

2019 Annual Groundwater Monitoring & Corrective Action Report

Plant Bowen

Cells 1 & 2

Cells 3 & 4

Cells 9 & 10

Solid Waste Disposal Facility

Permit No. 008-018D (LI)

Prepared for:



Date: JANUARY 30, 2020

Prepared by: Wood Environment & Infrastructure Solutions, Inc.
1075 Big Shanty Road NW, Suite 100, Kennesaw, Georgia 30144

Project No.: 6122-16-0287

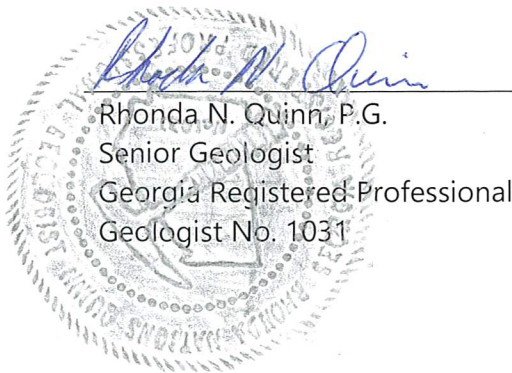
**GEORGIA POWER COMPANY
PLANT BOWEN
SOLID WASTE DISPOSAL FACILITY
PERMIT NO. 008-018D (LI)**

**2019 ANNUAL
GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT**

CERTIFICATION STATEMENT

This 2019 Annual Groundwater Monitoring & Corrective Action Report, Georgia Power Company - Plant Bowen Solid Waste Facility Landfill Cells 1 & 2, 3 & 4, and 9 & 10 has been prepared in compliance with the United States Environmental Protection Agency coal combustion residual rule [40 Code of Federal Regulations (CFR) 257 Subpart D] and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Wood Environment & Infrastructure Solutions, Inc.

Wood certifies that all Site constituents were below the applicable Georgia maximum contaminant levels (MCL) with the exception of antimony in upgradient well GWA-39RZ at Cells 9 & 10, and downgradient well GWC-16R at Cells 3 & 4 in the March and September 2019 events. The reported antimony concentrations of 0.014 and 0.0098 mg/L in GWA-39RZ and 0.020 and 0.011 mg/L in GWC-16R, exceeded the Georgia MCL of 0.006 mg/L. Alternate Source Demonstrations (ASD), dated August 2017 and April 2018, show antimony is the result of natural variability in the groundwater quality. In a letter dated January 30, 2019, EPD approved the April 2018 ASD for antimony.



Gregory J. Wrenn, P.E.
Associate Engineer
Georgia Registered
Professional Engineer No.
025565

The image shows a handwritten signature in blue ink over a circular professional seal for Gregory J. Wrenn, P.E., an Associate Engineer and Georgia Registered Professional Engineer No. 025565. The seal features the text 'GEORGIA REGISTERED PROFESSIONAL ENGINEER' and 'No. 025565' with a date stamp '1-30-20'.



TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Site Description and Background.....	1
1.2	Regional Geology and Hydrogeologic Setting	2
1.3	Groundwater Monitoring Network.....	3
2.0	GROUNDWATER MONITORING ACTIVITIES	4
2.1	Monitoring Well Installation and Maintenance	4
2.2	Detection Monitoring Program.....	4
2.3	Other Groundwater Sampling	4
3.0	SAMPLE METHODOLOGY & ANALYSES	5
3.1	Groundwater Elevation Measurements and Flow Direction.....	5
3.2	Groundwater Gradient and Flow Velocity.....	5
3.3	Continuous Water Level Monitoring (Hydrogeologic Monitoring).....	6
3.4	Groundwater Sampling	7
3.5	Laboratory Analyses	8
3.6	Groundwater Analytical Results	8
3.7	Quality Assurance & Quality Control.....	9
4.0	STATISTICAL ANALYSIS	11
4.1	Statistical Method	11
4.2	Statistical Analyses Results	14
5.0	MONITORING PROGRAM STATUS	22
6.0	CONCLUSIONS & FUTURE ACTIONS	23
	REFERENCES.....	24

FIGURES

Figure 1	Site Location Map
Figure 2	Monitoring Well Network – September 2019
Figure 3	Potentiometric Surface – Overburden Wells Event 12 (March 2019)
Figure 4	Potentiometric Surface – Overburden Wells Event 13 (September 2019)
Figure 5	Potentiometric Surface – Rock Wells Event 12 (March 2019)

FIGURES - continued

Figure 6	Potentiometric Surface – Rock Wells Event 13 (September 2019)
Figure 7	Flow Diagram for Prediction Limits

TABLES

Table 1	Monitoring Well Network Summary
Table 2	Groundwater Sampling Event Summary
Table 3	Summary of Groundwater Elevations
Table 4	Groundwater Flow Velocity Calculations
Table 5	Analytical Data Summary Appendix III (2019) Landfill Cells 1 & 2
Table 6	Analytical Data Summary Appendix III (2019) Landfill Cells 3 & 4
Table 7	Analytical Data Summary Appendix III (2019) Landfill Cells 9 & 10
Table 8	Analytical Data Summary Solid Waste Permit Metals (2019) Landfill Cells 1 & 2
Table 9	Analytical Data Summary Solid Waste Permit Metals (2019) Landfill Cells 3 & 4
Table 10	Analytical Data Summary Solid Waste Permit Metals (2019) Landfill Cells 9 & 10
Table 11	RPD Calculations
Table 12	Statistical Method Summary (embedded in text)

APPENDICES

Appendix A	Laboratory Analytical Data and Field Sampling Reports for 2019
Appendix B	Historical Groundwater Monitoring Results
Appendix C	Statistical Results
Appendix D	Memorandum on Hydrogeologic Monitoring Program
Appendix E	Alternate Source Demonstrations

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule 40 Code of Federal Regulations (CFR) 257 Subpart D and the Georgia Environmental Protection Division (EPD) Rules of Solid Waste Management 391-3-4-.10, this 2019 Annual Groundwater Monitoring & Corrective Action Report has been prepared to document groundwater monitoring activities conducted during the 2019 calendar year at Georgia Power Company's (GPC's) Plant Bowen solid waste disposal facility Cells 1 & 2, 3 & 4, and 9 & 10 (Site).

Groundwater monitoring is conducted under the requirements of the Georgia Solid Waste Permit No. 008-018D (LI) and in accordance with the specifications in the Design and Operation (D&O) Plan. This includes semi-annual groundwater sampling and groundwater level monitoring at the Site. A minor modification, dated August 9, 2017, approved the addition of Appendix III and IV parameters contained in the U.S. Federal regulations 40 CFR 257 Subpart D to the groundwater monitoring plan in Solid Waste Permit No. 008-018D (LI). An application for a new Georgia CCR permit was submitted in November 2018 for the facility to replace the Solid Waste Permit. The Georgia CCR permit is pending from EPD.

This report provides the results from the two semi-annual sampling events of 2019 conducted in March and September 2019 at Cells 1 & 2, Cells 3 & 4, and Cells 9 & 10. These sampling events include the scheduled semi-annual sampling for EPD's Solid Waste Permit constituents and the US EPA's CCR Appendix III constituents. The following sections describe the Site's groundwater monitoring program, analytical data collected from the sampling events, statistical analysis of the data, a description of groundwater flow, and a discussion of the current findings at the Site. This report is both the second semi-annual groundwater monitoring report required by the Solid Waste Permit and the annual groundwater monitoring report required by the US EPA CCR Rule. Statistical analysis for constituents in the State D&O Plan and the Federal CCR Appendix III constituents are included in this report.

1.1 Site Description and Background

Georgia Power Company's (GPC) Plant Bowen solid waste disposal facility is located in Bartow County off State Highway 113, approximately 7 miles west-southwest of Cartersville and 20 miles southeast of Rome (**Figure 1: Site Location Map**). The disposal facility is approximately 300 acres located on a previously undeveloped, contiguous portion of the plant property. The Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10 are located on the northeast portion of the Plant Bowen property. The disposal facility receives coal combustion by-products, coal ash and gypsum, from coal power generating processes at the Site. The landfill cells are lined in accordance with Solid Waste Permit No. 008-018D (LI). Cells 3 & 4 have a leachate collection system. Gypsum placement in disposal Cells 1 & 2 began in November 2008, whereas ash placement in disposal Cells 3 & 4 began in February 2015. Waste placement operations were initiated in Cells 9 & 10 in November 2015. Cells 9 & 10 are only used to store non-marketable gypsum. Cells 5, 6, 7, and 8 are undeveloped at this time and will be used as future cells.

A well network around each of the active disposal cells monitors the groundwater conditions at the Site. The monitoring well locations are shown in **Figure 2: Monitoring Well Network - September 2019**. A subset of the monitoring wells is equipped with data loggers and telemetry systems for water level measurements and data transmission for real-time monitoring of groundwater levels in the subsurface karst geology.

Background sampling for CCR parameters began in February 2016 and was completed in August 2017. The CCR background study results and statistical analysis were presented in the 2017 Annual Groundwater Monitoring and Corrective Action Report required under the CCR Rules. This report presents the data for two semi-annual sampling events for CCR and Solid Waste Permit constituents conducted in 2019. The Site status remains in detection monitoring.

1.2 Regional Geology and Hydrogeologic Setting

The geology and hydrogeology of the Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10 area are summarized below. The Plant Bowen Site lies within the Valley and Ridge physiographic province about three to four miles north of the Cartersville Fault. The Cartersville Fault separates the late Precambrian-aged metamorphic rocks to the east and south from the Cambrian-aged sedimentary rocks to the north-northwest and west.

The lithologies present in the landfill area of the plant Site from the ground surface to depth are terrace deposits, a residuum clay overburden, dolomite, and limestone bedrock. The Knox Group (dolomite and limestone bedrock) produces a characteristic orange to red clayey residuum (overburden) that ranges in thickness from 19 to 127 feet across the Plant Bowen Site and often contains weathered chert and dolomite fragments. Silt and clay with some gravel and sand (terrace deposits) overlay the clayey residuum in some areas but are not continuous across the landfill area.

Two main hydrostratigraphic layers (water-bearing zones) are present at the Plant Bowen Site: overburden (residuum clay), and bedrock (dolomite and limestone) – both units comprise the uppermost aquifer for groundwater monitoring purposes. Overburden materials are very heterogeneous ranging in composition from well-graded gravelly sand to fat clay. Bedrock underlying the Site (officially mapped as Knox undifferentiated) is a carbonate bedrock. Karst features within the underlying carbonate bedrock are predominately formed along initial discontinuities including joints, fissures (slots), fractures, and bedding planes or other linear features. These karst features may be partially or completely filled with soft unconsolidated sediments or may be empty or filled with water.

The water table commonly occurs in the lower overburden, but at some locations the water table is near the overburden-bedrock interface or in the upper fractured bedrock. Based on this data, it is likely that the overburden and bedrock are essentially a single inter-connected water-bearing zone below the unsaturated overburden. Therefore, the overburden and the upper fractured sedimentary bedrock together comprise the uppermost aquifer beneath the landfill area.

The groundwater flow in the Landfill Cells 1 & 2, 3 & 4, 9 & 10 area is to the north-northeast and west-northwest. However, there are variations in groundwater flow direction due to heterogeneous and anisotropic conditions at the Site.

1.3 Groundwater Monitoring Network

There are three developed disposal units comprising the CCR Landfill Cells 1 & 2, Cells 3 & 4, and Cells 9 & 10. The groundwater monitoring network is described below.

A groundwater monitoring system was installed within the uppermost aquifer at the Site. The monitoring system is designed to monitor groundwater passing the waste boundary of the CCR Units within the uppermost aquifer beneath the units. Wells were located to serve as upgradient and downgradient monitoring points based on groundwater flow direction. **Table 1: Monitoring Well Network Summary** provides the pertinent construction details for the well network at the Site.

The current monitoring well network at disposal Cells 1 & 2 consists of 29 wells (9 upgradient and 20 downgradient wells) at 17 locations, as a result of some wells located in a cluster representing the overburden and the bedrock. Sixteen wells are screened in the overburden and 13 wells in the upper bedrock. Additionally, five wells are monitored for water levels only.

The current monitoring well network at disposal Cells 3 & 4 consists of 23 monitoring wells at 19 locations. Nine wells are screened in the overburden and 14 wells in the upper bedrock. This well network currently consists of 12 upgradient wells and 11 downgradient wells.

The current monitoring network at disposal Cells 9 & 10 consists of 17 monitoring wells at 11 locations. Ten wells are screened in the overburden and 7 wells in the upper bedrock. This well network currently consists of 8 upgradient wells and 9 downgradient wells.

The monitoring wells were sampled for the 16 Solid Waste Permit metals and 5 field parameters, as specified in the D&O Plan for the Site. The wells were also sampled for the seven CCR Appendix III parameters. In accordance with § 391-3-4 for the 16 Solid Waste Permit metals and § 257.94(e) for the Appendix III parameters, data from all wells were compared to the appropriate standards in accordance with regulatory requirements for drinking water.

2.0 GROUNDWATER MONITORING ACTIVITIES

The following describes monitoring-related activities performed during the 2019 calendar year and discusses the status of the monitoring program. In 2019, samples were collected from each well in the certified monitoring system shown on **Figure 2**. Downgradient well GWC-21R was sampled again in June 2019 for fluoride to confirm the initial concentration. Downgradient wells GWC-21R and GWC-45 were sampled again in October for antimony, copper, and zinc to confirm initial concentrations. **Table 2: Groundwater Sampling Event Summary**, presents a summary of the 2019 groundwater sampling events completed at Plant Bowen’s Landfill Cells 1 & 2, 3 & 4, and 9 & 10.

2.1 Monitoring Well Installation and Maintenance

There was no change to the groundwater monitoring system during the 2019 calendar year; the network remained the same as in the previous reporting year. Monitoring well-related activities were limited to the following: visual inspection of well conditions prior to sampling, recording the Site conditions, and performing exterior maintenance to conduct sampling under safe and clean conditions.

2.2 Detection Monitoring Program

In accordance with § 257.94(b), the detection groundwater monitoring program continued during the 2019 calendar year. Groundwater samples were collected semi-annually from each monitoring well in the monitoring network and analyzed for Appendix III constituents (boron, calcium, chloride, fluoride, pH, sulfate, and Total Dissolved Solids) according to § 257.94(a). Data reports for the 2019 calendar year detection monitoring event are included in **Appendix A: Laboratory Analytical Data and Field Sampling Reports for 2019**. Statistical exceedances were identified during the 2019 monitoring event and were addressed with alternate source demonstrations or confirmation sampling.

2.3 Other Groundwater Sampling

In addition to sampling and analyzing the Appendix III parameters, the 16 Solid Waste Permit metals listed below were also sampled and analyzed concurrent with the 2019 semi-annual CCR detection monitoring events as required by the Georgia Solid Waste Permit (No. 008-018D (LI)).

Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium
Cobalt	Copper	Lead	Mercury	Nickel	Selenium
Silver	Thallium	Vanadium	Zinc		

The laboratory reports for these monitoring events are provided in **Appendix A**.

3.0 SAMPLE METHODOLOGY & ANALYSES

The following sections describe the methods used to conduct groundwater monitoring at Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10 CCR unit during the 2019 calendar year semi-annual events.

3.1 Groundwater Elevation Measurements and Flow Direction

Prior to each sampling event, groundwater levels were measured and recorded to the nearest 0.01 foot within a 24-hour period from each well in the certified networks for Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10. Groundwater levels recorded during the 2019 monitoring events are summarized in **Table 3: Summary of Groundwater Elevations**. Groundwater elevations vary between landfill cells due to topographic variations and anisotropic conditions in the overburden-bedrock aquifer. Also, groundwater elevations are mostly similar between the overburden and the upper bedrock at most onsite locations indicating a hydraulic communication between the overburden and upper bedrock. Groundwater levels typically varied within a one foot range in the overburden and upper bedrock within most well clusters, with the exception of well clusters, namely, GWC-6/GWC-6RZ, GWA-4/GWA-4RZ, GWC-13/GWC-13RZ, GWC-45/GWC-45R, and GWA-50/GWA-50R that showed greater variations.

Groundwater levels from the March and September 2019 detection monitoring events were used to develop potentiometric surface elevation contour maps provided as **Figures 3 and 4: Potentiometric Surface – Overburden Wells Events 12 and 13 (March and September 2019), respectively, and Figures 5 and 6: Potentiometric Surface – Rock Wells Events 12 and 13 (March and September 2019)**. The general direction of groundwater flow in the overburden in the Landfill Cells 1 & 2 and 9 & 10 area is to the north-northeast. Groundwater flow in the overburden in the Landfill Cells 3 & 4 was to the west-northwest in March 2019 (**Figure 3**). In September 2019 the groundwater level was below the top of the pump in overburden well GWC-18, and so the GWC-18 groundwater elevation could not be used in the preparation of the September 2019 potentiometric contouring of the overburden in Cells 3 & 4. Because the September groundwater elevation was lower (below the pump) than the March 2019 groundwater elevation of 681.37 feet, which was above the pump, the groundwater flow direction in Landfill Cells 3 & 4 is estimated to be to the west-northwest in September 2019 (**Figure 4**), as was observed in March 2019. The general groundwater flow direction in the bedrock is similar to the overburden, with groundwater flow in the bedrock in the Landfill Cells 1 & 2 and 9 & 10 area is to the north-northeast. Groundwater flow in the bedrock in the Landfill Cells 3 & 4 area is to the west-northwest (**Figures 5 and 6**). The groundwater flow patterns observed during the 2019 detection monitoring events are consistent with historic observations.

3.2 Groundwater Gradient and Flow Velocity

Groundwater flow velocities were calculated for the Site based on hydraulic gradients, hydraulic conductivity from previous slug test results, and an estimated effective porosity of 0.01 (based on default soil type value for silty clays to clays in USEPA 530/SW-89-031) of the screened horizon.

The average hydraulic conductivity (measured in centimeters/second or cm/sec) values used in the soil aquifer calculations (2.54×10^{-5} cm/sec = 0.072 ft/day) and the bedrock aquifer calculations (1.26×10^{-4} cm/sec = 0.36 ft/day) are presented in the *Plant Bowen Proposed Coal Combustion By-Product Storage Facility Site Acceptability Report* (Southern Company Services, 2002). Measured hydraulic conductivity data in the uppermost aquifer at the Site are lower than many karst aquifers, but comparable to fractured carbonate aquifers in the Valley & Ridge region. The hydraulic gradients were calculated between well pairs. Horizontal groundwater flow velocities at Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10 were calculated using the commonly-used derivative of Darcy's Law:

Where:

$V =$ Groundwater flow velocity $\left(\frac{\text{feet}}{\text{day}}\right)$

$K =$ Average Hydraulic Conductivity of the aquifer $\left(\frac{\text{feet}}{\text{day}}\right)$

$i =$ Horizontal hydraulic gradient $\left(\frac{\text{feet}}{\text{feet}}\right)$

$n_e =$ Effective porosity

Using this equation, groundwater flow velocities are calculated for various areas of the Site for both overburden and bedrock and are tabulated on **Table 4: Groundwater Flow Velocity Calculations**. The velocities presented on **Table 4** were calculated using groundwater elevation data measured on March 5 and September 3, 2019.

Estimated linear groundwater flow velocities presented in **Table 4** are similar to historical data from the Site. Estimated linear groundwater flow velocities for March and September 2019 sampling events range from approximately 0.02 to 0.09 feet per day in the overburden aquifer and from approximately 0.05 to 0.75 feet per day in the bedrock aquifer (**Table 4**). Lower groundwater velocities noted in the overburden material are due to the abundance of residual clays in this zone. Higher velocities noted in the bedrock aquifer are attributed to preferential groundwater flow in the fractured bedrock. Groundwater flow in the Knox Dolomite Formation, underlying the Site, occurs in joints, fractures, bedding planes, and solution channels (Croft, 1963). These pathways can facilitate relatively higher groundwater flows in the upper bedrock aquifer. However, the flow rates noted in the upper bedrock wells (**Table 4**) also suggest an abundance of residual clays in the epikarst zone at the Site.

3.3 Continuous Water Level Monitoring (Hydrogeologic Monitoring)

GPC continuously monitors groundwater level fluctuations in accordance with the *Plant Bowen Site Acceptability Report - Hydrogeological Assessment and Demonstration of Engineering Measures* (Southern Company Services, 2004). The hydrogeologic monitoring network provides site-wide water-level data which is evaluated for changes in subsurface hydrologic conditions. The hydrogeologic data is evaluated weekly and reported semi-annually by Wood. The telemetry equipment maintenance is performed by Wood.

3.3.1 Hydrogeologic Monitoring Network

Hydrogeologic monitoring locations shown on **Figure 2** for Cells 1 & 2, 3 & 4, and 9 & 10 were selected following analysis of the interim data and review of historical groundwater elevations and potentiometric surface maps. Across the landfill cells, there are a total of 37 wells currently equipped with transducers for monitoring water levels. An onsite river gauge is used to monitor surface water elevations in the Etowah River. Alternatively, the USGS river gauge (#02394670) at Cartersville, Georgia is used to monitor the surface water elevations in the Etowah River. Rainfall data is also obtained from the USGS station #02394670 on the Etowah River at Georgia Route 61.

For the hydrogeologic monitoring network, GPC utilized In-Situ® Instruments, Inc.'s Win-Situ® reporting software, and Level Troll 500® pressure transducers. Each pressure transducer was deployed in a selected monitoring well at a fixed depth and linked to its own telemetry box with a vented transducer cable. Groundwater levels are recorded multiple times daily from each well transducer and is programmed to record any fluctuation in water level of ± 0.5 feet occurring within the 4-hour recording schedule. The telemetry system relays water level data via satellite to a central data storage unit that can be accessed in real-time over the internet; whereby, the data can be checked for unusual groundwater level fluctuations. Groundwater elevations, along with the river stage elevations and rainfall data recorded between May 1, 2019 and October 31, 2019 are provided in this semi-annual monitoring report for the three disposal cell units as **Appendix D: Memorandum on Hydrogeologic Monitoring Program**.

3.3.2 Hydrogeologic Monitoring Results

The hydrogeologic monitoring network pressure transducers are operational and collecting continuous groundwater elevation data, with the exceptions described in **Appendix D**. Tables in the hydrogeologic monitoring memo (**Appendix D**) list identified data anomalies and the causes during the monitoring period. The majority of the anomalies noted in daily groundwater elevations are directly attributed to drawdown during sampling events, manual water level gauging, well and transducer maintenance, including corrections for transducer measurement drift by updating elevations based on taped-down measurements, and mechanical/electrical problems with transducers or telemetry units, changes in river stage, or significant rain events. Hydrologic monitoring data from May 1, 2019 to October 31, 2019 did not show water level fluctuations attributed to subsurface changes that might be indicative of land subsidence or sinkhole formation.

3.4 Groundwater Sampling

Groundwater samples were collected from monitoring wells using low-flow sampling procedures. Monitoring wells were purged and sampled using a dedicated QED bladder pump or a peristaltic pump using new disposable polyethylene tubing. A SmarTroll (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, conductivity, temperature, oxidation-reduction potential (ORP), and dissolved oxygen) during well purging to verify stabilization prior to sampling. Turbidity was measured using a Hach 2100Q (or similar) portable turbidity meter. Sampling equipment and pump intakes were placed at the midpoint of the well screen. Care was

taken to maintain a water level above the top of screen and not draw the water level down below the pump during purging. Water level stabilization was achieved when three consecutive water level measurements vary by 0.3 foot or less at a pumping rate of no less than 100 milliliters per minute (mL/min). Groundwater samples were collected when the following stabilization criteria were met:

- pH \pm 0.1 Standard Units (S.U.);
- Specific conductance \pm 5%;
- 0.2 Mg/L or 10% for DO > 0.5 mg/l (whichever is greater).
- Turbidity measurements less than 10 NTU

Once stabilization was achieved, samples were collected into appropriately-preserved laboratory-supplied sample containers. If turbidity readings are greater than 10 NTU at the time of sampling, a dissolved metals sample is also collected by filtering the water with a 0.45-micron water filter Total and filtered samples for metals were collected on May 6, 2019 from well GWC-8Z during this event. No dissolved metals samples were collected during the September 2019 sampling event. Sample bottles were placed in ice-packed coolers, and submitted to Pace Analytical, Inc. in Peachtree Corners (Atlanta), Georgia following chain-of-custody protocol.

An ephemeral spring at the Site is checked for water during each groundwater sampling event. There was no water present in the spring during the March and September 2019 events.

3.5 Laboratory Analyses

Cells 1 & 2, 3 & 4 and 9 & 10 monitoring wells were sampled and analyzed for applicable state and federal monitoring parameters. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in **Appendix A**.

Laboratory analyses were performed by Pace Analytical Services, LLC, of Peachtree Corners (Atlanta), Georgia. The Pace Laboratory is accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed. In addition, Pace Laboratories are certified to perform analysis by the State of Georgia. Groundwater data laboratory reports and chain of custody records for the monitoring events are presented in **Appendix A**.

3.6 Groundwater Analytical Results

3.6.1 CCR Constituents

Tables 5, 6, and 7: Analytical Data Summary Appendix III (2019) Landfill Cells 1 & 2, 3 & 4, and 9 & 10 summarize the analytical data for the seven Appendix III parameters for the March and September 2019 sampling events. The Appendix III parameter concentrations were less than the Georgia and/or Federal drinking water primary and secondary MCLs. The complete laboratory and field data sheets are included in **Appendix A**. Time Series data for the Appendix III parameters are provided in **Appendix B: Historical Groundwater Monitoring Results**.

3.6.2 Solid Waste Permit Metals

Tables 8, 9, and 10: Analytical Data Summary Solid Waste Permit Metals (2019) Landfill Cells 1 & 2, 3 & 4, and 9 & 10, respectively, summarize the analytical data for 16 Solid Waste Permit metals for the most recent sampling events (March and September 2019). There are five metals (copper, nickel, silver, vanadium, and zinc) currently being analyzed per requirements of the Georgia Solid Waste Regulations that are not required under the CCR regulations. Of these, zinc is the only constituent consistently detected above the PQL. Zinc concentrations ranged from 0.010 to 0.56 mg/L and are considerably lower than the Secondary MCL of 5 mg/L. The complete laboratory and field sampling reports are included in **Appendix A**. Time Series data for the Solid Waste Permit metals are provided in **Appendix B**.

In accordance with the Georgia Solid Waste Regulations, the metals data from active monitoring wells at the disposal facility were compared to Georgia drinking water primary and secondary MCLs. With the exception of antimony concentrations in two wells (GWA-39RZ and GWC-16R), the other target constituents were below the primary and secondary MCLs as specified by US EPA and Georgia EPD. The reported antimony concentrations of 0.014 and 0.0098 mg/L in upgradient well GWA-39RZ and 0.020 and 0.011 mg/L in downgradient well GWC-16R, respectively, were above the Georgia MCL of 0.006 mg/L. The Alternate Source Demonstrations submitted August 2017 and April 2018 indicate that the antimony detections in GWC-16R and GWA-39RZ are the result of natural variability in groundwater quality. Well GWA-39RZ is an upgradient well (**Figures 3 to 6**) and as such, is not indicative of a release from Cells 9 & 10.

3.7 Quality Assurance & Quality Control

Quality assurance and quality control of the groundwater data was assessed by performing a data quality evaluation of the results reported. A data quality evaluation was conducted on the 2019 data using laboratory precision and accuracy, analytical method requirements and requirements in the field sampling plan. The data quality evaluation showed the data is usable.

The analytical results provided in **Tables 5 to 10** provide concentrations from the most recent sampling events as reported by the laboratory. When values are followed by a "J" flag, this indicates that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (PQL). The estimated value is positively identified but is below lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions.

Quality control procedures included calculating the relative percent difference (RPD) between sample and sample duplicate concentrations. This is calculated as:

$$RPD = \frac{Conc1 - Conc2}{(Conc1 + Conc2) / 2}$$

The RPD calculations are provided in **Table 11: RPD Calculations** for all detected concentrations above the PQL for wells and corresponding duplicates. Other constituents were below the PQL. For a RPD to be representative of the process, the concentrations have to be five times the PQL in

accordance with US EPA guidance on inorganic data review, (US EPA August 2014). The RPD values of concentrations five times the PQL ranged within the allowable 20% RPD indicating good sampling precision with a few exceptions which include sulfate, zinc and/or TDS in one sample pair each. The RPD for sulfate in GWA-2/Dup-1 was outside of quality control limits and is qualified with J-flag due to field duplicate imprecision. The concentration of sulfate in both samples is low; consequently, slight variation between the two samples resulted in an elevated RPD. The sulfate results are considered valid and appropriate for use in statistical analysis.

Zinc results reported for sample duplicate pair GWC-12 exceeded the quality control limit; however, the zinc result is not designated as above the 20% RPD due to method blank contamination, and the concentrations are less than five times the PQL.

The TDS concentrations in GWA-38 and GWC-48 and their duplicates were less than five times the PQL and do not qualify as a greater than 20% RPD. The RPD for TDS in GWC-20R/Dup-3 was outside of quality control limits and is qualified with J-flag due to field duplicate imprecision. The GWC-20R TDS parent sample concentration of 24.0 mg/L was less than five times the PQL while the Dup-3 concentration of 179 mg/L was more than five times. The laboratory did not identify a discrepancy in the methodology or calculations. It was observed that field duplicate results were more consistent with past results for well GWC-20R. The specific conductance data measured in the field (309 $\mu\text{S}/\text{cm}$) also supports a TDS concentration closer to data measured in the duplicate sample for GWC-20R; therefore, the field duplicate value of 179 mg/L was selected as the more representative TDS result.

The 2019 analytical results were compared to MCLs and secondary MCLs to evaluate groundwater quality and used in the statistical evaluation. The 2019 constituent concentrations were within the historical range of concentrations. Those few concentrations higher than the historical range were identified as statistical exceedances.

4.0 STATISTICAL ANALYSIS

The Site is currently performing detection monitoring. Statistical analysis of the Solid Waste Permit metals and Appendix III groundwater monitoring data was performed on samples collected from the certified groundwater monitoring network pursuant to § 257.93(f) and following the PE-certified statistical analysis plans. The statistical analysis plans used at the Site for the Appendix III parameters were developed in 2017 by MacStat Consulting, Ltd. in accordance with § 257.93(f) using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, EPA 530/R-09-007 (USEPA, 2009). To develop the statistical method, analytical data collected during the background period were evaluated and used to develop statistical limits for each Appendix III parameter. Subsequent detection monitoring results were compared to the statistical limits to determine if concentrations were statistically different from background.

Historically, interwell statistical methods were used for the 16 Solid Waste Permit metals, in accordance with the D&O Plan. In July 2019, Georgia EPD requested the historic data for the 16 Solid Waste Permit metals be screened to evaluate if interwell or intrawell statistical methods are appropriate at this time. The data was evaluated by Groundwater Stats Consulting in August 2019 and determined intrawell prediction limits statistical method was appropriate for the 16 Solid Waste Permit metals. The barium in well GWC-13RZ was analyzed using a Trend Test. Intrawell statistical analysis was used to evaluate the March and September 2019 data for the 16 Solid Waste Permit metals and this report reflects the change in statistical methods.

4.1 Statistical Method

Sanitas is a commercially available decision support software package, developed in 1991, that incorporates the statistical tests required of Subtitle C and D facilities by US EPA regulations and guidance as recommended in the US EPA Unified Guidance (2009) document. A flow diagram showing the decision logic of the statistical procedures utilized in the Sanitas software is presented in **Figure 7: Flow Diagram for Prediction Limits**. The Sanitas groundwater statistical software was used to perform the statistical analyses of groundwater quality data obtained in March and September 2019. Interwell and intrawell methods were used, depending on the constituent, for the analysis of the Appendix III parameters. Intrawell methods were used for the 16 Solid Waste Permit metals during the March and September 2019 events. Groundwater conditions at the Site and data distribution influence which method is selected. Specific test information is provided below.

When using the interwell method, upgradient well data are pooled to establish a background statistical limit. Data from the March and September 2019 monitoring events were compared to the background statistical limit to evaluate whether concentrations exceed background statistical limits. The selected statistical method uses a 1-of-2 verification resample plan. When an initial statistically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier.

Groundwater quality data with significant natural spatial variation and no pre-existing exceedances of background statistical limits were evaluated using intrawell prediction limits. Using this method,

historical data from within a given well is used to establish statistical limits for future comparisons at the same well. Background data from the parameter at the well (e.g. pH at GWA-36) was used to establish a background statistical limit for that parameter at that well; therefore, each parameter will have a different statistical limit at each well. Data from the March and September 2019 monitoring events were compared to the statistical limits to determine whether concentrations exceed background statistical limits. The intrawell statistical method uses a 1-of-3 or 1-of-2 verification resample plan. When an SSI or questionable result occurs, up to 2 additional samples using the 1-of-3 verification resample plan may be collected to verify the initial result or determine if the result was an outlier.

If data from a sampling event initially exceed the PL, the resampling strategy may be used to verify the result. If the resamples exceed the PL, the initial exceedance is verified and a statistically significant increase (SSI) is identified. When a resample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance. If the initial finding is not verified by resampling, the resampled value will replace the initial finding. When the resample confirms the initial finding, the exceedance will be reported.

Intrawell prediction limits were used to analyze the 16 Solid Waste Permit metals data for Cells 1 & 2, 3 & 4, and 9 & 10 at the Bowen Landfill Cells. The Appendix III parameters were analyzed using both interwell and intrawell prediction limits as described in the statistical analysis plans prepared for the CCR monitoring program and are summarized below.

Landfill Cells 1 & 2

Interwell Prediction Limits: boron, fluoride, chloride, and pH

Intrawell Prediction Limits: calcium, sulfate, and TDS, and 16 Solid Waste Permit metals

Landfill Cells 3 & 4

Interwell Prediction Limits: boron, fluoride, and calcium

Intrawell Prediction Limits: chloride, pH, sulfate, and TDS, and 16 Solid Waste Permit metals

Landfill Cells 9 & 10

Interwell Prediction Limits: boron, fluoride, and pH

Intrawell Prediction Limits: calcium, chloride, sulfate, and TDS, and 16 Solid Waste Permit metals

Parametric methods are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a non-parametric test is utilized. The confidence level is dependent upon the number of available background samples, resample plan, as well as the number of comparisons. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

Some analytes may have a statistically-significant seasonal trend, based on testing with the non-parametric, seasonal Kruskal-Wallis test. If a statistically significant seasonal trend is found, then

the data may be deseasonalized prior to statistical testing. The Sanitas software did not deseasonalize the 2019 data.

Time series plots (**Appendix B**) display concentrations over time for wells and analytes, and may be used to identify suspected increasing or decreasing trends. While trends may be visual, a quantification of the trend and its significance is needed. Background data are tested using the Sen's Slope/Mann Kendall or linear regression trend test to confirm suspected increasing or decreasing trends. The distribution of the data determines which trend test is used. In the absence of suspected contamination, trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data will be evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be included in **Appendix C: Statistical Results** showing the date ranges used in construction of the statistical limits. Summary tables of the statistical analyses accompany the prediction limits in **Appendix C**.

The following table provides a summary of the statistical methodology used at Cells 1 & 2, 3 & 4, and 9 & 10 for the 2019 events.

Table 12: Statistical Method Summary

Statistical Methodology	Data Screening on Proposed Background	Evaluate outliers, trends, and seasonality when sufficient data are available
	Statistical Limits	Interwell statistical limits will be applied on a parameter basis, depending on the appropriateness of the method as determined by the Analysis of Variance. Intrawell statistical limits will be applied on a parameter basis, depending on the appropriateness of the method.
	Prediction Limits	When data contain between 15-50% non-detects the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit. Non-parametric when data sets contain greater than 50% non-detects or when data are not normally or transformed-normally distributed.
	Management of Non-Detects	When data contain less than 15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the practical quantitation limit (PQL) as reported by the laboratory.

Statistical Methodology	Management of Non-Detects	When data contain between 15-50% non-detects the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
	Confidence Intervals	Used in Assessment and Corrective Action monitoring.
	No Statistical Testing	Statistical testing is not required for parameters containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
	Verification Resample Plan	Optional 1-of-2 with minimum of 8 samples per well for interwell testing. Optional 1-of-3 or 1-of-2 with minimum of 8 samples per well for intrawell testing.
	Optional	<ul style="list-style-type: none"> ▪ Initial statistical exceedance warrants independent resampling within 90 days. ▪ If resample passes, well/parameter is not a confirmed statistically significant increase (SSI). ▪ If resample exceeds, well/parameter has a confirmed SSI. ▪ If no resample is collected, the original result is deemed verified.

4.2 Statistical Analyses Results

Analytical data from the monitoring events in March and September 2019 at the Landfill Cells 1 & 2, 3 & 4, 9 & 10 were statistically analyzed in accordance with the D&O Plan and with the PE-certified statistical methods for the CCR groundwater monitoring program.

The statistical analysis and comparison to prediction limits are included as **Appendix C**. Based on the statistical results presented in **Appendix C**, the following summarizes statistical exceedances identified for Appendix III CCR constituents during the 2019 calendar year.

**Statistical Analysis Summary – CCR Constituents
March 2019**

Appendix III Parameters	Wells with Concentrations Above Prediction Limits
Cells 1 & 2	
Chloride	GWC-13, GWC-13RZ, GWC-14Z
pH	GWC-8RR, GWC-8Z
Sulfate	GWC-15R
Cells 3 & 4	
Calcium	GWC-16R, GWC-17R, GWC-21R, GWC-23R
Chloride	GWC-18, GWC-18R, GWC-20R
Sulfate	GWC-17R, GWC-19R
TDS	GWC-16R
Cells 9 & 10	
Calcium	GWC-44, GWC-49R
Chloride	GWC-45R, GWC-48, GWC-49R
pH	GWC-44, GWC-45, GWC-48
Sulfate	GWC-44, GWC-45R, GWC-47R, GWC-49R
TDS	GWC-45

TDS – Total Dissolved Solids

**Statistical Analysis Summary – CCR Constituents
September 2019**

Appendix III Parameters	Wells with Concentrations Above Prediction Limits
Cells 1 & 2	
Chloride	GWC-13, GWC-13RZ, GWC-14Z
pH	GWC-8RR, GWC-15Z
Sulfate	GWC-15R
Cells 3 & 4	
Calcium	GWC-16R, GWC-17R, GWC-21R, GWC-23R
pH	GWC-22R
Cells 9 & 10	
Chloride	GWC-48
pH	GWC-44, GWC-45, GWC-48, GWC-49R, GWC-49Z
Sulfate	GWC-49R

Based on the statistical results presented in **Appendix C**, the following summarizes statistical exceedances identified for the Solid Waste Permit metals during the 2019 monitoring events.

**Statistical Analysis Summary – Solid Waste Permit Metals
March 2019**

Solid Waste Permit Metals	Wells with Concentrations Above Prediction Limits
Cells 1 & 2	
Barium	GWC-13RZ
Zinc	GWC-13
Cells 3 & 4	
Antimony	GWC-16R
Cells 9 & 10	
Barium	GWC-45, GWC-49R
Chromium	GWC-47R
Zinc	GWC-47

**Statistical Analysis Summary – Solid Waste Permit Metals
September 2019**

Solid Waste Permit Metals	Wells with Concentrations Above Prediction Limits
Cells 1 & 2	
Barium	GWC-13RZ
Cells 3 & 4	
Barium	GWC-21R
Zinc	GWC-21R
Cells 9 & 10	
Antimony	GWC-45, GWC-49R
Barium	GWC-49R
Zinc	GWC-47R, GWC-48

As presented in the Statistical Analysis Summary above in this section, several of the constituents analyzed in March and September 2019 had concentrations above the calculated prediction limits (PLs). Most of these concentrations above the PLs have been addressed previously in the August 2017 and April 2018 Alternate Source Demonstrations (ASDs) (**Appendix E: Alternate Source Demonstrations**). In a letter dated January 30, 2019, EPD approved the April 2018 ASD for antimony, barium, zinc, pH, calcium, chloride, sulfate, and TDS. The 2019 statistical exceedances are further evaluated in the sections below.

4.2.1 Constituent Exceedances Not Addressed in an ASD

As summarized in the table below, chromium, copper, and fluoride concentrations in wells GWC-47R, GWC-45, and GWC-21R, respectively, were above the PLs and had not been addressed by a previous ASD. The initial exceedances of these three metals were not verified with subsequent sampling, and no further action is needed to address these 2019 metals concentrations.

Summary of Statistical Exceedances Not Previously Addressed by an ASD

Well	Constituent	Initial Concentration (mg/L)	Resample Concentration (mg/L)	Prediction Limit (mg/L)	Statistical Result
GWC-21R	Fluoride	0.51 *	<0.030 [^]	0.40	Exceedance Not Verified
GWC-47R	Chromium	0.018 *	0.0015 J **	0.0053	Exceedance Not Verified
GWC-45	Copper	0.012 J **	0.00021 J ***	0.025	Exceedance Not Verified

*March 2019; ^June 2019; **September 2019; ***October 2019

4.2.2 Exceedances Resolved with Resampling

The following table summarizes those 2019 concentrations above a PL where the initial exceedances of these constituents and wells were not verified with subsequent sampling in September 2019, and no further action is needed to address these 2019 concentrations.

Summary of Statistical Exceedances Resolved with Resampling

Well	Constituent	Initial Concentration (mg/L)	Resample Concentration (mg/L)	Prediction Limit (mg/L)	Statistical Result
GWC-44	Calcium	17.2 J *	7.1 **	10.0 *	Exceedance Not Verified
GWC-49R	Calcium	31.0 *	24.3 **	30.0 *	Exceedance Not Verified
GWC-18	Chloride	2.8 *	2.0 **	2.4 *	Exceedance Not Verified
GWC-18R	Chloride	3.3 *	2.3 **	2.9 *	Exceedance Not Verified
GWC-20R	Chloride	2.7 *	1.6 **	2.3 *	Exceedance Not Verified
GWC-45R	Chloride	4.3 *	2.9 **	3.3 *	Exceedance Not Verified
GWC-49R	Chloride	2.7 *	1.4 **	1.8 *	Exceedance Not Verified
GWC-8Z	pH	8.0 *	7.2 **	7.6-5.2 *	Exceedance Not Verified
GWC-17R	Sulfate	25.9 *	6.0 **	9.3 *	Exceedance Not Verified
GWC-19R	Sulfate	4.3 *	3.7 **	3.7 *	Exceedance Not Verified
GWC-44	Sulfate	79.7 *	19.8 **	49.0 *	Exceedance Not Verified
GWC-45R	Sulfate	4.3 *	2.6 **	3.4 *	Exceedance Not Verified
GWC-47R	Sulfate	14.8 *	10.7 **	11.0 *	Exceedance Not Verified
GWC-16R	TDS	344 *	275 **	340 *	Exceedance Not Verified

2019 Annual Groundwater Monitoring & Corrective Action Report
Wood Project 6122-16-0287

Well	Constituent	Initial Concentration (mg/L)	Resample Concentration (mg/L)	Prediction Limit (mg/L)	Statistical Result
GWC-45	TDS	39.0 *	<10.0 **	31.0 *	Exceedance Not Verified
GWC-16R	Antimony	0.020*	0.011 **	0.019 *	Exceedance Not Verified (ASDs: August 2017 and April 2018)
GWC-21R	Antimony	0.010 **	0.0020 J ***	0.0064 **	Exceedance Not Verified (ASDs: August 2017 and April 2018)
GWC-45	Barium	0.0066 J *	0.0061 J **	0.0063 *	Exceedance Not Verified
GWC-13	Zinc	0.021*	0.0070 J **	0.02 *	Exceedance Not Verified
GWC-47	Zinc	0.051*	0.035 **	0.045 *	Exceedance Not Verified (ASD April 2018)

*March 2019; **September 2019; ***October 2019

4.2.3 Exceedances Addressed by Alternate Source Demonstrations

The following wells had constituent concentrations detected once above a PL in September 2019 and have not been resampled to verify the exceedance. In some instances, the exceedance is addressed specifically in a previous ASD. In others, the rationale presented therein can be applied to exceedances of those constituents in nearby wells. Also included below are the wells and constituents identified as having an initial concentration and a re-sample concentration verify a statistical exceedance. The April 2018 ASD addressed the statistical exceedances of calcium, chloride, pH, sulfate, TDS, antimony, barium, and zinc.

Summary of Statistical Exceedances Addressed by an ASD

Well	Constituent	Exceedance Event	Comment
GWC-16R, GWC-17R, GWC-21R, GWC-23R	Calcium	March & September 2019	Addressed in April 2018 ASD
GWC-13, GWC-13RZ	Chloride	March & September 2019	Addressed in April 2018 ASD
GWC-8RR, GWC-44, GWC-45, GWC-48	pH	March & September 2019	Addressed in April 2018 ASD

2019 Annual Groundwater Monitoring & Corrective Action Report
Wood Project 6122-16-0287

Well	Constituent	Exceedance Event	Comment
GWC-15Z, GWC-22R, GWC-49Z	pH	September 2019	Addressed in April 2018 ASD
GWC-49R	Sulfate	March & September 2019	Addressed in April 2018 ASD
GWC-13RZ	Barium	March & September 2019	Addressed in April 2018 ASD
GWC-14Z	Chloride	March & September 2019	The data used to demonstrate chloride in Cells 1&2 downgradient wells GWC-13 and GWC-13RZ were due to natural variability can also be applied to the chloride in GWC-14Z. The chloride in GWC-14Z is due to natural variation as described in the April 2018 ASD because GWC-14Z has similar concentrations and is located near GWC-13 and has similar concentrations as upgradient well GWA-4RZ. The GWC-14 chloride was below the chloride secondary MCL.
GWC-48	Chloride	March & September 2019	The data used to demonstrate chloride in Cells 1&2 downgradient wells GWC-13 and GWC-13RZ and Cells 9&10 well GWA-40 were due to natural variability can also be applied to the chloride in GWC-48. Chloride in GWC-48 is lower than the concentrations in GWC-13 and GWC-13RZ. The chloride concentration in Cells 9&10 upgradient wells (GWA-42 and GWA-43R) are similar to those in GWC-48. The GWC-48 chloride was below the chloride secondary MCL.
GWC-49R	pH	September 2019	The data used to demonstrate pH in Cells 9&10 downgradient wells GWC-44, GWC-45, GWC-48, and GWC-49Z was due to natural variability can also be applied to the pH in GWC-49R which is adjacent to GWC-49Z. The pH in GWC-49R is likely a natural variation in the groundwater based on similar pH values in Cells 9&10 upgradient wells (GWA-39RZ, GWA-42, GWA-43R).
GWC-15R	Sulfate	March & September 2019	The data used to demonstrate sulfate in Cells 1&2 upgradient well GWA-4RZ and Cells 9&10 downgradient well GWC-49R were due to natural variability can also be applied to the sulfate in downgradient well GWC-15R. Sulfate concentration in Cells 1&2 upgradient wells (GWA-2R and GWA-4RZ) have similar or higher concentrations than GWC-15R. The sulfate in GWC-15R was below the sulfate secondary MCL.

2019 Annual Groundwater Monitoring & Corrective Action Report
Wood Project 6122-16-0287

Well	Constituent	Exceedance Event	Comment
GWC-45	Antimony	September 2019	The data used to demonstrate antimony in Cells 3&4 downgradient wells GWC-16R and GWC-21R were due to natural variability can also be applied to the antimony in downgradient well GWC-45. Antimony in GWC-45 is likely a natural variation in the groundwater based on antimony concentration in Cells 9&10 upgradient wells (GWA-39RZ) having similar or higher concentrations than GWC-45. Antimony in GWC-45 was less than the antimony MCL.
GWC-49R	Antimony	September 2019	The data used to demonstrate antimony in Cells 3&4 downgradient wells GWC-16R and GWC-21R were due to natural variability can also be applied to the antimony in GWC-49R. Antimony in GWC-49R is likely a natural variation in the groundwater based on antimony concentration in Cells 9&10 upgradient well (GWA-39RZ) having similar or higher concentrations than GWC-49R. Antimony in GWC-49R was less than the antimony MCL.
GWC-21R	Barium	September 2019	The data used to demonstrate barium in Cells 1&2 downgradient well GWC-13RZ were due to natural variability can also be applied to the barium in GWC-21R. Barium in GWC-21R is likely a natural variation in the groundwater based on barium concentration in Cells 3&4 upgradient wells (GWA-56 and GWA-54) having similar or higher concentrations than GWC-21R and well GWA-56 and GWA-36 also having increasing barium trends. Barium in GWC-21R was less than the barium MCL.
GWC-49R	Barium	March & September 2019	The data used to demonstrate barium in Cells 1&2 downgradient wells GWC-13RZ were due to natural variability can also be applied to the barium in GWC-49R. Barium in GWC-49R is a natural variation in the groundwater based on the barium concentration in Cells 9&10 upgradient wells (GWA-39RZ, GWA-39Z, GWA-41, GWA-41R, and GWA-43) having similar or higher concentrations to GWC-49R and one upgradient well (GWA-42) showing an increasing trend in barium. Barium in GWC-49R was less than the barium MCL.
GWC-21R	Zinc	September 2019	The data used to demonstrate zinc in Cells 9&10 downgradient well GWC-47 were due to natural variability can also be applied to the zinc in downgradient well GWC-21R. Zinc in GWC-21R is a natural variation in the groundwater based on the zinc concentration in Cells 3&4 upgradient wells (GWA-36 and GWA-36R) having similar or higher concentrations to GWC-21R and four upgradient wells (GWA-36, GWA-52, GWA-53R, and GWA-55) showing an increasing trend in zinc. Zinc in GWC-21R was less than the zinc secondary MCL.

Well	Constituent	Exceedance Event	Comment
GWC-47R, GWC-48	Zinc	September 2019	The data used to demonstrate zinc in Cells 9&10 downgradient well GWC-47 were due to natural variability can also be applied to the zinc in GWC-47R and GWC-48, which are adjacent to GWC-47 and have similar concentrations. Zinc in GWC-47R and GWC-48 was less than the zinc secondary MCL.

The Appendix III parameters (calcium, chloride, pH, sulfate, and TDS) with concentrations above prediction limits in March and September 2019 are addressed in the April 2018 ASD. The solid waste permit metals (antimony, barium, and zinc) are also addressed in the April 2018 ASD. Therefore, a separate ASD does not appear to be warranted at this time.

These concentrations above the PL are not thought to be the result of a release from the Landfill Cells 1 & 2, 3 & 4, and 9 & 10 and are likely attributed to natural variability of groundwater chemistry underlying the Site that is not properly accommodated by the existing statistical methods due to geochemical differences between upgradient and downgradient wells, as described in the earlier ASD documents. The supporting evidence for natural variability as presented in the earlier ASD documents are summarized as follows.

- 1) The presence of naturally-occurring sulfide minerals containing these metals at the Site,
- 2) A lack of increasing concentration trends of these metals and inorganic parameters over time, and
- 3) The lack of co-occurrence or correlation of metals with indicator parameters, and
- 4) The non-detectable or low concentrations of other indicator parameters, including boron and fluoride, strongly support the natural occurrence of target parameters showing a SSI.
- 5) The landfill cells are lined, and Cells 3 & 4 have a leachate collection system in accordance with Solid Waste Permit No. 008-018D (LI).

Pursuant to § 257.94(e) and § 391-3-4.14.23(c), GPC will continue detection monitoring at Landfill Cells 1 & 2, 3 & 4, and 9 & 10.

5.0 MONITORING PROGRAM STATUS

The Plant Bowen Landfill Cells 1 & 2, 3 & 4, 9 & 10 are in detection monitoring. In 2019, statistical exceedances of Appendix III and the State Solid Waste Permit constituents were identified. Those statistical exceedances were either not confirmed by subsequent resampling or addressed in ASDs that showed the target constituent concentrations were not an indication of a release from the lined landfill cells, but were due to naturally-occurring sources in the geological formation and natural variability of groundwater chemistry. Groundwater monitoring at Plant Bowen Landfill Cells 1 & 2, 3 & 4, 9 & 10 will continue in detection monitoring phase.

6.0 CONCLUSIONS & FUTURE ACTIONS

In accordance with § 391-3-4 for the 16 Solid Waste Permit metals and § 257.94(e) for the Appendix III parameters, data from the Site wells were compared to the appropriate standards in accordance with regulatory requirements for drinking water. At the request of Georgia EPD, the 16 Solid Waste Permit metals were statistically analyzed using intrawell methods. The Appendix III parameters were statistically analyzed per the statistical plans prepared for the CCR monitoring program.

Concentrations of the 16 Solid Waste Permit metals and Appendix III parameters were below the Georgia MCLs and secondary MCLs, with the exception of antimony in upgradient well GWA-39RZ at Cells 9 & 10, and downgradient well GWC-16R at Cells 3 & 4. An August 2017 Alternate Source Demonstration (**Appendix E**) showed antimony concentrations in well GWC-16R vary naturally in groundwater at the Site. In a letter dated January 30, 2019, EPD approved the April 2018 ASD for antimony. Well GWA-39RZ is an upgradient well and is not located in a groundwater flow path as demonstrated by groundwater flow direction based on measured water level elevations. The majority of the metals and the Appendix III parameters were within their respective statistically calculated PLs for the 2019 sampling events. Most of the concentrations above PLs observed in 2019 were re-occurrences of statistical exceedances previously addressed in ASD reports (April 2018 or August 2017). The initial statistical exceedance of fluoride in well GWC-21R, chromium in GWC-47R, and copper in well GWC-45 were not addressed in a previous ASD, but were verified as not an exceedance with subsequent sampling and no further action is needed to address these 2019 metals concentrations. These statistical exceedances are not thought to be the result of a release from the Landfill Cells 1 & 2, 3 & 4, and 9 & 10 and are attributed to natural variability of groundwater chemistry underlying the Site. Those exceedances in the downgradient wells analyzed using the interwell method may likely be due to the statistical method not accommodating the geochemical differences between upgradient and downgradient locations.

Pursuant to § 257.94(e) and § 391-3-4.14.23(c), GPC will continue detection monitoring at the Site. The next scheduled groundwater monitoring event is scheduled for March-April 2020.

REFERENCES

- Amec Foster Wheeler Environment & Infrastructure, Inc., 2017. Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10 Alternate Source Demonstration Cells 3 & 4 (Antimony in wells GWC-16R and GWC-21R, and Nickel in wells GWC-16R), August 30, 2017.
- Croft, M.G., 1963. Geology and ground-water resources of Bartow County, Georgia. U.S. Geological Survey Water-Supply Paper 1619-FF, 37 p.
- Georgia Department of Natural Resources, Environmental Protection Division. 1997. *Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia – Circular 14.*
- Gibbons, Robert D. 1994. *Statistical Methods for Groundwater Monitoring*, 286 pp.
- Sanitas: Groundwater Statistical Software, Sanitas Technologies, Shawnee, KS, 2007. www.sanitastech.com
- Southern Company Services, Inc. 2002. Plant Bowen Coal Combustion By-Products Storage Facility Site Acceptability Report.
- Southern Company Services, Inc. 2004. Plant Bowen Proposed Coal Combustion By-Product Monofill Addendum I Site Acceptability Report – Hydrogeological Assessment and Demonstration of Engineering Measures.
- Southern Company Services, Inc. 2006. Plant Bowen Coal Combustion By-Product Disposal Facility- Hydrogeologic Report and Groundwater Monitoring Plan – Revision 1.
- U.S. Environmental Protection Agency (US EPA), 1989. USEPA 530/SW-89-031 Interim Final RCRA Investigation (RFI) Guidance, Volume I and II.
- US EPA, 2000. Guidance for Data Quality Assessment: Practical methods for data analysis; USEPA QA/G-9, QA00 Update. Environmental Protection Agency Report USEPA/600/R-96/084, Office of Environmental Information, Washington, D.C.
- US EPA, March 2009. *Unified Guidance*, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities. USEPA 350/R-09/007 Office of Solid Waste Management Division, U.S. Environmental Protection Agency, Washington, D. C.
- US EPA, 2013. Groundwater Sampling, SESDPROC-301-R3.
- US EPA, 2014. Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Superfund Data Review; Office of Superfund Remediation and Technology Innovation (OSRTI), Washington, DC, United States Environmental Protection Agency (EPA), EPA-540-R-013-001, August 2014
- US EPA, 2017. Groundwater Sampling; Science and Ecosystem Support Division, United States Environmental Protection Agency (EPA) Region 4, SESDPROC-301-R4, April 26, 2017
- Wood Environment & Infrastructure Solutions, Inc., 2018. Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10 Alternate Source Demonstration Cells 1 & 2, 3 & 4, and 9 & 10 (Barium, Zinc, pH, Calcium, Chloride, Sulfate, and TDS various wells), April 19, 2018.

TABLES

**TABLE 1
MONITORING WELL NETWORK SUMMARY**

Well Name	Installation Date	Northing (ft NAD83)	Easting (ft NAD83)	Ground Surface Elevation (ft, NAVD88)	Top of Casing Elevation (ft, NAVD88)	Top of Screen Elevation (ft, NAVD88)	Bottom of Screen Elevation (ft, NAVD88)	Screen Length (ft)	Total Well Depth on Construction Log (feet below land surface)	Lithology Screened	Hydraulic Location and Purpose
GWA-1	4/12/2007	1502840.52	2071724.11	739.4	742.20	601.7	591.7	10	148.0	Overburden/Bedrock	Cells 1 & 2 - Upgradient
GWA-2	4/4/2007	1502638.00	2071935.13	732.3	734.81	590.8	580.8	10	151.8	Overburden/Bedrock	Cells 1 & 2 - Upgradient
GWA-2R	8/3/2007	1502613.68	2071966.37	733.0	735.78	637.9	627.9	10	105.4	Bedrock	Cells 1 & 2 - Upgradient
GWA-3	4/11/2007	1502386.74	2072067.26	729.9	732.47	644.9	634.9	10	95.4	Overburden	Cells 1 & 2 - Upgradient
GWA-4	3/14/2007	1502239.16	2072318.41	741.0	743.47	681.5	671.5	10	69.8	Overburden	Cells 1 & 2 - Upgradient, Water level measurement only
GWA-4R	3/13/2007	1502244.98	2072317.65	741.4	743.84	658.4	648.4	10	93.4	Bedrock	Cells 1 & 2 - Upgradient, Water level measurement only. Well replaced by a new well GWA-4RZ.
GWA-4RZ	10/28/2016	1502237.97	2072329.51	740.1	742.85	633.1	623.1	10	117.0	Bedrock	Cells 1 & 2 - Upgradient
GWA-50	6/4/2008	1502156.81	2072442.89	720.6	722.98	636.6	626.6	10	94.3	Overburden	Cells 1 & 2 - Upgradient
GWA-50R	6/10/2008	1502153.32	2072447.90	719.0	721.30	590.8	580.8	10	138.5	Bedrock	Cells 1 & 2 - Upgradient
GWC-5	4/18/2006	1502338.19	2072677.08	735.8	738.17	634.7	624.7	10	111.4	Overburden	Cells 1 & 2 - Downgradient
GWC-6	5/1/2007	1502517.79	2072964.10	726.7	729.02	629.1	619.1	10	107.9	Overburden	Cells 1 & 2 - Downgradient
GWC-6RZ	4/28/2015	1502502.98	2072900.19	729.3	732.10	634.3	624.3	10	105.3	Bedrock	Cells 1 & 2 - Downgradient
GWC-7Z	5/19/2016	1502639.99	2073192.07	710.1	713.12	606.4	596.4	10	113.7	Overburden	Cells 1 & 2 - Downgradient
GWC-8Z	4/28/2015	1502828.21	2073525.42	699.3	702.32	636.3	626.3	10	73.0	Overburden	Cells 1 & 2 - Downgradient
GWC-8RR	6/27/2011	1502857.62	2073501.63	700.4	702.09	602.0	592.0	10	107.0	Bedrock	Cells 1 & 2 - Downgradient
GWC-9	8/16/2006	1503017.30	2073782.56	692.8	695.50	632.6	622.7	10	70.5	Overburden	Cells 1 & 2 - Downgradient
GWC-10	9/6/2006	1503160.48	2074020.99	685.8	688.57	627.6	617.6	10	68.5	Overburden	Cells 1 & 2 - Downgradient
GWC-10R	5/15/2007	1503151.35	2074021.32	686.6	688.61	601.1	591.1	10	95.8	Bedrock	Cells 1 & 2 - Downgradient
GWC-11	6/1/2007	1503388.37	2073830.98	676.0	678.43	644.2	634.2	10	42.1	Overburden	Cells 1 & 2 - Downgradient
GWC-11R	5/31/2007	1503393.39	2073829.01	675.9	678.32	608.0	598.0	10	78.2	Bedrock	Cells 1 & 2 - Downgradient
GWC-12	6/4/2007	1503660.16	2073693.51	675.2	677.77	637.1	627.1	10	48.4	Overburden	Cells 1 & 2 - Downgradient
GWC-13	5/31/2007	1503896.00	2073496.30	684.9	687.13	614.4	604.4	10	80.7	Overburden	Cells 1 & 2 - Downgradient
GWC-13R	6/5/2007	1503906.40	2073503.07	683.9	686.53	594.9	584.9	10	99.3	Bedrock	Cells 1 & 2 - Downgradient, Water level measurement only. Well replaced by a new well GWC-13RZ
GWC-13RZ	11/2/2016	1503927.54	2073517.10	681.8	684.61	589.8	579.8	10	102.0	Bedrock	Cells 1 & 2 - Downgradient
GWC-14	8/22/2007	1504081.44	2073214.90	683.6	686.30	615.8	605.8	10	78.0	Overburden	Cells 1 & 2 - Downgradient, Water level measurement only. Well replaced by a new well GWC-14Z
GWC-14Z	11/3/2016	1504061.38	2073193.18	684.4	687.33	621.4	611.4	10	73.0	Overburden	Cells 1 & 2 - Downgradient

**TABLE 1
MONITORING WELL NETWORK SUMMARY**

Well Name	Installation Date	Northing (ft NAD83)	Easting (ft NAD83)	Ground Surface Elevation (ft, NAVD88)	Top of Casing Elevation (ft, NAVD88)	Top of Screen Elevation (ft, NAVD88)	Bottom of Screen Elevation (ft, NAVD88)	Screen Length (ft)	Total Well Depth on Construction Log (feet below land surface)	Lithology Screened	Hydraulic Location and Purpose
GWC-15	6/1/2007	1503941.08	2072928.57	693.3	695.51	636.3	626.3	10	67.3	Overburden	Cells 1 & 2 - Downgradient, Water level measurement only. Well replaced by a new well GWC-15Z
GWC-15Z	10/31/2016	1503952.79	2072917.89	693.1	695.89	631.1	621.1	10	72.0	Overburden	Cells 1 & 2 - Downgradient
GWC-15R	5/24/2007	1503934.08	2072920.90	693.8	696.44	611.6	601.6	10	92.4	Bedrock	Cells 1 & 2 - Downgradient
GWA-36	6/15/2011	1505057.05	2073383.57	682.3	684.91	616.6	606.6	10	76.0	Overburden	Cells 3 & 4 - Upgradient
GWA-36R	6/15/2011	1505050.78	2073384.01	681.8	684.53	606.1	596.1	10	86.0	Bedrock	Cells 3 & 4 - Upgradient
GWA-37	9/11/2013	1505341.85	2073070.71	701.02	703.66	606.8	596.8	10	104.5	Overburden	Cells 3 & 4 - Upgradient
GWA-38	6/13/2011	1505501.65	2072833.09	713.8	716.43	659.1	649.1	10	65.0	Overburden	Cells 3 & 4 - Upgradient
GWA-51RZ	3/1/2016	1505310.38	2073781.45	706.3	708.98	625.5	615.5	10	91.0	Bedrock	Cells 3 & 4 - Upgradient
GWA-52	4/21/2015	1505460.21	2073875.23	707.1	710.12	636.5	626.5	10	80.9	Overburden	Cells 3 & 4 - Upgradient
GWA-53	4/10/2015	1505696.02	2074038.42	708.3	711.38	600.8	590.8	10	117.8	Overburden	Cells 3 & 4 - Upgradient
GWA-53R	4/10/2015	1505689.59	2074031.47	708.8	711.93	554.7	543.7	11	165.4	Bedrock	Cells 3 & 4 - Upgradient
GWA-54	4/14/2015	1505853.97	2074285.87	701.7	704.63	638.8	628.8	10	73.2	Overburden	Cells 3 & 4 - Upgradient
GWA-55	4/15/2015	1506035.38	2074506.56	694.2	697.01	642.1	632.1	10	62.4	Overburden	Cells 3 & 4 - Upgradient
GWA-55R	4/15/2015	1506041.83	2074517.12	694.0	696.84	601.5	591.5	10	102.8	Bedrock	Cells 3 & 4 - Upgradient
GWA-56	4/16/2015	1506128.94	2074632.63	689.5	692.45	616.9	606.9	10	82.9	Overburden	Cells 3 & 4 - Upgradient
GWC-16R	12/13/2011	1505877.37	2072608.08	728.1	730.69	646.0	636.0	10	95.0	Bedrock	Cells 3 & 4 - Downgradient
GWC-17R	12/8/2011	1506068.86	2072829.56	730.7	733.73	651.5	641.5	10	89.5	Bedrock	Cells 3 & 4 - Downgradient
GWC-18	6/6/2011	1506306.93	2072930.02	719.1	721.93	651.4	642.4	9	77.0	Overburden	Cells 3 & 4 - Downgradient
GWC-18R	6/2/2011	1506301.46	2072930.28	719.2	721.78	591.9	581.9	10	137.5	Bedrock	Cells 3 & 4 - Downgradient
GWC-19R	6/7/2011	1506395.14	2073158.91	724.0	726.58	590.3	580.3	10	144.0	Bedrock	Cells 3 & 4 - Downgradient
GWC-20R	6/9/2011	1506601.52	2073487.28	718.4	721.09	644.4	634.4	10	84.3	Bedrock	Cells 3 & 4 - Downgradient
GWC-21R	12/16/2011	1506694.91	2073784.63	720.9	723.46	641.7	631.7	10	89.5	Bedrock	Cells 3 & 4 - Downgradient
GWC-22R	6/14/2011	1506717.20	2074105.68	713.3	715.85	606.6	596.6	10	117.0	Bedrock	Cells 3 & 4 - Downgradient
GWC-23R	6/28/2011	1506700.85	2074447.26	688.9	691.41	652.2	642.2	10	47.0	Bedrock	Cells 3 & 4 - Downgradient
GWC-24R	6/21/2011	1506693.97	2074805.76	674.3	676.92	647.6	637.6	10	37.0	Bedrock	Cells 3 & 4 - Downgradient
GWC-25R	6/21/2011	1506495.03	2075088.24	674.2	676.75	587.5	577.5	10	97.0	Bedrock	Cells 3 & 4 - Downgradient
GWA-39Z	3/1/2016	1502655.51	2071120.35	732.1	735.10	629.2	619.2	10	115.0	Overburden	Cells 9 & 10 - Upgradient
GWA-39RZ	11/4/2016	1502618.22	2071163.59	729.8	732.58	602.8	592.8	10	137.0	Bedrock	Cells 9 & 10 - Upgradient
GWA-40	6/7/2011	1503195.11	2071300.70	728.6	731.73	586.5	576.5	10	153.0	Overburden	Cells 9 & 10 - Upgradient
GWA-41	6/6/2011	1503518.92	2071046.83	739.1	742.37	647.0	637.0	10	102.0	Overburden	Cells 9 & 10 - Upgradient

**TABLE 1
MONITORING WELL NETWORK SUMMARY**

Well Name	Installation Date	Northing (ft NAD83)	Easting (ft NAD83)	Ground Surface Elevation (ft, NAVD88)	Top of Casing Elevation (ft, NAVD88)	Top of Screen Elevation (ft, NAVD88)	Bottom of Screen Elevation (ft, NAVD88)	Screen Length (ft)	Total Well Depth on Construction Log (feet below land surface)	Lithology Screened	Hydraulic Location and Purpose
GWA-41R	6/1/2011	1503527.50	2071051.59	739.9	743.14	634.6	624.6	10	116.0	Bedrock	Cells 9 & 10 - Upgradient
GWA-42	6/1/2011	1503824.33	2071049.88	734.8	738.02	660.6	650.6	10	85.0	Overburden	Cells 9 & 10 - Upgradient
GWA-43	5/25/2011	1504128.26	2070982.13	707.7	710.97	635.5	625.5	10	93.0	Overburden	Cells 9 & 10 - Upgradient
GWA-43R	5/24/2011	1504117.91	2070972.79	707.9	711.21	601.7	591.7	10	127.0	Bedrock	Cells 9 & 10 - Upgradient
GWC-44	6/9/2011	1504436.07	2071414.77	709.9	712.95	634.7	624.7	10	86.0	Overburden	Cells 9 & 10 - Downgradient
GWC-45	5/17/2007	1504540.11	2071956.67	698.9	701.56	644.3	634.3	10	64.7	Overburden	Cells 9 & 10 - Downgradient
GWC-45R	5/22/2007	1504539.43	2071945.29	699.3	702.04	584.1	574.0	10	125.7	Bedrock	Cells 9 & 10 - Downgradient
GWC-46R	8/15/2014	1504523.07	2072184.48	687.9	690.51	642.3	632.3	10	56.5	Bedrock	Cells 9 & 10 - Downgradient
GWC-47	6 /2011	1504544.69	2072481.32	687.4	690.84	630.0	620.0	10	66	Overburden	Cells 9 & 10 - Downgradient
GWC-47R	4/24/2014	1504540.46	2072467.37	687.7	691.13	617.0	607.0	10	81.2	Bedrock	Cells 9 & 10 - Downgradient
GWC-48	6/8/2011	1504490.41	2072850.47	686.0	688.31	641.0	631.0	10	56.0	Overburden	Cells 9 & 10 - Downgradient
GWC-49Z	3/1/2016	1504238.74	2072896.12	706.2	709.12	627.2	617.2	10	90.0	Overburden	Cells 9 & 10 - Downgradient
GWC-49R	4/17/2014	1504246.61	2072916.91	706.0	709.50	585.7	575.7	10	131.1	Bedrock	Cells 9 & 10 - Downgradient

Notes:

1. ft NAD83 indicates feet referenced to the North American Datum of 1983.
2. NAVD88 indicates the North American Vertical Datum 1988.
3. TOC indicates top of casing.
4. The listed monitoring wells are measured for water levels and sampled for groundwater quality. Some wells are only measured for water levels as indicated under Purpose.

**TABLE 2
GROUNDWATER SAMPLING EVENT SUMMARY**

Well ID	Hydraulic Location	Summary of Sampling Events				Status of Monitoring Well
		March 6 - 27, and May 6, 2019	June 18, 2019	September 4 - 19, 2019	October 21, 2019	
Purpose of Sampling Event		Detection	Verification	Detection	Verification	
LANDFILL CELLS 1 & 2 MONITORING WELL NETWORK						
GWA-1	Upgradient	D04		D05		Detection Monitoring
GWA-2	Upgradient	D04		D05		Detection Monitoring
GWA-2R	Upgradient	D04		D05		Detection Monitoring
GWA-3	Upgradient	D04		D05		Detection Monitoring
GWA-4RZ	Upgradient	D04		D05		Detection Monitoring
GWA-50	Upgradient	D04		D05		Detection Monitoring
GWA-50R	Upgradient	D04		D05		Detection Monitoring
GWC-5	Downgradient	D04		D05		Detection Monitoring
GWC-6	Downgradient	D04		D05		Detection Monitoring
GWC-6RZ	Downgradient	D04		D05		Detection Monitoring
GWC-7Z	Downgradient	D04		D05		Detection Monitoring
GWC-8Z	Downgradient	D04		D05		Detection Monitoring
GWC-8RR	Downgradient	D04		D05		Detection Monitoring
GWC-9	Downgradient	D04		D05		Detection Monitoring
GWC-10	Downgradient	D04		D05		Detection Monitoring
GWC-10R	Downgradient	D04		D05		Detection Monitoring
GWC-11	Downgradient	D04		D05		Detection Monitoring
GWC-11R	Downgradient	D04		D05		Detection Monitoring
GWC-12	Downgradient	D04		D05		Detection Monitoring
GWC-13	Downgradient	D04		D05		Detection Monitoring
GWC-13RZ	Downgradient	D04		D05		Detection Monitoring
GWC-14Z	Downgradient	D04		D05		Detection Monitoring
GWC-15Z	Downgradient	D04		D05		Detection Monitoring
GWC-15R	Downgradient	D04		D05		Detection Monitoring
LANDFILL CELLS 3 & 4 MONITORING WELL NETWORK						
GWA-36	Upgradient	D04		D05		Detection Monitoring
GWA-36R	Upgradient	D04		D05		Detection Monitoring
GWA-37	Upgradient	D04		D05		Detection Monitoring
GWA-38	Upgradient	D04		D05		Detection Monitoring
GWA-51RZ	Upgradient	D04		D05		Detection Monitoring
GWA-52	Upgradient	D04		D05		Detection Monitoring
GWA-53	Upgradient	D04		D05		Detection Monitoring
GWA-53R	Upgradient	D04		D05		Detection Monitoring
GWA-54	Upgradient	D04		D05		Detection Monitoring
GWA-55	Upgradient	D04		D05		Detection Monitoring
GWA-55R	Upgradient	D04		D05		Detection Monitoring
GWA-56	Upgradient	D04		D05		Detection Monitoring
GWC-16R	Downgradient	D04		D05		Detection Monitoring
GWC-17R	Downgradient	D04		D05		Detection Monitoring
GWC-18	Downgradient	D04		D05		Detection Monitoring
GWC-18R	Downgradient	D04		D05		Detection Monitoring
GWC-19R	Downgradient	D04		D05		Detection Monitoring
GWC-20R	Downgradient	D04		D05		Detection Monitoring
GWC-21R	Downgradient	D04	V02-FI+pH	D05	V03-Sb + Zn	Detection Monitoring
GWC-22R	Downgradient	D04		D05		Detection Monitoring
GWC-23R	Downgradient	D04		D05		Detection Monitoring
GWC-24R	Downgradient	D04		D05		Detection Monitoring
GWC-25R	Downgradient	D04		D05		Detection Monitoring

**TABLE 2
GROUNDWATER SAMPLING EVENT SUMMARY**

Well ID	Hydraulic Location	Summary of Sampling Events				Status of Monitoring Well
		March 6 - 27, and May 6, 2019	June 18, 2019	September 4 - 19, 2019	October 21, 2019	
Purpose of Sampling Event		Detection	Verification	Detection	Verification	
LANDFILL CELLS 9 & 10 MONITORING WELL NETWORK						
GWA-39Z	Upgradient	D04		D05		Detection Monitoring
GWA-39RZ	Upgradient	D04		D05		Detection Monitoring
GWA-40	Upgradient	D04		D05		Detection Monitoring
GWA-41	Upgradient	D04		D05		Detection Monitoring
GWA-41R	Upgradient	D04		D05		Detection Monitoring
GWA-42	Upgradient	D04		D05		Detection Monitoring
GWA-43	Upgradient	D04		D05		Detection Monitoring
GWA-43R	Upgradient	D04		D05		Detection Monitoring
GWC-44	Downgradient	D04		D05		Detection Monitoring
GWC-45	Downgradient	D04		D05	V03-Sb + Cu	Detection Monitoring
GWC-45R	Downgradient	D04		D05		Detection Monitoring
GWC-46R	Downgradient	D04		D05		Detection Monitoring
GWC-47	Downgradient	D04		D05		Detection Monitoring
GWC-47R	Downgradient	D04		D05		Detection Monitoring
GWC-48	Downgradient	D04		D05		Detection Monitoring
GWC-49Z	Downgradient	D04		D05		Detection Monitoring
GWC-49R	Downgradient	D04		D05		Detection Monitoring

Notes:

Dxx - Detection Event Number

V = Verification Event and parameter resampled

Sb = Antimony

Fl = Fluoride

Cu = Copper

Zn = Zinc

**TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS**

Well ID	Top of Casing Elevation (feet above MSL)	Groundwater Elevation (feet above MSL)												
		3/21/2016 (Event #1)	5/2/2016 (Event #2)	7/5/2016 (Event #3)	9/6/2016 (Event #4)	10/24/2016 (Event #5)	1/4/2017 (Event #6)	3/13/2017 (Event #7)	5/15/2017 (Event #8)	9/14/2017 (Event #9)	3/6/2018 (Event #10)	9/5/2018 (Event #11)	3/5/2019 (Event #12)	9/3/2019 (Event #13)
Landfill Cells 1 & 2														
GWA-1	742.20	654.18	656.69	655.41	654.49	654.21	654.80	654.81	655.20	655.77	658.47	655.56	665.31	655.84
GWA-2	734.81	657.81	654.01	652.26	651.30	651.01	652.19	651.89	652.43	653.46	656.31	653.00	661.09	652.74
GWA-2R	735.78	658.46	655.05	653.86	652.76	652.63	653.00	652.83	653.23	653.70	657.15	654.09	662.09	653.94
GWA-3	732.47	681.38	670.95	666.87	663.58	661.93	661.24	662.00	664.19	NM	674.10	666.72	688.27	666.32
GWA-4	743.47	671.26	NA	Dry	NA	NA	671.21	671.23	671.09	671.18	671.17	NA	NA	671.13
GWA-4R	743.84	661.02	NA	Dry	NA	NA	657.34	655.95	655.81	655.57	658.00	656.07	662.42	657.58
GWC-4RZ	742.85	NA	NA	NA	NA	NA	649.41	652.42	653.60	643.93	655.08	655.55	663.58	655.05
GWA-50	722.98	671.25	665.44	662.47	659.49	657.62	656.08	654.82	654.33	654.23	656.17	657.50	673.93	661.37
GWA-50R	721.30	652.09	646.39	644.10	642.79	642.18	643.07	643.32	643.97	644.61	649.25	644.69	655.94	644.29
GWC-5	738.17	666.93	660.62	658.25	656.58	655.77	656.13	656.11	656.76	657.05	661.24	657.92	670.60	658.09
GWC-6	729.02	662.46	656.30	654.03	652.58	651.95	652.83	653.08	653.74	654.38	659.22	654.59	667.84	654.20
GWC-6RZ	732.10	661.62	655.80	653.49	652.19	651.62	652.42	652.65	653.33	653.91	658.51	645.03	665.93	653.72
GWC-7Z	713.12	660.93	NA	652.77	651.51	651.13	652.23	652.30	652.86	653.86	658.77	653.72	668.11	653.24
GWC-8Z	702.32	660.01	654.61	652.57	651.36	650.95	652.11	652.10	652.59	653.70	658.08	653.41	666.44	652.98
GWC-8RR	702.09	659.74	654.56	652.55	651.36	650.96	652.08	652.10	652.61	653.67	658.00	653.39	666.03	652.97
GWC-9	695.50	657.13	653.50	651.81	650.91	650.70	652.03	651.64	652.13	653.54	656.46	652.74	661.89	652.36
GWC-10	688.57	657.13	653.41	651.70	650.78	650.57	651.88	651.50	652.01	653.41	656.75	652.62	663.58	652.22
GWC-10R	688.61	657.11	653.39	651.69	650.76	650.56	651.84	651.45	651.96	653.35	656.69	652.58	663.63	652.19
GWC-11	678.43	656.95	653.33	651.68	650.73	650.49	651.84	651.57	651.94	653.48	656.60	652.63	661.27	652.23
GWC-11R	678.32	656.81	653.30	651.67	650.72	650.63	651.81	651.52	651.92	653.44	656.52	652.58	661.21	652.21
GWC-12	677.77	657.32	653.64	651.98	650.92	650.62	652.06	651.73	652.19	653.50	656.67	652.85	661.04	652.51
GWC-13	687.13	657.44	653.83	651.86	650.79	650.51	651.82	651.53	652.10	653.25	656.71	652.78	661.41	652.50
GWC-13R	686.53	657.32	653.26	651.28	650.89	650.62	651.92	651.70	652.17	653.41	656.63	652.86	661.11	652.58
GWC-13RZ	684.61	NA	NA	NA	NA	NA	NA	639.88	604.65	591.66	609.71	633.24	630.34	628.69
GWC-14	686.30	657.62	652.85	651.20	650.12	649.76	651.09	650.90	651.39	652.71	655.91	652.10	660.58	651.85
GWC-14Z	687.33	NA	NA	NA	NA	NA	652.34	652.26	652.62	653.53	657.41	653.31	662.11	653.39
GWC-15	695.51	661.75	654.51	652.89	651.66	651.19	652.45	652.49	652.97	653.70	657.76	653.73	662.91	653.51
GWC-15R	696.44	658.54	654.33	652.70	651.51	651.05	652.34	652.25	653.96	653.53	657.55	653.53	662.69	653.32
GWC-15Z	695.89	NA	NA	NA	NA	NA	652.06	652.01	652.51	653.30	657.30	653.30	662.40	653.07

**TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS**

Well ID	Top of Casing Elevation (feet above MSL)	Groundwater Elevation (feet above MSL)												
		3/21/2016 (Event #1)	5/2/2016 (Event #2)	7/5/2016 (Event #3)	9/6/2016 (Event #4)	10/24/2016 (Event #5)	1/4/2017 (Event #6)	3/13/2017 (Event #7)	5/15/2017 (Event #8)	9/14/2017 (Event #9)	3/6/2018 (Event #10)	9/5/2018 (Event #11)	3/5/2019 (Event #12)	9/3/2019 (Event #13)
Landfill Cells 3 & 4														
GWA-36	684.91	654.03	651.40	649.52	648.54	648.26	649.96	649.25	649.72	651.95	654.09	650.19	658.78	649.96
GWA-36R	684.53	654.01	651.37	649.45	648.50	648.23	649.94	649.23	649.69	651.93	654.08	650.16	658.77	648.93
GWA-37	703.66	653.36	652.53	649.78	648.64	648.14	649.68	649.25	649.91	651.43	652.94	651.51	658.11	651.87
GWA-38	716.43	665.11	664.49	661.87	659.24	657.59	655.97	656.28	657.32	658.78	659.80	662.00	669.00	657.70
GWA-51RZ	708.98	654.85	652.27	650.49	649.61	649.40	650.41	649.87	650.63	651.84	654.06	651.20	657.96	651.90
GWA-52	710.12	654.93	652.75	651.10	650.37	650.11	651.06	650.53	651.24	652.34	654.12	651.74	657.97	651.50
GWA-53	711.38	655.06	652.96	651.27	650.52	650.31	651.25	650.71	651.42	652.58	654.17	651.91	657.78	651.26
GWA-53R	711.93	654.97	652.86	651.16	650.38	650.19	651.19	650.63	651.31	652.47	654.08	651.85	657.69	652.25
GWA-54	704.63	655.28	653.16	651.43	650.70	650.46	651.41	650.87	651.59	652.74	654.32	652.11	657.93	651.85
GWA-55	697.01	655.09	652.97	649.29	650.54	650.28	651.39	648.73	651.47	652.64	654.21	651.99	657.95	651.74
GWA-55R	696.84	655.05	652.95	651.26	650.50	650.26	651.27	650.67	651.41	652.58	654.19	651.92	657.86	651.72
GWA-56	692.45	655.06	652.95	651.33	650.40	650.27	651.34	650.69	651.43	652.57	654.17	651.96	657.88	651.67
GWC-16R	730.69	651.86	652.23	652.23	652.13	652.02	651.85	650.39	649.95	650.08	651.35	650.57	653.30	653.18
GWC-17R	733.73	654.19	652.32	650.81	650.24	649.94	650.12	649.85	650.09	650.24	651.00	650.26	656.62	650.71
GWC-18	721.93	649.59	648.35	647.06	646.63	646.49	BTP	BTP	BTP	BTP	648.94	BTP	651.37	BTP
GWC-18R	721.78	649.94	648.53	647.19	646.68	646.50	647.47	646.76	647.28	649.05	649.17	647.54	651.92	647.45
GWC-19R	726.58	650.71	649.36	647.94	647.50	647.33	648.38	647.56	648.12	649.80	650.03	648.38	652.54	648.23
GWC-20R	721.09	651.56	650.03	648.55	649.77	647.78	648.77	647.98	648.56	650.36	650.62	648.94	653.78	648.86
GWC-21R	723.46	653.03	651.48	650.75	650.24	650.00	650.38	649.70	650.34	651.22	652.32	650.86	655.60	650.81
GWC-22R	715.85	653.71	651.77	650.21	649.50	649.25	650.20	649.57	650.28	651.44	652.65	650.75	655.93	650.54
GWC-23R	691.41	653.93	651.97	650.56	649.77	649.54	650.30	BTP	650.55	651.40	652.86	650.97	656.18	650.71
GWC-24R	676.92	653.75	651.87	650.31	649.56	649.37	650.25	649.70	650.34	651.48	652.78	650.82	656.16	650.65
GWC-25R	676.75	654.56	652.61	650.97	650.22	650.00	651.01	650.35	651.03	652.14	653.48	651.45	656.81	652.13

**TABLE 3
SUMMARY OF GROUNDWATER ELEVATIONS**

Well ID	Top of Casing Elevation (feet above MSL)	Groundwater Elevation (feet above MSL)														
		3/21/2016 (Event #1)	5/2/2016 (Event #2)	7/5/2016 (Event #3)	9/6/2016 (Event #4)	10/24/2016 (Event #5)	1/4/2017 (Event #6)	3/13/2017 (Event #7)	5/15/2017 (Event #8)	9/14/2017 (Event #9)	3/6/2018 (Event #10)	9/5/2018 (Event #11)	3/5/2019 (Event #12)	9/3/2019 (Event #13)		
Landfill Cells 9 & 10																
GWA-39Z	735.10	673.67	668.97	667.15	666.07	664.40	663.66	664.74	665.07	665.91	668.56	666.16	683.24	666.97		
GWA-39R	735.23	673.42	668.68	666.97	665.70	664.17	Well Abandoned									
GWA-39RZ	732.58	NA	NA	NA	NA	NA	662.98	663.79	664.28	664.40	667.73	663.64	684.13	666.13		
GWA-40	731.73	668.52	663.52	662.24	660.51	659.31	660.02	660.63	661.09	661.68	666.34	661.85	674.68	661.33		
GWA-41	742.37	670.16	664.54	663.03	661.27	659.91	BTP	661.20	661.40	662.67	668.29	662.47	685.47	662.12		
GWA-41R	743.14	670.19	664.58	663.08	661.30	659.99	660.70	661.22	661.49	662.69	668.35	662.57	685.59	662.14		
GWA-42	738.02	667.33	662.64	661.23	659.69	658.58	658.97	659.82	660.23	660.71	665.19	660.97	672.58	660.57		
GWA-43	710.97	663.54	657.76	655.89	654.43	653.79	654.75	655.25	655.25	656.72	661.80	655.96	668.77	655.52		
GWA-43R	711.21	663.30	657.70	655.86	654.40	653.81	654.72	655.18	655.20	656.65	661.67	655.99	668.67	655.46		
GWC-44	712.95	664.67	658.37	665.33	653.55	655.43	661.39	658.20	656.12	661.22	666.01	657.34	672.93	657.52		
GWC-45	701.56	662.40	657.69	655.16	652.80	651.66	651.38	652.77	654.35	655.74	661.37	644.08	668.35	655.63		
GWC-45R	702.04	653.41	650.39	648.41	647.43	647.32	648.43	648.04	648.09	650.22	652.67	649.24	657.28	648.79		
GWC-46R	690.51	654.46	650.62	648.26	647.12	646.87	648.01	647.65	648.57	649.96	653.55	649.37	658.85	648.94		
GWC-47	690.84	653.36	650.08	647.85	646.21	646.55	647.82	647.39	648.20	649.78	652.58	648.84	657.47	648.44		
GWC-47R	691.13	653.70	650.27	647.98	646.92	646.69	647.90	647.47	648.32	649.86	652.87	649.01	657.88	648.59		
GWC-48	688.31	653.70	650.57	648.49	647.75	647.62	648.35	648.37	648.84	650.30	653.36	649.48	658.61	649.06		
GWC-49Z	709.12	656.90	653.49	651.54	650.44	650.10	651.26	651.09	651.60	652.96	656.34	652.47	661.67	652.23		
GWC-49R	709.50	656.68	653.19	651.22	651.19	649.79	651.03	650.87	651.34	652.74	656.01	652.17	661.31	651.85		

Notes:
 BTP - Below Top of Pump
 Dry - Well was dry.
 NA - Not available.
 NM - Not measured.
 MSL - Mean Sea Level

**TABLE 4
GROUNDWATER FLOW VELOCITY CALCULATIONS**

Flow Paths		Groundwater Elevations in Well Pairs (h ₁ , h ₂) (feet)		Change in Elevation (Δh) (feet)	Distance Measured (L) (feet)	Hydraulic Gradient (i) (feet/feet)	Average Hydraulic Conductivity (K) (feet/day)	Estimated Effective Porosity (n _e)	Calculated Groundwater Flow Velocity (V) (feet/day)	Calculated Groundwater Flow Velocity (V) (feet/year)
Landfill Cells 1 & 2	Overburden March GWC-5 to GWC-9	670.60	661.89	8.71	1302	0.007	0.072	0.01	0.05	17.6
	Overburden March GWC-15 to GWC-14	662.91	660.58	2.33	326	0.007	0.072	0.01	0.05	18.8
	Overburden September GWC-5 to GWC-10	658.09	652.22	5.87	1575	0.004	0.072	0.01	0.03	9.8
	Overburden September GWC-15 to GWC-14	653.51	651.85	1.66	325	0.005	0.072	0.01	0.04	13.4
	Bedrock March GWC-8RR to GWC-10R	666.03	663.63	2.40	619	0.004	0.36	0.01	0.14	50.9
	Bedrock March GWC-10R to GWC-13R	663.63	661.11	2.52	904	0.003	0.36	0.01	0.10	36.6
	Bedrock September GWA-4RZ to GWC-10R	655.05	652.19	2.86	1915	0.001	0.36	0.01	0.05	19.6
	Bedrock September GWC-15R to GWC-13R	653.32	652.58	0.74	575	0.001	0.36	0.01	0.05	16.9
Landfill Cells 3 & 4	Overburden March GWA-52 to GWC-18	657.97	651.37	6.60	1285	0.005	0.072	0.01	0.04	13.5
	Overburden September GWA-52 to GWA-36	651.50	649.96	1.54	635	0.002	0.072	0.01	0.02	6.4
	Bedrock March GWA-53R to GWC-18R	657.69	651.92	5.77	1279	0.005	0.36	0.01	0.16	59.3
	Bedrock March GWA-36R to GWC-16R	658.77	653.30	5.47	1142	0.005	0.36	0.01	0.17	62.9
	Bedrock September GWA-53R to GWC-19R	652.25	648.23	4.02	1120	0.004	0.36	0.01	0.13	47.2
	Bedrock September GWC-25R to GWC-23R	652.13	650.71	1.42	660	0.002	0.36	0.01	0.08	28.3
	Overburden March GWA-40 to GWC-45	674.68	668.35	6.33	1498	0.004	0.072	0.01	0.03	11.1
Landfill Cells 9 & 10	Overburden March GWC-49Z to GWC-48	661.67	658.61	3.06	261	0.012	0.072	0.01	0.08	30.8
	Overburden September GWC-49Z to GWC-48	652.23	649.06	3.17	250	0.013	0.072	0.01	0.09	33.3
	Overburden September GWA-41 to GWC-47	662.12	648.44	13.68	1770	0.008	0.072	0.01	0.06	20.3
	Bedrock March GWA-41R to GWC-45R	685.59	657.28	28.31	1360	0.021	0.36	0.01	0.75	273.5
	Bedrock March GWC-49R to GWC-47R	661.31	657.88	3.43	547	0.006	0.36	0.01	0.23	82.4
	Bedrock September GWA-41R to GWC-45R	662.14	648.79	13.35	1340	0.010	0.36	0.01	0.36	130.9
	Bedrock September GWC-49R to GWC-47R	651.85	648.59	3.26	525	0.006	0.36	0.01	0.22	81.6

TABLE 5
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 1 & 2

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWA-1	GWA-1	GWA-2	GWA-2	GWA-2R	GWA-2R	GWA-3	GWA-3	
		3/20/2019	9/12/2019	3/20/2019	9/12/2019	3/19/2019	9/13/2019	3/20/2019	9/13/2019	
APPENDIX III	Boron	N/R	ND (0.0042 J)	ND	ND	ND	ND (0.014 J)	ND (0.012 J)	ND	ND
	Calcium	N/R	30.1	31.9	4.3	1.8	59.2	27.0	0.96	0.94
	Chloride	(250)	1.4	1.3	0.86	ND (0.80 J)	2.0	ND (0.94 J)	1.5	1.5
	Fluoride	4.0	ND	ND (0.051 J)	ND	ND	ND (0.056 J)	ND (0.055 J)	ND	ND
	pH	N/R	7.6	7.4	5.7	5.5	7.2	7.3	5.2	5.1
	Sulfate	(250)	1.5	ND (0.98 J)	3.6	5.2	32.5	3.8	ND (0.38 J)	ND
	TDS	(500)	175	174	49.0	44.0	208	113	30.0	19.0

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 5
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 1 & 2

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWA-4RZ	GWA-4RZ	GWA-50	GWA-50	GWA-50R	GWA-50R	GWC-5	GWC-5	
		3/21/2019	9/13/2019	3/19/2019	9/13/2019	3/19/2019	9/12/2019	3/20/2019	9/16/2019	
APPENDIX III	Boron	N/R	ND (0.0066 J)	ND (0.012 J)	ND	ND	ND	ND	ND (0.0051 J)	
	Calcium	N/R	49.9	49.9	4.2	1.9	4.6	2.7	2.8	
	Chloride	(250)	3.6	2.1	1.2	1.0	0.88	ND (0.74 J)	0.93	ND (0.73 J)
	Fluoride	4.0	ND (0.19 J)	ND (0.10 J)	ND	ND	ND	ND	ND	ND
	pH	N/R	7.2	7.2	5.9	5.6	6.0	5.9	6.3	6.1
	Sulfate	(250)	24.9	16.5	ND (0.52 J)	ND (0.55 J)	ND (0.97 J)	ND (0.80 J)	1.3	1.2
	TDS	(500)	367	200	34.0	19.0	48.0	46.0	66.0	45.0

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 5
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 1 & 2

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWC-6	GWC-6	GWC-6RZ	GWC-6RZ	GWC-7Z	GWC-7Z	GWC-8RR	GWC-8RR	
		3/21/2019	9/16/2019	3/21/2019	9/16/2019	3/21/2019	9/13/2019	3/27/2019	9/16/2019	
APPENDIX III	Boron	N/R	ND	ND	ND	ND	ND (0.0065 J)	ND (0.0078 J)	ND	
	Calcium	N/R	ND (14.9 J)	13.5	8.3	9.5	25.2	24.6	ND (20.6 J)	23.0
	Chloride	(250)	1.4	1.1	1.5	1.2	1.0	ND (1.0 J)	0.90	ND (0.76 J)
	Fluoride	4.0	ND	ND	ND	ND	ND	ND	ND	ND
	pH	N/R	7.2	7.4	6.8	6.8	7.3	6.8	8.1	7.9
	Sulfate	(250)	2.7	2.0	1.7	1.6	1.9	ND (0.76 J)	1.5	ND (0.69 J)
	TDS	(500)	80.0	82.0	60.0	65.0	107	115	101	113

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 5
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 1 & 2

Substance	MCL/ (SMCL)	Well ID							
	Sample Date	GWC-8Z	GWC-8Z Dissolved	GWC-8Z	GWC-9	GWC-9	GWC-10	GWC-10	
		5/6/2019	5/6/2019	9/16/2019	3/21/2019	9/16/2019	3/22/2019	9/17/2019	
APPENDIX III	Boron	N/R	ND (0.0065 J)	ND (0.0065 J)	ND	ND (0.0060 J)	ND	ND	
	Calcium	N/R	ND (20.0 J)	ND (19.7 J)	20.3	4.8	12.0	ND (15.4 J)	36.7
	Chloride	(250)	1.1	NA	1.4	2.0	1.9	2.2	2.4
	Fluoride	4.0	ND	NA	ND	ND	ND	ND (0.045 J)	ND
	pH	N/R	8.0	NA	7.2	5.3	6.0	6.2	7.2
	Sulfate	(250)	2.1	NA	1.0	2.3	3.0	1.6	1.2
	TDS	(500)	118	NA	99.0	39.0	85.0	95.0	165

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 5
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 1 & 2

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWC-10R	GWC-10R	GWC-11	GWC-11	GWC-11R	GWC-11R	GWC-12	GWC-12	
		3/22/2019	9/17/2019	3/23/2019	9/17/2019	3/23/2019	9/17/2019	3/23/2019	9/17/2019	
APPENDIX III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	
	Calcium	N/R	37.2	40.5	7.8	16.8	28.3	27.6	7.5	7.8
	Chloride	(250)	2.8	2.8	1.2	1.1	1.7	1.4	0.88	ND (0.84 J)
	Fluoride	4.0	ND	ND	ND	ND	ND	ND	ND	ND
	pH	N/R	7.3	7.5	6.3	6.6	7.6	7.6	6.3	6.2
	Sulfate	(250)	1.3	1.6	2.1	2.6	2.1	2.0	ND (0.30 J)	ND
	TDS	(500)	140	172	64.0	101	148	143	58.0	62.0

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 5
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 1 & 2

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWC-13	GWC-13	GWC-13RZ	GWC-13RZ	GWC-14Z	GWC-14Z	GWC-15R	GWC-15R	
APPENDIX III	Boron	N/R	ND (0.012 J)	ND (0.017 J)	ND (0.013 J)	ND (0.014 J)	ND	ND	ND	ND
	Calcium	N/R	29.6	40.7	40.5	42.9	ND (16.7 J)	11.4	35.6	39.5
	Chloride	(250)	3.5	4.0	7.4	7.6	3.7	3.8	1.9	2.0
	Fluoride	4.0	ND	ND	ND (0.12 J)	ND (0.17 J)	ND	ND	ND	ND
	pH	N/R	7.3	7.3	7.5	7.5	6.3	6.0	7.6	7.4
	Sulfate	(250)	15.5	50.7	57.9	68.1	6.2	6.1	11.2	13.1
	TDS	(500)	135	200	249	281	104	86.0	167	179

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 5
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 1 & 2

	Substance	MCL/ (SMCL)	Well ID	
		Sample Date	GWC-15Z	GWC-15Z
			3/22/2019	9/17/2019
APPENDIX III	Boron	N/R	ND	ND
	Calcium	N/R	ND (21.3 J)	22.1
	Chloride	(250)	1.2	ND (0.78 J)
	Fluoride	4.0	ND	ND
	pH	N/R	7.6	7.8
	Sulfate	(250)	2.1	1.6
	TDS	(500)	116	117

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 6
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 3 & 4

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWA-36	GWA-36	GWA-36R	GWA-36R	GWA-37	GWA-37	GWA-38	GWA-38	
APPENDIX III	Boron	N/R	ND	ND	ND (0.0049 J)	ND	ND	ND	ND	ND
	Calcium	N/R	ND (11.2 J)	13.3	28.0	27.9	0.78	0.76	2.6	1.6
	Chloride	(250)	2.4	2.0	2.8	2.7	1.1	ND (0.81 J)	2.9	2.9
	Fluoride	4.0	ND	ND	ND	ND	ND	ND	ND	ND
	pH	N/R	6.6	6.9	7.5	7.1	5.4	5.1	5.5	5.9
	Sulfate	(250)	ND (0.45 J)	ND (0.68 J)	4.3	1.8	ND (0.46 J)	ND	1.1	ND (0.83 J)
	TDS	(500)	71.0	83.0	135	142	ND (22.0 J)	26.0	84.0	44.0

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 6
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 3 & 4

Substance	MCL/ (SMCL)	Well ID							
	Sample Date	GWA-51RZ	GWA-51RZ	GWA-52	GWA-52	GWA-53	GWA-53	GWA-53R	GWA-53R
		3/8/2019	9/5/2019	3/7/2019	9/4/2019	3/8/2019	9/5/2019	3/12/2019	9/5/2019
APPENDIX III	Boron	N/R	ND (0.0085 J)	ND (0.010 J)	ND	ND	ND	ND	ND
	Calcium	N/R	46.6	40.7	29.5	28.1	25.9	29.3	28.0
	Chloride	(250)	3.4	2.7	3.6	1.3	2.7	2.3	3.3
	Fluoride	4.0	ND (0.075 J)	ND	ND	ND	ND	ND	ND (0.046 J)
	pH	N/R	7.6	7.3	7.3	7.4	7.7	7.6	7.7
	Sulfate	(250)	23.6	22.9	12.7	4.2	1.8	1.5	2.2
	TDS	(500)	244	207	159	135	143	148	150

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 6
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 3 & 4

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWA-54	GWA-54	GWA-55	GWA-55	GWA-55R	GWA-55R	GWA-56	GWA-56	
APPENDIX III	Boron	N/R	ND	ND	ND (0.0056 J)	ND	ND	ND	ND (0.020 J)	ND (0.015 J)
	Calcium	N/R	ND (23.8 J)	24.6	45.2	46.2	40.4	34.6	33.3	31.6
	Chloride	(250)	1.2	ND (0.81 J)	3.4	2.9	3.2	2.9	6.0	4.8
	Fluoride	4.0	ND	ND	ND	ND	ND	ND	ND (0.089 J)	ND (0.11 J)
	pH	N/R	7.6	7.5	7.1	7.3	7.2	7.5	8.1	7.8
	Sulfate	(250)	2.6	2.4	31.8	21.5	25.0	22.7	88.7	67.8
	TDS	(500)	111	132	248	229	212	183	410	326

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 6
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 3 & 4

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWC-16R	GWC-16R	GWC-17R	GWC-17R	GWC-18	GWC-18	GWC-18R	GWC-18R	
APPENDIX III	Boron	N/R	ND (0.013 J)	ND	ND (0.0099 J)	ND	ND	ND	ND	ND
	Calcium	N/R	63.8	55.7	65.3	66.7	ND (23.2 J)	15.2	28.6	27.5
	Chloride	(250)	2.4	1.1	6.9	4.5	2.8	2.0	3.3	2.3
	Fluoride	4.0	ND (0.23 J)	ND	ND (0.056 J)	ND	ND (0.050 J)	ND	ND (0.042 J)	ND
	pH	N/R	7.2	7.1	7.1	7.2	7.1	6.7	7.8	7.7
	Sulfate	(250)	11.0	3.8	25.9	6.0	2.3	1.8	2.6	2.0
	TDS	(500)	344	275	306	312	135	95.0	143	141

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 6
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 3 & 4

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWC-19R	GWC-19R	GWC-20R	GWC-20R	GWC-21R	GWC-21R	GWC-21R	GWC-21R	
		3/12/2019	9/9/2019	3/12/2019	9/6/2019	3/11/2019	6/18/2019	9/6/2019	10/21/2019	
APPENDIX III	Boron	N/R	ND	ND	ND (0.0045 J)	ND	ND (0.0050 J)	NA	ND	NA
	Calcium	N/R	31.1	29.6	35.2	31.1	67.1	NA	57.8	NA
	Chloride	(250)	2.8	2.3	2.7	1.6	4.2	NA	3.5	NA
	Fluoride	4.0	ND (0.040 J)	ND	ND (0.048 J)	ND	0.51	ND	ND	NA
	pH	N/R	7.6	7.7	7.6	7.8	7.0	6.9	7.0	7.1
	Sulfate	(250)	4.3	3.7	1.5	1.4	3.4	NA	6.0	NA
	TDS	(500)	156	172	191	24.0	311	NA	291	NA

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 6
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 3 & 4

Substance	MCL/ (SMCL)	Well ID								
		GWC-22R	GWC-22R	GWC-23R	GWC-23R	GWC-24R	GWC-24R	GWC-25R	GWC-25R	
Sample Date		3/11/2019	9/5/2019	3/12/2019	9/6/2019	3/8/2019	9/5/2019	3/8/2019	9/5/2019	
APPENDIX III	Boron	N/R	ND	ND	ND (0.0047 J)	ND	ND	ND	ND	ND
	Calcium	N/R	33.9	31.8	61.6	55.9	28.8	30.6	33.1	34.6
	Chloride	(250)	3.2	2.7	2.4	1.4	2.6	2.2	2.8	2.5
	Fluoride	4.0	ND	ND	ND (0.060 J)	ND	ND	ND	ND	ND
	pH	N/R	7.5	7.1	7.6	7.3	7.7	7.4	7.7	7.6
	Sulfate	(250)	2.0	1.7	17.7	9.5	1.9	1.8	1.6	1.6
	TDS	(500)	166	171	310	300	164	157	155	177

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 7
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 9 & 10

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWA-39RZ	GWA-39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41	
		3/14/2019	9/11/2019	3/15/2019	9/9/2019	3/13/2019	9/9/2019	3/14/2019	9/10/2019	
APPENDIX III	Boron	N/R	ND (0.0059 J)	ND (0.0081 J)	ND (0.0050 J)	ND	ND	ND	ND (0.0070 J)	ND
	Calcium	N/R	33.0	33.8	ND (20.3 J)	11.3	ND (23.8 J)	15.4	ND (22.7 J)	6.0
	Chloride	(250)	2.8	2.3	1.7	1.2	2.2	ND (0.83 J)	2.6	1.1
	Fluoride	4.0	ND (0.066 J)	ND (0.055 J)	ND	ND (0.054 J)	ND (0.045 J)	ND	ND (0.039 J)	ND
	pH	N/R	7.2	7.3	6.8	6.5	7.1	7.1	6.6	5.7
	Sulfate	(250)	9.3	14.0	3.0	2.4	2.1	1.6	6.2	1.2
	TDS	(500)	154	181	107	93.0	130	108	119	36.0

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 7
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 9 & 10

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWA-41R	GWA-41R	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R	
		3/14/2019	9/10/2019	3/14/2019	9/10/2019	3/13/2019	9/11/2019	3/13/2019	9/11/2019	
APPENDIX III	Boron	N/R	ND (0.015 J)	ND (0.015 J)	ND	ND	ND	ND (0.0059 J)	ND (0.012 J)	ND (0.021 J)
	Calcium	N/R	31.9	29.6	32.0	34.0	2.9	3.2	29.2	29.5
	Chloride	(250)	2.9	1.7	3.6	2.0	1.6	1.3	2.9	3.1
	Fluoride	4.0	ND (0.040 J)	ND	ND (0.058 J)	ND	ND	ND	ND (0.036 J)	ND
	pH	N/R	6.9	6.7	7.6	7.5	5.6	5.5	7.8	7.8
	Sulfate	(250)	8.9	8.4	2.2	1.2	ND (0.43 J)	ND	4.4	5.0
	TDS	(500)	157	113	157	105	31.0	21.0	152	151

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 7
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 9 & 10

Substance	MCL/ (SMCL)	Well ID									
	Sample Date	GWC-44	GWC-44	GWC-45	GWC-45	GWC-45	GWC-45R	GWC-45R	GWC-46R	GWC-46R	
APPENDIX III	Boron	N/R	ND (0.018 J)	ND (0.0088 J)	ND	ND	NA	ND (0.0060 J)	ND	ND (0.022 J)	ND
	Calcium	N/R	ND (17.2 J)	7.1	0.90	0.83	NA	37.0	37.2	46.1	43.1
	Chloride	(250)	6.4	3.7	1.3	ND (0.81 J)	NA	4.3	2.9	1.8	1.4
	Fluoride	4.0	ND (0.13 J)	ND	ND	ND	NA	ND (0.039 J)	ND	ND	ND
	pH	N/R	4.4	4.4	5.0	4.9	4.8	7.1	7.2	7.4	7.4
	Sulfate	(250)	79.7	19.8	ND (0.72 J)	ND	NA	4.3	2.6	4.4	7.0
	TDS	(500)	110	58.0	39.0	ND	NA	195	172	251	234

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 7
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 9 & 10

Substance	MCL/ (SMCL)	Well ID								
	Sample Date	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R	
		3/15/2019	9/12/2019	3/19/2019	9/11/2019	3/15/2019	9/11/2019	3/18/2019	9/11/2019	
APPENDIX III	Boron	N/R	ND	ND	ND	ND (0.0054 J)	ND	ND	ND (0.0099 J)	ND
	Calcium	N/R	ND (20.4 J)	21.1	28.4	33.3	4.4	2.9	31.0	24.3
	Chloride	(250)	2.8	2.3	2.6	2.1	3.3	3.3	2.7	1.4
	Fluoride	4.0	ND	ND	ND	ND	ND	ND	ND	ND
	pH	N/R	7.5	7.5	7.9	7.6	5.3	4.9	7.9	8.2
	Sulfate	(250)	4.2	4.7	14.8	10.7	1.7	ND (0.86 J)	5.8	5.7
	TDS	(500)	125	121	154	164	41.0	20.0	170	138

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 7
ANALYTICAL DATA SUMMARY
Appendix III (2019)
Landfill Cells 9 & 10

Substance	MCL/ (SMCL)	Well ID		
	Sample Date	GWC-49Z	GWC-49Z	
		3/19/2019	9/11/2019	
APPENDIX III	Boron	N/R	ND (0.0043 J)	ND
	Calcium	N/R	1.1	0.78
	Chloride	(250)	1.1	ND (1.0 J)
	Fluoride	4.0	ND	ND
	pH	N/R	5.6	5.4
	Sulfate	(250)	2.2	1.5
	TDS	(500)	35.0	27.0

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
7. TDS indicates total dissolved solids.
8. NA = parameter not analyzed
9. Appendix III = indicator parameters evaluated during Detection Monitoring

TABLE 8
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 1 & 2

Substance	Well ID								
	MCL / (SMCL)	GWA-1	GWA-1	GWA-2	GWA-2	GWA-2R	GWA-2R	GWA-3	GWA-3
	Sample Date	3/20/2019	9/12/2019	3/20/2019	9/12/2019	3/19/2019	9/13/2019	3/20/2019	9/13/2019
Antimony	0.006	ND	0.0037	ND	ND	ND (0.0019 J)	0.0044	ND (0.0019 J)	ND (0.0013 J)
Arsenic	0.01	ND	ND (0.00040 J)	ND	ND	ND	ND (0.00051 J)	ND	ND
Barium	2.0	0.019	0.018	ND (0.0072 J)	ND (0.0056 J)	0.024	0.012	ND (0.0042 J)	ND (0.0042 J)
Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND (0.00073 J)
Cobalt	N/R	ND (0.00078 J)	ND (0.00047 J)	ND	ND	ND	ND	ND	ND (0.00046 J)
Copper	1.0[^]	ND	ND	ND	ND	ND	ND (0.00055 J)	0.026	0.026
Lead	0.015^{***}	ND	ND	ND	ND (0.000072 J)	ND	ND	ND	ND
Mercury	0.002	ND (0.000040 J)	ND	ND (0.000039 J)	ND	ND	ND	ND	ND
Nickel	0.1	ND	ND (0.00038 J)	ND	ND	ND	ND	0.010	0.012
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND (0.000062 J)	ND	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND (0.0010 J)	ND	ND
Zinc	(5)	ND	ND (0.0047 J)	ND	ND (0.0050 J)	ND	ND (0.0078 J)	0.028	0.036

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. Bolded and shaded cells indicate MCL exceedance

TABLE 8
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 1 & 2

Substance	Well ID									
	MCL / (SMCL)	GWA-4RZ	GWA-4RZ	GWA-50	GWA-50	GWA-50R	GWA-50R	GWC-5	GWC-5	
	Sample Date	3/21/2019	9/13/2019	3/19/2019	9/13/2019	3/19/2019	9/12/2019	3/20/2019	9/16/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND (0.00052 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND (0.00060 J)	ND	ND	ND	ND	ND	ND
	Barium	2.0	0.040	0.034	0.012	ND (0.0088 J)	0.013	0.011	0.018	0.022
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND (0.00046 J)	ND (0.00051 J)
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	0.022	0.020	ND	ND	ND	ND	ND	ND
	Copper	1.0[^]	ND	ND (0.00045 J)	ND (0.0023 J)	ND (0.0023 J)	ND (0.0029 J)	ND (0.0028 J)	ND (0.023 J)	ND (0.016 J)
	Lead	0.015^{***}	ND	ND (0.000065 J)	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND (0.000068 J)	ND	ND	ND	ND	ND	ND (0.000043 J)	ND
	Nickel	0.1	ND	ND (0.00032 J)	ND	ND (0.00063 J)	ND (0.0016 J)	ND (0.0015 J)	ND (0.0080 J)	ND (0.0080 J)
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND (0.00045 J)	ND (0.0017 J)	ND (0.0028 J)	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND (0.000084 J)
Vanadium	N/R	ND	ND (0.00084 J)	ND	ND	ND	ND	ND	ND	
Zinc	(5)	ND (0.0034 J)	ND (0.0072 J)	ND	ND (0.0061 J)	ND	ND (0.0058 J)	0.032	0.035	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. ^{***} EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. Bolded and shaded cells indicate MCL exceedance

TABLE 8
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 1 & 2

Substance	Well ID								
	MCL / (SMCL)	GWC-6	GWC-6	GWC-6RZ	GWC-6RZ	GWC-7Z	GWC-7Z	GWC-8RR	GWC-8RR
	Sample Date	3/21/2019	9/16/2019	3/21/2019	9/16/2019	3/21/2019	9/13/2019	3/27/2019	9/16/2019
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND (0.00071 J)	ND	ND (0.00038 J)	ND (0.00077 J)	ND (0.0017 J)	ND
	Barium	2.0	ND (0.0074 J)	ND (0.0075 J)	ND (0.0075 J)	ND (0.0072 J)	0.030	0.031	0.014
	Beryllium	0.004	ND	ND	ND (0.000076 J)	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND (0.0029 J)	ND (0.0020 J)	ND (0.0025 J)	ND (0.0020 J)	ND	ND	ND (0.0021 J)
	Cobalt	N/R	ND	ND	ND	ND	ND (0.00059 J)	ND (0.00099 J)	ND
	Copper	1.0[^]	ND (0.0018 J)	ND	ND	ND	ND	ND (0.00025 J)	ND
	Lead	0.015^{***}	ND	ND (0.00010 J)	ND	ND	ND	ND	ND
	Mercury	0.002	ND (0.000045 J)	ND	ND (0.000039 J)	ND	ND (0.000043 J)	ND	ND (0.000039 J)
	Nickel	0.1	ND	ND	ND	ND	ND (0.00099 J)	ND (0.00061 J)	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND (0.000057 J)	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND	ND	
Zinc	(5)	ND	ND (0.0058 J)	ND	ND (0.0057 J)	ND	ND (0.0053 J)	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. ^EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. Bolded and shaded cells indicate MCL exceedance

TABLE 8
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 1 & 2

Substance	Well ID									
	MCL / (SMCL)	GWC-8Z	GWC-8Z Dissolved	GWC-8Z	GWC-9	GWC-9	GWC-10	GWC-10	GWC-10R	
	Sample Date	5/6/2019	5/6/2019	9/16/2019	3/21/2019	9/16/2019	3/22/2019	9/17/2019	3/22/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND (0.00063 J)	ND	ND (0.00043 J)	ND	ND (0.00044 J)	ND	ND	ND
	Barium	2.0	0.017	0.015	0.026	0.042	0.035	0.024	0.016	0.022
	Beryllium	0.004	ND (0.00010 J)	ND	ND	ND (0.00015 J)	ND (0.00010 J)	ND (0.00018 J)	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND (0.0048 J)	ND (0.0037 J)	ND (0.0020 J)	ND	ND	ND	ND (0.00090 J)	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND (0.0011 J)	ND	ND
	Copper	1.0[^]	ND	ND	ND	ND	ND (0.00021 J)	ND	ND	ND
	Lead	0.015^{***}	ND (0.00032 J)	ND	ND (0.000054 J)	ND	ND (0.000061 J)	ND	ND (0.000047 J)	ND
	Mercury	0.002	ND	ND	ND	ND (0.000042 J)	ND	ND (0.00014 J)	ND	ND (0.00014 J)
	Nickel	0.1	ND	ND	ND	ND (0.0010 J)	ND (0.00062 J)	ND (0.0022 J)	ND	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	(5)	ND (0.0024 J)	ND (0.0024 J)	ND (0.0065 J)	ND (0.0024 J)	ND (0.0062 J)	ND	ND (0.0052 J)	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. Bolded and shaded cells indicate MCL exceedance

TABLE 8
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 1 & 2

Substance	Well ID									
	MCL / (SMCL)	GWC-10R	GWC-11	GWC-11	GWC-11R	GWC-11R	GWC-12	GWC-12	GWC-13	
	Sample Date	9/17/2019	3/23/2019	9/17/2019	3/23/2019	9/17/2019	3/23/2019	9/17/2019	3/23/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND (0.00094 J)	ND (0.00041 J)	ND	ND (0.0013 J)	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND (0.0016 J)	ND (0.0016 J)	0.0055	ND (0.0047 J)	ND (0.00067 J)
	Barium	2.0	0.030	ND (0.0081 J)	0.011	0.019	0.018	0.024	0.025	0.023
	Beryllium	0.004	ND	ND (0.000057 J)	ND	ND	ND	ND	ND	ND (0.000061 J)
	Cadmium	0.005	ND	ND	ND	ND	ND	ND (0.00035 J)	ND (0.00057 J)	ND
	Chromium	0.1	ND (0.00067 J)	ND	ND (0.0079 J)	ND (0.0048 J)	ND (0.0042 J)	ND	ND	ND (0.0058 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND (0.0032 J)	ND (0.0030 J)	ND
	Copper	1.0[^]	ND (0.00029 J)	ND	ND	ND	ND (0.00031 J)	ND	ND	ND
	Lead	0.015^{***}	ND (0.00017 J)	ND	ND (0.000046 J)	ND	ND (0.000082 J)	ND	ND	ND
	Mercury	0.002	ND	ND (0.00015 J)	ND	ND (0.00013 J)	ND	ND (0.00015 J)	ND	ND (0.00017 J)
	Nickel	0.1	ND	ND	ND	ND	ND	ND (0.0026 J)	ND (0.0021 J)	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	(5)	ND (0.0048 J)	ND	ND (0.0056 J)	ND	ND (0.0075 J)	0.012	0.016	0.021	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. ^{***} EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. Bolded and shaded cells indicate MCL exceedance

TABLE 8
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 1 & 2

Substance	Well ID								
	<i>MCL / (SMCL)</i>	GWC-13	GWC-13RZ	GWC-13RZ	GWC-14Z	GWC-14Z	GWC-15R	GWC-15R	
	Sample Date	9/18/2019	3/22/2019	9/19/2019	3/22/2019	9/17/2019	3/25/2019	9/17/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND (0.0012 J)	ND (0.0014 J)	ND (0.00077 J)	ND	ND	ND	ND (0.0017 J)
	Arsenic	0.01	ND (0.00052 J)	ND (0.00097 J)	ND (0.00045 J)	ND	ND	ND	ND
	Barium	2.0	0.033	0.086	0.097	0.014	0.015	0.021	0.023
	Beryllium	0.004	ND (0.000074 J)	ND	ND	ND (0.000094 J)	ND (0.00013 J)	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND (0.0063 J)	ND	ND	ND	ND (0.00046 J)	ND	ND (0.00044 J)
	Cobalt	N/R	ND (0.00050 J)	ND	ND	ND	ND	ND	ND
	Copper	1.0[^]	ND (0.00057 J)	ND	ND (0.00021 J)	ND	ND	ND	ND
	Lead	0.015^{***}	ND (0.00020 J)	ND	ND (0.000048 J)	ND	ND	ND (0.00047 J)	ND (0.00016 J)
	Mercury	0.002	ND	ND (0.00014 J)	ND	ND (0.00014 J)	ND	ND (0.00011 J)	ND
	Nickel	0.1	ND (0.00046 J)	ND	ND	ND	ND (0.00070 J)	ND (0.0011 J)	ND (0.00057 J)
	Selenium	0.05	ND (0.0018 J)	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND	ND	
Zinc	(5)	ND (0.0070 J)	ND (0.0048 J)	ND (0.0091 J)	ND	ND (0.0057 J)	ND (0.0039 J)	ND (0.0066 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. ^{***} EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. Bolded and shaded cells indicate MCL exceedance

TABLE 8
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 1 & 2

Substance	Well ID			
	<i>MCL / (SMCL)</i>	GWC-15Z	GWC-15Z	
	Sample Date	3/22/2019	9/17/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND
	Arsenic	0.01	ND	ND
	Barium	2.0	0.014	0.014
	Beryllium	0.004	ND	ND
	Cadmium	0.005	ND	ND
	Chromium	0.1	ND	ND (0.00064 J)
	Cobalt	N/R	ND	ND
	Copper	1.0[^]	ND	ND
	Lead	0.015^{***}	ND	ND
	Mercury	0.002	ND (0.00012 J)	ND
	Nickel	0.1	ND	ND
	Selenium	0.05	ND	ND
	Silver	(0.1)	ND	ND
	Thallium	0.002	ND	ND
	Vanadium	N/R	ND	ND
Zinc	(5)	ND	ND (0.0048 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. Bolded and shaded cells indicate MCL exceedance

TABLE 9
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 3 & 4

Substance	Well ID									
	MCL / (SMCL)	GWA-36	GWA-36	GWA-36R	GWA-36R	GWA-37	GWA-37	GWA-38	GWA-38	
	Sample Date	3/6/2019	9/4/2019	3/7/2019	9/4/2019	3/6/2019	9/4/2019	3/7/2019	9/4/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND (0.0010 J)	ND	ND	ND (0.0019 J)	ND (0.0029 J)	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2.0	0.018	0.014	0.018	0.026	ND (0.0052 J)	ND (0.0050 J)	0.011	0.011
	Beryllium	0.004	ND (0.00029 J)	ND (0.00016 J)	ND (0.000068 J)	ND	ND	ND	ND	ND
	Cadmium	0.005	0.0013	ND (0.00088 J)	ND (0.00017 J)	ND (0.00016 J)	ND (0.000093 J)	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND (0.0013 J)	ND	ND	ND	ND (0.0017 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND (0.00087 J)	ND (0.00094 J)
	Copper	1.0[^]	ND	ND (0.00023 J)	ND	ND	ND (0.0052 J)	ND (0.0082 J)	ND	ND
	Lead	0.015^{***}	ND	ND (0.000076 J)	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel	0.1	ND	ND (0.00041 J)	ND	ND	ND (0.0075 J)	ND (0.0059 J)	ND	ND (0.00080 J)
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND (0.00073 J)	ND	ND (0.00076 J)	
Zinc	(5)	0.56	0.34	0.043	0.052	ND (0.0035 J)	ND (0.0086 J)	ND	ND (0.0056 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 9
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 3 & 4

Substance	Well ID									
	MCL / (SMCL)	GWA-51RZ	GWA-51RZ	GWA-52	GWA-52	GWA-53	GWA-53	GWA-53R	GWA-53R	
	Sample Date	3/8/2019	9/5/2019	3/7/2019	9/4/2019	3/8/2019	9/5/2019	3/12/2019	9/5/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND (0.00060 J)	ND	ND	ND	ND (0.00035 J)	ND (0.0020 J)	ND (0.00035 J)
	Arsenic	0.01	ND	ND (0.00061 J)	ND	ND	ND	ND (0.00039 J)	ND	ND (0.00046 J)
	Barium	2.0	0.015	0.018	0.025	0.020	0.012	0.013	0.016	0.014
	Beryllium	0.004	ND	ND	ND	ND	ND (0.000057 J)	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND (0.00096 J)	ND	ND (0.00065 J)	ND	ND (0.00055 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Copper	1.0[^]	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015^{***}	ND	ND	ND	ND	ND	ND (0.000080 J)	ND	ND (0.000083 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Selenium	0.05	ND (0.0052 J)	0.010	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND (0.00014 J)	ND	ND	ND	ND	ND	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	(5)	ND	ND (0.0051 J)	ND	ND (0.0045 J)	ND	ND (0.0064 J)	ND	ND (0.0098 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 9
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 3 & 4

Substance	Well ID									
	MCL / (SMCL)	GWA-54	GWA-54	GWA-55	GWA-55	GWA-55R	GWA-55R	GWA-56	GWA-56	
	Sample Date	3/7/2019	9/5/2019	3/8/2019	9/5/2019	3/7/2019	9/5/2019	3/7/2019	9/4/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND (0.00038 J)	ND	ND (0.00044 J)	ND	ND (0.00042 J)	ND (0.00085 J)	ND
	Barium	2.0	0.039	0.034	0.027	0.024	0.033	0.032	0.042	0.033
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND (0.0016 J)	ND	ND (0.00092 J)	ND	ND	ND	ND (0.0014 J)
	Cobalt	N/R	ND	ND	ND (0.0044 J)	ND	ND	ND	ND	ND
	Copper	1.0^	ND	ND	ND	ND	ND	ND	ND	ND (0.00047 J)
	Lead	0.015***	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Selenium	0.05	ND	ND	ND (0.0026 J)	ND	ND (0.0016 J)	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND (0.00011 J)	ND	ND	ND	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	(5)	ND	ND (0.0048 J)	ND	ND (0.0056 J)	ND	ND (0.0045 J)	ND	ND (0.0052 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. ^EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 9
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 3 & 4

Substance	Well ID									
	MCL / (SMCL)	GWC-16R	GWC-16R	GWC-17R	GWC-17R	GWC-18	GWC-18	GWC-18R	GWC-18R	
	Sample Date	3/11/2019	9/9/2019	3/12/2019	9/10/2019	3/12/2019	9/9/2019	3/12/2019	9/6/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	0.020	0.011	ND	ND	ND	ND (0.00091 J)	ND (0.00028 J)	
	Arsenic	0.01	ND	ND (0.00094 J)	ND	ND	ND (0.00099 J)	ND	ND	
	Barium	2.0	0.044	0.030	0.021	0.019	0.014	0.028	0.014	0.014
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND (0.0020 J)	ND (0.0010 J)	ND	ND (0.00053 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Copper	1.0[^]	ND (0.0018 J)	ND (0.00082 J)	ND	ND	ND	ND	ND	ND
	Lead	0.015^{***}	ND	ND	ND	ND	ND	ND (0.000050 J)	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel	0.1	ND (0.0079 J)	ND (0.0066 J)	ND (0.0010 J)	ND	ND	ND	ND	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND (0.00026 J)	ND (0.000060 J)	ND	ND	ND	ND	ND	ND
Vanadium	N/R	ND	ND (0.00091 J)	ND	ND	ND	ND (0.00078 J)	ND	ND	
Zinc	(5)	0.024	0.029	ND (0.0038 J)	ND (0.0055 J)	ND	ND (0.0063 J)	ND	ND (0.0046 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 9
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 3 & 4

Substance	Well ID									
	MCL / (SMCL)	GWC-19R	GWC-19R	GWC-20R	GWC-20R	GWC-21R	GWC-21R	GWC-21R	GWC-22R	
	Sample Date	3/12/2019	9/9/2019	3/12/2019	9/6/2019	3/11/2019	9/6/2019	10/21/2019	3/11/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND	ND	ND	ND (0.0029 J)	0.010	ND (0.0020 J)	ND
	Arsenic	0.01	ND	ND (0.00082 J)	ND	ND (0.00044 J)	ND (0.0038 J)	ND (0.0024 J)	NA	ND (0.00099 J)
	Barium	2.0	0.016	0.015	0.030	0.027	0.015	0.041	NA	0.048
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	NA	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	NA	ND
	Chromium	0.1	ND	ND (0.00056 J)	ND	ND (0.00076 J)	ND	ND (0.00078 J)	NA	ND
	Cobalt	N/R	ND	ND	ND	ND	ND (0.00056 J)	ND (0.00051 J)	NA	ND
	Copper	1.0[^]	ND	ND	ND	ND	ND	ND (0.010 J)	NA	ND
	Lead	0.015^{***}	ND	ND	ND	ND	ND	ND (0.0016 J)	NA	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	NA	ND
	Nickel	0.1	ND	ND	ND	ND	ND (0.0012 J)	ND (0.0028 J)	NA	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	NA	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	NA	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND (0.00020 J)	NA	ND (0.00015 J)
Vanadium	N/R	ND	ND (0.00081 J)	ND	ND	ND	ND (0.0012 J)	NA	ND	
Zinc	(5)	ND	ND (0.0062 J)	ND	ND (0.0042 J)	ND (0.0034 J)	0.045	0.017	ND (0.0021 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 9
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 3 & 4

Substance	Well ID								
	MCL / (SMCL)	GWC-22R	GWC-23R	GWC-23R	GWC-24R	GWC-24R	GWC-25R	GWC-25R	
	Sample Date	9/5/2019	3/12/2019	9/6/2019	3/8/2019	9/5/2019	3/8/2019	9/5/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND	ND (0.00029 J)	ND	ND (0.00033 J)	ND	ND
	Arsenic	0.01	ND (0.0024 J)	ND	ND (0.00054 J)	ND	ND (0.00053 J)	ND	ND
	Barium	2.0	0.045	0.022	0.021	0.020	0.022	0.017	0.016
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND (0.00044 J)
	Cobalt	N/R	ND (0.0012 J)	ND	ND	ND	ND	ND	ND
	Copper	1.0[^]	ND	ND	ND (0.00037 J)	ND	ND (0.0012 J)	ND (0.0018 J)	ND
	Lead	0.015^{***}	ND	ND	ND (0.000068 J)	ND	ND (0.000095 J)	ND (0.00035 J)	ND (0.000060 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND
	Nickel	0.1	ND (0.0011 J)	ND	ND (0.00086 J)	ND	ND	ND	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND (0.000055 J)	ND	ND (0.00030 J)	ND	ND	ND	ND
	Vanadium	N/R	ND (0.00094 J)	ND	ND (0.0011 J)	ND	ND (0.0012 J)	ND	ND
Zinc	(5)	ND (0.0053 J)	ND	ND (0.0059 J)	ND	ND (0.0066 J)	ND	ND (0.0053 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. ^{***} EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 10
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 9 & 10

Substance	Well ID								
	MCL / (SMCL)	GWA-39RZ	GWA-39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41
	Sample Date	3/14/2019	9/11/2019	3/15/2019	9/9/2019	3/13/2019	9/9/2019	3/14/2019	9/10/2019
Antimony	0.006	0.014	0.0098	ND	ND (0.00079 J)	ND	ND	ND	ND
Arsenic	0.01	ND	ND (0.00062 J)	ND	ND (0.00043 J)	ND	ND (0.00068 J)	ND	ND
Barium	2.0	0.018	0.020	0.019	0.015	ND (0.0076 J)	ND (0.0078 J)	0.028	0.018
Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	0.1	ND (0.0040 J)	ND	ND	ND	ND	ND	ND	ND
Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1.0[^]	ND	ND (0.0014 J)	ND	ND	ND	ND (0.0022 J)	ND	ND (0.00044 J)
Lead	0.015^{***}	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	0.1	ND (0.0017 J)	ND	ND	ND (0.0014 J)	ND	ND	ND	ND (0.00041 J)
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	N/R	ND	ND (0.00086 J)	ND	ND	ND	ND	ND	ND
Zinc	(5)	ND (0.0035 J)	ND (0.0085 J)	ND (0.0023 J)	ND (0.0047 J)	ND	ND (0.0058 J)	ND	ND (0.0061 J)

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. ^{***} EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 10
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 9 & 10

Substance	Well ID									
	MCL / (SMCL)	GWA-41R	GWA-41R	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R	
	Sample Date	3/14/2019	9/10/2019	3/14/2019	9/10/2019	3/13/2019	9/11/2019	3/13/2019	9/11/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND (0.0029 J)	ND	ND	ND	ND	ND (0.00029 J)	
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	
	Barium	2.0	0.040	0.031	ND (0.0066 J)	ND (0.0068 J)	0.014	0.015	ND (0.0077 J)	ND (0.0079 J)
	Beryllium	0.004	ND (0.000052 J)	ND	ND (0.00017 J)	ND (0.00015 J)	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND (0.00013 J)	ND (0.00014 J)	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND (0.00051 J)	ND	ND (0.00066 J)
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Copper	1.0[^]	ND (0.0022 J)	ND (0.0022 J)	ND	ND	ND	ND (0.00036 J)	ND (0.0015 J)	ND (0.00026 J)
	Lead	0.015^{***}	ND (0.00031 J)	ND	ND	ND	ND	ND (0.00010 J)	ND	ND (0.000092 J)
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel	0.1	ND (0.0010 J)	ND (0.00084 J)	ND (0.0015 J)	ND (0.0012 J)	ND	ND (0.00082 J)	ND	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND (0.000062 J)	ND	ND
	Vanadium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	(5)	ND (0.0021 J)	ND (0.0075 J)	0.010	0.014	ND (0.0022 J)	ND (0.0065 J)	ND (0.0023 J)	ND (0.0053 J)	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. *** EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 10
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 9 & 10

Substance	Well ID									
	MCL / (SMCL)	GWC-44	GWC-44	GWC-45	GWC-45	GWC-45	GWC-45R	GWC-45R	GWC-46R	
	Sample Date	3/14/2019	9/11/2019	3/14/2019	9/11/2019	10/21/2019	3/14/2019	9/11/2019	3/18/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	ND	ND	ND (0.0015 J)	0.014	0.0057	ND	ND	
	Arsenic	0.01	ND	ND	ND	ND	NA	ND	ND	
	Barium	2.0	0.077	0.036	ND (0.0066 J)	ND (0.0061 J)	NA	0.024	0.021	0.014
	Beryllium	0.004	ND (0.000078 J)	ND	ND	ND	NA	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	NA	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	NA	ND	ND	ND (0.0022 J)
	Cobalt	N/R	ND (0.0022 J)	ND (0.0018 J)	ND (0.0015 J)	ND (0.0014 J)	NA	ND	ND	ND
	Copper	1.0[^]	ND	ND (0.00043 J)	ND	ND (0.012 J)	ND (0.00021 J)	ND	ND	ND
	Lead	0.015^{***}	ND (0.00077 J)	ND (0.00047 J)	ND	ND (0.00016 J)	NA	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	NA	ND	ND	ND
	Nickel	0.1	ND	ND (0.00058 J)	ND (0.0010 J)	ND (0.0012 J)	NA	ND	ND	ND
	Selenium	0.05	ND (0.0042 J)	ND (0.0021 J)	ND	ND	NA	ND	ND	ND
	Silver	(0.1)	ND	ND	ND	ND	NA	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	NA	ND	ND	ND
	Vanadium	N/R	ND	ND	ND	ND	NA	ND	ND	ND
Zinc	(5)	ND (0.0039 J)	ND (0.0068 J)	ND	ND (0.0065 J)	NA	ND (0.0022 J)	ND (0.0058 J)	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. ^{***} EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 10
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 9 & 10

Substance	Well ID								
	MCL / (SMCL)	GWC-46R	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R
	Sample Date	9/11/2019	3/15/2019	9/12/2019	3/19/2019	9/11/2019	3/15/2019	9/11/2019	3/18/2019
Antimony	0.006	ND	ND	ND	ND	ND (0.00099 J)	ND	ND	ND
Arsenic	0.01	ND	ND	ND	ND	ND (0.00067 J)	ND	ND	ND
Barium	2.0	0.013	0.010	ND (0.0085 J)	ND (0.0088 J)	ND (0.0097 J)	0.026	0.031	0.015
Beryllium	0.004	ND	ND	ND	ND	ND	ND (0.00022 J)	ND (0.00027 J)	ND
Cadmium	0.005	ND	ND (0.00015 J)	ND	ND	ND	ND (0.00018 J)	ND (0.00024 J)	ND
Chromium	0.1	ND (0.0038 J)	ND	ND (0.0014 J)	0.018	ND (0.0015 J)	ND (0.0023 J)	ND (0.0016 J)	ND
Cobalt	N/R	ND	ND	ND	ND	ND	ND (0.0012 J)	ND (0.0013 J)	ND
Copper	1.0[^]	ND	ND	ND	ND	ND (0.00080 J)	ND	ND (0.00073 J)	ND
Lead	0.015^{***}	ND	ND	ND	ND	ND (0.000085 J)	ND	ND (0.000058 J)	ND
Mercury	0.002	ND	ND	ND	ND (0.000050 J)	ND	ND	ND	ND
Nickel	0.1	ND	ND	ND	ND (0.0042 J)	ND (0.0014 J)	ND (0.0033 J)	ND (0.0040 J)	ND
Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
Silver	(0.1)	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND (0.00027 J)	ND (0.00023 J)	ND	ND (0.00012 J)	ND
Vanadium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	(5)	ND (0.0055 J)	0.051	0.035	0.016	0.028	ND (0.0058 J)	0.011	ND

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. ^{***} EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

TABLE 10
ANALYTICAL DATA SUMMARY
Solid Waste Permit Metals (2019)
Landfill Cells 9 & 10

Substance	Well ID				
	MCL / (SMCL)	GWC-49R	GWC-49Z	GWC-49Z	
	Sample Date	9/11/2019	3/19/2019	9/11/2019	
GEORGIA SOLID WASTE PERMIT METALS	Antimony	0.006	0.0032	ND (0.0011 J)	ND (0.00065 J)
	Arsenic	0.01	ND	ND	ND
	Barium	2.0	0.017	ND (0.0033 J)	ND (0.0038 J)
	Beryllium	0.004	ND	ND	ND
	Cadmium	0.005	ND	ND	ND
	Chromium	0.1	ND (0.00063 J)	ND (0.0017 J)	ND (0.0020 J)
	Cobalt	N/R	ND	ND (0.00069 J)	ND (0.00075 J)
	Copper	1.0[^]	ND	ND	ND (0.00021 J)
	Lead	0.015^{***}	ND	ND	ND (0.000082 J)
	Mercury	0.002	ND	ND (0.000045 J)	ND
	Nickel	0.1	ND	ND (0.0047 J)	ND (0.0012 J)
	Selenium	0.05	ND	ND	ND
	Silver	(0.1)	ND	ND	ND
	Thallium	0.002	ND	ND	ND
	Vanadium	N/R	ND	ND	ND
Zinc	(5)	ND (0.0050 J)	ND (0.0034 J)	ND (0.0085 J)	

Notes:

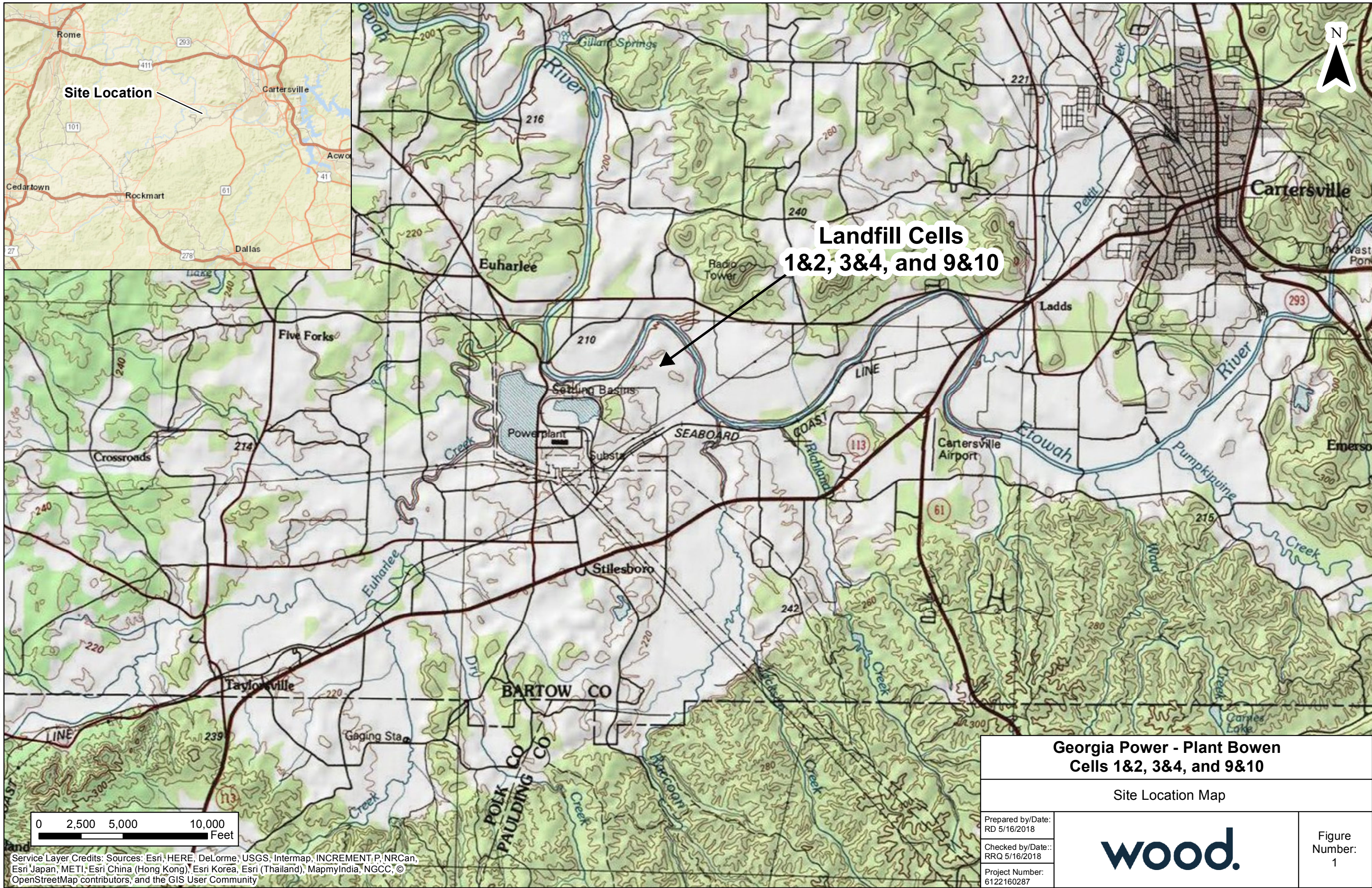
1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA only as a general guideline (not enforced).
3. ^{***} EPA Action Level for lead. [^]EPD secondary MCL for copper per Georgia Rule 391-3-5-.19 as a general guideline (not enforced).
4. Results for substances are reported in milligrams per liter (mg/L).
5. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
6. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value.
Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
7. N/R indicates a substance does not have an MCL or SMCL, but is evaluated statistically, as required by EPA's CCR Rule.
8. NA = parameter not analyzed
9. Bolded and shaded cells indicate MCL exceedance

**TABLE 11
RPD CALCULATIONS**

Cells 1 & 2			
Parameter	Concentration 1	Concentration 2	RPD
3/19/2019	Dup-1	GWA-50	
Barium	0.012	0.012	0%
Calcium	4.2	4.2	0%
Parameter	Concentration 1	Concentration 2	RPD
3/20/2019	Dup-2	GWA-1	
Barium	0.020	0.019	5%
Calcium	30.0	30.1	0%
Sulfate	1.5	1.5	0%
Total Dissolved Solids	176	175	1%
Parameter	Concentration 1	Concentration 2	RPD
3/22/2019	Dup-3	GWC-14Z	
Barium	0.015	0.014	7%
Chloride	3.7	3.7	0%
Sulfate	6.1	6.2	2%
Total Dissolved Solids	95.0	104	9%
Parameter	Concentration 1	Concentration 2	RPD
9/12/2019	DUP-1	GWA-2	
Calcium	2.1	1.8	15%
Sulfate	6.9	5.2	28%
Total Dissolved Solids	41.0	44.0	7%
Parameter	Concentration 1	Concentration 2	RPD
9/16/2019	DUP-2	GWC-8RR	
Barium	0.015	0.015	0%
Calcium	22.9	23.0	0%
Total Dissolved Solids	112	113	1%
Parameter	Concentration 1	Concentration 2	RPD
9/17/2019	DUP-3	GWC-12	
Barium	0.024	0.025	4%
Zinc	0.020	0.016	22%
Calcium	8.1	7.8	4%
Total Dissolved Solids	67.0	62.0	8%
Cells 3 & 4			
Parameter	Concentration 1	Concentration 2	RPD
3/6/2019	Dup-1	GWA-36	
Barium	0.018	0.018	0%
Cadmium	0.0012	0.0013	8%
Chloride	2.5	2.4	4%
Zinc	0.53	0.56	6%
Parameter	Concentration 1	Concentration 2	RPD
3/11/2019	DUP-2	GWC-22R	
Barium	0.048	0.048	0%
Calcium	33.9	33.9	0%
Chloride	3.2	3.2	0%
Sulfate	1.9	2.0	5%
Total Dissolved Solids	165	166	1%
Parameter	Concentration 1	Concentration 2	RPD
3/12/2019	DUP-3	GWC-19R	
Barium	0.015	0.016	6%
Calcium	29.3	31.1	6%
Chloride	3.3	2.8	16%
Sulfate	4.4	4.3	2%
Parameter	Concentration 1	Concentration 2	RPD
9/4/2019	DUP-1	GWA-38	
Barium	0.012	0.011	9%
Calcium	1.7	1.6	6%
Chloride	2.8	2.9	4%
Total Dissolved Solids	17.0	44.0	89%
Parameter	Concentration 1	Concentration 2	RPD
9/5/2019	DUP-2	GWC-24R	
Barium	0.020	0.022	10%
Calcium	28.6	30.6	7%
Chloride	2.3	2.2	4%
Sulfate	1.8	1.8	0%
Total Dissolved Solids	154	157	2%
Parameter	Concentration 1	Concentration 2	RPD
9/6/2019	DUP-3	GWC-20R	
Barium	0.028	0.027	4%
Calcium	33.6	31.1	8%
Chloride	1.6	1.6	0%
Sulfate	1.5	1.4	7%
Total Dissolved Solids	179	24.0	153%
Cells 9 & 10			
Parameter	Concentration 1	Concentration 2	RPD
3/13/2019	Dup-1	GWA-40	
Chloride	2.1	2.2	5%
Sulfate	2.2	2.1	5%
Total Dissolved Solids	142	130	9%
Parameter	Concentration 1	Concentration 2	RPD
3/18/2019	Dup-2	GWC-49R	
Barium	0.015	0.015	0%
Calcium	30.3	31.0	2%
Chloride	2.8	2.7	4%
Sulfate	5.9	5.8	2%
Total Dissolved Solids	157	170	8%
Parameter	Concentration 1	Concentration 2	RPD
9/10/2019	DUP-1	GWA-41	
Barium	0.021	0.018	15%
Calcium	6.9	6.0	14%
Chloride	1.2	1.1	9%
Sulfate	1.3	1.2	8%
Total Dissolved Solids	34.0	36.0	6%
Parameter	Concentration 1	Concentration 2	RPD
9/11/2019	DUP-2	GWC-48	
Barium	0.028	0.031	10%
Zinc	0.011	0.011	0%
Calcium	3.0	2.9	3%
Chloride	3.2	3.3	3%
Total Dissolved Solids	32.0	20.0	46%

concentrations in mg/L

FIGURES



**Landfill Cells
1&2, 3&4, and 9&10**

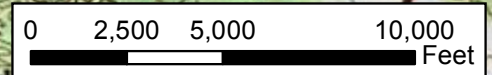
**Georgia Power - Plant Bowen
Cells 1&2, 3&4, and 9&10**

Site Location Map

Prepared by/Date:
RD 5/16/2018
Checked by/Date:
RRQ 5/16/2018
Project Number:
6122160287



Figure
Number:
1



Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Legend

● Spring Sampling Location

Well Location

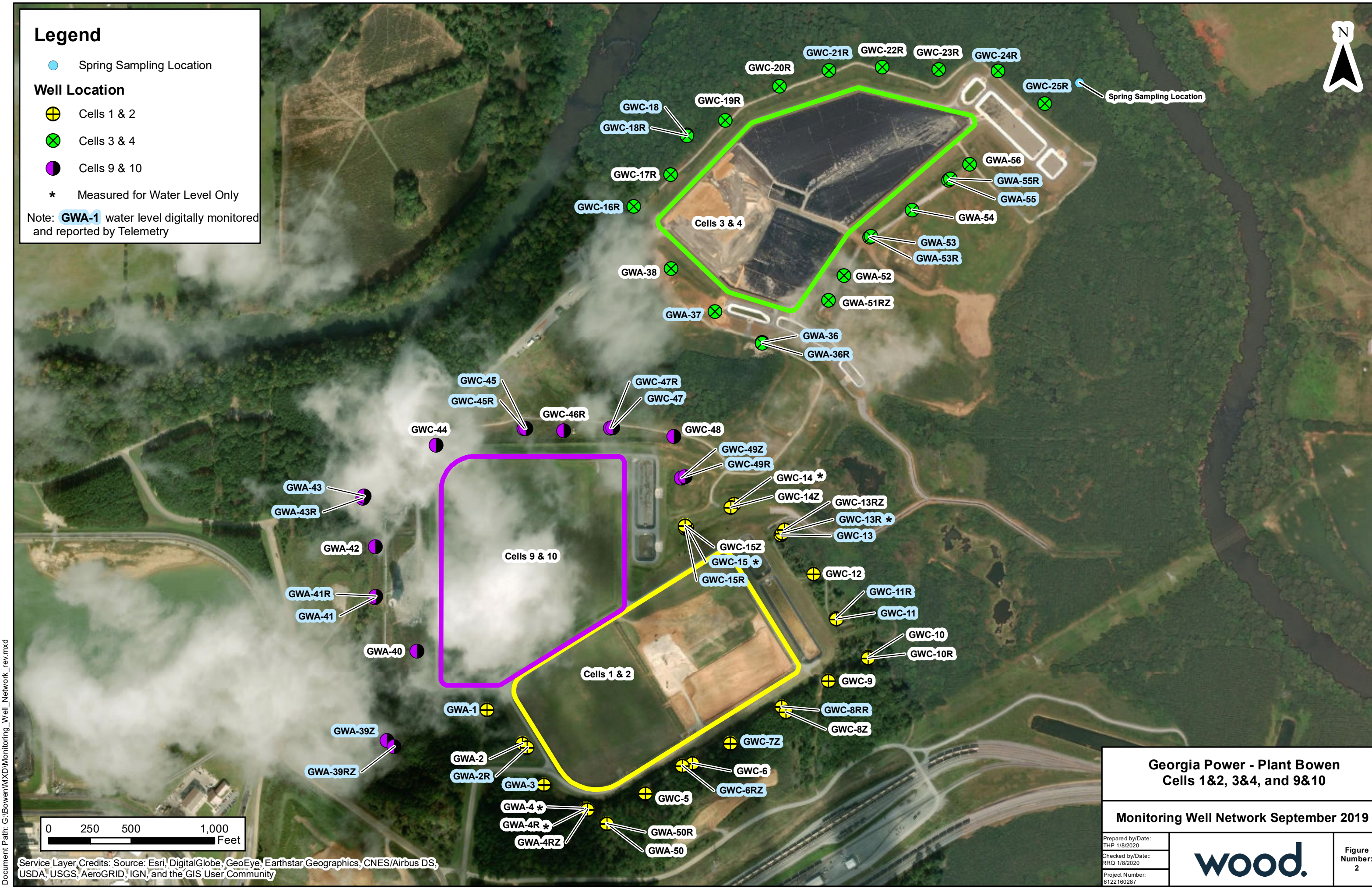
⊕ Cells 1 & 2

⊗ Cells 3 & 4

● Cells 9 & 10

* Measured for Water Level Only

Note: **GWA-1** water level digitally monitored and reported by Telemetry



Georgia Power - Plant Bowen
Cells 1&2, 3&4, and 9&10

Monitoring Well Network September 2019

Prepared by/Date:
THP 1/8/2020
Checked by/Date:
RRQ 1/8/2020
Project Number:
6122160287



Figure Number:
2

Document Path: G:\Bowen\MXD\Monitoring_Well_Network_rev.mxd

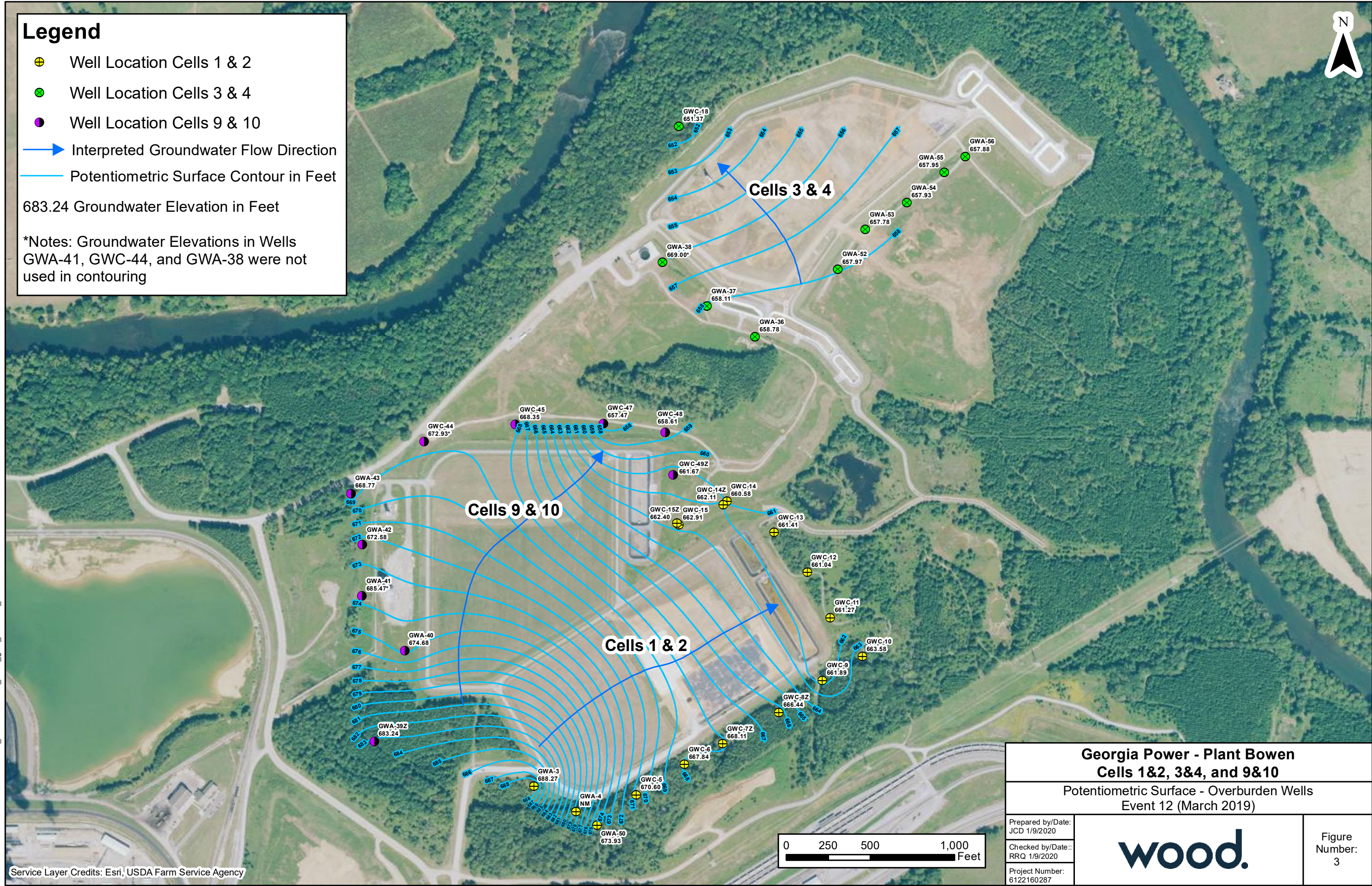
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

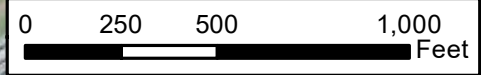
- ⊕ Well Location Cells 1 & 2
- ⊗ Well Location Cells 3 & 4
- Well Location Cells 9 & 10
- ➔ Interpreted Groundwater Flow Direction
- Potentiometric Surface Contour in Feet

683.24 Groundwater Elevation in Feet

*Notes: Groundwater Elevations in Wells GWA-41, GWC-44, and GWA-38 were not used in contouring



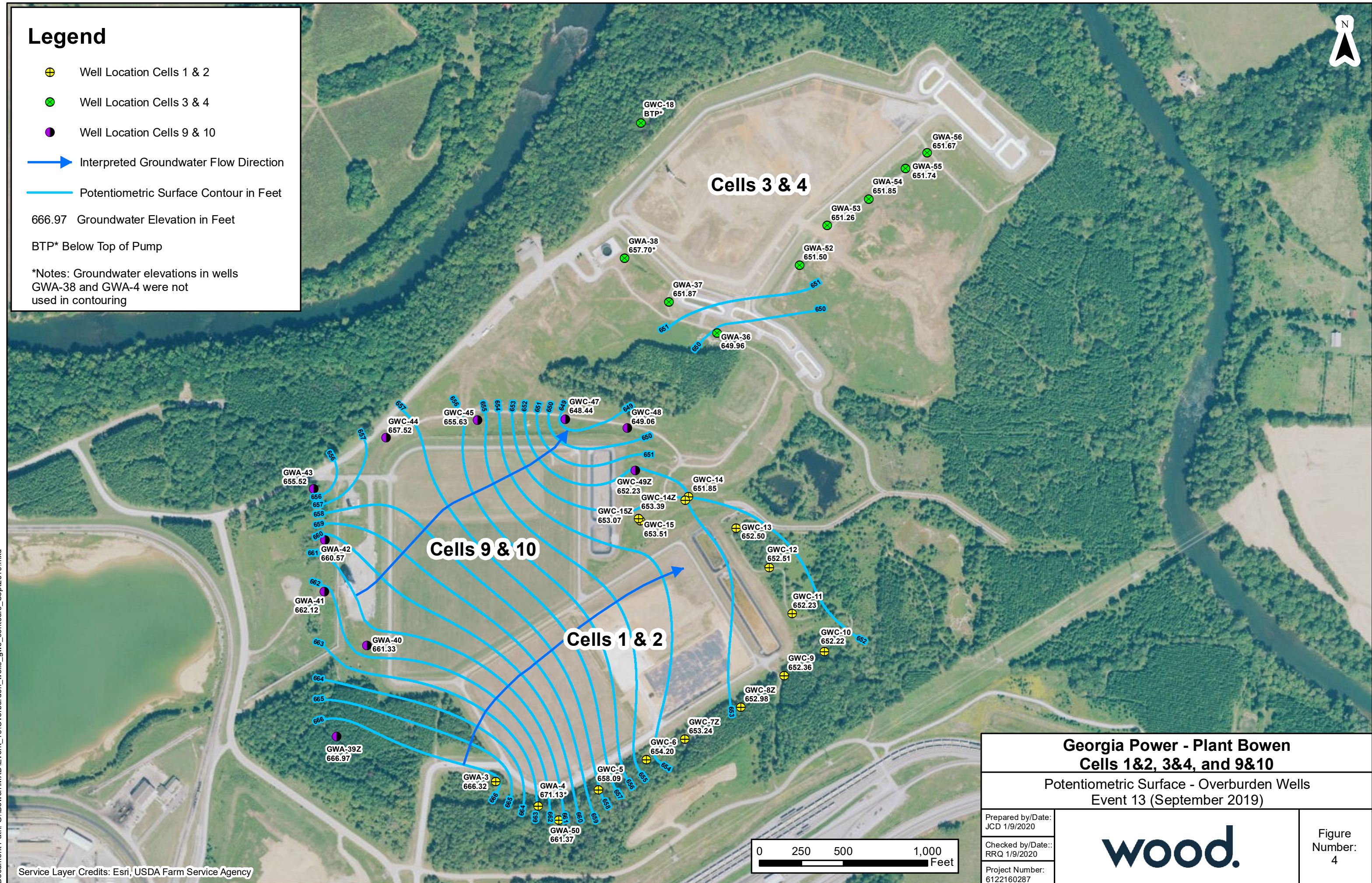
Georgia Power - Plant Bowen			Figure Number: 3
Cells 1&2, 3&4, and 9&10			
Potentiometric Surface - Overburden Wells Event 12 (March 2019)			
Prepared by/Date: JCD 1/9/2020			
Checked by/Date: RRQ 1/9/2020			
Project Number: 6122160287			



Legend

- Well Location Cells 1 & 2
 - Well Location Cells 3 & 4
 - Well Location Cells 9 & 10
 - Interpreted Groundwater Flow Direction
 - Potentiometric Surface Contour in Feet
- 666.97 Groundwater Elevation in Feet
- BTP* Below Top of Pump

*Notes: Groundwater elevations in wells
GWA-38 and GWA-4 were not
used in contouring

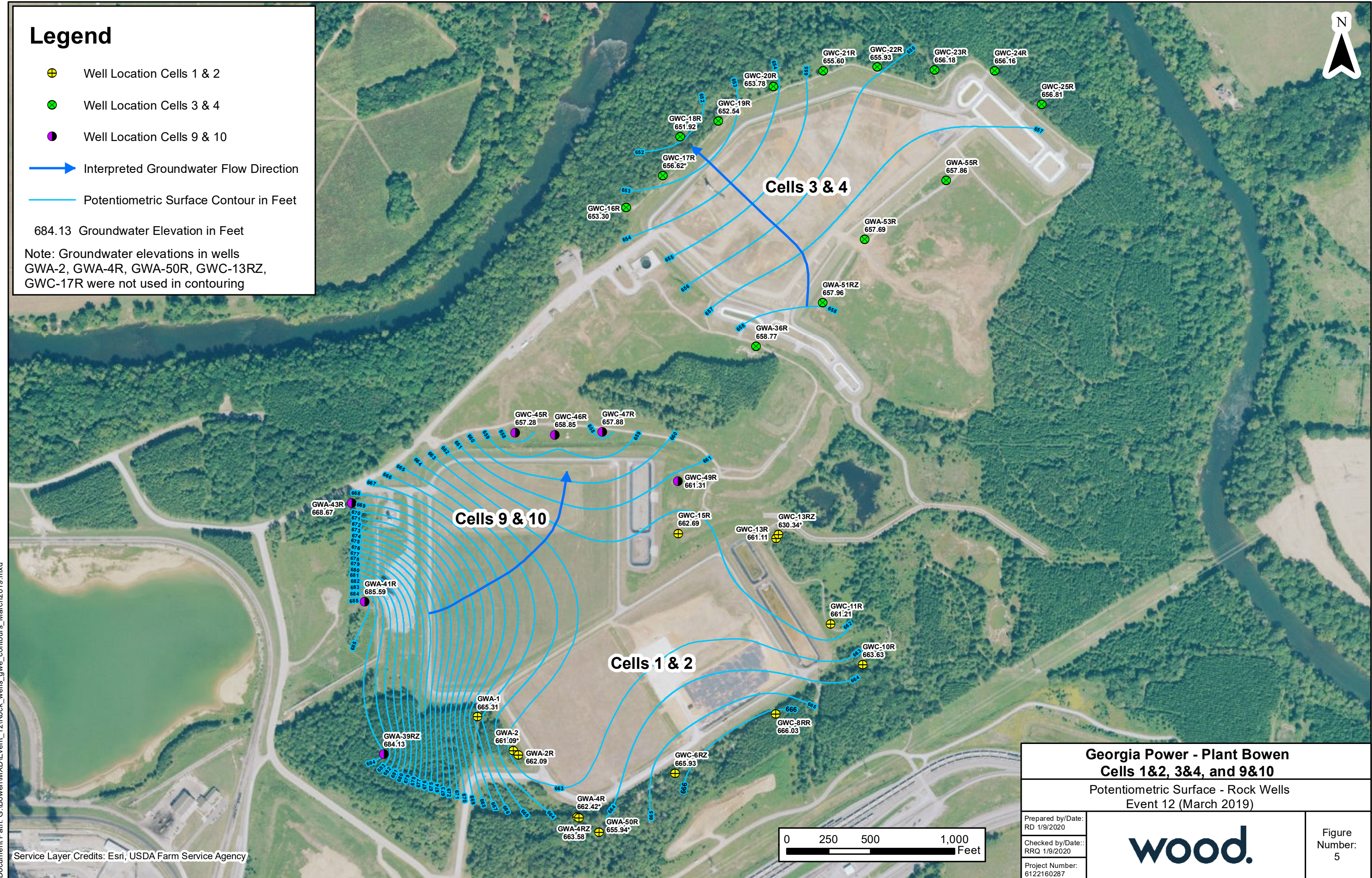


Legend

- Well Location Cells 1 & 2
- Well Location Cells 3 & 4
- Well Location Cells 9 & 10
- Interpreted Groundwater Flow Direction
- Potentiometric Surface Contour in Feet

684.13 Groundwater Elevation in Feet

Note: Groundwater elevations in wells GWA-2, GWA-4R, GWA-50R, GWC-13RZ, GWC-17R were not used in contouring



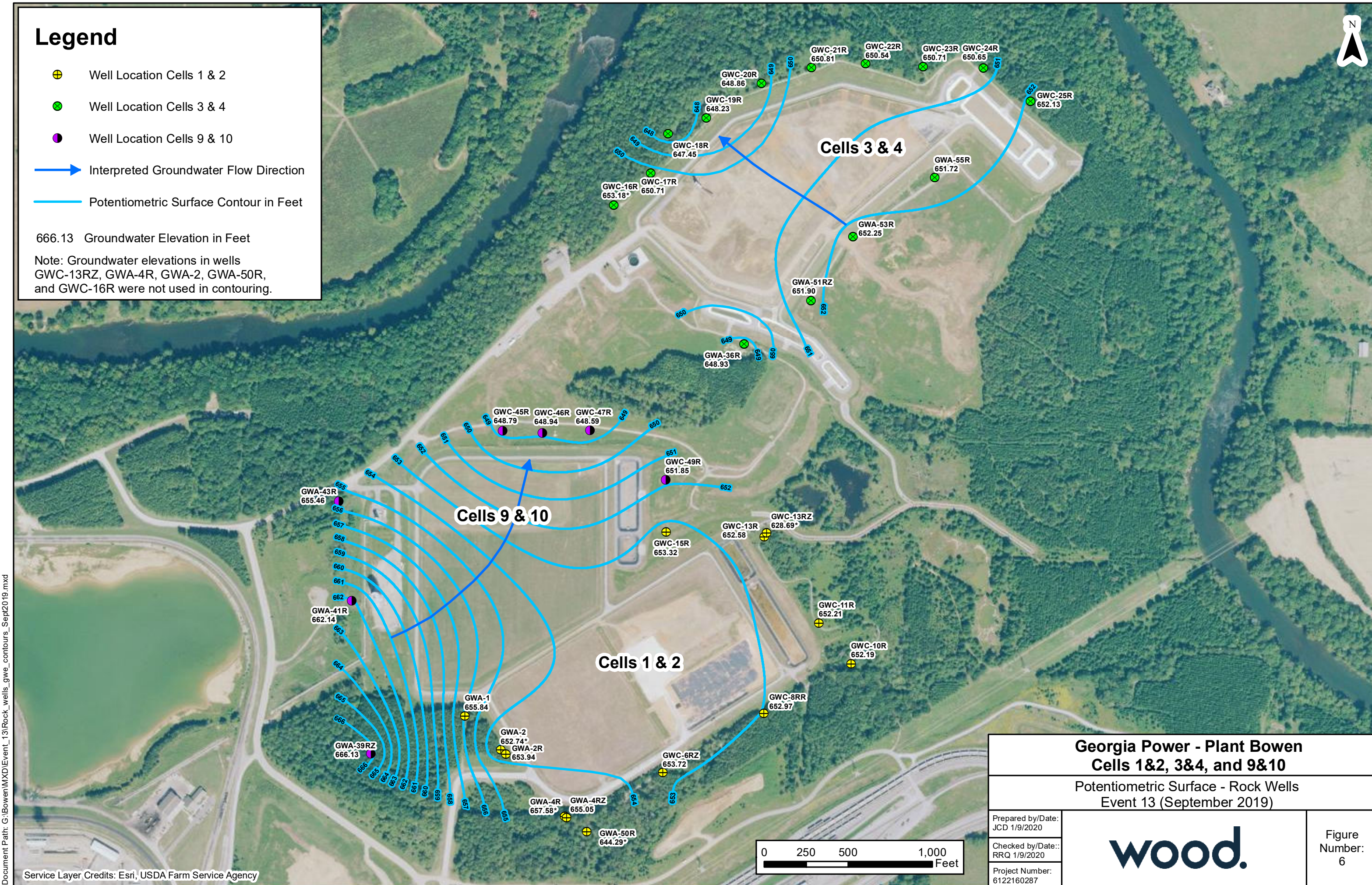
Legend

- ⊕ Well Location Cells 1 & 2
- ⊕ Well Location Cells 3 & 4
- Well Location Cells 9 & 10
- ➔ Interpreted Groundwater Flow Direction
- Potentiometric Surface Contour in Feet

666.13 Groundwater Elevation in Feet

Note: Groundwater elevations in wells GWC-13RZ, GWA-4R, GWA-2, GWA-50R, and GWC-16R were not used in contouring.

Document Path: G:\Bower\MXD\Event_13\Rock_wells_gwe_contours_Sep2019.mxd



Georgia Power - Plant Bowen Cells 1&2, 3&4, and 9&10

Potentiometric Surface - Rock Wells
Event 13 (September 2019)

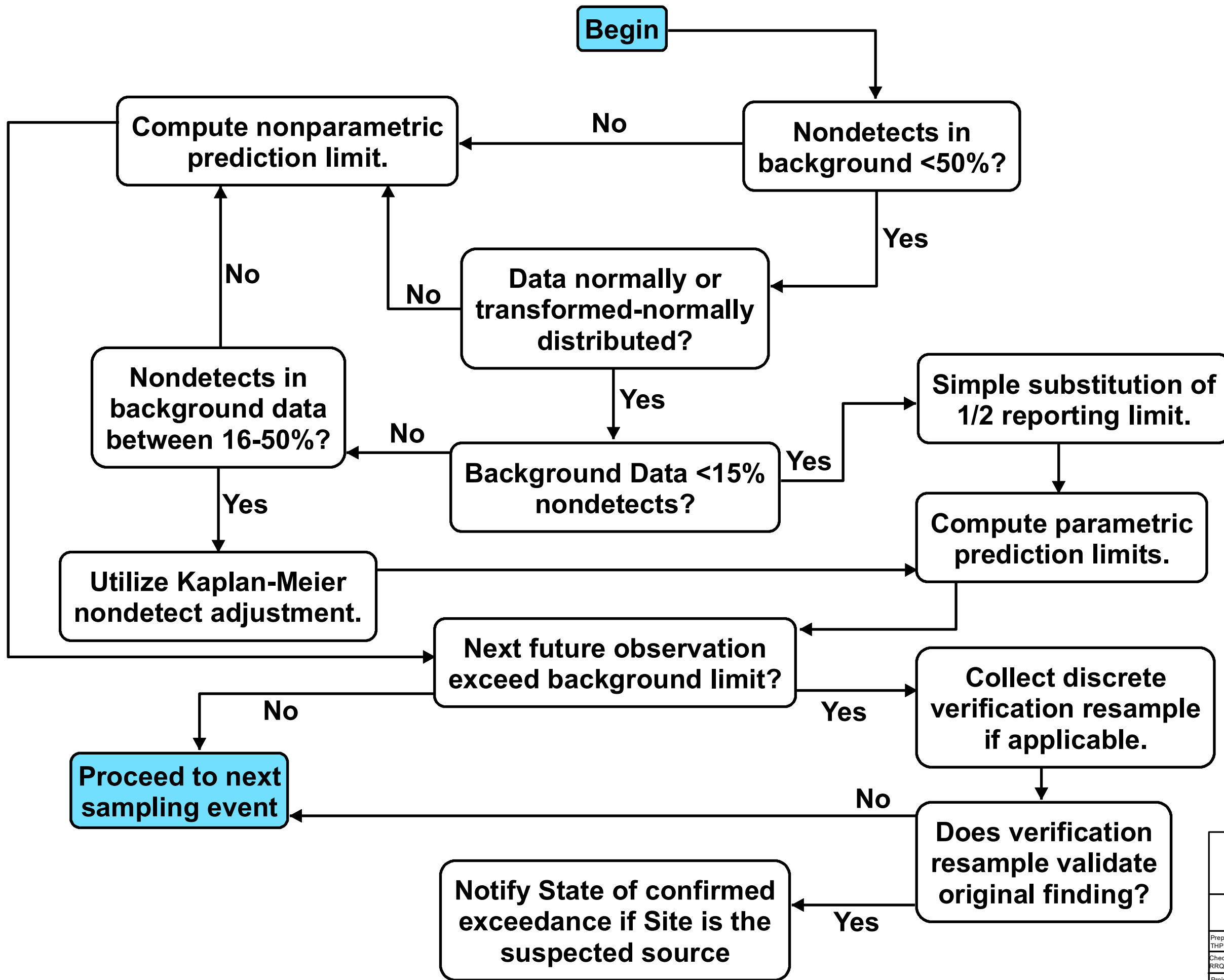
Prepared by/Date:
JCD 1/9/2020

Checked by/Date::
RRQ 1/9/2020

Project Number:
6122160287



Figure Number:
6



APPENDIX A
LABORATORY ANALYTICAL DATA AND FIELD SAMPLING REPORTS
FOR 2019

Well ID	Sample Date	Purge Volume (liter)	Time Elapsed	DTW (feet, TOC)	Drawdown (feet)	Temperature ©	pH (su)	Specific Conductance (uS/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)
GWA-1	3/20/2019	19.6	8400	77.35	10.3	17.6	7.6	304.3	4.5	1.5	16.8
GWA-2	3/20/2019	3.2	1920	72.96	0.03	16.0	5.7	24.0	0.2	5.4	57.2
GWA-2R	3/19/2019	2.6	1440	73.35	0.79	14.5	7.2	367.0	0.4	5.6	715.1
GWA-3	3/20/2019	2.0	1200	45.56	7.3	18.5	5.2	20.0	0.9	6.6	617.2
GWA-4RZ	3/21/2019	22.7	12421	78.83	31.3	15.3	7.2	441.0	0.3	2.6	7.2
GWC-5	3/20/2019	15.7	6720	67.51	6.9	16.0	6.3	38.2	2.8	8.0	72.1
GWC-6	3/21/2019	3.2	1920	62.08	0.21	15.7	7.2	139.0	1.3	7.5	19.6
GWC-6RZ	3/21/2019	4.0	1920	66.33	0.03	14.1	6.8	97.1	2.9	7.7	17.1
GWC-7Z	3/21/2019	5.1	2882	47.20	0.12	15.0	7.3	230.7	0.8	2.3	-87.2
GWC-8RR	3/27/2019	25.5	11782	38.84	0.11	15.1	8.1	177.8	4.7	8.4	75.7
GWC-8Z	5/6/2019	28.6	15600	43.02	0.5	17.4	8.0	149.2	8.9	7.6	26.9
GWC-9	3/21/2019	25.9	7930	34.14	0	15.7	5.3	54.0	0.2	6.1	94.5
GWC-10	3/22/2019	13.5	4566	27.13	0.02	15.1	6.2	161.2	1.4	7.6	57.8
GWC-10R	3/22/2019	7.7	2880	27.18	0	14.0	7.3	264.8	0.4	7.3	-12.1
GWC-11	3/23/2019	2.2	1260	17.33	0.02	18.2	6.3	92.7	1.6	3.8	34.2
GWC-11R	3/23/2019	2.6	1260	17.23	0.03	17.5	7.6	268.3	1.2	5.8	-15.8
GWC-12	3/23/2019	22.4	11520	16.45	0.30	19.4	6.3	110.2	5.1	0.2	-50.7
GWC-13	3/23/2019	18.2	9121	25.64	0.06	17.1	7.3	230.0	4.8	4.8	29.4
GWC-13RZ	3/22/2019	27.2	11762	51.46	43.2	16.7	7.5	436.7	0.9	3.4	59.9
GWC-14Z	3/22/2019	5.8	2881	25.11	2.52	18.2	6.3	180.3	0.2	4.6	53.8
GWC-15R	3/25/2019	22.6	11788	34.03	0.28	16.7	7.6	341.0	4.7	2.9	12.4
GWC-15Z	3/22/2019	3.0	1620	33.62	0.49	17.4	7.6	232.0	0.8	5.9	25.4
GWC-16R	3/11/2019	4.9	2161	77.10	2.3	15.5	7.2	578.6	0.4	0.4	24.3
GWC-17R	3/12/2019	4.3	2340	77.03	6.0	22.1	7.1	591.8	0.2	6.2	62.4
GWC-18	3/12/2019	2.3	900	68.00	0	17.0	7.1	202.2	0.8	6.7	63.4
GWC-18R	3/12/2019	2.5	1260	67.85	0	16.1	7.8	271.0	1.2	6.3	45.1
GWC-19R	3/12/2019	3.1	1680	74.94	0	18.4	7.6	288.9	0.2	6.3	19.0
GWC-20R	3/12/2019	2.7	1200	65.75	0.08	15.1	7.6	327.8	0.2	6.8	33.3
GWC-21R	3/11/2019	1.7	900	67.27	2.7	15.9	7.0	579.8	1.1	0.2	29.5
GWC-21R	6/18/2019	5.3	2641	71.64	4.3	18.6	6.9	596.6	0.5	0.1	-54.7
GWC-22R	3/11/2019	9.1	4680	59.42	0	16.1	7.5	312.2	3.8	4.2	19.7
GWC-23R	3/12/2019	4.0	2160	34.88	4.8	13.0	7.6	561.1	0.3	7.9	50.1
GWC-24R	3/8/2019	3.6	1440	20.08	0.57	14.8	7.7	282.5	0.7	4.0	-49.0
GWC-25R	3/8/2019	3.8	1440	19.05	0	15.4	7.7	309.5	1.9	6.2	2.5

Well ID	Sample Date	Purge Volume (liter)	Time Elapsed	DTW (feet, TOC)	Drawdown (feet)	Temperature ©	pH (su)	Specific Conductance (uS/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)
GWA-36	3/6/2019	5.3	2640	25.85	0	16.1	6.6	128.1	3.5	6.9	514.9
GWA-36R	3/7/2019	2.2	1200	25.32	0	15.0	7.5	278.1	2.8	4.9	118.6
GWA-37	3/6/2019	11.5	6480	46.35	11.4	15.7	5.4	23.2	0.6	4.5	81.9
GWA-38	3/7/2019	3.5	1800	47.18	6.2	16.3	5.5	40.9	0.5	6.9	94.4
GWA-39RZ	3/14/2019	71.8	27364	52.21	74.4	17.4	7.2	318.3	0.9	1.4	112.8
GWA-39Z	3/15/2019	28.6	13200	54.96	0.3	15.0	6.8	188.8	6.0	6.5	71.3
GWA-40	3/13/2019	3.5	1620	57.75	0	18.7	7.1	177.4	0.6	7.1	111.7
GWA-41	3/14/2019	4.8	2881	64.21	0.08	16.3	6.6	197.2	1.4	5.2	61.8
GWA-41R	3/14/2019	26.9	12603	64.99	0.85	18.4	6.9	292.1	9.9	3.5	46.7
GWA-42	3/14/2019	3.4	1440	65.70	0.05	18.3	7.6	270.4	4.3	3.8	26.1
GWA-43	3/13/2019	9.4	3600	42.81	0.19	15.7	5.6	26.3	3.6	6.9	105.8
GWA-43R	3/13/2019	14.8	7382	43.20	0.05	18.8	7.8	241.9	4.7	5.8	80.4
GWC-44	3/14/2019	5.4	2160	41.50	0.30	17.2	4.4	181.7	0.5	3.1	124.2
GWC-45	3/14/2019	13.5	6485	32.83	5.0	18.6	5.0	21.9	4.2	5.6	130.8
GWC-45R	3/14/2019	3.2	1260	43.80	0.02	17.7	7.1	356.9	0.7	3.7	87.2
GWC-46R	3/18/2019	3.0	1440	31.27	1.3	14.3	7.4	469.3	0.1	7.5	43.1
GWC-47	3/15/2019	2.3	1080	32.53	0	16.3	7.5	216.3	4.0	2.7	76.6
GWC-47R	3/19/2019	17.4	7443	32.53	5.7	17.2	7.9	280.7	0.3	4.7	50.3
GWC-48	3/15/2019	5.0	3423	29.35	0.05	17.6	5.3	46.0	0.4	3.2	16.6
GWC-49R	3/18/2019	45.9	12728	48.15	0	17.4	7.9	286.3	0.2	4.9	-11.0
GWC-49Z	3/19/2019	6.0	3600	47.41	0.55	15.3	5.6	29.2	1.3	7.5	659.6
GWA-50	3/19/2019	28.6	9611	48.32	13.6	15.1	5.9	34.5	1.6	5.8	68.4
GWA-50R	3/19/2019	13.7	7689	65.37	0	16.1	6.0	45.3	0.7	9.8	78.6
GWA-51RZ	3/8/2019	29.0	16560	50.77	30.4	16.1	7.6	367.3	0.6	3.1	868.3
GWA-52	3/7/2019	4.2	1920	51.68	0	17.2	7.3	286.5	0.2	5.7	43.0
GWA-53	3/8/2019	23.0	11522	52.77	0	16.3	7.7	260.2	7.6	7.1	22.7
GWA-53R	3/12/2019	2.6	900	53.35	0	17.6	7.7	270.0	3.1	6.0	39.9
GWA-54	3/7/2019	5.9	2880	46.00	0	17.1	7.6	230.1	0.3	3.2	46.8
GWA-55	3/8/2019	2.7	1260	38.45	0	16.1	7.1	398.0	0.4	3.5	52.9
GWA-55R	3/7/2019	2.6	900	38.43	0	16.7	7.2	374.9	3.7	4.2	24.6
GWA-56	3/7/2019	4.2	1982	34.05	0.40	16.7	8.1	594.1	4.2	0.6	5.4

April 03, 2019

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

RE: Project: Plant Bowen cells 1+2
Pace Project No.: 2616508

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 22, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616508001	GWC-6RZ	Water	03/21/19 09:54	03/22/19 14:20
2616508002	GWC-6	Water	03/21/19 11:04	03/22/19 14:20
2616508003	GWA-4RZ	Water	03/21/19 11:45	03/22/19 14:20
2616508004	GWC-7Z	Water	03/21/19 13:32	03/22/19 14:20
2616508005	GWC-9	Water	03/21/19 16:51	03/22/19 14:20
2616508006	FBL032119	Water	03/21/19 16:32	03/22/19 14:20
2616508007	EQBL032119	Water	03/21/19 16:36	03/22/19 14:20

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616508001	GWC-6RZ	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616508002	GWC-6	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616508003	GWA-4RZ	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616508004	GWC-7Z	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616508005	GWC-9	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616508006	FBL032119	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616508007	EQBL032119	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Sample: GWC-6RZ		Lab ID: 2616508001		Collected: 03/21/19 09:54		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 17:34	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 17:34	7440-38-2		
Barium	0.0075J	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 17:34	7440-39-3		
Beryllium	0.000076J	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 17:34	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 17:34	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 17:34	7440-43-9		
Calcium	8.3	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 17:34	7440-70-2		
Chromium	0.0025J	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 17:34	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 17:34	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 17:34	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 17:34	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 17:34	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 17:34	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 17:34	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 17:34	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 17:34	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 17:34	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.000039J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 10:44	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	60.0	mg/L	25.0	10.0	1		03/28/19 20:10			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.5	mg/L	0.25	0.024	1		04/02/19 09:59	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 09:59	16984-48-8		
Sulfate	1.7	mg/L	1.0	0.017	1		04/02/19 09:59	14808-79-8	M1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Sample: GWC-6 **Lab ID: 2616508002** Collected: 03/21/19 11:04 Received: 03/22/19 14:20 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS			Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 17:46	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 17:46	7440-38-2	
Barium	0.0074J	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 17:46	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 17:46	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 17:46	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 17:46	7440-43-9	
Calcium	14.9J	mg/L	25.0	0.69	50	03/27/19 13:02	03/28/19 17:51	7440-70-2	D3
Chromium	0.0029J	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 17:46	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 17:46	7440-48-4	
Copper	0.0018J	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 17:46	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 17:46	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 17:46	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 17:46	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 17:46	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 17:46	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 17:46	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 17:46	7440-66-6	
7470 Mercury			Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	0.000045J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 10:54	7439-97-6	
2540C Total Dissolved Solids			Analytical Method: SM 2540C						
Total Dissolved Solids	80.0	mg/L	25.0	10.0	1		03/28/19 20:10		
300.0 IC Anions 28 Days			Analytical Method: EPA 300.0						
Chloride	1.4	mg/L	0.25	0.024	1		04/02/19 10:20	16887-00-6	B
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 10:20	16984-48-8	
Sulfate	2.7	mg/L	1.0	0.017	1		04/02/19 10:20	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Sample: GWA-4RZ		Lab ID: 2616508003		Collected: 03/21/19 11:45		Received: 03/22/19 14:20		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 17:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 17:57	7440-38-2	
Barium	0.040	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 17:57	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 17:57	7440-41-7	
Boron	0.0066J	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 17:57	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 17:57	7440-43-9	
Calcium	49.9	mg/L	25.0	0.69	50	03/27/19 13:02	03/28/19 18:03	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 17:57	7440-47-3	
Cobalt	0.022	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 17:57	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 17:57	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 17:57	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 17:57	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 17:57	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 17:57	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 17:57	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 17:57	7440-62-2	
Zinc	0.0034J	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 17:57	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	0.000068J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 10:56	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	367	mg/L	25.0	10.0	1		03/28/19 20:10		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	3.6	mg/L	0.25	0.024	1		04/02/19 10:41	16887-00-6	
Fluoride	0.19J	mg/L	0.30	0.029	1		04/02/19 10:41	16984-48-8	
Sulfate	24.9	mg/L	1.0	0.017	1		04/02/19 10:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Sample: GWC-7Z **Lab ID: 2616508004** Collected: 03/21/19 13:32 Received: 03/22/19 14:20 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS			Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 18:08	7440-36-0	
Arsenic	0.00077J	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 18:08	7440-38-2	
Barium	0.030	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 18:08	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 18:08	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 18:08	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 18:08	7440-43-9	
Calcium	25.2	mg/L	25.0	0.69	50	03/27/19 13:02	03/28/19 18:14	7440-70-2	M6
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 18:08	7440-47-3	
Cobalt	0.00059J	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 18:08	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 18:08	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 18:08	7439-92-1	
Nickel	0.00099J	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 18:08	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 18:08	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 18:08	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 18:08	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 18:08	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 18:08	7440-66-6	
7470 Mercury			Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	0.000043J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 10:59	7439-97-6	
2540C Total Dissolved Solids			Analytical Method: SM 2540C						
Total Dissolved Solids	107	mg/L	25.0	10.0	1		03/28/19 20:10		
300.0 IC Anions 28 Days			Analytical Method: EPA 300.0						
Chloride	1.0	mg/L	0.25	0.024	1		04/02/19 11:02	16887-00-6	B
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 11:02	16984-48-8	
Sulfate	1.9	mg/L	1.0	0.017	1		04/02/19 11:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Sample: GWC-9		Lab ID: 2616508005		Collected: 03/21/19 16:51		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 19:00	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 19:00	7440-38-2		
Barium	0.042	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 19:00	7440-39-3		
Beryllium	0.00015J	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 19:00	7440-41-7		
Boron	0.0060J	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 19:00	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 19:00	7440-43-9		
Calcium	4.8	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 19:00	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 19:00	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 19:00	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 19:00	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 19:00	7439-92-1		
Nickel	0.0010J	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:00	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 19:00	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:00	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 19:00	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 19:00	7440-62-2		
Zinc	0.0024J	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 19:00	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.000042J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:06	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	39.0	mg/L	25.0	10.0	1		03/28/19 20:11			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.0	mg/L	0.25	0.024	1		04/02/19 11:24	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 11:24	16984-48-8		
Sulfate	2.3	mg/L	1.0	0.017	1		04/02/19 11:24	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Sample: FBL032119		Lab ID: 2616508006		Collected: 03/21/19 16:32		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 19:12	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 19:12	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 19:12	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 19:12	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 19:12	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 19:12	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 19:12	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 19:12	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 19:12	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 19:12	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 19:12	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:12	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 19:12	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:12	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 19:12	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 19:12	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 19:12	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:08	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		03/28/19 20:11			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.058J	mg/L	0.25	0.024	1		04/02/19 11:45	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 11:45	16984-48-8		
Sulfate	0.048J	mg/L	1.0	0.017	1		04/02/19 11:45	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Sample: EQBL032119 **Lab ID: 2616508007** Collected: 03/21/19 16:36 Received: 03/22/19 14:20 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 19:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 19:18	7440-38-2	
Barium	ND	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 19:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 19:18	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 19:18	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 19:18	7440-43-9	
Calcium	ND	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 19:18	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 19:18	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 19:18	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 19:18	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 19:18	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:18	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 19:18	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:18	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 19:18	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 19:18	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 19:18	7440-66-6	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	0.000046J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:11	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	11.0J	mg/L	25.0	10.0	1		03/28/19 20:11		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	0.069J	mg/L	0.25	0.024	1		04/02/19 12:06	16887-00-6	B
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 12:06	16984-48-8	
Sulfate	0.028J	mg/L	1.0	0.017	1		04/02/19 12:06	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

QC Batch: 25266 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2616508001, 2616508002, 2616508003, 2616508004, 2616508005, 2616508006, 2616508007

METHOD BLANK: 113834 Matrix: Water
 Associated Lab Samples: 2616508001, 2616508002, 2616508003, 2616508004, 2616508005, 2616508006, 2616508007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/28/19 10:40	

LABORATORY CONTROL SAMPLE: 113835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 113836 113837

Parameter	Units	2616508001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.000039J	0.0025	0.0025	0.0025	0.0025	99	97	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

QC Batch: 25235 Analysis Method: EPA 6020B
 QC Batch Method: EPA 3005A Analysis Description: 6020B MET
 Associated Lab Samples: 2616508001, 2616508002, 2616508003, 2616508004, 2616508005, 2616508006, 2616508007

METHOD BLANK: 113720 Matrix: Water
 Associated Lab Samples: 2616508001, 2616508002, 2616508003, 2616508004, 2616508005, 2616508006, 2616508007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/28/19 17:23	
Arsenic	mg/L	ND	0.0050	0.00057	03/28/19 17:23	
Barium	mg/L	ND	0.010	0.00078	03/28/19 17:23	
Beryllium	mg/L	ND	0.0030	0.000050	03/28/19 17:23	
Boron	mg/L	ND	0.040	0.0039	03/28/19 17:23	
Cadmium	mg/L	ND	0.0010	0.000093	03/28/19 17:23	
Calcium	mg/L	ND	0.50	0.014	03/28/19 17:23	
Chromium	mg/L	ND	0.010	0.0016	03/28/19 17:23	
Cobalt	mg/L	ND	0.010	0.00052	03/28/19 17:23	
Copper	mg/L	ND	0.025	0.0013	03/28/19 17:23	
Lead	mg/L	ND	0.0050	0.00027	03/28/19 17:23	
Nickel	mg/L	ND	0.010	0.00095	03/28/19 17:23	
Selenium	mg/L	ND	0.010	0.0014	03/28/19 17:23	
Silver	mg/L	ND	0.010	0.00095	03/28/19 17:23	
Thallium	mg/L	ND	0.0010	0.00014	03/28/19 17:23	
Vanadium	mg/L	ND	0.010	0.0019	03/28/19 17:23	
Zinc	mg/L	ND	0.010	0.0021	03/28/19 17:23	

LABORATORY CONTROL SAMPLE: 113721

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Copper	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Silver	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.1	0.10	100	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

Parameter	Units	2616508004		113722		113723		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20			
Arsenic	mg/L	0.00077J	0.1	0.1	0.10	0.10	103	102	75-125	1	20			
Barium	mg/L	0.030	0.1	0.1	0.13	0.13	103	102	75-125	1	20			
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20			
Boron	mg/L	ND	1	1	0.99	0.98	99	98	75-125	0	20			
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20			
Calcium	mg/L	25.2	1	1	26.6	25.8	144	65	75-125	3	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	107	105	75-125	2	20			
Cobalt	mg/L	0.00059J	0.1	0.1	0.11	0.10	105	104	75-125	1	20			
Copper	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20			
Lead	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20			
Nickel	mg/L	0.00099J	0.1	0.1	0.11	0.10	106	103	75-125	3	20			
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20			
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20			
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20			
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	0	20			
Zinc	mg/L	ND	0.1	0.1	0.10	0.11	102	113	75-125	10	20			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2616508

QC Batch: 25323 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2616508001, 2616508002, 2616508003, 2616508004, 2616508005, 2616508006, 2616508007

LABORATORY CONTROL SAMPLE: 114103

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	423	106	84-108	

SAMPLE DUPLICATE: 114104

Parameter	Units	2616508001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	60.0	64.0	6	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2616508

QC Batch: 25371 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616508001, 2616508002, 2616508003, 2616508004, 2616508005, 2616508006, 2616508007

METHOD BLANK: 114378 Matrix: Water
Associated Lab Samples: 2616508001, 2616508002, 2616508003, 2616508004, 2616508005, 2616508006, 2616508007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.31	0.25	0.024	03/29/19 15:25	
Fluoride	mg/L	ND	0.30	0.029	03/29/19 15:25	
Sulfate	mg/L	ND	1.0	0.017	03/29/19 15:25	

LABORATORY CONTROL SAMPLE: 114379

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	10.9	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 114380 114381

Parameter	Units	2616508001		2616508002		2616508003		2616508004		% Rec Limits	Max RPD	Qual
		MS Result	MSD Result	MS Result	MSD Result	MS Result	MSD Result					
Chloride	mg/L	1.5	10	10	11.7	11.8	103	103	90-110	0	15	
Fluoride	mg/L	ND	10	10	10.2	10.1	102	101	90-110	1	15	
Sulfate	mg/L	1.7	10	10	12.8	12.9	110	112	90-110	1	15	M1

MATRIX SPIKE SAMPLE: 114382

Parameter	Units	2616508002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.4	10	11.4	100	90-110	
Fluoride	mg/L	ND	10	10.0	100	90-110	
Sulfate	mg/L	2.7	10	13.3	106	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells 1+2

Pace Project No.: 2616508

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 1+2
Pace Project No.: 2616508

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616508001	GWC-6RZ	EPA 3005A	25235	EPA 6020B	25272
2616508002	GWC-6	EPA 3005A	25235	EPA 6020B	25272
2616508003	GWA-4RZ	EPA 3005A	25235	EPA 6020B	25272
2616508004	GWC-7Z	EPA 3005A	25235	EPA 6020B	25272
2616508005	GWC-9	EPA 3005A	25235	EPA 6020B	25272
2616508006	FBL032119	EPA 3005A	25235	EPA 6020B	25272
2616508007	EQBL032119	EPA 3005A	25235	EPA 6020B	25272
2616508001	GWC-6RZ	EPA 7470A	25266	EPA 7470A	25309
2616508002	GWC-6	EPA 7470A	25266	EPA 7470A	25309
2616508003	GWA-4RZ	EPA 7470A	25266	EPA 7470A	25309
2616508004	GWC-7Z	EPA 7470A	25266	EPA 7470A	25309
2616508005	GWC-9	EPA 7470A	25266	EPA 7470A	25309
2616508006	FBL032119	EPA 7470A	25266	EPA 7470A	25309
2616508007	EQBL032119	EPA 7470A	25266	EPA 7470A	25309
2616508001	GWC-6RZ	SM 2540C	25323		
2616508002	GWC-6	SM 2540C	25323		
2616508003	GWA-4RZ	SM 2540C	25323		
2616508004	GWC-7Z	SM 2540C	25323		
2616508005	GWC-9	SM 2540C	25323		
2616508006	FBL032119	SM 2540C	25323		
2616508007	EQBL032119	SM 2540C	25323		
2616508001	GWC-6RZ	EPA 300.0	25371		
2616508002	GWC-6	EPA 300.0	25371		
2616508003	GWA-4RZ	EPA 300.0	25371		
2616508004	GWC-7Z	EPA 300.0	25371		
2616508005	GWC-9	EPA 300.0	25371		
2616508006	FBL032119	EPA 300.0	25371		
2616508007	EQBL032119	EPA 300.0	25371		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	John Abraham	Attention:	
Address:	2480 Manner Road	Copy To:		Company Name:	
Atlanta, GA 30339		Purchase Order #:	Plant Bowen Cells 137	Address:	
Email:	abraham@southernco.com	Project Name:		Pace Quote:	
Phone:	(404) 505-7239	Requested Due Date:		Pace Project Manager:	betsy.medaniel@pacelabs.com
				Pace Profile #:	317.5
				State / Location:	GA
				Regulatory/Agency:	

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see wild codes to left)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Preservatives	Y/N	State Metals by 60207470	TDS, Chloride, Florida, Sul	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
			START DATE	START TIME			END DATE	END TIME							
1	Drinking Water	DW	3/22/19	08:14	G	3		2	Unpreserved		X	X			
2	Waste Water	WW	3/22/19	10:41	G	3		2	H2SO4		X	X			
3	Waste Water	WW	3/22/19	11:55	G	3		2	HCl		X	X			
4	Waste Water	WW	3/22/19	13:24	G	3		2	HNO3		X	X			
5	Waste Water	WW	3/22/19	14:51	G	3		2	NaOH		X	X			
6	Waste Water	WW	3/22/19	16:32	G	3		2	Na2S2O3		X	X			
7	Waste Water	WW	3/22/19	16:36	G	3		2	Other		X	X			

WO# 2616508

2616508

ADDITIONAL COMMENTS	RELEASED BY / DATE	ACCEPTED BY / DATE	TEMP in C	Received on	Custody	Sealed	Cooler	Samples
John A. Abraham	3/22/19 10:48	Betsy Medaniel	10.2	3/22/19 14:48	Y	Y	Y	Y
		M. Abraham						



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

WO#: **2616508**

PM: BM Due Date: 03/29/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 83 Type of Ice: Wet Blue None

Cooler Temperature 0.2 Biological Tissue is Frozen: Yes No Samples on ice, cooling process has begun

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3/22/19 *[Signature]*

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

Client Notification/ Resolution: _____

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Field Data Required? Y / N

Project Manager Review: _____ Date: _____

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

April 03, 2019

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


RE: Project: Plant Bowen cells-State List
Pace Project No.: 2616509

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 22, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616509001	GWA-1	Water	03/20/19 12:36	03/22/19 14:20
2616509002	GWA-2	Water	03/20/19 14:38	03/22/19 14:20
2616509003	GWC-5	Water	03/20/19 16:06	03/22/19 14:20
2616509004	GWA-3	Water	03/20/19 16:20	03/22/19 14:20
2616509005	Dup-2	Water	03/20/19 00:00	03/22/19 14:20

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616509001	GWA-1	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616509002	GWA-2	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616509003	GWC-5	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616509004	GWA-3	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616509005	Dup-2	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

Sample: GWA-1		Lab ID: 2616509001		Collected: 03/20/19 12:36		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 19:35	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 19:35	7440-38-2		
Barium	0.019	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 19:35	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 19:35	7440-41-7		
Boron	0.0042J	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 19:35	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 19:35	7440-43-9		
Calcium	30.1	mg/L	25.0	0.69	50	03/27/19 13:02	03/28/19 19:41	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 19:35	7440-47-3		
Cobalt	0.00078J	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 19:35	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 19:35	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 19:35	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:35	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 19:35	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:35	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 19:35	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 19:35	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 19:35	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.000040J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:13	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	175	mg/L	25.0	10.0	1		03/27/19 16:31			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.4	mg/L	0.25	0.024	1		04/02/19 12:27	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 12:27	16984-48-8		
Sulfate	1.5	mg/L	1.0	0.017	1		04/02/19 12:27	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

Sample: GWA-2		Lab ID: 2616509002		Collected: 03/20/19 14:38		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 19:46	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 19:46	7440-38-2		
Barium	0.0072J	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 19:46	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 19:46	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 19:46	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 19:46	7440-43-9		
Calcium	4.3	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 19:46	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 19:46	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 19:46	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 19:46	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 19:46	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:46	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 19:46	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:46	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 19:46	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 19:46	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 19:46	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.000039J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:15	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	49.0	mg/L	25.0	10.0	1		03/27/19 16:34			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.86	mg/L	0.25	0.024	1		04/02/19 12:48	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 12:48	16984-48-8		
Sulfate	3.6	mg/L	1.0	0.017	1		04/02/19 12:48	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

Sample: GWC-5		Lab ID: 2616509003		Collected: 03/20/19 16:06		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 19:58	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 19:58	7440-38-2		
Barium	0.018	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 19:58	7440-39-3		
Beryllium	0.00046J	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 19:58	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 19:58	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 19:58	7440-43-9		
Calcium	2.7	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 19:58	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 19:58	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 19:58	7440-48-4		
Copper	0.023J	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 19:58	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 19:58	7439-92-1		
Nickel	0.0080J	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:58	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 19:58	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 19:58	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 19:58	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 19:58	7440-62-2		
Zinc	0.032	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 19:58	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.000043J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:18	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	66.0	mg/L	25.0	10.0	1		03/27/19 16:35			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.93	mg/L	0.25	0.024	1		04/02/19 13:10	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 13:10	16984-48-8		
Sulfate	1.3	mg/L	1.0	0.017	1		04/02/19 13:10	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List
Pace Project No.: 2616509

Sample: GWA-3		Lab ID: 2616509004		Collected: 03/20/19 16:20		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0019J	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 20:09	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 20:09	7440-38-2		
Barium	0.0042J	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 20:09	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 20:09	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 20:09	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 20:09	7440-43-9		
Calcium	0.96	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 20:09	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 20:09	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 20:09	7440-48-4		
Copper	0.026	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 20:09	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 20:09	7439-92-1		
Nickel	0.010	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 20:09	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 20:09	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 20:09	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 20:09	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 20:09	7440-62-2		
Zinc	0.028	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 20:09	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:20	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	30.0	mg/L	25.0	10.0	1		03/27/19 16:35			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.5	mg/L	0.25	0.024	1		04/02/19 14:56	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 14:56	16984-48-8		
Sulfate	0.38J	mg/L	1.0	0.017	1		04/02/19 14:56	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

Sample: Dup-2		Lab ID: 2616509005		Collected: 03/20/19 00:00		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.00085J	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 20:21	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 20:21	7440-38-2		
Barium	0.020	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 20:21	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 20:21	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 20:21	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 20:21	7440-43-9		
Calcium	30.0	mg/L	25.0	0.69	50	03/27/19 13:02	03/28/19 20:26	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 20:21	7440-47-3		
Cobalt	0.00079J	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 20:21	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 20:21	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 20:21	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 20:21	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 20:21	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 20:21	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 20:21	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 20:21	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 20:21	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:22	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	176	mg/L	25.0	10.0	1		03/27/19 16:36			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.4	mg/L	0.25	0.024	1		04/02/19 15:17	16887-00-6	B	
Fluoride	0.043J	mg/L	0.30	0.029	1		04/02/19 15:17	16984-48-8		
Sulfate	1.5	mg/L	1.0	0.017	1		04/02/19 15:17	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

QC Batch: 25266 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2616509001, 2616509002, 2616509003, 2616509004, 2616509005

METHOD BLANK: 113834 Matrix: Water
 Associated Lab Samples: 2616509001, 2616509002, 2616509003, 2616509004, 2616509005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/28/19 10:40	

LABORATORY CONTROL SAMPLE: 113835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 113836 113837

Parameter	Units	113836		113837		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2616508001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	0.000039J	0.0025	0.0025	0.0025	0.0025	99	97	75-125	2	20

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

QC Batch: 25235 Analysis Method: EPA 6020B

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

Associated Lab Samples: 2616509001, 2616509002, 2616509003, 2616509004, 2616509005

METHOD BLANK: 113720

Matrix: Water

Associated Lab Samples: 2616509001, 2616509002, 2616509003, 2616509004, 2616509005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/28/19 17:23	
Arsenic	mg/L	ND	0.0050	0.00057	03/28/19 17:23	
Barium	mg/L	ND	0.010	0.00078	03/28/19 17:23	
Beryllium	mg/L	ND	0.0030	0.000050	03/28/19 17:23	
Boron	mg/L	ND	0.040	0.0039	03/28/19 17:23	
Cadmium	mg/L	ND	0.0010	0.000093	03/28/19 17:23	
Calcium	mg/L	ND	0.50	0.014	03/28/19 17:23	
Chromium	mg/L	ND	0.010	0.0016	03/28/19 17:23	
Cobalt	mg/L	ND	0.010	0.00052	03/28/19 17:23	
Copper	mg/L	ND	0.025	0.0013	03/28/19 17:23	
Lead	mg/L	ND	0.0050	0.00027	03/28/19 17:23	
Nickel	mg/L	ND	0.010	0.00095	03/28/19 17:23	
Selenium	mg/L	ND	0.010	0.0014	03/28/19 17:23	
Silver	mg/L	ND	0.010	0.00095	03/28/19 17:23	
Thallium	mg/L	ND	0.0010	0.00014	03/28/19 17:23	
Vanadium	mg/L	ND	0.010	0.0019	03/28/19 17:23	
Zinc	mg/L	ND	0.010	0.0021	03/28/19 17:23	

LABORATORY CONTROL SAMPLE: 113721

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Copper	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Silver	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.1	0.10	100	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 113722		113723		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2616508004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Arsenic	mg/L	0.00077J	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Barium	mg/L	0.030	0.1	0.1	0.13	0.13	103	102	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Boron	mg/L	ND	1	1	0.99	0.98	99	98	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Calcium	mg/L	25.2	1	1	26.6	25.8	144	65	75-125	3	20	M6	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	107	105	75-125	2	20		
Cobalt	mg/L	0.00059J	0.1	0.1	0.11	0.10	105	104	75-125	1	20		
Copper	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Nickel	mg/L	0.00099J	0.1	0.1	0.11	0.10	106	103	75-125	3	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	0	20		
Zinc	mg/L	ND	0.1	0.1	0.10	0.11	102	113	75-125	10	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616509

QC Batch: 25371 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616509001, 2616509002, 2616509003, 2616509004, 2616509005

METHOD BLANK: 114378 Matrix: Water
Associated Lab Samples: 2616509001, 2616509002, 2616509003, 2616509004, 2616509005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.31	0.25	0.024	03/29/19 15:25	
Fluoride	mg/L	ND	0.30	0.029	03/29/19 15:25	
Sulfate	mg/L	ND	1.0	0.017	03/29/19 15:25	

LABORATORY CONTROL SAMPLE: 114379

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	10.9	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 114380 114381

Parameter	Units	2616508001		2616508002		2616508003		2616508004		% Rec Limits	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec				
Chloride	mg/L	1.5	10	10	11.7	11.8	103	103	90-110	0	15	
Fluoride	mg/L	ND	10	10	10.2	10.1	102	101	90-110	1	15	
Sulfate	mg/L	1.7	10	10	12.8	12.9	110	112	90-110	1	15	M1

MATRIX SPIKE SAMPLE: 114382

Parameter	Units	2616508002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.4	10	11.4	100	90-110	
Fluoride	mg/L	ND	10	10.0	100	90-110	
Sulfate	mg/L	2.7	10	13.3	106	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells-State List

Pace Project No.: 2616509

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells-State List
Pace Project No.: 2616509

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616509001	GWA-1	EPA 3005A	25235	EPA 6020B	25272
2616509002	GWA-2	EPA 3005A	25235	EPA 6020B	25272
2616509003	GWC-5	EPA 3005A	25235	EPA 6020B	25272
2616509004	GWA-3	EPA 3005A	25235	EPA 6020B	25272
2616509005	Dup-2	EPA 3005A	25235	EPA 6020B	25272
2616509001	GWA-1	EPA 7470A	25266	EPA 7470A	25309
2616509002	GWA-2	EPA 7470A	25266	EPA 7470A	25309
2616509003	GWC-5	EPA 7470A	25266	EPA 7470A	25309
2616509004	GWA-3	EPA 7470A	25266	EPA 7470A	25309
2616509005	Dup-2	EPA 7470A	25266	EPA 7470A	25309
2616509001	GWA-1	SM 2540C	25217		
2616509002	GWA-2	SM 2540C	25217		
2616509003	GWC-5	SM 2540C	25217		
2616509004	GWA-3	SM 2540C	25217		
2616509005	Dup-2	SM 2540C	25217		
2616509001	GWA-1	EPA 300.0	25371		
2616509002	GWA-2	EPA 300.0	25371		
2616509003	GWC-5	EPA 300.0	25371		
2616509004	GWA-3	EPA 300.0	25371		
2616509005	Dup-2	EPA 300.0	25371		

REPORT OF LABORATORY ANALYSIS

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



Sample Condition Upon Receipt

Client Name: GTA Power

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

WO#: **2616509**

PM: **BM** Due Date: **03/29/19**
CLIENT: **GAPower-CCR**

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used: 83 Type of Ice: Wet Blue None

Cooler Temperature: 0.2 Biological Tissue is Frozen: Yes No
Temp should be above freezing to 6°C

Samples on ice, cooling process has begun
Date and initials of person examining contents: 3/22/19 AK

Comments:

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

Client Notification/ Resolution: _____ Date/Time: _____ Field Data Required? Y / N

Person Contacted: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

April 03, 2019

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

RE: Project: Plant Bowen cells-State List
Pace Project No.: 2616511

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 22, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616511001	GWA-50	Water	03/19/19 11:58	03/22/19 14:20
2616511002	GWA-50R	Water	03/19/19 15:37	03/22/19 14:20
2616511003	FBL031919	Water	03/19/19 16:50	03/22/19 14:20
2616511004	EQBL031919	Water	03/19/19 16:55	03/22/19 14:20
2616511005	Dup-1	Water	03/19/19 00:00	03/22/19 14:20
2616511006	GWA-2R	Water	03/19/19 12:06	03/22/19 14:20

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616511001	GWA-50	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616511002	GWA-50R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616511003	FBL031919	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616511004	EQBL031919	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616511005	Dup-1	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616511006	GWA-2R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Sample: GWA-50		Lab ID: 2616511001		Collected: 03/19/19 11:58		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 21:06	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 21:06	7440-38-2		
Barium	0.012	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 21:06	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 21:06	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 21:06	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 21:06	7440-43-9		
Calcium	4.2	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 21:06	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 21:06	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 21:06	7440-48-4		
Copper	0.0023J	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 21:06	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 21:06	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:06	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 21:06	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:06	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 21:06	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 21:06	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 21:06	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:41	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	34.0	mg/L	25.0	10.0	1		03/26/19 22:17			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.2	mg/L	0.25	0.024	1		04/02/19 16:20	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 16:20	16984-48-8		
Sulfate	0.52J	mg/L	1.0	0.017	1		04/02/19 16:20	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Sample: GWA-50R		Lab ID: 2616511002		Collected: 03/19/19 15:37		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 21:18	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 21:18	7440-38-2		
Barium	0.013	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 21:18	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 21:18	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 21:18	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 21:18	7440-43-9		
Calcium	4.6	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 21:18	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 21:18	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 21:18	7440-48-4		
Copper	0.0029J	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 21:18	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 21:18	7439-92-1		
Nickel	0.0016J	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:18	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 21:18	7782-49-2		
Silver	0.0017J	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:18	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 21:18	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 21:18	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 21:18	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:44	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	48.0	mg/L	25.0	10.0	1		03/26/19 22:17			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.88	mg/L	0.25	0.024	1		04/02/19 16:42	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 16:42	16984-48-8		
Sulfate	0.97J	mg/L	1.0	0.017	1		04/02/19 16:42	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Sample: FBL031919		Lab ID: 2616511003		Collected: 03/19/19 16:50		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 21:29	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 21:29	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 21:29	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 21:29	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 21:29	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 21:29	7440-43-9		
Calcium	0.014J	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 21:29	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 21:29	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 21:29	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 21:29	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 21:29	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:29	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 21:29	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:29	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 21:29	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 21:29	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 21:29	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:46	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		03/26/19 22:17			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.10J	mg/L	0.25	0.024	1		04/02/19 17:03	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 17:03	16984-48-8		
Sulfate	0.028J	mg/L	1.0	0.017	1		04/02/19 17:03	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Sample: EQBL031919		Lab ID: 2616511004		Collected: 03/19/19 16:55		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 21:35	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 21:35	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 21:35	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 21:35	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 21:35	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 21:35	7440-43-9		
Calcium	0.019J	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 21:35	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 21:35	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 21:35	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 21:35	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 21:35	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:35	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 21:35	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:35	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 21:35	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 21:35	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 21:35	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:48	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	12.0J	mg/L	25.0	10.0	1		03/26/19 22:18			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.091J	mg/L	0.25	0.024	1		04/02/19 17:24	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 17:24	16984-48-8		
Sulfate	0.048J	mg/L	1.0	0.017	1		04/02/19 17:24	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List
Pace Project No.: 2616511

Sample: Dup-1		Lab ID: 2616511005		Collected: 03/19/19 00:00		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 21:52	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 21:52	7440-38-2		
Barium	0.012	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 21:52	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 21:52	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 21:52	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 21:52	7440-43-9		
Calcium	4.2	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 21:52	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 21:52	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 21:52	7440-48-4		
Copper	0.0026J	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 21:52	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 21:52	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:52	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 21:52	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 21:52	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 21:52	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 21:52	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 21:52	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:51	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	32.0	mg/L	25.0	10.0	1		03/26/19 22:18			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.3	mg/L	0.25	0.024	1		04/01/19 23:17	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/01/19 23:17	16984-48-8		
Sulfate	1.3	mg/L	1.0	0.017	1		04/01/19 23:17	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Sample: GWA-2R		Lab ID: 2616511006		Collected: 03/19/19 12:06		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0019J	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 22:04	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 22:04	7440-38-2		
Barium	0.024	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 22:04	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 22:04	7440-41-7		
Boron	0.014J	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 22:04	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 22:04	7440-43-9		
Calcium	59.2	mg/L	25.0	0.69	50	03/27/19 13:02	03/28/19 22:09	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 22:04	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 22:04	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 22:04	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 22:04	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 22:04	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 22:04	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 22:04	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 22:04	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 22:04	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 22:04	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:53	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	208	mg/L	25.0	10.0	1		03/26/19 22:18			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.0	mg/L	0.25	0.024	1		04/02/19 00:25	16887-00-6	B	
Fluoride	0.056J	mg/L	0.30	0.029	1		04/02/19 00:25	16984-48-8		
Sulfate	32.5	mg/L	1.0	0.017	1		04/02/19 00:25	14808-79-8	M1	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616511

QC Batch: 25266 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2616511001, 2616511002, 2616511003, 2616511004, 2616511005, 2616511006

METHOD BLANK: 113834 Matrix: Water
Associated Lab Samples: 2616511001, 2616511002, 2616511003, 2616511004, 2616511005, 2616511006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/28/19 10:40	

LABORATORY CONTROL SAMPLE: 113835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 113836 113837

Parameter	Units	113836		113837		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2616508001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	0.000039J	0.0025	0.0025	0.0025	0.0025	99	97	75-125	2	20

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616511

QC Batch: 25235 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616511001, 2616511002, 2616511003, 2616511004, 2616511005, 2616511006

METHOD BLANK: 113720 Matrix: Water
Associated Lab Samples: 2616511001, 2616511002, 2616511003, 2616511004, 2616511005, 2616511006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/28/19 17:23	
Arsenic	mg/L	ND	0.0050	0.00057	03/28/19 17:23	
Barium	mg/L	ND	0.010	0.00078	03/28/19 17:23	
Beryllium	mg/L	ND	0.0030	0.000050	03/28/19 17:23	
Boron	mg/L	ND	0.040	0.0039	03/28/19 17:23	
Cadmium	mg/L	ND	0.0010	0.000093	03/28/19 17:23	
Calcium	mg/L	ND	0.50	0.014	03/28/19 17:23	
Chromium	mg/L	ND	0.010	0.0016	03/28/19 17:23	
Cobalt	mg/L	ND	0.010	0.00052	03/28/19 17:23	
Copper	mg/L	ND	0.025	0.0013	03/28/19 17:23	
Lead	mg/L	ND	0.0050	0.00027	03/28/19 17:23	
Nickel	mg/L	ND	0.010	0.00095	03/28/19 17:23	
Selenium	mg/L	ND	0.010	0.0014	03/28/19 17:23	
Silver	mg/L	ND	0.010	0.00095	03/28/19 17:23	
Thallium	mg/L	ND	0.0010	0.00014	03/28/19 17:23	
Vanadium	mg/L	ND	0.010	0.0019	03/28/19 17:23	
Zinc	mg/L	ND	0.010	0.0021	03/28/19 17:23	

LABORATORY CONTROL SAMPLE: 113721

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Copper	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Silver	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.1	0.10	100	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 113722		113723		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2616508004 Result	MS Spike Conc.	MSD Spike Conc.									
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Arsenic	mg/L	0.00077J	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Barium	mg/L	0.030	0.1	0.1	0.13	0.13	103	102	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Boron	mg/L	ND	1	1	0.99	0.98	99	98	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Calcium	mg/L	25.2	1	1	26.6	25.8	144	65	75-125	3	20	M6	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	107	105	75-125	2	20		
Cobalt	mg/L	0.00059J	0.1	0.1	0.11	0.10	105	104	75-125	1	20		
Copper	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Nickel	mg/L	0.00099J	0.1	0.1	0.11	0.10	106	103	75-125	3	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	0	20		
Zinc	mg/L	ND	0.1	0.1	0.10	0.11	102	113	75-125	10	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616511

QC Batch: 25371 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616511001, 2616511002, 2616511003, 2616511004

METHOD BLANK: 114378 Matrix: Water
Associated Lab Samples: 2616511001, 2616511002, 2616511003, 2616511004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.31	0.25	0.024	03/29/19 15:25	
Fluoride	mg/L	ND	0.30	0.029	03/29/19 15:25	
Sulfate	mg/L	ND	1.0	0.017	03/29/19 15:25	

LABORATORY CONTROL SAMPLE: 114379

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	10.9	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 114380 114381

Parameter	Units	2616508001		2616508002		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	1.5	10	10	11.7	11.8	103	103	90-110	0	15		
Fluoride	mg/L	ND	10	10	10.2	10.1	102	101	90-110	1	15		
Sulfate	mg/L	1.7	10	10	12.8	12.9	110	112	90-110	1	15	M1	

MATRIX SPIKE SAMPLE: 114382

Parameter	Units	2616508002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.4	10	11.4	100	90-110	
Fluoride	mg/L	ND	10	10.0	100	90-110	
Sulfate	mg/L	2.7	10	13.3	106	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616511

QC Batch: 25448 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616511005, 2616511006

METHOD BLANK: 114771 Matrix: Water
Associated Lab Samples: 2616511005, 2616511006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.31	0.25	0.024	04/01/19 22:31	
Fluoride	mg/L	ND	0.30	0.029	04/01/19 22:31	
Sulfate	mg/L	ND	1.0	0.017	04/01/19 22:31	

LABORATORY CONTROL SAMPLE: 114772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.2	102	90-110	
Fluoride	mg/L	10	10.1	101	90-110	
Sulfate	mg/L	10	10.8	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 114773 114774

Parameter	Units	2616511005		114774		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Chloride	mg/L	1.3	10	10	10.9	96	95	90-110	1	15	
Fluoride	mg/L	ND	10	10	9.7	97	96	90-110	1	15	
Sulfate	mg/L	1.3	10	10	11.0	97	96	90-110	1	15	

MATRIX SPIKE SAMPLE: 114775

Parameter	Units	2616511006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	2.0	10	11.3	93	90-110	
Fluoride	mg/L	0.056J	10	9.3	92	90-110	
Sulfate	mg/L	32.5	10	39.5	70	90-110 M1	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells-State List

Pace Project No.: 2616511

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells-State List
Pace Project No.: 2616511

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616511001	GWA-50	EPA 3005A	25235	EPA 6020B	25272
2616511002	GWA-50R	EPA 3005A	25235	EPA 6020B	25272
2616511003	FBL031919	EPA 3005A	25235	EPA 6020B	25272
2616511004	EQBL031919	EPA 3005A	25235	EPA 6020B	25272
2616511005	Dup-1	EPA 3005A	25235	EPA 6020B	25272
2616511006	GWA-2R	EPA 3005A	25235	EPA 6020B	25272
2616511001	GWA-50	EPA 7470A	25266	EPA 7470A	25309
2616511002	GWA-50R	EPA 7470A	25266	EPA 7470A	25309
2616511003	FBL031919	EPA 7470A	25266	EPA 7470A	25309
2616511004	EQBL031919	EPA 7470A	25266	EPA 7470A	25309
2616511005	Dup-1	EPA 7470A	25266	EPA 7470A	25309
2616511006	GWA-2R	EPA 7470A	25266	EPA 7470A	25309
2616511001	GWA-50	SM 2540C	25049		
2616511002	GWA-50R	SM 2540C	25049		
2616511003	FBL031919	SM 2540C	25049		
2616511004	EQBL031919	SM 2540C	25049		
2616511005	Dup-1	SM 2540C	25049		
2616511006	GWA-2R	SM 2540C	25049		
2616511001	GWA-50	EPA 300.0	25371		
2616511002	GWA-50R	EPA 300.0	25371		
2616511003	FBL031919	EPA 300.0	25371		
2616511004	EQBL031919	EPA 300.0	25371		
2616511005	Dup-1	EPA 300.0	25448		
2616511006	GWA-2R	EPA 300.0	25448		

REPORT OF LABORATORY ANALYSIS

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



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

WO#: **2616511**

PM: **BM**

Due Date: **03/29/19**

CLIENT: **GRPower-CCR**

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 83 Type of Ice: Wet Blue None

Cooler Temperature 0.2
Temp should be above freezing to 8°C

Biological Tissue is Frozen: Yes No

Samples on ice, cooling process has begun

Date and Initials of person examining contents: 3/22/19 BM

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

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

April 04, 2019

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

RE: Project: Plant Bowen Cells
Pace Project No.: 2616596

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells

Pace Project No.: 2616596

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells
Pace Project No.: 2616596

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616596001	GWC-13	Water	03/23/19 11:33	03/26/19 11:45
2616596002	GWC-12	Water	03/23/19 15:24	03/26/19 11:45
2616596003	GWC-11	Water	03/23/19 16:14	03/26/19 11:45
2616596004	GWC-11R	Water	03/23/19 16:59	03/26/19 11:45

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells

Pace Project No.: 2616596

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616596001	GWC-13	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616596002	GWC-12	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616596003	GWC-11	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616596004	GWC-11R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells
Pace Project No.: 2616596

Sample: GWC-13		Lab ID: 2616596001		Collected: 03/23/19 11:33		Received: 03/26/19 11:45		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 18:11	7440-36-0		
Arsenic	0.00067J	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 18:11	7440-38-2		
Barium	0.023	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 18:11	7440-39-3		
Beryllium	0.000061J	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 18:11	7440-41-7		
Boron	0.012J	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 18:11	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 18:11	7440-43-9		
Calcium	29.6	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 18:17	7440-70-2		
Chromium	0.0058J	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 18:11	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 18:11	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 18:11	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 18:11	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 18:11	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 18:11	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 18:11	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 18:11	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 18:11	7440-62-2		
Zinc	0.021	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 18:11	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.00017J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:10	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	135	mg/L	25.0	10.0	1		03/28/19 20:12			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.5	mg/L	0.25	0.024	1		04/02/19 19:31	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 19:31	16984-48-8		
Sulfate	15.5	mg/L	1.0	0.017	1		04/02/19 19:31	14808-79-8	M1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2616596

Sample: GWC-12		Lab ID: 2616596002		Collected: 03/23/19 15:24		Received: 03/26/19 11:45		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 18:22	7440-36-0	
Arsenic	0.0055	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 18:22	7440-38-2	
Barium	0.024	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 18:22	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 18:22	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 18:22	7440-42-8	
Cadmium	0.00035J	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 18:22	7440-43-9	
Calcium	7.5	mg/L	0.50	0.014	1	03/31/19 12:23	04/01/19 18:22	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 18:22	7440-47-3	
Cobalt	0.0032J	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 18:22	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 18:22	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 18:22	7439-92-1	
Nickel	0.0026J	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 18:22	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 18:22	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 18:22	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 18:22	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 18:22	7440-62-2	
Zinc	0.012	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 18:22	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	0.00015J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:19	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	58.0	mg/L	25.0	10.0	1		03/28/19 20:12		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	0.88	mg/L	0.25	0.024	1		04/02/19 20:35	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 20:35	16984-48-8	
Sulfate	0.30J	mg/L	1.0	0.017	1		04/02/19 20:35	14808-79-8	B

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells
Pace Project No.: 2616596

Sample: GWC-11		Lab ID: 2616596003		Collected: 03/23/19 16:14		Received: 03/26/19 11:45		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.00094J	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 18:34	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 18:34	7440-38-2		
Barium	0.0081J	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 18:34	7440-39-3		
Beryllium	0.000057J	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 18:34	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 18:34	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 18:34	7440-43-9		
Calcium	7.8	mg/L	0.50	0.014	1	03/31/19 12:23	04/01/19 18:34	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 18:34	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 18:34	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 18:34	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 18:34	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 18:34	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 18:34	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 18:34	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 18:34	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 18:34	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 18:34	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.00015J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:22	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	64.0	mg/L	25.0	10.0	1		03/28/19 20:12			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.2	mg/L	0.25	0.024	1		04/02/19 20:56	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 20:56	16984-48-8		
Sulfate	2.1	mg/L	1.0	0.017	1		04/02/19 20:56	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2616596

Sample: GWC-11R **Lab ID: 2616596004** Collected: 03/23/19 16:59 Received: 03/26/19 11:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 18:45	7440-36-0	
Arsenic	0.0016J	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 18:45	7440-38-2	
Barium	0.019	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 18:45	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 18:45	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 18:45	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 18:45	7440-43-9	
Calcium	28.3	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 18:51	7440-70-2	
Chromium	0.0048J	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 18:45	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 18:45	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 18:45	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 18:45	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 18:45	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 18:45	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 18:45	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 18:45	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 18:45	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 18:45	7440-66-6	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	0.00013J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:24	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	148	mg/L	25.0	10.0	1		03/28/19 20:12		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	1.7	mg/L	0.25	0.024	1		04/02/19 21:17	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 21:17	16984-48-8	
Sulfate	2.1	mg/L	1.0	0.017	1		04/02/19 21:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616596

QC Batch: 25347 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2616596001, 2616596002, 2616596003, 2616596004

METHOD BLANK: 114228 Matrix: Water
 Associated Lab Samples: 2616596001, 2616596002, 2616596003, 2616596004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	04/02/19 15:07	

LABORATORY CONTROL SAMPLE: 114229

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 114230 114231

Parameter	Units	114230		114231		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2616596001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	0.00017J	0.0025	0.0025	0.0025	95	98	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616596

QC Batch: 25446 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616596001, 2616596002, 2616596003, 2616596004

METHOD BLANK: 114744 Matrix: Water
Associated Lab Samples: 2616596001, 2616596002, 2616596003, 2616596004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	04/01/19 17:59	
Arsenic	mg/L	ND	0.0050	0.00057	04/01/19 17:59	
Barium	mg/L	ND	0.010	0.00078	04/01/19 17:59	
Beryllium	mg/L	ND	0.0030	0.000050	04/01/19 17:59	
Boron	mg/L	ND	0.040	0.0039	04/01/19 17:59	
Cadmium	mg/L	ND	0.0010	0.000093	04/01/19 17:59	
Calcium	mg/L	ND	0.50	0.014	04/01/19 17:59	
Chromium	mg/L	ND	0.010	0.0016	04/01/19 17:59	
Cobalt	mg/L	ND	0.010	0.00052	04/01/19 17:59	
Copper	mg/L	ND	0.025	0.0013	04/01/19 17:59	
Lead	mg/L	ND	0.0050	0.00027	04/01/19 17:59	
Nickel	mg/L	ND	0.010	0.00095	04/01/19 17:59	
Selenium	mg/L	ND	0.010	0.0014	04/01/19 17:59	
Silver	mg/L	ND	0.010	0.00095	04/01/19 17:59	
Thallium	mg/L	ND	0.0010	0.00014	04/01/19 17:59	
Vanadium	mg/L	ND	0.010	0.0019	04/01/19 17:59	
Zinc	mg/L	ND	0.010	0.0021	04/01/19 17:59	

LABORATORY CONTROL SAMPLE: 114745

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.094	94	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Calcium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Copper	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Nickel	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.10	102	80-120	
Zinc	mg/L	0.1	0.097	97	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616596

Parameter	Units	2616602001		114746		114747		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	ND	0.1	0.1	0.098	0.099	97	99	75-125	1	20			
Arsenic	mg/L	ND	0.1	0.1	0.098	0.097	97	96	75-125	1	20			
Barium	mg/L	0.021	0.1	0.1	0.12	0.12	94	96	75-125	1	20			
Beryllium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20			
Boron	mg/L	ND	1	1	0.97	0.98	96	98	75-125	1	20			
Cadmium	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	1	20			
Calcium	mg/L	35.6	1	1	37.5	35.0	185	-62	75-125	7	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20			
Cobalt	mg/L	ND	0.1	0.1	0.095	0.097	94	97	75-125	3	20			
Copper	mg/L	ND	0.1	0.1	0.097	0.099	97	98	75-125	1	20			
Lead	mg/L	0.00047J	0.1	0.1	0.095	0.096	94	96	75-125	1	20			
Nickel	mg/L	0.0011J	0.1	0.1	0.095	0.097	94	96	75-125	2	20			
Selenium	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20			
Silver	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20			
Thallium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	2	20			
Vanadium	mg/L	ND	0.1	0.1	0.10	0.099	99	99	75-125	0	20			
Zinc	mg/L	0.0039J	0.1	0.1	0.098	0.099	94	95	75-125	1	20			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells
Pace Project No.: 2616596

QC Batch: 25467 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616596001, 2616596002, 2616596003, 2616596004

METHOD BLANK: 115031 Matrix: Water
Associated Lab Samples: 2616596001, 2616596002, 2616596003, 2616596004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	04/02/19 18:49	
Fluoride	mg/L	ND	0.30	0.029	04/02/19 18:49	
Sulfate	mg/L	0.045J	1.0	0.017	04/02/19 18:49	

LABORATORY CONTROL SAMPLE: 115032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.2	102	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 115033 115034

Parameter	Units	2616596001		2616596002		115033		115034		% Rec Limits	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS % Rec	MSD % Rec	MS % Rec	MSD % Rec			
Chloride	mg/L	3.5	10	10	10	13.6	13.6	101	101	90-110	0	15
Fluoride	mg/L	ND	10	10	10	10.1	10.1	101	101	90-110	0	15
Sulfate	mg/L	15.5	10	10	10	24.2	24.2	87	86	90-110	0	15 M1

MATRIX SPIKE SAMPLE: 115035

Parameter	Units	2616596002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	0.88	10	10.8	99	90-110	
Fluoride	mg/L	ND	10	10.3	103	90-110	
Sulfate	mg/L	0.30J	10	10	97	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells

Pace Project No.: 2616596

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells

Pace Project No.: 2616596

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616596001	GWC-13	EPA 3005A	25446	EPA 6020B	25472
2616596002	GWC-12	EPA 3005A	25446	EPA 6020B	25472
2616596003	GWC-11	EPA 3005A	25446	EPA 6020B	25472
2616596004	GWC-11R	EPA 3005A	25446	EPA 6020B	25472
2616596001	GWC-13	EPA 7470A	25347	EPA 7470A	25359
2616596002	GWC-12	EPA 7470A	25347	EPA 7470A	25359
2616596003	GWC-11	EPA 7470A	25347	EPA 7470A	25359
2616596004	GWC-11R	EPA 7470A	25347	EPA 7470A	25359
2616596001	GWC-13	SM 2540C	25323		
2616596002	GWC-12	SM 2540C	25323		
2616596003	GWC-11	SM 2540C	25323		
2616596004	GWC-11R	SM 2540C	25323		
2616596001	GWC-13	EPA 300.0	25467		
2616596002	GWC-12	EPA 300.0	25467		
2616596003	GWC-11	EPA 300.0	25467		
2616596004	GWC-11R	EPA 300.0	25467		

REPORT OF LABORATORY ANALYSIS

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



Sample Collection Upon Receipt

Client Name: GA Power

WU#: **2616596**

PM: **BM**

CLIENT: **GAPower-CCR**

Due Date: **04/02/19**

Proj. Name: _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____
Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 082
Cooler Temperature 1.3°C

Type of Ice: Wet Blue None Samples on ice, cooling process has begun
Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 5/26/19024

Temp should be above freezing to 6°C

Comments: _____

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

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Field Data Required? Y / N

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

April 04, 2019

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

RE: Project: Plant Bowen Cells - State List
Pace Project No.: 2616600

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616600001	GWC-13RZ	Water	03/22/19 09:06	03/26/19 11:45
2616600002	GWC-10R	Water	03/22/19 09:56	03/26/19 11:45
2616600003	GWC-10	Water	03/22/19 11:40	03/26/19 11:45
2616600004	GWC-14Z	Water	03/22/19 15:11	03/26/19 11:45
2616600005	GWC-15Z	Water	03/22/19 16:20	03/26/19 11:45
2616600006	Dup-3	Water	03/22/19 00:00	03/26/19 11:45
2616600007	FBL032219	Water	03/22/19 16:40	03/26/19 11:45
2616600008	EQBL032219	Water	03/22/19 16:44	03/26/19 11:45

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Lab ID	Sample ID	Method	Analysts	Analytes Reported
261660001	GWC-13RZ	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
261660002	GWC-10R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
261660003	GWC-10	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
261660004	GWC-14Z	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
261660005	GWC-15Z	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
261660006	Dup-3	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
261660007	FBL032219	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
261660008	EQBL032219	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Sample: GWC-13RZ		Lab ID: 2616600001		Collected: 03/22/19 09:06		Received: 03/26/19 11:45		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0014J	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 19:08	7440-36-0		
Arsenic	0.00097J	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 19:08	7440-38-2		
Barium	0.086	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 19:08	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 19:08	7440-41-7		
Boron	0.013J	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 19:08	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 19:08	7440-43-9		
Calcium	40.5	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 19:14	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 19:08	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 19:08	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 19:08	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 19:08	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:08	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 19:08	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:08	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 19:08	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 19:08	7440-62-2		
Zinc	0.0048J	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 19:08	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.00014J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:31	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	249	mg/L	25.0	10.0	1		03/28/19 20:11			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	7.4	mg/L	0.25	0.024	1		04/02/19 21:39	16887-00-6		
Fluoride	0.12J	mg/L	0.30	0.029	1		04/02/19 21:39	16984-48-8		
Sulfate	57.9	mg/L	10.0	0.17	10		04/03/19 02:57	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells - State List
Pace Project No.: 2616600

Sample: GWC-10R		Lab ID: 2616600002		Collected: 03/22/19 09:56		Received: 03/26/19 11:45		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 19:20	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 19:20	7440-38-2		
Barium	0.022	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 19:20	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 19:20	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 19:20	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 19:20	7440-43-9		
Calcium	37.2	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 19:25	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 19:20	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 19:20	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 19:20	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 19:20	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:20	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 19:20	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:20	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 19:20	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 19:20	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 19:20	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.00014J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:33	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	140	mg/L	25.0	10.0	1		03/28/19 20:11			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.8	mg/L	0.25	0.024	1		04/02/19 22:00	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 22:00	16984-48-8		
Sulfate	1.3	mg/L	1.0	0.017	1		04/02/19 22:00	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Sample: GWC-10		Lab ID: 2616600003		Collected: 03/22/19 11:40		Received: 03/26/19 11:45		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 19:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 19:31	7440-38-2	
Barium	0.024	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 19:31	7440-39-3	
Beryllium	0.00018J	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 19:31	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 19:31	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 19:31	7440-43-9	
Calcium	15.4J	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 19:37	7440-70-2	D3
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 19:31	7440-47-3	
Cobalt	0.0011J	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 19:31	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 19:31	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 19:31	7439-92-1	
Nickel	0.0022J	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:31	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 19:31	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:31	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 19:31	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 19:31	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 19:31	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	0.00014J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:36	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	95.0	mg/L	25.0	10.0	1		03/28/19 20:11		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	2.2	mg/L	0.25	0.024	1		04/02/19 22:21	16887-00-6	
Fluoride	0.045J	mg/L	0.30	0.029	1		04/02/19 22:21	16984-48-8	
Sulfate	1.6	mg/L	1.0	0.017	1		04/02/19 22:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Sample: GWC-14Z Lab ID: 2616600004 Collected: 03/22/19 15:11 Received: 03/26/19 11:45 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 19:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 19:42	7440-38-2	
Barium	0.014	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 19:42	7440-39-3	
Beryllium	0.000094J	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 19:42	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 19:42	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 19:48	7440-43-9	
Calcium	16.7J	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 19:48	7440-70-2	D3
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 19:42	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 19:42	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 19:42	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 19:42	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:42	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 19:42	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:42	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 19:42	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 19:42	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 19:42	7440-66-6	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	0.00014J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:38	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	104	mg/L	25.0	10.0	1		03/28/19 20:11		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	3.7	mg/L	0.25	0.024	1		04/02/19 22:42	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 22:42	16984-48-8	
Sulfate	6.2	mg/L	1.0	0.017	1		04/02/19 22:42	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Sample: GWC-15Z		Lab ID: 2616600005		Collected: 03/22/19 16:20		Received: 03/26/19 11:45		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 19:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 19:54	7440-38-2	
Barium	0.014	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 19:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 19:54	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 19:54	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 19:54	7440-43-9	
Calcium	21.3J	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 20:00	7440-70-2	D3
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 19:54	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 19:54	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 19:54	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 19:54	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:54	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 19:54	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 19:54	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 19:54	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 19:54	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 19:54	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	0.00012J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:41	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	116	mg/L	25.0	10.0	1		03/28/19 20:11		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	1.2	mg/L	0.25	0.024	1		04/03/19 00:28	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		04/03/19 00:28	16984-48-8	
Sulfate	2.1	mg/L	1.0	0.017	1		04/03/19 00:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Sample: Dup-3		Lab ID: 261660006		Collected: 03/22/19 00:00		Received: 03/26/19 11:45		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 20:17	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 20:17	7440-38-2		
Barium	0.015	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 20:17	7440-39-3		
Beryllium	0.000096J	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 20:17	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 20:17	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 20:17	7440-43-9		
Calcium	16.3J	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 20:23	7440-70-2	D3	
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 20:17	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 20:17	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 20:17	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 20:17	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 20:17	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 20:17	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 20:17	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 20:17	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 20:17	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 20:17	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.00013J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:43	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	95.0	mg/L	25.0	10.0	1		03/28/19 20:11			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.7	mg/L	0.25	0.024	1		04/03/19 00:50	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		04/03/19 00:50	16984-48-8		
Sulfate	6.1	mg/L	1.0	0.017	1		04/03/19 00:50	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Sample: FBL032219 Lab ID: 2616600007 Collected: 03/22/19 16:40 Received: 03/26/19 11:45 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 20:28	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 20:28	7440-38-2	
Barium	ND	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 20:28	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 20:28	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 20:28	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 20:28	7440-43-9	
Calcium	ND	mg/L	0.50	0.014	1	03/31/19 12:23	04/01/19 20:28	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 20:28	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 20:28	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 20:28	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 20:28	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 20:28	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 20:28	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 20:28	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 20:28	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 20:28	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 20:28	7440-66-6	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	0.00012J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:45	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		03/28/19 20:11		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	0.10J	mg/L	0.25	0.024	1		04/03/19 01:32	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		04/03/19 01:32	16984-48-8	
Sulfate	0.065J	mg/L	1.0	0.017	1		04/03/19 01:32	14808-79-8	B

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Sample: EQBL032219		Lab ID: 2616600008		Collected: 03/22/19 16:44		Received: 03/26/19 11:45		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 20:34	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 20:34	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 20:34	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 20:34	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 20:34	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 20:34	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/31/19 12:23	04/01/19 20:34	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 20:34	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 20:34	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 20:34	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 20:34	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 20:34	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 20:34	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 20:34	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 20:34	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 20:34	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 20:34	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.00011J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:48	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	25.0	10.0	1		03/28/19 20:12			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.065J	mg/L	0.25	0.024	1		04/03/19 01:53	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		04/03/19 01:53	16984-48-8		
Sulfate	0.029J	mg/L	1.0	0.017	1		04/03/19 01:53	14808-79-8	B	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells - State List
Pace Project No.: 2616600

QC Batch: 25347 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2616600001, 2616600002, 2616600003, 2616600004, 2616600005, 2616600006, 2616600007, 2616600008

METHOD BLANK: 114228 Matrix: Water
Associated Lab Samples: 2616600001, 2616600002, 2616600003, 2616600004, 2616600005, 2616600006, 2616600007, 2616600008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	04/02/19 15:07	

LABORATORY CONTROL SAMPLE: 114229

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 114230 114231

Parameter	Units	2616596001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	0.00017J	0.0025	0.0025	0.0025	0.0026	95	98	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells - State List
Pace Project No.: 2616600

QC Batch: 25446 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616600001, 2616600002, 2616600003, 2616600004, 2616600005, 2616600006, 2616600007, 2616600008

METHOD BLANK: 114744 Matrix: Water
Associated Lab Samples: 2616600001, 2616600002, 2616600003, 2616600004, 2616600005, 2616600006, 2616600007, 2616600008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	04/01/19 17:59	
Arsenic	mg/L	ND	0.0050	0.00057	04/01/19 17:59	
Barium	mg/L	ND	0.010	0.00078	04/01/19 17:59	
Beryllium	mg/L	ND	0.0030	0.000050	04/01/19 17:59	
Boron	mg/L	ND	0.040	0.0039	04/01/19 17:59	
Cadmium	mg/L	ND	0.0010	0.000093	04/01/19 17:59	
Calcium	mg/L	ND	0.50	0.014	04/01/19 17:59	
Chromium	mg/L	ND	0.010	0.0016	04/01/19 17:59	
Cobalt	mg/L	ND	0.010	0.00052	04/01/19 17:59	
Copper	mg/L	ND	0.025	0.0013	04/01/19 17:59	
Lead	mg/L	ND	0.0050	0.00027	04/01/19 17:59	
Nickel	mg/L	ND	0.010	0.00095	04/01/19 17:59	
Selenium	mg/L	ND	0.010	0.0014	04/01/19 17:59	
Silver	mg/L	ND	0.010	0.00095	04/01/19 17:59	
Thallium	mg/L	ND	0.0010	0.00014	04/01/19 17:59	
Vanadium	mg/L	ND	0.010	0.0019	04/01/19 17:59	
Zinc	mg/L	ND	0.010	0.0021	04/01/19 17:59	

LABORATORY CONTROL SAMPLE: 114745

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.094	94	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Calcium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Copper	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Nickel	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.10	102	80-120	
Zinc	mg/L	0.1	0.097	97	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Parameter	Units	2616602001		114746		114747		% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Antimony	mg/L	ND	0.1	0.1	0.098	0.099	97	99	75-125	1	20		
Arsenic	mg/L	ND	0.1	0.1	0.098	0.097	97	96	75-125	1	20		
Barium	mg/L	0.021	0.1	0.1	0.12	0.12	94	96	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20		
Boron	mg/L	ND	1	1	0.97	0.98	96	98	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	1	20		
Calcium	mg/L	35.6	1	1	37.5	35.0	185	-62	75-125	7	20	M6	
Chromium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.095	0.097	94	97	75-125	3	20		
Copper	mg/L	ND	0.1	0.1	0.097	0.099	97	98	75-125	1	20		
Lead	mg/L	0.00047J	0.1	0.1	0.095	0.096	94	96	75-125	1	20		
Nickel	mg/L	0.0011J	0.1	0.1	0.095	0.097	94	96	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20		
Silver	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	2	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.099	99	99	75-125	0	20		
Zinc	mg/L	0.0039J	0.1	0.1	0.098	0.099	94	95	75-125	1	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

QC Batch: 25323

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2616600001, 2616600002, 2616600003, 2616600004, 2616600005, 2616600006, 2616600007, 2616600008

LABORATORY CONTROL SAMPLE: 114103

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	423	106	84-108	

SAMPLE DUPLICATE: 114104

Parameter	Units	2616508001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	60.0	64.0	6	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells - State List
Pace Project No.: 2616600

QC Batch: 25467 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616600001, 2616600002, 2616600003, 2616600004, 2616600005, 2616600006, 2616600007, 2616600008

METHOD BLANK: 115031 Matrix: Water
Associated Lab Samples: 2616600001, 2616600002, 2616600003, 2616600004, 2616600005, 2616600006, 2616600007, 2616600008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	04/02/19 18:49	
Fluoride	mg/L	ND	0.30	0.029	04/02/19 18:49	
Sulfate	mg/L	0.045J	1.0	0.017	04/02/19 18:49	

LABORATORY CONTROL SAMPLE: 115032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.2	102	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 115033 115034

Parameter	Units	2616596001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.5	10	10	13.6	13.6	101	101	90-110	0	15	
Fluoride	mg/L	ND	10	10	10.1	10.1	101	101	90-110	0	15	
Sulfate	mg/L	15.5	10	10	24.2	24.2	87	86	90-110	0	15 M1	

MATRIX SPIKE SAMPLE: 115035

Parameter	Units	2616596002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	0.88	10	10.8	99	90-110	
Fluoride	mg/L	ND	10	10.3	103	90-110	
Sulfate	mg/L	0.30J	10	10	97	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells - State List

Pace Project No.: 2616600

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
261660001	GWC-13RZ	EPA 3005A	25446	EPA 6020B	25472
261660002	GWC-10R	EPA 3005A	25446	EPA 6020B	25472
261660003	GWC-10	EPA 3005A	25446	EPA 6020B	25472
261660004	GWC-14Z	EPA 3005A	25446	EPA 6020B	25472
261660005	GWC-15Z	EPA 3005A	25446	EPA 6020B	25472
261660006	Dup-3	EPA 3005A	25446	EPA 6020B	25472
261660007	FBL032219	EPA 3005A	25446	EPA 6020B	25472
261660008	EQBL032219	EPA 3005A	25446	EPA 6020B	25472
261660001	GWC-13RZ	EPA 7470A	25347	EPA 7470A	25359
261660002	GWC-10R	EPA 7470A	25347	EPA 7470A	25359
261660003	GWC-10	EPA 7470A	25347	EPA 7470A	25359
261660004	GWC-14Z	EPA 7470A	25347	EPA 7470A	25359
261660005	GWC-15Z	EPA 7470A	25347	EPA 7470A	25359
261660006	Dup-3	EPA 7470A	25347	EPA 7470A	25359
261660007	FBL032219	EPA 7470A	25347	EPA 7470A	25359
261660008	EQBL032219	EPA 7470A	25347	EPA 7470A	25359
261660001	GWC-13RZ	SM 2540C	25323		
261660002	GWC-10R	SM 2540C	25323		
261660003	GWC-10	SM 2540C	25323		
261660004	GWC-14Z	SM 2540C	25323		
261660005	GWC-15Z	SM 2540C	25323		
261660006	Dup-3	SM 2540C	25323		
261660007	FBL032219	SM 2540C	25323		
261660008	EQBL032219	SM 2540C	25323		
261660001	GWC-13RZ	EPA 300.0	25467		
261660002	GWC-10R	EPA 300.0	25467		
261660003	GWC-10	EPA 300.0	25467		
261660004	GWC-14Z	EPA 300.0	25467		
261660005	GWC-15Z	EPA 300.0	25467		
261660006	Dup-3	EPA 300.0	25467		
261660007	FBL032219	EPA 300.0	25467		
261660008	EQBL032219	EPA 300.0	25467		

REPORT OF LABORATORY ANALYSIS

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

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A
Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Marner Road
 Atlanta, GA 30339
 Email: jabraham@southernco.com
 Phone: (404)506-7239
 Requested Due Date:

Section B
Required Project Information:
 Report To: Josu Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10348606
 Project Name: Plant Bowen Cells - State List
 Project #:

Section C
Invoice Information:
 Attention: scsvoices@southernco.com
 Company Name:
 Address:
 Pace Quote:
 Pace Project Manager: betsy.mcDaniel@pacelabs.com
 Pace Profile #: 317.5
 Regulatory Agency:
 State / Location: GA

ITEM #	MATRIX CODE (see valid codes to left)	MATRIX TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES						Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
			START DATE	END TIME			Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3				Methanol
1	GWL-13BZ		3/21/19 0906			2	1						X	X		2
2	GWL-10R		3/22/19 0956			2	1						X	X		3
3	GWL-10		3/22/19 1140			2	1						X	X		4
4	GWL-14Z		3/22/19 1511			2	1						X	X		5
5	GWL-15Z		3/22/19 1620			2	1						X	X		6
6	DUP-3		3/22/19			2	1						X	X		7
7	FIBL032219		3/22/19 1640			2	1						X	X		8
8	EARL032219		3/22/19 1644			2	1						X	X		

REMOVED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	Received on	Temp in C	Ice (Y/N)	Custody (Y/N)	Sealed Cooler (Y/N)	Samples Intact (Y/N)
Cindy Mardis	3/26	10:23	Charles Huntz	3/26/19	145			1.3		X		NY

WOM# : 2616600



2616600



Sample Condition Upon Receipt

WO#: 2616600

Client Name: GA Power

PM: BM

Due Date: 04/02/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 082 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1.3°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 5/26/19 JH

Temp should be above freezing to 6°C

Comments:

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

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

April 04, 2019

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


RE: Project: Plant Bowen Cells
Pace Project No.: 2616602

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 26, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells

Pace Project No.: 2616602

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells

Pace Project No.: 2616602

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616602001	GWC-15R	Water	03/25/19 12:24	03/26/19 11:45

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells

Pace Project No.: 2616602

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616602001	GWC-15R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2616602

Sample: GWC-15R **Lab ID: 2616602001** Collected: 03/25/19 12:24 Received: 03/26/19 11:45 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS			Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00078	1	03/31/19 12:23	04/01/19 20:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/31/19 12:23	04/01/19 20:40	7440-38-2	
Barium	0.021	mg/L	0.010	0.00078	1	03/31/19 12:23	04/01/19 20:40	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/31/19 12:23	04/01/19 20:40	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/31/19 12:23	04/01/19 20:40	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/31/19 12:23	04/01/19 20:40	7440-43-9	
Calcium	35.6	mg/L	25.0	0.69	50	03/31/19 12:23	04/01/19 20:45	7440-70-2	M6
Chromium	ND	mg/L	0.010	0.0016	1	03/31/19 12:23	04/01/19 20:40	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/31/19 12:23	04/01/19 20:40	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/31/19 12:23	04/01/19 20:40	7440-50-8	
Lead	0.00047J	mg/L	0.0050	0.00027	1	03/31/19 12:23	04/01/19 20:40	7439-92-1	
Nickel	0.0011J	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 20:40	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/31/19 12:23	04/01/19 20:40	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/31/19 12:23	04/01/19 20:40	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/31/19 12:23	04/01/19 20:40	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/31/19 12:23	04/01/19 20:40	7440-62-2	
Zinc	0.0039J	mg/L	0.010	0.0021	1	03/31/19 12:23	04/01/19 20:40	7440-66-6	
7470 Mercury			Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	0.00011J	mg/L	0.00050	0.000036	1	04/02/19 08:27	04/02/19 14:50	7439-97-6	
2540C Total Dissolved Solids			Analytical Method: SM 2540C						
Total Dissolved Solids	167	mg/L	25.0	10.0	1		03/28/19 20:12		
300.0 IC Anions 28 Days			Analytical Method: EPA 300.0						
Chloride	1.9	mg/L	0.25	0.024	1		04/03/19 02:14	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		04/03/19 02:14	16984-48-8	
Sulfate	11.2	mg/L	1.0	0.017	1		04/03/19 02:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616602

QC Batch:	25347	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
Associated Lab Samples:	2616602001		

METHOD BLANK: 114228 Matrix: Water

Associated Lab Samples: 2616602001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	04/02/19 15:07	

LABORATORY CONTROL SAMPLE: 114229

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 114230 114231

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2616596001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Mercury	mg/L	0.00017J	0.0025	0.0025	0.0025	0.0026	95	98	75-125	4	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells
Pace Project No.: 2616602

QC Batch: 25446 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616602001

METHOD BLANK: 114744 Matrix: Water
Associated Lab Samples: 2616602001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	04/01/19 17:59	
Arsenic	mg/L	ND	0.0050	0.00057	04/01/19 17:59	
Barium	mg/L	ND	0.010	0.00078	04/01/19 17:59	
Beryllium	mg/L	ND	0.0030	0.000050	04/01/19 17:59	
Boron	mg/L	ND	0.040	0.0039	04/01/19 17:59	
Cadmium	mg/L	ND	0.0010	0.000093	04/01/19 17:59	
Calcium	mg/L	ND	0.50	0.014	04/01/19 17:59	
Chromium	mg/L	ND	0.010	0.0016	04/01/19 17:59	
Cobalt	mg/L	ND	0.010	0.00052	04/01/19 17:59	
Copper	mg/L	ND	0.025	0.0013	04/01/19 17:59	
Lead	mg/L	ND	0.0050	0.00027	04/01/19 17:59	
Nickel	mg/L	ND	0.010	0.00095	04/01/19 17:59	
Selenium	mg/L	ND	0.010	0.0014	04/01/19 17:59	
Silver	mg/L	ND	0.010	0.00095	04/01/19 17:59	
Thallium	mg/L	ND	0.0010	0.00014	04/01/19 17:59	
Vanadium	mg/L	ND	0.010	0.0019	04/01/19 17:59	
Zinc	mg/L	ND	0.010	0.0021	04/01/19 17:59	

LABORATORY CONTROL SAMPLE: 114745

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.094	94	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Calcium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Copper	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Nickel	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.10	102	80-120	
Zinc	mg/L	0.1	0.097	97	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616602

Parameter	Units	2616602001		114746		114747		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	ND	0.1	0.1	0.098	0.099	97	99	75-125	1	20			
Arsenic	mg/L	ND	0.1	0.1	0.098	0.097	97	96	75-125	1	20			
Barium	mg/L	0.021	0.1	0.1	0.12	0.12	94	96	75-125	1	20			
Beryllium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20			
Boron	mg/L	ND	1	1	0.97	0.98	96	98	75-125	1	20			
Cadmium	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	1	20			
Calcium	mg/L	35.6	1	1	37.5	35.0	185	-62	75-125	7	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20			
Cobalt	mg/L	ND	0.1	0.1	0.095	0.097	94	97	75-125	3	20			
Copper	mg/L	ND	0.1	0.1	0.097	0.099	97	98	75-125	1	20			
Lead	mg/L	0.00047J	0.1	0.1	0.095	0.096	94	96	75-125	1	20			
Nickel	mg/L	0.0011J	0.1	0.1	0.095	0.097	94	96	75-125	2	20			
Selenium	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20			
Silver	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20			
Thallium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	2	20			
Vanadium	mg/L	ND	0.1	0.1	0.10	0.099	99	99	75-125	0	20			
Zinc	mg/L	0.0039J	0.1	0.1	0.098	0.099	94	95	75-125	1	20			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616602

QC Batch: 25323	Analysis Method: SM 2540C
QC Batch Method: SM 2540C	Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2616602001	

LABORATORY CONTROL SAMPLE: 114103

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	423	106	84-108	

SAMPLE DUPLICATE: 114104

Parameter	Units	2616508001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	60.0	64.0	6	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells
Pace Project No.: 2616602

QC Batch: 25467 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616602001

METHOD BLANK: 115031 Matrix: Water
Associated Lab Samples: 2616602001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	04/02/19 18:49	
Fluoride	mg/L	ND	0.30	0.029	04/02/19 18:49	
Sulfate	mg/L	0.045J	1.0	0.017	04/02/19 18:49	

LABORATORY CONTROL SAMPLE: 115032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.2	102	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 115033 115034

Parameter	Units	2616596001		2616596002		115033		115034		% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec						
Chloride	mg/L	3.5	10	10	13.6	13.6	101	101	90-110	0	15		
Fluoride	mg/L	ND	10	10	10.1	10.1	101	101	90-110	0	15		
Sulfate	mg/L	15.5	10	10	24.2	24.2	87	86	90-110	0	15	M1	

MATRIX SPIKE SAMPLE: 115035

Parameter	Units	2616596002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	0.88	10	10.8	99	90-110	
Fluoride	mg/L	ND	10	10.3	103	90-110	
Sulfate	mg/L	0.30J	10	10	97	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells

Pace Project No.: 2616602

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells

Pace Project No.: 2616602

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616602001	GWC-15R	EPA 3005A	25446	EPA 6020B	25472
2616602001	GWC-15R	EPA 7470A	25347	EPA 7470A	25359
2616602001	GWC-15R	SM 2540C	25323		
2616602001	GWC-15R	EPA 300.0	25467		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Joju Abraham	Attention:	
Address:	2480 Maner Road Atlanta, GA 30339	Copy To:	Wood Environmental	Company Name:	
Email:	jabraham@southernco.com	Purchase Order #:	SCS10348606	Address:	
Phone:	(404)506-7239	Project Name:	Plant Bowen Cells	Pace Quote:	
Requested Due Date:		Project #:		Pace Project Manager:	betsy.mcdanielle@pacelabs.com
				Pace Profile #:	317
				State / Location:	GA
				Regulatory Agency:	

Page: 1 of 1

ITEM #	MATRIX	CODE	COLLECTED		DATE	TIME	SAMPLER	SAMPLER TEMP AT COLLECTION	# OF CONTAINERS	Requested Analysis Filtered (Y/N)						TEMP in C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)							
			START	END						MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	Y/N	TDS, Cl, F, SO4	Metals 6020/470 (CCR list)	As-III + Smk Metals 604/292							Radium 226, 228	Mercury 2920	Residual Chlorine (Y/N)				
1	Drinking Water	DW	3/25/19	12:21	3/26/19	10:33	Cindy Mando		2	X	X	X	X															
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Cindy Mando	3/26	10:33	Charles Fowler	3/26/19	11:45	13 X W Y

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Robert MUI / Audrey Crofton
SIGNATURE of SAMPLER:	[Signature]
DATE Signed:	3/25/19

WO#: 2616602

2616602



Sample Condition Upon Receipt

WO#: 2616602

Client Name: GA Power

PM: BM

Due Date: 04/02/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Proj. Due Date: _____
Proj. Name: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 082

Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1.3°C

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 3/26/19 CDH

Temp should be above freezing to 6°C

Comments:

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

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

April 07, 2019

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

RE: Project: Plant Bowen Cells
Pace Project No.: 2616671

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 27, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells

Pace Project No.: 2616671

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells

Pace Project No.: 2616671

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616671001	GWC-8RR	Water	03/27/19 12:51	03/27/19 14:57

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells
Pace Project No.: 2616671

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616671001	GWC-8RR	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2616671

Sample: GWC-8RR		Lab ID: 2616671001		Collected: 03/27/19 12:51		Received: 03/27/19 14:57		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	04/01/19 15:22	04/03/19 03:56	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	04/01/19 15:22	04/03/19 03:56	7440-38-2		
Barium	0.014	mg/L	0.010	0.00078	1	04/01/19 15:22	04/03/19 03:56	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	04/01/19 15:22	04/03/19 03:56	7440-41-7		
Boron	0.0078J	mg/L	0.040	0.0039	1	04/01/19 15:22	04/03/19 03:56	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	04/01/19 15:22	04/03/19 03:56	7440-43-9		
Calcium	20.6J	mg/L	25.0	0.69	50	04/01/19 15:22	04/03/19 04:02	7440-70-2	D3	
Chromium	0.0021J	mg/L	0.010	0.0016	1	04/01/19 15:22	04/03/19 03:56	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	04/01/19 15:22	04/03/19 03:56	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	04/01/19 15:22	04/03/19 03:56	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	04/01/19 15:22	04/03/19 03:56	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	04/01/19 15:22	04/03/19 03:56	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	04/01/19 15:22	04/03/19 03:56	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	04/01/19 15:22	04/03/19 03:56	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	04/01/19 15:22	04/03/19 03:56	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	04/01/19 15:22	04/03/19 03:56	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	04/01/19 15:22	04/03/19 03:56	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.000039J	mg/L	0.00050	0.000036	1	04/03/19 07:45	04/03/19 12:20	7439-97-6	B	
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	101	mg/L	25.0	10.0	1		04/02/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.90	mg/L	0.25	0.024	1		04/04/19 01:42	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		04/04/19 01:42	16984-48-8		
Sulfate	1.5	mg/L	1.0	0.017	1		04/04/19 01:42	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616671

QC Batch:	25614	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
Associated Lab Samples:	2616671001		

METHOD BLANK: 115427 Matrix: Water

Associated Lab Samples: 2616671001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.000039J	0.00050	0.000036	04/03/19 12:11	

LABORATORY CONTROL SAMPLE: 115428

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 115429 115430

Parameter	Units	2616671001		115429		115430		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result				
Mercury	mg/L	0.000039J	0.0025	0.0025	0.0023	0.0023	90	90	75-125	0	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 115556 115557

Parameter	Units	2616482004		115556		115557		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result				
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0024	92	93	75-125	1	20

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells
Pace Project No.: 2616671

QC Batch: 25536 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616671001

METHOD BLANK: 115226 Matrix: Water
Associated Lab Samples: 2616671001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	04/03/19 00:01	
Arsenic	mg/L	ND	0.0050	0.00057	04/03/19 00:01	
Barium	mg/L	ND	0.010	0.00078	04/03/19 00:01	
Beryllium	mg/L	ND	0.0030	0.000050	04/03/19 00:01	
Boron	mg/L	ND	0.040	0.0039	04/03/19 00:01	
Cadmium	mg/L	ND	0.0010	0.000093	04/03/19 00:01	
Calcium	mg/L	ND	0.50	0.014	04/03/19 00:01	
Chromium	mg/L	ND	0.010	0.0016	04/03/19 00:01	
Cobalt	mg/L	ND	0.010	0.00052	04/03/19 00:01	
Copper	mg/L	ND	0.025	0.0013	04/03/19 00:01	
Lead	mg/L	ND	0.0050	0.00027	04/03/19 00:01	
Nickel	mg/L	ND	0.010	0.00095	04/03/19 00:01	
Selenium	mg/L	ND	0.010	0.0014	04/03/19 00:01	
Silver	mg/L	ND	0.010	0.00095	04/03/19 00:01	
Thallium	mg/L	ND	0.0010	0.00014	04/03/19 00:01	
Vanadium	mg/L	ND	0.010	0.0019	04/03/19 00:01	
Zinc	mg/L	ND	0.010	0.0021	04/03/19 00:01	

LABORATORY CONTROL SAMPLE: 115227

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Calcium	mg/L	1	0.95	95	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.094	94	80-120	
Copper	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Nickel	mg/L	0.1	0.093	93	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.094	94	80-120	
Vanadium	mg/L	0.1	0.097	97	80-120	
Zinc	mg/L	0.1	0.095	95	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616671

Parameter	Units	115228		115229		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		261666009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	107	101	75-125	5	20	
Arsenic	mg/L	0.00058J	0.1	0.1	0.10	0.099	99	98	75-125	1	20	
Barium	mg/L	0.026	0.1	0.1	0.13	0.12	103	97	75-125	5	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20	
Boron	mg/L	0.35	1	1	1.4	1.3	100	96	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	
Calcium	mg/L	2.4	1	1	3.5	3.3	110	90	75-125	6	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20	
Copper	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.095	99	95	75-125	3	20	
Nickel	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.097	100	96	75-125	3	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.095	99	95	75-125	4	20	
Vanadium	mg/L	0.0029J	0.1	0.1	0.11	0.10	102	98	75-125	4	20	
Zinc	mg/L	0.030	0.1	0.1	0.13	0.13	100	96	75-125	3	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2616671

QC Batch: 25629	Analysis Method: SM 2540C
QC Batch Method: SM 2540C	Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2616671001	

LABORATORY CONTROL SAMPLE: 115527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	406	102	84-108	

SAMPLE DUPLICATE: 115528

Parameter	Units	2616666007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	292	305	4	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells
Pace Project No.: 2616671

QC Batch: 25646 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616671001

METHOD BLANK: 115682 Matrix: Water
Associated Lab Samples: 2616671001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	04/03/19 12:12	
Fluoride	mg/L	ND	0.30	0.029	04/03/19 12:12	
Sulfate	mg/L	ND	1.0	0.017	04/03/19 12:12	

LABORATORY CONTROL SAMPLE: 115683

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.4	104	90-110	
Fluoride	mg/L	10	10.3	103	90-110	
Sulfate	mg/L	10	10.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 115684 115685

Parameter	Units	2616648001 Result	MS Spike Conc.	MSD Spike Conc.	115685		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
					MS Result	MSD Result						
Chloride	mg/L	717	10	10	309	309	-4080	-4080	90-110	0	15	E,M1
Fluoride	mg/L	0.32	10	10	11.0	11.1	107	107	90-110	0	15	
Sulfate	mg/L	131	10	10	106	106	-248	-248	90-110	0	15	E,M1

MATRIX SPIKE SAMPLE: 115686

Parameter	Units	2616648002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	6470	10	1180	-53000	90-110	E,M1
Fluoride	mg/L	0.19J	10	1.9	17	90-110	M1
Sulfate	mg/L	ND	10	326	3260	90-110	E,M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells

Pace Project No.: 2616671

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells

Pace Project No.: 2616671

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616671001	GWC-8RR	EPA 3005A	25536	EPA 6020B	25547
2616671001	GWC-8RR	EPA 7470A	25614	EPA 7470A	25682
2616671001	GWC-8RR	SM 2540C	25629		
2616671001	GWC-8RR	EPA 300.0	25646		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:
Company: Georgia Power - Coal Combustion Residuals
Address: 2480 Maner Road
Atlanta, GA 30339
Email: jbraham@southemco.com
Phone: (404)506-7239
Requested Due Date: [Blank]

Section B
 Required Project Information:
 Report To: Jolu Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10348606
 Project Name: Plant Bowen Cells
 Project #: [Blank]

Section C
 Invoice Information:
 Attention: [Blank]
 Company Name: [Blank]
 Address: [Blank]
 Pace Quote: [Blank]
 Pace Project Manager: betsy.mcdaniel@pacelabs.com
 Pace Profile #: 317

Regulatory Agency [Blank]
State / Location GA

Page : | Of |

ITEM #	MATRIX Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Other Tissue	CODE DW WT WW P SL OL WP AR OT TS	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES						ANALYSES TEST Y/N	REQUESTED ANALYSIS FILTERED (Y/N)			RECEIVED ON	TEMP IN C	SAMPLE CONDITIONS	Intact (Y/N)	Cooler (Y/N)	Sealed (Y/N)	Custody (Y/N)																		
				START DATE	END DATE			UNPRESERVED	H2SO4	HNO3	HCl	NaOH	Na2S2O3		Methanol	Other	TDS, Cl, F, SO4								Metals 6020/7470 (CCR list)	As III & Sechmetals 7470	Radium 226, 228	Mercury 7470	Residual Chlorine (Y/N)													
1			GWC-8RR	DATE	TIME	3/27/19	1251	2	1								2	X	X	X																						
2																																										
3																																										
4																																										
5																																										
6																																										
7																																										
8																																										
9																																										
10																																										
11																																										
12																																										

ADDITIONAL COMMENTS
 Relinquished by / Affiliation: Audrey Crafton
 Date: 3/27/19
 Time: 1457

ACCEPTED BY / AFFILIATION
 JESSICA WEINER
 Date: 3/27/19
 Time: 1457

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Audrey Crafton
 SIGNATURE of SAMPLER:
 DATE Signed: 3/27/19

SAMPLE CONDITIONS
 Received on: [Blank] Y
 Temp in C: 70 Y
 Intact (Y/N): Y
 Cooler (Y/N): Y
 Sealed (Y/N): Y
 Custody (Y/N): Y





Sample Condition Upon Receipt

WO#: 2616671

Client Name: Georgia Power

PM: BM

Due Date: 04/03/19

CLIENT: GAPower-CCR

Courier: [] Fed Ex [] UPS [] USPS [] Client [x] Commercial [] Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: [x] yes [] no Seals intact: [x] yes [] no

Packing Material: [] Bubble Wrap [] Bubble Bags [x] None [] Other

Thermometer Used 082

Type of Ice: [x] Wet [] Blue [] None

[x] Samples on ice, cooling process has begun

Cooler Temperature 7.00

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 3/27/19 [Signature]

Temp should be above freezing to 6°C

Comments:

Table with 16 rows of inspection items and checkboxes. Items include Chain of Custody Present, Chain of Custody Filled Out, Chain of Custody Relinquished, Sampler Name & Signature on COC, Samples Arrived within Hold Time, Short Hold Time Analysis (<72hr), Rush Turn Around Time Requested, Sufficient Volume, Correct Containers Used, Containers Intact, Filtered volume received for Dissolved tests, Sample Labels match COC, All containers needing preservation have been checked, All containers needing preservation are found to be in compliance with EPA recommendation, exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Samples checked for dechlorination, Headspace in VOA Vials (>6mm), Trip Blank Present, Trip Blank Custody Seals Present, Pace Trip Blank Lot # (if purchased).

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

May 14, 2019

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

RE: Project: Plant Bowen Landfill Cells
Pace Project No.: 2618213

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on May 07, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2618213001	GWC-8Z	Water	05/06/19 14:35	05/07/19 08:55

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2618213001	GWC-8Z	EPA 6020B	CSW	17
		EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

Sample: GWC-8Z		Lab ID: 2618213001		Collected: 05/06/19 14:35		Received: 05/07/19 08:55		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	05/09/19 13:10	05/09/19 19:43	7440-36-0	
Arsenic	0.00063J	mg/L	0.0050	0.00057	1	05/09/19 13:10	05/09/19 19:43	7440-38-2	
Barium	0.017	mg/L	0.010	0.00078	1	05/09/19 13:10	05/09/19 19:43	7440-39-3	
Beryllium	0.00010J	mg/L	0.0030	0.000050	1	05/09/19 13:10	05/09/19 19:43	7440-41-7	
Boron	0.0065J	mg/L	0.040	0.0039	1	05/09/19 13:10	05/09/19 19:43	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	05/09/19 13:10	05/09/19 19:43	7440-43-9	
Calcium	20.0J	mg/L	25.0	0.69	50	05/09/19 13:10	05/09/19 19:49	7440-70-2	D3
Chromium	0.0048J	mg/L	0.010	0.0016	1	05/09/19 13:10	05/09/19 19:43	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	05/09/19 13:10	05/09/19 19:43	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	05/09/19 13:10	05/09/19 19:43	7440-50-8	
Lead	0.00032J	mg/L	0.0050	0.00027	1	05/09/19 13:10	05/09/19 19:43	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	05/09/19 13:10	05/09/19 19:43	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	05/09/19 13:10	05/09/19 19:43	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	05/09/19 13:10	05/09/19 19:43	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	05/09/19 13:10	05/09/19 19:43	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	05/09/19 13:10	05/09/19 19:43	7440-62-2	
Zinc	0.0024J	mg/L	0.010	0.0021	1	05/09/19 13:10	05/09/19 19:43	7440-66-6	
6020B MET ICPMS, Lab Filtered		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony, Dissolved	ND	mg/L	0.0030	0.00078	1	05/13/19 12:55	05/14/19 13:03	7440-36-0	
Arsenic, Dissolved	ND	mg/L	0.0050	0.00057	1	05/13/19 12:55	05/14/19 13:03	7440-38-2	
Barium, Dissolved	0.015	mg/L	0.010	0.00078	1	05/13/19 12:55	05/14/19 13:03	7440-39-3	B
Beryllium, Dissolved	ND	mg/L	0.0030	0.000050	1	05/13/19 12:55	05/14/19 13:03	7440-41-7	
Boron, Dissolved	0.0065J	mg/L	0.040	0.0039	1	05/13/19 12:55	05/14/19 13:03	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.0010	0.000093	1	05/13/19 12:55	05/14/19 13:03	7440-43-9	
Calcium, Dissolved	19.7J	mg/L	25.0	0.69	50	05/13/19 12:55	05/14/19 13:09	7440-70-2	D3
Chromium, Dissolved	0.0037J	mg/L	0.010	0.0016	1	05/13/19 12:55	05/14/19 13:03	7440-47-3	
Cobalt, Dissolved	ND	mg/L	0.010	0.00052	1	05/13/19 12:55	05/14/19 13:03	7440-48-4	
Copper, Dissolved	ND	mg/L	0.025	0.0013	1	05/13/19 12:55	05/14/19 13:03	7440-50-8	
Lead, Dissolved	ND	mg/L	0.0050	0.00027	1	05/13/19 12:55	05/14/19 13:03	7439-92-1	
Nickel, Dissolved	ND	mg/L	0.010	0.00095	1	05/13/19 12:55	05/14/19 13:03	7440-02-0	
Selenium, Dissolved	ND	mg/L	0.010	0.0014	1	05/13/19 12:55	05/14/19 13:03	7782-49-2	
Silver, Dissolved	ND	mg/L	0.010	0.00095	1	05/13/19 12:55	05/14/19 13:03	7440-22-4	
Thallium, Dissolved	ND	mg/L	0.0010	0.00014	1	05/13/19 12:55	05/14/19 13:03	7440-28-0	
Vanadium, Dissolved	ND	mg/L	0.010	0.0019	1	05/13/19 12:55	05/14/19 13:03	7440-62-2	
Zinc, Dissolved	0.0024J	mg/L	0.010	0.0021	1	05/13/19 12:55	05/14/19 13:03	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	05/08/19 08:49	05/08/19 12:39	7439-97-6	
7470 Mercury, Lab Filtered		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury, Dissolved	ND	mg/L	0.00050	0.00014	1	05/13/19 09:53	05/13/19 14:12	7439-97-6	M1,R1
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	118	mg/L	25.0	10.0	1		05/08/19 11:02		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

Sample: GWC-8Z		Lab ID: 2618213001		Collected: 05/06/19 14:35	Received: 05/07/19 08:55	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	1.1	mg/L	0.25	0.024	1		05/09/19 09:01	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		05/09/19 09:01	16984-48-8	
Sulfate	2.1	mg/L	1.0	0.017	1		05/09/19 09:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

QC Batch: 27980

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 2618213001

METHOD BLANK: 125836

Matrix: Water

Associated Lab Samples: 2618213001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	05/08/19 12:34	

LABORATORY CONTROL SAMPLE: 125837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 125838 125839

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2618213001 Result	Spike Conc.	Spike Conc.	Conc.								
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0022	95	90	75-125	6	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Landfill Cells
Pace Project No.: 2618213

QC Batch: 28227 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury Dissolved
Associated Lab Samples: 2618213001

METHOD BLANK: 127245 Matrix: Water
Associated Lab Samples: 2618213001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury, Dissolved	mg/L	ND	0.00050	0.00014	05/13/19 14:08	

LABORATORY CONTROL SAMPLE: 127246

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	mg/L	0.0025	0.0022	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 127258 127259

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2618213001 Result	Spike Conc.	Spike Conc.	Conc.								
Mercury, Dissolved	mg/L	ND	0.0025	0.0025	0.0018	0.0024	70	95	75-125	31	20	M1, R1	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Landfill Cells
Pace Project No.: 2618213

QC Batch: 28096 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2618213001

METHOD BLANK: 126481 Matrix: Water
Associated Lab Samples: 2618213001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	05/09/19 19:32	
Arsenic	mg/L	ND	0.0050	0.00057	05/09/19 19:32	
Barium	mg/L	ND	0.010	0.00078	05/09/19 19:32	
Beryllium	mg/L	ND	0.0030	0.000050	05/09/19 19:32	
Boron	mg/L	ND	0.040	0.0039	05/09/19 19:32	
Cadmium	mg/L	ND	0.0010	0.000093	05/09/19 19:32	
Calcium	mg/L	ND	0.50	0.014	05/09/19 19:32	
Chromium	mg/L	ND	0.010	0.0016	05/09/19 19:32	
Cobalt	mg/L	ND	0.010	0.00052	05/09/19 19:32	
Copper	mg/L	ND	0.025	0.0013	05/09/19 19:32	
Lead	mg/L	ND	0.0050	0.00027	05/09/19 19:32	
Nickel	mg/L	ND	0.010	0.00095	05/09/19 19:32	
Selenium	mg/L	ND	0.010	0.0014	05/09/19 19:32	
Silver	mg/L	ND	0.010	0.00095	05/09/19 19:32	
Thallium	mg/L	ND	0.0010	0.00014	05/09/19 19:32	
Vanadium	mg/L	ND	0.010	0.0019	05/09/19 19:32	
Zinc	mg/L	ND	0.010	0.0021	05/09/19 19:32	

LABORATORY CONTROL SAMPLE: 126482

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	111	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.11	107	80-120	
Boron	mg/L	1	1.1	108	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Calcium	mg/L	1	0.99	99	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Copper	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.10	100	80-120	
Silver	mg/L	0.1	0.11	108	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.1	0.10	100	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 126483		126484		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2618213001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	106	106	75-125	0	20		
Arsenic	mg/L	ND	0.1	0.1	0.099	0.099	98	98	75-125	0	20		
Barium	mg/L	0.015	0.1	0.1	0.12	0.12	99	101	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20		
Boron	mg/L	0.0065J	1	1	1.0	1.0	100	100	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	102	75-125	3	20		
Calcium	mg/L	19.7J	1	1	20.8J	21.0J	86	109	75-125	1	20		
Chromium	mg/L	0.0037J	0.1	0.1	0.11	0.12	105	116	75-125	9	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20		
Copper	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	2	20		
Nickel	mg/L	ND	0.1	0.1	0.10	0.11	104	111	75-125	6	20		
Selenium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	105	105	75-125	0	20		
Zinc	mg/L	0.0024J	0.1	0.1	0.10	0.11	100	104	75-125	5	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Landfill Cells
Pace Project No.: 2618213

QC Batch: 28258 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET Dissolved
Associated Lab Samples: 2618213001

METHOD BLANK: 127316 Matrix: Water
Associated Lab Samples: 2618213001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony, Dissolved	mg/L	ND	0.0030	0.00078	05/13/19 17:22	
Arsenic, Dissolved	mg/L	ND	0.0050	0.00057	05/13/19 17:22	
Barium, Dissolved	mg/L	0.0016J	0.010	0.00078	05/13/19 17:22	
Beryllium, Dissolved	mg/L	ND	0.0030	0.000050	05/13/19 17:22	
Boron, Dissolved	mg/L	ND	0.040	0.0039	05/13/19 17:22	
Cadmium, Dissolved	mg/L	ND	0.0010	0.000093	05/13/19 17:22	
Calcium, Dissolved	mg/L	ND	0.50	0.014	05/13/19 17:22	
Chromium, Dissolved	mg/L	ND	0.010	0.0016	05/13/19 17:22	
Cobalt, Dissolved	mg/L	ND	0.010	0.00052	05/13/19 17:22	
Copper, Dissolved	mg/L	ND	0.025	0.0013	05/13/19 17:22	
Lead, Dissolved	mg/L	ND	0.0050	0.00027	05/13/19 17:22	
Nickel, Dissolved	mg/L	ND	0.010	0.00095	05/13/19 17:22	
Selenium, Dissolved	mg/L	ND	0.010	0.0014	05/13/19 17:22	
Silver, Dissolved	mg/L	ND	0.010	0.00095	05/13/19 17:22	
Thallium, Dissolved	mg/L	ND	0.0010	0.00014	05/13/19 17:22	
Vanadium, Dissolved	mg/L	ND	0.010	0.0019	05/13/19 17:22	
Zinc, Dissolved	mg/L	ND	0.010	0.0021	05/13/19 17:22	

LABORATORY CONTROL SAMPLE: 127317

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	mg/L	0.1	0.099	99	80-120	
Arsenic, Dissolved	mg/L	0.1	0.096	96	80-120	
Barium, Dissolved	mg/L	0.1	0.097	97	80-120	
Beryllium, Dissolved	mg/L	0.1	0.098	98	80-120	
Boron, Dissolved	mg/L	1	0.98	98	80-120	
Cadmium, Dissolved	mg/L	0.1	0.10	101	80-120	
Calcium, Dissolved	mg/L	1	0.97	97	80-120	
Chromium, Dissolved	mg/L	0.1	0.099	99	80-120	
Cobalt, Dissolved	mg/L	0.1	0.096	96	80-120	
Copper, Dissolved	mg/L	0.1	0.098	98	80-120	
Lead, Dissolved	mg/L	0.1	0.099	99	80-120	
Nickel, Dissolved	mg/L	0.1	0.098	98	80-120	
Selenium, Dissolved	mg/L	0.1	0.098	98	80-120	
Silver, Dissolved	mg/L	0.1	0.10	101	80-120	
Thallium, Dissolved	mg/L	0.1	0.097	97	80-120	
Vanadium, Dissolved	mg/L	0.1	0.098	98	80-120	
Zinc, Dissolved	mg/L	0.1	0.098	98	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 127318		127319		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2618213001 Result	MS Spike Conc.	MSD Spike Conc.									
Antimony, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20		
Arsenic, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Barium, Dissolved	mg/L	0.015	0.1	0.1	0.12	0.11	101	98	75-125	2	20		
Beryllium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	2	20		
Boron, Dissolved	mg/L	0.0065J	1	1	1.0	1.0	104	103	75-125	0	20		
Cadmium, Dissolved	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20		
Calcium, Dissolved	mg/L	19.7J	1	1	20.8J	20.8J	117	117	75-125	0	20		
Chromium, Dissolved	mg/L	0.0037J	0.1	0.1	0.11	0.11	105	106	75-125	1	20		
Cobalt, Dissolved	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20		
Copper, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20		
Lead, Dissolved	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	1	20		
Nickel, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Selenium, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Silver, Dissolved	mg/L	ND	0.1	0.1	0.10	0.10	103	103	75-125	1	20		
Thallium, Dissolved	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	0	20		
Vanadium, Dissolved	mg/L	ND	0.1	0.1	0.11	0.11	106	106	75-125	0	20		
Zinc, Dissolved	mg/L	0.0024J	0.1	0.1	0.10	0.10	101	98	75-125	2	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

QC Batch:	27996	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2618213001		

LABORATORY CONTROL SAMPLE: 125894

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	422	106	84-108	

SAMPLE DUPLICATE: 125895

Parameter	Units	2618044001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	310	354	13	10	D6

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Landfill Cells
Pace Project No.: 2618213

QC Batch: 27947 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2618213001

METHOD BLANK: 125764 Matrix: Water
Associated Lab Samples: 2618213001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.10J	0.25	0.024	05/08/19 22:59	
Fluoride	mg/L	ND	0.30	0.029	05/08/19 22:59	
Sulfate	mg/L	0.022J	1.0	0.017	05/08/19 22:59	

LABORATORY CONTROL SAMPLE: 125765

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.2	102	90-110	
Fluoride	mg/L	10	10.3	103	90-110	
Sulfate	mg/L	10	10	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 125766 125767

Parameter	Units	2618153001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	61.2	10	10	71.9	71.7	107	105	90-110	0	15	E
Fluoride	mg/L	0.75	10	10	10.2	10.2	94	94	90-110	0	15	
Sulfate	mg/L	ND	10	10	722	722	-13700	-13700	90-110	0	15	E,M1

MATRIX SPIKE SAMPLE: 125768

Parameter	Units	2618153002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	72.2	10	78.9	68	90-110	E,M1
Fluoride	mg/L	2.9	10	12.1	93	90-110	
Sulfate	mg/L	1300	10	538	-7590	90-110	E,M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Landfill Cells

Pace Project No.: 2618213

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2618213001	GWC-8Z	EPA 3005A	28096	EPA 6020B	28106
2618213001	GWC-8Z	EPA 3005A	28258	EPA 6020B	28279
2618213001	GWC-8Z	EPA 7470A	27980	EPA 7470A	28005
2618213001	GWC-8Z	EPA 7470A	28227	EPA 7470A	28261
2618213001	GWC-8Z	SM 2540C	27996		
2618213001	GWC-8Z	EPA 300.0	27947		

REPORT OF LABORATORY ANALYSIS

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



Sample Condition Upon Receipt

WO#: 2618213

Client Name: GA Power

PM: BM

Due Date: 05/14/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Proj. Due Date: _____
Proj. Name: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 082 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 08.1.4°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 5/7/19

Temp should be above freezing to 6°C 5/7/19

Comments: _____

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

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

March 18, 2019

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

RE: Project: Plant Bowen Cells 3+4
Pace Project No.: 2615878

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2615878001	GWA-36	Water	03/06/19 11:33	03/09/19 09:05
2615878002	GWA-37	Water	03/06/19 12:22	03/09/19 09:05
2615878003	Dup-1	Water	03/06/19 00:00	03/09/19 09:05

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2615878001	GWA-36	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615878002	GWA-37	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615878003	Dup-1	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

Sample: GWA-36		Lab ID: 2615878001		Collected: 03/06/19 11:33		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 14:30	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 14:30	7440-38-2		
Barium	0.018	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 14:30	7440-39-3		
Beryllium	0.00029J	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 14:30	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 14:30	7440-42-8		
Cadmium	0.0013	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 14:30	7440-43-9		
Calcium	11.2J	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 14:35	7440-70-2	D3	
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 14:30	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 14:30	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 14:30	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 14:30	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 14:30	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 14:30	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 14:30	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 14:30	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 14:30	7440-62-2		
Zinc	0.56	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 14:30	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:19	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	71.0	mg/L	25.0	10.0	1		03/13/19 19:23			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.4	mg/L	0.25	0.024	1		03/13/19 00:23	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 00:23	16984-48-8		
Sulfate	0.45J	mg/L	1.0	0.017	1		03/13/19 00:23	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

Sample: GWA-37		Lab ID: 2615878002		Collected: 03/06/19 12:22		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0019J	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 14:41	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 14:41	7440-38-2		
Barium	0.0052J	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 14:41	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 14:41	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 14:41	7440-42-8		
Cadmium	0.000093J	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 14:41	7440-43-9		
Calcium	0.78	mg/L	0.50	0.014	1	03/13/19 10:50	03/14/19 14:41	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 14:41	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 14:41	7440-48-4		
Copper	0.0052J	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 14:41	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 14:41	7439-92-1		
Nickel	0.0075J	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 14:41	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 14:41	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 14:41	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 14:41	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 14:41	7440-62-2		
Zinc	0.0035J	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 14:41	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:21	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	22.0J	mg/L	25.0	10.0	1		03/13/19 19:23			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.1	mg/L	0.25	0.024	1		03/13/19 00:46	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 00:46	16984-48-8		
Sulfate	0.46J	mg/L	1.0	0.017	1		03/13/19 00:46	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

Sample: Dup-1		Lab ID: 2615878003		Collected: 03/06/19 00:00		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 15:11	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 15:11	7440-38-2		
Barium	0.018	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 15:11	7440-39-3		
Beryllium	0.00026J	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 15:11	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 15:11	7440-42-8		
Cadmium	0.0012	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 15:11	7440-43-9		
Calcium	10.5J	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 15:17	7440-70-2	D3	
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 15:11	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 15:11	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 15:11	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 15:11	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:11	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 15:11	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:11	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 15:11	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 15:11	7440-62-2		
Zinc	0.53	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 15:11	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:23	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	260	mg/L	25.0	10.0	1		03/13/19 19:23			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.5	mg/L	0.25	0.024	1		03/13/19 01:08	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 01:08	16984-48-8		
Sulfate	0.43J	mg/L	1.0	0.017	1		03/13/19 01:08	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

QC Batch: 24123

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 2615878001, 2615878002, 2615878003

METHOD BLANK: 108124

Matrix: Water

Associated Lab Samples: 2615878001, 2615878002, 2615878003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/13/19 11:53	

LABORATORY CONTROL SAMPLE: 108125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 108126

108127

Parameter	Units	2615876001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0028	0.0026	111	103	75-125	8	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

QC Batch: 24189 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2615878001, 2615878002, 2615878003

METHOD BLANK: 108347 Matrix: Water

Associated Lab Samples: 2615878001, 2615878002, 2615878003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/14/19 14:01	
Arsenic	mg/L	ND	0.0050	0.00057	03/14/19 14:01	
Barium	mg/L	ND	0.010	0.00078	03/14/19 14:01	
Beryllium	mg/L	ND	0.0030	0.000050	03/14/19 14:01	
Boron	mg/L	ND	0.040	0.0039	03/14/19 14:01	
Cadmium	mg/L	ND	0.0010	0.000093	03/14/19 14:01	
Calcium	mg/L	ND	0.50	0.014	03/14/19 14:01	
Chromium	mg/L	ND	0.010	0.0016	03/14/19 14:01	
Cobalt	mg/L	ND	0.010	0.00052	03/14/19 14:01	
Copper	mg/L	ND	0.025	0.0013	03/14/19 14:01	
Lead	mg/L	ND	0.0050	0.00027	03/14/19 14:01	
Nickel	mg/L	ND	0.010	0.00095	03/14/19 14:01	
Selenium	mg/L	ND	0.010	0.0014	03/14/19 14:01	
Silver	mg/L	ND	0.010	0.00095	03/14/19 14:01	
Thallium	mg/L	ND	0.0010	0.00014	03/14/19 14:01	
Vanadium	mg/L	ND	0.010	0.0019	03/14/19 14:01	
Zinc	mg/L	ND	0.010	0.0021	03/14/19 14:01	

LABORATORY CONTROL SAMPLE: 108348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Calcium	mg/L	1	0.96	96	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Copper	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Nickel	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.099	99	80-120	
Zinc	mg/L	0.1	0.10	100	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

Parameter	Units	108349		108350		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2615879006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20		
Arsenic	mg/L	0.00085J	0.1	0.1	0.10	0.10	99	100	75-125	0	20		
Barium	mg/L	0.042	0.1	0.1	0.14	0.14	97	102	75-125	3	20		
Beryllium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20		
Boron	mg/L	0.020J	1	1	0.97	1.0	95	100	75-125	4	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20		
Calcium	mg/L	33.3	1	1	34.4	36.2	111	297	75-125	5	20	M6	
Chromium	mg/L	ND	0.1	0.1	0.098	0.099	98	98	75-125	1	20		
Cobalt	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20		
Copper	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20		
Lead	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20		
Nickel	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20		
Selenium	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20		
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20		
Zinc	mg/L	ND	0.1	0.1	0.098	0.097	97	96	75-125	2	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615878

QC Batch:	24220	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2615878001, 2615878002, 2615878003		

LABORATORY CONTROL SAMPLE: 108435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	401	100	84-108	

SAMPLE DUPLICATE: 108436

Parameter	Units	2615740001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	19000	18800	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

QC Batch: 24135 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2615878001, 2615878002, 2615878003

METHOD BLANK: 108159 Matrix: Water

Associated Lab Samples: 2615878001, 2615878002, 2615878003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/12/19 21:45	
Fluoride	mg/L	ND	0.30	0.029	03/12/19 21:45	
Sulfate	mg/L	ND	1.0	0.017	03/12/19 21:45	

LABORATORY CONTROL SAMPLE: 108160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.5	95	90-110	
Fluoride	mg/L	10	9.5	95	90-110	
Sulfate	mg/L	10	9.1	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 108161 108162

Parameter	Units	2615876001		2615876002		108161		108162		% Rec Limits	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	31.1	10	10	34.9	35.0	38	39	90-110	0	15 M1	
Fluoride	mg/L	0.88	10	10	10.0	10.1	92	92	90-110	1	15	
Sulfate	mg/L	209	10	10	192	193	-162	-159	90-110	0	15 E	

MATRIX SPIKE SAMPLE: 108163

Parameter	Units	2615876002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	0.071J	10	9.7	96	90-110	
Fluoride	mg/L	ND	10	9.6	96	90-110	
Sulfate	mg/L	ND	10	9.2	92	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615878

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2615878001	GWA-36	EPA 3005A	24189	EPA 6020B	24210
2615878002	GWA-37	EPA 3005A	24189	EPA 6020B	24210
2615878003	Dup-1	EPA 3005A	24189	EPA 6020B	24210
2615878001	GWA-36	EPA 7470A	24123	EPA 7470A	24183
2615878002	GWA-37	EPA 7470A	24123	EPA 7470A	24183
2615878003	Dup-1	EPA 7470A	24123	EPA 7470A	24183
2615878001	GWA-36	SM 2540C	24220		
2615878002	GWA-37	SM 2540C	24220		
2615878003	Dup-1	SM 2540C	24220		
2615878001	GWA-36	EPA 300.0	24135		
2615878002	GWA-37	EPA 300.0	24135		
2615878003	Dup-1	EPA 300.0	24135		

REPORT OF LABORATORY ANALYSIS

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

CHAIN OF CUSTODY RECORD

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

PAGE: 1 OF 1

CLIENT NAME: Southern Company Services
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
2180 Manor Road
Atlanta, GA 30339
 REPORT TO: Seju Abraham CC: Geosyntec
 REQUESTED COMPLETION DATE: PO # 56510348606
 PROJECT NAME/STATE:
Plant Bowen Cells 3+4 CCR
 PROJECT #:

CONTAINER TYPE	ANALYSIS REQUESTED	DATE/TIME	RELINQUISHED BY:	DATE/TIME
P 7	P 3	3/19/19	3/19/19	3/19/19
P 3	P 3	3/19/19	3/19/19	3/19/19
P 3	P 3	3/19/19	3/19/19	3/19/19

Collection DATE	Collection TIME	MATRIX CODE*	COM P	SAMPLE IDENTIFICATION
3/6/19	1133	GW	X	GWA-36
3/6/19	1222	GW	X	GWA-37
3/6/19	---	GW	X	DUP-1

CONTAINER TYPE	ANALYSIS REQUESTED	DATE/TIME	RELINQUISHED BY:	DATE/TIME
P 7	P 3	3/19/19	3/19/19	3/19/19
P 3	P 3	3/19/19	3/19/19	3/19/19
P 3	P 3	3/19/19	3/19/19	3/19/19

RECEIVED BY LAB: Robert Mull / Aubrey Carlton DATE/TIME: 3/6/19 1600
 RECEIVED BY: Geosyntec DATE/TIME: 3/19/19 0905
 pH Checked: Yes No: NA Temperature: 1.1°C Max.
 SAMPLE SHIPPED VIA: UPS FED-EX USPS COURIER CLIENT OTHER
 Intacty: Broken Not Present: Not Present
 COOLER ID: 2615878
 Tracking #: 2615878
 Entered into LIMS: 2615878



Sample Condition Upon Receipt

WO#: 2615878
PM: BM
CLIENT: GAPower-CCR
Due Date: 03/18/19
Proj. Due Date:
Proj. Name:

Client Name: GAPower

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 082 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1.7°C Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3/9/19

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

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

March 18, 2019

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

RE: Project: Plant Bowen Cells 3+4
Pace Project No.: 2615879

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2615879001	GWA-36R	Water	03/07/19 10:25	03/09/19 09:05
2615879002	GWA-38	Water	03/07/19 11:06	03/09/19 09:05
2615879003	GWA-52	Water	03/07/19 12:32	03/09/19 09:05
2615879004	GWA-54	Water	03/07/19 13:54	03/09/19 09:05
2615879005	GWA-55R	Water	03/07/19 15:15	03/09/19 09:05
2615879006	GWA-56	Water	03/07/19 15:55	03/09/19 09:05

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2615879001	GWA-36R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615879002	GWA-38	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615879003	GWA-52	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615879004	GWA-54	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615879005	GWA-55R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615879006	GWA-56	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615879

Sample: GWA-36R		Lab ID: 2615879001		Collected: 03/07/19 10:25		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 15:22	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 15:22	7440-38-2		
Barium	0.018	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 15:22	7440-39-3		
Beryllium	0.000068J	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 15:22	7440-41-7		
Boron	0.0049J	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 15:22	7440-42-8		
Cadmium	0.00017J	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 15:22	7440-43-9		
Calcium	28.0	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 15:28	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 15:22	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 15:22	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 15:22	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 15:22	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:22	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 15:22	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:22	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 15:22	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 15:22	7440-62-2		
Zinc	0.043	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 15:22	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:26	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	135	mg/L	25.0	10.0	1		03/13/19 19:23			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.8	mg/L	0.25	0.024	1		03/13/19 01:31	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 01:31	16984-48-8		
Sulfate	4.3	mg/L	1.0	0.017	1		03/13/19 01:31	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

Sample: GWA-38		Lab ID: 2615879002		Collected: 03/07/19 11:06		Received: 03/09/19 09:05		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 15:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 15:34	7440-38-2	
Barium	0.011	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 15:34	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 15:34	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 15:34	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 15:34	7440-43-9	
Calcium	2.6	mg/L	0.50	0.014	1	03/13/19 10:50	03/14/19 15:34	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 15:34	7440-47-3	
Cobalt	0.00087J	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 15:34	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 15:34	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 15:34	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:34	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 15:34	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:34	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 15:34	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 15:34	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 15:34	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:28	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	84.0	mg/L	25.0	10.0	1		03/13/19 19:23		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	2.9	mg/L	0.25	0.024	1		03/13/19 01:54	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 01:54	16984-48-8	
Sulfate	1.1	mg/L	1.0	0.017	1		03/13/19 01:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

Sample: GWA-52 **Lab ID: 2615879003** Collected: 03/07/19 12:32 Received: 03/09/19 09:05 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 15:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 15:45	7440-38-2	
Barium	0.025	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 15:45	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 15:45	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 15:45	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 15:45	7440-43-9	
Calcium	29.5	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 15:51	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 15:45	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 15:45	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 15:45	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 15:45	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:45	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 15:45	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:45	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 15:45	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 15:45	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 15:45	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:30	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	159	mg/L	25.0	10.0	1		03/13/19 19:24		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	3.6	mg/L	0.25	0.024	1		03/13/19 03:47	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 03:47	16984-48-8	
Sulfate	12.7	mg/L	1.0	0.017	1		03/13/19 03:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

Sample: GWA-54 **Lab ID: 2615879004** Collected: 03/07/19 13:54 Received: 03/09/19 09:05 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS			Analytical Method: EPA 6020B Preparation Method: EPA 3005A						
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 15:57	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 15:57	7440-38-2	
Barium	0.039	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 15:57	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 15:57	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 15:57	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 15:57	7440-43-9	
Calcium	23.8J	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 16:02	7440-70-2	D3
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 15:57	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 15:57	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 15:57	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 15:57	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:57	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 15:57	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 15:57	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 15:57	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 15:57	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 15:57	7440-66-6	
7470 Mercury			Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:33	7439-97-6	
2540C Total Dissolved Solids			Analytical Method: SM 2540C						
Total Dissolved Solids	111	mg/L	25.0	10.0	1		03/13/19 19:24		
300.0 IC Anions 28 Days			Analytical Method: EPA 300.0						
Chloride	1.2	mg/L	0.25	0.024	1		03/13/19 04:09	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 04:09	16984-48-8	
Sulfate	2.6	mg/L	1.0	0.017	1		03/13/19 04:09	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615879

Sample: GWA-55R		Lab ID: 2615879005		Collected: 03/07/19 15:15		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 16:27	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 16:27	7440-38-2		
Barium	0.033	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 16:27	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 16:27	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 16:27	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 16:27	7440-43-9		
Calcium	40.4	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 16:33	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 16:27	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 16:27	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 16:27	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 16:27	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 16:27	7440-02-0		
Selenium	0.0016J	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 16:27	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 16:27	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 16:27	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 16:27	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 16:27	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:35	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	212	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.2	mg/L	0.25	0.024	1		03/13/19 04:55	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 04:55	16984-48-8		
Sulfate	25.0	mg/L	1.0	0.017	1		03/13/19 04:55	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

Sample: GWA-56		Lab ID: 2615879006		Collected: 03/07/19 15:55		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 16:39	7440-36-0		
Arsenic	0.00085J	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 16:39	7440-38-2		
Barium	0.042	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 16:39	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 16:39	7440-41-7		
Boron	0.020J	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 16:39	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 16:39	7440-43-9		
Calcium	33.3	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 16:44	7440-70-2	M6	
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 16:39	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 16:39	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 16:39	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 16:39	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 16:39	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 16:39	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 16:39	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 16:39	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 16:39	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 16:39	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:38	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	410	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	6.0	mg/L	0.25	0.024	1		03/13/19 05:17	16887-00-6		
Fluoride	0.089J	mg/L	0.30	0.029	1		03/13/19 05:17	16984-48-8		
Sulfate	88.7	mg/L	10.0	0.17	10		03/18/19 16:25	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615879

QC Batch: 24123 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2615879001, 2615879002, 2615879003, 2615879004, 2615879005, 2615879006

METHOD BLANK: 108124 Matrix: Water
Associated Lab Samples: 2615879001, 2615879002, 2615879003, 2615879004, 2615879005, 2615879006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/13/19 11:53	

LABORATORY CONTROL SAMPLE: 108125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 108126 108127

Parameter	Units	2615876001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0028	0.0026	111	103	75-125	8	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615879

QC Batch: 24189 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2615879001, 2615879002, 2615879003, 2615879004, 2615879005, 2615879006

METHOD BLANK: 108347 Matrix: Water
Associated Lab Samples: 2615879001, 2615879002, 2615879003, 2615879004, 2615879005, 2615879006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/14/19 14:01	
Arsenic	mg/L	ND	0.0050	0.00057	03/14/19 14:01	
Barium	mg/L	ND	0.010	0.00078	03/14/19 14:01	
Beryllium	mg/L	ND	0.0030	0.000050	03/14/19 14:01	
Boron	mg/L	ND	0.040	0.0039	03/14/19 14:01	
Cadmium	mg/L	ND	0.0010	0.000093	03/14/19 14:01	
Calcium	mg/L	ND	0.50	0.014	03/14/19 14:01	
Chromium	mg/L	ND	0.010	0.0016	03/14/19 14:01	
Cobalt	mg/L	ND	0.010	0.00052	03/14/19 14:01	
Copper	mg/L	ND	0.025	0.0013	03/14/19 14:01	
Lead	mg/L	ND	0.0050	0.00027	03/14/19 14:01	
Nickel	mg/L	ND	0.010	0.00095	03/14/19 14:01	
Selenium	mg/L	ND	0.010	0.0014	03/14/19 14:01	
Silver	mg/L	ND	0.010	0.00095	03/14/19 14:01	
Thallium	mg/L	ND	0.0010	0.00014	03/14/19 14:01	
Vanadium	mg/L	ND	0.010	0.0019	03/14/19 14:01	
Zinc	mg/L	ND	0.010	0.0021	03/14/19 14:01	

LABORATORY CONTROL SAMPLE: 108348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Calcium	mg/L	1	0.96	96	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Copper	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Nickel	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.099	99	80-120	
Zinc	mg/L	0.1	0.10	100	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

Parameter	Units	108349		108350		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Arsenic	mg/L	0.00085J	0.1	0.1	0.10	0.10	99	100	75-125	0	20	
Barium	mg/L	0.042	0.1	0.1	0.14	0.14	97	102	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20	
Boron	mg/L	0.020J	1	1	0.97	1.0	95	100	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20	
Calcium	mg/L	33.3	1	1	34.4	36.2	111	297	75-125	5	20	M6
Chromium	mg/L	ND	0.1	0.1	0.098	0.099	98	98	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Copper	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Nickel	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Zinc	mg/L	ND	0.1	0.1	0.098	0.097	97	96	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615879

QC Batch: 24220 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2615879001, 2615879002, 2615879003, 2615879004, 2615879005, 2615879006

LABORATORY CONTROL SAMPLE: 108435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	401	100	84-108	

SAMPLE DUPLICATE: 108436

Parameter	Units	2615740001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	19000	18800	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615879

QC Batch: 24135 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2615879001, 2615879002, 2615879003, 2615879004, 2615879005, 2615879006

METHOD BLANK: 108159 Matrix: Water
Associated Lab Samples: 2615879001, 2615879002, 2615879003, 2615879004, 2615879005, 2615879006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/12/19 21:45	
Fluoride	mg/L	ND	0.30	0.029	03/12/19 21:45	
Sulfate	mg/L	ND	1.0	0.017	03/12/19 21:45	

LABORATORY CONTROL SAMPLE: 108160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.5	95	90-110	
Fluoride	mg/L	10	9.5	95	90-110	
Sulfate	mg/L	10	9.1	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 108161 108162

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2615876001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Chloride	mg/L	31.1	10	10	34.9	35.0	38	39	90-110	0	15	M1	
Fluoride	mg/L	0.88	10	10	10.0	10.1	92	92	90-110	1	15		
Sulfate	mg/L	209	10	10	192	193	-162	-159	90-110	0	15	E	

MATRIX SPIKE SAMPLE: 108163

Parameter	Units	2615876002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	0.071J	10	9.7	96	90-110	
Fluoride	mg/L	ND	10	9.6	96	90-110	
Sulfate	mg/L	ND	10	9.2	92	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615879

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615879

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2615879001	GWA-36R	EPA 3005A	24189	EPA 6020B	24210
2615879002	GWA-38	EPA 3005A	24189	EPA 6020B	24210
2615879003	GWA-52	EPA 3005A	24189	EPA 6020B	24210
2615879004	GWA-54	EPA 3005A	24189	EPA 6020B	24210
2615879005	GWA-55R	EPA 3005A	24189	EPA 6020B	24210
2615879006	GWA-56	EPA 3005A	24189	EPA 6020B	24210
2615879001	GWA-36R	EPA 7470A	24123	EPA 7470A	24183
2615879002	GWA-38	EPA 7470A	24123	EPA 7470A	24183
2615879003	GWA-52	EPA 7470A	24123	EPA 7470A	24183
2615879004	GWA-54	EPA 7470A	24123	EPA 7470A	24183
2615879005	GWA-55R	EPA 7470A	24123	EPA 7470A	24183
2615879006	GWA-56	EPA 7470A	24123	EPA 7470A	24183
2615879001	GWA-36R	SM 2540C	24220		
2615879002	GWA-38	SM 2540C	24220		
2615879003	GWA-52	SM 2540C	24220		
2615879004	GWA-54	SM 2540C	24220		
2615879005	GWA-55R	SM 2540C	24220		
2615879006	GWA-56	SM 2540C	24220		
2615879001	GWA-36R	EPA 300.0	24135		
2615879002	GWA-38	EPA 300.0	24135		
2615879003	GWA-52	EPA 300.0	24135		
2615879004	GWA-54	EPA 300.0	24135		
2615879005	GWA-55R	EPA 300.0	24135		
2615879006	GWA-56	EPA 300.0	24135		

REPORT OF LABORATORY ANALYSIS

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



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

CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

CLIENT NAME: Southern Company Services
 CLIENT ADDRESS/PHONE NUMBER/FAX NUMBER:
2480 Maner Road
Atlanta, GA 3080
 REPORT TO: Joie Abraham
 CC: Geosyntec
 REQUESTED COMPLETION DATE: PO# SC510348606
 PROJECT NAME/STATE:
Plant Bowen Cells 3+4 CER
 PROJECT #:

CONTAINER TYPE	PRESERVATION	ANALYSIS REQUESTED										REMARKS/ADDITIONAL INFORMATION				
		P	F	S	B	ED	TO	TH	SO	SO	SO					
P - PLASTIC	1 - HCl, ≤6°C															
A - AMBER GLASS	2 - H ₂ SO ₄ , ≤6°C															
G - CLEAR GLASS	3 - HNO ₃															
V - VOA VIAL	4 - NaOH, ≤6°C															
S - STERILE	5 - NaOH/ZnAc, ≤6°C															
O - OTHER	6 - Na ₂ S ₂ O ₃ , ≤6°C															
	7 - ≤6°C not frozen															
*MATRIX CODES:																
DW - DRINKING WATER	S - SOIL															
WW - WASTEWATER	SL - SLUDGE															
GW - GROUNDWATER	SD - SOLID															
SW - SURFACE WATER	A - AIR															
ST - STORM WATER	L - LIQUID															
W - WATER	P - PRODUCT															

LAB #	CONTAINER TYPE	PRESERVATION	# of CONTAINERS	C	O	M	A	B	MATRIX CODE	Collection TIME	SAMPLE IDENTIFICATION	RELINQUISHED BY:	DATE/TIME:
1	P	7	2	X					GW	1025	GWA-36R	Viewed	3/7/19 1700
2	P	7	2	X					GW	1106	GWA-38	Viewed	3/7/19 1700
3	P	7	2	X					GW	1232	GWA-52	Viewed	3/7/19 1700
4	P	7	2	X					GW	1354	GWA-54	Viewed	3/7/19 1700
5	P	7	2	X					GW	1515	GWA-55R	Viewed	3/7/19 1700
6	P	7	2	X					GW	1555	GWA-56	Viewed	3/7/19 1700

FOR LAB USE ONLY

LAB #: _____

Entered into LIMS: _____

Tracking #: _____

RELINQUISHED BY: Viewed DATE/TIME: 3/7/19 1700

RELINQUISHED BY: Viewed DATE/TIME: 3/7/19 1700

SAMPLE SHIPPED VIA: UPS COURIER 200 CLIENT FS OTHER FS

UPS EX USPS EX # of Coolers _____

Cooler ID: _____

Intact _____ Broken _____ Not Present _____

RECEIVED BY LAB: Charles Hank DATE/TIME: 3/7/19 0905

Temperature: 7.1 Min: 7.1 Max: 7.1

PH checked: Yes No NA Yes Yes No NA

Pace COC Revised





Sample Condition Upon Receipt

WO#: 2615879

Client Name: GA Power

PM: BM

Due Date: 03/18/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 082 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1-1°C

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 3/9/19 BM

Temp should be above freezing to 6°C

Comments:

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

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

March 18, 2019

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

RE: Project: Plant Bowen Cells 3+4
Pace Project No.: 2615881

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2615881001	GWA-51RZ	Water	03/08/19 09:22	03/09/19 09:05
2615881002	GWA-53	Water	03/08/19 14:18	03/09/19 09:05
2615881003	GWA-55	Water	03/08/19 10:18	03/09/19 09:05
2615881004	GWC-24R	Water	03/08/19 12:18	03/09/19 09:05
2615881005	GWC-25R	Water	03/08/19 13:41	03/09/19 09:05
2615881006	FBL030819	Water	03/08/19 14:21	03/09/19 09:05
2615881007	EQBL030819	Water	03/08/19 14:24	03/09/19 09:05

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2615881001	GWA-51RZ	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615881002	GWA-53	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615881003	GWA-55	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615881004	GWC-24R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615881005	GWC-25R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615881006	FBL030819	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2615881007	EQBL030819	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Sample: GWA-51RZ		Lab ID: 2615881001		Collected: 03/08/19 09:22		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 18:30	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 18:30	7440-38-2		
Barium	0.015	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 18:30	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 18:30	7440-41-7		
Boron	0.0085J	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 18:30	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 18:30	7440-43-9		
Calcium	46.6	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 18:35	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 18:30	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 18:30	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 18:30	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 18:30	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 18:30	7440-02-0		
Selenium	0.0052J	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 18:30	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 18:30	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 18:30	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 18:30	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 18:30	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:45	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	244	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.4	mg/L	0.25	0.024	1		03/13/19 05:40	16887-00-6		
Fluoride	0.075J	mg/L	0.30	0.029	1		03/13/19 05:40	16984-48-8		
Sulfate	23.6	mg/L	1.0	0.017	1		03/13/19 05:40	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Sample: GWA-53		Lab ID: 2615881002		Collected: 03/08/19 14:18		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 18:41	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 18:41	7440-38-2		
Barium	0.012	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 18:41	7440-39-3		
Beryllium	0.000057J	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 18:41	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 18:41	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 18:41	7440-43-9		
Calcium	25.9	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 18:47	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 18:41	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 18:41	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 18:41	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 18:41	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 18:41	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 18:41	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 18:41	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 18:41	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 18:41	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 18:41	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:47	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	143	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.7	mg/L	0.25	0.024	1		03/13/19 06:03	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 06:03	16984-48-8		
Sulfate	1.8	mg/L	1.0	0.017	1		03/13/19 06:03	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Sample: GWA-55		Lab ID: 2615881003		Collected: 03/08/19 10:18		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 18:53	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 18:53	7440-38-2		
Barium	0.027	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 18:53	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 18:53	7440-41-7		
Boron	0.0056J	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 18:53	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 18:53	7440-43-9		
Calcium	45.2	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 18:58	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 18:53	7440-47-3		
Cobalt	0.0044J	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 18:53	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 18:53	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 18:53	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 18:53	7440-02-0		
Selenium	0.0026J	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 18:53	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 18:53	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 18:53	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 18:53	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 18:53	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:49	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	248	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.4	mg/L	0.25	0.024	1		03/13/19 06:25	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 06:25	16984-48-8		
Sulfate	31.8	mg/L	1.0	0.017	1		03/13/19 06:25	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Sample: GWC-24R		Lab ID: 2615881004		Collected: 03/08/19 12:18		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 19:04	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 19:04	7440-38-2		
Barium	0.020	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 19:04	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 19:04	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 19:04	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 19:04	7440-43-9		
Calcium	28.8	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 19:10	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 19:04	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 19:04	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 19:04	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 19:04	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 19:04	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 19:04	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 19:04	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 19:04	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 19:04	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 19:04	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:52	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	164	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.6	mg/L	0.25	0.024	1		03/13/19 06:48	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 06:48	16984-48-8		
Sulfate	1.9	mg/L	1.0	0.017	1		03/13/19 06:48	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Sample: GWC-25R		Lab ID: 2615881005		Collected: 03/08/19 13:41		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 19:16	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 19:16	7440-38-2		
Barium	0.017	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 19:16	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 19:16	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 19:16	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 19:16	7440-43-9		
Calcium	33.1	mg/L	25.0	0.69	50	03/13/19 10:50	03/14/19 19:21	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 19:16	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 19:16	7440-48-4		
Copper	0.0018J	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 19:16	7440-50-8		
Lead	0.00035J	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 19:16	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 19:16	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 19:16	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 19:16	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 19:16	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 19:16	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 19:16	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:54	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	155	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.8	mg/L	0.25	0.024	1		03/13/19 07:11	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 07:11	16984-48-8		
Sulfate	1.6	mg/L	1.0	0.017	1		03/13/19 07:11	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615881

Sample: FBL030819		Lab ID: 2615881006		Collected: 03/08/19 14:21	Received: 03/09/19 09:05	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 19:44	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 19:44	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 19:44	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 19:44	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 19:44	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 19:44	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/13/19 10:50	03/14/19 19:44	7440-70-2		
Chromium	0.0026J	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 19:44	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 19:44	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 19:44	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 19:44	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 19:44	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 19:44	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 19:44	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 19:44	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 19:44	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 19:44	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:57	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	21.0J	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.067J	mg/L	0.25	0.024	1		03/13/19 09:04	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 09:04	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/13/19 09:04	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Sample: EQBL030819		Lab ID: 2615881007		Collected: 03/08/19 14:24		Received: 03/09/19 09:05		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/13/19 10:50	03/14/19 19:50	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/13/19 10:50	03/14/19 19:50	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/13/19 10:50	03/14/19 19:50	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/13/19 10:50	03/14/19 19:50	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/13/19 10:50	03/14/19 19:50	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/13/19 10:50	03/14/19 19:50	7440-43-9		
Calcium	0.015J	mg/L	0.50	0.014	1	03/13/19 10:50	03/14/19 19:50	7440-70-2		
Chromium	0.025	mg/L	0.010	0.0016	1	03/13/19 10:50	03/14/19 19:50	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/13/19 10:50	03/14/19 19:50	7440-48-4		
Copper	0.0013J	mg/L	0.025	0.0013	1	03/13/19 10:50	03/14/19 19:50	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/13/19 10:50	03/14/19 19:50	7439-92-1		
Nickel	0.0038J	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 19:50	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/13/19 10:50	03/14/19 19:50	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/13/19 10:50	03/14/19 19:50	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/13/19 10:50	03/14/19 19:50	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/13/19 10:50	03/14/19 19:50	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/13/19 10:50	03/14/19 19:50	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/13/19 08:25	03/13/19 12:59	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	12.0J	mg/L	25.0	10.0	1		03/13/19 19:24			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	ND	mg/L	0.25	0.024	1		03/13/19 09:26	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/13/19 09:26	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/13/19 09:26	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

QC Batch: 24123 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2615881001, 2615881002, 2615881003, 2615881004, 2615881005, 2615881006, 2615881007

METHOD BLANK: 108124 Matrix: Water
 Associated Lab Samples: 2615881001, 2615881002, 2615881003, 2615881004, 2615881005, 2615881006, 2615881007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/13/19 11:53	

LABORATORY CONTROL SAMPLE: 108125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 108126 108127

Parameter	Units	2615876001 Result	MS		MSD		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
			Spike Conc.	Conc.	Spike Conc.	Conc.							
Mercury	mg/L	ND	0.0025	0.0025	0.0028	0.0026	111	103	75-125	8	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

QC Batch: 24189 Analysis Method: EPA 6020B
 QC Batch Method: EPA 3005A Analysis Description: 6020B MET
 Associated Lab Samples: 2615881001, 2615881002, 2615881003, 2615881004, 2615881005, 2615881006, 2615881007

METHOD BLANK: 108347 Matrix: Water
 Associated Lab Samples: 2615881001, 2615881002, 2615881003, 2615881004, 2615881005, 2615881006, 2615881007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/14/19 14:01	
Arsenic	mg/L	ND	0.0050	0.00057	03/14/19 14:01	
Barium	mg/L	ND	0.010	0.00078	03/14/19 14:01	
Beryllium	mg/L	ND	0.0030	0.000050	03/14/19 14:01	
Boron	mg/L	ND	0.040	0.0039	03/14/19 14:01	
Cadmium	mg/L	ND	0.0010	0.000093	03/14/19 14:01	
Calcium	mg/L	ND	0.50	0.014	03/14/19 14:01	
Chromium	mg/L	ND	0.010	0.0016	03/14/19 14:01	
Cobalt	mg/L	ND	0.010	0.00052	03/14/19 14:01	
Copper	mg/L	ND	0.025	0.0013	03/14/19 14:01	
Lead	mg/L	ND	0.0050	0.00027	03/14/19 14:01	
Nickel	mg/L	ND	0.010	0.00095	03/14/19 14:01	
Selenium	mg/L	ND	0.010	0.0014	03/14/19 14:01	
Silver	mg/L	ND	0.010	0.00095	03/14/19 14:01	
Thallium	mg/L	ND	0.0010	0.00014	03/14/19 14:01	
Vanadium	mg/L	ND	0.010	0.0019	03/14/19 14:01	
Zinc	mg/L	ND	0.010	0.0021	03/14/19 14:01	

LABORATORY CONTROL SAMPLE: 108348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Calcium	mg/L	1	0.96	96	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Copper	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.095	95	80-120	
Nickel	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.099	99	80-120	
Zinc	mg/L	0.1	0.10	100	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Parameter	Units	108349		108350		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		2615879006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Arsenic	mg/L	0.00085J	0.1	0.1	0.10	0.10	99	100	75-125	0	20	
Barium	mg/L	0.042	0.1	0.1	0.14	0.14	97	102	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20	
Boron	mg/L	0.020J	1	1	0.97	1.0	95	100	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20	
Calcium	mg/L	33.3	1	1	34.4	36.2	111	297	75-125	5	20	M6
Chromium	mg/L	ND	0.1	0.1	0.098	0.099	98	98	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Copper	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Nickel	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Zinc	mg/L	ND	0.1	0.1	0.098	0.097	97	96	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615881

QC Batch: 24220 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2615881001, 2615881002, 2615881003, 2615881004, 2615881005, 2615881006, 2615881007

LABORATORY CONTROL SAMPLE: 108435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	401	100	84-108	

SAMPLE DUPLICATE: 108436

Parameter	Units	2615740001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	19000	18800	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 3+4
Pace Project No.: 2615881

QC Batch: 24135 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2615881001, 2615881002, 2615881003, 2615881004, 2615881005, 2615881006, 2615881007

METHOD BLANK: 108159 Matrix: Water
Associated Lab Samples: 2615881001, 2615881002, 2615881003, 2615881004, 2615881005, 2615881006, 2615881007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/12/19 21:45	
Fluoride	mg/L	ND	0.30	0.029	03/12/19 21:45	
Sulfate	mg/L	ND	1.0	0.017	03/12/19 21:45	

LABORATORY CONTROL SAMPLE: 108160

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.5	95	90-110	
Fluoride	mg/L	10	9.5	95	90-110	
Sulfate	mg/L	10	9.1	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 108161 108162

Parameter	Units	2615876001		2615876002		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	31.1	10	10	34.9	35.0	38	39	90-110	0	15	M1	
Fluoride	mg/L	0.88	10	10	10.0	10.1	92	92	90-110	1	15		
Sulfate	mg/L	209	10	10	192	193	-162	-159	90-110	0	15	E	

MATRIX SPIKE SAMPLE: 108163

Parameter	Units	2615876002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	0.071J	10	9.7	96	90-110	
Fluoride	mg/L	ND	10	9.6	96	90-110	
Sulfate	mg/L	ND	10	9.2	92	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells 3+4

Pace Project No.: 2615881

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2615881001	GWA-51RZ	EPA 3005A	24189	EPA 6020B	24210
2615881002	GWA-53	EPA 3005A	24189	EPA 6020B	24210
2615881003	GWA-55	EPA 3005A	24189	EPA 6020B	24210
2615881004	GWC-24R	EPA 3005A	24189	EPA 6020B	24210
2615881005	GWC-25R	EPA 3005A	24189	EPA 6020B	24210
2615881006	FBL030819	EPA 3005A	24189	EPA 6020B	24210
2615881007	EQBL030819	EPA 3005A	24189	EPA 6020B	24210
2615881001	GWA-51RZ	EPA 7470A	24123	EPA 7470A	24183
2615881002	GWA-53	EPA 7470A	24123	EPA 7470A	24183
2615881003	GWA-55	EPA 7470A	24123	EPA 7470A	24183
2615881004	GWC-24R	EPA 7470A	24123	EPA 7470A	24183
2615881005	GWC-25R	EPA 7470A	24123	EPA 7470A	24183
2615881006	FBL030819	EPA 7470A	24123	EPA 7470A	24183
2615881007	EQBL030819	EPA 7470A	24123	EPA 7470A	24183
2615881001	GWA-51RZ	SM 2540C	24220		
2615881002	GWA-53	SM 2540C	24220		
2615881003	GWA-55	SM 2540C	24220		
2615881004	GWC-24R	SM 2540C	24220		
2615881005	GWC-25R	SM 2540C	24220		
2615881006	FBL030819	SM 2540C	24220		
2615881007	EQBL030819	SM 2540C	24220		
2615881001	GWA-51RZ	EPA 300.0	24135		
2615881002	GWA-53	EPA 300.0	24135		
2615881003	GWA-55	EPA 300.0	24135		
2615881004	GWC-24R	EPA 300.0	24135		
2615881005	GWC-25R	EPA 300.0	24135		
2615881006	FBL030819	EPA 300.0	24135		
2615881007	EQBL030819	EPA 300.0	24135		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Joy Abraham	Attention:	scsinvoices@southernco.com
Address:	2480 Maner Road Atlanta, GA 30339	Copy To:	Wood Environmental	Company Name:	
Email:	jabraham@southernco.com	Purchase Order #:	SCS10348606	Address:	
Phone:	(404)506-7239	Project Name:	Plant Bowen Cells - State List Cells 3&4	Pace Quote:	
Requested Due Date:		Project #:		Pace Project Manager:	betsy.mcdaniel@papelabs.com
				Pace Profile #:	317.5
				Regulatory Agency	
				State / Location	
				GA	

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (S=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	PRESERVATIVES			REQUESTED ANALYSIS FILTERED (Y/N)					TEMP IN C	Received on	Custody	Sealed	Cooler	Samples Intact	
			START	END			DATE	TIME		DATE	TIME	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol							Other
1	GWA-51 RZ	DW	3/8/19	0922	WTG	WTG	3/8/19	1418	2								X	X	X					1
2	GWA-53	WT	3/8/19	1418	WTG	WTG	3/8/19	1018	2								X	X	X					2
3	GWA-55	WW	3/8/19	1018	WTG	WTG	3/8/19	1218	2								X	X	X					3
4	BWC-24R	P	3/8/19	1341	WTG	WTG	3/8/19	1341	2								X	X	X					4
5	GWC-25R	SL	3/8/19	1421	WTG	WTG	3/8/19	1421	2								X	X	X					5
6	FBL 030819	CL	3/8/19	1424	WTG	WTG	3/8/19	1424	2								X	X	X					6
7	EGBL 030819	WP	3/8/19	1424	WTG	WTG	3/8/19	1424	2								X	X	X					7

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
		Kevin Stephenson	Wood Environmental	3/8/19		1418	Charles Furber

WO#: 2615881

2615881

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Kevin Stephenson & Veronica Fay
SIGNATURE of SAMPLER:	<i>Kevin Stephenson & Veronica Fay</i>
DATE Signed:	



Sample Condition Upon Receipt

WO#: 2615881

Client Name: GA Power

PM: BM

Due Date: 03/18/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 082 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1-7°C
Temp should be above freezing to 6°C

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 3/9/19

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

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

March 20, 2019

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

RE: Project: Plant Bowen Cells
Pace Project No.: 2615967

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 12, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells

Pace Project No.: 2615967

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells

Pace Project No.: 2615967

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2615967001	GWC-16R	Water	03/11/19 11:48	03/12/19 17:10
2615967002	GWC-22R	Water	03/11/19 11:13	03/12/19 17:10
2615967003	GWC-21R	Water	03/11/19 15:10	03/12/19 17:10
2615967004	Dup-2	Water	03/11/19 00:00	03/12/19 17:10

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells

Pace Project No.: 2615967

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2615967001	GWC-16R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2615967002	GWC-22R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2615967003	GWC-21R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2615967004	Dup-2	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2615967

Sample: GWC-16R		Lab ID: 2615967001		Collected: 03/11/19 11:48		Received: 03/12/19 17:10		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.020	mg/L	0.0030	0.00078	1	03/14/19 14:26	03/15/19 18:49	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/14/19 14:26	03/15/19 18:49	7440-38-2		
Barium	0.044	mg/L	0.010	0.00078	1	03/14/19 14:26	03/15/19 18:49	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/14/19 14:26	03/15/19 18:49	7440-41-7		
Boron	0.013J	mg/L	0.040	0.0039	1	03/14/19 14:26	03/15/19 18:49	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/14/19 14:26	03/15/19 18:49	7440-43-9		
Calcium	63.8	mg/L	25.0	0.69	50	03/14/19 14:26	03/15/19 18:55	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/14/19 14:26	03/15/19 18:49	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/14/19 14:26	03/15/19 18:49	7440-48-4		
Copper	0.0018J	mg/L	0.025	0.0013	1	03/14/19 14:26	03/15/19 18:49	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/14/19 14:26	03/15/19 18:49	7439-92-1		
Nickel	0.0079J	mg/L	0.010	0.00095	1	03/14/19 14:26	03/15/19 18:49	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/14/19 14:26	03/15/19 18:49	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/14/19 14:26	03/15/19 18:49	7440-22-4		
Thallium	0.00026J	mg/L	0.0010	0.00014	1	03/14/19 14:26	03/15/19 18:49	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/14/19 14:26	03/15/19 18:49	7440-62-2		
Zinc	0.024	mg/L	0.010	0.0021	1	03/14/19 14:26	03/15/19 18:49	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/15/19 12:10	03/15/19 17:16	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	344	mg/L	25.0	10.0	1		03/18/19 16:56			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.4	mg/L	0.25	0.024	1		03/15/19 21:25	16887-00-6		
Fluoride	0.23J	mg/L	0.30	0.029	1		03/15/19 21:25	16984-48-8		
Sulfate	11.0	mg/L	1.0	0.017	1		03/15/19 21:25	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2615967

Sample: GWC-22R		Lab ID: 2615967002		Collected: 03/11/19 11:13		Received: 03/12/19 17:10		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/14/19 14:26	03/15/19 19:01	7440-36-0	
Arsenic	0.00099J	mg/L	0.0050	0.00057	1	03/14/19 14:26	03/15/19 19:01	7440-38-2	
Barium	0.048	mg/L	0.010	0.00078	1	03/14/19 14:26	03/15/19 19:01	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/14/19 14:26	03/15/19 19:01	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/14/19 14:26	03/15/19 19:01	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/14/19 14:26	03/15/19 19:01	7440-43-9	
Calcium	33.9	mg/L	25.0	0.69	50	03/14/19 14:26	03/15/19 19:06	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/14/19 14:26	03/15/19 19:01	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/14/19 14:26	03/15/19 19:01	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/14/19 14:26	03/15/19 19:01	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/14/19 14:26	03/15/19 19:01	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/14/19 14:26	03/15/19 19:01	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/14/19 14:26	03/15/19 19:01	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/14/19 14:26	03/15/19 19:01	7440-22-4	
Thallium	0.00015J	mg/L	0.0010	0.00014	1	03/14/19 14:26	03/15/19 19:01	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/14/19 14:26	03/15/19 19:01	7440-62-2	
Zinc	0.0021J	mg/L	0.010	0.0021	1	03/14/19 14:26	03/15/19 19:01	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/15/19 12:10	03/15/19 17:38	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	166	mg/L	25.0	10.0	1		03/13/19 19:24		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	3.2	mg/L	0.25	0.024	1		03/18/19 17:56	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		03/18/19 17:56	16984-48-8	
Sulfate	2.0	mg/L	1.0	0.017	1		03/18/19 17:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2615967

Sample: GWC-21R		Lab ID: 2615967003		Collected: 03/11/19 15:10		Received: 03/12/19 17:10		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0029J	mg/L	0.0030	0.00078	1	03/14/19 14:26	03/15/19 19:12	7440-36-0		
Arsenic	0.0038J	mg/L	0.0050	0.00057	1	03/14/19 14:26	03/15/19 19:12	7440-38-2		
Barium	0.015	mg/L	0.010	0.00078	1	03/14/19 14:26	03/15/19 19:12	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/14/19 14:26	03/15/19 19:12	7440-41-7		
Boron	0.0050J	mg/L	0.040	0.0039	1	03/14/19 14:26	03/15/19 19:12	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/14/19 14:26	03/15/19 19:12	7440-43-9		
Calcium	67.1	mg/L	25.0	0.69	50	03/14/19 14:26	03/15/19 19:18	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/14/19 14:26	03/15/19 19:12	7440-47-3		
Cobalt	0.00056J	mg/L	0.010	0.00052	1	03/14/19 14:26	03/15/19 19:12	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/14/19 14:26	03/15/19 19:12	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/14/19 14:26	03/15/19 19:12	7439-92-1		
Nickel	0.0012J	mg/L	0.010	0.00095	1	03/14/19 14:26	03/15/19 19:12	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/14/19 14:26	03/15/19 19:12	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/14/19 14:26	03/15/19 19:12	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/14/19 14:26	03/15/19 19:12	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/14/19 14:26	03/15/19 19:12	7440-62-2		
Zinc	0.0034J	mg/L	0.010	0.0021	1	03/14/19 14:26	03/15/19 19:12	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/15/19 12:10	03/15/19 17:40	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	311	mg/L	25.0	10.0	1		03/18/19 16:59			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	4.2	mg/L	0.25	0.024	1		03/15/19 22:10	16887-00-6		
Fluoride	0.51	mg/L	0.30	0.029	1		03/15/19 22:10	16984-48-8		
Sulfate	3.4	mg/L	1.0	0.017	1		03/15/19 22:10	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells
Pace Project No.: 2615967

Sample: Dup-2		Lab ID: 2615967004		Collected: 03/11/19 00:00		Received: 03/12/19 17:10		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/14/19 14:26	03/15/19 19:24	7440-36-0	
Arsenic	0.00075J	mg/L	0.0050	0.00057	1	03/14/19 14:26	03/15/19 19:24	7440-38-2	
Barium	0.048	mg/L	0.010	0.00078	1	03/14/19 14:26	03/15/19 19:24	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/14/19 14:26	03/15/19 19:24	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/14/19 14:26	03/15/19 19:24	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/14/19 14:26	03/15/19 19:24	7440-43-9	
Calcium	33.9	mg/L	25.0	0.69	50	03/14/19 14:26	03/15/19 19:29	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/14/19 14:26	03/15/19 19:24	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/14/19 14:26	03/15/19 19:24	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/14/19 14:26	03/15/19 19:24	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/14/19 14:26	03/15/19 19:24	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/14/19 14:26	03/15/19 19:24	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/14/19 14:26	03/15/19 19:24	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/14/19 14:26	03/15/19 19:24	7440-22-4	
Thallium	0.00015J	mg/L	0.0010	0.00014	1	03/14/19 14:26	03/15/19 19:24	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/14/19 14:26	03/15/19 19:24	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/14/19 14:26	03/15/19 19:24	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/15/19 12:10	03/15/19 17:43	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	165	mg/L	25.0	10.0	1		03/18/19 16:59		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	3.2	mg/L	0.25	0.024	1		03/15/19 22:33	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		03/15/19 22:33	16984-48-8	
Sulfate	1.9	mg/L	1.0	0.017	1		03/15/19 22:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2615967

QC Batch: 24380 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2615967001, 2615967002, 2615967003, 2615967004

METHOD BLANK: 109357 Matrix: Water
 Associated Lab Samples: 2615967001, 2615967002, 2615967003, 2615967004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/15/19 17:12	

LABORATORY CONTROL SAMPLE: 109358

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 109378 109379

Parameter	Units	2615967001		2615967002		2615967003		2615967004		% Rec Limits	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.			
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0026	100	102	75-125	3	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells
Pace Project No.: 2615967

QC Batch: 24312 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2615967001, 2615967002, 2615967003, 2615967004

METHOD BLANK: 108896 Matrix: Water
Associated Lab Samples: 2615967001, 2615967002, 2615967003, 2615967004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/15/19 18:30	
Arsenic	mg/L	ND	0.0050	0.00057	03/15/19 18:30	
Barium	mg/L	ND	0.010	0.00078	03/15/19 18:30	
Beryllium	mg/L	ND	0.0030	0.000050	03/15/19 18:30	
Boron	mg/L	ND	0.040	0.0039	03/15/19 18:30	
Cadmium	mg/L	ND	0.0010	0.000093	03/15/19 18:30	
Calcium	mg/L	ND	0.50	0.014	03/15/19 18:30	
Chromium	mg/L	ND	0.010	0.0016	03/15/19 18:30	
Cobalt	mg/L	ND	0.010	0.00052	03/15/19 18:30	
Copper	mg/L	ND	0.025	0.0013	03/15/19 18:30	
Lead	mg/L	ND	0.0050	0.00027	03/15/19 18:30	
Nickel	mg/L	ND	0.010	0.00095	03/15/19 18:30	
Selenium	mg/L	ND	0.010	0.0014	03/15/19 18:30	
Silver	mg/L	ND	0.010	0.00095	03/15/19 18:30	
Thallium	mg/L	ND	0.0010	0.00014	03/15/19 18:30	
Vanadium	mg/L	ND	0.010	0.0019	03/15/19 18:30	
Zinc	mg/L	ND	0.010	0.0021	03/15/19 18:30	

LABORATORY CONTROL SAMPLE: 108897

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	110	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	104	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Calcium	mg/L	1	1.0	103	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Nickel	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Silver	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	
Vanadium	mg/L	0.1	0.10	105	80-120	
Zinc	mg/L	0.1	0.10	104	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2615967

Parameter	Units	2616034004		108898		108899		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	112	109	75-125	2	20			
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20			
Barium	mg/L	0.029	0.1	0.1	0.13	0.13	106	102	75-125	3	20			
Beryllium	mg/L	0.0024J	0.1	0.1	0.098	0.098	95	95	75-125	0	20			
Boron	mg/L	1.5	1	1	2.5	2.5	100	103	75-125	1	20			
Cadmium	mg/L	0.0024	0.1	0.1	0.10	0.11	102	103	75-125	1	20			
Calcium	mg/L	54.3	1	1	54.7	56.0	38	170	75-125	2	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20			
Cobalt	mg/L	0.062	0.1	0.1	0.16	0.16	99	95	75-125	2	20			
Copper	mg/L	ND	0.1	0.1	0.097	0.098	96	97	75-125	1	20			
Lead	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20			
Nickel	mg/L	0.021	0.1	0.1	0.12	0.12	95	96	75-125	1	20			
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	104	102	75-125	2	20			
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20			
Thallium	mg/L	0.00025J	0.1	0.1	0.098	0.098	98	98	75-125	0	20			
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20			
Zinc	mg/L	0.041	0.1	0.1	0.14	0.14	100	100	75-125	1	20			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2615967

QC Batch: 24220	Analysis Method: SM 2540C
QC Batch Method: SM 2540C	Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2615967002	

LABORATORY CONTROL SAMPLE: 108435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	401	100	84-108	

SAMPLE DUPLICATE: 108436

Parameter	Units	2615740001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	19000	18800	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells
Pace Project No.: 2615967

QC Batch: 24393 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2615967001, 2615967002, 2615967003, 2615967004

METHOD BLANK: 109447 Matrix: Water
Associated Lab Samples: 2615967001, 2615967002, 2615967003, 2615967004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/15/19 15:00	
Fluoride	mg/L	ND	0.30	0.029	03/15/19 15:00	
Sulfate	mg/L	ND	1.0	0.017	03/15/19 15:00	

LABORATORY CONTROL SAMPLE: 109448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.7	97	90-110	
Fluoride	mg/L	10	9.8	98	90-110	
Sulfate	mg/L	10	9.1	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 109449 109450

Parameter	Units	2615793001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	108	10	10	79.3	79.2	-292	-293	90-110	0	15	E,M1
Fluoride	mg/L	1.1	10	10	9.3	9.2	82	81	90-110	0	15	M1
Sulfate	mg/L	62.2	10	10	65.1	65.0	30	29	90-110	0	15	E,M1

MATRIX SPIKE SAMPLE: 109451

Parameter	Units	2615795001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	77.4	20	81.9	22	90-110	M1
Fluoride	mg/L	1.4	20	24.8	117	90-110	M1
Sulfate	mg/L	1500	20	1370	-636	90-110	E,M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells

Pace Project No.: 2615967

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells

Pace Project No.: 2615967

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2615967001	GWC-16R	EPA 3005A	24312	EPA 6020B	24340
2615967002	GWC-22R	EPA 3005A	24312	EPA 6020B	24340
2615967003	GWC-21R	EPA 3005A	24312	EPA 6020B	24340
2615967004	Dup-2	EPA 3005A	24312	EPA 6020B	24340
2615967001	GWC-16R	EPA 7470A	24380	EPA 7470A	24416
2615967002	GWC-22R	EPA 7470A	24380	EPA 7470A	24416
2615967003	GWC-21R	EPA 7470A	24380	EPA 7470A	24416
2615967004	Dup-2	EPA 7470A	24380	EPA 7470A	24416
2615967001	GWC-16R	SM 2540C	24469		
2615967002	GWC-22R	SM 2540C	24220		
2615967003	GWC-21R	SM 2540C	24469		
2615967004	Dup-2	SM 2540C	24469		
2615967001	GWC-16R	EPA 300.0	24393		
2615967002	GWC-22R	EPA 300.0	24393		
2615967003	GWC-21R	EPA 300.0	24393		
2615967004	Dup-2	EPA 300.0	24393		

REPORT OF LABORATORY ANALYSIS

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



Sample Condition Upon Receipt

WO#: 2615967

Client Name: GA Power

PM: BM

Due Date: 03/20/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 082 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 10.2°C Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Proj. Due Date:
Proj. Name:

Date and Initials of person examining contents: 3/12/19 GJH

Comments:

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

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

March 27, 2019

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

RE: Project: Plant Bowen cells 3+4
Pace Project No.: 2616191

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 15, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616191001	GWC-17R	Water	03/12/19 15:26	03/15/19 15:40
2616191002	GWC-18	Water	03/12/19 12:51	03/15/19 15:40
2616191003	GWC-18R	Water	03/12/19 11:53	03/15/19 15:40
2616191004	GWC-19R	Water	03/12/19 12:30	03/15/19 15:40
2616191005	GWC-20R	Water	03/12/19 10:41	03/15/19 15:40
2616191006	GWC-23R	Water	03/12/19 11:20	03/15/19 15:40
2616191007	GWA-53R	Water	03/12/19 10:08	03/15/19 15:40
2616191008	FBL031219-1	Water	03/12/19 13:43	03/15/19 15:40
2616191009	EQBL031219-1	Water	03/12/19 13:46	03/15/19 15:40
2616191010	FBL031219-2	Water	03/12/19 13:53	03/15/19 15:40
2616191011	EQBL031219-2	Water	03/12/19 14:11	03/15/19 15:40
2616191012	Dup-3	Water	03/12/19 00:00	03/15/19 15:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616191001	GWC-17R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191002	GWC-18	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191003	GWC-18R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191004	GWC-19R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191005	GWC-20R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191006	GWC-23R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191007	GWA-53R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191008	FBL031219-1	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191009	EQBL031219-1	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616191010	FBL031219-2	EPA 6020B	CSW	17

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616191011	EQBL031219-2	EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
		EPA 6020B	CSW	17
		EPA 7470A	DRB	1
2616191012	Dup-3	SM 2540C	RLC	1
		EPA 300.0	RLC	3
		EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: GWC-17R		Lab ID: 2616191001		Collected: 03/12/19 15:26		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 17:09	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 17:09	7440-38-2		
Barium	0.021	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 17:09	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 17:09	7440-41-7		
Boron	0.0099J	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 17:09	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 17:09	7440-43-9		
Calcium	65.3	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 17:15	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 17:09	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 17:09	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 17:09	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 17:09	7439-92-1		
Nickel	0.0010J	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 17:09	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 17:09	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 17:09	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 17:09	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 17:09	7440-62-2		
Zinc	0.0038J	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 17:09	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:52	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	306	mg/L	25.0	10.0	1		03/23/19 19:12		H5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	6.9	mg/L	0.25	0.024	1		03/22/19 04:00	16887-00-6		
Fluoride	0.056J	mg/L	0.30	0.029	1		03/22/19 04:00	16984-48-8		
Sulfate	25.9	mg/L	1.0	0.017	1		03/22/19 04:00	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2616191

Sample: GWC-18 Lab ID: 2616191002 Collected: 03/12/19 12:51 Received: 03/15/19 15:40 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 17:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 17:21	7440-38-2	
Barium	0.014	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 17:21	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 17:21	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 17:21	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 17:21	7440-43-9	
Calcium	23.2J	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 17:27	7440-70-2	D3
Chromium	0.0020J	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 17:21	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 17:21	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 17:21	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 17:21	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 17:21	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 17:21	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 17:21	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 17:21	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 17:21	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 17:21	7440-66-6	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:54	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	135	mg/L	25.0	10.0	1		03/23/19 19:12		H5
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	2.8	mg/L	0.25	0.024	1		03/22/19 04:23	16887-00-6	
Fluoride	0.050J	mg/L	0.30	0.029	1		03/22/19 04:23	16984-48-8	
Sulfate	2.3	mg/L	1.0	0.017	1		03/22/19 04:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: GWC-18R		Lab ID: 2616191003		Collected: 03/12/19 11:53		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.00091J	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 17:32	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 17:32	7440-38-2		
Barium	0.014	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 17:32	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 17:32	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 17:32	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 17:32	7440-43-9		
Calcium	28.6	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 17:38	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 17:32	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 17:32	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 17:32	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 17:32	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 17:32	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 17:32	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 17:32	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 17:32	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 17:32	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 17:32	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:56	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	143	mg/L	25.0	10.0	1		03/19/19 17:54		1A, L1	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.3	mg/L	0.25	0.024	1		03/22/19 04:46	16887-00-6		
Fluoride	0.042J	mg/L	0.30	0.029	1		03/22/19 04:46	16984-48-8		
Sulfate	2.6	mg/L	1.0	0.017	1		03/22/19 04:46	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: GWC-19R **Lab ID: 2616191004** Collected: 03/12/19 12:30 Received: 03/15/19 15:40 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 17:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 17:44	7440-38-2	
Barium	0.016	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 17:44	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 17:44	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 17:44	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 17:44	7440-43-9	
Calcium	31.1	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 17:50	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 17:44	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 17:44	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 17:44	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 17:44	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 17:44	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 17:44	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 17:44	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 17:44	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 17:44	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 17:44	7440-66-6	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:59	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	156	mg/L	25.0	10.0	1		03/23/19 19:13		H5
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	2.8	mg/L	0.25	0.024	1		03/22/19 05:08	16887-00-6	
Fluoride	0.040J	mg/L	0.30	0.029	1		03/22/19 05:08	16984-48-8	
Sulfate	4.3	mg/L	1.0	0.017	1		03/22/19 05:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2616191

Sample: GWC-20R		Lab ID: 2616191005		Collected: 03/12/19 10:41		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 19:20	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 19:20	7440-38-2		
Barium	0.030	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 19:20	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 19:20	7440-41-7		
Boron	0.0045J	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 19:20	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 19:20	7440-43-9		
Calcium	35.2	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 19:26	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 19:20	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 19:20	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 19:20	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 19:20	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 19:20	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 19:20	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 19:20	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 19:20	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 19:20	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 19:20	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 14:01	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	191	mg/L	25.0	10.0	1		03/19/19 17:55		1A, L1	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.7	mg/L	0.25	0.024	1		03/22/19 21:28	16887-00-6		
Fluoride	0.048J	mg/L	0.30	0.029	1		03/22/19 21:28	16984-48-8		
Sulfate	1.5	mg/L	1.0	0.017	1		03/22/19 21:28	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: GWC-23R		Lab ID: 2616191006		Collected: 03/12/19 11:20		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 19:32	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 19:32	7440-38-2		
Barium	0.022	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 19:32	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 19:32	7440-41-7		
Boron	0.0047J	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 19:32	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 19:32	7440-43-9		
Calcium	61.6	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 19:37	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 19:32	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 19:32	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 19:32	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 19:32	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 19:32	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 19:32	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 19:32	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 19:32	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 19:32	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 19:32	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 14:03	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	310	mg/L	25.0	10.0	1		03/19/19 17:55		1A, L1	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.4	mg/L	0.25	0.024	1		03/22/19 21:51	16887-00-6		
Fluoride	0.060J	mg/L	0.30	0.029	1		03/22/19 21:51	16984-48-8		
Sulfate	17.7	mg/L	1.0	0.017	1		03/22/19 21:51	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: GWA-53R		Lab ID: 2616191007		Collected: 03/12/19 10:08		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0020J	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 19:43	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 19:43	7440-38-2		
Barium	0.016	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 19:43	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 19:43	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 19:43	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 19:43	7440-43-9		
Calcium	28.0	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 19:49	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 19:43	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 19:43	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 19:43	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 19:43	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 19:43	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 19:43	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 19:43	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 19:43	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 19:43	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 19:43	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 14:06	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	150	mg/L	25.0	10.0	1		03/19/19 17:55		1A, L1	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.3	mg/L	0.25	0.024	1		03/22/19 22:37	16887-00-6		
Fluoride	0.046J	mg/L	0.30	0.029	1		03/22/19 22:37	16984-48-8		
Sulfate	2.2	mg/L	1.0	0.017	1		03/22/19 22:37	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2616191

Sample: FBL031219-1		Lab ID: 2616191008		Collected: 03/12/19 13:43		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 19:55	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 19:55	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 19:55	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 19:55	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 19:55	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 19:55	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/20/19 14:34	03/21/19 19:55	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 19:55	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 19:55	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 19:55	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 19:55	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 19:55	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 19:55	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 19:55	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 19:55	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 19:55	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 19:55	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 14:08	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	41.0	mg/L	25.0	10.0	1		03/23/19 19:13		H5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.31	mg/L	0.25	0.024	1		03/22/19 23:00	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 23:00	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/22/19 23:00	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: EQBL031219-1		Lab ID: 2616191009		Collected: 03/12/19 13:46		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 20:00	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 20:00	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 20:00	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 20:00	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 20:00	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 20:00	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/20/19 14:34	03/21/19 20:00	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 20:00	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 20:00	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 20:00	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 20:00	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:00	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 20:00	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:00	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 20:00	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 20:00	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 20:00	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 14:11	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	29.0	mg/L	25.0	10.0	1		03/23/19 19:13		H5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.32	mg/L	0.25	0.024	1		03/22/19 23:22	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 23:22	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/22/19 23:22	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: FBL031219-2		Lab ID: 2616191010		Collected: 03/12/19 13:53		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 20:18	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 20:18	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 20:18	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 20:18	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 20:18	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 20:18	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/20/19 14:34	03/21/19 20:18	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 20:18	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 20:18	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 20:18	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 20:18	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:18	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 20:18	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:18	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 20:18	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 20:18	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 20:18	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 14:13	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	25.0	mg/L	25.0	10.0	1		03/23/19 19:14		H5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.32	mg/L	0.25	0.024	1		03/22/19 23:45	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 23:45	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/22/19 23:45	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: EQBL031219-2		Lab ID: 2616191011		Collected: 03/12/19 14:11		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 20:23	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 20:23	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 20:23	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 20:23	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 20:23	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 20:23	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/20/19 14:34	03/21/19 20:23	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 20:23	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 20:23	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 20:23	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 20:23	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:23	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 20:23	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:23	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 20:23	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 20:23	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 20:23	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 14:41	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	29.0	mg/L	25.0	10.0	1		03/23/19 19:14		H5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.32	mg/L	0.25	0.024	1		03/23/19 00:08	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/23/19 00:08	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/23/19 00:08	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Sample: Dup-3		Lab ID: 2616191012		Collected: 03/12/19 00:00		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 20:29	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 20:29	7440-38-2		
Barium	0.015	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 20:29	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 20:29	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 20:29	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 20:29	7440-43-9		
Calcium	29.3	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 20:35	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 20:29	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 20:29	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 20:29	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 20:29	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:29	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 20:29	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:29	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 20:29	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 20:29	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 20:29	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 14:44	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	164	mg/L	25.0	10.0	1		03/23/19 19:14		H5	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.3	mg/L	0.25	0.024	1		03/23/19 00:31	16887-00-6		
Fluoride	0.045J	mg/L	0.30	0.029	1		03/23/19 00:31	16984-48-8		
Sulfate	4.4	mg/L	1.0	0.017	1		03/23/19 00:31	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

QC Batch: 24639 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2616191001, 2616191002, 2616191003, 2616191004, 2616191005, 2616191006, 2616191007, 2616191008, 2616191009, 2616191010

METHOD BLANK: 110677 Matrix: Water
 Associated Lab Samples: 2616191001, 2616191002, 2616191003, 2616191004, 2616191005, 2616191006, 2616191007, 2616191008, 2616191009, 2616191010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/20/19 13:07	

LABORATORY CONTROL SAMPLE: 110678

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 110679 110680

Parameter	Units	2616179001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0025	99	99	75-125	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2616191

QC Batch: 24668 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2616191011, 2616191012

METHOD BLANK: 110914 Matrix: Water
Associated Lab Samples: 2616191011, 2616191012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/20/19 14:27	

LABORATORY CONTROL SAMPLE: 110915

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 110916 110917

Parameter	Units	2616193001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0025	97	101	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2616191

QC Batch: 24597 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616191001, 2616191002, 2616191003, 2616191004

METHOD BLANK: 110486 Matrix: Water
Associated Lab Samples: 2616191001, 2616191002, 2616191003, 2616191004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/21/19 13:23	
Arsenic	mg/L	ND	0.0050	0.00057	03/21/19 13:23	
Barium	mg/L	ND	0.010	0.00078	03/21/19 13:23	
Beryllium	mg/L	ND	0.0030	0.000050	03/21/19 13:23	
Boron	mg/L	ND	0.040	0.0039	03/21/19 13:23	
Cadmium	mg/L	ND	0.0010	0.000093	03/21/19 13:23	
Calcium	mg/L	ND	0.50	0.014	03/21/19 13:23	
Chromium	mg/L	ND	0.010	0.0016	03/21/19 13:23	
Cobalt	mg/L	ND	0.010	0.00052	03/21/19 13:23	
Copper	mg/L	ND	0.025	0.0013	03/21/19 13:23	
Lead	mg/L	ND	0.0050	0.00027	03/21/19 13:23	
Nickel	mg/L	ND	0.010	0.00095	03/21/19 13:23	
Selenium	mg/L	ND	0.010	0.0014	03/21/19 13:23	
Silver	mg/L	ND	0.010	0.00095	03/21/19 13:23	
Thallium	mg/L	ND	0.0010	0.00014	03/21/19 13:23	
Vanadium	mg/L	ND	0.010	0.0019	03/21/19 13:23	
Zinc	mg/L	ND	0.010	0.0021	03/21/19 13:23	

LABORATORY CONTROL SAMPLE: 110487

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.11	109	80-120	
Silver	mg/L	0.1	0.11	106	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.1	0.10	103	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Parameter	Units	2616179004		110488		110489		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20			
Arsenic	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	3	20			
Barium	mg/L	0.010	0.1	0.1	0.11	0.11	98	98	75-125	0	20			
Beryllium	mg/L	ND	0.1	0.1	0.097	0.093	97	93	75-125	5	20			
Boron	mg/L	ND	1	1	0.97	0.93	97	93	75-125	3	20			
Cadmium	mg/L	0.00015J	0.1	0.1	0.10	0.097	100	97	75-125	3	20			
Calcium	mg/L	20.4J	1	1	21.9J	23.4J	150	298	75-125	7	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	98	100	75-125	2	20			
Cobalt	mg/L	ND	0.1	0.1	0.094	0.094	94	94	75-125	0	20			
Copper	mg/L	ND	0.1	0.1	0.096	0.095	96	94	75-125	2	20			
Lead	mg/L	ND	0.1	0.1	0.097	0.093	97	93	75-125	4	20			
Nickel	mg/L	ND	0.1	0.1	0.096	0.095	96	94	75-125	2	20			
Selenium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20			
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	1	20			
Thallium	mg/L	ND	0.1	0.1	0.097	0.094	97	94	75-125	3	20			
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20			
Zinc	mg/L	0.051	0.1	0.1	0.15	0.15	97	97	75-125	0	20			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

QC Batch: 24707 Analysis Method: EPA 6020B
 QC Batch Method: EPA 3005A Analysis Description: 6020B MET
 Associated Lab Samples: 2616191005, 2616191006, 2616191007, 2616191008, 2616191009, 2616191010, 2616191011, 2616191012

METHOD BLANK: 111121 Matrix: Water
 Associated Lab Samples: 2616191005, 2616191006, 2616191007, 2616191008, 2616191009, 2616191010, 2616191011, 2616191012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/21/19 19:09	
Arsenic	mg/L	ND	0.0050	0.00057	03/21/19 19:09	
Barium	mg/L	ND	0.010	0.00078	03/21/19 19:09	
Beryllium	mg/L	ND	0.0030	0.000050	03/21/19 19:09	
Boron	mg/L	ND	0.040	0.0039	03/21/19 19:09	
Cadmium	mg/L	ND	0.0010	0.000093	03/21/19 19:09	
Calcium	mg/L	ND	0.50	0.014	03/21/19 19:09	
Chromium	mg/L	ND	0.010	0.0016	03/21/19 19:09	
Cobalt	mg/L	ND	0.010	0.00052	03/21/19 19:09	
Copper	mg/L	ND	0.025	0.0013	03/21/19 19:09	
Lead	mg/L	ND	0.0050	0.00027	03/21/19 19:09	
Nickel	mg/L	ND	0.010	0.00095	03/21/19 19:09	
Selenium	mg/L	ND	0.010	0.0014	03/21/19 19:09	
Silver	mg/L	ND	0.010	0.00095	03/21/19 19:09	
Thallium	mg/L	ND	0.0010	0.00014	03/21/19 19:09	
Vanadium	mg/L	ND	0.010	0.0019	03/21/19 19:09	
Zinc	mg/L	ND	0.010	0.0021	03/21/19 19:09	

LABORATORY CONTROL SAMPLE: 111122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.10	105	80-120	
Calcium	mg/L	1	1.0	101	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	105	80-120	
Silver	mg/L	0.1	0.11	106	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	
Vanadium	mg/L	0.1	0.11	105	80-120	
Zinc	mg/L	0.1	0.10	103	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Parameter	Units	111123		111124		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		2616193001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	105	75-125	2	20	
Barium	mg/L	0.028	0.1	0.1	0.13	0.13	101	100	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20	
Boron	mg/L	0.0070J	1	1	0.96	0.99	95	98	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20	
Calcium	mg/L	22.7J	1	1	23.3J	23.3J	67	68	75-125	0	20	M6
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.098	0.096	97	96	75-125	1	20	
Copper	mg/L	ND	0.1	0.1	0.10	0.10	101	99	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	105	103	75-125	2	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	104	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Zinc	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2616191

QC Batch: 24797 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616191001, 2616191002, 2616191003, 2616191004, 2616191005, 2616191006, 2616191007, 2616191008, 2616191009, 2616191010, 2616191011, 2616191012

METHOD BLANK: 111639 Matrix: Water
Associated Lab Samples: 2616191001, 2616191002, 2616191003, 2616191004, 2616191005, 2616191006, 2616191007, 2616191008, 2616191009, 2616191010, 2616191011, 2616191012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/22/19 00:57	
Fluoride	mg/L	ND	0.30	0.029	03/22/19 00:57	
Sulfate	mg/L	ND	1.0	0.017	03/22/19 00:57	

LABORATORY CONTROL SAMPLE: 111640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.7	97	90-110	
Fluoride	mg/L	10	10.1	101	90-110	
Sulfate	mg/L	10	10.8	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 111641 111642

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2616189001 Result	Spike Conc.	Spike Conc.	MS Result						
Chloride	mg/L	2.2	10	10	11.8	11.8	96	96	90-110	0	15
Fluoride	mg/L	0.045J	10	10	10.2	10.2	102	102	90-110	0	15
Sulfate	mg/L	2.1	10	10	12.5	12.5	103	104	90-110	0	15

MATRIX SPIKE SAMPLE: 111643

Parameter	Units	2616189002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.6	10	11.6	101	90-110	
Fluoride	mg/L	ND	10	10.6	106	90-110	
Sulfate	mg/L	0.43J	10	11.3	109	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1A Out of hold rerun result confirms original. Original reported.

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

H5 Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 3+4
Pace Project No.: 2616191

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616191001	GWC-17R	EPA 3005A	24597	EPA 6020B	24647
2616191002	GWC-18	EPA 3005A	24597	EPA 6020B	24647
2616191003	GWC-18R	EPA 3005A	24597	EPA 6020B	24647
2616191004	GWC-19R	EPA 3005A	24597	EPA 6020B	24647
2616191005	GWC-20R	EPA 3005A	24707	EPA 6020B	24750
2616191006	GWC-23R	EPA 3005A	24707	EPA 6020B	24750
2616191007	GWA-53R	EPA 3005A	24707	EPA 6020B	24750
2616191008	FBL031219-1	EPA 3005A	24707	EPA 6020B	24750
2616191009	EQBL031219-1	EPA 3005A	24707	EPA 6020B	24750
2616191010	FBL031219-2	EPA 3005A	24707	EPA 6020B	24750
2616191011	EQBL031219-2	EPA 3005A	24707	EPA 6020B	24750
2616191012	Dup-3	EPA 3005A	24707	EPA 6020B	24750
2616191001	GWC-17R	EPA 7470A	24639	EPA 7470A	24703
2616191002	GWC-18	EPA 7470A	24639	EPA 7470A	24703
2616191003	GWC-18R	EPA 7470A	24639	EPA 7470A	24703
2616191004	GWC-19R	EPA 7470A	24639	EPA 7470A	24703
2616191005	GWC-20R	EPA 7470A	24639	EPA 7470A	24703
2616191006	GWC-23R	EPA 7470A	24639	EPA 7470A	24703
2616191007	GWA-53R	EPA 7470A	24639	EPA 7470A	24703
2616191008	FBL031219-1	EPA 7470A	24639	EPA 7470A	24703
2616191009	EQBL031219-1	EPA 7470A	24639	EPA 7470A	24703
2616191010	FBL031219-2	EPA 7470A	24639	EPA 7470A	24703
2616191011	EQBL031219-2	EPA 7470A	24668	EPA 7470A	24709
2616191012	Dup-3	EPA 7470A	24668	EPA 7470A	24709
2616191001	GWC-17R	SM 2540C	24973		
2616191002	GWC-18	SM 2540C	24973		
2616191003	GWC-18R	SM 2540C	24551		
2616191004	GWC-19R	SM 2540C	24973		
2616191005	GWC-20R	SM 2540C	24551		
2616191006	GWC-23R	SM 2540C	24551		
2616191007	GWA-53R	SM 2540C	24551		
2616191008	FBL031219-1	SM 2540C	24973		
2616191009	EQBL031219-1	SM 2540C	24973		
2616191010	FBL031219-2	SM 2540C	24973		
2616191011	EQBL031219-2	SM 2540C	24973		
2616191012	Dup-3	SM 2540C	24973		
2616191001	GWC-17R	EPA 300.0	24797		
2616191002	GWC-18	EPA 300.0	24797		
2616191003	GWC-18R	EPA 300.0	24797		
2616191004	GWC-19R	EPA 300.0	24797		
2616191005	GWC-20R	EPA 300.0	24797		
2616191006	GWC-23R	EPA 300.0	24797		
2616191007	GWA-53R	EPA 300.0	24797		
2616191008	FBL031219-1	EPA 300.0	24797		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 3+4

Pace Project No.: 2616191

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616191009	EQBL031219-1	EPA 300.0	24797		
2616191010	FBL031219-2	EPA 300.0	24797		
2616191011	EQBL031219-2	EPA 300.0	24797		
2616191012	Dup-3	EPA 300.0	24797		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Marner Road, Atlanta, GA 30339
 Email: jbraham@southernco.com
 Phone: (404)506-7239
 Requested Due Date:

Section B
Required Project Information:
 Report To: Joju Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10348606
 Project Name: Plant Bowen Cells - State List 3 A 1
 Project #: 317.5

Section C
Invoice Information:
 Attention: scmvoices@southernco.com
 Company Name:
 Address:
 Pace Quote:
 Pace Project Manager: betisy.mcdaniel@pacelabs.com
 Pace Profile #: 317.5

Page: 1 of 1

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G-GRAB C-COMP)	MATRIX CODE (see valid codes to left)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	PRESERVATIVES										ANALYSES TEST	RESIDUAL CHLORINE (Y/N)
			START DATE	END DATE			START TIME	END TIME		H2SO4	HNO3	HCl	NaOH	Na2SO3	Methanol	Other	TDS, Cl, F, SO4	Meils 6020			
1	Drinking Water	DW	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
2	Waste Water	WW	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
3	Process Water	P	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
4	Sludge	SL	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
5	Oil	OL	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
6	Wipe	WP	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
7	Air	AR	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
8	Other	OT	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
9	Tissue	TS	3/12/19	3/12/19	WT G	WT G	21	1	1									X			
10			3/12/19	3/12/19	WT G	WT G	21	1	1									X			
11			3/12/19	3/12/19	WT G	WT G	21	1	1									X			
12			3/12/19	3/12/19	WT G	WT G	21	1	1									X			

NO# : 2616191

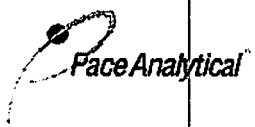
2616191

RECEIVED BY / AFFILIATION
 DATE: 3/15/19 14:45
 TIME: 8:45
 M. RATHMAN

RECEIVED BY / AFFILIATION
 DATE: 3/15/19 15:40
 TIME: 8:50
 M. Rathman

TEMP IN C
 Received on: 3/12/19
 Ice (Y/N):
 Sealed (Y/N):
 Custody (Y/N):
 Samples Intact (Y/N):

SAMPLER NAME AND SIGNATURE
 PRINT NAME OF SAMPLER: Robert Mull & Veronica Fays
 SIGNATURE OF SAMPLER: Veronica Fays
 DATE SIGNED: 3/12/19



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

WO#: 2616191

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

PM: BM Due Date: 03/22/19
CLIENT: GAPower-CCR

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 83 Type of Ice: Wet Blue None

Cooler Temperature 0.5 Biological Tissue is Frozen: Yes No

Samples on ice, cooling process has begun
Date and Initials of person examining contents: 3/15/19 MR

Temp should be above freezing to 6°C Comments: _____

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

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

June 21, 2019

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

RE: Project: Plant Bowen Cells
Pace Project No.: 2619873

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on June 19, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells

Pace Project No.: 2619873

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells

Pace Project No.: 2619873

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2619873001	GWC-21R	Water	06/18/19 13:25	06/19/19 11:20
2619873002	FBL-061819	Water	06/18/19 15:35	06/19/19 11:20

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells

Pace Project No.: 2619873

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2619873001	GWC-21R	EPA 300.0	MWB	1
2619873002	FBL-061819	EPA 300.0	MWB	1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2619873

Sample: GWC-21R		Lab ID: 2619873001		Collected: 06/18/19 13:25	Received: 06/19/19 11:20	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		06/20/19 15:28	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2619873

Sample: FBL-061819		Lab ID: 2619873002		Collected: 06/18/19 15:35	Received: 06/19/19 11:20	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Fluoride	ND	mg/L	0.30	0.029	1		06/20/19 15:50	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2619873

QC Batch: 30603

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2619873001, 2619873002

METHOD BLANK: 137790

Matrix: Water

Associated Lab Samples: 2619873001, 2619873002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.30	0.029	06/20/19 03:46	

LABORATORY CONTROL SAMPLE: 137791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	10	9.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 137792 137793

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2619806001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Fluoride	mg/L	1.2	10	10	10.2	10.3	90	91	90-110	1	15		

MATRIX SPIKE SAMPLE: 137794

Parameter	Units	2619806002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	0.97	10	10.3	93	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells

Pace Project No.: 2619873

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells

Pace Project No.: 2619873

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2619873001	GWC-21R	EPA 300.0	30603		
2619873002	FBL-061819	EPA 300.0	30603		

REPORT OF LABORATORY ANALYSIS

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



Sample Condition Upon Receipt

WO#: 2619873

Client Name: CA Power CCR

PM: BM Due Date: 06/26/19 CLIENT: GAPower-CCR

Courier: [] Fed Ex [] UPS [] USPS [x] Client [] Commercial [] Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: [x] yes [] no Seals intact: [x] yes [] no

Packing Material: [] Bubble Wrap [] Bubble Bags [x] None [] Other

Thermometer Used 082 Type of Ice: [x] Wet Blue None [] Samples on ice, cooling process has begun

Cooler Temperature 7.1°C Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 6/19/19 [Signature]

Table with 16 rows of checklist items (Chain of Custody Present, Chain of Custody Filled Out, etc.) and checkboxes for Yes, No, N/A.

Client Notification/ Resolution: Field Data Required? Y / N Person Contacted: Date/Time: Comments/ Resolution:

Project Manager Review: Date:

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

March 25, 2019

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

RE: Project: Plant Bowen cells-State List
Pace Project No.: 2616179

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 15, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616179001	GWA-39Z	Water	03/15/19 13:28	03/15/19 16:35
2616179002	FBL031519	Water	03/15/19 14:02	03/15/19 16:35
2616179003	EQBL031519	Water	03/15/19 14:07	03/15/19 16:35
2616179004	GWC-47	Water	03/15/19 09:52	03/15/19 16:35
2616179005	GWC-48	Water	03/15/19 13:58	03/15/19 16:35

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616179001	GWA-39Z	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2616179002	FBL031519	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2616179003	EQBL031519	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	MWB	3
2616179004	GWC-47	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616179005	GWC-48	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List
Pace Project No.: 2616179

Sample: GWA-39Z		Lab ID: 2616179001		Collected: 03/15/19 13:28		Received: 03/15/19 16:35		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 14:28	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 14:28	7440-38-2		
Barium	0.019	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 14:28	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 14:28	7440-41-7		
Boron	0.0050J	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 14:28	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 14:28	7440-43-9		
Calcium	20.3J	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 14:34	7440-70-2	D3	
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 14:28	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 14:28	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 14:28	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 14:28	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 14:28	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 14:28	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 14:28	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 14:28	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 14:28	7440-62-2		
Zinc	0.0023J	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 14:28	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:11	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	107	mg/L	25.0	10.0	1		03/21/19 17:58			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.7	mg/L	0.25	0.024	1		03/22/19 07:11	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 07:11	16984-48-8		
Sulfate	3.0	mg/L	1.0	0.017	1		03/22/19 07:11	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

Sample: FBL031519		Lab ID: 2616179002		Collected: 03/15/19 14:02		Received: 03/15/19 16:35		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 14:40	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 14:40	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 14:40	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 14:40	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 14:40	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 14:40	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/19/19 12:14	03/21/19 14:40	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 14:40	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 14:40	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 14:40	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 14:40	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 14:40	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 14:40	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 14:40	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 14:40	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 14:40	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 14:40	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:28	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	15.0J	mg/L	25.0	10.0	1		03/22/19 12:51		D6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.079J	mg/L	0.25	0.024	1		03/22/19 07:36	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 07:36	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/22/19 07:36	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

Sample: EQBL031519 **Lab ID: 2616179003** Collected: 03/15/19 14:07 Received: 03/15/19 16:35 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 14:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 14:45	7440-38-2	
Barium	ND	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 14:45	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 14:45	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 14:45	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 14:45	7440-43-9	
Calcium	ND	mg/L	0.50	0.014	1	03/19/19 12:14	03/21/19 14:45	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 14:45	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 14:45	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 14:45	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 14:45	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 14:45	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 14:45	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 14:45	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 14:45	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 14:45	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 14:45	7440-66-6	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:30	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	20.0J	mg/L	25.0	10.0	1		03/21/19 17:58		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	0.094J	mg/L	0.25	0.024	1		03/22/19 08:01	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 08:01	16984-48-8	
Sulfate	ND	mg/L	1.0	0.017	1		03/22/19 08:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

Sample: GWC-47		Lab ID: 2616179004		Collected: 03/15/19 09:52		Received: 03/15/19 16:35		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 14:51	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 14:51	7440-38-2	
Barium	0.010	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 14:51	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 14:51	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 14:51	7440-42-8	
Cadmium	0.00015J	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 14:51	7440-43-9	
Calcium	20.4J	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 14:57	7440-70-2	D3,M6
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 14:51	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 14:51	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 14:51	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 14:51	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 14:51	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 14:51	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 14:51	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 14:51	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 14:51	7440-62-2	
Zinc	0.051	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 14:51	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:33	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	125	mg/L	25.0	10.0	1		03/21/19 17:59		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	2.8	mg/L	0.25	0.024	1		03/22/19 14:16	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 14:16	16984-48-8	
Sulfate	4.2	mg/L	1.0	0.017	1		03/22/19 14:16	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List
Pace Project No.: 2616179

Sample: GWC-48		Lab ID: 2616179005		Collected: 03/15/19 13:58		Received: 03/15/19 16:35		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 16:01	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 16:01	7440-38-2		
Barium	0.026	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 16:01	7440-39-3		
Beryllium	0.00022J	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 16:01	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 16:01	7440-42-8		
Cadmium	0.00018J	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 16:01	7440-43-9		
Calcium	4.4	mg/L	0.50	0.014	1	03/19/19 12:14	03/21/19 16:01	7440-70-2		
Chromium	0.0023J	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 16:01	7440-47-3		
Cobalt	0.0012J	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 16:01	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 16:01	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 16:01	7439-92-1		
Nickel	0.0033J	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:01	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 16:01	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:01	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 16:01	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 16:01	7440-62-2		
Zinc	0.0058J	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 16:01	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:35	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	41.0	mg/L	25.0	10.0	1		03/21/19 17:59			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.3	mg/L	0.25	0.024	1		03/22/19 14:39	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 14:39	16984-48-8		
Sulfate	1.7	mg/L	1.0	0.017	1		03/22/19 14:39	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

QC Batch: 24639 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2616179001, 2616179002, 2616179003, 2616179004, 2616179005

METHOD BLANK: 110677 Matrix: Water
 Associated Lab Samples: 2616179001, 2616179002, 2616179003, 2616179004, 2616179005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/20/19 13:07	

LABORATORY CONTROL SAMPLE: 110678

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 110679 110680

Parameter	Units	2616179001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0025	99	99	75-125	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

QC Batch: 24597 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616179001, 2616179002, 2616179003, 2616179004, 2616179005

METHOD BLANK: 110486 Matrix: Water
Associated Lab Samples: 2616179001, 2616179002, 2616179003, 2616179004, 2616179005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/21/19 13:23	
Arsenic	mg/L	ND	0.0050	0.00057	03/21/19 13:23	
Barium	mg/L	ND	0.010	0.00078	03/21/19 13:23	
Beryllium	mg/L	ND	0.0030	0.000050	03/21/19 13:23	
Boron	mg/L	ND	0.040	0.0039	03/21/19 13:23	
Cadmium	mg/L	ND	0.0010	0.000093	03/21/19 13:23	
Calcium	mg/L	ND	0.50	0.014	03/21/19 13:23	
Chromium	mg/L	ND	0.010	0.0016	03/21/19 13:23	
Cobalt	mg/L	ND	0.010	0.00052	03/21/19 13:23	
Copper	mg/L	ND	0.025	0.0013	03/21/19 13:23	
Lead	mg/L	ND	0.0050	0.00027	03/21/19 13:23	
Nickel	mg/L	ND	0.010	0.00095	03/21/19 13:23	
Selenium	mg/L	ND	0.010	0.0014	03/21/19 13:23	
Silver	mg/L	ND	0.010	0.00095	03/21/19 13:23	
Thallium	mg/L	ND	0.0010	0.00014	03/21/19 13:23	
Vanadium	mg/L	ND	0.010	0.0019	03/21/19 13:23	
Zinc	mg/L	ND	0.010	0.0021	03/21/19 13:23	

LABORATORY CONTROL SAMPLE: 110487

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.11	109	80-120	
Silver	mg/L	0.1	0.11	106	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.1	0.10	103	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

Parameter	Units	2616179004		110488		110489		% Rec	% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS	MSD	MS	MSD	MS	MSD								
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20				
Arsenic	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	3	20				
Barium	mg/L	0.010	0.1	0.1	0.11	0.11	98	98	75-125	0	20				
Beryllium	mg/L	ND	0.1	0.1	0.097	0.093	97	93	75-125	5	20				
Boron	mg/L	ND	1	1	0.97	0.93	97	93	75-125	3	20				
Cadmium	mg/L	0.00015J	0.1	0.1	0.10	0.097	100	97	75-125	3	20				
Calcium	mg/L	20.4J	1	1	21.9J	23.4J	150	298	75-125	7	20	M6			
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	98	100	75-125	2	20				
Cobalt	mg/L	ND	0.1	0.1	0.094	0.094	94	94	75-125	0	20				
Copper	mg/L	ND	0.1	0.1	0.096	0.095	96	94	75-125	2	20				
Lead	mg/L	ND	0.1	0.1	0.097	0.093	97	93	75-125	4	20				
Nickel	mg/L	ND	0.1	0.1	0.096	0.095	96	94	75-125	2	20				
Selenium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20				
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	1	20				
Thallium	mg/L	ND	0.1	0.1	0.097	0.094	97	94	75-125	3	20				
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20				
Zinc	mg/L	0.051	0.1	0.1	0.15	0.15	97	97	75-125	0	20				

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

QC Batch: 24757

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2616179001, 2616179003, 2616179004, 2616179005

LABORATORY CONTROL SAMPLE: 111467

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	414	104	84-108	

SAMPLE DUPLICATE: 111468

Parameter	Units	2616160007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	340	330	3	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

QC Batch: 24873	Analysis Method: SM 2540C
QC Batch Method: SM 2540C	Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2616179002	

LABORATORY CONTROL SAMPLE: 112147

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	425	106	84-108	

SAMPLE DUPLICATE: 112148

Parameter	Units	2616179002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	15.0J	17.0J	12	10	D6

SAMPLE DUPLICATE: 112340

Parameter	Units	2616369004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	161	20.0J	156	10	D6

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

QC Batch: 24743 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616179001, 2616179002, 2616179003, 2616179004, 2616179005

METHOD BLANK: 111327 Matrix: Water
Associated Lab Samples: 2616179001, 2616179002, 2616179003, 2616179004, 2616179005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/21/19 21:46	
Fluoride	mg/L	ND	0.30	0.029	03/21/19 21:46	
Sulfate	mg/L	ND	1.0	0.017	03/21/19 21:46	

LABORATORY CONTROL SAMPLE: 111328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.2	92	90-110	
Fluoride	mg/L	10	10.4	104	90-110	
Sulfate	mg/L	10	9.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 111329 111330

Parameter	Units	2616160010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	24.8	10	10	31.1	31.0	63	62	90-110	0	15	M1
Fluoride	mg/L	ND	10	10	11.5	11.2	115	112	90-110	2	15	M1
Sulfate	mg/L	404	10	10	263	264	-1410	-1400	90-110	0	15	E

MATRIX SPIKE SAMPLE: 111331

Parameter	Units	2616160011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	6.6	10	15.3	87	90-110	M1
Fluoride	mg/L	1.6	10	13.6	120	90-110	M1
Sulfate	mg/L	238	10	179	-587	90-110	E

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells-State List

Pace Project No.: 2616179

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616179001	GWA-39Z	EPA 3005A	24597	EPA 6020B	24647
2616179002	FBL031519	EPA 3005A	24597	EPA 6020B	24647
2616179003	EQBL031519	EPA 3005A	24597	EPA 6020B	24647
2616179004	GWC-47	EPA 3005A	24597	EPA 6020B	24647
2616179005	GWC-48	EPA 3005A	24597	EPA 6020B	24647
2616179001	GWA-39Z	EPA 7470A	24639	EPA 7470A	24703
2616179002	FBL031519	EPA 7470A	24639	EPA 7470A	24703
2616179003	EQBL031519	EPA 7470A	24639	EPA 7470A	24703
2616179004	GWC-47	EPA 7470A	24639	EPA 7470A	24703
2616179005	GWC-48	EPA 7470A	24639	EPA 7470A	24703
2616179001	GWA-39Z	SM 2540C	24757		
2616179002	FBL031519	SM 2540C	24873		
2616179003	EQBL031519	SM 2540C	24757		
2616179004	GWC-47	SM 2540C	24757		
2616179005	GWC-48	SM 2540C	24757		
2616179001	GWA-39Z	EPA 300.0	24743		
2616179002	FBL031519	EPA 300.0	24743		
2616179003	EQBL031519	EPA 300.0	24743		
2616179004	GWC-47	EPA 300.0	24743		
2616179005	GWC-48	EPA 300.0	24743		

REPORT OF LABORATORY ANALYSIS

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



Sample Condition Upon Receipt

Client Name: GIA Powder

Project # _____

WO#: **2616179**

PM: **BM**

Due Date: **03/22/19**

CLIENT: **GAPower-CCR**

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 8.3 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 5.0 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3/15/19 BM

Comments:

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

Client Notification/ Resolution: _____

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Field Data Required? Y / N

Project Manager Review: _____ Date: _____

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

March 25, 2019

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

RE: Project: Plant Bowen cells - 9+10
Pace Project No.: 2616189

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 15, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616189001	GWA-40	Water	03/13/19 15:39	03/15/19 15:40
2616189002	GWA-43	Water	03/13/19 10:34	03/15/19 15:40
2616189003	GWA-43R	Water	03/13/19 13:22	03/15/19 15:40
2616189004	Dup-1	Water	03/13/19 00:00	03/15/19 15:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616189001	GWA-40	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616189002	GWA-43	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616189003	GWA-43R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616189004	Dup-1	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

Sample: GWA-40		Lab ID: 2616189001		Collected: 03/13/19 15:39		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 16:12	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 16:12	7440-38-2		
Barium	0.0076J	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 16:12	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 16:12	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 16:12	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 16:12	7440-43-9		
Calcium	23.8J	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 16:18	7440-70-2	D3	
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 16:12	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 16:12	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 16:12	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 16:12	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:12	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 16:12	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:12	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 16:12	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 16:12	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 16:12	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:37	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	130	mg/L	25.0	10.0	1		03/20/19 19:53			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.2	mg/L	0.25	0.024	1		03/22/19 01:43	16887-00-6		
Fluoride	0.045J	mg/L	0.30	0.029	1		03/22/19 01:43	16984-48-8		
Sulfate	2.1	mg/L	1.0	0.017	1		03/22/19 01:43	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

Sample: GWA-43		Lab ID: 2616189002		Collected: 03/13/19 10:34		Received: 03/15/19 15:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 16:23	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 16:23	7440-38-2	
Barium	0.014	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 16:23	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 16:23	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 16:23	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 16:23	7440-43-9	
Calcium	2.9	mg/L	0.50	0.014	1	03/19/19 12:14	03/21/19 16:23	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 16:23	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 16:23	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 16:23	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 16:23	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:23	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 16:23	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:23	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 16:23	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 16:23	7440-62-2	
Zinc	0.0022J	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 16:23	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:40	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	31.0	mg/L	25.0	10.0	1		03/20/19 19:53		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	1.6	mg/L	0.25	0.024	1		03/22/19 02:51	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		03/22/19 02:51	16984-48-8	
Sulfate	0.43J	mg/L	1.0	0.017	1		03/22/19 02:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

Sample: GWA-43R		Lab ID: 2616189003		Collected: 03/13/19 13:22		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 16:35	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 16:35	7440-38-2		
Barium	0.0077J	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 16:35	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 16:35	7440-41-7		
Boron	0.012J	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 16:35	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 16:35	7440-43-9		
Calcium	29.2	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 16:41	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 16:35	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 16:35	7440-48-4		
Copper	0.0015J	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 16:35	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 16:35	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:35	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 16:35	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:35	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 16:35	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 16:35	7440-62-2		
Zinc	0.0023J	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 16:35	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:42	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	152	mg/L	25.0	10.0	1		03/20/19 19:54			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.9	mg/L	0.25	0.024	1		03/22/19 03:14	16887-00-6		
Fluoride	0.036J	mg/L	0.30	0.029	1		03/22/19 03:14	16984-48-8		
Sulfate	4.4	mg/L	1.0	0.017	1		03/22/19 03:14	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

Sample: Dup-1		Lab ID: 2616189004		Collected: 03/13/19 00:00		Received: 03/15/19 15:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/19/19 12:14	03/21/19 16:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/19/19 12:14	03/21/19 16:58	7440-38-2	
Barium	0.0071J	mg/L	0.010	0.00078	1	03/19/19 12:14	03/21/19 16:58	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/19/19 12:14	03/21/19 16:58	7440-41-7	
Boron	ND	mg/L	0.040	0.0039	1	03/19/19 12:14	03/21/19 16:58	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/19/19 12:14	03/21/19 16:58	7440-43-9	
Calcium	24.2J	mg/L	25.0	0.69	50	03/19/19 12:14	03/21/19 17:04	7440-70-2	D3
Chromium	ND	mg/L	0.010	0.0016	1	03/19/19 12:14	03/21/19 16:58	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/19/19 12:14	03/21/19 16:58	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/19/19 12:14	03/21/19 16:58	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/19/19 12:14	03/21/19 16:58	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:58	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/19/19 12:14	03/21/19 16:58	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/19/19 12:14	03/21/19 16:58	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/19/19 12:14	03/21/19 16:58	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/19/19 12:14	03/21/19 16:58	7440-62-2	
Zinc	ND	mg/L	0.010	0.0021	1	03/19/19 12:14	03/21/19 16:58	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 09:33	03/20/19 13:45	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	142	mg/L	25.0	10.0	1		03/20/19 19:54		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	2.1	mg/L	0.25	0.024	1		03/22/19 03:37	16887-00-6	
Fluoride	0.041J	mg/L	0.30	0.029	1		03/22/19 03:37	16984-48-8	
Sulfate	2.2	mg/L	1.0	0.017	1		03/22/19 03:37	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells - 9+10
Pace Project No.: 2616189

QC Batch: 24639 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2616189001, 2616189002, 2616189003, 2616189004

METHOD BLANK: 110677 Matrix: Water
Associated Lab Samples: 2616189001, 2616189002, 2616189003, 2616189004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/20/19 13:07	

LABORATORY CONTROL SAMPLE: 110678

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 110679 110680

Parameter	Units	2616179001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0025	99	99	75-125	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

QC Batch: 24597 Analysis Method: EPA 6020B
 QC Batch Method: EPA 3005A Analysis Description: 6020B MET
 Associated Lab Samples: 2616189001, 2616189002, 2616189003, 2616189004

METHOD BLANK: 110486 Matrix: Water
 Associated Lab Samples: 2616189001, 2616189002, 2616189003, 2616189004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/21/19 13:23	
Arsenic	mg/L	ND	0.0050	0.00057	03/21/19 13:23	
Barium	mg/L	ND	0.010	0.00078	03/21/19 13:23	
Beryllium	mg/L	ND	0.0030	0.000050	03/21/19 13:23	
Boron	mg/L	ND	0.040	0.0039	03/21/19 13:23	
Cadmium	mg/L	ND	0.0010	0.000093	03/21/19 13:23	
Calcium	mg/L	ND	0.50	0.014	03/21/19 13:23	
Chromium	mg/L	ND	0.010	0.0016	03/21/19 13:23	
Cobalt	mg/L	ND	0.010	0.00052	03/21/19 13:23	
Copper	mg/L	ND	0.025	0.0013	03/21/19 13:23	
Lead	mg/L	ND	0.0050	0.00027	03/21/19 13:23	
Nickel	mg/L	ND	0.010	0.00095	03/21/19 13:23	
Selenium	mg/L	ND	0.010	0.0014	03/21/19 13:23	
Silver	mg/L	ND	0.010	0.00095	03/21/19 13:23	
Thallium	mg/L	ND	0.0010	0.00014	03/21/19 13:23	
Vanadium	mg/L	ND	0.010	0.0019	03/21/19 13:23	
Zinc	mg/L	ND	0.010	0.0021	03/21/19 13:23	

LABORATORY CONTROL SAMPLE: 110487

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.11	109	80-120	
Silver	mg/L	0.1	0.11	106	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.1	0.10	103	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells - 9+10

Pace Project No.: 2616189

Parameter	Units	2616179004		MS		MSD		MS		MSD		% Rec	Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20					
Arsenic	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	3	20					
Barium	mg/L	0.010	0.1	0.1	0.11	0.11	98	98	75-125	0	20					
Beryllium	mg/L	ND	0.1	0.1	0.097	0.093	97	93	75-125	5	20					
Boron	mg/L	ND	1	1	0.97	0.93	97	93	75-125	3	20					
Cadmium	mg/L	0.00015J	0.1	0.1	0.10	0.097	100	97	75-125	3	20					
Calcium	mg/L	20.4J	1	1	21.9J	23.4J	150	298	75-125	7	20	M6				
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	98	100	75-125	2	20					
Cobalt	mg/L	ND	0.1	0.1	0.094	0.094	94	94	75-125	0	20					
Copper	mg/L	ND	0.1	0.1	0.096	0.095	96	94	75-125	2	20					
Lead	mg/L	ND	0.1	0.1	0.097	0.093	97	93	75-125	4	20					
Nickel	mg/L	ND	0.1	0.1	0.096	0.095	96	94	75-125	2	20					
Selenium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20					
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	1	20					
Thallium	mg/L	ND	0.1	0.1	0.097	0.094	97	94	75-125	3	20					
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20					
Zinc	mg/L	0.051	0.1	0.1	0.15	0.15	97	97	75-125	0	20					

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells - 9+10
Pace Project No.: 2616189

QC Batch: 24797 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616189001, 2616189002, 2616189003, 2616189004

METHOD BLANK: 111639 Matrix: Water
Associated Lab Samples: 2616189001, 2616189002, 2616189003, 2616189004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/22/19 00:57	
Fluoride	mg/L	ND	0.30	0.029	03/22/19 00:57	
Sulfate	mg/L	ND	1.0	0.017	03/22/19 00:57	

LABORATORY CONTROL SAMPLE: 111640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.7	97	90-110	
Fluoride	mg/L	10	10.1	101	90-110	
Sulfate	mg/L	10	10.8	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 111641 111642

Parameter	Units	2616189001 Result	MS Spike Conc.	MSD Spike Conc.	111641		111642		% Rec Limits	RPD	Max RPD	Qual
					MS Result	MSD Result	MS % Rec	MSD % Rec				
Chloride	mg/L	2.2	10	10	11.8	11.8	96	96	90-110	0	15	
Fluoride	mg/L	0.045J	10	10	10.2	10.2	102	102	90-110	0	15	
Sulfate	mg/L	2.1	10	10	12.5	12.5	103	104	90-110	0	15	

MATRIX SPIKE SAMPLE: 111643

Parameter	Units	2616189002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.6	10	11.6	101	90-110	
Fluoride	mg/L	ND	10	10.6	106	90-110	
Sulfate	mg/L	0.43J	10	11.3	109	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells - 9+10
Pace Project No.: 2616189

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells - 9+10
Pace Project No.: 2616189

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616189001	GWA-40	EPA 3005A	24597	EPA 6020B	24647
2616189002	GWA-43	EPA 3005A	24597	EPA 6020B	24647
2616189003	GWA-43R	EPA 3005A	24597	EPA 6020B	24647
2616189004	Dup-1	EPA 3005A	24597	EPA 6020B	24647
2616189001	GWA-40	EPA 7470A	24639	EPA 7470A	24703
2616189002	GWA-43	EPA 7470A	24639	EPA 7470A	24703
2616189003	GWA-43R	EPA 7470A	24639	EPA 7470A	24703
2616189004	Dup-1	EPA 7470A	24639	EPA 7470A	24703
2616189001	GWA-40	SM 2540C	24657		
2616189002	GWA-43	SM 2540C	24657		
2616189003	GWA-43R	SM 2540C	24657		
2616189004	Dup-1	SM 2540C	24657		
2616189001	GWA-40	EPA 300.0	24797		
2616189002	GWA-43	EPA 300.0	24797		
2616189003	GWA-43R	EPA 300.0	24797		
2616189004	Dup-1	EPA 300.0	24797		

REPORT OF LABORATORY ANALYSIS

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



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

WO#: **2616189**

PM: **BM**

Due Date: **03/22/19**

CLIENT: **GAPower-CCR**

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 83 Type of Ice: Wet Blue None

Cooler Temperature 0.5 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Samples on ice, cooling process has begun

Date and Initials of person examining contents: 3/15/19 MR

Comments:

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

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

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

March 26, 2019

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

RE: Project: Plant Bowen cells-State List
Pace Project No.: 2616193

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 15, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616193001	GWA-41	Water	03/14/19 09:56	03/15/19 15:40
2616193002	GWA-41R	Water	03/14/19 13:53	03/15/19 15:40
2616193003	GWA-42	Water	03/14/19 16:20	03/15/19 15:40
2616193004	GWC-44	Water	03/14/19 09:45	03/15/19 15:40
2616193005	GWC-45	Water	03/14/19 13:27	03/15/19 15:40
2616193006	GWC-45R	Water	03/14/19 11:07	03/15/19 15:40
2616193007	GWA-39RZ	Water	03/14/19 17:27	03/15/19 15:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616193001	GWA-41	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616193002	GWA-41R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616193003	GWA-42	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616193004	GWC-44	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616193005	GWC-45	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616193006	GWC-45R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616193007	GWA-39RZ	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Sample: GWA-41		Lab ID: 2616193001		Collected: 03/14/19 09:56		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 20:40	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 20:40	7440-38-2		
Barium	0.028	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 20:40	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 20:40	7440-41-7		
Boron	0.0070J	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 20:40	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 20:40	7440-43-9		
Calcium	22.7J	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 20:46	7440-70-2	D3,M6	
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 20:40	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 20:40	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 20:40	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 20:40	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:40	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 20:40	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 20:40	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 20:40	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 20:40	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 20:40	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 14:32	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	119	mg/L	25.0	10.0	1		03/21/19 17:57			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.6	mg/L	0.25	0.024	1		03/23/19 00:54	16887-00-6		
Fluoride	0.039J	mg/L	0.30	0.029	1		03/23/19 00:54	16984-48-8		
Sulfate	6.2	mg/L	1.0	0.017	1		03/23/19 00:54	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Sample: GWA-41R		Lab ID: 2616193002		Collected: 03/14/19 13:53		Received: 03/15/19 15:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 21:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 21:32	7440-38-2	
Barium	0.040	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 21:32	7440-39-3	
Beryllium	0.000052J	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 21:32	7440-41-7	
Boron	0.015J	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 21:32	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 21:38	7440-43-9	
Calcium	31.9	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 21:38	7440-70-2	
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 21:32	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 21:32	7440-48-4	
Copper	0.0022J	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 21:32	7440-50-8	
Lead	0.00031J	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 21:32	7439-92-1	
Nickel	0.0010J	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 21:32	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 21:32	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 21:32	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 21:32	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 21:32	7440-62-2	
Zinc	0.0021J	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 21:32	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 14:46	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	157	mg/L	25.0	10.0	1		03/21/19 17:58		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	2.9	mg/L	0.25	0.024	1		03/23/19 02:48	16887-00-6	
Fluoride	0.040J	mg/L	0.30	0.029	1		03/23/19 02:48	16984-48-8	
Sulfate	8.9	mg/L	1.0	0.017	1		03/23/19 02:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List
Pace Project No.: 2616193

Sample: GWA-42		Lab ID: 2616193003		Collected: 03/14/19 16:20		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 21:43	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 21:43	7440-38-2		
Barium	0.0066J	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 21:43	7440-39-3		
Beryllium	0.00017J	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 21:43	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 21:43	7440-42-8		
Cadmium	0.00013J	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 21:43	7440-43-9		
Calcium	32.0	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 21:49	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 21:43	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 21:43	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 21:43	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 21:43	7439-92-1		
Nickel	0.0015J	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 21:43	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 21:43	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 21:43	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 21:43	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 21:43	7440-62-2		
Zinc	0.010	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 21:43	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 14:49	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	157	mg/L	25.0	10.0	1		03/21/19 17:58			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	3.6	mg/L	0.25	0.024	1		03/23/19 03:11	16887-00-6		
Fluoride	0.058J	mg/L	0.30	0.029	1		03/23/19 03:11	16984-48-8		
Sulfate	2.2	mg/L	1.0	0.017	1		03/23/19 03:11	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Sample: GWC-44		Lab ID: 2616193004		Collected: 03/14/19 09:45		Received: 03/15/19 15:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 21:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 21:55	7440-38-2	
Barium	0.077	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 21:55	7440-39-3	
Beryllium	0.000078J	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 21:55	7440-41-7	
Boron	0.018J	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 21:55	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 21:55	7440-43-9	
Calcium	17.2J	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 22:01	7440-70-2	D3
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 21:55	7440-47-3	
Cobalt	0.0022J	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 21:55	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 21:55	7440-50-8	
Lead	0.00077J	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 21:55	7439-92-1	
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 21:55	7440-02-0	
Selenium	0.0042J	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 21:55	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 21:55	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 21:55	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 21:55	7440-62-2	
Zinc	0.0039J	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 21:55	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 14:56	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	110	mg/L	25.0	10.0	1		03/21/19 17:58		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Chloride	6.4	mg/L	0.25	0.024	1		03/23/19 03:34	16887-00-6	
Fluoride	0.13J	mg/L	0.30	0.029	1		03/23/19 03:34	16984-48-8	
Sulfate	79.7	mg/L	5.0	0.085	5		03/26/19 10:58	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List
Pace Project No.: 2616193

Sample: GWC-45		Lab ID: 2616193005		Collected: 03/14/19 13:27		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0015J	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 22:06	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 22:06	7440-38-2		
Barium	0.0066J	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 22:06	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 22:06	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 22:06	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 22:06	7440-43-9		
Calcium	0.90	mg/L	0.50	0.014	1	03/20/19 14:34	03/21/19 22:06	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 22:06	7440-47-3		
Cobalt	0.0015J	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 22:06	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 22:06	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 22:06	7439-92-1		
Nickel	0.0010J	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 22:06	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 22:06	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 22:06	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 22:06	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 22:06	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 22:06	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 14:58	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	39.0	mg/L	25.0	10.0	1		03/21/19 17:58			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.3	mg/L	0.25	0.024	1		03/21/19 21:54	16887-00-6	B,M1	
Fluoride	ND	mg/L	0.30	0.029	1		03/21/19 21:54	16984-48-8		
Sulfate	0.72J	mg/L	1.0	0.017	1		03/21/19 21:54	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Sample: GWC-45R		Lab ID: 2616193006		Collected: 03/14/19 11:07		Received: 03/15/19 15:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 22:29	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 22:29	7440-38-2		
Barium	0.024	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 22:29	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 22:29	7440-41-7		
Boron	0.0060J	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 22:29	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 22:29	7440-43-9		
Calcium	37.0	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 22:35	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 22:29	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 22:29	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 22:29	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 22:29	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 22:29	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 22:29	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 22:29	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 22:29	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 22:29	7440-62-2		
Zinc	0.0022J	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 22:29	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 15:01	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	195	mg/L	25.0	10.0	1		03/21/19 17:58			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	4.3	mg/L	0.25	0.024	1		03/21/19 23:03	16887-00-6		
Fluoride	0.039J	mg/L	0.30	0.029	1		03/21/19 23:03	16984-48-8		
Sulfate	4.3	mg/L	1.0	0.017	1		03/21/19 23:03	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Sample: GWA-39RZ Lab ID: 2616193007 Collected: 03/14/19 17:27 Received: 03/15/19 15:40 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	0.014	mg/L	0.0030	0.00078	1	03/20/19 14:34	03/21/19 22:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00057	1	03/20/19 14:34	03/21/19 22:41	7440-38-2	
Barium	0.018	mg/L	0.010	0.00078	1	03/20/19 14:34	03/21/19 22:41	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000050	1	03/20/19 14:34	03/21/19 22:41	7440-41-7	
Boron	0.0059J	mg/L	0.040	0.0039	1	03/20/19 14:34	03/21/19 22:41	7440-42-8	
Cadmium	ND	mg/L	0.0010	0.000093	1	03/20/19 14:34	03/21/19 22:41	7440-43-9	
Calcium	33.0	mg/L	25.0	0.69	50	03/20/19 14:34	03/21/19 22:46	7440-70-2	
Chromium	0.0040J	mg/L	0.010	0.0016	1	03/20/19 14:34	03/21/19 22:41	7440-47-3	
Cobalt	ND	mg/L	0.010	0.00052	1	03/20/19 14:34	03/21/19 22:41	7440-48-4	
Copper	ND	mg/L	0.025	0.0013	1	03/20/19 14:34	03/21/19 22:41	7440-50-8	
Lead	ND	mg/L	0.0050	0.00027	1	03/20/19 14:34	03/21/19 22:41	7439-92-1	
Nickel	0.0017J	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 22:41	7440-02-0	
Selenium	ND	mg/L	0.010	0.0014	1	03/20/19 14:34	03/21/19 22:41	7782-49-2	
Silver	ND	mg/L	0.010	0.00095	1	03/20/19 14:34	03/21/19 22:41	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/20/19 14:34	03/21/19 22:41	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	03/20/19 14:34	03/21/19 22:41	7440-62-2	
Zinc	0.0035J	mg/L	0.010	0.0021	1	03/20/19 14:34	03/21/19 22:41	7440-66-6	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.000036	1	03/20/19 10:01	03/20/19 15:03	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	154	mg/L	25.0	10.0	1		03/21/19 17:58		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Chloride	2.8	mg/L	0.25	0.024	1		03/21/19 23:25	16887-00-6	B
Fluoride	0.066J	mg/L	0.30	0.029	1		03/21/19 23:25	16984-48-8	
Sulfate	9.3	mg/L	1.0	0.017	1		03/21/19 23:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

QC Batch: 24668 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2616193001, 2616193002, 2616193003, 2616193004, 2616193005, 2616193006, 2616193007

METHOD BLANK: 110914 Matrix: Water
 Associated Lab Samples: 2616193001, 2616193002, 2616193003, 2616193004, 2616193005, 2616193006, 2616193007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/20/19 14:27	

LABORATORY CONTROL SAMPLE: 110915

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 110916 110917

Parameter	Units	2616193001 Result	MS		MSD		% Rec	% Rec	% Rec	Limits	Max		Qual
			Spike Conc.	MS Result	MSD Result	MSD Result					RPD	RPD	
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0025	97	101	75-125	4	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616193

QC Batch: 24707 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616193001, 2616193002, 2616193003, 2616193004, 2616193005, 2616193006, 2616193007

METHOD BLANK: 111121 Matrix: Water
Associated Lab Samples: 2616193001, 2616193002, 2616193003, 2616193004, 2616193005, 2616193006, 2616193007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/21/19 19:09	
Arsenic	mg/L	ND	0.0050	0.00057	03/21/19 19:09	
Barium	mg/L	ND	0.010	0.00078	03/21/19 19:09	
Beryllium	mg/L	ND	0.0030	0.000050	03/21/19 19:09	
Boron	mg/L	ND	0.040	0.0039	03/21/19 19:09	
Cadmium	mg/L	ND	0.0010	0.000093	03/21/19 19:09	
Calcium	mg/L	ND	0.50	0.014	03/21/19 19:09	
Chromium	mg/L	ND	0.010	0.0016	03/21/19 19:09	
Cobalt	mg/L	ND	0.010	0.00052	03/21/19 19:09	
Copper	mg/L	ND	0.025	0.0013	03/21/19 19:09	
Lead	mg/L	ND	0.0050	0.00027	03/21/19 19:09	
Nickel	mg/L	ND	0.010	0.00095	03/21/19 19:09	
Selenium	mg/L	ND	0.010	0.0014	03/21/19 19:09	
Silver	mg/L	ND	0.010	0.00095	03/21/19 19:09	
Thallium	mg/L	ND	0.0010	0.00014	03/21/19 19:09	
Vanadium	mg/L	ND	0.010	0.0019	03/21/19 19:09	
Zinc	mg/L	ND	0.010	0.0021	03/21/19 19:09	

LABORATORY CONTROL SAMPLE: 111122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	104	80-120	
Barium	mg/L	0.1	0.10	103	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.10	105	80-120	
Calcium	mg/L	1	1.0	101	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	105	80-120	
Silver	mg/L	0.1	0.11	106	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	
Vanadium	mg/L	0.1	0.11	105	80-120	
Zinc	mg/L	0.1	0.10	103	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

Parameter	Units	2616193001		111123		111124		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	2	20			
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	105	75-125	2	20			
Barium	mg/L	0.028	0.1	0.1	0.13	0.13	101	100	75-125	1	20			
Beryllium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20			
Boron	mg/L	0.0070J	1	1	0.96	0.99	95	98	75-125	3	20			
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	103	75-125	1	20			
Calcium	mg/L	22.7J	1	1	23.3J	23.3J	67	68	75-125	0	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20			
Cobalt	mg/L	ND	0.1	0.1	0.098	0.096	97	96	75-125	1	20			
Copper	mg/L	ND	0.1	0.1	0.10	0.10	101	99	75-125	1	20			
Lead	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20			
Nickel	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20			
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	105	103	75-125	2	20			
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	104	75-125	2	20			
Thallium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20			
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20			
Zinc	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616193

QC Batch: 24797 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616193001, 2616193002, 2616193003, 2616193004

METHOD BLANK: 111639 Matrix: Water
Associated Lab Samples: 2616193001, 2616193002, 2616193003, 2616193004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/22/19 00:57	
Fluoride	mg/L	ND	0.30	0.029	03/22/19 00:57	
Sulfate	mg/L	ND	1.0	0.017	03/22/19 00:57	

LABORATORY CONTROL SAMPLE: 111640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.7	97	90-110	
Fluoride	mg/L	10	10.1	101	90-110	
Sulfate	mg/L	10	10.8	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 111641 111642

Parameter	Units	2616189001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max		
										RPD	RPD	Qual
Chloride	mg/L	2.2	10	10	11.8	11.8	96	96	90-110	0	15	
Fluoride	mg/L	0.045J	10	10	10.2	10.2	102	102	90-110	0	15	
Sulfate	mg/L	2.1	10	10	12.5	12.5	103	104	90-110	0	15	

MATRIX SPIKE SAMPLE: 111643

Parameter	Units	2616189002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.6	10	11.6	101	90-110	
Fluoride	mg/L	ND	10	10.6	106	90-110	
Sulfate	mg/L	0.43J	10	11.3	109	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616193

QC Batch: 24801 Analysis Method: EPA 300.0
 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
 Associated Lab Samples: 2616193005, 2616193006, 2616193007

METHOD BLANK: 111657 Matrix: Water

Associated Lab Samples: 2616193005, 2616193006, 2616193007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.31	0.25	0.024	03/21/19 21:08	
Fluoride	mg/L	ND	0.30	0.029	03/21/19 21:08	
Sulfate	mg/L	ND	1.0	0.017	03/21/19 21:08	

LABORATORY CONTROL SAMPLE: 111658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.7	97	90-110	
Fluoride	mg/L	10	10.1	101	90-110	
Sulfate	mg/L	10	10.7	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 111659 111660

Parameter	Units	2616193005		111660		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Chloride	mg/L	1.3	10	10	10.4	91	-13	90-110		15	M1
Fluoride	mg/L	ND	10	10	9.7	97	100	90-110	3	15	
Sulfate	mg/L	0.72J	10	10	10.7	100	103	90-110	3	15	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells-State List
Pace Project No.: 2616193

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

- | | |
|----|---|
| B | Analyte was detected in the associated method blank. |
| D3 | Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference. |
| M1 | Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery. |
| M6 | Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution. |

REPORT OF LABORATORY ANALYSIS

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

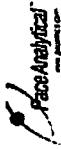
QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells-State List
Pace Project No.: 2616193

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616193001	GWA-41	EPA 3005A	24707	EPA 6020B	24750
2616193002	GWA-41R	EPA 3005A	24707	EPA 6020B	24750
2616193003	GWA-42	EPA 3005A	24707	EPA 6020B	24750
2616193004	GWC-44	EPA 3005A	24707	EPA 6020B	24750
2616193005	GWC-45	EPA 3005A	24707	EPA 6020B	24750
2616193006	GWC-45R	EPA 3005A	24707	EPA 6020B	24750
2616193007	GWA-39RZ	EPA 3005A	24707	EPA 6020B	24750
2616193001	GWA-41	EPA 7470A	24668	EPA 7470A	24709
2616193002	GWA-41R	EPA 7470A	24668	EPA 7470A	24709
2616193003	GWA-42	EPA 7470A	24668	EPA 7470A	24709
2616193004	GWC-44	EPA 7470A	24668	EPA 7470A	24709
2616193005	GWC-45	EPA 7470A	24668	EPA 7470A	24709
2616193006	GWC-45R	EPA 7470A	24668	EPA 7470A	24709
2616193007	GWA-39RZ	EPA 7470A	24668	EPA 7470A	24709
2616193001	GWA-41	SM 2540C	24757		
2616193002	GWA-41R	SM 2540C	24757		
2616193003	GWA-42	SM 2540C	24757		
2616193004	GWC-44	SM 2540C	24757		
2616193005	GWC-45	SM 2540C	24757		
2616193006	GWC-45R	SM 2540C	24757		
2616193007	GWA-39RZ	SM 2540C	24757		
2616193001	GWA-41	EPA 300.0	24797		
2616193002	GWA-41R	EPA 300.0	24797		
2616193003	GWA-42	EPA 300.0	24797		
2616193004	GWC-44	EPA 300.0	24797		
2616193005	GWC-45	EPA 300.0	24801		
2616193006	GWC-45R	EPA 300.0	24801		
2616193007	GWA-39RZ	EPA 300.0	24801		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
 Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Manser Road, Atlanta, GA 30339
 Email: jbraham@southernco.com
 Phone: (404)506-7239
 Requested Due Date:

Section B
 Required Project Information:
 Report To: Joji Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10348606
 Project Name: Plant Bowen Cells - State List
 Project #:

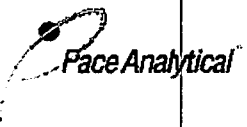
Section C
 Invoice Information:
 Attention: scsvoices@southernco.com
 Company Name:
 Address:
 Pace Querie:
 Pace Project Manager: betsy.mcdaniel@pacestudies.com
 Pace Profile #: 317.5

Page: 1 of 1

ITEM #	MATRIX CODE (see valid codes to left)	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	PRESERVATIVES								ANALYTES TESTED (Y/N)	TDS, CL, F, SO4	Metal 6020	Methyl ERB 747D	Residual Chlorine (Y/N)
		START DATE	END DATE		TIME	TIME		H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other						
1	WTG	3/14/19	0856	G			2	1	1											
2	WTG	3/14/19	1353	G			2	1	1											
3	WTG	3/14/19	1620	G			2	1	1											
4	WTG	3/14/19	0945	G			2	1	1											
5	WTG	3/14/19	1527	G			2	1	1											
6	WTG	3/14/19	1107	G			2	1	1											
7	WTG	3/14/19	1727	G			2	1	1											

ADDITIONAL COMMENTS: Cindy Marks 3/15/19 2:45 M. KATHMAN 3/15/19 1448
 Cells 9+10
 Received on: 0.54
 Temp in C: 7
 Samples (Y/N):
 Cooler (Y/N):
 Sealed (Y/N):
 Custody (Y/N):
 Received on: 3/14/19
 DATE Signed: 3/14/19
 SIGNATURE OF SAMPLER: M. B. Mull
 SIGNATURE OF SAMPLER: Doyet Mull / Veronica Fay

NO# : 2616193
 2616193



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

WO#: **2616193**

PM: BM

Due Date: 03/22/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 83 Type of Ice: Wet Blue None

Cooler Temperature 0.5 Biological Tissue is Frozen: Yes No
Temp should be above freezing to 6°C

Samples on ice, cooling process has begun

Date and Initials of person examining contents: 3/15/19 MR

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

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

March 26, 2019

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

RE: Project: Plant Bowen cells-State List
Pace Project No.: 2616284

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 19, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616284001	GWC-46R	Water	03/18/19 09:48	03/19/19 12:55
2616284002	GWC-49R	Water	03/18/19 14:10	03/19/19 12:55
2616284003	FBL031819	Water	03/18/19 15:30	03/19/19 12:55
2616284004	EQBL031819	Water	03/18/19 15:35	03/19/19 12:55
2616284005	Dup-2	Water	03/18/19 00:00	03/19/19 12:55

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616284001	GWC-46R	EPA 6020B	KLH	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616284002	GWC-49R	EPA 6020B	KLH	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616284003	FBL031819	EPA 6020B	KLH	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616284004	EQBL031819	EPA 6020B	KLH	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616284005	Dup-2	EPA 6020B	KLH	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

Sample: GWC-46R		Lab ID: 2616284001		Collected: 03/18/19 09:48		Received: 03/19/19 12:55		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/21/19 14:00	03/22/19 20:42	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/21/19 14:00	03/22/19 20:42	7440-38-2		
Barium	0.014	mg/L	0.010	0.00078	1	03/21/19 14:00	03/22/19 20:42	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/21/19 14:00	03/22/19 20:42	7440-41-7		
Boron	0.022J	mg/L	0.040	0.0039	1	03/21/19 14:00	03/22/19 20:42	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/21/19 14:00	03/22/19 20:42	7440-43-9		
Calcium	46.1	mg/L	25.0	0.69	50	03/21/19 14:00	03/22/19 20:48	7440-70-2		
Chromium	0.0022J	mg/L	0.010	0.0016	1	03/21/19 14:00	03/22/19 20:42	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/21/19 14:00	03/22/19 20:42	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/21/19 14:00	03/22/19 20:42	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/21/19 14:00	03/22/19 20:42	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 20:42	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/21/19 14:00	03/22/19 20:42	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 20:42	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/21/19 14:00	03/22/19 20:42	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/21/19 14:00	03/22/19 20:42	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/21/19 14:00	03/22/19 20:42	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/25/19 08:29	03/25/19 14:37	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	251	mg/L	25.0	10.0	1		03/22/19 12:54			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.8	mg/L	0.25	0.024	1		03/24/19 20:59	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/24/19 20:59	16984-48-8		
Sulfate	4.4	mg/L	1.0	0.017	1		03/24/19 20:59	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

Sample: GWC-49R		Lab ID: 2616284002		Collected: 03/18/19 14:10		Received: 03/19/19 12:55		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/21/19 14:00	03/22/19 20:54	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/21/19 14:00	03/22/19 20:54	7440-38-2		
Barium	0.015	mg/L	0.010	0.00078	1	03/21/19 14:00	03/22/19 20:54	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/21/19 14:00	03/22/19 20:54	7440-41-7		
Boron	0.0099J	mg/L	0.040	0.0039	1	03/21/19 14:00	03/22/19 20:54	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/21/19 14:00	03/22/19 20:54	7440-43-9		
Calcium	31.0	mg/L	25.0	0.69	50	03/21/19 14:00	03/22/19 21:00	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/21/19 14:00	03/22/19 20:54	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/21/19 14:00	03/22/19 20:54	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/21/19 14:00	03/22/19 20:54	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/21/19 14:00	03/22/19 20:54	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 20:54	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/21/19 14:00	03/22/19 20:54	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 20:54	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/21/19 14:00	03/22/19 20:54	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/21/19 14:00	03/22/19 20:54	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/21/19 14:00	03/22/19 20:54	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/25/19 08:29	03/25/19 15:30	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	170	mg/L	25.0	10.0	1		03/22/19 12:54			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.7	mg/L	0.25	0.024	1		03/24/19 21:22	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/24/19 21:22	16984-48-8		
Sulfate	5.8	mg/L	1.0	0.017	1		03/24/19 21:22	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List
Pace Project No.: 2616284

Sample: FBL031819		Lab ID: 2616284003		Collected: 03/18/19 15:30	Received: 03/19/19 12:55	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/21/19 14:00	03/22/19 21:17	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/21/19 14:00	03/22/19 21:17	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/21/19 14:00	03/22/19 21:17	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/21/19 14:00	03/22/19 21:17	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/21/19 14:00	03/22/19 21:17	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/21/19 14:00	03/22/19 21:17	7440-43-9		
Calcium	ND	mg/L	0.50	0.014	1	03/21/19 14:00	03/22/19 21:17	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/21/19 14:00	03/22/19 21:17	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/21/19 14:00	03/22/19 21:17	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/21/19 14:00	03/22/19 21:17	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/21/19 14:00	03/22/19 21:17	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 21:17	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/21/19 14:00	03/22/19 21:17	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 21:17	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/21/19 14:00	03/22/19 21:17	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/21/19 14:00	03/22/19 21:17	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/21/19 14:00	03/22/19 21:17	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/25/19 08:29	03/25/19 15:32	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	19.0J	mg/L	25.0	10.0	1		03/22/19 12:55			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	ND	mg/L	0.25	0.024	1		03/24/19 22:07	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/24/19 22:07	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/24/19 22:07	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

Sample: EQBL031819		Lab ID: 2616284004		Collected: 03/18/19 15:35		Received: 03/19/19 12:55		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/21/19 14:00	03/22/19 21:28	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/21/19 14:00	03/22/19 21:28	7440-38-2		
Barium	ND	mg/L	0.010	0.00078	1	03/21/19 14:00	03/22/19 21:28	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/21/19 14:00	03/22/19 21:28	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/21/19 14:00	03/22/19 21:28	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/21/19 14:00	03/22/19 21:28	7440-43-9		
Calcium	0.016J	mg/L	0.50	0.014	1	03/21/19 14:00	03/22/19 21:28	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/21/19 14:00	03/22/19 21:28	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/21/19 14:00	03/22/19 21:28	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/21/19 14:00	03/22/19 21:28	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/21/19 14:00	03/22/19 21:28	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 21:28	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/21/19 14:00	03/22/19 21:28	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 21:28	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/21/19 14:00	03/22/19 21:28	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/21/19 14:00	03/22/19 21:28	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/21/19 14:00	03/22/19 21:28	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/25/19 08:29	03/25/19 15:34	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	18.0J	mg/L	25.0	10.0	1		03/22/19 12:55			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	0.057J	mg/L	0.25	0.024	1		03/24/19 22:30	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/24/19 22:30	16984-48-8		
Sulfate	ND	mg/L	1.0	0.017	1		03/24/19 22:30	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

Sample: Dup-2		Lab ID: 2616284005		Collected: 03/18/19 00:00		Received: 03/19/19 12:55		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/21/19 14:00	03/22/19 21:40	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/21/19 14:00	03/22/19 21:40	7440-38-2		
Barium	0.015	mg/L	0.010	0.00078	1	03/21/19 14:00	03/22/19 21:40	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/21/19 14:00	03/22/19 21:40	7440-41-7		
Boron	0.0058J	mg/L	0.040	0.0039	1	03/21/19 14:00	03/22/19 21:40	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/21/19 14:00	03/22/19 21:40	7440-43-9		
Calcium	30.3	mg/L	25.0	0.69	50	03/21/19 14:00	03/22/19 21:45	7440-70-2		
Chromium	ND	mg/L	0.010	0.0016	1	03/21/19 14:00	03/22/19 21:40	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/21/19 14:00	03/22/19 21:40	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/21/19 14:00	03/22/19 21:40	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/21/19 14:00	03/22/19 21:40	7439-92-1		
Nickel	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 21:40	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/21/19 14:00	03/22/19 21:40	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/21/19 14:00	03/22/19 21:40	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/21/19 14:00	03/22/19 21:40	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/21/19 14:00	03/22/19 21:40	7440-62-2		
Zinc	ND	mg/L	0.010	0.0021	1	03/21/19 14:00	03/22/19 21:40	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.000036	1	03/25/19 08:29	03/25/19 15:37	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	157	mg/L	25.0	10.0	1		03/22/19 12:55			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.8	mg/L	0.25	0.024	1		03/24/19 22:52	16887-00-6		
Fluoride	ND	mg/L	0.30	0.029	1		03/24/19 22:52	16984-48-8		
Sulfate	5.9	mg/L	1.0	0.017	1		03/24/19 22:52	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

QC Batch: 24984

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 2616284001, 2616284002, 2616284003, 2616284004, 2616284005

METHOD BLANK: 112756

Matrix: Water

Associated Lab Samples: 2616284001, 2616284002, 2616284003, 2616284004, 2616284005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/25/19 14:33	

LABORATORY CONTROL SAMPLE: 112757

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 112758

112759

Parameter	Units	2616284001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0024	91	94	75-125	3	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616284

QC Batch: 24808 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616284001, 2616284002, 2616284003, 2616284004, 2616284005

METHOD BLANK: 111716 Matrix: Water
Associated Lab Samples: 2616284001, 2616284002, 2616284003, 2616284004, 2616284005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/22/19 20:08	
Arsenic	mg/L	ND	0.0050	0.00057	03/22/19 20:08	
Barium	mg/L	ND	0.010	0.00078	03/22/19 20:08	
Beryllium	mg/L	ND	0.0030	0.000050	03/22/19 20:08	
Boron	mg/L	ND	0.040	0.0039	03/22/19 20:08	
Cadmium	mg/L	ND	0.0010	0.000093	03/22/19 20:08	
Calcium	mg/L	ND	0.50	0.014	03/22/19 20:08	
Chromium	mg/L	ND	0.010	0.0016	03/22/19 20:08	
Cobalt	mg/L	ND	0.010	0.00052	03/22/19 20:08	
Copper	mg/L	ND	0.025	0.0013	03/22/19 20:08	
Lead	mg/L	ND	0.0050	0.00027	03/22/19 20:08	
Nickel	mg/L	ND	0.010	0.00095	03/22/19 20:08	
Selenium	mg/L	ND	0.010	0.0014	03/22/19 20:08	
Silver	mg/L	ND	0.010	0.00095	03/22/19 20:08	
Thallium	mg/L	ND	0.0010	0.00014	03/22/19 20:08	
Vanadium	mg/L	ND	0.010	0.0019	03/22/19 20:08	
Zinc	mg/L	ND	0.010	0.0021	03/22/19 20:08	

LABORATORY CONTROL SAMPLE: 111717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	0.97	97	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Calcium	mg/L	1	1.0	101	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Nickel	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Silver	mg/L	0.1	0.10	105	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	
Vanadium	mg/L	0.1	0.10	100	80-120	
Zinc	mg/L	0.1	0.10	102	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

Parameter	Units	2616369003		111718		111719		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	105	103	75-125	2	20			
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20			
Barium	mg/L	0.015	0.1	0.1	0.11	0.11	98	97	75-125	1	20			
Beryllium	mg/L	0.00011J	0.1	0.1	0.093	0.093	93	93	75-125	0	20			
Boron	mg/L	1.1	1	1	1.9	2.0	81	90	75-125	5	20			
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20			
Calcium	mg/L	60.2	1	1	63.0	63.0	284	286	75-125	0	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.10	0.098	99	98	75-125	1	20			
Cobalt	mg/L	0.0079J	0.1	0.1	0.10	0.10	96	96	75-125	1	20			
Copper	mg/L	ND	0.1	0.1	0.099	0.097	98	96	75-125	2	20			
Lead	mg/L	ND	0.1	0.1	0.095	0.094	95	93	75-125	2	20			
Nickel	mg/L	0.0016J	0.1	0.1	0.099	0.098	97	97	75-125	1	20			
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20			
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	1	20			
Thallium	mg/L	ND	0.1	0.1	0.095	0.094	95	94	75-125	1	20			
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20			
Zinc	mg/L	0.0028J	0.1	0.1	0.10	0.10	99	99	75-125	0	20			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

QC Batch: 24985 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Associated Lab Samples: 2616284001, 2616284002, 2616284003, 2616284004, 2616284005

METHOD BLANK: 112760 Matrix: Water

Associated Lab Samples: 2616284001, 2616284002, 2616284003, 2616284004, 2616284005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	0.024	03/24/19 14:11	
Fluoride	mg/L	ND	0.30	0.029	03/24/19 14:11	
Sulfate	mg/L	ND	1.0	0.017	03/24/19 14:11	

LABORATORY CONTROL SAMPLE: 112761

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10	100	90-110	
Fluoride	mg/L	10	9.9	99	90-110	
Sulfate	mg/L	10	9.4	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 112762 112763

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2616191001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Chloride	mg/L	6.3	10	10	14.8	15.2	85	88	90-110	2	15	M1	
Fluoride	mg/L	ND	10	10	9.0	9.5	90	95	90-110	5	15		
Sulfate	mg/L	22.0	10	10	28.9	29.2	69	72	90-110	1	15	M1	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells-State List

Pace Project No.: 2616284

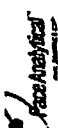
Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616284001	GWC-46R	EPA 3005A	24808	EPA 6020B	24824
2616284002	GWC-49R	EPA 3005A	24808	EPA 6020B	24824
2616284003	FBL031819	EPA 3005A	24808	EPA 6020B	24824
2616284004	EQBL031819	EPA 3005A	24808	EPA 6020B	24824
2616284005	Dup-2	EPA 3005A	24808	EPA 6020B	24824
2616284001	GWC-46R	EPA 7470A	24984	EPA 7470A	25051
2616284002	GWC-49R	EPA 7470A	24984	EPA 7470A	25051
2616284003	FBL031819	EPA 7470A	24984	EPA 7470A	25051
2616284004	EQBL031819	EPA 7470A	24984	EPA 7470A	25051
2616284005	Dup-2	EPA 7470A	24984	EPA 7470A	25051
2616284001	GWC-46R	SM 2540C	24873		
2616284002	GWC-49R	SM 2540C	24873		
2616284003	FBL031819	SM 2540C	24873		
2616284004	EQBL031819	SM 2540C	24873		
2616284005	Dup-2	SM 2540C	24873		
2616284001	GWC-46R	EPA 300.0	24985		
2616284002	GWC-49R	EPA 300.0	24985		
2616284003	FBL031819	EPA 300.0	24985		
2616284004	EQBL031819	EPA 300.0	24985		
2616284005	Dup-2	EPA 300.0	24985		

REPORT OF LABORATORY ANALYSIS

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

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



Section A

Required Client Information:

Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Marler Road
 Atlanta, GA 30339
 Email: jbrahnam@groundzero.com
 Phone: (404)506-7269
 Project Name: Plant Bowen Cells - State List
 Project #: 317.5

Section B

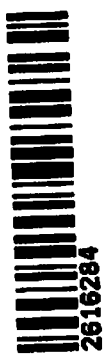
Invoice Information:

Attention: scsimon@groundzero.com
 Company Name: Wood Environmental
 Address: Plant Bowen Cells - State List
 Paco Quota: baisy.medanal@pacolabs.com
 Paco Project Manager: baisy.medanal@pacolabs.com
 Paco Profile #: 317.5

Page: 1 of 1

#	ITEM	MATRIX CODE	MATRIX	COLLECTED		SAMPLE TYPE (G-RAB C-COMP)	MATRIX CODE (see valid codes to left)	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES											Residual Chlorine (Y/N)	Received on (DD)	Temp h c	Custody (Y/N)	Sealed (Y/N)	Cooler (Y/N)	Samples (Y/N)				
				START DATE	END DATE					H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Unpreserved	TDS, Cl, F, SO4	Metals 6020	Plumb 7470											
1		WTG	DW	3/19/19	10:00	WTG		2	1																						
2		WTG	W	3/19/19	14:10	WTG		2	1																						
3		WTG	W	3/19/19	15:30	WTG		2	1																						
4		WTG	W	3/19/19	15:35	WTG		2	1																						
5		WTG	W	3/19/19		WTG		2	1																						
6																															
7																															
8																															
9																															
10																															
11																															
12																															

WO#: 2616284



Signature of Sampler: Robert Mull/Kevin Stokel
 Date Signed: 3/18/19

Signature of Sampler: *[Signature]*

Signature of Sampler: *[Signature]*

Signature of Sampler: *[Signature]*



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Tracking #: _____

WO#: **2616284**

PM: BM Due Date: **03/26/19**
CLIENT: **GAPower-CCR**

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used B3 Type of Ice: Wet Blue None

Cooler Temperature 2.0 Biological Tissue is Frozen: Yes No
Temp should be above freezing to 6°C

Samples on ice, cooling process has begun
Date and Initials of person examining contents: 3/19/19 MR

Comments:

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

Client Notification/ Resolution: _____ Date/Time: _____ Field Data Required? Y / N

Person Contacted: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

April 03, 2019

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

RE: Project: Plant Bowen cells-State List
Pace Project No.: 2616510

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on March 22, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2616510001	GWC-49Z	Water	03/19/19 10:28	03/22/19 14:20
2616510002	GWC-47R	Water	03/19/19 16:30	03/22/19 14:20

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2616510001	GWC-49Z	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3
2616510002	GWC-47R	EPA 6020B	CSW	17
		EPA 7470A	DRB	1
		SM 2540C	RLC	1
		EPA 300.0	RLC	3

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

Sample: GWC-49Z		Lab ID: 2616510001		Collected: 03/19/19 10:28		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0011J	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 20:44	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 20:44	7440-38-2		
Barium	0.0033J	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 20:44	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 20:44	7440-41-7		
Boron	0.0043J	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 20:44	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 20:44	7440-43-9		
Calcium	1.1	mg/L	0.50	0.014	1	03/27/19 13:02	03/28/19 20:44	7440-70-2		
Chromium	0.0017J	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 20:44	7440-47-3		
Cobalt	0.00069J	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 20:44	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 20:44	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 20:44	7439-92-1		
Nickel	0.0047J	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 20:44	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 20:44	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 20:44	7440-22-4		
Thallium	ND	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 20:44	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 20:44	7440-62-2		
Zinc	0.0034J	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 20:44	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.000045J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:32	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	35.0	mg/L	25.0	10.0	1		03/26/19 22:17			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	1.1	mg/L	0.25	0.024	1		04/02/19 15:38	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 15:38	16984-48-8		
Sulfate	2.2	mg/L	1.0	0.017	1		04/02/19 15:38	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

Sample: GWC-47R		Lab ID: 2616510002		Collected: 03/19/19 16:30		Received: 03/22/19 14:20		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00078	1	03/27/19 13:02	03/28/19 20:55	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00057	1	03/27/19 13:02	03/28/19 20:55	7440-38-2		
Barium	0.0088J	mg/L	0.010	0.00078	1	03/27/19 13:02	03/28/19 20:55	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000050	1	03/27/19 13:02	03/28/19 20:55	7440-41-7		
Boron	ND	mg/L	0.040	0.0039	1	03/27/19 13:02	03/28/19 20:55	7440-42-8		
Cadmium	ND	mg/L	0.0010	0.000093	1	03/27/19 13:02	03/28/19 20:55	7440-43-9		
Calcium	28.4	mg/L	25.0	0.69	50	03/27/19 13:02	03/28/19 21:01	7440-70-2		
Chromium	0.018	mg/L	0.010	0.0016	1	03/27/19 13:02	03/28/19 20:55	7440-47-3		
Cobalt	ND	mg/L	0.010	0.00052	1	03/27/19 13:02	03/28/19 20:55	7440-48-4		
Copper	ND	mg/L	0.025	0.0013	1	03/27/19 13:02	03/28/19 20:55	7440-50-8		
Lead	ND	mg/L	0.0050	0.00027	1	03/27/19 13:02	03/28/19 20:55	7439-92-1		
Nickel	0.0042J	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 20:55	7440-02-0		
Selenium	ND	mg/L	0.010	0.0014	1	03/27/19 13:02	03/28/19 20:55	7782-49-2		
Silver	ND	mg/L	0.010	0.00095	1	03/27/19 13:02	03/28/19 20:55	7440-22-4		
Thallium	0.00027J	mg/L	0.0010	0.00014	1	03/27/19 13:02	03/28/19 20:55	7440-28-0		
Vanadium	ND	mg/L	0.010	0.0019	1	03/27/19 13:02	03/28/19 20:55	7440-62-2		
Zinc	0.016	mg/L	0.010	0.0021	1	03/27/19 13:02	03/28/19 20:55	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.000050J	mg/L	0.00050	0.000036	1	03/27/19 15:11	03/28/19 11:34	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	154	mg/L	25.0	10.0	1		03/26/19 22:17			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0								
Chloride	2.6	mg/L	0.25	0.024	1		04/02/19 15:59	16887-00-6	B	
Fluoride	ND	mg/L	0.30	0.029	1		04/02/19 15:59	16984-48-8		
Sulfate	14.8	mg/L	1.0	0.017	1		04/02/19 15:59	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

QC Batch: 25266

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 2616510001, 2616510002

METHOD BLANK: 113834

Matrix: Water

Associated Lab Samples: 2616510001, 2616510002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000036	03/28/19 10:40	

LABORATORY CONTROL SAMPLE: 113835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 113836

113837

Parameter	Units	113836		113837		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2616508001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	0.000039J	0.0025	0.0025	0.0025	0.0025	99	97	75-125	2	20

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

QC Batch: 25235 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2616510001, 2616510002

METHOD BLANK: 113720 Matrix: Water

Associated Lab Samples: 2616510001, 2616510002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	03/28/19 17:23	
Arsenic	mg/L	ND	0.0050	0.00057	03/28/19 17:23	
Barium	mg/L	ND	0.010	0.00078	03/28/19 17:23	
Beryllium	mg/L	ND	0.0030	0.000050	03/28/19 17:23	
Boron	mg/L	ND	0.040	0.0039	03/28/19 17:23	
Cadmium	mg/L	ND	0.0010	0.000093	03/28/19 17:23	
Calcium	mg/L	ND	0.50	0.014	03/28/19 17:23	
Chromium	mg/L	ND	0.010	0.0016	03/28/19 17:23	
Cobalt	mg/L	ND	0.010	0.00052	03/28/19 17:23	
Copper	mg/L	ND	0.025	0.0013	03/28/19 17:23	
Lead	mg/L	ND	0.0050	0.00027	03/28/19 17:23	
Nickel	mg/L	ND	0.010	0.00095	03/28/19 17:23	
Selenium	mg/L	ND	0.010	0.0014	03/28/19 17:23	
Silver	mg/L	ND	0.010	0.00095	03/28/19 17:23	
Thallium	mg/L	ND	0.0010	0.00014	03/28/19 17:23	
Vanadium	mg/L	ND	0.010	0.0019	03/28/19 17:23	
Zinc	mg/L	ND	0.010	0.0021	03/28/19 17:23	

LABORATORY CONTROL SAMPLE: 113721

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Calcium	mg/L	1	1.0	102	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Copper	mg/L	0.1	0.10	103	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	
Silver	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.10	103	80-120	
Zinc	mg/L	0.1	0.10	100	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 113722		113723		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2616508004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Arsenic	mg/L	0.00077J	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Barium	mg/L	0.030	0.1	0.1	0.13	0.13	103	102	75-125	1	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Boron	mg/L	ND	1	1	0.99	0.98	99	98	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Calcium	mg/L	25.2	1	1	26.6	25.8	144	65	75-125	3	20	M6	
Chromium	mg/L	ND	0.1	0.1	0.11	0.11	107	105	75-125	2	20		
Cobalt	mg/L	0.00059J	0.1	0.1	0.11	0.10	105	104	75-125	1	20		
Copper	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Nickel	mg/L	0.00099J	0.1	0.1	0.11	0.10	106	103	75-125	3	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.11	0.11	108	108	75-125	0	20		
Zinc	mg/L	ND	0.1	0.1	0.10	0.11	102	113	75-125	10	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

QC Batch: 25049

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2616510001, 2616510002

LABORATORY CONTROL SAMPLE: 112956

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	84-108	

SAMPLE DUPLICATE: 112957

Parameter	Units	2616510001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	35.0	36.0	3	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells-State List
Pace Project No.: 2616510

QC Batch: 25371 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2616510001, 2616510002

METHOD BLANK: 114378 Matrix: Water
Associated Lab Samples: 2616510001, 2616510002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.31	0.25	0.024	03/29/19 15:25	
Fluoride	mg/L	ND	0.30	0.029	03/29/19 15:25	
Sulfate	mg/L	ND	1.0	0.017	03/29/19 15:25	

LABORATORY CONTROL SAMPLE: 114379

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.3	103	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	10.9	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 114380 114381

Parameter	Units	2616508001		2616508002		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	1.5	10	10	11.7	11.8	103	103	90-110	0	15		
Fluoride	mg/L	ND	10	10	10.2	10.1	102	101	90-110	1	15		
Sulfate	mg/L	1.7	10	10	12.8	12.9	110	112	90-110	1	15	M1	

MATRIX SPIKE SAMPLE: 114382

Parameter	Units	2616508002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.4	10	11.4	100	90-110	
Fluoride	mg/L	ND	10	10.0	100	90-110	
Sulfate	mg/L	2.7	10	13.3	106	90-110	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells-State List

Pace Project No.: 2616510

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2616510001	GWC-49Z	EPA 3005A	25235	EPA 6020B	25272
2616510002	GWC-47R	EPA 3005A	25235	EPA 6020B	25272
2616510001	GWC-49Z	EPA 7470A	25266	EPA 7470A	25309
2616510002	GWC-47R	EPA 7470A	25266	EPA 7470A	25309
2616510001	GWC-49Z	SM 2540C	25049		
2616510002	GWC-47R	SM 2540C	25049		
2616510001	GWC-49Z	EPA 300.0	25371		
2616510002	GWC-47R	EPA 300.0	25371		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A	Section B	Section C
Required Client Information: Company: Georgia Power - Coal Combustion Residuals Address: 2480 Manor Road, Atlanta, GA 30339 Email: jbrabham@southemco.com Phone: (404) 506-7239 Fax:	Required Project Information: Report To: Joy Abraham Copy To: Wood Environmental Purchase Order #: SCS10348606 Project Name: Plant Bowen Cells - State List Project #:	Invoice Information: Attention: scsmroces@southemco.com Company Name: Address: P.O. Box: P.O. Project Manager: P.O. Profile #: 317.5 State: GA

Page: | Of |

ITEM #	MATRIX	CODE	SAMPLE TYPE (Q=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES							ANALYTES	TDS, Cl, F, SO4	Metals 6020	Mercury 7470	Residual Chlorine (Y/N)
				START DATE	END DATE			H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other					
1	Drinking Water	DW	G	3/19/19	1028		2												
2	Waste Water	WW	G	3/19/19	1650		2												

SAMPLE ID
 One Character per box.
 (A-Z, 0-9 /, -)
 Sample IDs must be unique

GWC-49Z
 GWC-47R

NO#: 2616510



DATE	TIME	INITIALS	DATE	TIME	INITIALS	DATE	TIME	INITIALS
3/22/19	1048	[Signature]	3/22/19	1048	[Signature]	3/22/19	1048	[Signature]
3/22/19	1920	[Signature]	3/22/19	1920	[Signature]	3/22/19	1920	[Signature]

FRONT NAME OF SAMPLER: Robert Mull / Kevin Stolenson
 SIGNATURE OF SAMPLER: [Signature]
 DATE SIGNED: 3/19/19



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

WO#: **2616510**

PM: **BM**

Due Date: **03/29/19**

CLIENT: **GAPower-CCR**

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 83 Type of Ice: Wet Blue None

Cooler Temperature 0.2

Biological Tissue is Frozen: Yes No

Samples on ice, cooling process has begun

Temp should be above freezing to 8°C

Comments:

Date and Initials of person examining contents: 3/22/19 AK

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

Client Notification/ Resolution: _____

Person Contacted: _____ Date/Time: _____

Field Data Required? Y / N

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

Product Name: Low-Flow System

Date: 2019-03-20 12:35:56

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 152 ft

Pump placement from TOC 146.80 ft

Well Information:

Well ID GWA-1
Well diameter 2 in
Well Total Depth 151.80 ft
Screen Length 10 ft
Depth to Water 77.35 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 1.15844 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 123.96 in
Total Volume Pumped 19.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:18:21	7439.96	17.54	7.64	305.32	5.61	87.44	1.41	17.81
Last 5	12:22:21	7679.96	17.40	7.64	305.13	5.38	87.51	1.45	17.86
Last 5	12:26:21	7919.96	17.54	7.63	304.33	4.97	87.55	1.47	17.48
Last 5	12:30:21	8159.96	17.71	7.64	304.48	4.73	87.61	1.51	17.45
Last 5	12:34:21	8399.95	17.58	7.64	304.35	4.54	87.68	1.54	16.84
Variance 0			0.14	-0.00	-0.80			0.02	-0.38
Variance 1			0.17	0.00	0.15			0.04	-0.03
Variance 2			-0.13	0.00	-0.14			0.03	-0.61

Notes

Pre-purged 9 liters

Grab Samples

GWA-1
Metals
GWA-1
Inorganics
Dup-1
Metals

Product Name: Low-Flow System

Date: 2019-03-20 14:36:27

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 154 ft

Pump placement from TOC 149.30 ft

Well Information:

Well ID GWA-2
Well diameter 2 in
Well Total Depth 154.30 ft
Screen Length 10 ft
Depth to Water 72.96 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.167367 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.36 in
Total Volume Pumped 3.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:18:50	960.02	16.03	5.99	25.94	0.26	72.97	5.36	40.91
Last 5	14:22:50	1200.02	16.02	5.82	24.08	0.13	72.98	5.42	46.73
Last 5	14:26:50	1440.01	16.02	5.75	23.98	0.29	72.98	5.37	50.90
Last 5	14:30:50	1680.02	15.95	5.73	24.08	0.18	72.97	5.36	54.37
Last 5	14:34:50	1920.01	16.01	5.71	24.01	0.24	72.99	5.37	57.19
Variance 0			0.01	-0.07	-0.10			-0.05	4.17
Variance 1			-0.08	-0.03	0.10			-0.01	3.47
Variance 2			0.06	-0.01	-0.06			0.01	2.82

Notes

Pre-purged .5 liters.

Grab Samples

GWA-2
Metals
GWA-2
Inorganics

Product Name: Low-Flow System

Date: 2019-03-19 12:03:57

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 364455
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 107 ft

Pump placement from TOC 102.40 ft

Well Information:

Well ID GWA-2R
Well diameter 2 in
Well Total Depth 107.40 ft
Screen Length 10 ft
Depth to Water 73.35 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.9575863 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 9.48 in
Total Volume Pumped 2.64 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:44:39	480.03	13.68	6.89	318.28	0.15	73.98	5.60	665.90
Last 5	11:48:39	720.03	14.12	7.06	365.17	0.41	74.04	5.42	679.23
Last 5	11:52:39	960.03	14.44	7.15	365.67	0.27	74.10	5.31	693.29
Last 5	11:56:39	1200.02	14.40	7.18	371.78	0.64	74.13	5.33	704.52
Last 5	12:00:39	1440.02	14.49	7.20	367.04	0.43	74.14	5.56	715.09
Variance 0			0.32	0.10	0.50			-0.11	14.05
Variance 1			-0.04	0.03	6.10			0.03	11.23
Variance 2			0.09	0.02	-4.74			0.22	10.57

Notes

Pre-purged 1 liter.

Grab Samples

GWA-2R
Metals
GWA-2R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-20 16:18:22

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 98 ft

Pump placement from TOC 93.20 ft

Well Information:

Well ID GWA-3
Well diameter 2 in
Well Total Depth 98.20 ft
Screen Length 10 ft
Depth to Water 45.56 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.9174154 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 87.84 in
Total Volume Pumped 2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:56:17	240.07	19.68	5.27	19.99	0.77	52.54	7.04	221.89
Last 5	16:00:17	480.03	19.33	5.25	20.32	0.81	52.60	6.99	253.02
Last 5	16:04:17	720.02	18.40	5.23	20.10	0.73	52.67	6.81	339.57
Last 5	16:08:17	960.02	18.86	5.23	20.00	1.60	52.78	6.73	528.63
Last 5	16:12:17	1200.02	18.52	5.22	20.00	0.86	52.88	6.63	617.20
Variance 0			-0.92	-0.02	-0.22			-0.18	86.55
Variance 1			0.46	0.01	-0.10			-0.08	189.06
Variance 2			-0.34	-0.01	-0.00			-0.10	88.57

Notes

Pre-purged 5 liters

Grab Samples

GWA-3
Metals
GWA-3
Inorganics

Product Name: Low-Flow System

Date: 2019-03-20 12:40:12

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 121 ft

Pump placement from TOC 115 ft

Well Information:

Well ID GWA-4RZ
Well diameter 2 in
Well Total Depth 120.07 ft
Screen Length 10 ft
Depth to Water 78.83 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 1.025074 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 375.96 in
Total Volume Pumped 22.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:25:13	11700.94	15.15	7.28	421.01	0.52	108.08	0.76	-24.83
Last 5	12:28:13	11880.93	15.35	7.29	420.82	0.47	108.63	0.79	-24.64
Last 5	12:31:13	12060.94	15.62	7.28	421.09	0.41	109.14	0.81	-24.47
Last 5	12:34:13	12240.93	15.93	7.28	420.66	0.35	109.62	0.83	-24.74
Last 5	12:37:13	12420.93	16.19	7.28	419.27	0.34	110.16	0.86	-24.48
Variance 0			0.27	-0.01	0.26			0.02	0.17
Variance 1			0.32	0.00	-0.43			0.03	-0.27
Variance 2			0.26	-0.00	-1.39			0.02	0.26

Notes

Prepurged 0.2L
Performing complete evacuation and will sample in 24 hours

Grab Samples

Log: Plant Bowen- 1 of 1
 Report Created: 2019-03-21 11:57:39
 Site: Plant Bowen
 GPS: GWA-4RZ
 Log Created: 2019-03-21 11:55:53

Number Readings: 11

Battery Type: SmarTROLL₂_c Battery Pack

Battery SN: 450876

Device Type: SmarTROLL₂_c MP

Device SN:

553835

Created	Baro (mbar)	Temp (C)	RDO (mg/L)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (̑S/cm)	Sp Cond (̑S/cm)	Salinity (psu)	Resist (Ohm-cm)	Density (g/cm ³)	TDS (ppt)	Depth (ft)	Pressure (psi)	Air Temp (C)
3/21/2019 11:55	989	16.16	4.32	45	7.23	38.8	355.2	427.3	0.2	2816	0.999	0	-0.15	-0.044	15
3/21/2019 11:55	989	16.06	4.32	45	7.18	35.7	355.2	427.3	0.2	2816	0.999	0	-0.1	-0.044	15
3/21/2019 11:56	989	15.98	3.77	39.3	7.15	33.6	355.5	429.1	0.2	2813	0.999	0	-0.15	-0.066	15
3/21/2019 11:56	988.9	15.88	3.45	35.8	7.15	30.1	356.4	431.2	0.2	2806	0.999	0	-0.07	-0.031	15
3/21/2019 11:56	989	15.75	3.19	33.1	7.16	26.2	357.4	433.2	0.2	2798	0.999	0	-0.1	-0.044	15
3/21/2019 11:56	989	15.66	3.03	31.4	7.16	23.7	357.3	434.4	0.2	2799	0.999	0	-0.09	-0.041	15.1
3/21/2019 11:56	989	15.57	2.91	30	7.17	19.6	358	436.3	0.2	2793	0.999	0	-0.05	-0.023	15.1
3/21/2019 11:56	989	15.48	2.81	29	7.17	15.7	358.8	438.1	0.2	2787	0.999	0	-0.12	-0.053	15.1
3/21/2019 11:57	989	15.44	2.73	28.1	7.17	13	358.9	438.6	0.2	2786	0.999	0	-0.12	-0.05	15.2
3/21/2019 11:57	989.1	15.37	2.68	27.5	7.18	10.6	359.3	440	0.2	2783	0.999	0	-0.16	-0.071	15.2
3/21/2019 11:57	989	15.3	2.64	27.1	7.18	7.2	359.7	441	0.2	2780	0.999	0	-0.12	-0.052	15.2

Product Name: Low-Flow System

Date: 2019-03-20 16:04:47

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 115 ft

Pump placement from TOC 109 ft

Well Information:

Well ID GWC-5
Well diameter 2 in
Well Total Depth 113.75 ft
Screen Length 10 ft
Depth to Water 67.51 ft

Pumping Information:

Final Pumping Rate 145 mL/min
Total System Volume 0.9982936 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 82.92 in
Total Volume Pumped 15.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	15:46:02	5759.98	16.02	6.41	41.29	2.88	73.86	7.82	70.90
Last 5	15:50:02	5999.98	15.94	6.40	40.48	2.92	74.06	7.83	71.36
Last 5	15:54:02	6239.98	15.83	6.35	40.06	2.80	74.16	7.96	73.93
Last 5	15:58:02	6479.98	15.86	6.34	38.98	2.90	74.30	8.03	71.38
Last 5	16:02:02	6719.98	16.01	6.29	38.24	2.83	74.42	8.01	72.12
Variance 0			-0.12	-0.05	-0.42			0.13	2.57
Variance 1			0.03	-0.01	-1.08			0.06	-2.56
Variance 2			0.15	-0.04	-0.74			-0.02	0.74

Notes

Prepurged 2L

Grab Samples

GWC-5
Metals
GWC-5
Inorganics

Product Name: Low-Flow System

Date: 2019-03-21 11:02:02

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 113 ft

Pump placement from TOC 106.3 ft

Well Information:

Well ID GWC-6
Well diameter 2 in
Well Total Depth 111.37 ft
Screen Length 10 ft
Depth to Water 62.08 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.9893668 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 2.52 in
Total Volume Pumped 3.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:44:03	960.02	14.98	7.05	133.96	0.43	62.28	7.38	20.16
Last 5	10:48:03	1200.02	15.08	7.10	136.07	0.50	62.28	7.44	19.79
Last 5	10:52:03	1440.02	15.29	7.14	137.63	0.54	62.29	7.48	19.98
Last 5	10:56:03	1680.02	15.39	7.19	138.37	0.91	62.29	7.49	19.00
Last 5	11:00:03	1920.01	15.66	7.21	138.96	1.31	62.29	7.51	19.55
Variance 0			0.21	0.03	1.56			0.04	0.19
Variance 1			0.10	0.05	0.74			0.01	-0.98
Variance 2			0.27	0.03	0.59			0.03	0.55

Notes

Prepurged 0.3L

Grab Samples

GWC-6
Metals
GWC-6
Inorganics

Product Name: Low-Flow System

Date: 2019-03-21 09:52:14

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 114 ft

Pump placement from TOC 108 ft

Well Information:

Well ID GWC-6RZ
Well diameter 2 in
Well Total Depth 112.80 ft
Screen Length 10 ft
Depth to Water 66.33 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.9938302 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.36 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	09:34:17	960.02	13.99	6.70	100.35	6.86	66.36	7.33	7.08
Last 5	09:38:17	1200.02	14.00	6.72	99.24	5.23	66.36	7.47	11.03
Last 5	09:42:17	1440.02	14.04	6.77	98.45	4.22	66.36	7.55	12.14
Last 5	09:46:17	1680.02	14.06	6.78	97.79	3.10	66.36	7.65	15.13
Last 5	09:50:17	1920.01	14.07	6.82	97.06	2.87	66.36	7.72	17.11
Variance 0			0.03	0.05	-0.79			0.09	1.11
Variance 1			0.02	0.01	-0.67			0.10	2.99
Variance 2			0.01	0.04	-0.73			0.07	1.97

Notes

Wasps in well casing. Prepurged 0.4L.

Grab Samples

GWC-6RZ

Metals

GWC-6RZ

Inorganics

Product Name: Low-Flow System

Date: 2019-03-21 13:30:34

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 118 ft

Pump placement from TOC 112 ft

Well Information:

Well ID GWC-7Z
Well diameter 2 in
Well Total Depth 117.00 ft
Screen Length 10 ft
Depth to Water 47.20 ft

Pumping Information:

Final Pumping Rate 105 mL/min
Total System Volume 1.011684 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 1.44 in
Total Volume Pumped 5.1 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	13:12:01	1920.01	15.17	7.20	231.46	0.92	47.44	1.89	-91.75
Last 5	13:16:01	2160.01	15.04	7.23	230.72	0.88	47.43	1.99	-90.70
Last 5	13:20:03	2402.01	15.15	7.26	230.92	0.77	47.44	2.10	-90.14
Last 5	13:24:03	2642.01	15.04	7.28	230.85	0.78	47.45	2.20	-89.26
Last 5	13:28:03	2882.01	14.95	7.30	230.65	0.77	47.45	2.27	-87.24
Variance 0			0.11	0.03	0.20			0.11	0.55
Variance 1			-0.12	0.02	-0.07			0.10	0.89
Variance 2			-0.08	0.02	-0.20			0.08	2.02

Notes

Prepurged 0.3L

Grab Samples

GWC-7Z
Metals
GWC-7Z
Inorganics

Product Name: Low-Flow System

Date: 2019-03-24 15:04:40

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 112.8 ft

Pump placement from TOC 106.8 ft

Well Information:

Well ID GWC-8RR
Well diameter 2 in
Well Total Depth 111.83 ft
Screen Length 10 ft
Depth to Water 38.84 ft

Pumping Information:

Final Pumping Rate 165 mL/min
Total System Volume 0.9884741 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 7.8 in
Total Volume Pumped 35.1 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:46:13	11290.83	16.36	8.14	183.64	1.27	39.49	8.14	24.56
Last 5	14:50:13	11530.83	16.16	8.14	183.31	1.26	39.49	8.14	24.57
Last 5	14:54:13	11770.82	16.21	8.15	183.01	1.29	39.50	8.15	24.24
Last 5	14:58:13	12010.82	16.38	8.15	183.10	1.24	39.49	8.16	24.48
Last 5	15:02:13	12250.81	16.24	8.15	182.93	1.11	39.49	8.15	24.42
Variance 0			0.05	0.00	-0.30			0.01	-0.33
Variance 1			0.17	-0.00	0.09			0.01	0.23
Variance 2			-0.13	0.00	-0.18			-0.01	-0.06

Notes

Prepurged 2L

Grab Samples

GWC-8RR

Metals

GWC-8RR

Inorganics

Product Name: Low-Flow System

Date: 2019-03-26 13:40:09

Project Information:

Operator Name Audrey Crafton
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Reclaimer
Tubing Type LDPE
Tubing Diameter .5 in
Tubing Length 113 ft

Pump placement from TOC 106.83 ft

Well Information:

Well ID GWC-8RR
Well diameter 2 in
Well Total Depth 111.83 ft
Screen Length 10 ft
Depth to Water 38.63 ft

Pumping Information:

Final Pumping Rate 500 mL/min
Total System Volume 4.848035 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 5.76 in
Total Volume Pumped 17.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:17:01	960.02	15.16	7.90	179.46	12.00	39.25	8.69	83.07
Last 5	13:21:04	1203.02	15.21	7.99	179.39	12.98	39.25	8.59	70.23
Last 5	13:29:04	1683.01	15.17	8.05	179.48	10.20	39.22	8.51	58.24
Last 5	13:33:04	1923.01	15.21	8.07	179.23	9.89	39.00	8.48	54.70
Last 5	13:37:04	2163.01	15.21	8.10	179.37	8.54	39.11	8.44	52.57
Variance 0			-0.04	0.06	0.09			-0.09	-11.99
Variance 1			0.04	0.02	-0.26			-0.03	-3.54
Variance 2			0.00	0.03	0.15			-0.04	-2.13

Notes

Prepurged 85L. Well was redeveloped due to high pH levels

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-27 12:55:10

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 113 ft

Pump placement from TOC 106.83 ft

Well Information:

Well ID GWC-8RR
Well diameter 2 in
Well Total Depth 111.83 ft
Screen Length 10 ft
Depth to Water 38.84 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.9893668 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 1.32 in
Total Volume Pumped 25.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:30:33	10820.96	15.48	8.04	177.05	7.45	38.96	8.30	76.30
Last 5	12:34:33	11060.96	15.45	8.07	176.72	6.77	38.95	8.27	75.50
Last 5	12:38:33	11300.96	15.39	8.07	177.42	4.82	38.95	8.31	75.31
Last 5	12:42:34	11541.95	15.30	8.08	177.32	4.60	38.95	8.34	75.28
Last 5	12:46:34	11781.95	15.12	8.07	177.83	4.70	38.95	8.37	75.69
Variance 0			-0.06	0.01	0.71			0.04	-0.19
Variance 1			-0.09	0.00	-0.10			0.03	-0.04
Variance 2			-0.18	-0.00	0.51			0.03	0.42

Notes Prepurged 0.75 L

Grab Samples

GWC-8RR
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-05-06 14:31:40

Project Information:

Operator Name Audrey Crafton
Company Name Resolute Env
Project Name Resample May 2019
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 642531
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 77 ft

Pump placement from TOC 71.4 ft

Well Information:

Well ID GWC-8Z
Well diameter 2 in
Well Total Depth 76.4 ft
Screen Length 10 ft
Depth to Water 43.02 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.8286836 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 5.88 in
Total Volume Pumped 28.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:11:29	14639.85	17.49	7.99	149.39	8.50	43.47	7.56	26.72
Last 5	14:15:29	14879.84	17.47	7.98	148.48	8.13	43.46	7.57	26.98
Last 5	14:19:29	15119.84	17.33	7.99	149.52	9.42	43.47	7.62	26.89
Last 5	14:23:29	15359.84	17.44	7.96	149.60	8.82	43.47	7.52	27.07
Last 5	14:27:29	15599.83	17.37	7.98	149.18	8.92	43.51	7.57	26.90
Variance 0			-0.14	0.01	1.04			0.05	-0.10
Variance 1			0.12	-0.02	0.08			-0.11	0.18
Variance 2			-0.07	0.02	-0.43			0.05	-0.17

Notes

Prepurged 2L

Turbidity would not drop below 5 NTU after trolling for over 4 hours. It was below 10 NTU though and PR from GA Power said go ahead and sample

Grab Samples

GWC-8Z

Metals, dissolved metals, Inorganics

Product Name: Low-Flow System

Date: 2019-03-21 16:48:37

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 79 ft

Pump placement from TOC 72 ft

Well Information:

Well ID GWC-9
Well diameter 2 in
Well Total Depth 77.16 ft
Screen Length 10 ft
Depth to Water 34.14 ft

Pumping Information:

Final Pumping Rate 185 mL/min
Total System Volume 0.8376105 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 25.9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	16:30:12	6969.98	15.66	5.18	47.51	0.25	34.14	6.21	105.57
Last 5	16:34:12	7209.97	15.68	5.25	49.96	0.23	34.14	6.19	101.68
Last 5	16:38:12	7449.97	15.61	5.30	52.78	0.27	34.14	6.08	98.04
Last 5	16:42:12	7689.97	15.61	5.36	55.11	0.21	34.14	6.11	94.55
Last 5	16:46:12	7929.96	15.67	5.33	53.96	0.24	34.14	6.06	94.49
Variance 0			-0.07	0.05	2.82			-0.11	-3.64
Variance 1			0.00	0.06	2.32			0.03	-3.49
Variance 2			0.06	-0.03	-1.14			-0.05	-0.06

Notes

Prepurged 0.5L

Grab Samples

GWC-9
Metals
GWC-9
Radium
GWC-9
Inorganics

Product Name: Low-Flow System

Date: 2019-03-22 11:36:27

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 72.8 ft

Pump placement from TOC 66.8 ft

Well Information:

Well ID GWC-10
Well diameter 2 in
Well Total Depth 71.81 ft
Screen Length 10 ft
Depth to Water 27.13 ft

Pumping Information:

Final Pumping Rate 165 mL/min
Total System Volume 0.8099372 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 13.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:18:03	3600.00	14.76	6.12	150.82	1.43	27.15	7.48	60.87
Last 5	11:22:07	3844.00	14.89	6.14	154.86	1.66	27.14	7.48	60.39
Last 5	11:26:09	4086.00	14.89	6.16	157.05	1.44	27.15	7.55	59.65
Last 5	11:30:09	4326.00	14.94	6.19	159.06	1.29	27.15	7.59	59.10
Last 5	11:34:09	4565.99	15.12	6.23	161.22	1.38	27.15	7.59	57.83
Variance 0			-0.01	0.02	2.19			0.07	-0.73
Variance 1			0.06	0.03	2.01			0.03	-0.56
Variance 2			0.18	0.03	2.17			0.01	-1.27

Notes

Prepurged 0.4L

Grab Samples

GWC-10
Metals
GWC-10
Inorganics

Product Name: Low-Flow System

Date: 2019-03-22 09:53:57

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 101 ft

Pump placement from TOC 95.2 ft

Well Information:

Well ID GWC-10R
Well diameter 2 in
Well Total Depth 100.20 ft
Screen Length 10 ft
Depth to Water 27.18 ft

Pumping Information:

Final Pumping Rate 160 mL/min
Total System Volume 0.9358057 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 7.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	09:36:02	1920.01	13.90	7.22	269.00	0.29	27.18	6.49	-18.76
Last 5	09:40:02	2160.01	13.81	7.26	267.94	0.35	27.18	6.82	-17.04
Last 5	09:44:02	2400.01	13.87	7.28	267.12	0.52	27.18	7.00	-15.06
Last 5	09:48:02	2640.01	13.94	7.31	265.93	0.28	27.18	7.17	-13.25
Last 5	09:52:02	2880.01	14.04	7.34	264.79	0.41	27.18	7.33	-12.14
Variance 0			0.06	0.03	-0.82			0.19	1.98
Variance 1			0.07	0.03	-1.19			0.17	1.82
Variance 2			0.09	0.03	-1.14			0.16	1.11

Notes

Prepurged 0.5L

Grab Samples

GWC-10R
Metals

GWC-10R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-23 16:11:22

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 48.3 ft

Pump placement from TOC 42.3 ft

Well Information:

Well ID GWC-11
Well diameter 2 in
Well Total Depth 47.35 ft
Screen Length 10 ft
Depth to Water 17.33 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.7005834 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 2.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:57:47	540.02	18.34	6.33	91.42	2.60	17.34	3.77	30.21
Last 5	16:00:47	720.02	18.17	6.29	89.22	3.03	17.34	3.80	32.05
Last 5	16:03:47	900.02	18.08	6.28	90.77	1.57	17.35	3.85	32.52
Last 5	16:06:47	1080.02	18.11	6.27	91.07	1.44	17.35	3.83	33.68
Last 5	16:09:47	1260.01	18.20	6.27	92.72	1.62	17.35	3.83	34.20
Variance 0			-0.09	-0.01	1.55			0.05	0.47
Variance 1			0.03	-0.01	0.30			-0.01	1.16
Variance 2			0.10	0.00	1.66			0.00	0.52

Notes

Prepurged 0.2L

Grab Samples

GWC-11
Metals
GWC-11
Inorganics

Product Name: Low-Flow System

Date: 2019-03-23 16:57:25

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 84.2 ft

Pump placement from TOC 78.2 ft

Well Information:

Well ID GWC-11R
Well diameter 2 in
Well Total Depth 83.20 ft
Screen Length 10 ft
Depth to Water 17.23 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.8608202 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.36 in
Total Volume Pumped 2.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:43:06	540.02	17.99	7.36	259.39	2.89	17.26	5.19	-35.99
Last 5	16:46:06	720.02	17.84	7.43	261.11	2.46	17.26	5.25	-29.37
Last 5	16:49:06	900.02	17.81	7.47	264.77	1.98	17.26	5.45	-23.82
Last 5	16:52:06	1080.02	17.72	7.53	266.59	1.82	17.26	5.62	-19.92
Last 5	16:55:06	1260.02	17.49	7.56	268.27	1.17	17.26	5.77	-15.83
Variance 0			-0.03	0.04	3.67			0.20	5.55
Variance 1			-0.09	0.05	1.82			0.18	3.90
Variance 2			-0.23	0.03	1.67			0.15	4.08

Notes

Prepurged 0.3L

Grab Samples

GWC-11R
Metals

GWC-11R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-23 15:21:04

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 55 ft

Pump placement from TOC 49 ft

Well Information:

Well ID GWC-12
Well diameter 2 in
Well Total Depth 54.03 ft
Screen Length 10 ft
Depth to Water 16.45 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.7304883 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 3.6 in
Total Volume Pumped 22.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:03:02	10559.84	19.26	6.33	110.87	5.44	16.76	0.22	-50.16
Last 5	15:07:02	10799.84	19.42	6.33	110.75	5.68	16.76	0.23	-50.05
Last 5	15:11:02	11039.82	19.21	6.32	110.38	5.33	16.75	0.22	-49.32
Last 5	15:15:02	11279.82	19.32	6.33	110.33	5.41	16.77	0.23	-50.24
Last 5	15:19:02	11519.82	19.44	6.34	110.19	5.09	16.75	0.22	-50.68
Variance 0			-0.21	-0.00	-0.37			-0.00	0.73
Variance 1			0.11	0.01	-0.05			0.00	-0.91
Variance 2			0.12	0.01	-0.14			-0.01	-0.44

Notes

Prepurged 0.5L

Grab Samples

GWC-12
Metals
GWC-12
Inorganics

Product Name: Low-Flow System

Date: 2019-03-23 11:31:03

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 86 ft

Pump placement from TOC 79.80 ft

Well Information:

Well ID GWC-13
Well diameter 2 in
Well Total Depth 84.80 ft
Screen Length 10 ft
Depth to Water 25.64 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.8688543 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.72 in
Total Volume Pumped 18.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:13:05	8160.90	15.84	7.26	237.54	5.24	25.69	4.96	30.02
Last 5	11:17:05	8400.90	16.33	7.26	235.41	5.08	25.70	4.91	30.28
Last 5	11:21:05	8640.90	16.74	7.27	233.40	4.96	25.70	4.85	29.39
Last 5	11:25:05	8880.89	16.96	7.27	231.80	4.88	25.70	4.85	29.52
Last 5	11:29:05	9120.88	17.05	7.27	230.03	4.84	25.70	4.79	29.36
Variance 0			0.40	0.02	-2.02			-0.06	-0.89
Variance 1			0.23	-0.00	-1.60			0.00	0.13
Variance 2			0.08	0.00	-1.77			-0.05	-0.16

Notes

Prepurged 0.2L

Grab Samples

GWC-13
Metals
GWC-13
Inorganics

Product Name: Low-Flow System

Date: 2019-03-21 12:55:18

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 106 ft

Pump placement from TOC 101.0 ft

Well Information:

Well ID GWC-13RZ
Well diameter 2 in
Well Total Depth 106.00 ft
Screen Length 10 ft
Depth to Water 51.46 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.9531228 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 518.04 in
Total Volume Pumped 27.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:32:26	10801.91	15.75	7.48	435.64	0.93	92.29	3.04	61.20
Last 5	12:36:26	11041.91	15.62	7.48	436.05	0.88	93.07	3.16	61.01
Last 5	12:40:26	11281.90	15.66	7.49	436.84	1.12	93.59	3.25	60.86
Last 5	12:44:26	11521.90	16.20	7.49	435.00	0.91	94.41	3.30	60.40
Last 5	12:48:26	11761.90	16.74	7.49	436.74	0.86	94.63	3.36	59.86
Variance 0			0.04	0.00	0.79			0.09	-0.15
Variance 1			0.54	0.00	-1.84			0.04	-0.45
Variance 2			0.54	0.01	1.74			0.07	-0.54

Notes

Pre-purged 3.5 liters. Water level did not stabilize above the screen. Complete evacuation method initiated. Pumping discontinued at 95.0ft. Sampled to be collected 3/22.

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-22 15:09:23

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 77.3 ft

Pump placement from TOC 71.3 ft

Well Information:

Well ID GWC-14Z
Well diameter 2 in
Well Total Depth 76.34 ft
Screen Length 10 ft
Depth to Water 25.11 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.8300226 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 30.24 in
Total Volume Pumped 5.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:50:43	1921.02	18.24	6.14	169.26	0.14	27.51	4.45	59.36
Last 5	14:54:43	2161.02	18.30	6.18	173.20	0.17	27.53	4.46	57.61
Last 5	14:58:43	2401.02	18.24	6.22	176.82	0.08	27.60	4.53	55.73
Last 5	15:02:43	2641.02	18.30	6.24	179.09	0.12	27.62	4.53	55.04
Last 5	15:06:43	2881.01	18.21	6.27	180.29	0.24	27.63	4.56	53.79
Variance 0			-0.06	0.04	3.62			0.07	-1.88
Variance 1			0.06	0.02	2.26			0.00	-0.69
Variance 2			-0.09	0.03	1.20			0.03	-1.25

Notes

Prepurged 0.5L

Grab Samples

GWC-14Z
Metals

GWC-14Z
Inorganics

Product Name: Low-Flow System

Date: 2019-03-22 16:18:18

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 76 ft

Pump placement from TOC 70 ft

Well Information:

Well ID GWC-15Z
Well diameter 2 in
Well Total Depth 74.90 ft
Screen Length 10 ft
Depth to Water 33.62 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.8242202 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 5.88 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:04:09	900.03	17.55	7.41	230.95	0.09	34.11	6.04	29.91
Last 5	16:07:09	1080.02	17.44	7.47	230.79	0.10	34.11	5.98	27.96
Last 5	16:10:09	1260.02	17.36	7.49	231.87	0.34	34.12	5.98	27.44
Last 5	16:13:09	1440.02	17.40	7.52	232.02	0.66	34.11	5.93	26.26
Last 5	16:16:09	1620.02	17.36	7.55	231.98	0.76	34.11	5.86	25.43
Variance 0			-0.08	0.02	1.08			0.00	-0.52
Variance 1			0.04	0.04	0.16			-0.06	-1.19
Variance 2			-0.04	0.03	-0.04			-0.06	-0.82

Notes

Prepurged 0.2L

Grab Samples

GWC-15Z
Metals

GWC-15Z
Inorganics

Product Name: Low-Flow System

Date: 2019-03-25 12:24:46

Project Information:

Operator Name Audrey Crafton
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 98 ft

Pump placement from TOC 92.5 ft

Well Information:

Well ID GWC-15R
Well diameter 2 in
Well Total Depth 97.5 ft
Screen Length 10 ft
Depth to Water 34.03 ft

Pumping Information:

Final Pumping Rate 115 mL/min
Total System Volume 0.9224155 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 3.36 in
Total Volume Pumped 22.59 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:05:52	10827.86	16.54	7.64	339.42	5.51	34.30	3.02	13.14
Last 5	12:09:52	11067.86	16.54	7.63	340.56	5.63	34.31	3.01	13.18
Last 5	12:13:52	11307.86	16.61	7.63	340.76	4.87	34.31	3.06	12.85
Last 5	12:17:52	11547.85	16.66	7.64	339.44	4.82	34.30	2.99	12.57
Last 5	12:21:52	11787.84	16.74	7.64	341.03	4.72	34.31	2.92	12.41
Variance 0			0.07	0.00	0.20			0.05	-0.33
Variance 1			0.05	0.01	-1.31			-0.07	-0.28
Variance 2			0.07	-0.00	1.59			-0.07	-0.16

Notes

Grab Samples

GWC-15R
Metals, inorganics

Product Name: Low-Flow System

Date: 2019-03-11 11:46:07

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 100 ft

Pump placement from TOC 93.10 ft

Well Information:

Well ID GWC-16R
Well diameter 2 in
Well Total Depth 98.12 ft
Screen Length 10 ft
Depth to Water 77.10 ft

Pumping Information:

Final Pumping Rate 135 mL/min
Total System Volume 0.9313423 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 27.12 in
Total Volume Pumped 4.9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:28:03	1201.02	15.40	7.21	576.27	0.41	78.87	0.67	29.87
Last 5	11:32:03	1441.02	15.40	7.20	576.40	0.44	79.04	0.56	28.20
Last 5	11:36:03	1681.02	15.42	7.21	577.10	0.46	79.16	0.46	26.43
Last 5	11:40:03	1921.01	15.48	7.21	578.02	0.42	79.25	0.42	25.47
Last 5	11:44:03	2161.01	15.48	7.21	578.64	0.41	79.36	0.42	24.34
Variance 0			0.02	0.01	0.71			-0.09	-1.76
Variance 1			0.06	-0.00	0.92			-0.05	-0.96
Variance 2			0.00	0.00	0.62			0.01	-1.13

Notes

Prepurged 0.5L

Grab Samples

GWC-16R
Inorganics
GWC-16R
Metals

Product Name: Low-Flow System

Date: 2019-03-11 14:46:40

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 94 ft

Pump placement from TOC 88 ft

Well Information:

Well ID GWC-17R
Well diameter 2 in
Well Total Depth 92.93 ft
Screen Length 10 ft
Depth to Water 77.03 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.9045618 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 72.36 in
Total Volume Pumped 4.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:32:02	1620.01	15.75	7.27	582.90	0.15	81.43	6.85	24.30
Last 5	14:35:02	1800.01	15.67	7.27	582.56	0.14	81.92	6.83	24.02
Last 5	14:38:02	1980.01	15.67	7.27	581.95	0.16	82.29	6.83	23.77
Last 5	14:41:02	2160.01	15.63	7.27	582.37	0.15	82.68	6.86	23.57
Last 5	14:44:02	2340.01	15.58	7.28	581.62	0.17	83.06	6.88	23.65
Variance 0			0.00	0.01	-0.61			-0.00	-0.25
Variance 1			-0.03	-0.01	0.42			0.04	-0.21
Variance 2			-0.06	0.01	-0.75			0.01	0.09

Notes

Prepurged 0.2L. Water level dropped below top of screen and performing complete evacuation

Grab Samples

Log: Plant Bowen- 1 of 1
 Report Created: 2019-03-12 15:27:16
 Site: Plant Bowen
 GPS: GWC-17R
 Log Created: 2019-03-12 15:24:39

Number Readings: 9

Battery Type: SmarTROLL₄,c Battery Pack

Battery SN: 450876

Device Type: SmarTROLL₄,c MP

Device SN: 553835

Created	Baro (mbar)	Temp (C)	RDO (mg/L)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (ÅµS/cm)	Sp Cond (ÅµS/cm)	Salinity (psu)	Resist (Ohm-cm)	Density (g/cm ³)	TDS (ppt)	Depth (ft)	Pressure (psi)	Air Temp (C)
3/12/2019 15:24	998.7	28.38	5.4	70.6	7.22	71.7	576.6	541.6	0.3	1734	0.996	0	-0.32	-0.139	32
3/12/2019 15:24	998.7	27.29	5.4	70.6	7.18	72.2	576.6	541.6	0.3	1734	0.996	0	-0.32	-0.139	32
3/12/2019 15:24	998.7	26.38	5.88	74.6	7.14	72	582.6	564.3	0.3	1717	0.997	0	-0.33	-0.142	31.9
3/12/2019 15:25	998.7	25.54	5.75	71.7	7.13	70.4	567.2	559.5	0.3	1763	0.997	0	-0.34	-0.149	31.9
3/12/2019 15:25	998.8	24.65	5.69	70.5	7.16	66.7	560.3	556.7	0.3	1785	0.997	0	-0.32	-0.138	31.8
3/12/2019 15:25	998.7	23.92	6	72.7	7.16	66.2	564.1	573.5	0.3	1773	0.997	0	-0.33	-0.145	31.8
3/12/2019 15:25	998.7	23.2	6.02	72	7.16	63.8	560.5	577.7	0.3	1784	0.998	0	-0.35	-0.15	31.7
3/12/2019 15:25	998.8	22.47	6.06	71.8	7.16	62.4	559.6	581.9	0.3	1787	0.998	0	-0.36	-0.156	31.7
3/12/2019 15:25	998.7	22.12	6.22	72.8	7.14	62.4	561.8	591.8	0.3	1780	0.998	0	-0.35	-0.152	31.6

Log: Plant Bowen- 1 of 1
 Report Created: 2019-03-12 15:27:16
 Site: Plant Bowen
 GPS: GWC-17R
 Log Created: 2019-03-12 15:24:39
 Number Readings: 9
 Battery Type: SmarTROLL₄,c Battery Pack
 Battery SN: 450876
 Device Type: SmarTROLL₄,c MP
 Device SN: 553835

Created	Baro (mbar)	Temp (C)	RDO (mg/L)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (ÅµS/cm)	Sp Cond (ÅµS/cm)	Salinity (psu)	Resist (Ohm-cm)	Density (g/cm ³)	TDS (ppt)	Depth (ft)	Pressure (psi)	Air Temp (C)
3/12/2019 15:24	998.7	28.38	5.4	70.6	7.22	71.7	576.6	541.6	0.3	1734	0.996	0	-0.32	-0.139	32
3/12/2019 15:24	998.7	27.29	5.4	70.6	7.18	72.2	576.6	541.6	0.3	1734	0.996	0	-0.32	-0.139	32
3/12/2019 15:24	998.7	26.38	5.88	74.6	7.14	72	582.6	564.3	0.3	1717	0.997	0	-0.33	-0.142	31.9
3/12/2019 15:25	998.7	25.54	5.75	71.7	7.13	70.4	567.2	559.5	0.3	1763	0.997	0	-0.34	-0.149	31.9
3/12/2019 15:25	998.8	24.65	5.69	70.5	7.16	66.7	560.3	556.7	0.3	1785	0.997	0	-0.32	-0.138	31.8
3/12/2019 15:25	998.7	23.92	6	72.7	7.16	66.2	564.1	573.5	0.3	1773	0.997	0	-0.33	-0.145	31.8
3/12/2019 15:25	998.7	23.2	6.02	72	7.16	63.8	560.5	577.7	0.3	1784	0.998	0	-0.35	-0.15	31.7
3/12/2019 15:25	998.8	22.47	6.06	71.8	7.16	62.4	559.6	581.9	0.3	1787	0.998	0	-0.36	-0.156	31.7
3/12/2019 15:25	998.7	22.12	6.22	72.8	7.14	62.4	561.8	591.8	0.3	1780	0.998	0	-0.35	-0.152	31.6

Product Name: Low-Flow System

Date: 2019-03-12 12:50:08

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 80.3 ft

Pump placement from TOC 75.3 ft

Well Information:

Well ID GWC-18
Well diameter 2 in
Well Total Depth 80.3 ft
Screen Length 10 ft
Depth to Water 68 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.713413 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 2.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:35:46	180.03	16.84	7.01	193.37	1.23	68.00	7.02	66.93
Last 5	12:38:46	360.03	16.79	7.02	194.90	0.89	68.00	6.92	65.75
Last 5	12:41:46	540.02	16.84	7.04	199.69	1.04	68.00	6.83	64.42
Last 5	12:44:46	720.02	17.05	7.05	198.25	0.72	68.00	6.70	63.86
Last 5	12:47:46	900.02	17.01	7.06	202.18	0.78	68.00	6.70	63.43
Variance 0			0.06	0.01	4.79			-0.10	-1.32
Variance 1			0.21	0.01	-1.44			-0.12	-0.57
Variance 2			-0.04	0.01	3.93			-0.00	-0.43

Notes

Prepurged 1L
Well performed well

Grab Samples

GWC-18
Metals
GWC-18
Inorganics

Product Name: Low-Flow System

Date: 2019-03-12 11:51:42

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 140.1 ft

Pump placement from TOC 135.1 ft

Well Information:

Well ID GWC-18R
Well diameter 2 in
Well Total Depth 140.1 ft
Screen Length 10 ft
Depth to Water 67.85 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.9803256 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 2.52 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:36:46	540.02	16.16	7.65	270.23	1.60	67.85	5.94	45.57
Last 5	11:39:46	720.02	16.13	7.71	270.20	1.42	67.85	6.19	44.69
Last 5	11:42:46	900.02	16.07	7.74	270.25	1.44	67.85	6.25	44.67
Last 5	11:45:46	1080.02	16.08	7.75	270.40	1.34	67.85	6.25	44.98
Last 5	11:48:46	1260.02	16.07	7.76	271.04	1.16	67.85	6.25	45.14
Variance 0			-0.06	0.03	0.05			0.06	-0.02
Variance 1			0.01	0.01	0.16			-0.01	0.31
Variance 2			-0.01	0.01	0.64			0.00	0.16

Notes

Prepurged 2L
Well performed well.

Grab Samples

GWC-18R
Metals
GWC-18R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-12 12:28:56

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 147 ft

Pump placement from TOC 141.60 ft

Well Information:

Well ID GWC-19R
Well diameter 2 in
Well Total Depth 146.60 ft
Screen Length 10 ft
Depth to Water 74.94 ft

Pumping Information:

Final Pumping Rate 105 mL/min
Total System Volume 1.141123 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 3.05 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:10:33	720.02	18.13	7.60	289.25	0.52	71.93	6.25	20.26
Last 5	12:14:33	960.02	18.11	7.59	289.65	0.29	71.93	6.27	19.52
Last 5	12:18:33	1200.02	18.14	7.60	288.39	0.32	71.93	6.26	19.54
Last 5	12:22:33	1440.02	18.29	7.59	289.41	0.26	71.93	6.29	19.55
Last 5	12:26:33	1680.02	18.43	7.60	288.93	0.23	71.93	6.28	18.99
Variance 0			0.04	0.01	-1.26			-0.00	0.02
Variance 1			0.15	-0.01	1.02			0.03	0.01
Variance 2			0.14	0.01	-0.49			-0.01	-0.56

Notes

Prepurged 0.4L

Grab Samples

GWC-19R
Metals

DUP-3
Metals

GWC-19R
Inorganics

DUP-3
Inorganics



Product Name: Low-Flow System

Date: 2019-03-12 10:39:08

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 88.5 ft

Pump placement from TOC 82.5 ft

Well Information:

Well ID GWC-20R
Well diameter 2 in
Well Total Depth 87.47 ft
Screen Length 10 ft
Depth to Water 65.75 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.8800129 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.96 in
Total Volume Pumped 2.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:21:01	240.08	13.75	7.57	324.97	0.19	65.84	7.06	51.88
Last 5	10:25:01	480.03	14.77	7.61	318.67	0.16	65.83	6.82	42.05
Last 5	10:29:01	720.03	14.94	7.62	317.44	0.18	65.83	6.75	37.66
Last 5	10:33:01	960.02	14.99	7.64	319.72	0.22	65.83	6.72	34.42
Last 5	10:37:01	1200.02	15.10	7.63	327.81	0.21	65.82	6.79	33.34
Variance 0			0.17	0.01	-1.23			-0.06	-4.39
Variance 1			0.05	0.02	2.27			-0.04	-3.24
Variance 2			0.11	-0.01	8.09			0.07	-1.07

Notes

Prepurged 1L.

Grab Samples

GWC-20R
Metals

GWC-20R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-11 15:06:39

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 91 ft

Pump placement from TOC 85.59 ft

Well Information:

Well ID GWC-21R
Well diameter 2 in
Well Total Depth 90.59 ft
Screen Length 10 ft
Depth to Water 67.27 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.7611715 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 32.95 in
Total Volume Pumped 1.65 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:49:47	180.04	16.29	6.97	577.56	1.20	69.55	0.25	38.05
Last 5	14:52:47	360.02	16.11	6.96	578.15	1.09	69.67	0.23	36.96
Last 5	14:55:47	540.02	16.03	6.95	579.39	0.97	69.80	0.22	34.48
Last 5	14:58:47	720.02	15.98	6.95	578.76	0.91	69.92	0.21	32.49
Last 5	15:01:47	900.02	15.87	6.95	579.78	1.08	70.02	0.22	29.54
Variance 0			-0.08	-0.01	1.23			-0.01	-2.48
Variance 1			-0.05	-0.00	-0.62			-0.01	-1.99
Variance 2			-0.10	-0.00	1.01			0.00	-2.95

Notes

Prepurged 2L
Well performed well.

Grab Samples

GWC-21R
Metals
GWC-21R
Inorganics

Product Name: Low-Flow System

Date: 2019-06-18 13:24:32

Project Information:

Operator Name Audrey Crafton
Company Name Resolute Env
Project Name June 2019 Resample
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463072
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 90 ft

Pump placement from TOC 85.59 ft

Well Information:

Well ID GWC-21R
Well diameter 2 in
Well Total Depth 90.59 ft
Screen Length 10 ft
Depth to Water 71.64 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.886708 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 51.12 in
Total Volume Pumped 5.28 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	13:06:52	1680.02	19.81	6.81	592.59	0.48	75.36	0.10	-47.64
Last 5	13:10:52	1920.02	19.33	6.84	589.45	0.47	75.51	0.10	-51.31
Last 5	13:14:53	2160.92	19.19	6.85	593.23	0.48	75.66	0.11	-53.92
Last 5	13:18:53	2400.91	18.98	6.87	594.24	0.40	75.75	0.12	-54.79
Last 5	13:22:53	2640.91	18.63	6.88	596.62	0.49	75.90	0.13	-54.73
Variance 0			-0.14	0.01	3.78			0.01	-2.61
Variance 1			-0.21	0.02	1.02			0.01	-0.87
Variance 2			-0.34	0.02	2.38			0.01	0.06

Notes

Prepurged 1.0 L. Large amount of ants inside inner casing and under cap.

Grab Samples

GWC-21R
Fluoride

Product Name: Low-Flow System

Date: 2019-03-11 11:11:40

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 120 ft

Pump placement from TOC 114.6 ft

Well Information:

Well ID GWC-22R
Well diameter 2 in
Well Total Depth 119.6 ft
Screen Length 10 ft
Depth to Water 59.42 ft

Pumping Information:

Final Pumping Rate 160 mL/min
Total System Volume 0.8906108 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 9.06 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:55:20	3960.00	16.15	7.50	312.78	5.33	59.42	3.78	22.02
Last 5	10:58:20	4140.00	16.15	7.50	313.11	5.35	59.42	3.89	21.24
Last 5	11:01:20	4320.00	16.11	7.50	312.57	4.69	59.42	4.07	20.32
Last 5	11:04:20	4500.00	16.07	7.51	312.18	4.17	59.42	4.18	19.75
Last 5	11:07:20	4679.99	16.07	7.51	312.24	3.82	59.42	4.19	19.74
Variance 0			-0.05	0.00	-0.54			0.17	-0.92
Variance 1			-0.03	0.01	-0.39			0.11	-0.56
Variance 2			-0.01	0.00	0.06			0.01	-0.01

Notes

Prepurged 1L
Adjusted pump rate to 100ml/min @1020 to lower Turbidity.

Grab Samples

GWC-22R
Metals
GWC-22R
Inorganics

DUP- 2
Metals
DUP-2
Inorganics



Product Name: Low-Flow System

Date: 2019-03-11 10:04:49

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 51 ft

Pump placement from TOC 45.6 ft

Well Information:

Well ID GWC-23R
Well diameter 2 in
Well Total Depth 49.57 ft
Screen Length 10 ft
Depth to Water 34.88 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.7126346 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 57.72 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	09:51:02	1440.02	15.21	7.40	559.15	0.26	38.32	6.96	56.67
Last 5	09:54:02	1620.02	15.21	7.41	558.00	0.27	38.71	6.80	54.89
Last 5	09:57:02	1800.02	15.13	7.41	557.70	0.43	39.02	6.67	53.41
Last 5	10:00:02	1980.02	15.20	7.41	558.29	0.25	39.37	6.61	51.89
Last 5	10:03:02	2160.01	15.23	7.42	557.39	0.26	39.69	6.56	51.03
Variance 0			-0.09	0.00	-0.30			-0.13	-1.48
Variance 1			0.08	0.00	0.60			-0.06	-1.52
Variance 2			0.02	0.00	-0.90			-0.05	-0.86

Notes

Prepurged 0.3L
Performing complete evacuation

Grab Samples

Log: Plant Bowen- 1 of 1
 Report Created: 2019-03-12 11:19:35
 Site: Plant Bowen
 GPS: GWC-23R
 Log Created: 2019-03-12 11:16:17
 Number Readings: 10
 Battery Type: SmarTROLLä_c Battery Pack
 Battery SN: 450876
 Device Type: SmarTROLLä_c MP

Device SN:	553835														
Created	Baro (mbar)	Temp (C)	RDO (mg/L)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (ÅµS/cm)	Sp Cond (ÅµS/cm)	Salinity (psu)	Resist (Ohm-cm)	Density (g/cm³)	TDS (ppt)	Depth (ft)	Pressure (psi)	Air Temp (C)
3/12/2019 11:16	1002	12.97	7.96	76.5	7.63	60.2	418	542.1	0.3	2393	1	0	-0.11	-0.047	15.2
3/12/2019 11:16	1002	12.9	8.01	76.9	7.62	58.4	420.5	546.3	0.3	2378	1	0	-0.15	-0.066	15.3
3/12/2019 11:16	1002.1	12.85	7.95	76.2	7.61	57.1	420.4	546.8	0.3	2379	1	0	-0.15	-0.063	15.3
3/12/2019 11:16	1002	12.85	7.98	76.5	7.6	56	422.9	550.6	0.3	2365	1	0	-0.17	-0.075	15.3
3/12/2019 11:16	1002.1	12.83	8	76.6	7.59	55	425.7	554.5	0.3	2349	1	0	-0.14	-0.059	15.3
3/12/2019 11:17	1002	12.85	7.97	76.4	7.58	53.9	426	554.7	0.3	2347	1	0	-0.16	-0.068	15.3
3/12/2019 11:17	1002.1	12.86	8	76.7	7.57	52.9	427.7	556.9	0.3	2338	1	0	-0.18	-0.076	15.3
3/12/2019 11:17	1002	12.9	8	76.7	7.57	51.7	429.7	559.3	0.3	2327	1	0	-0.14	-0.062	15.3
3/12/2019 11:17	1002	12.95	7.91	75.9	7.55	51	430.3	559.6	0.3	2324	1	0	-0.16	-0.068	15.3
3/12/2019 11:17	1002.1	12.99	7.89	75.8	7.55	50.1	432.1	561.1	0.3	2314	1	0	-0.15	-0.067	15.3

Product Name: Low-Flow System

Date: 2019-03-08 12:30:26

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 40 ft

Pump placement from TOC 35.1 ft

Well Information:

Well ID GWC-24R
Well diameter 2 in
Well Total Depth 40.1 ft
Screen Length 10 ft
Depth to Water 20.08 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.5335369 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 6.84 in
Total Volume Pumped 3.55 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:03:54	720.02	14.40	7.62	281.49	1.09	20.60	3.92	-54.62
Last 5	12:06:54	900.02	14.08	7.62	285.69	0.75	20.55	3.98	-55.89
Last 5	12:09:54	1080.02	14.72	7.62	283.96	0.81	20.65	4.10	-59.85
Last 5	12:12:54	1260.01	14.85	7.65	282.85	0.70	20.65	4.11	-50.44
Last 5	12:15:54	1440.01	14.78	7.65	282.54	0.73	20.65	4.03	-49.03
Variance 0			0.65	-0.00	-1.73			0.12	-3.96
Variance 1			0.13	0.02	-1.11			0.01	9.41
Variance 2			-0.08	0.01	-0.31			-0.08	1.42

Notes

Prepurged 4.5 L

Casing had wasps and lady bugs seeking shelter from cold. Initially purged ladybugs from well. Was able to purge bugs from well after 5L. BP controller dropped pressure at 1158 to below 100ml/min. Adjusted it to 150 ml/min.

Grab Samples
GWC-24R
Metals
GWC-24R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-08 14:10:33

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 100 ft

Pump placement from TOC 95 ft

Well Information:

Well ID GWC-25R
Well diameter 2 in
Well Total Depth 100 ft
Screen Length 10 ft
Depth to Water 19.05 ft

Pumping Information:

Final Pumping Rate 160 mL/min
Total System Volume 0.8013423 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 3.84 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:28:01	720.02	15.35	7.61	305.33	2.20	19.05	6.02	-1.07
Last 5	13:31:01	900.02	15.34	7.65	304.55	1.92	19.05	6.09	0.01
Last 5	13:34:01	1080.02	15.42	7.67	305.08	2.26	19.05	6.13	0.87
Last 5	13:37:01	1260.06	15.42	7.69	305.25	2.05	19.05	6.17	1.72
Last 5	13:40:01	1440.04	15.39	7.69	309.52	1.94	19.05	6.19	2.53
Variance 0			0.08	0.01	0.53			0.04	0.87
Variance 1			0.00	0.02	0.17			0.04	0.85
Variance 2			-0.03	0.01	4.28			0.01	0.80

Notes

Prepurged 0.5L
Well performed well

Grab Samples

GWC-25R
Metals
GWC-25R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-06 11:31:25

Project Information:

Operator Name Audrey Crafton
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 364455
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 80 ft

Pump placement from TOC 75 ft

Well Information:

Well ID GWA-36
Well diameter 2 in
Well Total Depth 80.05 ft
Screen Length 10 ft
Depth to Water 25.85 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.8420739 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 5.28 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:12:28	1680.03	15.87	6.64	129.40	5.79	25.85	6.80	466.14
Last 5	11:16:28	1920.03	15.91	6.64	129.99	5.11	25.85	6.92	479.56
Last 5	11:20:28	2160.03	16.02	6.64	128.07	4.32	25.85	6.88	492.40
Last 5	11:24:28	2400.03	16.00	6.63	128.84	3.79	25.85	6.97	505.33
Last 5	11:28:28	2640.03	16.11	6.64	128.08	3.50	25.85	6.94	514.89
Variance 0			0.11	0.00	-1.92			-0.04	12.84
Variance 1			-0.02	-0.01	0.77			0.09	12.93
Variance 2			0.11	0.00	-0.77			-0.03	9.56

Notes

Prepurged 1.5L

Grab Samples

GWA-36
Metals, inorganics
DUP-1
Metals, inorganics

Product Name: Low-Flow System

Date: 2019-03-07 10:24:36

Project Information:

Operator Name Audrey Crafton
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 364455
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 90 ft

Pump placement from TOC 84.69 ft

Well Information:

Well ID GWA-36R
Well diameter 2 in
Well Total Depth 89.69 ft
Screen Length 10 ft
Depth to Water 25.32 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.886708 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 2.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:06:48	240.07	14.47	7.45	278.84	2.28	25.32	4.67	136.84
Last 5	10:10:48	480.03	14.57	7.47	276.96	2.49	25.32	4.79	129.41
Last 5	10:14:48	720.02	14.83	7.47	278.07	1.97	25.32	4.83	123.79
Last 5	10:18:48	960.03	14.97	7.48	277.07	2.24	25.32	4.83	121.55
Last 5	10:22:48	1200.02	15.01	7.48	278.12	2.79	25.32	4.94	118.64
Variance 0			0.26	-0.00	1.11			0.04	-5.62
Variance 1			0.14	0.01	-1.00			-0.00	-2.24
Variance 2			0.05	0.01	1.05			0.11	-2.91

Notes

Prepurged 1L

Grab Samples

GWA-36R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-03-06 12:19:57

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 110 ft

Pump placement from TOC 102.5 ft

Well Information:

Well ID BGWA-37
Well diameter 2 in
Well Total Depth 107.52 ft
Screen Length 10 ft
Depth to Water 46.35 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.9759765 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 136.56 in
Total Volume Pumped 11.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:02:03	5519.98	15.71	5.37	22.73	0.71	56.88	4.57	82.62
Last 5	12:06:03	5759.98	15.75	5.33	22.84	0.42	57.11	4.54	83.87
Last 5	12:10:03	5999.98	15.75	5.29	22.99	0.48	57.44	4.53	85.35
Last 5	12:14:03	6239.98	15.71	5.35	23.14	0.44	57.61	4.51	82.99
Last 5	12:18:03	6479.97	15.66	5.38	23.18	0.56	57.73	4.45	81.94
Variance 0			0.01	-0.04	0.16			-0.01	1.48
Variance 1			-0.05	0.06	0.15			-0.03	-2.36
Variance 2			-0.04	0.03	0.04			-0.06	-1.05

Notes

Prepurged 1L

Grab Samples

BGWC-37
Inorganics
GWA-37
App III

Product Name: Low-Flow System

Date: 2019-03-07 11:04:00

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 70 ft

Pump placement from TOC 64.3 ft

Well Information:

Well ID GWA-38
Well diameter 2 in
Well Total Depth 69.25 ft
Screen Length 10 ft
Depth to Water 47.18 ft

Pumping Information:

Final Pumping Rate 115 mL/min
Total System Volume 0.7974396 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 74.16 in
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:50:02	1080.02	16.40	5.63	42.11	0.68	48.20	6.98	94.78
Last 5	10:53:02	1260.02	16.07	5.57	41.99	0.45	48.26	7.00	95.26
Last 5	10:56:02	1440.02	16.23	5.58	41.72	0.32	48.33	6.95	93.64
Last 5	10:59:02	1620.02	16.38	5.55	41.22	0.28	48.39	6.92	94.16
Last 5	11:02:02	1800.01	16.31	5.54	40.88	0.50	48.46	6.93	94.42
Variance 0			0.16	0.01	-0.27			-0.04	-1.62
Variance 1			0.15	-0.03	-0.50			-0.03	0.52
Variance 2			-0.07	-0.02	-0.35			0.00	0.27

Notes

Prepurged 0.5L

Grab Samples

GWA-38
Inorganics
GWA-38
Metals

Product Name: Low-Flow System

Date: 2019-03-14 17:03:38

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 118 ft

Pump placement from TOC 112.5 ft

Well Information:

Well ID GWA-39Z
Well diameter 2 in
Well Total Depth 117.5 ft
Screen Length 10 ft
Depth to Water 54.65 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.8816839 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	16:42:08	2340.02	16.77	6.26	81.38	13.10	55.05	6.56	127.54
Last 5	16:45:08	2520.02	16.78	6.27	84.93	18.10	55.00	6.49	126.94
Last 5	16:48:08	2700.01	17.36	6.28	87.28	24.00	54.90	6.45	126.06
Last 5	16:51:08	2880.01	17.54	6.30	87.98	22.90	54.80	6.33	125.44
Last 5	16:54:08	3060.01	17.69	6.31	88.49	24.20	54.82	6.34	124.84
Variance 0			0.58	0.01	2.35			-0.04	-0.88
Variance 1			0.18	0.01	0.70			-0.12	-0.62
Variance 2			0.14	0.01	0.51			0.01	-0.61

Notes

Prepurged 1L
Was not able to sample. Turbidity rising & ran out of time. Tried decreasing and increasing pump rate to lower turbidity.

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-15 13:26:25

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 119 ft

Pump placement from TOC 112.5 ft

Well Information:

Well ID GWA-39Z
Well diameter 2 in
Well Total Depth 117.50 ft
Screen Length 10 ft
Depth to Water 54.96 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 1.016147 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 3.84 in
Total Volume Pumped 28.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	13:08:02	12239.93	14.99	6.76	184.25	5.79	55.28	6.53	71.79
Last 5	13:12:02	12479.93	14.99	6.76	185.51	5.77	55.28	6.54	72.01
Last 5	13:16:02	12719.93	15.03	6.75	186.38	5.82	55.28	6.53	72.26
Last 5	13:20:02	12959.92	15.04	6.77	187.65	6.05	55.28	6.55	71.67
Last 5	13:24:02	13199.92	15.03	6.78	188.82	6.00	55.28	6.54	71.34
Variance 0			0.03	-0.01	0.87			-0.01	0.25
Variance 1			0.01	0.02	1.27			0.01	-0.59
Variance 2			-0.01	0.01	1.17			-0.01	-0.33

Notes

Grab Samples
GWA-39Z
Metals
GWA-39Z
Inorganics

Product Name: Low-Flow System

Date: 2019-03-13 17:05:19

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 141 ft

Pump placement from TOC 135 ft

Well Information:

Well ID GWA-39RZ
Well diameter 2 in
Well Total Depth 140.07 ft
Screen Length 10 ft
Depth to Water 52.21 ft

Pumping Information:

Final Pumping Rate 250 mL/min
Total System Volume 1.114343 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 893.28 in
Total Volume Pumped 71.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:46:05	26403.82	15.71	7.46	309.87	1.41	121.23	0.79	-11.08
Last 5	16:50:05	26643.81	15.66	7.47	310.67	0.94	122.39	0.87	-12.06
Last 5	16:54:05	26883.81	15.66	7.47	312.65	0.61	124.08	0.92	-11.99
Last 5	16:58:05	27123.82	15.60	7.46	313.63	1.87	125.21	0.99	-12.40
Last 5	17:02:05	27363.82	15.66	7.46	316.07	0.90	126.65	1.30	-11.41
Variance 0			-0.00	0.00	1.98			0.05	0.07
Variance 1			-0.06	-0.02	0.98			0.07	-0.40
Variance 2			0.06	0.00	2.44			0.30	0.98

Notes

Prepurged 1L
Performed complete evacuation. Top of Pump at 128.45. Pump rate increased while trolling because historically goes dry and time

Grab Samples

Report Created: 2019-03-14 17:27:12
 Site: Plant Bowen
 GPS: GWA-39RZ
 Log Created: 2019-03-14 17:26:05

Number Readings: 7

Battery Type: SmarTROLLá, c Battery Pack

Battery SN: 535712

Device Type: SmarTROLLá, c MP

Device SN: 463068

Created	Baro (mm Hg)	Temp (C)	RDO (mg/l)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (µS/cm)	Sp Cond (µS/cm)	Salinity (ppt)	Resist (Ohm-cm)	Density (g/cm³)	TDS (ppt)	Depth (ft)	Pressure (psi)	Air Temp (C)
3/14/2019 17:26	742	17.37	0.9	9.6	7.19	113.7	274.5	321.3	0.2	3643	0.999	0	-0.21	-0.09	24.7
3/14/2019 17:26	742	17.36	0.97	10.4	7.2	113.6	273.7	320.5	0.2	3653	0.999	0	-0.25	-0.108	24.7
3/14/2019 17:26	742	17.36	1.03	11	7.2	113.2	273.7	320.4	0.2	3654	0.999	0	-0.26	-0.113	24.7
3/14/2019 17:26	742	17.36	1.15	12.3	7.21	113.1	272.7	319.3	0.2	3667	0.999	0	-0.28	-0.123	24.7
3/14/2019 17:26	742	17.34	1.33	14.2	7.21	113.1	271.5	318.2	0.2	3683	0.999	0	-0.25	-0.109	24.7
3/14/2019 17:27	742	17.36	1.4	14.9	7.22	112.9	271.8	318.3	0.2	3680	0.999	0	-0.25	-0.107	24.7
3/14/2019 17:27	742	17.36	1.41	15.1	7.22	112.8	271.9	318.3	0.2	3678	0.999	0	-0.26	-0.113	24.7

Product Name: Low-Flow System

Date: 2019-03-13 15:37:52

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 155 ft

Pump placement from TOC 149.5 ft

Well Information:

Well ID GWA-40
Well diameter 2 in
Well Total Depth 154.8 ft
Screen Length 10 ft
Depth to Water 57.75 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 1.046831 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 3.51 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	15:23:36	900.02	19.09	7.10	172.51	0.79	57.75	6.66	114.63
Last 5	15:26:36	1080.02	18.97	7.10	171.41	0.95	57.75	7.03	114.62
Last 5	15:29:36	1260.06	18.88	7.12	170.57	0.79	57.75	7.11	114.23
Last 5	15:32:36	1440.03	18.70	7.12	170.73	0.85	57.75	7.14	113.28
Last 5	15:35:36	1620.02	18.70	7.12	177.40	0.55	57.75	7.08	111.67
Variance 0			-0.09	0.01	-0.84			0.08	-0.39
Variance 1			-0.18	0.00	0.16			0.03	-0.95
Variance 2			-0.00	0.00	6.67			-0.06	-1.60

Notes

Prepurged 0.5L
Well performed well

Grab Samples

GWA-40
Metals
GWA-40
Inorganics

Product Name: Low-Flow System

Date: 2019-03-14 09:54:04

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 106.5 ft

Pump placement from TOC 97.5 ft

Well Information:

Well ID GWA-41
Well diameter 2 in
Well Total Depth 102.52 ft
Screen Length 10 ft
Depth to Water 64.21 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.9603546 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.96 in
Total Volume Pumped 4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	09:40:03	2161.01	16.25	6.52	181.76	1.91	64.29	5.13	64.99
Last 5	09:43:03	2341.01	16.24	6.53	186.19	1.93	64.29	5.21	63.85
Last 5	09:46:03	2521.01	16.28	6.56	190.03	1.75	64.29	5.19	62.27
Last 5	09:49:03	2701.01	16.28	6.58	193.55	1.66	64.29	5.19	61.28
Last 5	09:52:03	2881.01	16.27	6.58	197.24	1.39	64.29	5.24	61.76
Variance 0			0.04	0.03	3.84			-0.02	-1.59
Variance 1			-0.01	0.02	3.52			0.00	-0.99
Variance 2			-0.01	-0.01	3.68			0.04	0.48

Notes

Prepurged 0.3L

Grab Samples

GWA-41
Metals
GWA-41
Inorganics

Product Name: Low-Flow System

Date: 2019-03-14 13:51:23

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 131 ft

Pump placement from TOC 124.8 ft

Well Information:

Well ID GWA-41R
Well diameter 2 in
Well Total Depth 129.80 ft
Screen Length 10 ft
Depth to Water 64.99 ft

Pumping Information:

Final Pumping Rate 105 mL/min
Total System Volume 1.069708 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 10.2 in
Total Volume Pumped 26.94 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	13:37:07	11882.94	19.45	7.00	290.02	11.10	65.05	3.43	42.75
Last 5	13:40:07	12062.94	19.14	6.92	290.94	11.20	65.06	3.52	46.66
Last 5	13:43:07	12242.93	18.83	6.93	291.08	11.00	65.06	3.52	46.07
Last 5	13:46:07	12422.93	18.48	6.94	291.60	10.35	65.06	3.51	45.91
Last 5	13:49:07	12602.93	18.39	6.93	292.07	9.90	65.06	3.49	46.74
Variance 0			-0.31	0.00	0.14			0.00	-0.59
Variance 1			-0.35	0.01	0.52			-0.01	-0.16
Variance 2			-0.09	-0.00	0.46			-0.02	0.84

Notes

Prepurged 0.5L

Grab Samples

GWA-41R
Metals
GWA-41R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-14 16:19:05

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 90 ft

Pump placement from TOC 83 ft

Well Information:

Well ID GWA-42
Well diameter 2 in
Well Total Depth 87.90 ft
Screen Length 10 ft
Depth to Water 65.70 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.886708 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.6 in
Total Volume Pumped 3.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:05:03	720.02	18.70	7.49	270.32	5.69	65.74	3.85	28.76
Last 5	16:08:03	900.03	18.72	7.52	270.40	5.60	65.74	3.81	27.62
Last 5	16:11:03	1080.02	18.84	7.54	270.11	4.91	65.74	3.77	26.42
Last 5	16:14:03	1260.02	18.67	7.56	269.34	4.52	65.75	3.78	25.89
Last 5	16:17:03	1440.02	18.30	7.57	270.40	4.28	65.75	3.82	26.06
Variance 0			0.12	0.03	-0.29			-0.04	-1.20
Variance 1			-0.17	0.02	-0.77			0.01	-0.53
Variance 2			-0.37	0.01	1.07			0.04	0.17

Notes

Prepurged 0.3L

Grab Samples

GWA-42
Metals
GWA-42
Inorganics

Product Name: Low-Flow System

Date: 2019-03-13 10:33:51

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 93 ft

Pump placement from TOC 87.55 ft

Well Information:

Well ID GWA-43
Well diameter 2 in
Well Total Depth 92.55 ft
Screen Length 10 ft
Depth to Water 42.81 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.7700984 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 2.28 in
Total Volume Pumped 9.36 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:16:13	2880.01	15.57	5.62	26.26	4.69	43.00	6.85	104.47
Last 5	10:19:13	3060.01	15.48	5.63	26.31	4.83	43.00	6.92	104.71
Last 5	10:22:13	3240.01	15.62	5.62	26.28	4.11	43.00	6.87	105.28
Last 5	10:25:13	3420.01	15.53	5.63	26.39	3.69	43.00	6.85	105.55
Last 5	10:28:13	3600.00	15.66	5.63	26.27	3.64	43.00	6.90	105.81
Variance 0			0.13	-0.00	-0.02			-0.05	0.58
Variance 1			-0.09	0.01	0.10			-0.01	0.27
Variance 2			0.13	-0.00	-0.11			0.05	0.26

Notes

Prepurged 2L
Well performed ok. Dropped pump rate to 105 ml/min @0957 to try and drop turbidity.

Grab Samples

GWA-43
Metals
GWA-43
Inorganics

Product Name: Low-Flow System

Date: 2019-03-13 13:32:43

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 113 ft

Pump placement from TOC 107.82 ft

Well Information:

Well ID GWA-43R
Well diameter 2 in
Well Total Depth 112.82 ft
Screen Length 10 ft
Depth to Water 43.2 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.8593668 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.6 in
Total Volume Pumped 14.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:08:54	6661.99	18.61	7.85	245.73	5.57	43.25	5.75	78.84
Last 5	13:11:54	6841.98	18.59	7.84	245.12	5.28	43.25	5.77	79.04
Last 5	13:14:54	7021.99	18.92	7.84	243.74	4.98	43.25	5.79	79.48
Last 5	13:17:54	7201.98	18.97	7.85	244.24	4.94	43.25	5.77	79.20
Last 5	13:20:54	7381.98	18.79	7.84	241.90	4.74	43.25	5.82	80.43
Variance 0			0.33	0.00	-1.38			0.01	0.44
Variance 1			0.05	0.01	0.50			-0.01	-0.28
Variance 2			-0.18	-0.01	-2.34			0.05	1.24

Notes

Prepurged 2L

Grab Samples

GWA-43R
Metals

GWA-43R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-14 09:44:13

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 90 ft

Pump placement from TOC 84.7 ft

Well Information:

Well ID GWC-44
Well diameter 2 in
Well Total Depth 89.7 ft
Screen Length 10 ft
Depth to Water 41.5 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.756708 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 3.6 in
Total Volume Pumped 5.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	09:27:42	1440.02	17.06	4.40	181.86	0.61	41.75	3.07	122.47
Last 5	09:30:42	1620.02	17.09	4.40	181.93	0.65	41.77	3.07	122.92
Last 5	09:33:42	1800.02	17.10	4.40	181.99	0.60	41.77	3.08	123.41
Last 5	09:36:42	1980.01	17.14	4.41	181.81	0.78	41.79	3.08	123.70
Last 5	09:39:42	2160.02	17.19	4.41	181.72	0.52	41.80	3.08	124.21
Variance 0			0.00	-0.00	0.06			0.01	0.49
Variance 1			0.05	0.00	-0.18			0.00	0.29
Variance 2			0.04	0.00	-0.09			-0.00	0.51

Notes

Prepurged 1L

Took 7 additional stable readings after the third stable reading to try and achieve desired ph range between 5.6-7.9. Well stable around 4.41 pH

Grab Samples

GWC-44

Metals

GWC-44

Inorganics

Product Name: Low-Flow System

Date: 2019-03-14 13:46:55

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 68 ft

Pump placement from TOC 62.6 ft

Well Information:

Well ID GWC-45
Well diameter 2 in
Well Total Depth 67.6 ft
Screen Length 10 ft
Depth to Water 32.83 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.6585128 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 59.64 in
Total Volume Pumped 13.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	13:13:44	5765.00	18.80	5.03	22.00	6.22	37.70	5.60	130.38
Last 5	13:16:44	5945.00	18.46	5.02	21.79	5.79	37.80	5.67	130.95
Last 5	13:19:44	6125.00	18.92	4.99	21.92	4.24	37.86	5.55	130.60
Last 5	13:22:44	6305.00	18.88	5.00	21.70	3.88	37.80	5.56	130.91
Last 5	13:25:44	6484.99	18.63	5.01	21.92	4.24	37.80	5.63	130.84
Variance 0			0.46	-0.02	0.13			-0.13	-0.35
Variance 1			-0.04	0.01	-0.22			0.01	0.30
Variance 2			-0.25	0.01	0.22			0.07	-0.07

Notes

Prepurged 0.5L

Adjusted pump rate to 140ml/min at 1143, to 130ml/min at 1152 and 100ml/min at 1223 to reduce drawdown. Well a little shallow for BP Controller; caused turbidity and drawdown to periodically fluctuate.

Grab Samples

GWC-45

Metals

GWC-45

Inorganics

Product Name: Low-Flow System

Date: 2019-03-14 11:02:00

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 128 ft

Pump placement from TOC 123.1 ft

Well Information:

Well ID GWC-45R
Well diameter 2 in
Well Total Depth 128.1 ft
Screen Length 10 ft
Depth to Water 43.8 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.9263182 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 3.15 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:47:38	540.02	17.41	7.05	356.41	0.49	43.83	3.45	86.85
Last 5	10:50:38	720.02	17.42	7.08	357.14	0.65	43.82	3.63	87.14
Last 5	10:53:38	900.02	17.50	7.10	357.43	0.70	43.82	3.67	87.27
Last 5	10:56:38	1080.02	17.63	7.12	357.21	0.84	43.82	3.70	87.19
Last 5	10:59:38	1260.02	17.72	7.14	356.95	0.74	43.82	3.69	87.20
Variance 0			0.08	0.02	0.28			0.04	0.13
Variance 1			0.14	0.02	-0.22			0.03	-0.08
Variance 2			0.09	0.01	-0.26			-0.01	0.01

Notes

Prepurged 0.5L
Well performed well

Grab Samples

GWC-45R
Metals
GWC-45R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-18 09:45:53

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 60 ft

Pump placement from TOC 54 ft

Well Information:

Well ID GWC-46R
Well diameter 2 in
Well Total Depth 59.10 ft
Screen Length 10 ft
Depth to Water 31.27 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.7528054 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 15.96 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	09:28:05	480.03	14.04	7.37	473.23	0.30	32.35	7.63	69.84
Last 5	09:32:05	720.03	13.95	7.37	473.07	0.11	32.47	7.58	58.19
Last 5	09:36:05	960.02	14.08	7.38	471.34	0.20	32.51	7.53	51.36
Last 5	09:40:05	1200.01	14.27	7.38	474.79	0.09	32.55	7.56	46.15
Last 5	09:44:05	1440.02	14.32	7.39	469.33	0.10	32.60	7.45	43.07
Variance 0			0.13	0.01	-1.73			-0.05	-6.83
Variance 1			0.19	0.00	3.45			0.03	-5.21
Variance 2			0.06	0.01	-5.46			-0.11	-3.08

Notes

Prepurged 0.5L

Grab Samples

GWC-46R
Metals

GWC-46R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-15 09:50:40

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 67.3 ft

Pump placement from TOC 62.3 ft

Well Information:

Well ID GWC-47
Well diameter 2 in
Well Total Depth 67.33 ft
Screen Length 10 ft
Depth to Water 32.53 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.6553884 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 2.34 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	09:35:20	360.03	16.69	7.49	218.38	3.80	32.53	2.67	85.25
Last 5	09:38:20	540.02	16.65	7.48	217.90	3.80	32.53	2.68	81.44
Last 5	09:41:20	720.02	16.52	7.46	217.92	4.16	32.53	2.70	79.46
Last 5	09:44:20	900.02	16.53	7.46	217.35	4.08	32.53	2.71	77.32
Last 5	09:47:20	1080.01	16.34	7.45	216.33	4.00	32.53	2.72	76.60
Variance 0			-0.13	-0.01	0.02			0.02	-1.98
Variance 1			0.01	-0.00	-0.57			0.01	-2.14
Variance 2			-0.19	-0.01	-1.02			0.01	-0.72

Notes

Prepurged 3L
Well performed well

Grab Samples

GWC-47
Metals
GWC-47
Inorganics

Product Name: Low-Flow System

Date: 2019-03-15 12:02:00

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 85.4 ft

Pump placement from TOC 79.4 ft

Well Information:

Well ID GWC-47R
Well diameter 2 in
Well Total Depth 84.4 ft
Screen Length 10 ft
Depth to Water 32.5 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.7361763 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 78 in
Total Volume Pumped 11 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:43:42	4685.98	17.09	8.03	255.27	3.03	38.70	2.21	19.51
Last 5	11:46:42	4865.98	17.14	8.06	255.38	2.87	38.80	2.21	19.02
Last 5	11:49:46	5049.98	17.20	8.06	256.20	3.00	38.85	2.28	17.76
Last 5	11:52:46	5229.98	17.22	8.10	255.35	2.96	38.90	2.40	17.33
Last 5	11:55:48	5411.97	17.19	8.12	256.12	2.55	39.00	2.39	16.86
Variance 0			0.06	0.01	0.82			0.08	-1.26
Variance 1			0.02	0.04	-0.85			0.11	-0.43
Variance 2			-0.03	0.01	0.78			-0.01	-0.47

Notes

1L Prepured

Ph kept increasing although well had stabilized. Called Brad F. at 1156& under instructions from Joju A., well was not sampled due to climbing pH.

Well will be redeveloped next week and will be resampled then.

Grab Samples



Product Name: Low-Flow System

Date: 2019-03-18 12:41:48

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 364455
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type GeoTech Reclaimer
Tubing Type LDPE
Tubing Diameter .5 in
Tubing Length 85 ft

Pump placement from TOC 83.40 ft

Well Information:

Well ID GWC-47R WD
Well diameter 2 in
Well Total Depth 84.40 ft
Screen Length 10 ft
Depth to Water 32.92 ft

Pumping Information:

Final Pumping Rate 500 mL/min
Total System Volume 3.771929 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 560.52 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:20:05	240.04	16.54	7.77	264.85	0.65	79.72	7.38	354.22
Last 5	12:24:05	480.02	16.57	7.81	255.18	0.34	79.72	7.33	394.11
Last 5	12:28:05	720.02	16.63	7.83	264.71	0.45	79.70	7.25	427.81
Last 5	12:32:05	960.02	16.65	7.83	264.19	0.47	79.73	7.17	454.73
Last 5	12:36:06	1201.00	16.72	7.86	262.28	0.42	79.63	7.10	472.30
Variance 0			0.06	0.02	9.53			-0.08	33.70
Variance 1			0.02	0.01	-0.52			-0.08	26.91
Variance 2			0.07	0.03	-1.91			-0.07	17.57

Notes

Well development requested due to persistent pH over 8.0. Redevelopment performed and pH lower than 8.0 documented. Pre-purged 57 liters. Bug parts observed in discharge tube and bucket. Upon completion well seems clean with a turbidity below 1 NTU.

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-19 16:25:32

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 85 ft

Pump placement from TOC 79.40 ft

Well Information:

Well ID GWC-47R
Well diameter 2 in
Well Total Depth 84.40 ft
Screen Length 10 ft
Depth to Water 32.53 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.859391 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 68.76 in
Total Volume Pumped 17.36 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:06:05	6480.01	17.19	7.94	281.60	0.26	38.26	4.70	51.25
Last 5	16:10:05	6720.01	17.10	7.93	281.30	0.30	38.26	4.74	50.93
Last 5	16:14:05	6960.01	17.14	7.93	281.02	0.22	38.22	4.73	50.62
Last 5	16:18:05	7200.01	17.14	7.92	280.90	0.26	38.28	4.72	50.45
Last 5	16:22:08	7443.01	17.22	7.93	280.70	0.25	38.26	4.70	50.26
Variance 0			0.04	0.01	-0.29			-0.01	-0.31
Variance 1			0.00	-0.01	-0.12			-0.01	-0.18
Variance 2			0.08	0.00	-0.20			-0.02	-0.18

Notes

Pre-purged 3 liters

Grab Samples

GWC-47R
Metals

GWC-47R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-15 13:57:26

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 60 ft

Pump placement from TOC 54.5 ft

Well Information:

Well ID GWC-48
Well diameter 2 in
Well Total Depth 59.5 ft
Screen Length 10 ft
Depth to Water 29.35 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.6228054 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.6 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:41:57	2701.00	17.86	5.28	46.34	0.61	29.40	3.10	12.75
Last 5	13:44:57	2881.00	17.73	5.28	46.62	0.46	29.40	3.08	13.80
Last 5	13:47:57	3061.00	17.59	5.29	46.32	0.42	29.40	3.09	15.26
Last 5	13:50:57	3241.00	17.55	5.28	45.78	0.65	29.40	3.14	16.13
Last 5	13:53:59	3423.00	17.56	5.28	45.96	0.40	29.40	3.20	16.60
Variance 0			-0.14	0.01	-0.30			0.01	1.46
Variance 1			-0.04	-0.01	-0.54			0.05	0.87
Variance 2			0.01	0.00	0.18			0.06	0.46

Notes

Prepurged 1L

Well stabilized relatively quickly. Ph slightly below desired range. Gave 7 additional stable readings to see if ph could increase. Ph stable at 5.28

Grab Samples

GWC-48
Metals
GWC-48
Inorganics

Product Name: Low-Flow System

Date: 2019-03-18 14:09:14

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 135.5 ft

Pump placement from TOC 129.4 ft

Well Information:

Well ID GWC-49R
Well diameter 2 in
Well Total Depth 134.40 ft
Screen Length 10 ft
Depth to Water 48.15 ft

Pumping Information:

Final Pumping Rate 235 mL/min
Total System Volume 1.089794 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 45.9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	13:50:09	11766.93	17.40	7.90	282.32	0.22	48.12	5.00	-11.22
Last 5	13:54:09	12006.93	17.37	7.90	283.41	0.16	48.12	4.99	-11.08
Last 5	13:58:10	12247.93	17.54	7.90	283.33	0.13	48.12	4.92	-11.64
Last 5	14:02:10	12487.93	17.53	7.90	283.87	0.17	48.12	4.93	-11.06
Last 5	14:06:10	12727.93	17.38	7.89	286.30	0.16	48.12	4.93	-10.98
Variance 0			0.17	0.01	-0.08			-0.07	-0.57
Variance 1			-0.01	-0.01	0.54			0.01	0.58
Variance 2			-0.15	-0.01	2.42			-0.00	0.09

Notes

Prepurged 0.4L

Grab Samples

GWC-49R
Metals

DUP-2
Metals

GWC-49R
Inorganics

DUP-2
Inorganics



Product Name: Low-Flow System

Date: 2019-03-18 16:24:09

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 364455
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 95 ft

Pump placement from TOC 89.47 ft

Well Information:

Well ID GWC-49Z
Well diameter 2 in
Well Total Depth 94.47 ft
Screen Length 10 ft
Depth to Water 47.42 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.9040251 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 7.78 in
Total Volume Pumped 15.68 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:04:24	5765.97	16.39	5.54	28.49	2.79	48.08	7.42	327.87
Last 5	16:08:24	6005.97	16.44	5.53	28.54	2.83	48.08	7.46	325.41
Last 5	16:12:24	6245.97	16.49	5.54	28.52	3.01	48.08	7.39	323.57
Last 5	16:16:24	6485.97	16.54	5.53	28.46	2.57	48.07	7.40	328.10
Last 5	16:20:24	6725.96	16.60	5.53	28.48	2.39	48.07	7.44	325.32
Variance 0			0.05	0.01	-0.02			-0.07	-1.84
Variance 1			0.04	-0.00	-0.06			0.01	4.54
Variance 2			0.06	-0.00	0.02			0.04	-2.79

Notes

Pre-purged 4.5 liters. Value for pH were outside of the acceptable statistical threshold. Resampling to be preformed 3/19.

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-19 10:26:37

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 364455
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 95 ft

Pump placement from TOC 89.47 ft

Well Information:

Well ID GWC-49Z
Well diameter 2 in
Well Total Depth 94.47 ft
Screen Length 10 ft
Depth to Water 47.41 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.9040251 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 6.6 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:08:08	2640.02	15.04	5.59	29.60	1.26	47.94	7.46	590.40
Last 5	10:12:08	2880.02	15.16	5.59	29.47	1.32	47.95	7.44	610.00
Last 5	10:16:07	3120.01	15.53	5.60	29.23	1.16	47.96	7.42	628.39
Last 5	10:20:08	3360.02	15.23	5.60	29.32	1.44	47.96	7.47	642.77
Last 5	10:24:08	3600.02	15.25	5.60	29.23	1.28	47.96	7.48	659.58
Variance 0			0.38	0.01	-0.23			-0.02	18.39
Variance 1			-0.31	0.01	0.09			0.05	14.38
Variance 2			0.03	-0.00	-0.09			0.01	16.82

Notes

Pre-purged 1 liter

Grab Samples

GWC-49Z

Metals

GWC-49Z

Inorganics

Product Name: Low-Flow System

Date: 2019-03-19 11:56:21

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 99 ft

Pump placement from TOC 92 ft

Well Information:

Well ID GWA-50
Well diameter 2 in
Well Total Depth 96.73 ft
Screen Length 10 ft
Depth to Water 48.32 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.9268789 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 163.08 in
Total Volume Pumped 28.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:38:11	8648.96	15.85	5.86	35.04	1.73	61.35	5.81	71.44
Last 5	11:42:12	8889.96	15.48	5.87	34.89	1.69	61.48	5.89	71.00
Last 5	11:46:12	9129.96	15.26	5.93	34.68	1.75	61.64	5.87	68.23
Last 5	11:50:13	9370.96	15.13	5.92	34.49	1.87	61.77	5.86	68.91
Last 5	11:54:13	9610.95	15.12	5.93	34.50	1.62	61.91	5.83	68.38
Variance 0			-0.23	0.06	-0.21			-0.02	-2.77
Variance 1			-0.12	-0.01	-0.19			-0.01	0.68
Variance 2			-0.01	0.01	0.01			-0.04	-0.53

Notes

Prepurged 0.3L

Grab Samples

GWA-50
Metals
DUP-1
Metals
GWA-50
Inorganics

Product Name: Low-Flow System

Date: 2019-03-19 15:36:10

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 146.5 ft

Pump placement from TOC 140.5 ft

Well Information:

Well ID GWA-50R
Well diameter 2 in
Well Total Depth 145.53 ft
Screen Length 10 ft
Depth to Water 65.37 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.138891 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 13.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:17:06	6724.98	15.93	5.86	42.21	0.60	65.36	10.08	85.80
Last 5	15:21:06	6964.97	16.05	5.89	43.01	2.90	65.36	10.03	83.77
Last 5	15:25:09	7207.97	15.95	5.91	44.03	0.87	65.36	9.89	83.07
Last 5	15:29:09	7447.97	16.11	5.95	45.20	0.76	65.36	9.82	81.96
Last 5	15:33:10	7688.97	16.05	6.01	45.34	0.74	65.36	9.79	78.62
Variance 0			-0.09	0.02	1.01			-0.14	-0.70
Variance 1			0.16	0.04	1.17			-0.07	-1.10
Variance 2			-0.06	0.06	0.15			-0.03	-3.35

Notes

Prepurged 0.5L

Grab Samples

GWA-50R
Metals

GWA-50R
Inorganics

DUP-1
Inorganics



Product Name: Low-Flow System

Date: 2019-03-07 16:16:57

Project Information:

Operator Name Audrey Crafton
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 364455
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 96 ft

Pump placement from TOC 90.70 ft

Well Information:

Well ID GWA-51RZ
Well diameter 2 in
Well Total Depth 95.70 ft
Screen Length 10 ft
Depth to Water 50.77 ft

Pumping Information:

Final Pumping Rate 105 mL/min
Total System Volume 0.9134886 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 364.56 in
Total Volume Pumped 29 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:52:03	15600.06	16.41	7.54	367.01	0.48	80.85	3.06	911.01
Last 5	15:56:03	15840.06	16.31	7.55	366.82	0.66	81.14	3.08	889.77
Last 5	16:00:03	16080.06	16.22	7.55	367.20	0.56	81.54	3.07	882.89
Last 5	16:04:03	16320.06	16.20	7.55	367.45	0.54	81.93	3.08	907.72
Last 5	16:08:03	16560.06	16.10	7.55	367.32	0.56	82.29	3.09	868.33
Variance 0			-0.09	-0.00	0.38			-0.01	-6.88
Variance 1			-0.03	0.00	0.25			0.01	24.83
Variance 2			-0.09	0.00	-0.13			0.01	-39.39

Notes

Prepurged 0.5L
No sample. Performing a complete evacuation since water level will not stabilize

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-07 12:29:42

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 85 ft

Pump placement from TOC 79 ft

Well Information:

Well ID GWA-52
Well diameter 2 in
Well Total Depth 83.96 ft
Screen Length 10 ft
Depth to Water 51.68 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.864391 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 4.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:12:02	960.02	17.19	7.13	285.09	0.03	51.67	5.80	48.08
Last 5	12:16:02	1200.02	17.18	7.17	285.06	0.04	51.66	5.72	46.89
Last 5	12:20:02	1440.02	17.20	7.23	284.54	0.06	51.66	5.68	44.90
Last 5	12:24:02	1680.02	17.28	7.25	286.42	0.16	51.65	5.70	44.29
Last 5	12:28:02	1920.01	17.18	7.29	286.53	0.23	51.66	5.69	42.96
Variance 0			0.02	0.06	-0.51			-0.04	-1.99
Variance 1			0.08	0.02	1.88			0.02	-0.61
Variance 2			-0.09	0.04	0.11			-0.01	-1.32

Notes

Prepurged 0.4L

Grab Samples

GWA-52
Inorganics
GWA-52
Metals

Product Name: Low-Flow System

Date: 2019-03-08 14:19:21

Project Information:

Operator Name Kevin Stephenson
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Bladder
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 121 ft

Pump placement from TOC 115.92 ft

Well Information:

Well ID GWA-53
Well diameter 2 in
Well Total Depth 120.92 ft
Screen Length 10 ft
Depth to Water 52.77 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.7300742 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 23.04 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:00:53	10561.95	16.33	7.74	260.27	7.84	52.77	7.06	22.84
Last 5	14:04:53	10801.95	16.34	7.73	259.91	7.75	52.77	7.06	22.81
Last 5	14:08:53	11041.94	16.31	7.70	259.83	7.61	52.77	7.05	24.96
Last 5	14:12:53	11281.94	16.31	7.73	259.96	6.99	52.77	7.05	22.79
Last 5	14:16:53	11521.93	16.30	7.73	260.23	7.64	52.77	7.05	22.74
Variance 0			-0.03	-0.03	-0.08			-0.01	2.14
Variance 1			0.00	0.03	0.13			0.00	-2.16
Variance 2			-0.02	0.00	0.27			0.00	-0.06

Notes

Pre-purged 2.5 liters. Three hours after stabilization turbidity was below 10 but higher than 5. Well sampled according to FSP.

Grab Samples

GWA-53
Metals
GWA-53
Inorganics

Product Name: Low-Flow System

Date: 2019-03-12 10:08:03

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 169 ft

Pump placement from TOC 163.8 ft

Well Information:

Well ID GWA-53R
Well diameter 2 in
Well Total Depth 168.8 ft
Screen Length 10 ft
Depth to Water 53.35 ft

Pumping Information:

Final Pumping Rate 170 mL/min
Total System Volume 1.1108426 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 2.55 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	09:51:24	180.07	17.97	7.75	270.24	4.74	53.35	6.02	62.75
Last 5	09:54:24	360.02	17.71	7.73	270.48	4.95	53.35	6.03	51.39
Last 5	09:57:24	540.02	17.71	7.72	270.07	3.67	53.35	5.95	44.32
Last 5	10:00:24	720.02	17.68	7.71	269.78	3.11	53.35	5.98	41.51
Last 5	10:03:24	900.02	17.55	7.70	270.02	3.11	53.35	5.95	39.92
Variance 0			-0.00	-0.01	-0.41			-0.08	-7.07
Variance 1			-0.03	-0.01	-0.29			0.03	-2.81
Variance 2			-0.13	-0.01	0.24			-0.03	-1.60

Notes

Prepurged 1L
Well performed well

Grab Samples

GWA-53R
Metals
GWA-53R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-07 14:06:42

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 76 ft

Pump placement from TOC 71.1 ft

Well Information:

Well ID GWA-54
Well diameter 2 in
Well Total Depth 76.1 ft
Screen Length 10 ft
Depth to Water 46 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.6942202 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 5.89 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:40:07	2160.00	16.78	7.55	229.10	0.33	46.00	2.90	50.87
Last 5	13:43:07	2340.00	16.91	7.56	229.49	0.33	46.00	3.02	49.32
Last 5	13:46:07	2520.00	16.84	7.54	229.74	0.32	46.00	2.87	49.33
Last 5	13:49:07	2700.00	16.94	7.55	230.52	0.35	46.00	2.92	47.63
Last 5	13:52:07	2880.00	17.10	7.55	230.06	0.27	46.00	3.16	46.81
Variance 0			-0.07	-0.02	0.25			-0.15	0.01
Variance 1			0.10	0.01	0.78			0.05	-1.71
Variance 2			0.16	-0.00	-0.46			0.23	-0.81

Notes

Prepurged 1L
Bp controller dropped pump rate below 100 ml/min at 1317. Adjusted rate to 120 ml/min.

Grab Samples

GWA-54
Metals
GWA-54
Inorganics

Product Name: Low-Flow System

Date: 2019-03-08 10:17:46

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 65 ft

Pump placement from TOC 60.2 ft

Well Information:

Well ID GWA-55
Well diameter 2 in
Well Total Depth 65.2 ft
Screen Length 10 ft
Depth to Water 38.45 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.6451225 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 2.73 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:00:36	540.02	16.06	7.21	411.11	0.57	38.45	3.84	91.20
Last 5	10:03:36	720.02	15.99	7.18	410.13	0.50	38.45	3.78	77.92
Last 5	10:06:36	900.02	16.25	7.16	402.68	0.51	38.45	3.81	67.20
Last 5	10:09:36	1080.02	16.31	7.15	400.57	0.40	38.45	3.55	58.92
Last 5	10:12:36	1260.01	16.14	7.14	397.95	0.36	38.45	3.53	52.85
Variance 0			0.26	-0.02	-7.45			0.03	-10.72
Variance 1			0.06	-0.01	-2.11			-0.25	-8.27
Variance 2			-0.17	-0.01	-2.62			-0.02	-6.07

Notes

Prepurged 1L
Well performed well

Grab Samples

GWA-55
Metals
GWA-55
Inorganics

Product Name: Low-Flow System

Date: 2019-03-07 15:13:47

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463068
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 106 ft

Pump placement from TOC 100.7 ft

Well Information:

Well ID GWA-55R
Well diameter 2 in
Well Total Depth 105.7 ft
Screen Length 10 ft
Depth to Water 38.43 ft

Pumping Information:

Final Pumping Rate 170 mL/min
Total System Volume 0.8281228 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 2.55 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:58:03	180.03	16.98	7.23	370.12	2.97	38.42	3.98	4.72
Last 5	15:01:03	360.02	16.97	7.21	373.25	3.67	38.43	4.15	13.25
Last 5	15:04:03	540.02	16.88	7.22	373.51	3.30	38.43	4.18	18.62
Last 5	15:07:03	720.02	16.93	7.22	374.82	3.75	38.43	4.21	22.45
Last 5	15:10:03	900.02	16.74	7.22	374.87	3.69	38.43	4.21	24.62
Variance 0			-0.09	0.00	0.26			0.03	5.36
Variance 1			0.05	-0.00	1.31			0.03	3.83
Variance 2			-0.19	0.01	0.05			0.00	2.17

Notes

Prepurged 2L
Organic flecks coming up with discharge. Not affecting Turbidity.

Grab Samples

GWA-55R
Metals
GWA-55R
Inorganics

Product Name: Low-Flow System

Date: 2019-03-07 15:53:19

Project Information:

Operator Name Robert Mull
Company Name Resolute Env
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated Pump
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 87 ft

Pump placement from TOC 81 ft

Well Information:

Well ID GWA-56
Well diameter 2 in
Well Total Depth 85.87 ft
Screen Length 10 ft
Depth to Water 34.05 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.8733178 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 4.8 in
Total Volume Pumped 4.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	15:39:06	1261.02	16.60	8.08	605.47	8.01	34.45	0.43	24.57
Last 5	15:42:06	1441.02	16.56	8.08	601.59	5.95	34.46	0.50	19.45
Last 5	15:45:06	1621.02	16.51	8.06	599.83	4.92	34.46	0.54	14.39
Last 5	15:48:06	1801.02	16.61	8.05	597.63	4.17	34.46	0.58	9.35
Last 5	15:51:07	1982.01	16.65	8.05	594.09	4.18	34.45	0.63	5.36
Variance 0			-0.05	-0.01	-1.76			0.04	-5.06
Variance 1			0.10	-0.01	-2.20			0.04	-5.05
Variance 2			0.03	-0.01	-3.53			0.05	-3.99

Notes

Prepurged 1L

Grab Samples

GWA-56
Metals
GWA-56
Inorganics

Well ID	Sample Date	Purge Volume (liter)	Time Elapsed	DTW (feet, TOC)	Drawdown (feet)	Temperature (C)	pH (su)	Specific Conductance (uS/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)
GWA-1	9/12/19	8.0	4325	86.71	7.17	21.1	7.4	304.8	0.5	0.6	45.0
GWA-2	9/12/19	5.8	2881	82.47	0.06	19.5	5.5	25.3	0.9	5.7	117.9
GWA-2R	9/13/19	11.4	4561	82.18	1.10	20.2	7.3	207.0	0.0	5.6	74.4
GWA-3	9/13/19	9.0	4561	66.85	11.24	19.8	5.1	20.8	0.2	7.2	171.3
GWA-4RZ	9/13/19	36.5	10080	87.97	31.20	19.1	7.2	379.8	1.1	0.8	13.2
GWC-5	9/16/19	10.8	4868	80.86	5.46	19.1	6.1	38.1	0.7	8.3	103.2
GWC-6	9/16/19	5.0	2160	75.37	0.25	18.9	7.4	134.8	1.8	7.2	58.0
GWC-6RZ	9/16/19	6.0	2340	79.02	0.02	19.2	6.8	100.1	0.6	7.4	48.5
GWC-7Z	9/13/19	2.6	1200	60.36	0.13	21.6	6.8	231.7	0.1	0.2	-84.6
GWC-8Z	9/16/19	7.9	4324	49.90	0.37	18.7	7.2	160.2	1.1	7.2	83.6
GWC-8RR	9/16/19	2.4	1200	49.39	0.06	19.4	7.9	195.7	0.2	8.0	29.3
GWC-9	9/16/19	4.8	1920	43.62	0.02	20.8	6.0	108.1	0.3	6.1	86.8
GWC-10	9/17/19	7.0	2340	36.72	0.02	18.2	7.2	299.4	1.4	7.4	37.1
GWC-10R	9/17/19	7.0	3240	36.78	0	17.6	7.5	286.9	0.2	5.4	6.7
GWC-11	9/17/19	8.5	4141	26.62	0.01	23.0	6.6	167.3	0.8	4.5	58.7
GWC-11R	9/17/19	3.5	1080	26.53	0.03	20.5	7.6	271.1	2.0	4.0	21.4
GWC-12	9/17/19	4.0	1920	26.74	0.48	21.0	6.2	114.3	2.1	0.4	6.2
GWC-13	9/18/19	4.5	1980	35.05	0.05	19.0	7.3	325.0	4.1	4.4	50.0
GWC-13RZ	9/19/19	33.6	17520	53.10	41.20	19.2	7.5	462.1	0.4	4.5	161.1
GWC-14Z	9/17/19	3.1	1441	34.50	2.33	22.9	6.0	134.3	0.2	4.6	82.6
GWC-15R	9/17/19	2.9	1441	43.75	0.22	22.8	7.4	343.6	1.3	2.1	39.0
GWC-15Z	9/17/19	2.5	1200	43.46	0.52	21.1	7.8	230.0	0.5	6.4	52.8
GWC-16R	9/9/19	2.8	1680	78.53	3.32	22.6	7.1	513.7	0.2	1.1	44.6
GWC-17R	9/10/19	NM	2	83.02	0.36	21.8	7.2	564.8	NM	7.6	154.4
GWC-18	9/9/19	3.0	1200	74.94	0.02	18.1	6.7	164.0	2.2	7.9	88.5
GWC-18R	9/6/19	3.5	1680	74.17	0.03	18.6	7.7	278.1	0.4	6.8	86.7
GWC-19R	9/9/19	3.4	1440	78.69	0.03	20.0	7.7	285.0	1.1	6.6	57.1
GWC-20R	9/6/19	2.3	900	72.10	0.13	20.8	7.8	309.1	0	6.8	67.7
GWC-21R	9/6/19	5.0	4082	72.60	3.31	21.8	7.0	541.3	0.7	3.3	33.4
GWC-21R	10/21/19	5.8	3060	73.14	4.15	18.4	7.1	557.7	0.2	4.6	16.5
GWC-22R	9/5/19	7.3	3120	65.23	0.06	20.3	7.1	329.7	1.8	3.8	-41.7
GWC-23R	9/6/19	2.8	900	42.35	1.05	18.1	7.3	535.5	1.8	5.2	80.7
GWC-24R	9/5/19	5.1	2643	26.18	0.60	21.5	7.4	286.4	0.4	2.7	-43.0
GWC-25R	9/5/19	4.2	1680	25.43	0	18.4	7.6	314.5	0.7	6.3	66.6

Well ID	Sample Date	Purge Volume (liter)	Time Elapsed	DTW (feet, TOC)	Drawdown (feet)	Temperature (C)	pH (su)	Specific Conductance (uS/cm)	Turbidity (NTU)	DO (mg/L)	ORP (mV)
GWA-36	9/4/19	2.9	1440	34.93	0.50	19.9	6.9	153.8	2.3	6.6	64.1
GWA-36R	9/4/19	2.8	1440	34.58	0.20	21.7	7.1	276.3	1.0	4.7	88.2
GWA-37	9/4/19	4.8	2640	51.65	4.85	25.8	5.1	18.9	0.7	3.6	122.4
GWA-38	9/4/19	2.0	1080	52.83	1.07	21.4	5.9	38.4	0	7.2	112.1
GWA-39Z	9/9/19	12.6	5041	68.42	0.38	18.1	6.5	123.2	0.3	6.4	84.3
GWA-39RZ	9/11/19	2.4	720	66.82	62.98	19.1	7.3	295.7	1.4	3.1	169.8
GWA-40	9/9/19	3.6	1200	70.74	0.04	21.5	7.1	159.5	0.3	8.7	44.3
GWA-41	9/10/19	2.8	2400	80.74	0.04	21.9	5.7	44.1	0.7	7.1	85.1
GWA-41R	9/10/19	2.4	1200	80.59	0.05	20.8	6.7	237.3	0.2	0.3	50.4
GWA-42	9/10/19	2.8	1200	77.94	0.02	19.7	7.5	253.9	0.1	4.8	48.1
GWA-43	9/11/19	4.3	2160	55.95	0.10	19.3	5.5	28.1	1.4	8.1	92.6
GWA-43R	9/11/19	3.7	1200	56.18	0.11	18.7	7.8	278.1	1.7	6.5	74.4
GWC-44	9/11/19	2.5	1200	56.30	0.15	20.8	4.4	88.4	0.1	4.8	113.5
GWC-45	9/11/19	3.1	1441	46.28	3.39	20.3	4.9	22.4	0.4	5.2	84.4
GWC-45	10/21/19	3.4	1680	47.76	2.88	18.1	4.8	23.5	0.1	5.8	187.6
GWC-45R	9/11/19	2.6	1440	53.48	0.08	21.3	7.2	340.0	0.2	4.0	48.3
GWC-46R	9/11/19	2.2	1200	41.90	0.95	22.1	7.4	442.2	0.1	6.3	65.3
GWC-47	9/12/19	3.5	1680	42.83	0.02	20.7	7.5	233.6	0.2	2.9	84.9
GWC-47R	9/11/19	6.2	3360	42.83	4.30	23.1	7.6	301.0	0.2	3.1	49.4
GWC-48	9/11/19	3.6	1440	39.47	0.02	21.1	4.9	38.8	0.1	3.5	149.3
GWC-49R	9/11/19	4.0	1922	58.00	0.02	20.6	8.2	236.0	0.2	5.5	54.8
GWC-49Z	9/11/19	6.5	3121	57.26	1.05	21.2	5.4	26.2	1.1	6.7	166.8
GWA-50	9/13/19	9.2	4560	62.24	9.86	19.0	5.6	24.1	0.2	6.5	99.2
GWA-50R	9/12/19	15.1	6480	77.47	0.05	19.8	5.9	38.1	0.1	9.8	107.1
GWA-51RZ	9/5/19	20.0	10800	58.05	26.45	28.0	7.3	433.2	0.1	4.4	140.4
GWA-52	9/4/19	2.8	1080	58.60	0.01	21.0	7.4	262.8	0.1	7.0	126.2
GWA-53	9/5/19	3.5	1920	59.63	0.20	20.8	7.6	274.1	2.4	6.8	52.5
GWA-53R	9/5/19	8.3	3840	60.28	0.04	21.3	7.7	277.8	3.1	6.4	37.9
GWA-54	9/5/19	6.0	1080	52.73	0.01	19.2	7.5	235.9	0	3.2	65.6
GWA-55	9/5/19	3.0	900	45.21	0.01	20.4	7.3	411.8	0	2.4	69.3
GWA-55R	9/5/19	3.5	1080	45.08	0.02	21.4	7.5	345.0	0.4	0.3	46.8
GWA-56	9/4/19	9.8	4560	40.69	0.39	23.0	7.8	567.5	0.9	2.1	24.7

NM = not measured

December 16, 2019

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

RE: Project: Plant Bowen cells 1+2
Pace Project No.: 2623127


Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report replaces the report issued on September 23, 2019. This report was revised to correct the Fluoride reporting limit as 0.3 mg/L in accordance with GPC contract specifications. No other changes have been made to this report

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623127

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623127001	GWA-2R	Water	09/13/19 10:22	09/13/19 15:35
2623127002	GWA-3	Water	09/13/19 12:23	09/13/19 15:35
2623127003	GWA-4RZ	Water	09/13/19 08:47	09/13/19 15:35
2623127004	GWC-7Z	Water	09/13/19 12:29	09/13/19 15:35
2623127005	GWA-50	Water	09/13/19 11:14	09/13/19 15:35

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623127001	GWA-2R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623127002	GWA-3	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623127003	GWA-4RZ	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623127004	GWC-7Z	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623127005	GWA-50	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

Sample: GWA-2R		Lab ID: 2623127001		Collected: 09/13/19 10:22		Received: 09/13/19 15:35		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.0044	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 13:43	7440-36-0	
Arsenic	0.00051J	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 13:43	7440-38-2	
Barium	0.012	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 13:43	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 13:43	7440-41-7	
Boron	0.012J	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 13:43	7440-42-8	B
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 13:43	7440-43-9	
Calcium	27.0	mg/L	5.0	0.55	50	09/16/19 14:10	09/20/19 13:48	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 13:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 13:43	7440-48-4	
Copper	0.00055J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 13:43	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 13:43	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 13:43	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 13:43	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 13:43	7440-22-4	
Thallium	0.000062J	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 13:43	7440-28-0	
Vanadium	0.0010J	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 13:43	7440-62-2	
Zinc	0.0078J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 13:43	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 12:35	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	113	mg/L	10.0	10.0	1		09/18/19 13:28		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	0.94J	mg/L	1.0	0.60	1		09/17/19 21:33	16887-00-6	
Fluoride	0.055J	mg/L	0.30	0.050	1		09/17/19 21:33	16984-48-8	
Sulfate	3.8	mg/L	1.0	0.50	1		09/17/19 21:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

Sample: GWA-3		Lab ID: 2623127002		Collected: 09/13/19 12:23		Received: 09/13/19 15:35		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.0013J	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 13:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 13:54	7440-38-2	
Barium	0.0042J	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 13:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 13:54	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 13:54	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 13:54	7440-43-9	
Calcium	0.94	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 13:54	7440-70-2	
Chromium	0.00073J	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 13:54	7440-47-3	
Cobalt	0.00046J	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 13:54	7440-48-4	
Copper	0.026	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 13:54	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 13:54	7439-92-1	
Nickel	0.012	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 13:54	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 13:54	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 13:54	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 13:54	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 13:54	7440-62-2	
Zinc	0.036	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 13:54	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 12:49	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	19.0	mg/L	10.0	10.0	1		09/18/19 13:28		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	1.5	mg/L	1.0	0.60	1		09/17/19 22:31	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/17/19 22:31	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/17/19 22:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

Sample: GWA-4RZ Lab ID: 2623127003 Collected: 09/13/19 08:47 Received: 09/13/19 15:35 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	0.00052J	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 14:46	7440-36-0	
Arsenic	0.00060J	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 14:46	7440-38-2	
Barium	0.034	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 14:46	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 14:46	7440-41-7	
Boron	0.012J	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 14:46	7440-42-8	B
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 14:46	7440-43-9	
Calcium	49.9	mg/L	5.0	0.55	50	09/16/19 14:10	09/20/19 14:51	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 14:46	7440-47-3	
Cobalt	0.020	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 14:46	7440-48-4	
Copper	0.00045J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 14:46	7440-50-8	
Lead	0.000065J	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 14:46	7439-92-1	
Nickel	0.00032J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 14:46	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 14:46	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 14:46	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 14:46	7440-28-0	
Vanadium	0.00084J	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 14:46	7440-62-2	
Zinc	0.0072J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 14:46	7440-66-6	B
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 12:52	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	200	mg/L	10.0	10.0	1		09/18/19 13:28		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993									
Chloride	2.1	mg/L	1.0	0.60	1		09/17/19 21:18	16887-00-6	
Fluoride	0.10J	mg/L	0.30	0.050	1		09/17/19 21:18	16984-48-8	
Sulfate	16.5	mg/L	1.0	0.50	1		09/17/19 21:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

Sample: GWC-7Z		Lab ID: 2623127004		Collected: 09/13/19 12:29		Received: 09/13/19 15:35		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0020J	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 14:57	7440-36-0		
Arsenic	0.0017J	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 14:57	7440-38-2		
Barium	0.031	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 14:57	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 14:57	7440-41-7		
Boron	0.0065J	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 14:57	7440-42-8	B	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 14:57	7440-43-9		
Calcium	24.6	mg/L	5.0	0.55	50	09/16/19 14:10	09/20/19 15:03	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 14:57	7440-47-3		
Cobalt	0.00099J	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 14:57	7440-48-4		
Copper	0.00025J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 14:57	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 14:57	7439-92-1		
Nickel	0.00061J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 14:57	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 14:57	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 14:57	7440-22-4		
Thallium	0.000057J	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 14:57	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 14:57	7440-62-2		
Zinc	0.0053J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 14:57	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 12:54	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	115	mg/L	10.0	10.0	1		09/18/19 13:28			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.0J	mg/L	1.0	0.60	1		09/17/19 22:45	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/17/19 22:45	16984-48-8		
Sulfate	0.76J	mg/L	1.0	0.50	1		09/17/19 22:45	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

Sample: GWA-50		Lab ID: 2623127005		Collected: 09/13/19 11:14		Received: 09/13/19 15:35		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 15:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 15:08	7440-38-2	
Barium	0.0088J	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 15:08	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 15:08	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 15:08	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 15:08	7440-43-9	
Calcium	1.9	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 15:08	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 15:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 15:08	7440-48-4	
Copper	0.0023J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 15:08	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 15:08	7439-92-1	
Nickel	0.00063J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 15:08	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 15:08	7782-49-2	
Silver	0.00045J	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 15:08	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 15:08	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 15:08	7440-62-2	
Zinc	0.0061J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 15:08	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 12:56	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	19.0	mg/L	10.0	10.0	1		09/18/19 13:28		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	1.0	mg/L	1.0	0.60	1		09/17/19 22:16	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/17/19 22:16	16984-48-8	
Sulfate	0.55J	mg/L	1.0	0.50	1		09/17/19 22:16	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

QC Batch: 35362 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2623127001, 2623127002, 2623127003, 2623127004, 2623127005

METHOD BLANK: 159305 Matrix: Water
Associated Lab Samples: 2623127001, 2623127002, 2623127003, 2623127004, 2623127005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/17/19 12:30	

LABORATORY CONTROL SAMPLE: 159306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159307 159308

Parameter	Units	2623127001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0025	99	99	75-125	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

QC Batch: 35366 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623127001, 2623127002, 2623127003, 2623127004, 2623127005

METHOD BLANK: 159319 Matrix: Water
Associated Lab Samples: 2623127001, 2623127002, 2623127003, 2623127004, 2623127005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/20/19 13:31	
Arsenic	mg/L	ND	0.0050	0.00035	09/20/19 13:31	
Barium	mg/L	ND	0.010	0.00049	09/20/19 13:31	
Beryllium	mg/L	ND	0.0030	0.000074	09/20/19 13:31	
Boron	mg/L	0.0052J	0.040	0.0049	09/20/19 13:31	
Cadmium	mg/L	ND	0.0025	0.00011	09/20/19 13:31	
Calcium	mg/L	ND	0.10	0.011	09/20/19 13:31	
Chromium	mg/L	ND	0.010	0.00039	09/20/19 13:31	
Cobalt	mg/L	ND	0.0050	0.00030	09/20/19 13:31	
Copper	mg/L	ND	0.025	0.00019	09/20/19 13:31	
Lead	mg/L	ND	0.0050	0.000046	09/20/19 13:31	
Nickel	mg/L	ND	0.010	0.00031	09/20/19 13:31	
Selenium	mg/L	ND	0.010	0.0013	09/20/19 13:31	
Silver	mg/L	ND	0.010	0.00028	09/20/19 13:31	
Thallium	mg/L	ND	0.0010	0.000052	09/20/19 13:31	
Vanadium	mg/L	ND	0.010	0.00071	09/20/19 13:31	
Zinc	mg/L	0.0049J	0.010	0.0015	09/20/19 13:31	

LABORATORY CONTROL SAMPLE: 159320

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Calcium	mg/L	1	1.0	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Copper	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.10	100	80-120	
Zinc	mg/L	0.1	0.10	102	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623127

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159321		159322		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2623127002 Result	MS Spike Conc.	MSD Spike Conc.									
Antimony	mg/L	0.0013J	0.1	0.1	0.10	0.10	103	102	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	0	20		
Barium	mg/L	0.0042J	0.1	0.1	0.11	0.11	103	101	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20		
Boron	mg/L	ND	1	1	1.0	1.0	100	103	75-125	4	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	1	20		
Calcium	mg/L	0.94	1	1	2.0	2.0	101	103	75-125	1	20		
Chromium	mg/L	0.00073J	0.1	0.1	0.11	0.11	106	105	75-125	2	20		
Cobalt	mg/L	0.00046J	0.1	0.1	0.10	0.10	104	101	75-125	2	20		
Copper	mg/L	0.026	0.1	0.1	0.13	0.13	105	104	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	1	20		
Nickel	mg/L	0.012	0.1	0.1	0.12	0.12	105	104	75-125	1	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Zinc	mg/L	0.036	0.1	0.1	0.14	0.14	104	104	75-125	0	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

QC Batch: 35535 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2623127001, 2623127002, 2623127003, 2623127004, 2623127005

LABORATORY CONTROL SAMPLE: 159910

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	84-108	

SAMPLE DUPLICATE: 159911

Parameter	Units	2623139001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	312	317	2	10	H1

SAMPLE DUPLICATE: 159912

Parameter	Units	2623127004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	115	118	3	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

QC Batch: 498159 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623127001, 2623127002, 2623127003, 2623127004, 2623127005

METHOD BLANK: 2682071 Matrix: Water
Associated Lab Samples: 2623127001, 2623127002, 2623127003, 2623127004, 2623127005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/17/19 16:42	
Fluoride	mg/L	ND	0.10	0.050	09/17/19 16:42	
Sulfate	mg/L	ND	1.0	0.50	09/17/19 16:42	

LABORATORY CONTROL SAMPLE: 2682072

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.1	100	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.3	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2682073 2682074

Parameter	Units	2622907001		2682074		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Chloride	mg/L	1.2	50	52.9	53.1	103	104	90-110	0	10	
Fluoride	mg/L	0.054J	2.5	2.6	2.6	100	100	90-110	0	10	
Sulfate	mg/L	2.4	50	54.5	54.6	104	104	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2682075 2682076

Parameter	Units	2623127001		2682076		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Chloride	mg/L	0.94J	50	53.0	53.0	104	104	90-110	0	10	
Fluoride	mg/L	0.055J	2.5	2.6	2.6	102	100	90-110	2	10	
Sulfate	mg/L	3.8	50	56.0	56.1	104	104	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623127

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

H1 Analysis conducted outside the EPA method holding time.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 1+2
Pace Project No.: 2623127

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623127001	GWA-2R	EPA 3005A	35366	EPA 6020B	35393
2623127002	GWA-3	EPA 3005A	35366	EPA 6020B	35393
2623127003	GWA-4RZ	EPA 3005A	35366	EPA 6020B	35393
2623127004	GWC-7Z	EPA 3005A	35366	EPA 6020B	35393
2623127005	GWA-50	EPA 3005A	35366	EPA 6020B	35393
2623127001	GWA-2R	EPA 7470A	35362	EPA 7470A	35389
2623127002	GWA-3	EPA 7470A	35362	EPA 7470A	35389
2623127003	GWA-4RZ	EPA 7470A	35362	EPA 7470A	35389
2623127004	GWC-7Z	EPA 7470A	35362	EPA 7470A	35389
2623127005	GWA-50	EPA 7470A	35362	EPA 7470A	35389
2623127001	GWA-2R	SM 2540C	35535		
2623127002	GWA-3	SM 2540C	35535		
2623127003	GWA-4RZ	SM 2540C	35535		
2623127004	GWC-7Z	SM 2540C	35535		
2623127005	GWA-50	SM 2540C	35535		
2623127001	GWA-2R	EPA 300.0 Rev 2.1 1993	498159		
2623127002	GWA-3	EPA 300.0 Rev 2.1 1993	498159		
2623127003	GWA-4RZ	EPA 300.0 Rev 2.1 1993	498159		
2623127004	GWC-7Z	EPA 300.0 Rev 2.1 1993	498159		
2623127005	GWA-50	EPA 300.0 Rev 2.1 1993	498159		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Maner Road, Atlanta, GA 30339
 Email: jabraham@southemco.com
 Phone: (404) 506-7239
 Requested Due Date:

Section B
Required Project Information:
 Report To: Jolu Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10382775
 Project Name: Plant Bowen Cells - State List
 Project #: Cells 1 + 2

Section C
Invoice Information:
 Attention: scs@woodco.com
 Company Name: Wood Environmental
 Address: 2480 Maner Road, Atlanta, GA 30339
 Pace Project Manager: belisy.mcdaniel@pacelabs.com
 Pace Profile #: 317.5

Page: 1 of 1

ITEM #	MATRIX	CODE	COLLECTED		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAS C=COMP)	SAMPLER TEMP AT COLLECTION		# OF CONTAINERS	PRESERVATIVES	ANALYSES TEST	REQUESTED ANALYSIS / FILTRATED (Y/N)	RESIDUAL CHLORINE (Y/N)
			START DATE	START TIME			END DATE	END TIME					
1	Drinking Water	DW	9/13/19	1022	WTG	G		2	Unpreserved	Metals 6020/470			
2	Water	WT	9/13/19	1223	WTG	G		2	H2SO4	TDS, Cl, F, SO4			
3	Waste Water	WW	9/13/19	0847	WTG	G		2	HCl	Other			
4	Product	P	9/13/19	1229	WTG	G		2	HNO3	Methanol			
5	Solid/Slud	SL	9/13/19	1114	WTG	G		2	Na2S2O3				
6	Oil	OL											
7	Wipe	WP											
8	Air	AR											
9	Other	OT											
10	Tissue	TS											

WO#: 2623127

RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME	TEMP In C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
Jolu Abraham	9/13/19	1535	Max Luman	9/13/19	1535						

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Audrey Crafton, Joe Booth
 SIGNATURE of SAMPLER: *Audrey Crafton*
 DATE Signed: 9/13/19

Sample Condition Upon Receipt



Client Name: GIA Power

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

WO#: 2623127

Tracking #: _____

PM: **BM** Due Date: **09/20/19**

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

CLIENT: **GAPower-CCR**

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 83 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 2.8 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/13/19 MK

Temp should be above freezing to 6°C

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

Client Notification/ Resolution: _____ **Field Data Required?** Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

December 16, 2019

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

RE: Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623138

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells 1+2

Pace Project No.: 2623138

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623138001	GWA-1	Water	09/12/19 13:25	09/13/19 16:09
2623138002	GWA-2	Water	09/12/19 15:07	09/13/19 16:09
2623138003	GWA-50R	Water	09/12/19 16:06	09/13/19 16:09
2623138004	Dup-1	Water	09/12/19 00:00	09/13/19 16:09
2623138005	FBL 091219	Water	09/12/19 15:50	09/13/19 16:09
2623138006	EQBL 091219	Water	09/12/19 15:55	09/13/19 16:09

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 1+2

Pace Project No.: 2623138

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623138001	GWA-1	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623138002	GWA-2	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623138003	GWA-50R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623138004	Dup-1	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623138005	FBL 091219	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623138006	EQBL 091219	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

Sample: GWA-1		Lab ID: 2623138001		Collected: 09/12/19 13:25		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0037	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 20:17	7440-36-0		
Arsenic	0.00040J	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 20:17	7440-38-2		
Barium	0.018	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 20:17	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 20:17	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 20:17	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 20:17	7440-43-9		
Calcium	31.9	mg/L	5.0	0.55	50	09/16/19 15:56	09/18/19 20:23	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 20:17	7440-47-3		
Cobalt	0.00047J	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 20:17	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 20:17	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 20:17	7439-92-1		
Nickel	0.00038J	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 20:17	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 20:17	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 20:17	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 20:17	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 20:17	7440-62-2		
Zinc	0.0047J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 20:17	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:39	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	174	mg/L	10.0	10.0	1		09/17/19 11:50			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.3	mg/L	1.0	0.60	1		09/18/19 17:38	16887-00-6		
Fluoride	0.051J	mg/L	0.30	0.050	1		09/18/19 17:38	16984-48-8		
Sulfate	0.98J	mg/L	1.0	0.50	1		09/18/19 17:38	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

Sample: GWA-2		Lab ID: 2623138002		Collected: 09/12/19 15:07		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 20:40	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 20:40	7440-38-2		
Barium	0.0056J	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 20:40	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 20:40	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 20:40	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 20:40	7440-43-9		
Calcium	1.8	mg/L	0.10	0.011	1	09/16/19 15:56	09/18/19 20:40	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 20:40	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 20:40	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 20:40	7440-50-8		
Lead	0.000072J	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 20:40	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 20:40	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 20:40	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 20:40	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 20:40	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 20:40	7440-62-2		
Zinc	0.0050J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 20:40	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:46	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	44.0	mg/L	10.0	10.0	1		09/17/19 11:51			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.80J	mg/L	1.0	0.60	1		09/18/19 17:53	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 17:53	16984-48-8		
Sulfate	5.2	mg/L	1.0	0.50	1		09/18/19 17:53	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

Sample: GWA-50R		Lab ID: 2623138003		Collected: 09/12/19 16:06		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 20:51	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 20:51	7440-38-2		
Barium	0.011	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 20:51	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 20:51	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 20:51	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 20:51	7440-43-9		
Calcium	3.7	mg/L	0.10	0.011	1	09/16/19 15:56	09/18/19 20:51	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 20:51	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 20:51	7440-48-4		
Copper	0.0028J	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 20:51	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 20:51	7439-92-1		
Nickel	0.0015J	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 20:51	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 20:51	7782-49-2		
Silver	0.0028J	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 20:51	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 20:51	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 20:51	7440-62-2		
Zinc	0.0058J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 20:51	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:48	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	46.0	mg/L	10.0	10.0	1		09/17/19 11:51			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.74J	mg/L	1.0	0.60	1		09/18/19 18:36	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 18:36	16984-48-8		
Sulfate	0.80J	mg/L	1.0	0.50	1		09/18/19 18:36	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

Sample: Dup-1		Lab ID: 2623138004		Collected: 09/12/19 00:00		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 21:03	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 21:03	7440-38-2		
Barium	0.0060J	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 21:03	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 21:03	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 21:03	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 21:03	7440-43-9		
Calcium	2.1	mg/L	0.10	0.011	1	09/16/19 15:56	09/18/19 21:03	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 21:03	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 21:03	7440-48-4		
Copper	0.00046J	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 21:03	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 21:03	7439-92-1		
Nickel	0.00036J	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 21:03	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 21:03	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 21:03	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 21:03	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 21:03	7440-62-2		
Zinc	0.0051J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 21:03	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:50	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	41.0	mg/L	10.0	10.0	1		09/17/19 11:51			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.83J	mg/L	1.0	0.60	1		09/18/19 18:51	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 18:51	16984-48-8		
Sulfate	6.9	mg/L	1.0	0.50	1		09/18/19 18:51	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

Sample: FBL 091219		Lab ID: 2623138005		Collected: 09/12/19 15:50		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 21:14	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 21:14	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 21:14	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 21:14	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 21:14	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 21:14	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/16/19 15:56	09/18/19 21:14	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 21:14	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 21:14	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 21:14	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 21:14	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 21:14	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 21:14	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 21:14	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 21:14	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 21:14	7440-62-2		
Zinc	0.0059J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 21:14	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:53	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	10.0	mg/L	10.0	10.0	1		09/17/19 11:51			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/18/19 19:05	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 19:05	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/18/19 19:05	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

Sample: EQBL 091219		Lab ID: 2623138006		Collected: 09/12/19 15:55		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 21:20	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 21:20	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 21:20	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 21:20	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 21:20	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 21:20	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/16/19 15:56	09/18/19 21:20	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 21:20	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 21:20	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 21:20	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 21:20	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 21:20	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 21:20	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 21:20	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 21:20	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 21:20	7440-62-2		
Zinc	0.0060J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 21:20	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:55	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	14.0	mg/L	10.0	10.0	1		09/17/19 11:52			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/18/19 19:20	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 19:20	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/18/19 19:20	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623138

QC Batch: 35365

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 2623138001, 2623138002, 2623138003, 2623138004, 2623138005, 2623138006

METHOD BLANK: 159315

Matrix: Water

Associated Lab Samples: 2623138001, 2623138002, 2623138003, 2623138004, 2623138005, 2623138006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/17/19 13:49	

LABORATORY CONTROL SAMPLE: 159316

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159317 159318

Parameter	Units	159317		159318		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2623137001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0027	0.0026	107	103	75-125	4	20

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

QC Batch: 35380 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623138001, 2623138002, 2623138003, 2623138004, 2623138005, 2623138006

METHOD BLANK: 159344 Matrix: Water
Associated Lab Samples: 2623138001, 2623138002, 2623138003, 2623138004, 2623138005, 2623138006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/18/19 18:28	
Arsenic	mg/L	ND	0.0050	0.00035	09/18/19 18:28	
Barium	mg/L	ND	0.010	0.00049	09/18/19 18:28	
Beryllium	mg/L	ND	0.0030	0.000074	09/18/19 18:28	
Boron	mg/L	ND	0.040	0.0049	09/18/19 18:28	
Cadmium	mg/L	ND	0.0025	0.00011	09/18/19 18:28	
Calcium	mg/L	ND	0.10	0.011	09/18/19 18:28	
Chromium	mg/L	ND	0.010	0.00039	09/18/19 18:28	
Cobalt	mg/L	ND	0.0050	0.00030	09/18/19 18:28	
Copper	mg/L	ND	0.025	0.00019	09/18/19 18:28	
Lead	mg/L	ND	0.0050	0.000046	09/18/19 18:28	
Nickel	mg/L	ND	0.010	0.00031	09/18/19 18:28	
Selenium	mg/L	ND	0.010	0.0013	09/18/19 18:28	
Silver	mg/L	ND	0.010	0.00028	09/18/19 18:28	
Thallium	mg/L	ND	0.0010	0.000052	09/18/19 18:28	
Vanadium	mg/L	ND	0.010	0.00071	09/18/19 18:28	
Zinc	mg/L	0.0045J	0.010	0.0015	09/18/19 18:28	

LABORATORY CONTROL SAMPLE: 159345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.10	104	80-120	
Calcium	mg/L	1	0.99	99	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.1	0.11	111	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159346												159347	
Parameter	Units	2623134003 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
			Spike Conc.	Spike Conc.									
Antimony	mg/L	0.00029J	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Barium	mg/L	0.0079J	0.1	0.1	0.11	0.11	98	100	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Boron	mg/L	0.021J	1	1	0.98	0.99	96	97	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Calcium	mg/L	29.5	1	1	30.2	30.5	65	95	75-125	1	20	M6	
Chromium	mg/L	0.00066J	0.1	0.1	0.10	0.10	103	103	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20		
Copper	mg/L	0.00026J	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Lead	mg/L	0.000092J	0.1	0.1	0.098	0.10	98	100	75-125	1	20		
Nickel	mg/L	ND	0.1	0.1	0.10	0.10	100	99	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	106	103	75-125	3	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	20		
Zinc	mg/L	0.0053J	0.1	0.1	0.11	0.11	102	102	75-125	0	20		

SAMPLE DUPLICATE: 159348

Parameter	Units	92445435001	Dup	RPD	Max RPD	Qualifiers
		Result	Result			
Antimony	mg/L	1.7J ug/L	0.0017J		20	
Arsenic	mg/L	63.4 ug/L	0.066	3	20	
Barium	mg/L	221 ug/L	0.23	2	20	
Beryllium	mg/L	2.8 ug/L	0.0026J	5	20	
Boron	mg/L	159J ug/L	0.16J		20	
Cadmium	mg/L	ND	ND		20	
Calcium	mg/L	1350000 ug/L	1370	1	20	
Chromium	mg/L	132 ug/L	0.14	5	20	
Cobalt	mg/L	63.8 ug/L	0.067	5	20	
Copper	mg/L	37.6 ug/L	0.040J	5	20	
Lead	mg/L	36.6 ug/L	0.037	1	20	
Nickel	mg/L	76.9 ug/L	0.079	3	20	
Selenium	mg/L	24.8J ug/L	0.023J		20	
Silver	mg/L	ND	ND		20	
Thallium	mg/L	0.79J ug/L	0.00078J		20	
Vanadium	mg/L	142 ug/L	0.15	5	20	
Zinc	mg/L	419 ug/L	0.43	3	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623138

QC Batch: 498348 Analysis Method: EPA 300.0 Rev 2.1 1993
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
 Associated Lab Samples: 2623138001, 2623138002, 2623138003, 2623138004, 2623138005, 2623138006

METHOD BLANK: 2682971 Matrix: Water
 Associated Lab Samples: 2623138001, 2623138002, 2623138003, 2623138004, 2623138005, 2623138006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/18/19 15:40	
Fluoride	mg/L	ND	0.10	0.050	09/18/19 15:40	
Sulfate	mg/L	ND	1.0	0.50	09/18/19 15:40	

LABORATORY CONTROL SAMPLE: 2682972

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.0	98	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	50.2	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683007 2683008

Parameter	Units	92445860001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Chloride	mg/L	61.7	50	50	105	104	86	85	90-110	1	10	M1
Fluoride	mg/L	0.61	2.5	2.5	3.2	3.1	104	102	90-110	2	10	
Sulfate	mg/L	5.7	50	50	57.2	57.3	103	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683009 2683010

Parameter	Units	92445729001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result						
Chloride	mg/L	34.6	50	50	85.8	85.2	102	101	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	101	102	90-110	1	10	
Sulfate	mg/L	9.2	50	50	61.1	60.6	104	103	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623138

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

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

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 1+2
Pace Project No.: 2623138

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623138001	GWA-1	EPA 3005A	35380	EPA 6020B	35396
2623138002	GWA-2	EPA 3005A	35380	EPA 6020B	35396
2623138003	GWA-50R	EPA 3005A	35380	EPA 6020B	35396
2623138004	Dup-1	EPA 3005A	35380	EPA 6020B	35396
2623138005	FBL 091219	EPA 3005A	35380	EPA 6020B	35396
2623138006	EQBL 091219	EPA 3005A	35380	EPA 6020B	35396
2623138001	GWA-1	EPA 7470A	35365	EPA 7470A	35390
2623138002	GWA-2	EPA 7470A	35365	EPA 7470A	35390
2623138003	GWA-50R	EPA 7470A	35365	EPA 7470A	35390
2623138004	Dup-1	EPA 7470A	35365	EPA 7470A	35390
2623138005	FBL 091219	EPA 7470A	35365	EPA 7470A	35390
2623138006	EQBL 091219	EPA 7470A	35365	EPA 7470A	35390
2623138001	GWA-1	SM 2540C	35434		
2623138002	GWA-2	SM 2540C	35434		
2623138003	GWA-50R	SM 2540C	35434		
2623138004	Dup-1	SM 2540C	35434		
2623138005	FBL 091219	SM 2540C	35434		
2623138006	EQBL 091219	SM 2540C	35434		
2623138001	GWA-1	EPA 300.0 Rev 2.1 1993	498348		
2623138002	GWA-2	EPA 300.0 Rev 2.1 1993	498348		
2623138003	GWA-50R	EPA 300.0 Rev 2.1 1993	498348		
2623138004	Dup-1	EPA 300.0 Rev 2.1 1993	498348		
2623138005	FBL 091219	EPA 300.0 Rev 2.1 1993	498348		
2623138006	EQBL 091219	EPA 300.0 Rev 2.1 1993	498348		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Joju Abraham	Attention:	scsinvoices@southamco.com
Address:	2480 Maner Road Atlanta, GA 30339	Copy To:	Wood Environmental	Company Name:	
Email:	j.abraham@southamco.com	Purchase Order #:	SCS10382775	Address:	
Phone:	(404)506-7239	Project Name:	Plant Bowen Cells - State List	Pace Quote:	
Requested Due Date:		Project #:	Cells 1+2	Pace Project Manager:	betsy.modaniel@paceclabs.com
				Pace Profile #:	317.5
				Regulatory Agency:	GA
				State / Location:	

Page: 1 Of 1

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G-GRAB C-COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	PRESERVATIVES						ANALYSES TEST (Y/N)	Residual Chrome (Y/N)	
			START DATE	START TIME				END DATE	END TIME	H2SO4	HNO3	HCl	NaOH			Na2S2O3
1		DW	9/12/19	1325		WT	2								X	
2		WT	9/12/19	1507		WT	2								X	
3		WT	9/12/19	1606		WT	2								X	
4		WT	9/12/19			WT	2								X	
5		WT	9/12/19	1550		WT	2								X	
6		WT	9/12/19	1555		WT	2								X	
7																
8																
9																
10																
11																
12																

WO#: 2623138

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on	Temp (Y/N)	Custody	Sealed	Samples
	Cindy Madd	9/13	12:30		9/13	12:30						
		9/13	1609	Molalman	9/13/19	1609						
							1.6					

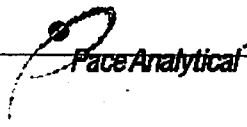
SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Audrey Crafton, Joe Booth

SIGNATURE of SAMPLER: *Audrey Crafton*

DATE Signed: 9/12/19

Sample Condition Upon Receipt



Client Name: GRA Power

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Tracking #: _____

WO#: 2623138

PM: BM Due Date: 09/20/19
CLIENT: GRPower-CCR

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 83 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1.6 Biological Tissue is Frozen: Yes No
Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9/13/19 ml

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

Client Notification/ Resolution: _____ Field Data Required? Y / N
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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

December 16, 2019

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

RE: Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 17, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen Cells 1+2

Pace Project No.: 2623221

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen Cells 1+2

Pace Project No.: 2623221

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623221001	GWC-5	Water	09/16/19 11:51	09/17/19 15:14
2623221002	GWC-6	Water	09/16/19 15:00	09/17/19 15:14
2623221003	GWC-6RZ	Water	09/16/19 13:22	09/17/19 15:14
2623221004	GWC-8Z	Water	09/16/19 11:40	09/17/19 15:14
2623221005	GWC-8RR	Water	09/16/19 13:15	09/17/19 15:14
2623221006	GWC-9	Water	09/16/19 15:08	09/17/19 15:14
2623221007	FBL091619	Water	09/16/19 16:00	09/17/19 15:14
2623221008	EQBL091619	Water	09/16/19 16:05	09/17/19 15:14
2623221009	Dup-2	Water	09/16/19 00:00	09/17/19 15:14

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells 1+2

Pace Project No.: 2623221

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623221001	GWC-5	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623221002	GWC-6	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623221003	GWC-6RZ	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623221004	GWC-8Z	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623221005	GWC-8RR	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623221006	GWC-9	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623221007	FBL091619	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623221008	EQBL091619	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623221009	Dup-2	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: GWC-5		Lab ID: 2623221001		Collected: 09/16/19 11:51		Received: 09/17/19 15:14		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/19/19 16:18	09/24/19 18:53	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/19/19 16:18	09/24/19 18:53	7440-38-2		
Barium	0.022	mg/L	0.010	0.00049	1	09/19/19 16:18	09/24/19 18:53	7440-39-3		
Beryllium	0.00051J	mg/L	0.0030	0.000074	1	09/19/19 16:18	09/24/19 18:53	7440-41-7		
Boron	0.0051J	mg/L	0.040	0.0049	1	09/19/19 16:18	09/24/19 18:53	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/19/19 16:18	09/24/19 18:53	7440-43-9		
Calcium	2.8	mg/L	0.10	0.011	1	09/19/19 16:18	09/24/19 18:53	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/19/19 16:18	09/24/19 18:53	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/19/19 16:18	09/24/19 18:53	7440-48-4		
Copper	0.016J	mg/L	0.025	0.00019	1	09/19/19 16:18	09/24/19 18:53	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/19/19 16:18	09/24/19 18:53	7439-92-1		
Nickel	0.0080J	mg/L	0.010	0.00031	1	09/19/19 16:18	09/24/19 18:53	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/19/19 16:18	09/24/19 18:53	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/19/19 16:18	09/24/19 18:53	7440-22-4		
Thallium	0.000084J	mg/L	0.0010	0.000052	1	09/19/19 16:18	09/24/19 18:53	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/19/19 16:18	09/24/19 18:53	7440-62-2		
Zinc	0.035	mg/L	0.010	0.0015	1	09/19/19 16:18	09/24/19 18:53	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/19/19 08:57	09/19/19 12:42	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	45.0	mg/L	10.0	10.0	1		09/20/19 12:59			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.73J	mg/L	1.0	0.60	1		09/20/19 04:10	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/20/19 04:10	16984-48-8		
Sulfate	1.2	mg/L	1.0	0.50	1		09/20/19 04:10	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: GWC-6		Lab ID: 2623221002		Collected: 09/16/19 15:00		Received: 09/17/19 15:14		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/19/19 16:18	09/24/19 19:44	7440-36-0		
Arsenic	0.00071J	mg/L	0.0050	0.00035	1	09/19/19 16:18	09/24/19 19:44	7440-38-2		
Barium	0.0075J	mg/L	0.010	0.00049	1	09/19/19 16:18	09/24/19 19:44	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/19/19 16:18	09/24/19 19:44	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/19/19 16:18	09/24/19 19:44	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/19/19 16:18	09/24/19 19:44	7440-43-9		
Calcium	13.5	mg/L	5.0	0.55	50	09/19/19 16:18	09/24/19 19:50	7440-70-2		
Chromium	0.0020J	mg/L	0.010	0.00039	1	09/19/19 16:18	09/24/19 19:44	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/19/19 16:18	09/24/19 19:44	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/19/19 16:18	09/24/19 19:44	7440-50-8		
Lead	0.00010J	mg/L	0.0050	0.000046	1	09/19/19 16:18	09/24/19 19:44	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/19/19 16:18	09/24/19 19:44	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/19/19 16:18	09/24/19 19:44	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/19/19 16:18	09/24/19 19:44	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/19/19 16:18	09/24/19 19:44	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/19/19 16:18	09/24/19 19:44	7440-62-2		
Zinc	0.0058J	mg/L	0.010	0.0015	1	09/19/19 16:18	09/24/19 19:44	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/19/19 08:57	09/19/19 12:45	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	82.0	mg/L	10.0	10.0	1		09/20/19 12:59			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.1	mg/L	1.0	0.60	1		09/20/19 04:25	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/20/19 04:25	16984-48-8		
Sulfate	2.0	mg/L	1.0	0.50	1		09/20/19 04:25	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: GWC-6RZ Lab ID: 2623221003 Collected: 09/16/19 13:22 Received: 09/17/19 15:14 Matrix: Water											
Parameters	Results	Units	Report Limit			MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A											
Antimony	ND	mg/L	0.0030	0.00027	1		09/19/19 16:18	09/24/19 19:56	7440-36-0		
Arsenic	0.00038J	mg/L	0.0050	0.00035	1		09/19/19 16:18	09/24/19 19:56	7440-38-2		
Barium	0.0072J	mg/L	0.010	0.00049	1		09/19/19 16:18	09/24/19 19:56	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1		09/19/19 16:18	09/24/19 19:56	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1		09/19/19 16:18	09/24/19 19:56	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1		09/19/19 16:18	09/24/19 19:56	7440-43-9		
Calcium	9.5	mg/L	5.0	0.55	50		09/19/19 16:18	09/24/19 20:02	7440-70-2		
Chromium	0.0020J	mg/L	0.010	0.00039	1		09/19/19 16:18	09/24/19 19:56	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1		09/19/19 16:18	09/24/19 19:56	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1		09/19/19 16:18	09/24/19 19:56	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1		09/19/19 16:18	09/24/19 19:56	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1		09/19/19 16:18	09/24/19 19:56	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1		09/19/19 16:18	09/24/19 19:56	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1		09/19/19 16:18	09/24/19 19:56	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1		09/19/19 16:18	09/24/19 19:56	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1		09/19/19 16:18	09/24/19 19:56	7440-62-2		
Zinc	0.0057J	mg/L	0.010	0.0015	1		09/19/19 16:18	09/24/19 19:56	7440-66-6	B	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A											
Mercury	ND	mg/L	0.00050	0.00014	1		09/19/19 08:57	09/19/19 12:47	7439-97-6		
2540C Total Dissolved Solids Analytical Method: SM 2540C											
Total Dissolved Solids	65.0	mg/L	10.0	10.0	1			09/20/19 13:00			
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993											
Chloride	1.2	mg/L	1.0	0.60	1			09/20/19 04:39	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1			09/20/19 04:39	16984-48-8		
Sulfate	1.6	mg/L	1.0	0.50	1			09/20/19 04:39	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: GWC-8Z		Lab ID: 2623221004		Collected: 09/16/19 11:40		Received: 09/17/19 15:14		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/19/19 16:18	09/24/19 20:07	7440-36-0		
Arsenic	0.00043J	mg/L	0.0050	0.00035	1	09/19/19 16:18	09/24/19 20:07	7440-38-2		
Barium	0.026	mg/L	0.010	0.00049	1	09/19/19 16:18	09/24/19 20:07	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/19/19 16:18	09/24/19 20:07	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/19/19 16:18	09/24/19 20:07	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/19/19 16:18	09/24/19 20:07	7440-43-9		
Calcium	20.3	mg/L	5.0	0.55	50	09/19/19 16:18	09/24/19 20:13	7440-70-2		
Chromium	0.0020J	mg/L	0.010	0.00039	1	09/19/19 16:18	09/24/19 20:07	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/19/19 16:18	09/24/19 20:07	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/19/19 16:18	09/24/19 20:07	7440-50-8		
Lead	0.000054J	mg/L	0.0050	0.000046	1	09/19/19 16:18	09/24/19 20:07	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/19/19 16:18	09/24/19 20:07	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/19/19 16:18	09/24/19 20:07	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/19/19 16:18	09/24/19 20:07	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/19/19 16:18	09/24/19 20:07	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/19/19 16:18	09/24/19 20:07	7440-62-2		
Zinc	0.0065J	mg/L	0.010	0.0015	1	09/19/19 16:18	09/24/19 20:07	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/19/19 08:57	09/19/19 12:49	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	99.0	mg/L	10.0	10.0	1		09/20/19 13:00			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.4	mg/L	1.0	0.60	1		09/20/19 04:53	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/20/19 04:53	16984-48-8		
Sulfate	1.0	mg/L	1.0	0.50	1		09/20/19 04:53	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: GWC-8RR		Lab ID: 2623221005		Collected: 09/16/19 13:15		Received: 09/17/19 15:14		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/19/19 16:18	09/24/19 20:19	7440-36-0		
Arsenic	0.00039J	mg/L	0.0050	0.00035	1	09/19/19 16:18	09/24/19 20:19	7440-38-2		
Barium	0.015	mg/L	0.010	0.00049	1	09/19/19 16:18	09/24/19 20:19	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/19/19 16:18	09/24/19 20:19	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/19/19 16:18	09/24/19 20:19	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/19/19 16:18	09/24/19 20:19	7440-43-9		
Calcium	23.0	mg/L	5.0	0.55	50	09/19/19 16:18	09/24/19 20:25	7440-70-2		
Chromium	0.00046J	mg/L	0.010	0.00039	1	09/19/19 16:18	09/24/19 20:19	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/19/19 16:18	09/24/19 20:19	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/19/19 16:18	09/24/19 20:19	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/19/19 16:18	09/24/19 20:19	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/19/19 16:18	09/24/19 20:19	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/19/19 16:18	09/24/19 20:19	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/19/19 16:18	09/24/19 20:19	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/19/19 16:18	09/24/19 20:19	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/19/19 16:18	09/24/19 20:19	7440-62-2		
Zinc	0.0056J	mg/L	0.010	0.0015	1	09/19/19 16:18	09/24/19 20:19	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/19/19 08:57	09/19/19 12:52	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	113	mg/L	10.0	10.0	1		09/20/19 13:00			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.76J	mg/L	1.0	0.60	1		09/20/19 05:52	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/20/19 05:52	16984-48-8		
Sulfate	0.69J	mg/L	1.0	0.50	1		09/20/19 05:52	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: GWC-9		Lab ID: 2623221006		Collected: 09/16/19 15:08		Received: 09/17/19 15:14		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/19/19 16:18	09/24/19 20:30	7440-36-0		
Arsenic	0.00044J	mg/L	0.0050	0.00035	1	09/19/19 16:18	09/24/19 20:30	7440-38-2		
Barium	0.035	mg/L	0.010	0.00049	1	09/19/19 16:18	09/24/19 20:30	7440-39-3		
Beryllium	0.00010J	mg/L	0.0030	0.000074	1	09/19/19 16:18	09/24/19 20:30	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/19/19 16:18	09/24/19 20:30	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/19/19 16:18	09/24/19 20:30	7440-43-9		
Calcium	12.0	mg/L	5.0	0.55	50	09/19/19 16:18	09/24/19 20:36	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/19/19 16:18	09/24/19 20:30	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/19/19 16:18	09/24/19 20:30	7440-48-4		
Copper	0.00021J	mg/L	0.025	0.00019	1	09/19/19 16:18	09/24/19 20:30	7440-50-8		
Lead	0.000061J	mg/L	0.0050	0.000046	1	09/19/19 16:18	09/24/19 20:30	7439-92-1		
Nickel	0.00062J	mg/L	0.010	0.00031	1	09/19/19 16:18	09/24/19 20:30	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/19/19 16:18	09/24/19 20:30	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/19/19 16:18	09/24/19 20:30	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/19/19 16:18	09/24/19 20:30	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/19/19 16:18	09/24/19 20:30	7440-62-2		
Zinc	0.0062J	mg/L	0.010	0.0015	1	09/19/19 16:18	09/24/19 20:30	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/19/19 08:57	09/19/19 12:54	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	85.0	mg/L	10.0	10.0	1		09/20/19 13:00			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.9	mg/L	1.0	0.60	1		09/20/19 06:06	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/20/19 06:06	16984-48-8		
Sulfate	3.0	mg/L	1.0	0.50	1		09/20/19 06:06	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: FBL091619		Lab ID: 2623221007		Collected: 09/16/19 16:00		Received: 09/17/19 15:14		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/19/19 16:18	09/24/19 20:53	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/19/19 16:18	09/24/19 20:53	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/19/19 16:18	09/24/19 20:53	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/19/19 16:18	09/24/19 20:53	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/19/19 16:18	09/24/19 20:53	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/19/19 16:18	09/24/19 20:53	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/19/19 16:18	09/24/19 20:53	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/19/19 16:18	09/24/19 20:53	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/19/19 16:18	09/24/19 20:53	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/19/19 16:18	09/24/19 20:53	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/19/19 16:18	09/24/19 20:53	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/19/19 16:18	09/24/19 20:53	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/19/19 16:18	09/24/19 20:53	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/19/19 16:18	09/24/19 20:53	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/19/19 16:18	09/24/19 20:53	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/19/19 16:18	09/24/19 20:53	7440-62-2		
Zinc	0.0062J	mg/L	0.010	0.0015	1	09/19/19 16:18	09/24/19 20:53	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/19/19 08:57	09/19/19 12:57	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	11.0	mg/L	10.0	10.0	1		09/20/19 13:00			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/20/19 06:21	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/20/19 06:21	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/20/19 06:21	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: EQBL091619		Lab ID: 2623221008		Collected: 09/16/19 16:05		Received: 09/17/19 15:14		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/19/19 16:18	09/24/19 20:59	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/19/19 16:18	09/24/19 20:59	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/19/19 16:18	09/24/19 20:59	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/19/19 16:18	09/24/19 20:59	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/19/19 16:18	09/24/19 20:59	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/19/19 16:18	09/24/19 20:59	7440-43-9		
Calcium	0.019J	mg/L	0.10	0.011	1	09/19/19 16:18	09/24/19 20:59	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/19/19 16:18	09/24/19 20:59	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/19/19 16:18	09/24/19 20:59	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/19/19 16:18	09/24/19 20:59	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/19/19 16:18	09/24/19 20:59	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/19/19 16:18	09/24/19 20:59	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/19/19 16:18	09/24/19 20:59	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/19/19 16:18	09/24/19 20:59	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/19/19 16:18	09/24/19 20:59	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/19/19 16:18	09/24/19 20:59	7440-62-2		
Zinc	0.0066J	mg/L	0.010	0.0015	1	09/19/19 16:18	09/24/19 20:59	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/19/19 08:57	09/19/19 12:59	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/20/19 13:01			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/20/19 06:35	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/20/19 06:35	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/20/19 06:35	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Sample: Dup-2		Lab ID: 2623221009		Collected: 09/16/19 00:00		Received: 09/17/19 15:14		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/19/19 16:18	09/24/19 21:05	7440-36-0		
Arsenic	0.00041J	mg/L	0.0050	0.00035	1	09/19/19 16:18	09/24/19 21:05	7440-38-2		
Barium	0.015	mg/L	0.010	0.00049	1	09/19/19 16:18	09/24/19 21:05	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/19/19 16:18	09/24/19 21:05	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/19/19 16:18	09/24/19 21:05	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/19/19 16:18	09/24/19 21:05	7440-43-9		
Calcium	22.9	mg/L	5.0	0.55	50	09/19/19 16:18	09/24/19 21:10	7440-70-2		
Chromium	0.00047J	mg/L	0.010	0.00039	1	09/19/19 16:18	09/24/19 21:05	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/19/19 16:18	09/24/19 21:05	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/19/19 16:18	09/24/19 21:05	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/19/19 16:18	09/24/19 21:05	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/19/19 16:18	09/24/19 21:05	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/19/19 16:18	09/24/19 21:05	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/19/19 16:18	09/24/19 21:05	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/19/19 16:18	09/24/19 21:05	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/19/19 16:18	09/24/19 21:05	7440-62-2		
Zinc	0.0049J	mg/L	0.010	0.0015	1	09/19/19 16:18	09/24/19 21:05	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/19/19 08:57	09/19/19 13:01	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	112	mg/L	10.0	10.0	1		09/20/19 13:01			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.74J	mg/L	1.0	0.60	1		09/20/19 06:50	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/20/19 06:50	16984-48-8		
Sulfate	0.69J	mg/L	1.0	0.50	1		09/20/19 06:50	14808-79-8		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 1+2

Pace Project No.: 2623221

QC Batch:	35602	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
Associated Lab Samples:	2623221001, 2623221002, 2623221003, 2623221004, 2623221005, 2623221006, 2623221007, 2623221008, 2623221009		

METHOD BLANK:	160217	Matrix:	Water
Associated Lab Samples:	2623221001, 2623221002, 2623221003, 2623221004, 2623221005, 2623221006, 2623221007, 2623221008, 2623221009		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/19/19 12:14	

LABORATORY CONTROL SAMPLE: 160218

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 160219 160220

Parameter	Units	2623273001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0020	0.0020	81	80	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

QC Batch: 35636 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623221001, 2623221002, 2623221003, 2623221004, 2623221005, 2623221006, 2623221007, 2623221008, 2623221009

METHOD BLANK: 160430 Matrix: Water
Associated Lab Samples: 2623221001, 2623221002, 2623221003, 2623221004, 2623221005, 2623221006, 2623221007, 2623221008, 2623221009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/24/19 18:41	
Arsenic	mg/L	ND	0.0050	0.00035	09/24/19 18:41	
Barium	mg/L	ND	0.010	0.00049	09/24/19 18:41	
Beryllium	mg/L	ND	0.0030	0.000074	09/24/19 18:41	
Boron	mg/L	ND	0.040	0.0049	09/24/19 18:41	
Cadmium	mg/L	ND	0.0025	0.00011	09/24/19 18:41	
Calcium	mg/L	ND	0.10	0.011	09/24/19 18:41	
Chromium	mg/L	ND	0.010	0.00039	09/24/19 18:41	
Cobalt	mg/L	ND	0.0050	0.00030	09/24/19 18:41	
Copper	mg/L	ND	0.025	0.00019	09/24/19 18:41	
Lead	mg/L	ND	0.0050	0.000046	09/24/19 18:41	
Nickel	mg/L	ND	0.010	0.00031	09/24/19 18:41	
Selenium	mg/L	ND	0.010	0.0013	09/24/19 18:41	
Silver	mg/L	ND	0.010	0.00028	09/24/19 18:41	
Thallium	mg/L	ND	0.0010	0.000052	09/24/19 18:41	
Vanadium	mg/L	ND	0.010	0.00071	09/24/19 18:41	
Zinc	mg/L	0.0048J	0.010	0.0015	09/24/19 18:41	

LABORATORY CONTROL SAMPLE: 160431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	110	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Calcium	mg/L	1	1.0	103	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	105	80-120	
Nickel	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	105	80-120	
Vanadium	mg/L	0.1	0.099	99	80-120	
Zinc	mg/L	0.1	0.10	105	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 1+2

Pace Project No.: 2623221

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 160432		160433		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2623221001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	110	111	75-125	1	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	2	20		
Barium	mg/L	0.022	0.1	0.1	0.13	0.13	106	107	75-125	1	20		
Beryllium	mg/L	0.00051J	0.1	0.1	0.10	0.10	101	104	75-125	3	20		
Boron	mg/L	0.0051J	1	1	1.0	1.0	102	104	75-125	3	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	105	75-125	4	20		
Calcium	mg/L	2.8	1	1	3.8	3.9	95	103	75-125	2	20		
Chromium	mg/L	ND	0.1	0.1	0.099	0.10	99	104	75-125	5	20		
Cobalt	mg/L	ND	0.1	0.1	0.099	0.11	99	106	75-125	7	20		
Copper	mg/L	0.016J	0.1	0.1	0.12	0.12	99	103	75-125	4	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.11	104	108	75-125	4	20		
Nickel	mg/L	0.0080J	0.1	0.1	0.11	0.11	97	105	75-125	7	20		
Selenium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	105	75-125	3	20		
Thallium	mg/L	0.000084J	0.1	0.1	0.10	0.11	104	107	75-125	3	20		
Vanadium	mg/L	ND	0.1	0.1	0.099	0.10	99	104	75-125	5	20		
Zinc	mg/L	0.035	0.1	0.1	0.13	0.14	98	101	75-125	3	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 1+2

Pace Project No.: 2623221

QC Batch: 35712

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623221001, 2623221002, 2623221003, 2623221004, 2623221005, 2623221006, 2623221007, 2623221008, 2623221009

LABORATORY CONTROL SAMPLE: 160813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	413	103	84-108	

SAMPLE DUPLICATE: 160814

Parameter	Units	2623221001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	45.0	42.0	7	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

QC Batch: 498896 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623221001, 2623221002, 2623221003, 2623221004, 2623221005, 2623221006, 2623221007, 2623221008, 2623221009

METHOD BLANK: 2685331 Matrix: Water
Associated Lab Samples: 2623221001, 2623221002, 2623221003, 2623221004, 2623221005, 2623221006, 2623221007, 2623221008, 2623221009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/20/19 02:43	
Fluoride	mg/L	ND	0.10	0.050	09/20/19 02:43	
Sulfate	mg/L	ND	1.0	0.50	09/20/19 02:43	

LABORATORY CONTROL SAMPLE: 2685332

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.8	100	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	51.0	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2685333 2685334

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92446203001 Result	Spike Conc.	Spike Conc.	MS Result						
Chloride	mg/L	20.5	50	50	72.6	72.4	104	104	90-110	0	10
Fluoride	mg/L	ND	2.5	2.5	3.1	2.9	123	117	90-110	5	10 M1
Sulfate	mg/L	ND	50	50	53.8	53.3	106	105	90-110	1	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2685335 2685336

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92446211001 Result	Spike Conc.	Spike Conc.	MS Result						
Chloride	mg/L	17.5	50	50	71.2	70.7	107	106	90-110	1	10
Fluoride	mg/L	0.18	2.5	2.5	2.8	2.8	105	103	90-110	1	10
Sulfate	mg/L	596	50	50	641	643	90	94	90-110	0	10

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: Plant Bowen Cells 1+2

Pace Project No.: 2623221

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells 1+2
Pace Project No.: 2623221

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623221001	GWC-5	EPA 3005A	35636	EPA 6020B	35669
2623221002	GWC-6	EPA 3005A	35636	EPA 6020B	35669
2623221003	GWC-6RZ	EPA 3005A	35636	EPA 6020B	35669
2623221004	GWC-8Z	EPA 3005A	35636	EPA 6020B	35669
2623221005	GWC-8RR	EPA 3005A	35636	EPA 6020B	35669
2623221006	GWC-9	EPA 3005A	35636	EPA 6020B	35669
2623221007	FBL091619	EPA 3005A	35636	EPA 6020B	35669
2623221008	EQBL091619	EPA 3005A	35636	EPA 6020B	35669
2623221009	Dup-2	EPA 3005A	35636	EPA 6020B	35669
2623221001	GWC-5	EPA 7470A	35602	EPA 7470A	35629
2623221002	GWC-6	EPA 7470A	35602	EPA 7470A	35629
2623221003	GWC-6RZ	EPA 7470A	35602	EPA 7470A	35629
2623221004	GWC-8Z	EPA 7470A	35602	EPA 7470A	35629
2623221005	GWC-8RR	EPA 7470A	35602	EPA 7470A	35629
2623221006	GWC-9	EPA 7470A	35602	EPA 7470A	35629
2623221007	FBL091619	EPA 7470A	35602	EPA 7470A	35629
2623221008	EQBL091619	EPA 7470A	35602	EPA 7470A	35629
2623221009	Dup-2	EPA 7470A	35602	EPA 7470A	35629
2623221001	GWC-5	SM 2540C	35712		
2623221002	GWC-6	SM 2540C	35712		
2623221003	GWC-6RZ	SM 2540C	35712		
2623221004	GWC-8Z	SM 2540C	35712		
2623221005	GWC-8RR	SM 2540C	35712		
2623221006	GWC-9	SM 2540C	35712		
2623221007	FBL091619	SM 2540C	35712		
2623221008	EQBL091619	SM 2540C	35712		
2623221009	Dup-2	SM 2540C	35712		
2623221001	GWC-5	EPA 300.0 Rev 2.1 1993	498896		
2623221002	GWC-6	EPA 300.0 Rev 2.1 1993	498896		
2623221003	GWC-6RZ	EPA 300.0 Rev 2.1 1993	498896		
2623221004	GWC-8Z	EPA 300.0 Rev 2.1 1993	498896		
2623221005	GWC-8RR	EPA 300.0 Rev 2.1 1993	498896		
2623221006	GWC-9	EPA 300.0 Rev 2.1 1993	498896		
2623221007	FBL091619	EPA 300.0 Rev 2.1 1993	498896		
2623221008	EQBL091619	EPA 300.0 Rev 2.1 1993	498896		
2623221009	Dup-2	EPA 300.0 Rev 2.1 1993	498896		

REPORT OF LABORATORY ANALYSIS

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



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Maner Road
 Allenton, GA 30539
 Email: jabraham@souththermo.com
 Phone: (404)508-7239 Fax: _____
 Requested Due Date: _____

Section B
Required Project Information:
 Report To: Jobu Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10382775
 Project Name: Plant Bowen Cells - State List
 Project #: **Cells 1 & 2**

Section C
Invoice Information:
 Attention: cesinvoices@souththermo.com
 Company Name:
 Address:
 Peco Quote:
 Peco Project Manager: belsy.mcdaniel@pacelabs.com.
 Peco Profile #: 317.5
 State: GA

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G-GRAB C-COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	Preservatives	Analytes Test	Requested Analysis Filtered (Y/N)	TEMP n C	Received on	Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
			START DATE	END DATE											
1	Drinking Water	GW	9/16/19 1151		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
2	Drinking Water	GW	9/16/19 1500		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
3	Drinking Water	GW	9/16/19 1322		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
4	Drinking Water	GW	9/16/19 1140		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
5	Drinking Water	GW	9/16/19 1315		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
6	Drinking Water	GW	9/16/19 1508		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
7	Drinking Water	GW	9/16/19 1400		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
8	Drinking Water	GW	9/16/19 1605		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
9	Drinking Water	GW	9/16/19		GW	2	H2SO4 Unpreserved	TDS, Cl, F, SO4	X						
10															
11															
12															

ADDITIONAL COMMENTS	DATE	TIME	ACCEPTED BY/AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Agg. Milled	9/17/19	13:46	[Signature]	9/17/19	13:46	Pass
[Signature]	9/17/19	15:14	Charles [Signature]	9/17/19	15:14	Pass

SAMPLER NAME AND SIGNATURE	DATE SIGNED
[Signature]	9/17/19
PRINT NAME OF SAMPLER: Audrey Crafton & Veronica Fay	
SIGNATURE OF SAMPLER: [Signature]	
DATE SIGNED: 9/17/19	

W0#: 2623221

2623221

WO#: 2623221

Sample Condition Upon Receipt



Client Name: GA Power CCR

PM: BM Due Date: 09/24/19
CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____

Optional: Proj Due Date: Proj Name:

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 214 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 3.1°C Biological Tissue is Frozen: Yes No Date and Initials of person examining contents: 9/17/19 CCR

Temp should be above freezing to 6°C

Comments:

Table with 16 rows of checklist items including Chain of Custody Present, Samples Arrived within Hold Time, Short Hold Time Analysis, Containers Intact, etc.

Client Notification/ Resolution: Person Contacted: Date/Time: Field Data Required? Y / N

Project Manager Review: Date:

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

December 16, 2019

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

RE: Project: Plant Bowen cells 1+2
Pace Project No.: 2623391

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 20, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623391

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: Plant Bowen cells 1+2

Pace Project No.: 2623391

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623391001	GWC-13	Water	09/18/19 10:18	09/20/19 12:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 1+2

Pace Project No.: 2623391

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623391001	GWC-13	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623391

Sample: GWC-13 Lab ID: 2623391001 Collected: 09/18/19 10:18 Received: 09/20/19 12:40 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	0.0012J	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 20:13	7440-36-0	
Arsenic	0.00052J	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 20:13	7440-38-2	
Barium	0.033	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 20:13	7440-39-3	
Beryllium	0.000074J	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/27/19 11:50	7440-41-7	
Boron	0.017J	mg/L	0.040	0.0049	1	09/23/19 13:00	09/27/19 11:50	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 20:13	7440-43-9	
Calcium	40.7	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 20:19	7440-70-2	M6
Chromium	0.0063J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 20:13	7440-47-3	
Cobalt	0.00050J	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 20:13	7440-48-4	
Copper	0.00057J	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 20:13	7440-50-8	
Lead	0.00020J	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 20:13	7439-92-1	
Nickel	0.00046J	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 20:13	7440-02-0	
Selenium	0.0018J	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 20:13	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 20:13	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 20:13	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 20:13	7440-62-2	
Zinc	0.0070J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 20:13	7440-66-6	B
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:04	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	200	mg/L	10.0	10.0	1		09/24/19 13:21		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993									
Chloride	4.0	mg/L	1.0	0.60	1		09/25/19 13:47	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 13:47	16984-48-8	
Sulfate	50.7	mg/L	1.0	0.50	1		09/25/19 13:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623391

QC Batch: 35850	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
Associated Lab Samples: 2623391001	

METHOD BLANK: 161413 Matrix: Water

Associated Lab Samples: 2623391001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/24/19 11:47	

LABORATORY CONTROL SAMPLE: 161414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 161415 161416

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2623459001 Result	Spike Conc.	Spike Conc.	Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0015	0.0014	59	55	75-125	5	20 M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623391

QC Batch: 35796 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623391001

METHOD BLANK: 161204 Matrix: Water
Associated Lab Samples: 2623391001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/26/19 20:01	
Arsenic	mg/L	ND	0.0050	0.00035	09/26/19 20:01	
Barium	mg/L	ND	0.010	0.00049	09/26/19 20:01	
Beryllium	mg/L	ND	0.0030	0.000074	09/27/19 11:39	
Boron	mg/L	ND	0.040	0.0049	09/27/19 11:39	
Cadmium	mg/L	ND	0.0025	0.00011	09/26/19 20:01	
Calcium	mg/L	ND	0.10	0.011	09/26/19 20:01	
Chromium	mg/L	ND	0.010	0.00039	09/26/19 20:01	
Cobalt	mg/L	ND	0.0050	0.00030	09/26/19 20:01	
Copper	mg/L	ND	0.025	0.00019	09/26/19 20:01	
Lead	mg/L	ND	0.0050	0.000046	09/26/19 20:01	
Nickel	mg/L	ND	0.010	0.00031	09/26/19 20:01	
Selenium	mg/L	ND	0.010	0.0013	09/26/19 20:01	
Silver	mg/L	ND	0.010	0.00028	09/26/19 20:01	
Thallium	mg/L	ND	0.0010	0.000052	09/26/19 20:01	
Vanadium	mg/L	ND	0.010	0.00071	09/26/19 20:01	
Zinc	mg/L	0.0044J	0.010	0.0015	09/26/19 20:01	

LABORATORY CONTROL SAMPLE: 161205

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	110	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.11	110	80-120	
Beryllium	mg/L	0.1	0.091	91	80-120	
Boron	mg/L	1	0.93	93	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Calcium	mg/L	1	1.0	100	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Nickel	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	
Vanadium	mg/L	0.1	0.099	99	80-120	
Zinc	mg/L	0.1	0.10	104	80-120	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623391

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 161206												161207	
Parameter	Units	2623391001	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual		
		Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD			
Antimony	mg/L	0.0012J	0.1	0.1	0.11	0.11	111	109	75-125	2	20		
Arsenic	mg/L	0.00052J	0.1	0.1	0.10	0.10	103	100	75-125	3	20		
Barium	mg/L	0.033	0.1	0.1	0.14	0.14	112	110	75-125	1	20		
Beryllium	mg/L	0.000074J	0.1	0.1	0.095	0.093	95	93	75-125	2	20		
Boron	mg/L	0.017J	1	1	0.99	0.96	97	94	75-125	3	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Calcium	mg/L	40.7	1	1	41.5	39.9	85	-78	75-125	4	20 M6		
Chromium	mg/L	0.0063J	0.1	0.1	0.11	0.11	104	102	75-125	1	20		
Cobalt	mg/L	0.00050J	0.1	0.1	0.10	0.10	102	99	75-125	3	20		
Copper	mg/L	0.00057J	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Lead	mg/L	0.00020J	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Nickel	mg/L	0.00046J	0.1	0.1	0.10	0.098	100	98	75-125	2	20		
Selenium	mg/L	0.0018J	0.1	0.1	0.11	0.10	103	100	75-125	3	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20		
Zinc	mg/L	0.0070J	0.1	0.1	0.11	0.11	103	102	75-125	1	20		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623391

QC Batch: 35863	Analysis Method: SM 2540C
QC Batch Method: SM 2540C	Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2623391001	

LABORATORY CONTROL SAMPLE: 161459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	84-108	

SAMPLE DUPLICATE: 161460

Parameter	Units	2623393001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	165	163	1	10	

SAMPLE DUPLICATE: 161461

Parameter	Units	2623393011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	67.0	74.0	10	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623391

QC Batch: 499701 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623391001

METHOD BLANK: 2688835 Matrix: Water
Associated Lab Samples: 2623391001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/25/19 12:27	
Fluoride	mg/L	ND	0.10	0.050	09/25/19 12:27	
Sulfate	mg/L	ND	1.0	0.50	09/25/19 12:27	

LABORATORY CONTROL SAMPLE: 2688836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2688837 2688838

Parameter	Units	2623392001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	7.6	50	50	59.3	60.6	103	106	90-110	2	10	
Fluoride	mg/L	0.17J	2.5	2.5	2.7	2.8	101	104	90-110	3	10	
Sulfate	mg/L	68.1	50	50	102	101	67	66	90-110	1	10 M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2688839 2688840

Parameter	Units	2623393009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	52.4	51.8	105	104	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	101	101	90-110	0	10	
Sulfate	mg/L	ND	50	50	52.2	51.6	104	103	90-110	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623391

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 1+2
Pace Project No.: 2623391

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623391001	GWC-13	EPA 3005A	35796	EPA 6020B	35802
2623391001	GWC-13	EPA 7470A	35850	EPA 7470A	35862
2623391001	GWC-13	SM 2540C	35863		
2623391001	GWC-13	EPA 300.0 Rev 2.1 1993	499701		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Johu Abraham	Attention:	scsinvoices@southemco.com
Address:	2480 Manor Road Atlanta, GA 30339	Copy To:	Wood Environmental	Company Name:	
Email:	jabraham@southemco.com	Purchase Order #:	SCS10382775	Address:	
Phone:	(404)506-7239	Project Name:	Plant Bowen Cells - State List	Pace Project Manager:	betsy.mcdaniel@pacelabs.com
Requested Due Date:		Project #:	Cells 1 & 2	Pace Profile #:	317.5
				Regulatory Agency:	GA
				State / Location:	

Page: 1 of 1

ITEM #	MATRIX	MATRIX CODE (see valid codes to left)	COLLECTED		SAMPLE TYPE (G-RAB C-COMP)	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES		ANALYSES TEST	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)
			START DATE	END DATE				H2SO4	Unpreserved			
1	Drinking Water	DW	9/18/19	10:18	2	2	H2SO4	1	X	TDS, Cl, F, SO4	X	
2	Water	WT					HNO3					
3	Waste Water	WW					HCl					
4	Product	P					NaOH					
5	Soil/Sed	SL					Metanal					
6	Other	OT					Other					

WO#: 2623391

ADDITIONAL COMMENTS	RECEIVED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on	Temp (Y/N)	Custody	Sealed	Cooler	Samples
Veronica Fay / Resolute	Veronica Fay / Resolute	9/19	5:00	Cindy Mendi	9/19	5:00							
Cindy Mendi	Cindy Mendi	9/20	11:15	SPence	9/20	11:15							
SPence	SPence	9/20	12:40	M Zalman	9/20	12:40							

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Veronica Fay, Audrey Cratten
 SIGNATURE of SAMPLER: Veronica Fay, Audrey Cratten
 DATE Signed: 9/18/19

Sample Condition Upon Receipt



Client Name: GIA Power

Project # _____

WO# : 2623391

Courier: Fed Ex UPS USPS Client Commercial Pace Other

PM: BM Due Date: 09/27/1'

Tracking #: _____

CLIENT: GAPower-CCR

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 8.3

Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature 0.2

Biological Tissue Is Frozen: Yes No

Date and Initials of person examining contents: 9/20/19 MR

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix:	<u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

December 16, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 1+2
Pace Project No.: 2623392

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 20, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623392

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 1+2

Pace Project No.: 2623392

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623392001	GWC-13RZ	Water	09/19/19 09:10	09/20/19 12:40

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 1+2
Pace Project No.: 2623392

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623392001	GWC-13RZ	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623392

Sample: GWC-13RZ		Lab ID: 2623392001		Collected: 09/19/19 09:10		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.00077J	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 21:04	7440-36-0		
Arsenic	0.00045J	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 21:04	7440-38-2		
Barium	0.097	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 21:04	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 21:04	7440-41-7		
Boron	0.014J	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 21:04	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 21:04	7440-43-9		
Calcium	42.9	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 21:10	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 21:04	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 21:04	7440-48-4		
Copper	0.00021J	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 21:04	7440-50-8		
Lead	0.000048J	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 21:04	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 21:04	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 21:04	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 21:04	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 21:04	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 21:04	7440-62-2		
Zinc	0.0091J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 21:04	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:06	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	281	mg/L	10.0	10.0	1		09/24/19 13:21			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	7.6	mg/L	1.0	0.60	1		09/25/19 13:04	16887-00-6		
Fluoride	0.17J	mg/L	0.30	0.050	1		09/25/19 13:04	16984-48-8		
Sulfate	68.1	mg/L	1.0	0.50	1		09/25/19 13:04	14808-79-8	M1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623392

QC Batch: 35850	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
Associated Lab Samples: 2623392001	

METHOD BLANK: 161413 Matrix: Water

Associated Lab Samples: 2623392001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/24/19 11:47	

LABORATORY CONTROL SAMPLE: 161414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 161415 161416

Parameter	Units	161415		161416		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2623459001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0015	0.0014	59	55	75-125	5	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623392

QC Batch: 35796 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623392001

METHOD BLANK: 161204 Matrix: Water
Associated Lab Samples: 2623392001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/26/19 20:01	
Arsenic	mg/L	ND	0.0050	0.00035	09/26/19 20:01	
Barium	mg/L	ND	0.010	0.00049	09/26/19 20:01	
Beryllium	mg/L	ND	0.0030	0.000074	09/27/19 11:39	
Boron	mg/L	ND	0.040	0.0049	09/27/19 11:39	
Cadmium	mg/L	ND	0.0025	0.00011	09/26/19 20:01	
Calcium	mg/L	ND	0.10	0.011	09/26/19 20:01	
Chromium	mg/L	ND	0.010	0.00039	09/26/19 20:01	
Cobalt	mg/L	ND	0.0050	0.00030	09/26/19 20:01	
Copper	mg/L	ND	0.025	0.00019	09/26/19 20:01	
Lead	mg/L	ND	0.0050	0.000046	09/26/19 20:01	
Nickel	mg/L	ND	0.010	0.00031	09/26/19 20:01	
Selenium	mg/L	ND	0.010	0.0013	09/26/19 20:01	
Silver	mg/L	ND	0.010	0.00028	09/26/19 20:01	
Thallium	mg/L	ND	0.0010	0.000052	09/26/19 20:01	
Vanadium	mg/L	ND	0.010	0.00071	09/26/19 20:01	
Zinc	mg/L	0.0044J	0.010	0.0015	09/26/19 20:01	

LABORATORY CONTROL SAMPLE: 161205

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	110	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.11	110	80-120	
Beryllium	mg/L	0.1	0.091	91	80-120	
Boron	mg/L	1	0.93	93	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Calcium	mg/L	1	1.0	100	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Nickel	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	
Vanadium	mg/L	0.1	0.099	99	80-120	
Zinc	mg/L	0.1	0.10	104	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623392

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 161206		161207		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2623391001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	0.0012J	0.1	0.1	0.11	0.11	111	109	75-125	2	20		
Arsenic	mg/L	0.00052J	0.1	0.1	0.10	0.10	103	100	75-125	3	20		
Barium	mg/L	0.033	0.1	0.1	0.14	0.14	112	110	75-125	1	20		
Beryllium	mg/L	0.000074J	0.1	0.1	0.095	0.093	95	93	75-125	2	20		
Boron	mg/L	0.017J	1	1	0.99	0.96	97	94	75-125	3	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Calcium	mg/L	40.7	1	1	41.5	39.9	85	-78	75-125	4	20	M6	
Chromium	mg/L	0.0063J	0.1	0.1	0.11	0.11	104	102	75-125	1	20		
Cobalt	mg/L	0.00050J	0.1	0.1	0.10	0.10	102	99	75-125	3	20		
Copper	mg/L	0.00057J	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Lead	mg/L	0.00020J	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Nickel	mg/L	0.00046J	0.1	0.1	0.10	0.098	100	98	75-125	2	20		
Selenium	mg/L	0.0018J	0.1	0.1	0.11	0.10	103	100	75-125	3	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20		
Zinc	mg/L	0.0070J	0.1	0.1	0.11	0.11	103	102	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623392

QC Batch: 35863	Analysis Method: SM 2540C
QC Batch Method: SM 2540C	Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2623392001	

LABORATORY CONTROL SAMPLE: 161459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	84-108	

SAMPLE DUPLICATE: 161460

Parameter	Units	2623393001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	165	163	1	10	

SAMPLE DUPLICATE: 161461

Parameter	Units	2623393011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	67.0	74.0	10	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623392

QC Batch: 499701 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623392001

METHOD BLANK: 2688835 Matrix: Water
Associated Lab Samples: 2623392001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/25/19 12:27	
Fluoride	mg/L	ND	0.10	0.050	09/25/19 12:27	
Sulfate	mg/L	ND	1.0	0.50	09/25/19 12:27	

LABORATORY CONTROL SAMPLE: 2688836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2688837 2688838

Parameter	Units	2623392001		2688837		2688838		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	7.6	50	50	59.3	60.6	103	106	90-110	2	10		
Fluoride	mg/L	0.17J	2.5	2.5	2.7	2.8	101	104	90-110	3	10		
Sulfate	mg/L	68.1	50	50	102	101	67	66	90-110	1	10 M1		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2688839 2688840

Parameter	Units	2623393009		2688839		2688840		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	ND	50	50	52.4	51.8	105	104	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	101	101	90-110	0	10		
Sulfate	mg/L	ND	50	50	52.2	51.6	104	103	90-110	1	10		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623392

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 1+2

Pace Project No.: 2623392

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623392001	GWC-13RZ	EPA 3005A	35796	EPA 6020B	35802
2623392001	GWC-13RZ	EPA 7470A	35850	EPA 7470A	35862
2623392001	GWC-13RZ	SM 2540C	35863		
2623392001	GWC-13RZ	EPA 300.0 Rev 2.1 1993	499701		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Job: Abraham	Attention:	scshvoices@southemca.com
Address:	2480 Mener Road Atlanta, GA 30339	Copy To:	Wood Environmental	Company Name:	
Email:	jabraham@southemco.com	Purchase Order #:	SCS10382775	Facility:	
Phone:	(404)506-7239	Project Name:	Plant Bowen Cells - State List	Pace Project Manager:	betsy.modanial@pace-labs.com
Requested Due Date:		Project #:	Cells 12	Pace Profile #:	317.5
Regulatory Agency:		State / Location:		GA	

Page: 1 Of 1

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (Q-GRAB C-COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	PRESERVATIVES		ANALYSIS TEST	Y/N	Requested Analyte / Element (Y/N)	Residual Chlorine (Y/N)
			START DATE	END DATE				H2SO4	HNO3				
1	Drinking Water	DW	9/19/10		WTG		2	X		X			
2	Waste Water	WW											
3	Process Water	P											
4	Sludge	SL											
5	Wipes	WP											
6	Air	AR											
7	Clear	OT											
8	Tissue	TS											
9													
10													
11													
12													

NO#: 2623392

RECEIVED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on	Temp	Y/N	Custody	Sealed	Cooler	Samples
Audrey Crafton	9/19	5:00	Gedy Mander	9/19	5:00								
Gedy Mander	9/20	11:15	Parse	9/20	11:15								
Parse	9/20	12:40	Mda Uman	9/20/19	12:40								

SAMPLER NAME AND SIGNATURE: Audrey Crafton

PRINT Name of SAMPLER: Audrey Crafton

SIGNATURE of SAMPLER: *Audrey Crafton*

DATE Signed: 9/19/19

Sample Condition Upon Receipt

Pace Analytical

Client Name: GIA POWER

Project # _____

WO# : 2623392

PM: BM

Due Date: 09/27/19

CLIENT: GAPower-CCR

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 8.3 Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature 0.2 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/29/19 MR

Temp should be above freezing to 6°C

Comments: _____

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix: <u>W</u>			
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 20, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623393001	GWC-10	Water	09/17/19 11:56	09/20/19 12:40
2623393002	GWC-10R	Water	09/17/19 10:43	09/20/19 12:40
2623393003	GWC-11	Water	09/17/19 14:37	09/20/19 12:40
2623393004	GWC-11R	Water	09/17/19 15:36	09/20/19 12:40
2623393005	GWC-12	Water	09/17/19 15:18	09/20/19 12:40
2623393006	GWC-14Z	Water	09/17/19 13:52	09/20/19 12:40
2623393007	GWC-15R	Water	09/17/19 10:49	09/20/19 12:40
2623393008	GWC-15Z	Water	09/17/19 11:43	09/20/19 12:40
2623393009	FBL 091719	Water	09/17/19 16:05	09/20/19 12:40
2623393010	EQBL 091719	Water	09/17/19 16:10	09/20/19 12:40
2623393011	Dup-3	Water	09/17/19 00:00	09/20/19 12:40

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623393001	GWC-10	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393002	GWC-10R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393003	GWC-11	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393004	GWC-11R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393005	GWC-12	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393006	GWC-14Z	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393007	GWC-15R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393008	GWC-15Z	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393009	FBL 091719	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2623393010	EQBL 091719	EPA 6020B	CSW	17	PASI-GA

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623393011	Dup-3	EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
		EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Sample: GWC-10		Lab ID: 2623393001		Collected: 09/17/19 11:56		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 21:16	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 21:16	7440-38-2		
Barium	0.016	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 21:16	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 21:16	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 21:16	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 21:16	7440-43-9		
Calcium	36.7	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 21:22	7440-70-2		
Chromium	0.00090J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 21:16	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 21:16	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 21:16	7440-50-8		
Lead	0.000047J	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 21:16	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 21:16	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 21:16	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 21:16	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 21:16	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 21:16	7440-62-2		
Zinc	0.0052J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 21:16	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:13	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	165	mg/L	10.0	10.0	1		09/24/19 13:20			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.4	mg/L	1.0	0.60	1		09/25/19 14:01	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 14:01	16984-48-8		
Sulfate	1.2	mg/L	1.0	0.50	1		09/25/19 14:01	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Sample: GWC-10R		Lab ID: 2623393002		Collected: 09/17/19 10:43		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 21:27	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 21:27	7440-38-2		
Barium	0.030	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 21:27	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 21:27	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 21:27	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 21:27	7440-43-9		
Calcium	40.5	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 21:33	7440-70-2		
Chromium	0.00067J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 21:27	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 21:27	7440-48-4		
Copper	0.00029J	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 21:27	7440-50-8		
Lead	0.00017J	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 21:27	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 21:27	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 21:27	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 21:27	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 21:27	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 21:27	7440-62-2		
Zinc	0.0048J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 21:27	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:16	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	172	mg/L	10.0	10.0	1		09/24/19 13:20			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.8	mg/L	1.0	0.60	1		09/25/19 14:16	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 14:16	16984-48-8		
Sulfate	1.6	mg/L	1.0	0.50	1		09/25/19 14:16	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Sample: GWC-11		Lab ID: 2623393003		Collected: 09/17/19 14:37		Received: 09/20/19 12:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.00041J	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 21:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 21:39	7440-38-2	
Barium	0.011	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 21:39	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 21:39	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 21:39	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 21:39	7440-43-9	
Calcium	16.8	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 21:44	7440-70-2	
Chromium	0.0079J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 21:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 21:39	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 21:39	7440-50-8	
Lead	0.000046J	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 21:39	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 21:39	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 21:39	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 21:39	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 21:39	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 21:39	7440-62-2	
Zinc	0.0056J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 21:39	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:18	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	101	mg/L	10.0	10.0	1		09/24/19 13:20		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	1.1	mg/L	1.0	0.60	1		09/25/19 14:31	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 14:31	16984-48-8	
Sulfate	2.6	mg/L	1.0	0.50	1		09/25/19 14:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

Sample: GWC-11R		Lab ID: 2623393004		Collected: 09/17/19 15:36		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0013J	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 21:50	7440-36-0		
Arsenic	0.0016J	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 21:50	7440-38-2		
Barium	0.018	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 21:50	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 21:50	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 21:50	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 21:50	7440-43-9		
Calcium	27.6	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 21:56	7440-70-2		
Chromium	0.0042J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 21:50	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 21:50	7440-48-4		
Copper	0.00031J	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 21:50	7440-50-8		
Lead	0.000082J	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 21:50	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 21:50	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 21:50	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 21:50	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 21:50	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 21:50	7440-62-2		
Zinc	0.0075J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 21:50	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:20	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	143	mg/L	10.0	10.0	1		09/24/19 13:20			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.4	mg/L	1.0	0.60	1		09/25/19 14:45	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 14:45	16984-48-8		
Sulfate	2.0	mg/L	1.0	0.50	1		09/25/19 14:45	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

Sample: GWC-12		Lab ID: 2623393005		Collected: 09/17/19 15:18		Received: 09/20/19 12:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 22:13	7440-36-0	
Arsenic	0.0047J	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 22:13	7440-38-2	
Barium	0.025	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 22:13	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 22:13	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 22:13	7440-42-8	
Cadmium	0.00057J	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 22:13	7440-43-9	
Calcium	7.8	mg/L	0.10	0.011	1	09/23/19 13:00	09/26/19 22:13	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 22:13	7440-47-3	
Cobalt	0.0030J	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 22:13	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 22:13	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 22:13	7439-92-1	
Nickel	0.0021J	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 22:13	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 22:13	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 22:13	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 22:13	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 22:13	7440-62-2	
Zinc	0.016	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 22:13	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:23	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	62.0	mg/L	10.0	10.0	1		09/24/19 13:20		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	0.84J	mg/L	1.0	0.60	1		09/25/19 15:43	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 15:43	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/25/19 15:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Sample: GWC-14Z		Lab ID: 2623393006		Collected: 09/17/19 13:52		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 22:24	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 22:24	7440-38-2		
Barium	0.015	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 22:24	7440-39-3		
Beryllium	0.00013J	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 22:24	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 22:24	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 22:24	7440-43-9		
Calcium	11.4	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 22:30	7440-70-2		
Chromium	0.00046J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 22:24	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 22:24	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 22:24	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 22:24	7439-92-1		
Nickel	0.00070J	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 22:24	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 22:24	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 22:24	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 22:24	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 22:24	7440-62-2		
Zinc	0.0057J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 22:24	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:25	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	86.0	mg/L	10.0	10.0	1		09/24/19 13:20			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	3.8	mg/L	1.0	0.60	1		09/25/19 15:58	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 15:58	16984-48-8		
Sulfate	6.1	mg/L	1.0	0.50	1		09/25/19 15:58	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Sample: GWC-15R		Lab ID: 2623393007		Collected: 09/17/19 10:49		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0017J	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 22:36	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 22:36	7440-38-2		
Barium	0.023	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 22:36	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 22:36	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 22:36	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 22:36	7440-43-9		
Calcium	39.5	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 22:42	7440-70-2		
Chromium	0.00044J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 22:36	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 22:36	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 22:36	7440-50-8		
Lead	0.00016J	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 22:36	7439-92-1		
Nickel	0.00057J	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 22:36	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 22:36	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 22:36	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 22:36	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 22:36	7440-62-2		
Zinc	0.0066J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 22:36	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:28	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	179	mg/L	10.0	10.0	1		09/24/19 13:21			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.0	mg/L	1.0	0.60	1		09/25/19 16:12	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 16:12	16984-48-8		
Sulfate	13.1	mg/L	1.0	0.50	1		09/25/19 16:12	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Sample: GWC-15Z		Lab ID: 2623393008		Collected: 09/17/19 11:43		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 22:47	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 22:47	7440-38-2		
Barium	0.014	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 22:47	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 22:47	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 22:47	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 22:47	7440-43-9		
Calcium	22.1	mg/L	5.0	0.55	50	09/23/19 13:00	09/26/19 22:53	7440-70-2		
Chromium	0.00064J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 22:47	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 22:47	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 22:47	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 22:47	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 22:47	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 22:47	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 22:47	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 22:47	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 22:47	7440-62-2		
Zinc	0.0048J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 22:47	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:30	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	117	mg/L	10.0	10.0	1		09/24/19 13:21			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.78J	mg/L	1.0	0.60	1		09/25/19 16:27	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 16:27	16984-48-8		
Sulfate	1.6	mg/L	1.0	0.50	1		09/25/19 16:27	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

Sample: FBL 091719		Lab ID: 2623393009		Collected: 09/17/19 16:05		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 22:59	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 22:59	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 22:59	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 22:59	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 22:59	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 22:59	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/23/19 13:00	09/26/19 22:59	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 22:59	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 22:59	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 22:59	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 22:59	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 22:59	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 22:59	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 22:59	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 22:59	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 22:59	7440-62-2		
Zinc	0.0053J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 22:59	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:32	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/24/19 13:21			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/25/19 16:41	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 16:41	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/25/19 16:41	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Sample: EQBL 091719		Lab ID: 2623393010		Collected: 09/17/19 16:10		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 23:05	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 23:05	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 23:05	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 23:05	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 23:05	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 23:05	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/23/19 13:00	09/26/19 23:05	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 23:05	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 23:05	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 23:05	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 23:05	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 23:05	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 23:05	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 23:05	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 23:05	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 23:05	7440-62-2		
Zinc	0.0061J	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 23:05	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:35	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/24/19 13:21			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/25/19 17:25	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 17:25	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/25/19 17:25	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Sample: Dup-3		Lab ID: 2623393011		Collected: 09/17/19 00:00		Received: 09/20/19 12:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/23/19 13:00	09/26/19 23:22	7440-36-0		
Arsenic	0.0046J	mg/L	0.0050	0.00035	1	09/23/19 13:00	09/26/19 23:22	7440-38-2		
Barium	0.024	mg/L	0.010	0.00049	1	09/23/19 13:00	09/26/19 23:22	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/23/19 13:00	09/26/19 23:22	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/23/19 13:00	09/26/19 23:22	7440-42-8		
Cadmium	0.00058J	mg/L	0.0025	0.00011	1	09/23/19 13:00	09/26/19 23:22	7440-43-9		
Calcium	8.1	mg/L	0.10	0.011	1	09/23/19 13:00	09/26/19 23:22	7440-70-2		
Chromium	0.0016J	mg/L	0.010	0.00039	1	09/23/19 13:00	09/26/19 23:22	7440-47-3		
Cobalt	0.0031J	mg/L	0.0050	0.00030	1	09/23/19 13:00	09/26/19 23:22	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/23/19 13:00	09/26/19 23:22	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/23/19 13:00	09/26/19 23:22	7439-92-1		
Nickel	0.0045J	mg/L	0.010	0.00031	1	09/23/19 13:00	09/26/19 23:22	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/23/19 13:00	09/26/19 23:22	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/23/19 13:00	09/26/19 23:22	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/23/19 13:00	09/26/19 23:22	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/23/19 13:00	09/26/19 23:22	7440-62-2		
Zinc	0.020	mg/L	0.010	0.0015	1	09/23/19 13:00	09/26/19 23:22	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/24/19 09:00	09/24/19 12:42	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	67.0	mg/L	10.0	10.0	1		09/24/19 13:21			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.83J	mg/L	1.0	0.60	1		09/25/19 17:39	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/25/19 17:39	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/25/19 17:39	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

QC Batch: 35850 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2623393001, 2623393002, 2623393003, 2623393004, 2623393005, 2623393006, 2623393007, 2623393008,
 2623393009, 2623393010, 2623393011

METHOD BLANK: 161413 Matrix: Water
 Associated Lab Samples: 2623393001, 2623393002, 2623393003, 2623393004, 2623393005, 2623393006, 2623393007, 2623393008,
 2623393009, 2623393010, 2623393011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/24/19 11:47	

LABORATORY CONTROL SAMPLE: 161414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 161415 161416

Parameter	Units	2623459001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0015	0.0014	59	55	75-125	5	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

QC Batch: 35796 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623393001, 2623393002, 2623393003, 2623393004, 2623393005, 2623393006, 2623393007, 2623393008, 2623393009, 2623393010, 2623393011

METHOD BLANK: 161204 Matrix: Water
Associated Lab Samples: 2623393001, 2623393002, 2623393003, 2623393004, 2623393005, 2623393006, 2623393007, 2623393008, 2623393009, 2623393010, 2623393011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/26/19 20:01	
Arsenic	mg/L	ND	0.0050	0.00035	09/26/19 20:01	
Barium	mg/L	ND	0.010	0.00049	09/26/19 20:01	
Beryllium	mg/L	ND	0.0030	0.000074	09/27/19 11:39	
Boron	mg/L	ND	0.040	0.0049	09/27/19 11:39	
Cadmium	mg/L	ND	0.0025	0.00011	09/26/19 20:01	
Calcium	mg/L	ND	0.10	0.011	09/26/19 20:01	
Chromium	mg/L	ND	0.010	0.00039	09/26/19 20:01	
Cobalt	mg/L	ND	0.0050	0.00030	09/26/19 20:01	
Copper	mg/L	ND	0.025	0.00019	09/26/19 20:01	
Lead	mg/L	ND	0.0050	0.000046	09/26/19 20:01	
Nickel	mg/L	ND	0.010	0.00031	09/26/19 20:01	
Selenium	mg/L	ND	0.010	0.0013	09/26/19 20:01	
Silver	mg/L	ND	0.010	0.00028	09/26/19 20:01	
Thallium	mg/L	ND	0.0010	0.000052	09/26/19 20:01	
Vanadium	mg/L	ND	0.010	0.00071	09/26/19 20:01	
Zinc	mg/L	0.0044J	0.010	0.0015	09/26/19 20:01	

LABORATORY CONTROL SAMPLE: 161205

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	110	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.11	110	80-120	
Beryllium	mg/L	0.1	0.091	91	80-120	
Boron	mg/L	1	0.93	93	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Calcium	mg/L	1	1.0	100	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Copper	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Nickel	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	103	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	
Vanadium	mg/L	0.1	0.099	99	80-120	
Zinc	mg/L	0.1	0.10	104	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 161206		161207		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2623391001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Antimony	mg/L	0.0012J	0.1	0.1	0.11	0.11	111	109	75-125	2	20		
Arsenic	mg/L	0.00052J	0.1	0.1	0.10	0.10	103	100	75-125	3	20		
Barium	mg/L	0.033	0.1	0.1	0.14	0.14	112	110	75-125	1	20		
Beryllium	mg/L	0.000074J	0.1	0.1	0.095	0.093	95	93	75-125	2	20		
Boron	mg/L	0.017J	1	1	0.99	0.96	97	94	75-125	3	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Calcium	mg/L	40.7	1	1	41.5	39.9	85	-78	75-125	4	20	M6	
Chromium	mg/L	0.0063J	0.1	0.1	0.11	0.11	104	102	75-125	1	20		
Cobalt	mg/L	0.00050J	0.1	0.1	0.10	0.10	102	99	75-125	3	20		
Copper	mg/L	0.00057J	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Lead	mg/L	0.00020J	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Nickel	mg/L	0.00046J	0.1	0.1	0.10	0.098	100	98	75-125	2	20		
Selenium	mg/L	0.0018J	0.1	0.1	0.11	0.10	103	100	75-125	3	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	2	20		
Zinc	mg/L	0.0070J	0.1	0.1	0.11	0.11	103	102	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

QC Batch: 35863

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 2623393001, 2623393002, 2623393003, 2623393004, 2623393005, 2623393006, 2623393007, 2623393008, 2623393009, 2623393010, 2623393011

LABORATORY CONTROL SAMPLE: 161459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	84-108	

SAMPLE DUPLICATE: 161460

Parameter	Units	2623393001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	165	163	1	10	

SAMPLE DUPLICATE: 161461

Parameter	Units	2623393011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	67.0	74.0	10	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

QC Batch: 499701 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623393001, 2623393002, 2623393003, 2623393004, 2623393005, 2623393006, 2623393007, 2623393008, 2623393009, 2623393010, 2623393011

METHOD BLANK: 2688835 Matrix: Water
Associated Lab Samples: 2623393001, 2623393002, 2623393003, 2623393004, 2623393005, 2623393006, 2623393007, 2623393008, 2623393009, 2623393010, 2623393011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/25/19 12:27	
Fluoride	mg/L	ND	0.10	0.050	09/25/19 12:27	
Sulfate	mg/L	ND	1.0	0.50	09/25/19 12:27	

LABORATORY CONTROL SAMPLE: 2688836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2688837 2688838

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2623392001	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	7.6	50	50	59.3	60.6	103	106	90-110	2	10		
Fluoride	mg/L	0.17J	2.5	2.5	2.7	2.8	101	104	90-110	3	10		
Sulfate	mg/L	68.1	50	50	102	101	67	66	90-110	1	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2688839 2688840

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2623393009	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	ND	50	50	52.4	51.8	105	104	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	101	101	90-110	0	10		
Sulfate	mg/L	ND	50	50	52.2	51.6	104	103	90-110	1	10		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 1+2

Pace Project No.: 2623393

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 1+2
Pace Project No.: 2623393

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623393001	GWC-10	EPA 3005A	35796	EPA 6020B	35802
2623393002	GWC-10R	EPA 3005A	35796	EPA 6020B	35802
2623393003	GWC-11	EPA 3005A	35796	EPA 6020B	35802
2623393004	GWC-11R	EPA 3005A	35796	EPA 6020B	35802
2623393005	GWC-12	EPA 3005A	35796	EPA 6020B	35802
2623393006	GWC-14Z	EPA 3005A	35796	EPA 6020B	35802
2623393007	GWC-15R	EPA 3005A	35796	EPA 6020B	35802
2623393008	GWC-15Z	EPA 3005A	35796	EPA 6020B	35802
2623393009	FBL 091719	EPA 3005A	35796	EPA 6020B	35802
2623393010	EQBL 091719	EPA 3005A	35796	EPA 6020B	35802
2623393011	Dup-3	EPA 3005A	35796	EPA 6020B	35802
2623393001	GWC-10	EPA 7470A	35850	EPA 7470A	35862
2623393002	GWC-10R	EPA 7470A	35850	EPA 7470A	35862
2623393003	GWC-11	EPA 7470A	35850	EPA 7470A	35862
2623393004	GWC-11R	EPA 7470A	35850	EPA 7470A	35862
2623393005	GWC-12	EPA 7470A	35850	EPA 7470A	35862
2623393006	GWC-14Z	EPA 7470A	35850	EPA 7470A	35862
2623393007	GWC-15R	EPA 7470A	35850	EPA 7470A	35862
2623393008	GWC-15Z	EPA 7470A	35850	EPA 7470A	35862
2623393009	FBL 091719	EPA 7470A	35850	EPA 7470A	35862
2623393010	EQBL 091719	EPA 7470A	35850	EPA 7470A	35862
2623393011	Dup-3	EPA 7470A	35850	EPA 7470A	35862
2623393001	GWC-10	SM 2540C	35863		
2623393002	GWC-10R	SM 2540C	35863		
2623393003	GWC-11	SM 2540C	35863		
2623393004	GWC-11R	SM 2540C	35863		
2623393005	GWC-12	SM 2540C	35863		
2623393006	GWC-14Z	SM 2540C	35863		
2623393007	GWC-15R	SM 2540C	35863		
2623393008	GWC-15Z	SM 2540C	35863		
2623393009	FBL 091719	SM 2540C	35863		
2623393010	EQBL 091719	SM 2540C	35863		
2623393011	Dup-3	SM 2540C	35863		
2623393001	GWC-10	EPA 300.0 Rev 2.1 1993	499701		
2623393002	GWC-10R	EPA 300.0 Rev 2.1 1993	499701		
2623393003	GWC-11	EPA 300.0 Rev 2.1 1993	499701		
2623393004	GWC-11R	EPA 300.0 Rev 2.1 1993	499701		
2623393005	GWC-12	EPA 300.0 Rev 2.1 1993	499701		
2623393006	GWC-14Z	EPA 300.0 Rev 2.1 1993	499701		
2623393007	GWC-15R	EPA 300.0 Rev 2.1 1993	499701		
2623393008	GWC-15Z	EPA 300.0 Rev 2.1 1993	499701		
2623393009	FBL 091719	EPA 300.0 Rev 2.1 1993	499701		
2623393010	EQBL 091719	EPA 300.0 Rev 2.1 1993	499701		
2623393011	Dup-3	EPA 300.0 Rev 2.1 1993	499701		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: **Section B** Required Project Information: **Section C** Invoice Information:

Company: Georgia Power - Coal Combustion Residuals | Report To: Jolu Abraham | Affiliation: scshwiceas@southemco.com

Address: 2480 Maner Road | Copy To: Wood Environmental | Company Name: |

Atlanta, GA 30339 | Purchase Order #: SCS10382775 | Peco Order: |

Email: j.abraham@southemco.com | Project Name: Plant Bowen Cells - State List | Peco Project Manager: betsy.modiano@pscalabs.com

Phone: (404)506-7239 | Fax: | Project #: Cells 1 & 2 | Peco Profile #: 317.5

Requested Date: | State / Location: GA

Page: 1 of 1

ITEM #	MATRIX	CODE	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES								ANALYSES TEST	RECEIVED ON	TEMP IN C	RECEIVED ON	SEALER (Y/N)	CUSTODY	SCALER (Y/N)	INTEGRITY		
				START DATE	END TIME			H2SO4	HNO3	HCl	NaOH	MnSO3	Methanol	Other	Y/N									TDS, Cl, F, SO4	Metals 6020/7470
1	GWC-10	WTG	9/17/19 1151			2	1								X	X									
2	GWC-10R	WTG	9/17/19 1043			2	1								X	X									
3	GWC-11	WTG	9/17/19 1437			2	1								X	X									
4	GWC-11R	WTG	9/17/19 1536			2	1								X	X									
5	GWC-12	WTG	9/17/19 1618			2	1								X	X									
6	GWC-14#	WTG	9/17/19 1352			2	1								X	X									
7	GWC-15R	WTG	9/17/19 1049			2	1								X	X									
8	GWC-15#	WTG	9/17/19 1143			2	1								X	X									
9	FBL091719	WTG	9/17/19 1605			2	1								X	X									
10	E08L091719	WTG	9/17/19 1610			2	1								X	X									
11	DUP-3	WTG	9/17/19 --			2	1								X	X									
12																									

WO#: 26233393

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Vernonica Fay / Resolute	Resolute	9.20	1240	Vernonica Fay	9/20/19	1115	
Resolute	Resolute	9.20	1240	Vernonica Fay	9/20/19	1210	

PRINT Name of SAMPLER: Veronica Fay
 SIGNATURE of SAMPLER: Veronica Fay
 DATE Signed: 9/17/19



Sample Condition Upon Receipt

Client Name: GA Power

Project # _____

WO#: **2623393**

PM: **BM** Due Date: **09/27/19**

CLIENT: **GAPower-CCR**

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 8.3 Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature 0.2 Biological Tissue is Frozen: Yes No

Date and initials of person examining contents: 9/20/19 MB

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix:	<u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):	_____		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 06, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report replaces the report issued on September 12, 2019. This report was revised to correct the Fluoride reporting limit as 0.3 mg/L in accordance with GPC contract specifications. No other changes have been made to this report

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622807001	GWA-51RZ	Water	09/05/19 09:21	09/06/19 09:40
2622807002	GWA-53	Water	09/05/19 11:08	09/06/19 09:40
2622807003	GWA-53R	Water	09/05/19 13:34	09/06/19 09:40
2622807004	GWA-54	Water	09/05/19 10:17	09/06/19 09:40
2622807005	GWA-55	Water	09/05/19 11:19	09/06/19 09:40
2622807006	GWA-55R	Water	09/05/19 12:20	09/06/19 09:40
2622807007	GWC-25R	Water	09/05/19 11:42	09/06/19 09:40
2622807008	GWC-24R	Water	09/05/19 14:02	09/06/19 09:40
2622807009	GWC-22R	Water	09/05/19 16:04	09/06/19 09:40
2622807010	Dup-2	Water	09/05/19 00:00	09/06/19 09:40
2622807011	FBL090519	Water	09/05/19 15:05	09/06/19 09:40
2622807012	EQBL090519	Water	09/05/19 15:10	09/06/19 09:40

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622807001	GWA-51RZ	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807002	GWA-53	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807003	GWA-53R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807004	GWA-54	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807005	GWA-55	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807006	GWA-55R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807007	GWC-25R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807008	GWC-24R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807009	GWC-22R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622807010	Dup-2	EPA 6020B	CSW	17	PASI-GA

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622807011	FBL090519	EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
2622807012	EQBL090519	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: GWA-51RZ Lab ID: 2622807001 Collected: 09/05/19 09:21 Received: 09/06/19 09:40 Matrix: Water											
Parameters	Results	Units	Report Limit			MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A											
Antimony	0.00060J	mg/L	0.0030	0.00027	1		09/09/19 11:05	09/11/19 18:07	7440-36-0		
Arsenic	0.00061J	mg/L	0.0050	0.00035	1		09/09/19 11:05	09/11/19 18:07	7440-38-2		
Barium	0.018	mg/L	0.010	0.00049	1		09/09/19 11:05	09/11/19 18:07	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1		09/09/19 11:05	09/11/19 18:07	7440-41-7		
Boron	0.010J	mg/L	0.040	0.0049	1		09/09/19 11:05	09/11/19 18:07	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1		09/09/19 11:05	09/11/19 18:07	7440-43-9		
Calcium	40.7	mg/L	5.0	0.55	50		09/09/19 11:05	09/11/19 18:13	7440-70-2	M6	
Chromium	ND	mg/L	0.010	0.00039	1		09/09/19 11:05	09/11/19 18:07	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1		09/09/19 11:05	09/11/19 18:07	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1		09/09/19 11:05	09/11/19 18:07	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1		09/09/19 11:05	09/11/19 18:07	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1		09/09/19 11:05	09/11/19 18:07	7440-02-0		
Selenium	0.010	mg/L	0.010	0.0013	1		09/09/19 11:05	09/11/19 18:07	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1		09/09/19 11:05	09/11/19 18:07	7440-22-4		
Thallium	0.00014J	mg/L	0.0010	0.000052	1		09/09/19 11:05	09/11/19 18:07	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1		09/09/19 11:05	09/11/19 18:07	7440-62-2		
Zinc	0.0051J	mg/L	0.010	0.0015	1		09/09/19 11:05	09/11/19 18:07	7440-66-6	B	
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A											
Mercury	ND	mg/L	0.00050	0.00014	1		09/10/19 11:58	09/10/19 16:58	7439-97-6		
2540C Total Dissolved Solids Analytical Method: SM 2540C											
Total Dissolved Solids	207	mg/L	10.0	10.0	1			09/10/19 19:07			
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993											
Chloride	2.7	mg/L	1.0	0.60	1			09/10/19 20:50	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1			09/10/19 20:50	16984-48-8		
Sulfate	22.9	mg/L	1.0	0.50	1			09/10/19 20:50	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

Sample: GWA-53		Lab ID: 2622807002		Collected: 09/05/19 11:08		Received: 09/06/19 09:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.00035J	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 18:59	7440-36-0	
Arsenic	0.00039J	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 18:59	7440-38-2	
Barium	0.013	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 18:59	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 18:59	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 18:59	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 18:59	7440-43-9	
Calcium	29.3	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 19:05	7440-70-2	
Chromium	0.00065J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 18:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 18:59	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 18:59	7440-50-8	
Lead	0.000080J	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 18:59	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 18:59	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 18:59	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 18:59	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 18:59	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 18:59	7440-62-2	
Zinc	0.0064J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 18:59	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:07	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	148	mg/L	10.0	10.0	1		09/10/19 19:07		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	2.3	mg/L	1.0	0.60	1		09/10/19 21:58	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 21:58	16984-48-8	
Sulfate	1.5	mg/L	1.0	0.50	1		09/10/19 21:58	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: GWA-53R		Lab ID: 2622807003		Collected: 09/05/19 13:34		Received: 09/06/19 09:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.00035J	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 19:10	7440-36-0	
Arsenic	0.00046J	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 19:10	7440-38-2	
Barium	0.014	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 19:10	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 19:10	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 19:10	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 19:10	7440-43-9	
Calcium	29.0	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 19:16	7440-70-2	
Chromium	0.00055J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 19:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 19:10	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 19:10	7440-50-8	
Lead	0.000083J	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 19:10	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 19:10	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 19:10	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 19:10	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 19:10	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 19:10	7440-62-2	
Zinc	0.0098J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 19:10	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:09	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	142	mg/L	10.0	10.0	1		09/10/19 19:07		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	2.4	mg/L	1.0	0.60	1		09/10/19 22:52	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 22:52	16984-48-8	
Sulfate	1.5	mg/L	1.0	0.50	1		09/10/19 22:52	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: GWA-54		Lab ID: 2622807004		Collected: 09/05/19 10:17		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 19:22	7440-36-0		
Arsenic	0.00038J	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 19:22	7440-38-2		
Barium	0.034	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 19:22	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 19:22	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 19:22	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 19:22	7440-43-9		
Calcium	24.6	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 19:28	7440-70-2		
Chromium	0.0016J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 19:22	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 19:22	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 19:22	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 19:22	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 19:22	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 19:22	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 19:22	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 19:22	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 19:22	7440-62-2		
Zinc	0.0048J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 19:22	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:12	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	132	mg/L	10.0	10.0	1		09/10/19 19:08			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.81J	mg/L	1.0	0.60	1		09/10/19 21:44	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 21:44	16984-48-8		
Sulfate	2.4	mg/L	1.0	0.50	1		09/10/19 21:44	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: GWA-55		Lab ID: 2622807005		Collected: 09/05/19 11:19		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 19:33	7440-36-0		
Arsenic	0.00044J	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 19:33	7440-38-2		
Barium	0.024	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 19:33	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 19:33	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 19:33	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 19:33	7440-43-9		
Calcium	46.2	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 19:39	7440-70-2		
Chromium	0.00092J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 19:33	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 19:33	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 19:33	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 19:33	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 19:33	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 19:33	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 19:33	7440-22-4		
Thallium	0.00011J	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 19:33	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 19:33	7440-62-2		
Zinc	0.0056J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 19:33	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:14	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	229	mg/L	10.0	10.0	1		09/10/19 19:08			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.9	mg/L	1.0	0.60	1		09/10/19 22:11	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 22:11	16984-48-8		
Sulfate	21.5	mg/L	1.0	0.50	1		09/10/19 22:11	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: GWA-55R		Lab ID: 2622807006		Collected: 09/05/19 12:20		Received: 09/06/19 09:40		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 19:45	7440-36-0	
Arsenic	0.00042J	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 19:45	7440-38-2	
Barium	0.032	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 19:45	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 19:45	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 19:45	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 19:45	7440-43-9	
Calcium	34.6	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 19:50	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 19:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 19:45	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 19:45	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 19:45	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 19:45	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 19:45	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 19:45	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 19:45	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 19:45	7440-62-2	
Zinc	0.0045J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 19:45	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:21	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	183	mg/L	10.0	10.0	1		09/10/19 19:08		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	2.9	mg/L	1.0	0.60	1		09/10/19 22:38	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 22:38	16984-48-8	
Sulfate	22.7	mg/L	1.0	0.50	1		09/10/19 22:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: GWC-25R		Lab ID: 2622807007		Collected: 09/05/19 11:42		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 20:08	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 20:08	7440-38-2		
Barium	0.016	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 20:08	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 20:08	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 20:08	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 20:08	7440-43-9		
Calcium	34.6	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 20:13	7440-70-2		
Chromium	0.00044J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 20:08	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 20:08	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 20:08	7440-50-8		
Lead	0.000060J	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 20:08	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 20:08	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 20:08	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 20:08	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 20:08	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 20:08	7440-62-2		
Zinc	0.0053J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 20:08	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:24	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	177	mg/L	10.0	10.0	1		09/10/19 19:08			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.5	mg/L	1.0	0.60	1		09/10/19 22:25	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 22:25	16984-48-8		
Sulfate	1.6	mg/L	1.0	0.50	1		09/10/19 22:25	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: GWC-24R		Lab ID: 2622807008		Collected: 09/05/19 14:02		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.00033J	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 20:19	7440-36-0		
Arsenic	0.00053J	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 20:19	7440-38-2		
Barium	0.022	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 20:19	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 20:19	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 20:19	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 20:19	7440-43-9		
Calcium	30.6	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 20:25	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 20:19	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 20:19	7440-48-4		
Copper	0.0012J	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 20:19	7440-50-8		
Lead	0.000095J	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 20:19	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 20:19	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 20:19	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 20:19	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 20:19	7440-28-0		
Vanadium	0.0012J	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 20:19	7440-62-2		
Zinc	0.0066J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 20:19	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:26	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	157	mg/L	10.0	10.0	1		09/10/19 19:08			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.2	mg/L	1.0	0.60	1		09/10/19 23:05	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 23:05	16984-48-8		
Sulfate	1.8	mg/L	1.0	0.50	1		09/10/19 23:05	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: GWC-22R		Lab ID: 2622807009		Collected: 09/05/19 16:04		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 20:31	7440-36-0		
Arsenic	0.0024J	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 20:31	7440-38-2		
Barium	0.045	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 20:31	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 20:31	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 20:31	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 20:31	7440-43-9		
Calcium	31.8	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 20:36	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 20:31	7440-47-3		
Cobalt	0.0012J	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 20:31	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 20:31	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 20:31	7439-92-1		
Nickel	0.0011J	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 20:31	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 20:31	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 20:31	7440-22-4		
Thallium	0.000055J	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 20:31	7440-28-0		
Vanadium	0.00094J	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 20:31	7440-62-2		
Zinc	0.0053J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 20:31	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:28	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	171	mg/L	10.0	10.0	1		09/10/19 19:09			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.7	mg/L	1.0	0.60	1		09/11/19 01:20	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 01:20	16984-48-8		
Sulfate	1.7	mg/L	1.0	0.50	1		09/11/19 01:20	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: Dup-2		Lab ID: 2622807010		Collected: 09/05/19 00:00		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.00029J	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 20:42	7440-36-0		
Arsenic	0.00047J	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 20:42	7440-38-2		
Barium	0.020	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 20:42	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 20:42	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 20:42	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 20:42	7440-43-9		
Calcium	28.6	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 20:48	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 20:42	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 20:42	7440-48-4		
Copper	0.00080J	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 20:42	7440-50-8		
Lead	0.000086J	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 20:42	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 20:42	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 20:42	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 20:42	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 20:42	7440-28-0		
Vanadium	0.0012J	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 20:42	7440-62-2		
Zinc	0.0069J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 20:42	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:31	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	154	mg/L	10.0	10.0	1		09/10/19 19:09			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.3	mg/L	1.0	0.60	1		09/10/19 20:37	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 20:37	16984-48-8		
Sulfate	1.8	mg/L	1.0	0.50	1		09/10/19 20:37	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: FBL090519		Lab ID: 2622807011		Collected: 09/05/19 15:05		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 20:53	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 20:53	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 20:53	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 20:53	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 20:53	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 20:53	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/09/19 11:05	09/11/19 20:53	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 20:53	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 20:53	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 20:53	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 20:53	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 20:53	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 20:53	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 20:53	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 20:53	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 20:53	7440-62-2		
Zinc	0.0050J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 20:53	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:33	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	15.0	mg/L	10.0	10.0	1		09/10/19 19:09			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/10/19 23:45	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 23:45	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/10/19 23:45	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

Sample: EQBL090519		Lab ID: 2622807012		Collected: 09/05/19 15:10		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 20:59	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 20:59	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 20:59	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 20:59	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 20:59	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 20:59	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/09/19 11:05	09/11/19 20:59	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 20:59	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 20:59	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 20:59	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 20:59	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 20:59	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 20:59	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 20:59	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 20:59	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 20:59	7440-62-2		
Zinc	0.0049J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 20:59	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:36	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	12.0	mg/L	10.0	10.0	1		09/10/19 19:10			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/11/19 01:06	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 01:06	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/11/19 01:06	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

QC Batch: 34993 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2622807001, 2622807002, 2622807003, 2622807004, 2622807005, 2622807006, 2622807007, 2622807008,
 2622807009, 2622807010, 2622807011, 2622807012

METHOD BLANK: 157551 Matrix: Water
 Associated Lab Samples: 2622807001, 2622807002, 2622807003, 2622807004, 2622807005, 2622807006, 2622807007, 2622807008,
 2622807009, 2622807010, 2622807011, 2622807012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/10/19 16:53	

LABORATORY CONTROL SAMPLE: 157552

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 157553 157554

Parameter	Units	2622807001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0024	102	96	75-125	6	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

QC Batch: 34909 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622807001, 2622807002, 2622807003, 2622807004, 2622807005, 2622807006, 2622807007, 2622807008, 2622807009, 2622807010, 2622807011, 2622807012

METHOD BLANK: 157237 Matrix: Water
Associated Lab Samples: 2622807001, 2622807002, 2622807003, 2622807004, 2622807005, 2622807006, 2622807007, 2622807008, 2622807009, 2622807010, 2622807011, 2622807012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/11/19 17:42	
Arsenic	mg/L	ND	0.0050	0.00035	09/11/19 17:42	
Barium	mg/L	ND	0.010	0.00049	09/11/19 17:42	
Beryllium	mg/L	ND	0.0030	0.000074	09/11/19 17:42	
Boron	mg/L	ND	0.040	0.0049	09/11/19 17:42	
Cadmium	mg/L	ND	0.0025	0.00011	09/11/19 17:42	
Calcium	mg/L	0.021J	0.10	0.011	09/11/19 17:42	
Chromium	mg/L	ND	0.010	0.00039	09/11/19 17:42	
Cobalt	mg/L	ND	0.0050	0.00030	09/11/19 17:42	
Copper	mg/L	ND	0.025	0.00019	09/11/19 17:42	
Lead	mg/L	ND	0.0050	0.000046	09/11/19 17:42	
Nickel	mg/L	ND	0.010	0.00031	09/11/19 17:42	
Selenium	mg/L	ND	0.010	0.0013	09/11/19 17:42	
Silver	mg/L	ND	0.010	0.00028	09/11/19 17:42	
Thallium	mg/L	ND	0.0010	0.000052	09/11/19 17:42	
Vanadium	mg/L	ND	0.010	0.00071	09/11/19 17:42	
Zinc	mg/L	0.0043J	0.010	0.0015	09/11/19 17:42	

LABORATORY CONTROL SAMPLE: 157238

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Calcium	mg/L	1	1.0	101	80-120	
Chromium	mg/L	0.1	0.093	93	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Copper	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Nickel	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Silver	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	
Vanadium	mg/L	0.1	0.092	92	80-120	
Zinc	mg/L	0.1	0.10	101	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 157239		157240		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		2622807001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Antimony	mg/L	0.00060J	0.1	0.1	0.10	0.10	103	103	75-125	1	20	
Arsenic	mg/L	0.00061J	0.1	0.1	0.098	0.099	97	98	75-125	1	20	
Barium	mg/L	0.018	0.1	0.1	0.12	0.12	103	102	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Boron	mg/L	0.010J	1	1	0.99	0.99	98	98	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Calcium	mg/L	40.7	1	1	44.0	45.8	336	515	75-125	4	20	M6
Chromium	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Copper	mg/L	ND	0.1	0.1	0.096	0.095	95	95	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Nickel	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Selenium	mg/L	0.010	0.1	0.1	0.11	0.11	101	100	75-125	1	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Thallium	mg/L	0.00014J	0.1	0.1	0.10	0.10	100	100	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.097	0.099	96	98	75-125	2	20	
Zinc	mg/L	0.0051J	0.1	0.1	0.10	0.10	98	95	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

QC Batch: 35046 Analysis Method: SM 2540C
 QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
 Associated Lab Samples: 2622807001, 2622807002, 2622807003, 2622807004, 2622807005, 2622807006, 2622807007, 2622807008,
 2622807009, 2622807010, 2622807011, 2622807012

LABORATORY CONTROL SAMPLE: 157796

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	398	100	84-108	

SAMPLE DUPLICATE: 157797

Parameter	Units	2622806001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	194	197	2	10	

SAMPLE DUPLICATE: 157798

Parameter	Units	2622807003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	142	147	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

QC Batch: 496834 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2622807001, 2622807002, 2622807003, 2622807004, 2622807005, 2622807006, 2622807007, 2622807008, 2622807010

METHOD BLANK: 2675526 Matrix: Water
Associated Lab Samples: 2622807001, 2622807002, 2622807003, 2622807004, 2622807005, 2622807006, 2622807007, 2622807008, 2622807010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/10/19 17:14	
Fluoride	mg/L	ND	0.10	0.050	09/10/19 17:14	
Sulfate	mg/L	ND	1.0	0.50	09/10/19 17:14	

LABORATORY CONTROL SAMPLE: 2675527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.4	99	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	50.6	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675528 2675529

Parameter	Units	2622774001		2675529		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Chloride	mg/L	154	50	200	50	92	90	90-110	1	10	
Fluoride	mg/L	0.93	2.5	3.4	2.5	98	96	90-110	2	10	
Sulfate	mg/L	145	50	188	50	86	84	90-110	1	10 M6	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675530 2675531

Parameter	Units	2622808009		2675531		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Chloride	mg/L	ND	50	53.4	50	107	108	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.7	2.5	107	107	90-110	0	10	
Sulfate	mg/L	ND	50	51.0	50	102	102	90-110	0	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622807

QC Batch: 496835 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2622807009, 2622807011, 2622807012

METHOD BLANK: 2675532 Matrix: Water
Associated Lab Samples: 2622807009, 2622807011, 2622807012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/10/19 23:18	
Fluoride	mg/L	ND	0.10	0.050	09/10/19 23:18	
Sulfate	mg/L	ND	1.0	0.50	09/10/19 23:18	

LABORATORY CONTROL SAMPLE: 2675533

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	48.3	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675534 2675535

Parameter	Units	2622807011		2675535		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	ND	50	50	53.5	53.7	107	107	90-110	1	10
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	106	107	90-110	1	10
Sulfate	mg/L	ND	50	50	50.8	51.1	102	102	90-110	1	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675536 2675537

Parameter	Units	2622766001		2675537		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	147	50	50	191	190	88	87	90-110	0	10 M6
Fluoride	mg/L	0.82	2.5	2.5	3.4	3.3	103	101	90-110	1	10
Sulfate	mg/L	140	50	50	181	180	83	81	90-110	1	10 M6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622807001	GWA-51RZ	EPA 3005A	34909	EPA 6020B	34942
2622807002	GWA-53	EPA 3005A	34909	EPA 6020B	34942
2622807003	GWA-53R	EPA 3005A	34909	EPA 6020B	34942
2622807004	GWA-54	EPA 3005A	34909	EPA 6020B	34942
2622807005	GWA-55	EPA 3005A	34909	EPA 6020B	34942
2622807006	GWA-55R	EPA 3005A	34909	EPA 6020B	34942
2622807007	GWC-25R	EPA 3005A	34909	EPA 6020B	34942
2622807008	GWC-24R	EPA 3005A	34909	EPA 6020B	34942
2622807009	GWC-22R	EPA 3005A	34909	EPA 6020B	34942
2622807010	Dup-2	EPA 3005A	34909	EPA 6020B	34942
2622807011	FBL090519	EPA 3005A	34909	EPA 6020B	34942
2622807012	EQBL090519	EPA 3005A	34909	EPA 6020B	34942
2622807001	GWA-51RZ	EPA 7470A	34993	EPA 7470A	35030
2622807002	GWA-53	EPA 7470A	34993	EPA 7470A	35030
2622807003	GWA-53R	EPA 7470A	34993	EPA 7470A	35030
2622807004	GWA-54	EPA 7470A	34993	EPA 7470A	35030
2622807005	GWA-55	EPA 7470A	34993	EPA 7470A	35030
2622807006	GWA-55R	EPA 7470A	34993	EPA 7470A	35030
2622807007	GWC-25R	EPA 7470A	34993	EPA 7470A	35030
2622807008	GWC-24R	EPA 7470A	34993	EPA 7470A	35030
2622807009	GWC-22R	EPA 7470A	34993	EPA 7470A	35030
2622807010	Dup-2	EPA 7470A	34993	EPA 7470A	35030
2622807011	FBL090519	EPA 7470A	34993	EPA 7470A	35030
2622807012	EQBL090519	EPA 7470A	34993	EPA 7470A	35030
2622807001	GWA-51RZ	SM 2540C	35046		
2622807002	GWA-53	SM 2540C	35046		
2622807003	GWA-53R	SM 2540C	35046		
2622807004	GWA-54	SM 2540C	35046		
2622807005	GWA-55	SM 2540C	35046		
2622807006	GWA-55R	SM 2540C	35046		
2622807007	GWC-25R	SM 2540C	35046		
2622807008	GWC-24R	SM 2540C	35046		
2622807009	GWC-22R	SM 2540C	35046		
2622807010	Dup-2	SM 2540C	35046		
2622807011	FBL090519	SM 2540C	35046		
2622807012	EQBL090519	SM 2540C	35046		
2622807001	GWA-51RZ	EPA 300.0 Rev 2.1 1993	496834		
2622807002	GWA-53	EPA 300.0 Rev 2.1 1993	496834		
2622807003	GWA-53R	EPA 300.0 Rev 2.1 1993	496834		
2622807004	GWA-54	EPA 300.0 Rev 2.1 1993	496834		
2622807005	GWA-55	EPA 300.0 Rev 2.1 1993	496834		
2622807006	GWA-55R	EPA 300.0 Rev 2.1 1993	496834		
2622807007	GWC-25R	EPA 300.0 Rev 2.1 1993	496834		
2622807008	GWC-24R	EPA 300.0 Rev 2.1 1993	496834		
2622807009	GWC-22R	EPA 300.0 Rev 2.1 1993	496835		
2622807010	Dup-2	EPA 300.0 Rev 2.1 1993	496834		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 3+4

Pace Project No.: 2622807

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622807011	FBL090519	EPA 300.0 Rev 2.1 1993	496835		
2622807012	EQBL090519	EPA 300.0 Rev 2.1 1993	496835		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: Georgia Power - Coal Combustion Residuals, Address: 2480 Meador Road, Atlanta, GA 30339, Email: jbraham@southemco.com, Phone: (404)506-7239, Requested Due Date:

Section B Required Project Information: Report To: Jitu Abraham, Copy To: Wood Environmental, Purchase Order #: SCS10362775, Project Name: Plant Bowen Cells - State List, Project #: Cells 3 & 4

Section C Invoice Information: Attention: scsinvcs@southemco.com, Company Name: , Address: , Pace Quote: , Pace Project Manager: betsy.modanis@paceelabs.com, Pace Profile #: 317.5, State: GA

Page: Of

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	PRESERVATIVES							Analytical Test	Y/N	TDS, Cl, F, SO4	Residual Chlorine (Y/N)
			START DATE	END DATE			TIME	TIME		H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other				
1					WTG				2	1								X		
2					WTG				2	1								X		
3					WTG				2	1								X		
4					WTG				2	1								X		
5					WTG				2	1								X		
6					WTG				2	1								X		
7					WTG				2	1								X		
8					WTG				2	1								X		
9					WTG				2	1								X		
10					WTG				2	1								X		
11					WTG				2	1								X		
12					WTG				2	1								X		

WO#: 2622807

2622807

ADDITIONAL COMMENTS: Cindy Maudis, 9/6, 9:00 AM, 9/6/19, 0900, 0.24, 4, 7

RELINQUISHED BY / AFFILIATION: [Signature]

ACQUIRED BY / AFFILIATION: [Signature]

SAMPLER NAME AND SIGNATURE: Audrey Crafton, Veronica Fay, Joe Booth

PRINT Name of SAMPLER: Audrey Crafton, Veronica Fay, Joe Booth

SIGNATURE of SAMPLER: [Signatures]

DATE Signed: 9/15/19

TEMP in C: 0.24

Received on: 9/15/19

Is Custody Sealed (Y/N): Y

Intact Samples (Y/N): Y



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

WO#: 2622807

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

PM: BM Due Date: 09/13/19
CLIENT: GAPower-CCR

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 23 Type of Ice: Wet Blue None Samples on Ice, cooling process has begun

Cooler Temperature 0.2 Biological Tissue is Frozen: Yes No
Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9/6/19 [Signature]

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 06, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report replaces the report issued on September 13, 2019. This report was revised to correct the Fluoride reporting limit as 0.3 mg/L in accordance with GPC contract specifications. No other changes have been made to this report

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622808001	GWA-36	Water	09/04/19 11:23	09/06/19 09:40
2622808002	GWA-36R	Water	09/04/19 10:18	09/06/19 09:40
2622808003	GWA-37	Water	09/04/19 11:45	09/06/19 09:40
2622808004	GWA-38	Water	09/04/19 10:05	09/06/19 09:40
2622808005	GWA-52	Water	09/04/19 11:27	09/06/19 09:40
2622808006	GWA-56	Water	09/04/19 14:26	09/06/19 09:40
2622808007	Dup-1	Water	09/04/19 00:00	09/06/19 09:40
2622808008	FBL 090419	Water	09/04/19 16:05	09/06/19 09:40
2622808009	EQBL 090419	Water	09/04/19 16:10	09/06/19 09:40

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622808001	GWA-36	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622808002	GWA-36R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622808003	GWA-37	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622808004	GWA-38	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622808005	GWA-52	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622808006	GWA-56	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622808007	Dup-1	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622808008	FBL 090419	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622808009	EQBL 090419	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Sample: GWA-36		Lab ID: 2622808001		Collected: 09/04/19 11:23		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0010J	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 21:16	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 21:16	7440-38-2		
Barium	0.014	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 21:16	7440-39-3		
Beryllium	0.00016J	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 21:16	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 21:16	7440-42-8		
Cadmium	0.00088J	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 21:16	7440-43-9		
Calcium	13.3	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 21:22	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 21:16	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 21:16	7440-48-4		
Copper	0.00023J	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 21:16	7440-50-8		
Lead	0.000076J	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 21:16	7439-92-1		
Nickel	0.00041J	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 21:16	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 21:16	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 21:16	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 21:16	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 21:16	7440-62-2		
Zinc	0.34	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 21:16	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:38	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	83.0	mg/L	10.0	10.0	1		09/09/19 15:21			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.0	mg/L	1.0	0.60	1		09/10/19 18:49	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 18:49	16984-48-8		
Sulfate	0.68J	mg/L	1.0	0.50	1		09/10/19 18:49	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Sample: GWA-36R		Lab ID: 2622808002		Collected: 09/04/19 10:18		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 21:28	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 21:28	7440-38-2		
Barium	0.026	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 21:28	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 21:28	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 21:28	7440-42-8		
Cadmium	0.00016J	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 21:28	7440-43-9		
Calcium	27.9	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 21:34	7440-70-2		
Chromium	0.0013J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 21:28	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 21:28	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 21:28	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 21:28	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 21:28	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 21:28	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 21:28	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 21:28	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 21:28	7440-62-2		
Zinc	0.052	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 21:28	7440-66-6		
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:40	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	142	mg/L	10.0	10.0	1		09/09/19 15:21			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.7	mg/L	1.0	0.60	1		09/10/19 17:55	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 17:55	16984-48-8		
Sulfate	1.8	mg/L	1.0	0.50	1		09/10/19 17:55	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Sample: GWA-37		Lab ID: 2622808003		Collected: 09/04/19 11:45		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.0029J	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 21:39	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 21:39	7440-38-2		
Barium	0.0050J	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 21:39	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 21:39	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 21:39	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 21:39	7440-43-9		
Calcium	0.76	mg/L	0.10	0.011	1	09/09/19 11:05	09/11/19 21:39	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 21:39	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 21:39	7440-48-4		
Copper	0.0082J	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 21:39	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 21:39	7439-92-1		
Nickel	0.0059J	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 21:39	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 21:39	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 21:39	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 21:39	7440-28-0		
Vanadium	0.00073J	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 21:39	7440-62-2		
Zinc	0.0086J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 21:39	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:43	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	26.0	mg/L	10.0	10.0	1		09/09/19 15:22			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.81J	mg/L	1.0	0.60	1		09/10/19 19:16	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 19:16	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/10/19 19:16	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Sample: GWA-38		Lab ID: 2622808004		Collected: 09/04/19 10:05		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 21:51	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 21:51	7440-38-2		
Barium	0.011	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 21:51	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 21:51	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 21:51	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 21:51	7440-43-9		
Calcium	1.6	mg/L	0.10	0.011	1	09/09/19 11:05	09/11/19 21:51	7440-70-2		
Chromium	0.0017J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 21:51	7440-47-3		
Cobalt	0.00094J	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 21:51	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 21:51	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 21:51	7439-92-1		
Nickel	0.00080J	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 21:51	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 21:51	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 21:51	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 21:51	7440-28-0		
Vanadium	0.00076J	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 21:51	7440-62-2		
Zinc	0.0056J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 21:51	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:50	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	44.0	mg/L	10.0	10.0	1		09/09/19 15:22			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.9	mg/L	1.0	0.60	1		09/10/19 17:42	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 17:42	16984-48-8		
Sulfate	0.83J	mg/L	1.0	0.50	1		09/10/19 17:42	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Sample: GWA-52		Lab ID: 2622808005		Collected: 09/04/19 11:27		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 22:02	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 22:02	7440-38-2		
Barium	0.020	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 22:02	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 22:02	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 22:02	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 22:02	7440-43-9		
Calcium	28.1	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 22:08	7440-70-2		
Chromium	0.00096J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 22:02	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 22:02	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 22:02	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 22:02	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 22:02	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 22:02	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 22:02	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 22:02	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 22:02	7440-62-2		
Zinc	0.0045J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 22:02	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:52	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	135	mg/L	10.0	10.0	1		09/09/19 15:22			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.3	mg/L	1.0	0.60	1		09/10/19 19:03	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 19:03	16984-48-8		
Sulfate	4.2	mg/L	1.0	0.50	1		09/10/19 19:03	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Sample: GWA-56		Lab ID: 2622808006		Collected: 09/04/19 14:26		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 22:25	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 22:25	7440-38-2		
Barium	0.033	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 22:25	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 22:25	7440-41-7		
Boron	0.015J	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 22:25	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 22:25	7440-43-9		
Calcium	31.6	mg/L	5.0	0.55	50	09/09/19 11:05	09/11/19 22:31	7440-70-2		
Chromium	0.0014J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 22:25	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 22:25	7440-48-4		
Copper	0.00047J	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 22:25	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 22:25	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 22:25	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 22:25	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 22:25	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 22:25	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 22:25	7440-62-2		
Zinc	0.0052J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 22:25	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:54	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	326	mg/L	10.0	10.0	1		09/09/19 15:23			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	4.8	mg/L	1.0	0.60	1		09/10/19 19:30	16887-00-6		
Fluoride	0.11J	mg/L	0.30	0.050	1		09/10/19 19:30	16984-48-8		
Sulfate	67.8	mg/L	1.0	0.50	1		09/10/19 19:30	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Sample: Dup-1		Lab ID: 2622808007		Collected: 09/04/19 00:00		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 22:37	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 22:37	7440-38-2		
Barium	0.012	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 22:37	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 22:37	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 22:37	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 22:37	7440-43-9		
Calcium	1.7	mg/L	0.10	0.011	1	09/09/19 11:05	09/11/19 22:37	7440-70-2		
Chromium	0.0014J	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 22:37	7440-47-3		
Cobalt	0.00093J	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 22:37	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 22:37	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 22:37	7439-92-1		
Nickel	0.00085J	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 22:37	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 22:37	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 22:37	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 22:37	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 22:37	7440-62-2		
Zinc	0.0057J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 22:37	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:57	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	17.0	mg/L	10.0	10.0	1		09/09/19 15:23			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.8	mg/L	1.0	0.60	1		09/10/19 17:28	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 17:28	16984-48-8		
Sulfate	0.81J	mg/L	1.0	0.50	1		09/10/19 17:28	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

Sample: FBL 090419		Lab ID: 2622808008		Collected: 09/04/19 16:05	Received: 09/06/19 09:40	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 11:05	09/11/19 22:54	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 11:05	09/11/19 22:54	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/09/19 11:05	09/11/19 22:54	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 11:05	09/11/19 22:54	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 11:05	09/11/19 22:54	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 11:05	09/11/19 22:54	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/09/19 11:05	09/11/19 22:54	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 11:05	09/11/19 22:54	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 11:05	09/11/19 22:54	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 11:05	09/11/19 22:54	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 11:05	09/11/19 22:54	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 11:05	09/11/19 22:54	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 11:05	09/11/19 22:54	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 11:05	09/11/19 22:54	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 11:05	09/11/19 22:54	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 11:05	09/11/19 22:54	7440-62-2		
Zinc	0.0050J	mg/L	0.010	0.0015	1	09/09/19 11:05	09/11/19 22:54	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/10/19 11:58	09/10/19 17:59	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	11.0	mg/L	10.0	10.0	1		09/09/19 15:23			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/10/19 19:43	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 19:43	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/10/19 19:43	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

Sample: EQBL 090419		Lab ID: 2622808009		Collected: 09/04/19 16:10		Received: 09/06/19 09:40		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 17:05	09/10/19 18:45	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 17:05	09/10/19 18:45	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/09/19 17:05	09/10/19 18:45	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 17:05	09/10/19 18:45	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 17:05	09/10/19 18:45	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 17:05	09/10/19 18:45	7440-43-9		
Calcium	0.054J	mg/L	0.10	0.011	1	09/09/19 17:05	09/10/19 18:45	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 17:05	09/10/19 18:45	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 17:05	09/10/19 18:45	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 17:05	09/10/19 18:45	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 17:05	09/10/19 18:45	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 17:05	09/10/19 18:45	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 17:05	09/10/19 18:45	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 17:05	09/10/19 18:45	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 17:05	09/10/19 18:45	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 17:05	09/10/19 18:45	7440-62-2		
Zinc	0.0054J	mg/L	0.010	0.0015	1	09/09/19 17:05	09/10/19 18:45	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 15:49	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/09/19 15:23			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/10/19 19:57	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/10/19 19:57	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/10/19 19:57	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

QC Batch: 34993

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 2622808001, 2622808002, 2622808003, 2622808004, 2622808005, 2622808006, 2622808007, 2622808008

METHOD BLANK: 15751

Matrix: Water

Associated Lab Samples: 2622808001, 2622808002, 2622808003, 2622808004, 2622808005, 2622808006, 2622808007, 2622808008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/10/19 16:53	

LABORATORY CONTROL SAMPLE: 15752

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 157553 157554

Parameter	Units	2622807001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0024	102	96	75-125	6	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

QC Batch: 35154	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
Associated Lab Samples: 2622808009	

METHOD BLANK: 158199 Matrix: Water

Associated Lab Samples: 2622808009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/12/19 15:34	

LABORATORY CONTROL SAMPLE: 158200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 158201 158202

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2622810001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0029	97	115	75-125	17	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

QC Batch: 34909 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622808001, 2622808002, 2622808003, 2622808004, 2622808005, 2622808006, 2622808007, 2622808008

METHOD BLANK: 157237 Matrix: Water
Associated Lab Samples: 2622808001, 2622808002, 2622808003, 2622808004, 2622808005, 2622808006, 2622808007, 2622808008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/11/19 17:42	
Arsenic	mg/L	ND	0.0050	0.00035	09/11/19 17:42	
Barium	mg/L	ND	0.010	0.00049	09/11/19 17:42	
Beryllium	mg/L	ND	0.0030	0.000074	09/11/19 17:42	
Boron	mg/L	ND	0.040	0.0049	09/11/19 17:42	
Cadmium	mg/L	ND	0.0025	0.00011	09/11/19 17:42	
Calcium	mg/L	0.021J	0.10	0.011	09/11/19 17:42	
Chromium	mg/L	ND	0.010	0.00039	09/11/19 17:42	
Cobalt	mg/L	ND	0.0050	0.00030	09/11/19 17:42	
Copper	mg/L	ND	0.025	0.00019	09/11/19 17:42	
Lead	mg/L	ND	0.0050	0.000046	09/11/19 17:42	
Nickel	mg/L	ND	0.010	0.00031	09/11/19 17:42	
Selenium	mg/L	ND	0.010	0.0013	09/11/19 17:42	
Silver	mg/L	ND	0.010	0.00028	09/11/19 17:42	
Thallium	mg/L	ND	0.0010	0.000052	09/11/19 17:42	
Vanadium	mg/L	ND	0.010	0.00071	09/11/19 17:42	
Zinc	mg/L	0.0043J	0.010	0.0015	09/11/19 17:42	

LABORATORY CONTROL SAMPLE: 157238

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Calcium	mg/L	1	1.0	101	80-120	
Chromium	mg/L	0.1	0.093	93	80-120	
Cobalt	mg/L	0.1	0.095	95	80-120	
Copper	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Nickel	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Silver	mg/L	0.1	0.099	99	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	
Vanadium	mg/L	0.1	0.092	92	80-120	
Zinc	mg/L	0.1	0.10	101	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 157239		157240		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		2622807001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Antimony	mg/L	0.00060J	0.1	0.1	0.10	0.10	103	103	75-125	1	20	
Arsenic	mg/L	0.00061J	0.1	0.1	0.098	0.099	97	98	75-125	1	20	
Barium	mg/L	0.018	0.1	0.1	0.12	0.12	103	102	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Boron	mg/L	0.010J	1	1	0.99	0.99	98	98	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Calcium	mg/L	40.7	1	1	44.0	45.8	336	515	75-125	4	20	M6
Chromium	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Copper	mg/L	ND	0.1	0.1	0.096	0.095	95	95	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Nickel	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Selenium	mg/L	0.010	0.1	0.1	0.11	0.11	101	100	75-125	1	20	
Silver	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Thallium	mg/L	0.00014J	0.1	0.1	0.10	0.10	100	100	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.097	0.099	96	98	75-125	2	20	
Zinc	mg/L	0.0051J	0.1	0.1	0.10	0.10	98	95	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

QC Batch: 34964 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622808009

METHOD BLANK: 157450 Matrix: Water
Associated Lab Samples: 2622808009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/10/19 18:33	
Arsenic	mg/L	ND	0.0050	0.00035	09/10/19 18:33	
Barium	mg/L	ND	0.010	0.00049	09/10/19 18:33	
Beryllium	mg/L	ND	0.0030	0.000074	09/10/19 18:33	
Boron	mg/L	ND	0.040	0.0049	09/10/19 18:33	
Cadmium	mg/L	ND	0.0025	0.00011	09/10/19 18:33	
Calcium	mg/L	ND	0.10	0.011	09/10/19 18:33	
Chromium	mg/L	ND	0.010	0.00039	09/10/19 18:33	
Cobalt	mg/L	ND	0.0050	0.00030	09/10/19 18:33	
Copper	mg/L	ND	0.025	0.00019	09/10/19 18:33	
Lead	mg/L	ND	0.0050	0.000046	09/10/19 18:33	
Nickel	mg/L	ND	0.010	0.00031	09/10/19 18:33	
Selenium	mg/L	ND	0.010	0.0013	09/10/19 18:33	
Silver	mg/L	ND	0.010	0.00028	09/10/19 18:33	
Thallium	mg/L	ND	0.0010	0.000052	09/10/19 18:33	
Vanadium	mg/L	ND	0.010	0.00071	09/10/19 18:33	
Zinc	mg/L	0.0042J	0.010	0.0015	09/10/19 18:33	

LABORATORY CONTROL SAMPLE: 157451

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	0.93	93	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Calcium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Copper	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Nickel	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Silver	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.096	96	80-120	
Zinc	mg/L	0.1	0.10	101	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

Parameter	Units	2622810004		157452		157453		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	0.00029J	0.1	0.1	0.10	0.10	101	101	75-125	0	20			
Arsenic	mg/L	0.00054J	0.1	0.1	0.099	0.10	99	100	75-125	1	20			
Barium	mg/L	0.021	0.1	0.1	0.12	0.12	100	101	75-125	1	20			
Beryllium	mg/L	ND	0.1	0.1	0.10	0.11	101	106	75-125	5	20			
Boron	mg/L	ND	1	1	0.96	1.0	96	103	75-125	7	20			
Cadmium	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20			
Calcium	mg/L	55.9	1	1	57.6	57.7	167	173	75-125	0	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.099	0.099	99	98	75-125	0	20			
Cobalt	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20			
Copper	mg/L	0.00037J	0.1	0.1	0.096	0.098	95	97	75-125	2	20			
Lead	mg/L	0.000068J	0.1	0.1	0.097	0.098	97	98	75-125	1	20			
Nickel	mg/L	0.00086J	0.1	0.1	0.097	0.097	96	96	75-125	0	20			
Selenium	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2	20			
Silver	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	2	20			
Thallium	mg/L	0.00030J	0.1	0.1	0.098	0.10	97	100	75-125	3	20			
Vanadium	mg/L	0.0011J	0.1	0.1	0.099	0.10	98	99	75-125	1	20			
Zinc	mg/L	0.0059J	0.1	0.1	0.10	0.10	94	98	75-125	3	20			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

QC Batch: 34944 Analysis Method: SM 2540C
 QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
 Associated Lab Samples: 2622808001, 2622808002, 2622808003, 2622808004, 2622808005, 2622808006, 2622808007, 2622808008, 2622808009

LABORATORY CONTROL SAMPLE: 157364

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	386	96	84-108	

SAMPLE DUPLICATE: 157365

Parameter	Units	2622818002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	581	577	1	10	

SAMPLE DUPLICATE: 157366

Parameter	Units	2622808002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	142	150	5	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622808

QC Batch: 496834 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2622808001, 2622808002, 2622808003, 2622808004, 2622808005, 2622808006, 2622808007, 2622808008, 2622808009

METHOD BLANK: 2675526 Matrix: Water
Associated Lab Samples: 2622808001, 2622808002, 2622808003, 2622808004, 2622808005, 2622808006, 2622808007, 2622808008, 2622808009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/10/19 17:14	
Fluoride	mg/L	ND	0.10	0.050	09/10/19 17:14	
Sulfate	mg/L	ND	1.0	0.50	09/10/19 17:14	

LABORATORY CONTROL SAMPLE: 2675527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.4	99	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	50.6	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675528 2675529

Parameter	Units	2622774001		2675528		2675529		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result				
Chloride	mg/L	154	154	50	50	200	199	92	90	1	10
Fluoride	mg/L	0.93	0.93	2.5	2.5	3.4	3.3	98	96	2	10
Sulfate	mg/L	145	145	50	50	188	186	86	84	1	10 M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675530 2675531

Parameter	Units	2622808009		2675530		2675531		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result				
Chloride	mg/L	ND	ND	50	50	53.4	53.8	107	108	1	10
Fluoride	mg/L	ND	ND	2.5	2.5	2.7	2.7	107	107	0	10
Sulfate	mg/L	ND	ND	50	50	51.0	51.2	102	102	0	10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 3+4

Pace Project No.: 2622808

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622808001	GWA-36	EPA 3005A	34909	EPA 6020B	34942
2622808002	GWA-36R	EPA 3005A	34909	EPA 6020B	34942
2622808003	GWA-37	EPA 3005A	34909	EPA 6020B	34942
2622808004	GWA-38	EPA 3005A	34909	EPA 6020B	34942
2622808005	GWA-52	EPA 3005A	34909	EPA 6020B	34942
2622808006	GWA-56	EPA 3005A	34909	EPA 6020B	34942
2622808007	Dup-1	EPA 3005A	34909	EPA 6020B	34942
2622808008	FBL 090419	EPA 3005A	34909	EPA 6020B	34942
2622808009	EQBL 090419	EPA 3005A	34964	EPA 6020B	34967
2622808001	GWA-36	EPA 7470A	34993	EPA 7470A	35030
2622808002	GWA-36R	EPA 7470A	34993	EPA 7470A	35030
2622808003	GWA-37	EPA 7470A	34993	EPA 7470A	35030
2622808004	GWA-38	EPA 7470A	34993	EPA 7470A	35030
2622808005	GWA-52	EPA 7470A	34993	EPA 7470A	35030
2622808006	GWA-56	EPA 7470A	34993	EPA 7470A	35030
2622808007	Dup-1	EPA 7470A	34993	EPA 7470A	35030
2622808008	FBL 090419	EPA 7470A	34993	EPA 7470A	35030
2622808009	EQBL 090419	EPA 7470A	35154	EPA 7470A	35198
2622808001	GWA-36	SM 2540C	34944		
2622808002	GWA-36R	SM 2540C	34944		
2622808003	GWA-37	SM 2540C	34944		
2622808004	GWA-38	SM 2540C	34944		
2622808005	GWA-52	SM 2540C	34944		
2622808006	GWA-56	SM 2540C	34944		
2622808007	Dup-1	SM 2540C	34944		
2622808008	FBL 090419	SM 2540C	34944		
2622808009	EQBL 090419	SM 2540C	34944		
2622808001	GWA-36	EPA 300.0 Rev 2.1 1993	496834		
2622808002	GWA-36R	EPA 300.0 Rev 2.1 1993	496834		
2622808003	GWA-37	EPA 300.0 Rev 2.1 1993	496834		
2622808004	GWA-38	EPA 300.0 Rev 2.1 1993	496834		
2622808005	GWA-52	EPA 300.0 Rev 2.1 1993	496834		
2622808006	GWA-56	EPA 300.0 Rev 2.1 1993	496834		
2622808007	Dup-1	EPA 300.0 Rev 2.1 1993	496834		
2622808008	FBL 090419	EPA 300.0 Rev 2.1 1993	496834		
2622808009	EQBL 090419	EPA 300.0 Rev 2.1 1993	496834		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
 Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Maner Road
 Atlanta, GA 30339
 Email: abraham@southemco.com
 Phone: (404)506-7239
 Fax: []
 Requested Due Date: 9/15/19

Section B
 Required Project Information:
 Report To: Joey Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10382775
 Project Name: Plant Bowen Cells - States List
 Project #: 66115 34H

Section C
 Invoice Information:
 Attention: sssinvoices@southemco.com
 Company Name: []
 Address: []
 Pace Quote: []
 Pace Project Manager: betsy.mcdaniels@paceelabs.com
 Pace Profile #: 317.5
 State / Location: GA

Page: [] Of []

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	PRESERVATIVES							TDS, CL, F, SO4 Metals 6020/7470 *	Requested/Analysis Element (Y/N)	Residual Chlorine (Y/N)
			START DATE TIME	END DATE TIME				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2SO3	Methanol			
1		DW	9/4/19 1123		G	WT	2	1									
2		WT	9/4/19 1018		G	WT	2	1									
3		WT	9/4/19 1145		G	WT	2	1									
4		WT	9/4/19 1005		G	WT	2	1									
5		WT	9/4/19 1127		G	WT	2	1									
6		WT	9/4/19 1426		G	WT	2	1									
7		WT	9/4/19 -		G	WT	2	1									
8		WT	9/4/19 1605		G	WT	2	1									
9		WT	9/4/19 1610		G	WT	2	1									
10																	
11																	
12																	

WO#: 2622808

2622808

RELEASING BY / JUSTIFICATION	DATE	TIME	ACCEPTED BY / APPLICATION	DATE	TIME	TEMP IN C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
Gindy Maddis	9/6	9:00 AM	Pose	9/6/19	9:00 AM						
Pose	9/6/19	0940	Mozalman	9/6/19	0940						
							0.2				

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Audrey Crafton, Veronica Fox, Joe Booth
 SIGNATURE of SAMPLER: [Signature]
 DATE Signed: 9/14/19



Sample Condition Upon Receipt

Client Name: GIA POWER

Project # _____

WO#: 2622808

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

PH: BM

Due Date: 09/13/19

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

CLIENT: GAPower-CCR

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 23 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 0.2

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/6/19 MK

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 06, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report replaces the report issued on September 13, 2019. This report was revised to correct the Fluoride reporting limit as 0.3 mg/L in accordance with GPC contract specifications. No other changes have been made to this report

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622810

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 3+4

Pace Project No.: 2622810

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622810001	GWC-18R	Water	09/06/19 11:21	09/06/19 14:26
2622810002	GWC-20R	Water	09/06/19 11:26	09/06/19 14:26
2622810003	GWC-21R	Water	09/06/19 11:02	09/06/19 14:26
2622810004	GWC-23R	Water	09/06/19 10:00	09/06/19 14:26
2622810005	Dup-3	Water	09/06/19 00:00	09/06/19 14:26
2622810006	FBL 090619	Water	09/06/19 12:19	09/06/19 14:26
2622810007	EQBL 090619	Water	09/06/19 12:25	09/06/19 14:26

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622810001	GWC-18R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622810002	GWC-20R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622810003	GWC-21R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622810004	GWC-23R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622810005	Dup-3	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622810006	FBL 090619	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622810007	EQBL 090619	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

Sample: GWC-18R		Lab ID: 2622810001		Collected: 09/06/19 11:21		Received: 09/06/19 14:26		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.00028J	mg/L	0.0030	0.00027	1	09/09/19 17:05	09/10/19 18:51	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 17:05	09/10/19 18:51	7440-38-2	
Barium	0.014	mg/L	0.010	0.00049	1	09/09/19 17:05	09/10/19 18:51	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 17:05	09/10/19 18:51	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 17:05	09/10/19 18:51	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 17:05	09/10/19 18:51	7440-43-9	
Calcium	27.5	mg/L	5.0	0.55	50	09/09/19 17:05	09/10/19 18:56	7440-70-2	
Chromium	0.00053J	mg/L	0.010	0.00039	1	09/09/19 17:05	09/10/19 18:51	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 17:05	09/10/19 18:51	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 17:05	09/10/19 18:51	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 17:05	09/10/19 18:51	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 17:05	09/10/19 18:51	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 17:05	09/10/19 18:51	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 17:05	09/10/19 18:51	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 17:05	09/10/19 18:51	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 17:05	09/10/19 18:51	7440-62-2	
Zinc	0.0046J	mg/L	0.010	0.0015	1	09/09/19 17:05	09/10/19 18:51	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 15:39	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	141	mg/L	10.0	10.0	1		09/11/19 11:25		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	2.3	mg/L	1.0	0.60	1		09/11/19 02:14	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 02:14	16984-48-8	
Sulfate	2.0	mg/L	1.0	0.50	1		09/11/19 02:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

Sample: GWC-20R		Lab ID: 2622810002		Collected: 09/06/19 11:26		Received: 09/06/19 14:26		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 17:05	09/10/19 19:02	7440-36-0		
Arsenic	0.00044J	mg/L	0.0050	0.00035	1	09/09/19 17:05	09/10/19 19:02	7440-38-2		
Barium	0.027	mg/L	0.010	0.00049	1	09/09/19 17:05	09/10/19 19:02	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 17:05	09/10/19 19:02	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 17:05	09/10/19 19:02	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 17:05	09/10/19 19:02	7440-43-9		
Calcium	31.1	mg/L	5.0	0.55	50	09/09/19 17:05	09/10/19 19:08	7440-70-2		
Chromium	0.00076J	mg/L	0.010	0.00039	1	09/09/19 17:05	09/10/19 19:02	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 17:05	09/10/19 19:02	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 17:05	09/10/19 19:02	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 17:05	09/10/19 19:02	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 17:05	09/10/19 19:02	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 17:05	09/10/19 19:02	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 17:05	09/10/19 19:02	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 17:05	09/10/19 19:02	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 17:05	09/10/19 19:02	7440-62-2		
Zinc	0.0042J	mg/L	0.010	0.0015	1	09/09/19 17:05	09/10/19 19:02	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 15:51	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	24.0	mg/L	10.0	10.0	1		09/11/19 11:25			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.6	mg/L	1.0	0.60	1		09/11/19 02:27	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 02:27	16984-48-8		
Sulfate	1.4	mg/L	1.0	0.50	1		09/11/19 02:27	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

Sample: GWC-21R		Lab ID: 2622810003		Collected: 09/06/19 11:02		Received: 09/06/19 14:26		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.010	mg/L	0.0030	0.00027	1	09/09/19 17:05	09/10/19 19:13	7440-36-0	
Arsenic	0.0024J	mg/L	0.0050	0.00035	1	09/09/19 17:05	09/10/19 19:13	7440-38-2	
Barium	0.041	mg/L	0.010	0.00049	1	09/09/19 17:05	09/10/19 19:13	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 17:05	09/10/19 19:13	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 17:05	09/10/19 19:13	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 17:05	09/10/19 19:13	7440-43-9	
Calcium	57.8	mg/L	5.0	0.55	50	09/09/19 17:05	09/10/19 19:19	7440-70-2	
Chromium	0.00078J	mg/L	0.010	0.00039	1	09/09/19 17:05	09/10/19 19:13	7440-47-3	
Cobalt	0.00051J	mg/L	0.0050	0.00030	1	09/09/19 17:05	09/10/19 19:13	7440-48-4	
Copper	0.010J	mg/L	0.025	0.00019	1	09/09/19 17:05	09/10/19 19:13	7440-50-8	
Lead	0.0016J	mg/L	0.0050	0.000046	1	09/09/19 17:05	09/10/19 19:13	7439-92-1	
Nickel	0.0028J	mg/L	0.010	0.00031	1	09/09/19 17:05	09/10/19 19:13	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 17:05	09/10/19 19:13	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 17:05	09/10/19 19:13	7440-22-4	
Thallium	0.00020J	mg/L	0.0010	0.000052	1	09/09/19 17:05	09/10/19 19:13	7440-28-0	
Vanadium	0.0012J	mg/L	0.010	0.00071	1	09/09/19 17:05	09/10/19 19:13	7440-62-2	
Zinc	0.045	mg/L	0.010	0.0015	1	09/09/19 17:05	09/10/19 19:13	7440-66-6	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 15:53	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	291	mg/L	10.0	10.0	1		09/11/19 11:25		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	3.5	mg/L	1.0	0.60	1		09/11/19 02:00	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 02:00	16984-48-8	
Sulfate	6.0	mg/L	1.0	0.50	1		09/11/19 02:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

Sample: GWC-23R		Lab ID: 2622810004		Collected: 09/06/19 10:00		Received: 09/06/19 14:26		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.00029J	mg/L	0.0030	0.00027	1	09/09/19 17:05	09/10/19 19:36	7440-36-0		
Arsenic	0.00054J	mg/L	0.0050	0.00035	1	09/09/19 17:05	09/10/19 19:36	7440-38-2		
Barium	0.021	mg/L	0.010	0.00049	1	09/09/19 17:05	09/10/19 19:36	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 17:05	09/10/19 19:36	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 17:05	09/10/19 19:36	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 17:05	09/10/19 19:36	7440-43-9		
Calcium	55.9	mg/L	5.0	0.55	50	09/09/19 17:05	09/10/19 19:42	7440-70-2	M6	
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 17:05	09/10/19 19:36	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 17:05	09/10/19 19:36	7440-48-4		
Copper	0.00037J	mg/L	0.025	0.00019	1	09/09/19 17:05	09/10/19 19:36	7440-50-8		
Lead	0.000068J	mg/L	0.0050	0.000046	1	09/09/19 17:05	09/10/19 19:36	7439-92-1		
Nickel	0.00086J	mg/L	0.010	0.00031	1	09/09/19 17:05	09/10/19 19:36	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 17:05	09/10/19 19:36	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 17:05	09/10/19 19:36	7440-22-4		
Thallium	0.00030J	mg/L	0.0010	0.000052	1	09/09/19 17:05	09/10/19 19:36	7440-28-0		
Vanadium	0.0011J	mg/L	0.010	0.00071	1	09/09/19 17:05	09/10/19 19:36	7440-62-2		
Zinc	0.0059J	mg/L	0.010	0.0015	1	09/09/19 17:05	09/10/19 19:36	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 15:56	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	300	mg/L	10.0	10.0	1		09/11/19 11:25			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.4	mg/L	1.0	0.60	1		09/11/19 01:46	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 01:46	16984-48-8		
Sulfate	9.5	mg/L	1.0	0.50	1		09/11/19 01:46	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622810

Sample: Dup-3		Lab ID: 2622810005		Collected: 09/06/19 00:00		Received: 09/06/19 14:26		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.00051J	mg/L	0.0030	0.00027	1	09/09/19 17:05	09/10/19 20:16	7440-36-0	
Arsenic	0.00050J	mg/L	0.0050	0.00035	1	09/09/19 17:05	09/10/19 20:16	7440-38-2	
Barium	0.028	mg/L	0.010	0.00049	1	09/09/19 17:05	09/10/19 20:16	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 17:05	09/10/19 20:16	7440-41-7	
Boron	0.0073J	mg/L	0.040	0.0049	1	09/09/19 17:05	09/10/19 20:16	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 17:05	09/10/19 20:16	7440-43-9	
Calcium	33.6	mg/L	5.0	0.55	50	09/09/19 17:05	09/10/19 20:22	7440-70-2	
Chromium	0.00066J	mg/L	0.010	0.00039	1	09/09/19 17:05	09/10/19 20:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 17:05	09/10/19 20:16	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 17:05	09/10/19 20:16	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 17:05	09/10/19 20:16	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 17:05	09/10/19 20:16	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 17:05	09/10/19 20:16	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 17:05	09/10/19 20:16	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 17:05	09/10/19 20:16	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 17:05	09/10/19 20:16	7440-62-2	
Zinc	0.0049J	mg/L	0.010	0.0015	1	09/09/19 17:05	09/10/19 20:16	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 16:03	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	179	mg/L	10.0	10.0	1		09/11/19 11:25		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	1.6	mg/L	1.0	0.60	1		09/11/19 01:33	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 01:33	16984-48-8	
Sulfate	1.5	mg/L	1.0	0.50	1		09/11/19 01:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

Sample: FBL 090619		Lab ID: 2622810006		Collected: 09/06/19 12:19		Received: 09/06/19 14:26		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 17:05	09/10/19 20:45	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 17:05	09/10/19 20:45	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/09/19 17:05	09/10/19 20:45	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 17:05	09/10/19 20:45	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 17:05	09/10/19 20:45	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 17:05	09/10/19 20:45	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/09/19 17:05	09/10/19 20:45	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 17:05	09/10/19 20:45	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 17:05	09/10/19 20:45	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 17:05	09/10/19 20:45	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 17:05	09/10/19 20:45	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 17:05	09/10/19 20:45	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 17:05	09/10/19 20:45	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 17:05	09/10/19 20:45	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 17:05	09/10/19 20:45	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 17:05	09/10/19 20:45	7440-62-2		
Zinc	0.0055J	mg/L	0.010	0.0015	1	09/09/19 17:05	09/10/19 20:45	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 16:05	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	10.0	mg/L	10.0	10.0	1		09/11/19 11:26			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/11/19 02:41	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 02:41	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/11/19 02:41	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622810

Sample: EQBL 090619		Lab ID: 2622810007		Collected: 09/06/19 12:25	Received: 09/06/19 14:26	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/09/19 17:05	09/10/19 20:51	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/09/19 17:05	09/10/19 20:51	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/09/19 17:05	09/10/19 20:51	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/09/19 17:05	09/10/19 20:51	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/09/19 17:05	09/10/19 20:51	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/09/19 17:05	09/10/19 20:51	7440-43-9		
Calcium	ND	mg/L	0.10	0.011	1	09/09/19 17:05	09/10/19 20:51	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/09/19 17:05	09/10/19 20:51	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/09/19 17:05	09/10/19 20:51	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/09/19 17:05	09/10/19 20:51	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/09/19 17:05	09/10/19 20:51	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/09/19 17:05	09/10/19 20:51	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/09/19 17:05	09/10/19 20:51	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/09/19 17:05	09/10/19 20:51	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/09/19 17:05	09/10/19 20:51	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/09/19 17:05	09/10/19 20:51	7440-62-2		
Zinc	0.0049J	mg/L	0.010	0.0015	1	09/09/19 17:05	09/10/19 20:51	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 16:07	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	10.0	mg/L	10.0	10.0	1		09/11/19 11:26			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/11/19 03:22	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/11/19 03:22	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/11/19 03:22	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622810

QC Batch: 35154 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2622810001, 2622810002, 2622810003, 2622810004, 2622810005, 2622810006, 2622810007

METHOD BLANK: 158199 Matrix: Water
 Associated Lab Samples: 2622810001, 2622810002, 2622810003, 2622810004, 2622810005, 2622810006, 2622810007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/12/19 15:34	

LABORATORY CONTROL SAMPLE: 158200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 158201 158202

Parameter	Units	2622810001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0029	97	115	75-125	17	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

QC Batch: 34964 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622810001, 2622810002, 2622810003, 2622810004, 2622810005, 2622810006, 2622810007

METHOD BLANK: 157450 Matrix: Water
Associated Lab Samples: 2622810001, 2622810002, 2622810003, 2622810004, 2622810005, 2622810006, 2622810007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/10/19 18:33	
Arsenic	mg/L	ND	0.0050	0.00035	09/10/19 18:33	
Barium	mg/L	ND	0.010	0.00049	09/10/19 18:33	
Beryllium	mg/L	ND	0.0030	0.000074	09/10/19 18:33	
Boron	mg/L	ND	0.040	0.0049	09/10/19 18:33	
Cadmium	mg/L	ND	0.0025	0.00011	09/10/19 18:33	
Calcium	mg/L	ND	0.10	0.011	09/10/19 18:33	
Chromium	mg/L	ND	0.010	0.00039	09/10/19 18:33	
Cobalt	mg/L	ND	0.0050	0.00030	09/10/19 18:33	
Copper	mg/L	ND	0.025	0.00019	09/10/19 18:33	
Lead	mg/L	ND	0.0050	0.000046	09/10/19 18:33	
Nickel	mg/L	ND	0.010	0.00031	09/10/19 18:33	
Selenium	mg/L	ND	0.010	0.0013	09/10/19 18:33	
Silver	mg/L	ND	0.010	0.00028	09/10/19 18:33	
Thallium	mg/L	ND	0.0010	0.000052	09/10/19 18:33	
Vanadium	mg/L	ND	0.010	0.00071	09/10/19 18:33	
Zinc	mg/L	0.0042J	0.010	0.0015	09/10/19 18:33	

LABORATORY CONTROL SAMPLE: 157451

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.096	96	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Boron	mg/L	1	0.93	93	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Calcium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Copper	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Nickel	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Silver	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.096	96	80-120	
Zinc	mg/L	0.1	0.10	101	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622810

Parameter	Units	2622810004		157452		157453		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec							
Antimony	mg/L	0.00029J	0.1	0.1	0.10	0.10	101	101	75-125	0	20			
Arsenic	mg/L	0.00054J	0.1	0.1	0.099	0.10	99	100	75-125	1	20			
Barium	mg/L	0.021	0.1	0.1	0.12	0.12	100	101	75-125	1	20			
Beryllium	mg/L	ND	0.1	0.1	0.10	0.11	101	106	75-125	5	20			
Boron	mg/L	ND	1	1	0.96	1.0	96	103	75-125	7	20			
Cadmium	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20			
Calcium	mg/L	55.9	1	1	57.6	57.7	167	173	75-125	0	20	M6		
Chromium	mg/L	ND	0.1	0.1	0.099	0.099	99	98	75-125	0	20			
Cobalt	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20			
Copper	mg/L	0.00037J	0.1	0.1	0.096	0.098	95	97	75-125	2	20			
Lead	mg/L	0.000068J	0.1	0.1	0.097	0.098	97	98	75-125	1	20			
Nickel	mg/L	0.00086J	0.1	0.1	0.097	0.097	96	96	75-125	0	20			
Selenium	mg/L	ND	0.1	0.1	0.096	0.098	96	98	75-125	2	20			
Silver	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	2	20			
Thallium	mg/L	0.00030J	0.1	0.1	0.098	0.10	97	100	75-125	3	20			
Vanadium	mg/L	0.0011J	0.1	0.1	0.099	0.10	98	99	75-125	1	20			
Zinc	mg/L	0.0059J	0.1	0.1	0.10	0.10	94	98	75-125	3	20			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

QC Batch: 35081 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2622810001, 2622810002, 2622810003, 2622810004, 2622810005, 2622810006, 2622810007

LABORATORY CONTROL SAMPLE: 157900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	407	102	84-108	

SAMPLE DUPLICATE: 157901

Parameter	Units	2622810001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	141	147	4	10	

SAMPLE DUPLICATE: 157902

Parameter	Units	2622884003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	106	110	4	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622810

QC Batch: 496835 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2622810001, 2622810002, 2622810003, 2622810004, 2622810005, 2622810006, 2622810007

METHOD BLANK: 2675532 Matrix: Water
Associated Lab Samples: 2622810001, 2622810002, 2622810003, 2622810004, 2622810005, 2622810006, 2622810007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/10/19 23:18	
Fluoride	mg/L	ND	0.10	0.050	09/10/19 23:18	
Sulfate	mg/L	ND	1.0	0.50	09/10/19 23:18	

LABORATORY CONTROL SAMPLE: 2675533

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.5	99	90-110	
Sulfate	mg/L	50	48.3	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675534 2675535

Parameter	Units	2622807011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	53.5	53.7	107	107	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	106	107	90-110	1	10	
Sulfate	mg/L	ND	50	50	50.8	51.1	102	102	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2675536 2675537

Parameter	Units	2622766001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	147	50	50	191	190	88	87	90-110	0	10 M6	
Fluoride	mg/L	0.82	2.5	2.5	3.4	3.3	103	101	90-110	1	10	
Sulfate	mg/L	140	50	50	181	180	83	81	90-110	1	10 M6	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622810

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 3+4

Pace Project No.: 2622810

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622810001	GWC-18R	EPA 3005A	34964	EPA 6020B	34967
2622810002	GWC-20R	EPA 3005A	34964	EPA 6020B	34967
2622810003	GWC-21R	EPA 3005A	34964	EPA 6020B	34967
2622810004	GWC-23R	EPA 3005A	34964	EPA 6020B	34967
2622810005	Dup-3	EPA 3005A	34964	EPA 6020B	34967
2622810006	FBL 090619	EPA 3005A	34964	EPA 6020B	34967
2622810007	EQBL 090619	EPA 3005A	34964	EPA 6020B	34967
2622810001	GWC-18R	EPA 7470A	35154	EPA 7470A	35198
2622810002	GWC-20R	EPA 7470A	35154	EPA 7470A	35198
2622810003	GWC-21R	EPA 7470A	35154	EPA 7470A	35198
2622810004	GWC-23R	EPA 7470A	35154	EPA 7470A	35198
2622810005	Dup-3	EPA 7470A	35154	EPA 7470A	35198
2622810006	FBL 090619	EPA 7470A	35154	EPA 7470A	35198
2622810007	EQBL 090619	EPA 7470A	35154	EPA 7470A	35198
2622810001	GWC-18R	SM 2540C	35081		
2622810002	GWC-20R	SM 2540C	35081		
2622810003	GWC-21R	SM 2540C	35081		
2622810004	GWC-23R	SM 2540C	35081		
2622810005	Dup-3	SM 2540C	35081		
2622810006	FBL 090619	SM 2540C	35081		
2622810007	EQBL 090619	SM 2540C	35081		
2622810001	GWC-18R	EPA 300.0 Rev 2.1 1993	496835		
2622810002	GWC-20R	EPA 300.0 Rev 2.1 1993	496835		
2622810003	GWC-21R	EPA 300.0 Rev 2.1 1993	496835		
2622810004	GWC-23R	EPA 300.0 Rev 2.1 1993	496835		
2622810005	Dup-3	EPA 300.0 Rev 2.1 1993	496835		
2622810006	FBL 090619	EPA 300.0 Rev 2.1 1993	496835		
2622810007	EQBL 090619	EPA 300.0 Rev 2.1 1993	496835		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of 1

Section A
Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Manor Road
 Atlanta, GA 30339
 Email: jabraham@southemco.com
 Phone: (404)506-7239
 Fax:
 Requested Due Date:

Section B
Required Project Information:
 Report To: Joty Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10382775
 Project Name: Plant Bowen Cells - State List
 Project #: **Cells 301**

Section C
Invoice Information:
 Attention: scsinvoices@gsouthemco.com
 Company Name:
 Address:
 Pace Quote:
 Pace Project Manager: betty.medaniel@pacelabs.com
 Pace Profile #: 317.5

States / Location: GA
 Regulatory Agency:

ITEMS #	MATRIX CODE (see valid codes to left)	MATRIX	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Preservatives	Analytical Test	TDS, Cl, F, SO4	Metals 6020/7470 *	Requested Analytical Element (Y/N)	TEMP in C	Received on	Ice (Y/N)	Custody	Sealed Cooler (Y/N)	Samples Intact (Y/N)	
			START DATE TIME	END DATE TIME		DATE	TIME													
1	GWC-1BR	DW	7/6/19 11:21		G		21	H2SO4 Unpreserved	X	X	X									
2	GWC-2OR	WT	7/6/19 11:26		G		21	HNO3 HCl	X	X	X									
3	GWC-21R	WT	7/6/19 11:02		G		21	HNO3 HCl	X	X	X									
4	GWC-23R	WT	7/6/19 10:00		G		21	HNO3 HCl	X	X	X									
5	DVP-3	Wipe	7/6/19 --		G		21	HNO3 HCl	X	X	X									
6	FBL090619	Other	7/6/19 12:19		G		21	HNO3 HCl	X	X	X									
7	EBL090619	Other	7/6/19 12:25		G		21	HNO3 HCl	X	X	X									

WO#: 2622810

RELEASING BY / VERIFICATION
 Veronice Fay / Resolute 9/6/19 14:26
 Signature: Veronice Fay
 Date: 9/6/19

RECEIVED BY / ACCEPTATION
 Mda Luman
 Signature: Mda Luman
 Date: 9/6/19

ADDITIONAL COMMENTS
 304 Y Y Y

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Audrey Crofton, Jose Booth, Veronice Fay
 SIGNATURE of SAMPLER: Veronice Fay
 DATE Signed: 9/6/19

TEMP in C
 Received on
 Ice (Y/N)
 Custody
 Sealed Cooler (Y/N)
 Samples Intact (Y/N)



Sample Condition Upon Receipt

Client Name: GIA Power

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____
Tracking #: _____

WO#: 2622810

PH: BM

Due Date: 09/13/19

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

CLIENT: GAPower-CCR

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 8.3

Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature 3.4

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/6/19 MR

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?

Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review:

Date:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 3+4
Pace Project No.: 2622908

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 10, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report replaces the report issued on September 18, 2019. This report was revised to correct the Fluoride reporting limit as 0.3 mg/L in accordance with GPC contract specifications. No other changes have been made to this report

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622908

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 3+4
Pace Project No.: 2622908

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622908001	GWC-16R	Water	09/09/19 14:36	09/10/19 13:12
2622908002	GWC-18	Water	09/09/19 11:53	09/10/19 13:12
2622908003	GWC-19R	Water	09/09/19 11:24	09/10/19 13:12

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 3+4

Pace Project No.: 2622908

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622908001	GWC-16R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622908002	GWC-18	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622908003	GWC-19R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622908

Sample: GWC-16R		Lab ID: 2622908001		Collected: 09/09/19 14:36		Received: 09/10/19 13:12		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.011	mg/L	0.0030	0.00027	1	09/12/19 14:21	09/16/19 18:34	7440-36-0		
Arsenic	0.00094J	mg/L	0.0050	0.00035	1	09/12/19 14:21	09/16/19 18:34	7440-38-2		
Barium	0.030	mg/L	0.010	0.00049	1	09/12/19 14:21	09/16/19 18:34	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/12/19 14:21	09/16/19 18:34	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/12/19 14:21	09/16/19 18:34	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/12/19 14:21	09/16/19 18:34	7440-43-9		
Calcium	55.7	mg/L	5.0	0.55	50	09/12/19 14:21	09/16/19 18:40	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/12/19 14:21	09/16/19 18:34	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/12/19 14:21	09/16/19 18:34	7440-48-4		
Copper	0.00082J	mg/L	0.025	0.00019	1	09/12/19 14:21	09/16/19 18:34	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/12/19 14:21	09/16/19 18:34	7439-92-1		
Nickel	0.0066J	mg/L	0.010	0.00031	1	09/12/19 14:21	09/16/19 18:34	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/12/19 14:21	09/16/19 18:34	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/12/19 14:21	09/16/19 18:34	7440-22-4		
Thallium	0.000060J	mg/L	0.0010	0.000052	1	09/12/19 14:21	09/16/19 18:34	7440-28-0		
Vanadium	0.00091J	mg/L	0.010	0.00071	1	09/12/19 14:21	09/16/19 18:34	7440-62-2		
Zinc	0.029	mg/L	0.010	0.0015	1	09/12/19 14:21	09/16/19 18:34	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 16:15	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	275	mg/L	10.0	10.0	1		09/11/19 11:27			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.1	mg/L	1.0	0.60	1		09/17/19 19:22	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/17/19 19:22	16984-48-8		
Sulfate	3.8	mg/L	1.0	0.50	1		09/17/19 19:22	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622908

Sample: GWC-18		Lab ID: 2622908002		Collected: 09/09/19 11:53		Received: 09/10/19 13:12		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/12/19 14:21	09/16/19 18:45	7440-36-0		
Arsenic	0.00099J	mg/L	0.0050	0.00035	1	09/12/19 14:21	09/16/19 18:45	7440-38-2		
Barium	0.028	mg/L	0.010	0.00049	1	09/12/19 14:21	09/16/19 18:45	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/12/19 14:21	09/16/19 18:45	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/12/19 14:21	09/16/19 18:45	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/12/19 14:21	09/16/19 18:45	7440-43-9		
Calcium	15.2	mg/L	5.0	0.55	50	09/12/19 14:21	09/16/19 18:51	7440-70-2		
Chromium	0.0010J	mg/L	0.010	0.00039	1	09/12/19 14:21	09/16/19 18:45	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/12/19 14:21	09/16/19 18:45	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/12/19 14:21	09/16/19 18:45	7440-50-8		
Lead	0.000050J	mg/L	0.0050	0.000046	1	09/12/19 14:21	09/16/19 18:45	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/12/19 14:21	09/16/19 18:45	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/12/19 14:21	09/16/19 18:45	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/12/19 14:21	09/16/19 18:45	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/12/19 14:21	09/16/19 18:45	7440-28-0		
Vanadium	0.00078J	mg/L	0.010	0.00071	1	09/12/19 14:21	09/16/19 18:45	7440-62-2		
Zinc	0.0063J	mg/L	0.010	0.0015	1	09/12/19 14:21	09/16/19 18:45	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 16:17	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	95.0	mg/L	10.0	10.0	1		09/11/19 11:27			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.0	mg/L	1.0	0.60	1		09/17/19 19:08	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/17/19 19:08	16984-48-8		
Sulfate	1.8	mg/L	1.0	0.50	1		09/17/19 19:08	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2622908

Sample: GWC-19R		Lab ID: 2622908003		Collected: 09/09/19 11:24		Received: 09/10/19 13:12		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/12/19 14:21	09/16/19 18:57	7440-36-0		
Arsenic	0.00082J	mg/L	0.0050	0.00035	1	09/12/19 14:21	09/16/19 18:57	7440-38-2		
Barium	0.015	mg/L	0.010	0.00049	1	09/12/19 14:21	09/16/19 18:57	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/12/19 14:21	09/16/19 18:57	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/12/19 14:21	09/16/19 18:57	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/12/19 14:21	09/16/19 18:57	7440-43-9		
Calcium	29.6	mg/L	5.0	0.55	50	09/12/19 14:21	09/16/19 19:03	7440-70-2		
Chromium	0.00056J	mg/L	0.010	0.00039	1	09/12/19 14:21	09/16/19 18:57	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/12/19 14:21	09/16/19 18:57	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/12/19 14:21	09/16/19 18:57	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/12/19 14:21	09/16/19 18:57	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/12/19 14:21	09/16/19 18:57	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/12/19 14:21	09/16/19 18:57	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/12/19 14:21	09/16/19 18:57	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/12/19 14:21	09/16/19 18:57	7440-28-0		
Vanadium	0.00081J	mg/L	0.010	0.00071	1	09/12/19 14:21	09/16/19 18:57	7440-62-2		
Zinc	0.0062J	mg/L	0.010	0.0015	1	09/12/19 14:21	09/16/19 18:57	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 16:19	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	172	mg/L	10.0	10.0	1		09/11/19 11:28			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.3	mg/L	1.0	0.60	1		09/17/19 18:53	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/17/19 18:53	16984-48-8		
Sulfate	3.7	mg/L	1.0	0.50	1		09/17/19 18:53	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622908

QC Batch: 35154

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 2622908001, 2622908002, 2622908003

METHOD BLANK: 158199

Matrix: Water

Associated Lab Samples: 2622908001, 2622908002, 2622908003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/12/19 15:34	

LABORATORY CONTROL SAMPLE: 158200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 158201 158202

Parameter	Units	MS		MSD		% Rec		% Rec Limits	RPD	Max RPD	Qual
		2622810001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec				
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0029	97	115	75-125	17	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622908

QC Batch: 35185 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622908001, 2622908002, 2622908003

METHOD BLANK: 158382 Matrix: Water
Associated Lab Samples: 2622908001, 2622908002, 2622908003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/16/19 17:20	
Arsenic	mg/L	ND	0.0050	0.00035	09/16/19 17:20	
Barium	mg/L	ND	0.010	0.00049	09/16/19 17:20	
Beryllium	mg/L	ND	0.0030	0.000074	09/16/19 17:20	
Boron	mg/L	ND	0.040	0.0049	09/16/19 17:20	
Cadmium	mg/L	ND	0.0025	0.00011	09/16/19 17:20	
Calcium	mg/L	ND	0.10	0.011	09/16/19 17:20	
Chromium	mg/L	ND	0.010	0.00039	09/16/19 17:20	
Cobalt	mg/L	ND	0.0050	0.00030	09/16/19 17:20	
Copper	mg/L	ND	0.025	0.00019	09/16/19 17:20	
Lead	mg/L	ND	0.0050	0.000046	09/16/19 17:20	
Nickel	mg/L	ND	0.010	0.00031	09/16/19 17:20	
Selenium	mg/L	ND	0.010	0.0013	09/16/19 17:20	
Silver	mg/L	ND	0.010	0.00028	09/16/19 17:20	
Thallium	mg/L	ND	0.0010	0.000052	09/16/19 17:20	
Vanadium	mg/L	ND	0.010	0.00071	09/16/19 17:20	
Zinc	mg/L	0.0045J	0.010	0.0015	09/16/19 17:20	

LABORATORY CONTROL SAMPLE: 158383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Calcium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Silver	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	
Vanadium	mg/L	0.1	0.095	95	80-120	
Zinc	mg/L	0.1	0.11	106	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622908

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 158384												158385											
Parameter	Units	2622907001	MS	MSD	MS	MSD	MS	MSD	% Rec		Max	Qual											
		Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD												
Antimony	mg/L	0.00079J	0.1	0.1	0.097	0.10	97	99	75-125	2	20												
Arsenic	mg/L	0.00043J	0.1	0.1	0.098	0.099	97	99	75-125	2	20												
Barium	mg/L	0.015	0.1	0.1	0.11	0.11	96	98	75-125	2	20												
Beryllium	mg/L	ND	0.1	0.1	0.097	0.10	97	103	75-125	6	20												
Boron	mg/L	ND	1	1	0.95	0.98	95	98	75-125	4	20												
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20												
Calcium	mg/L	11.3	1	1	12.5	12.5	121	115	75-125	0	20												
Chromium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20												
Cobalt	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	2	20												
Copper	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20												
Lead	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20												
Nickel	mg/L	0.0014J	0.1	0.1	0.099	0.10	98	99	75-125	1	20												
Selenium	mg/L	ND	0.1	0.1	0.094	0.098	94	98	75-125	4	20												
Silver	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20												
Thallium	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20												
Vanadium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20												
Zinc	mg/L	0.0047J	0.1	0.1	0.11	0.11	101	101	75-125	0	20												

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2622908

QC Batch:	35081	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2622908001, 2622908002, 2622908003		

LABORATORY CONTROL SAMPLE: 157900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	407	102	84-108	

SAMPLE DUPLICATE: 157901

Parameter	Units	2622810001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	141	147	4	10	

SAMPLE DUPLICATE: 157902

Parameter	Units	2622884003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	106	110	4	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2622908

QC Batch: 498159 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2622908001, 2622908002, 2622908003

METHOD BLANK: 2682071 Matrix: Water
Associated Lab Samples: 2622908001, 2622908002, 2622908003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/17/19 16:42	
Fluoride	mg/L	ND	0.10	0.050	09/17/19 16:42	
Sulfate	mg/L	ND	1.0	0.50	09/17/19 16:42	

LABORATORY CONTROL SAMPLE: 2682072

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.1	100	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.3	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2682073 2682074

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2622907001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	1.2	50	50	52.9	53.1	103	104	90-110	0	10		
Fluoride	mg/L	0.054J	2.5	2.5	2.6	2.6	100	100	90-110	0	10		
Sulfate	mg/L	2.4	50	50	54.5	54.6	104	104	90-110	0	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2682075 2682076

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		2623127001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	0.94J	50	50	53.0	53.0	104	104	90-110	0	10		
Fluoride	mg/L	0.055J	2.5	2.5	2.6	2.6	102	100	90-110	2	10		
Sulfate	mg/L	3.8	50	50	56.0	56.1	104	104	90-110	0	10		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 3+4

Pace Project No.: 2622908

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 3+4
Pace Project No.: 2622908

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622908001	GWC-16R	EPA 3005A	35185	EPA 6020B	35214
2622908002	GWC-18	EPA 3005A	35185	EPA 6020B	35214
2622908003	GWC-19R	EPA 3005A	35185	EPA 6020B	35214
2622908001	GWC-16R	EPA 7470A	35154	EPA 7470A	35198
2622908002	GWC-18	EPA 7470A	35154	EPA 7470A	35198
2622908003	GWC-19R	EPA 7470A	35154	EPA 7470A	35198
2622908001	GWC-16R	SM 2540C	35081		
2622908002	GWC-18	SM 2540C	35081		
2622908003	GWC-19R	SM 2540C	35081		
2622908001	GWC-16R	EPA 300.0 Rev 2.1 1993	498159		
2622908002	GWC-18	EPA 300.0 Rev 2.1 1993	498159		
2622908003	GWC-19R	EPA 300.0 Rev 2.1 1993	498159		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company: Georgia Power - Coal Combustion Residuals	Report To: Jehu Abraham	Company Name: Wood Environmental	Attention: scsinvoices@southernco.com	Page: 1	Of 1
Address: 2490 Maner Road	Copy To: Wood Environmental	Purchase Order #: SCS10382775	Address:		
Email: jabraham@southernco.com	Project Name: Plant Bowen Cells - State List	Project #: <u>CR-115 344</u>	Face Order #:		
Phone: (404)506-7239	Requested Due Date:	MATRIX CODE (see valid codes to left)	Face Project Manager: betsy.mcdaniel@pacelabs.com		
Fax:		SAMPLE TYPE (G=GRAB C=COMP)	Face Profile #: 317.5		

ITEM #	MATRIX	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	PRESERVATIVES						Other	Y/N	Residual Chlorine (Y/N)
		START DATE	END DATE				H2SO4	HNO3	HCl	NaOH	Na2SO3	Methanol			
1	GWC - 16R	9/9/19	1430		2	1									1
2	GWC - 18	9/9/19	1153		2	1									2
3	GWC - 19R	9/9/19	1124		2	1									3
4															
5															
6															
7															
8															
9															
10															
11															
12															

ADDITIONAL COMMENTS		RELEASED BY / DATE		ACCEPTED BY / DATE		TITLE		SAMPLING CONDITIONS	
Cindy Mando		9/10 12:20		Joe Booth		9/10/19 12:20		Received on	
- 1 Page		9.10.19 1312		Audrey Crafton		9/10/19 1312		Cooler (Y/N)	
				Audrey Crafton				Sealed (Y/N)	
				Joe Booth				Custom (Y/N)	
				Audrey Crafton				Intact (Y/N)	
				Audrey Crafton				TEMP in C	
				DATE Signed: 9/9/19					

10# : 26222908

26222908

Page 5 of 16

WO#: 2622908

Sample Condition Upon Receipt



Client Name: GA Power CCR

PM: BM Due Date: 09/12/19 CLIENT: GAPower-CCR

Courier: [] Fed Ex [] UPS [] USPS [] Client [] Commercial [x] Pace Other

Tracking #: _____

Custody Seal on Cooler/Box Present: [x] yes [] no Seals intact: [x] yes [] no

Packing Material: [] Bubble Wrap [] Bubble Bags [x] None [] Other

Thermometer Used 214 Type of Ice: [x] Wet Blue None [] Samples on ice, cooling process has begun

Cooler Temperature 4.5°C Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9/10/19 [Signature]

Comments:

Table with 16 rows of checklist items (Chain of Custody Present, Chain of Custody Filled Out, etc.) and checkboxes for Yes, No, N/A.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 3+4
Pace Project No.: 2623139

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 3+4

Pace Project No.: 2623139

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 3+4

Pace Project No.: 2623139

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623139001	GWC-17R	Water	09/10/19 09:16	09/13/19 16:09

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 3+4

Pace Project No.: 2623139

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623139001	GWC-17R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 3+4
Pace Project No.: 2623139

Sample: GWC-17R		Lab ID: 2623139001		Collected: 09/10/19 09:16		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 21:26	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 21:26	7440-38-2		
Barium	0.019	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 21:26	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 21:26	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 21:26	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 21:26	7440-43-9		
Calcium	66.7	mg/L	5.0	0.55	50	09/16/19 15:56	09/18/19 21:31	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 21:26	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 21:26	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 21:26	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 21:26	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 21:26	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 21:26	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 21:26	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 21:26	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 21:26	7440-62-2		
Zinc	0.0055J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 21:26	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/18/19 09:31	09/18/19 13:51	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	312	mg/L	10.0	10.0	1		09/18/19 13:27		H1	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	4.5	mg/L	1.0	0.60	1		09/19/19 01:08	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 01:08	16984-48-8		
Sulfate	6.0	mg/L	1.0	0.50	1		09/19/19 01:08	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2623139

QC Batch: 35498 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2623139001

METHOD BLANK: 159775 Matrix: Water
Associated Lab Samples: 2623139001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/18/19 13:37	

LABORATORY CONTROL SAMPLE: 159776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159777 159778

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2623211001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Mercury	mg/L	0.00033J	0.0025	0.0025	0.0026	0.0026	92	92	75-125	0	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2623139

QC Batch: 35380 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623139001

METHOD BLANK: 159344 Matrix: Water
Associated Lab Samples: 2623139001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/18/19 18:28	
Arsenic	mg/L	ND	0.0050	0.00035	09/18/19 18:28	
Barium	mg/L	ND	0.010	0.00049	09/18/19 18:28	
Beryllium	mg/L	ND	0.0030	0.000074	09/18/19 18:28	
Boron	mg/L	ND	0.040	0.0049	09/18/19 18:28	
Cadmium	mg/L	ND	0.0025	0.00011	09/18/19 18:28	
Calcium	mg/L	ND	0.10	0.011	09/18/19 18:28	
Chromium	mg/L	ND	0.010	0.00039	09/18/19 18:28	
Cobalt	mg/L	ND	0.0050	0.00030	09/18/19 18:28	
Copper	mg/L	ND	0.025	0.00019	09/18/19 18:28	
Lead	mg/L	ND	0.0050	0.000046	09/18/19 18:28	
Nickel	mg/L	ND	0.010	0.00031	09/18/19 18:28	
Selenium	mg/L	ND	0.010	0.0013	09/18/19 18:28	
Silver	mg/L	ND	0.010	0.00028	09/18/19 18:28	
Thallium	mg/L	ND	0.0010	0.000052	09/18/19 18:28	
Vanadium	mg/L	ND	0.010	0.00071	09/18/19 18:28	
Zinc	mg/L	0.0045J	0.010	0.0015	09/18/19 18:28	

LABORATORY CONTROL SAMPLE: 159345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.10	104	80-120	
Calcium	mg/L	1	0.99	99	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.1	0.11	111	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2623139

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159346												159347	
Parameter	Units	2623134003 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
			Spike Conc.	Spike Conc.									
Antimony	mg/L	0.00029J	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Barium	mg/L	0.0079J	0.1	0.1	0.11	0.11	98	100	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Boron	mg/L	0.021J	1	1	0.98	0.99	96	97	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Calcium	mg/L	29.5	1	1	30.2	30.5	65	95	75-125	1	20	M6	
Chromium	mg/L	0.00066J	0.1	0.1	0.10	0.10	103	103	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20		
Copper	mg/L	0.00026J	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Lead	mg/L	0.000092J	0.1	0.1	0.098	0.10	98	100	75-125	1	20		
Nickel	mg/L	ND	0.1	0.1	0.10	0.10	100	99	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	106	103	75-125	3	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	20		
Zinc	mg/L	0.0053J	0.1	0.1	0.11	0.11	102	102	75-125	0	20		

SAMPLE DUPLICATE: 159348

Parameter	Units	92445435001	Dup	RPD	Max RPD	Qualifiers
		Result	Result			
Antimony	mg/L	1.7J ug/L	0.0017J		20	
Arsenic	mg/L	63.4 ug/L	0.066	3	20	
Barium	mg/L	221 ug/L	0.23	2	20	
Beryllium	mg/L	2.8 ug/L	0.0026J	5	20	
Boron	mg/L	159J ug/L	0.16J		20	
Cadmium	mg/L	ND	ND		20	
Calcium	mg/L	1350000 ug/L	1370	1	20	
Chromium	mg/L	132 ug/L	0.14	5	20	
Cobalt	mg/L	63.8 ug/L	0.067	5	20	
Copper	mg/L	37.6 ug/L	0.040J	5	20	
Lead	mg/L	36.6 ug/L	0.037	1	20	
Nickel	mg/L	76.9 ug/L	0.079	3	20	
Selenium	mg/L	24.8J ug/L	0.023J		20	
Silver	mg/L	ND	ND		20	
Thallium	mg/L	0.79J ug/L	0.00078J		20	
Vanadium	mg/L	142 ug/L	0.15	5	20	
Zinc	mg/L	419 ug/L	0.43	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4

Pace Project No.: 2623139

QC Batch:	35535	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2623139001		

LABORATORY CONTROL SAMPLE: 159910

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	84-108	

SAMPLE DUPLICATE: 159911

Parameter	Units	2623139001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	312	317	2	10	H1

SAMPLE DUPLICATE: 159912

Parameter	Units	2623127004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	115	118	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 3+4
Pace Project No.: 2623139

QC Batch: 498356 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623139001

METHOD BLANK: 2682991 Matrix: Water
Associated Lab Samples: 2623139001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/18/19 22:58	
Fluoride	mg/L	ND	0.10	0.050	09/18/19 22:58	
Sulfate	mg/L	ND	1.0	0.50	09/18/19 22:58	

LABORATORY CONTROL SAMPLE: 2682992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.8	102	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683011 2683012

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92445745001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	29.8	50	50	50	80.6	81.2	101	103	90-110	1	10	
Fluoride	mg/L	0.15	2.5	2.5	2.5	2.7	2.7	102	102	90-110	0	10	
Sulfate	mg/L	12.5	50	50	50	63.8	64.4	103	104	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683013 2683014

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92445858008 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	17.5	50	50	50	69.5	69.1	104	103	90-110	1	10	
Fluoride	mg/L	0.15	2.5	2.5	2.5	2.6	2.7	96	102	90-110	6	10	
Sulfate	mg/L	30.5	50	50	50	83.0	83.3	105	105	90-110	0	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 3+4

Pace Project No.: 2623139

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

H1 Analysis conducted outside the EPA method holding time.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 3+4
Pace Project No.: 2623139

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623139001	GWC-17R	EPA 3005A	35380	EPA 6020B	35396
2623139001	GWC-17R	EPA 7470A	35498	EPA 7470A	35531
2623139001	GWC-17R	SM 2540C	35535		
2623139001	GWC-17R	EPA 300.0 Rev 2.1 1993	498356		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Manser Road, Atlanta, GA 30339
 Email: jbraham@southernco.com
 Phone: (404)506-7239
 Requested Due Date: _____

Section B
Required Project Information:
 Report To: Jiju Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10382775
 Project Name: Plant Bowen Cells - State List
 Project #: **Cells 3+4**

Section C
Invoice Information:
 Attention: scsinvoices@southernco.com
 Company Name: _____
 Address: _____
 Pace Quote: _____
 Pace Project Manager: balisy.mcdaniel@pacelabs.com
 Pace Profile #: 317.5

Regulatory Agency: _____
 State / Location: _____
 GA

Page: 1 of 1

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G-RAB C-COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	PRESERVATIVES	ANALYSES TEST	RESIDUAL CHLORINE (Y/N)
			START DATE	END DATE						
1	Drinking Water	OW	9-13-13		6	wt	Unpreserved	TDS, Cl, F, SO4		
2	Water	WT								
3	Waste Water	WW								
4	Product	P								
5	Solid/Sed	SL								
6	Oil	OL								
7	Wipe	WP								
8	Air	AR								
9	Other	OT								
10	Tissue	TS								

WO#: 2623139

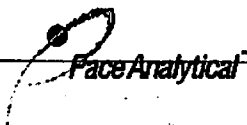
2623139

RECEIVED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP IN C	Received on	Custody	Sealed	Cooler	Samples
Cyndy Mardo	9/13	12:30	M. La Mann	9/13	16:09						
						1.6	Y	Y	Y	Y	Y

ADDITIONAL COMMENTS: _____

PRINT Name of SAMPLER: Joe Roth, Audrey Crafton
 SIGNATURE of SAMPLER: [Signatures]
 DATE Signed: 7/10/17

Sample Condition Upon Receipt



Client Name: GTA Powder

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

WO#: 2623139

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

PN: **BM** Due Date: **09/20/19**
CLIENT: **GAPower-CCR**

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used 83 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 1.6 Biological Tissue Is Frozen: Yes No
Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9/13/19 ml

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 10, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report replaces the report issued on September 18, 2019. This report was revised to correct the Fluoride reporting limit as 0.3 mg/L in accordance with GPC contract specifications. No other changes have been made to this report

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 9+10

Pace Project No.: 2622907

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 9+10

Pace Project No.: 2622907

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622907001	GWA-39Z	Water	09/09/19 15:24	09/10/19 13:12
2622907002	GWA-40	Water	09/09/19 16:33	09/10/19 13:12

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622907001	GWA-39Z	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2622907002	GWA-40	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

Sample: GWA-39Z		Lab ID: 2622907001		Collected: 09/09/19 15:24		Received: 09/10/19 13:12		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.00079J	mg/L	0.0030	0.00027	1	09/12/19 14:21	09/16/19 17:31	7440-36-0	
Arsenic	0.00043J	mg/L	0.0050	0.00035	1	09/12/19 14:21	09/16/19 17:31	7440-38-2	
Barium	0.015	mg/L	0.010	0.00049	1	09/12/19 14:21	09/16/19 17:31	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/12/19 14:21	09/16/19 17:31	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/12/19 14:21	09/16/19 17:31	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/12/19 14:21	09/16/19 17:31	7440-43-9	
Calcium	11.3	mg/L	5.0	0.55	50	09/12/19 14:21	09/16/19 17:37	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/12/19 14:21	09/16/19 17:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/12/19 14:21	09/16/19 17:31	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/12/19 14:21	09/16/19 17:31	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/12/19 14:21	09/16/19 17:31	7439-92-1	
Nickel	0.0014J	mg/L	0.010	0.00031	1	09/12/19 14:21	09/16/19 17:31	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/12/19 14:21	09/16/19 17:31	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/12/19 14:21	09/16/19 17:31	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/12/19 14:21	09/16/19 17:31	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/12/19 14:21	09/16/19 17:31	7440-62-2	
Zinc	0.0047J	mg/L	0.010	0.0015	1	09/12/19 14:21	09/16/19 17:31	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 16:10	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	93.0	mg/L	10.0	10.0	1		09/11/19 11:27		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	1.2	mg/L	1.0	0.60	1		09/17/19 17:55	16887-00-6	
Fluoride	0.054J	mg/L	0.30	0.050	1		09/17/19 17:55	16984-48-8	
Sulfate	2.4	mg/L	1.0	0.50	1		09/17/19 17:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

Sample: GWA-40		Lab ID: 2622907002		Collected: 09/09/19 16:33		Received: 09/10/19 13:12		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/12/19 14:21	09/16/19 18:23	7440-36-0		
Arsenic	0.00068J	mg/L	0.0050	0.00035	1	09/12/19 14:21	09/16/19 18:23	7440-38-2		
Barium	0.0078J	mg/L	0.010	0.00049	1	09/12/19 14:21	09/16/19 18:23	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/12/19 14:21	09/16/19 18:23	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/12/19 14:21	09/16/19 18:23	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/12/19 14:21	09/16/19 18:23	7440-43-9		
Calcium	15.4	mg/L	5.0	0.55	50	09/12/19 14:21	09/16/19 18:28	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/12/19 14:21	09/16/19 18:23	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/12/19 14:21	09/16/19 18:23	7440-48-4		
Copper	0.0022J	mg/L	0.025	0.00019	1	09/12/19 14:21	09/16/19 18:23	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/12/19 14:21	09/16/19 18:23	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/12/19 14:21	09/16/19 18:23	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/12/19 14:21	09/16/19 18:23	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/12/19 14:21	09/16/19 18:23	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/12/19 14:21	09/16/19 18:23	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/12/19 14:21	09/16/19 18:23	7440-62-2		
Zinc	0.0058J	mg/L	0.010	0.0015	1	09/12/19 14:21	09/16/19 18:23	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/12/19 10:58	09/12/19 16:12	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	108	mg/L	10.0	10.0	1		09/11/19 11:27			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	0.83J	mg/L	1.0	0.60	1		09/17/19 18:39	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/17/19 18:39	16984-48-8		
Sulfate	1.6	mg/L	1.0	0.50	1		09/17/19 18:39	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2622907

QC Batch: 35154 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2622907001, 2622907002

METHOD BLANK: 158199 Matrix: Water

Associated Lab Samples: 2622907001, 2622907002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/12/19 15:34	

LABORATORY CONTROL SAMPLE: 158200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 158201 158202

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2622810001 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0029	97	115	75-125	17	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

QC Batch: 35185 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622907001, 2622907002

METHOD BLANK: 158382 Matrix: Water
Associated Lab Samples: 2622907001, 2622907002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/16/19 17:20	
Arsenic	mg/L	ND	0.0050	0.00035	09/16/19 17:20	
Barium	mg/L	ND	0.010	0.00049	09/16/19 17:20	
Beryllium	mg/L	ND	0.0030	0.000074	09/16/19 17:20	
Boron	mg/L	ND	0.040	0.0049	09/16/19 17:20	
Cadmium	mg/L	ND	0.0025	0.00011	09/16/19 17:20	
Calcium	mg/L	ND	0.10	0.011	09/16/19 17:20	
Chromium	mg/L	ND	0.010	0.00039	09/16/19 17:20	
Cobalt	mg/L	ND	0.0050	0.00030	09/16/19 17:20	
Copper	mg/L	ND	0.025	0.00019	09/16/19 17:20	
Lead	mg/L	ND	0.0050	0.000046	09/16/19 17:20	
Nickel	mg/L	ND	0.010	0.00031	09/16/19 17:20	
Selenium	mg/L	ND	0.010	0.0013	09/16/19 17:20	
Silver	mg/L	ND	0.010	0.00028	09/16/19 17:20	
Thallium	mg/L	ND	0.0010	0.000052	09/16/19 17:20	
Vanadium	mg/L	ND	0.010	0.00071	09/16/19 17:20	
Zinc	mg/L	0.0045J	0.010	0.0015	09/16/19 17:20	

LABORATORY CONTROL SAMPLE: 158383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Calcium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Silver	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	
Vanadium	mg/L	0.1	0.095	95	80-120	
Zinc	mg/L	0.1	0.11	106	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 158384		158385		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2622907001 Result	MS Spike Conc.	MSD Spike Conc.									
Antimony	mg/L	0.00079J	0.1	0.1	0.097	0.10	97	99	75-125	2	20		
Arsenic	mg/L	0.00043J	0.1	0.1	0.098	0.099	97	99	75-125	2	20		
Barium	mg/L	0.015	0.1	0.1	0.11	0.11	96	98	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.097	0.10	97	103	75-125	6	20		
Boron	mg/L	ND	1	1	0.95	0.98	95	98	75-125	4	20		
Cadmium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20		
Calcium	mg/L	11.3	1	1	12.5	12.5	121	115	75-125	0	20		
Chromium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20		
Cobalt	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	2	20		
Copper	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20		
Nickel	mg/L	0.0014J	0.1	0.1	0.099	0.10	98	99	75-125	1	20		
Selenium	mg/L	ND	0.1	0.1	0.094	0.098	94	98	75-125	4	20		
Silver	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20		
Thallium	mg/L	ND	0.1	0.1	0.097	0.098	97	98	75-125	1	20		
Vanadium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20		
Zinc	mg/L	0.0047J	0.1	0.1	0.11	0.11	101	101	75-125	0	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

QC Batch: 35081 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2622907001, 2622907002

LABORATORY CONTROL SAMPLE: 157900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	407	102	84-108	

SAMPLE DUPLICATE: 157901

Parameter	Units	2622810001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	141	147	4	10	

SAMPLE DUPLICATE: 157902

Parameter	Units	2622884003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	106	110	4	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

QC Batch: 498159 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2622907001, 2622907002

METHOD BLANK: 2682071 Matrix: Water
Associated Lab Samples: 2622907001, 2622907002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/17/19 16:42	
Fluoride	mg/L	ND	0.10	0.050	09/17/19 16:42	
Sulfate	mg/L	ND	1.0	0.50	09/17/19 16:42	

LABORATORY CONTROL SAMPLE: 2682072

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.1	100	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.3	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2682073 2682074

Parameter	Units	2622907001		2682073		2682074		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	MS Spike Conc.				
Chloride	mg/L	1.2	50	50	52.9	53.1	103	104	90-110	0	10
Fluoride	mg/L	0.054J	2.5	2.5	2.6	2.6	100	100	90-110	0	10
Sulfate	mg/L	2.4	50	50	54.5	54.6	104	104	90-110	0	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2682075 2682076

Parameter	Units	2623127001		2682075		2682076		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MS Result	MS Spike Conc.	MS Result	MS Spike Conc.				
Chloride	mg/L	0.94J	50	50	53.0	53.0	104	104	90-110	0	10
Fluoride	mg/L	0.055J	2.5	2.5	2.6	2.6	102	100	90-110	2	10
Sulfate	mg/L	3.8	50	50	56.0	56.1	104	104	90-110	0	10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 9+10

Pace Project No.: 2622907

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 9+10
Pace Project No.: 2622907

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622907001	GWA-39Z	EPA 3005A	35185	EPA 6020B	35214
2622907002	GWA-40	EPA 3005A	35185	EPA 6020B	35214
2622907001	GWA-39Z	EPA 7470A	35154	EPA 7470A	35198
2622907002	GWA-40	EPA 7470A	35154	EPA 7470A	35198
2622907001	GWA-39Z	SM 2540C	35081		
2622907002	GWA-40	SM 2540C	35081		
2622907001	GWA-39Z	EPA 300.0 Rev 2.1 1993	498159		
2622907002	GWA-40	EPA 300.0 Rev 2.1 1993	498159		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
 Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Report To: Jody Abraham
 Address: 2480 Minter Road
 Atlanta, GA 30339
 Email: jabraham@southemco.com
 Phone: (404)506-7239
 Requested Due Date:

Section B
 Required Project Information:
 Report To: Jody Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10382775
 Project Name: Plant Bowen Cells - State List
 Project #: **Cells 9410**

Section C
 Invoice Information:
 Attention: scsinvoices@southemco.com
 Company Name:
 Address:
 Pace Quote:
 Pace Project Manager: betsy.mcdaniel@paceclabs.com
 Pace Profile #: 3175
 GA

Page: 1 of 1

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	ANALYSIS COST	Metals 60207470 *	TDS, Cl, F, SO4	Residual Chlorine (Y/N)
			START DATE	START TIME														
1	GWA - 39 Z	WT G	9/9/19	1524		2	1								X	X		
2	GWA - 40	WT G	9/9/19	1633		2	1								X	X		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

ADDITIONAL COMMENTS: **Yndy Martin** 9/10 12:20 **3-1 Pace** 9.10.19 1220
3-9 Pace 9.10.19 1312 **Charles Hinkle** 9/10/19 1312
 RECEIVED BY: **Yndy Martin** DATE: 9.10.19
 RECEIVED BY: **Charles Hinkle** DATE: 9/10/19
 RECEIVED ON: **Y** ICE (Y/N): **Y** SEALED (Y/N): **Y** COOLER (Y/N): **Y** SAMPLES (Y/N): **Y**
 TEMP °C: **41.5**
 Residual Chlorine (Y/N):
 Received on: **Y** Ice (Y/N): **Y** Sealed (Y/N): **Y** Cooler (Y/N): **Y** Samples (Y/N): **Y**

SAMPLER NAME AND SIGNATURE: **Yndy Martin**
 PRINT Name of SAMPLER: **Yndy Martin**
 SIGNATURE of SAMPLER: **Yndy Martin**
 DATE Signed: **9/19/19**
 SIGNATURE of SAMPLER: **Yndy Martin**
 DATE Signed: **9/19/19**

NO# : 2622907

2622907

* Metals State List: Sb, As, Ba, Bb, B, Cd, Ca, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, Zn, Hg



Sample Condition Upon Receipt

WO#: 2622907

Client Name: GA Power CCR

PM: BM Due Date: 09/12/19
CLIENT: GAPower-CCR

Courier: [] Fed Ex [] UPS [] USPS [] Client [] Commercial [x] Pace Other
Tracking #: _____

Optional:
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: [] yes [] no Seals intact: [x] yes [] no

Packing Material: [] Bubble Wrap [] Bubble Bags [x] None [] Other

Thermometer Used 214 Type of Ice: [x] Wet Blue None [] Samples on ice, cooling process has begun

Cooler Temperature 4.5°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/10/19 [Signature]

Temp should be above freezing to 6°C Comments:

Table with 16 rows and 3 columns. Columns: Question, Yes/No/N/A checkboxes, and Numbered Item. Includes items like Chain of Custody Present, Samples Arrived within Hold Time, Rush Turn Around Time Requested (48hr TAT), etc.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____
Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623134001	GWA-39RZ	Water	09/11/19 09:00	09/13/19 16:09
2623134002	GWA-43	Water	09/11/19 10:22	09/13/19 16:09
2623134003	GWA-43R	Water	09/11/19 09:21	09/13/19 16:09
2623134004	GWC-44	Water	09/11/19 11:42	09/13/19 16:09
2623134005	GWC-45	Water	09/11/19 14:46	09/13/19 16:09
2623134006	GWC-45R	Water	09/11/19 13:51	09/13/19 16:09
2623134007	GWC-46R	Water	09/11/19 16:05	09/13/19 16:09
2623134008	GWC-47R	Water	09/11/19 15:13	09/13/19 16:09
2623134009	GWC-48	Water	09/11/19 13:06	09/13/19 16:09
2623134010	GWC-49R	Water	09/11/19 10:22	09/13/19 16:09
2623134011	GWC-49Z	Water	09/11/19 11:45	09/13/19 16:09
2623134012	Dup-2	Water	09/11/19 00:00	09/13/19 16:09
2623134013	EQBL 091119	Water	09/11/19 15:55	09/13/19 16:09
2623134014	FBL 091119	Water	09/11/19 15:50	09/13/19 16:09

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623134001	GWA-39RZ	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134002	GWA-43	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134003	GWA-43R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134004	GWC-44	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134005	GWC-45	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134006	GWC-45R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134007	GWC-46R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134008	GWC-47R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134009	GWC-48	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623134010	GWC-49R	EPA 6020B	CSW	17	PASI-GA

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623134011	GWC-49Z	EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
2623134012	Dup-2	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
2623134013	EQBL 091119	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
2623134014	FBL 091119	EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
		EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWA-39RZ Lab ID: 2623134001 Collected: 09/11/19 09:00 Received: 09/13/19 16:09 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	0.0098	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 15:20	7440-36-0	
Arsenic	0.00062J	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 15:20	7440-38-2	
Barium	0.020	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 15:20	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 15:20	7440-41-7	
Boron	0.0081J	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 15:20	7440-42-8	B
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 15:20	7440-43-9	
Calcium	33.8	mg/L	5.0	0.55	50	09/16/19 14:10	09/20/19 15:26	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 15:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 15:20	7440-48-4	
Copper	0.0014J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 15:20	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 15:20	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 15:20	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 15:20	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 15:20	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 15:20	7440-28-0	
Vanadium	0.00086J	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 15:20	7440-62-2	
Zinc	0.0085J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 15:20	7440-66-6	B
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 12:59	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	181	mg/L	10.0	10.0	1		09/16/19 13:03		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993									
Chloride	2.3	mg/L	1.0	0.60	1		09/19/19 01:23	16887-00-6	
Fluoride	0.055J	mg/L	0.30	0.050	1		09/19/19 01:23	16984-48-8	
Sulfate	14.0	mg/L	1.0	0.50	1		09/19/19 01:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWA-43		Lab ID: 2623134002		Collected: 09/11/19 10:22		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 18:36	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 18:36	7440-38-2		
Barium	0.015	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 18:36	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 18:36	7440-41-7		
Boron	0.0059J	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 18:36	7440-42-8	B	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 18:36	7440-43-9		
Calcium	3.2	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 18:36	7440-70-2		
Chromium	0.00051J	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 18:36	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 18:36	7440-48-4		
Copper	0.00036J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 18:36	7440-50-8		
Lead	0.00010J	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 18:36	7439-92-1		
Nickel	0.00082J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 18:36	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 18:36	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 18:36	7440-22-4		
Thallium	0.000062J	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 18:36	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 18:36	7440-62-2		
Zinc	0.0065J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 18:36	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:01	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	21.0	mg/L	10.0	10.0	1		09/17/19 11:48		D6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.3	mg/L	1.0	0.60	1		09/19/19 01:37	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 01:37	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/19/19 01:37	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWA-43R		Lab ID: 2623134003		Collected: 09/11/19 09:21		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	0.00029J	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 18:40	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 18:40	7440-38-2		
Barium	0.0079J	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 18:40	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 18:40	7440-41-7		
Boron	0.021J	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 18:40	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 18:40	7440-43-9		
Calcium	29.5	mg/L	5.0	0.55	50	09/16/19 15:56	09/18/19 18:45	7440-70-2	M6	
Chromium	0.00066J	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 18:40	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 18:40	7440-48-4		
Copper	0.00026J	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 18:40	7440-50-8		
Lead	0.000092J	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 18:40	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 18:40	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 18:40	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 18:40	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 18:40	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 18:40	7440-62-2		
Zinc	0.0053J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 18:40	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:04	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	151	mg/L	10.0	10.0	1		09/17/19 11:48			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	3.1	mg/L	1.0	0.60	1		09/19/19 01:52	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 01:52	16984-48-8		
Sulfate	5.0	mg/L	1.0	0.50	1		09/19/19 01:52	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWC-44		Lab ID: 2623134004		Collected: 09/11/19 11:42		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 19:31	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 19:31	7440-38-2		
Barium	0.036	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 19:31	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 19:31	7440-41-7		
Boron	0.0088J	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 19:31	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 19:31	7440-43-9		
Calcium	7.1	mg/L	0.10	0.011	1	09/16/19 15:56	09/18/19 19:31	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 19:31	7440-47-3		
Cobalt	0.0018J	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 19:31	7440-48-4		
Copper	0.00043J	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 19:31	7440-50-8		
Lead	0.00047J	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 19:31	7439-92-1		
Nickel	0.00058J	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 19:31	7440-02-0		
Selenium	0.0021J	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 19:31	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 19:31	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 19:31	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 19:31	7440-62-2		
Zinc	0.0068J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 19:31	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:06	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	58.0	mg/L	10.0	10.0	1		09/17/19 11:48			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	3.7	mg/L	1.0	0.60	1		09/19/19 02:06	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 02:06	16984-48-8		
Sulfate	19.8	mg/L	1.0	0.50	1		09/19/19 02:06	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWC-45		Lab ID: 2623134005		Collected: 09/11/19 14:46		Received: 09/13/19 16:09		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.014	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 19:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 19:43	7440-38-2	
Barium	0.0061J	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 19:43	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 19:43	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 19:43	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 19:43	7440-43-9	
Calcium	0.83	mg/L	0.10	0.011	1	09/16/19 15:56	09/18/19 19:43	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 19:43	7440-47-3	
Cobalt	0.0014J	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 19:43	7440-48-4	
Copper	0.012J	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 19:43	7440-50-8	
Lead	0.00016J	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 19:43	7439-92-1	
Nickel	0.0012J	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 19:43	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 19:43	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 19:43	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 19:43	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 19:43	7440-62-2	
Zinc	0.0065J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 19:43	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:13	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/17/19 11:48		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	0.81J	mg/L	1.0	0.60	1		09/19/19 02:21	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 02:21	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/19/19 02:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWC-45R		Lab ID: 2623134006		Collected: 09/11/19 13:51		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 19:54	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 19:54	7440-38-2		
Barium	0.021	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 19:54	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 19:54	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 19:54	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 19:54	7440-43-9		
Calcium	37.2	mg/L	5.0	0.55	50	09/16/19 15:56	09/18/19 20:00	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 19:54	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 19:54	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 19:54	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 19:54	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 19:54	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 19:54	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 19:54	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 19:54	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 19:54	7440-62-2		
Zinc	0.0058J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 19:54	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:15	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	172	mg/L	10.0	10.0	1		09/17/19 11:48			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.9	mg/L	1.0	0.60	1		09/19/19 02:35	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 02:35	16984-48-8		
Sulfate	2.6	mg/L	1.0	0.50	1		09/19/19 02:35	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWC-46R		Lab ID: 2623134007		Collected: 09/11/19 16:05		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 20:05	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 20:05	7440-38-2		
Barium	0.013	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 20:05	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 20:05	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 20:05	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 20:05	7440-43-9		
Calcium	43.1	mg/L	5.0	0.55	50	09/16/19 15:56	09/18/19 20:11	7440-70-2		
Chromium	0.0038J	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 20:05	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 20:05	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 20:05	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 20:05	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 20:05	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 20:05	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 20:05	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 20:05	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 20:05	7440-62-2		
Zinc	0.0055J	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 20:05	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:18	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	234	mg/L	10.0	10.0	1		09/17/19 11:49			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.4	mg/L	1.0	0.60	1		09/19/19 03:19	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 03:19	16984-48-8		
Sulfate	7.0	mg/L	1.0	0.50	1		09/19/19 03:19	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWC-47R Lab ID: 2623134008 Collected: 09/11/19 15:13 Received: 09/13/19 16:09 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	0.00099J	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 18:48	7440-36-0	
Arsenic	0.00067J	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 18:48	7440-38-2	
Barium	0.0097J	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 18:48	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 18:48	7440-41-7	
Boron	0.0054J	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 18:48	7440-42-8	B
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 18:48	7440-43-9	
Calcium	33.3	mg/L	5.0	0.55	50	09/16/19 14:10	09/20/19 18:54	7440-70-2	
Chromium	0.0015J	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 18:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 18:48	7440-48-4	
Copper	0.00080J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 18:48	7440-50-8	
Lead	0.000085J	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 18:48	7439-92-1	
Nickel	0.0014J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 18:48	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 18:48	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 18:48	7440-22-4	
Thallium	0.00023J	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 18:48	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 18:48	7440-62-2	
Zinc	0.028	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 18:48	7440-66-6	B
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:20	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	164	mg/L	10.0	10.0	1		09/17/19 11:49		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993									
Chloride	2.1	mg/L	1.0	0.60	1		09/19/19 03:33	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 03:33	16984-48-8	
Sulfate	10.7	mg/L	1.0	0.50	1		09/19/19 03:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWC-48		Lab ID: 2623134009		Collected: 09/11/19 13:06		Received: 09/13/19 16:09		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 18:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 18:59	7440-38-2	
Barium	0.031	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 18:59	7440-39-3	
Beryllium	0.00027J	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 18:59	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 18:59	7440-42-8	
Cadmium	0.00024J	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 18:59	7440-43-9	
Calcium	2.9	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 18:59	7440-70-2	
Chromium	0.0016J	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 18:59	7440-47-3	
Cobalt	0.0013J	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 18:59	7440-48-4	
Copper	0.00073J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 18:59	7440-50-8	
Lead	0.000058J	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 18:59	7439-92-1	
Nickel	0.0040J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 18:59	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 18:59	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 18:59	7440-22-4	
Thallium	0.00012J	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 18:59	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 18:59	7440-62-2	
Zinc	0.011	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 18:59	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:23	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	20.0	mg/L	10.0	10.0	1		09/17/19 11:49		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	3.3	mg/L	1.0	0.60	1		09/19/19 03:48	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 03:48	16984-48-8	
Sulfate	0.86J	mg/L	1.0	0.50	1		09/19/19 03:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWC-49R		Lab ID: 2623134010		Collected: 09/11/19 10:22		Received: 09/13/19 16:09		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.0032	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 19:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 19:11	7440-38-2	
Barium	0.017	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 19:11	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 19:11	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 19:11	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 19:11	7440-43-9	
Calcium	24.3	mg/L	5.0	0.55	50	09/16/19 14:10	09/20/19 19:17	7440-70-2	
Chromium	0.00063J	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 19:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 19:11	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 19:11	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 19:11	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 19:11	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 19:11	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 19:11	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 19:11	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 19:11	7440-62-2	
Zinc	0.0050J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 19:11	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:25	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	138	mg/L	10.0	10.0	1		09/17/19 11:49		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	1.4	mg/L	1.0	0.60	1		09/19/19 04:02	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 04:02	16984-48-8	
Sulfate	5.7	mg/L	1.0	0.50	1		09/19/19 04:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: GWC-49Z		Lab ID: 2623134011		Collected: 09/11/19 11:45		Received: 09/13/19 16:09		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.00065J	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 19:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 19:22	7440-38-2	
Barium	0.0038J	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 19:22	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 19:22	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 19:22	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 19:22	7440-43-9	
Calcium	0.78	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 19:22	7440-70-2	
Chromium	0.0020J	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 19:22	7440-47-3	
Cobalt	0.00075J	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 19:22	7440-48-4	
Copper	0.00021J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 19:22	7440-50-8	
Lead	0.000082J	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 19:22	7439-92-1	
Nickel	0.0012J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 19:22	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 19:22	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 19:22	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 19:22	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 19:22	7440-62-2	
Zinc	0.0085J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 19:22	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:27	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	27.0	mg/L	10.0	10.0	1		09/17/19 11:49		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	1.0J	mg/L	1.0	0.60	1		09/19/19 04:17	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 04:17	16984-48-8	
Sulfate	1.5	mg/L	1.0	0.50	1		09/19/19 04:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: Dup-2		Lab ID: 2623134012		Collected: 09/11/19 00:00		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 19:45	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 19:45	7440-38-2		
Barium	0.028	mg/L	0.010	0.00049	1	09/16/19 14:10	09/21/19 14:55	7440-39-3		
Beryllium	0.00033J	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 19:45	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 19:45	7440-42-8		
Cadmium	0.00018J	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 19:45	7440-43-9		
Calcium	3.0	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 19:45	7440-70-2		
Chromium	0.0017J	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 19:45	7440-47-3		
Cobalt	0.0014J	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 19:45	7440-48-4		
Copper	0.00034J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 19:45	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 19:45	7439-92-1		
Nickel	0.0041J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 19:45	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 19:45	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 19:45	7440-22-4		
Thallium	0.00011J	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 19:45	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 19:45	7440-62-2		
Zinc	0.011	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 19:45	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:30	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	32.0	mg/L	10.0	10.0	1		09/17/19 11:49		D6	
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	3.2	mg/L	1.0	0.60	1		09/19/19 04:31	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 04:31	16984-48-8		
Sulfate	0.93J	mg/L	1.0	0.50	1		09/19/19 04:31	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: EQBL 091119		Lab ID: 2623134013		Collected: 09/11/19 15:55		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 19:57	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 19:57	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 19:57	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 19:57	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 19:57	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 19:57	7440-43-9		
Calcium	0.019J	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 19:57	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 19:57	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 19:57	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 19:57	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 19:57	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 19:57	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 19:57	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 19:57	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 19:57	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 19:57	7440-62-2		
Zinc	0.0063J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 19:57	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:32	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/17/19 11:50			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/19/19 04:46	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 04:46	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/19/19 04:46	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

Sample: FBL 091119 Lab ID: 2623134014 Collected: 09/11/19 15:50 Received: 09/13/19 16:09 Matrix: Water									
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 20:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 20:02	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 20:02	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 20:02	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 20:02	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 20:02	7440-43-9	
Calcium	0.022J	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 20:02	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 20:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 20:02	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 20:02	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 20:02	7439-92-1	
Nickel	0.00099J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 20:02	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 20:02	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 20:02	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 20:02	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 20:02	7440-62-2	
Zinc	0.0065J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 20:02	7440-66-6	B
7470 Mercury Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:25	09/17/19 13:35	7439-97-6	
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/17/19 11:50		
300.0 IC Anions 28 Days Analytical Method: EPA 300.0 Rev 2.1 1993									
Chloride	ND	mg/L	1.0	0.60	1		09/19/19 05:00	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/19/19 05:00	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/19/19 05:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

QC Batch: 35362 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
 Associated Lab Samples: 2623134001, 2623134002, 2623134003, 2623134004, 2623134005, 2623134006, 2623134007, 2623134008,
 2623134009, 2623134010, 2623134011, 2623134012, 2623134013, 2623134014

METHOD BLANK: 159305 Matrix: Water
 Associated Lab Samples: 2623134001, 2623134002, 2623134003, 2623134004, 2623134005, 2623134006, 2623134007, 2623134008,
 2623134009, 2623134010, 2623134011, 2623134012, 2623134013, 2623134014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/17/19 12:30	

LABORATORY CONTROL SAMPLE: 159306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159307 159308

Parameter	Units	2623127001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0025	99	99	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

QC Batch: 35366 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623134001, 2623134002, 2623134008, 2623134009, 2623134010, 2623134011, 2623134012, 2623134013, 2623134014

METHOD BLANK: 159319 Matrix: Water
Associated Lab Samples: 2623134001, 2623134002, 2623134008, 2623134009, 2623134010, 2623134011, 2623134012, 2623134013, 2623134014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/20/19 13:31	
Arsenic	mg/L	ND	0.0050	0.00035	09/20/19 13:31	
Barium	mg/L	ND	0.010	0.00049	09/20/19 13:31	
Beryllium	mg/L	ND	0.0030	0.000074	09/20/19 13:31	
Boron	mg/L	0.0052J	0.040	0.0049	09/20/19 13:31	
Cadmium	mg/L	ND	0.0025	0.00011	09/20/19 13:31	
Calcium	mg/L	ND	0.10	0.011	09/20/19 13:31	
Chromium	mg/L	ND	0.010	0.00039	09/20/19 13:31	
Cobalt	mg/L	ND	0.0050	0.00030	09/20/19 13:31	
Copper	mg/L	ND	0.025	0.00019	09/20/19 13:31	
Lead	mg/L	ND	0.0050	0.000046	09/20/19 13:31	
Nickel	mg/L	ND	0.010	0.00031	09/20/19 13:31	
Selenium	mg/L	ND	0.010	0.0013	09/20/19 13:31	
Silver	mg/L	ND	0.010	0.00028	09/20/19 13:31	
Thallium	mg/L	ND	0.0010	0.000052	09/20/19 13:31	
Vanadium	mg/L	ND	0.010	0.00071	09/20/19 13:31	
Zinc	mg/L	0.0049J	0.010	0.0015	09/20/19 13:31	

LABORATORY CONTROL SAMPLE: 159320

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Calcium	mg/L	1	1.0	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Copper	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.10	100	80-120	
Zinc	mg/L	0.1	0.10	102	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159321		159322		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		2623127002 Result	MS Spike Conc.	MSD Spike Conc.									
Antimony	mg/L	0.0013J	0.1	0.1	0.10	0.10	103	102	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	0	20		
Barium	mg/L	0.0042J	0.1	0.1	0.11	0.11	103	101	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20		
Boron	mg/L	ND	1	1	1.0	1.0	100	103	75-125	4	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	1	20		
Calcium	mg/L	0.94	1	1	2.0	2.0	101	103	75-125	1	20		
Chromium	mg/L	0.00073J	0.1	0.1	0.11	0.11	106	105	75-125	2	20		
Cobalt	mg/L	0.00046J	0.1	0.1	0.10	0.10	104	101	75-125	2	20		
Copper	mg/L	0.026	0.1	0.1	0.13	0.13	105	104	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	1	20		
Nickel	mg/L	0.012	0.1	0.1	0.12	0.12	105	104	75-125	1	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20		
Zinc	mg/L	0.036	0.1	0.1	0.14	0.14	104	104	75-125	0	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

QC Batch: 35380 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623134003, 2623134004, 2623134005, 2623134006, 2623134007

METHOD BLANK: 159344 Matrix: Water
Associated Lab Samples: 2623134003, 2623134004, 2623134005, 2623134006, 2623134007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/18/19 18:28	
Arsenic	mg/L	ND	0.0050	0.00035	09/18/19 18:28	
Barium	mg/L	ND	0.010	0.00049	09/18/19 18:28	
Beryllium	mg/L	ND	0.0030	0.000074	09/18/19 18:28	
Boron	mg/L	ND	0.040	0.0049	09/18/19 18:28	
Cadmium	mg/L	ND	0.0025	0.00011	09/18/19 18:28	
Calcium	mg/L	ND	0.10	0.011	09/18/19 18:28	
Chromium	mg/L	ND	0.010	0.00039	09/18/19 18:28	
Cobalt	mg/L	ND	0.0050	0.00030	09/18/19 18:28	
Copper	mg/L	ND	0.025	0.00019	09/18/19 18:28	
Lead	mg/L	ND	0.0050	0.000046	09/18/19 18:28	
Nickel	mg/L	ND	0.010	0.00031	09/18/19 18:28	
Selenium	mg/L	ND	0.010	0.0013	09/18/19 18:28	
Silver	mg/L	ND	0.010	0.00028	09/18/19 18:28	
Thallium	mg/L	ND	0.0010	0.000052	09/18/19 18:28	
Vanadium	mg/L	ND	0.010	0.00071	09/18/19 18:28	
Zinc	mg/L	0.0045J	0.010	0.0015	09/18/19 18:28	

LABORATORY CONTROL SAMPLE: 159345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.10	104	80-120	
Calcium	mg/L	1	0.99	99	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.1	0.11	111	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159346												159347	
Parameter	Units	2623134003 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual		
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD		RPD	
Antimony	mg/L	0.00029J	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Barium	mg/L	0.0079J	0.1	0.1	0.11	0.11	98	100	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Boron	mg/L	0.021J	1	1	0.98	0.99	96	97	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Calcium	mg/L	29.5	1	1	30.2	30.5	65	95	75-125	1	20 M6		
Chromium	mg/L	0.00066J	0.1	0.1	0.10	0.10	103	103	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20		
Copper	mg/L	0.00026J	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Lead	mg/L	0.000092J	0.1	0.1	0.098	0.10	98	100	75-125	1	20		
Nickel	mg/L	ND	0.1	0.1	0.10	0.10	100	99	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	106	103	75-125	3	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	20		
Zinc	mg/L	0.0053J	0.1	0.1	0.11	0.11	102	102	75-125	0	20		

SAMPLE DUPLICATE: 159348

Parameter	Units	92445435001	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
Antimony	mg/L	1.7J ug/L	0.0017J		20	
Arsenic	mg/L	63.4 ug/L	0.066	3	20	
Barium	mg/L	221 ug/L	0.23	2	20	
Beryllium	mg/L	2.8 ug/L	0.0026J	5	20	
Boron	mg/L	159J ug/L	0.16J		20	
Cadmium	mg/L	ND	ND		20	
Calcium	mg/L	1350000 ug/L	1370	1	20	
Chromium	mg/L	132 ug/L	0.14	5	20	
Cobalt	mg/L	63.8 ug/L	0.067	5	20	
Copper	mg/L	37.6 ug/L	0.040J	5	20	
Lead	mg/L	36.6 ug/L	0.037	1	20	
Nickel	mg/L	76.9 ug/L	0.079	3	20	
Selenium	mg/L	24.8J ug/L	0.023J		20	
Silver	mg/L	ND	ND		20	
Thallium	mg/L	0.79J ug/L	0.00078J		20	
Vanadium	mg/L	142 ug/L	0.15	5	20	
Zinc	mg/L	419 ug/L	0.43	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

QC Batch:	35360	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2623134001		

LABORATORY CONTROL SAMPLE: 159298

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	399	100	84-108	

SAMPLE DUPLICATE: 159299

Parameter	Units	2622885003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2560	2560	0	10	

SAMPLE DUPLICATE: 159300

Parameter	Units	2623137006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

QC Batch: 35434 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2623134002, 2623134003, 2623134004, 2623134005, 2623134006, 2623134007, 2623134008, 2623134009, 2623134010, 2623134011, 2623134012, 2623134013, 2623134014

LABORATORY CONTROL SAMPLE: 159482

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	399	100	84-108	

SAMPLE DUPLICATE: 159483

Parameter	Units	2623134002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	21.0	26.0	21	10	D6

SAMPLE DUPLICATE: 159484

Parameter	Units	2623134012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	32.0	37.0	14	10	D6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623134

QC Batch: 498356 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623134001, 2623134002, 2623134003, 2623134004, 2623134005, 2623134006, 2623134007, 2623134008, 2623134009, 2623134010, 2623134011, 2623134012, 2623134013, 2623134014

METHOD BLANK: 2682991 Matrix: Water
Associated Lab Samples: 2623134001, 2623134002, 2623134003, 2623134004, 2623134005, 2623134006, 2623134007, 2623134008, 2623134009, 2623134010, 2623134011, 2623134012, 2623134013, 2623134014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/18/19 22:58	
Fluoride	mg/L	ND	0.10	0.050	09/18/19 22:58	
Sulfate	mg/L	ND	1.0	0.50	09/18/19 22:58	

LABORATORY CONTROL SAMPLE: 2682992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.8	102	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683011 2683012

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92445745001 Result	Spike Conc.	Spike Conc.	Result						
Chloride	mg/L	29.8	50	50	80.6	81.2	101	103	90-110	1	10
Fluoride	mg/L	0.15	2.5	2.5	2.7	2.7	102	102	90-110	0	10
Sulfate	mg/L	12.5	50	50	63.8	64.4	103	104	90-110	1	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683013 2683014

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92445858008 Result	Spike Conc.	Spike Conc.	Result						
Chloride	mg/L	17.5	50	50	69.5	69.1	104	103	90-110	1	10
Fluoride	mg/L	0.15	2.5	2.5	2.6	2.7	96	102	90-110	6	10
Sulfate	mg/L	30.5	50	50	83.0	83.3	105	105	90-110	0	10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623134001	GWA-39RZ	EPA 3005A	35366	EPA 6020B	35393
2623134002	GWA-43	EPA 3005A	35366	EPA 6020B	35393
2623134003	GWA-43R	EPA 3005A	35380	EPA 6020B	35396
2623134004	GWC-44	EPA 3005A	35380	EPA 6020B	35396
2623134005	GWC-45	EPA 3005A	35380	EPA 6020B	35396
2623134006	GWC-45R	EPA 3005A	35380	EPA 6020B	35396
2623134007	GWC-46R	EPA 3005A	35380	EPA 6020B	35396
2623134008	GWC-47R	EPA 3005A	35366	EPA 6020B	35393
2623134009	GWC-48	EPA 3005A	35366	EPA 6020B	35393
2623134010	GWC-49R	EPA 3005A	35366	EPA 6020B	35393
2623134011	GWC-49Z	EPA 3005A	35366	EPA 6020B	35393
2623134012	Dup-2	EPA 3005A	35366	EPA 6020B	35393
2623134013	EQBL 091119	EPA 3005A	35366	EPA 6020B	35393
2623134014	FBL 091119	EPA 3005A	35366	EPA 6020B	35393
2623134001	GWA-39RZ	EPA 7470A	35362	EPA 7470A	35389
2623134002	GWA-43	EPA 7470A	35362	EPA 7470A	35389
2623134003	GWA-43R	EPA 7470A	35362	EPA 7470A	35389
2623134004	GWC-44	EPA 7470A	35362	EPA 7470A	35389
2623134005	GWC-45	EPA 7470A	35362	EPA 7470A	35389
2623134006	GWC-45R	EPA 7470A	35362	EPA 7470A	35389
2623134007	GWC-46R	EPA 7470A	35362	EPA 7470A	35389
2623134008	GWC-47R	EPA 7470A	35362	EPA 7470A	35389
2623134009	GWC-48	EPA 7470A	35362	EPA 7470A	35389
2623134010	GWC-49R	EPA 7470A	35362	EPA 7470A	35389
2623134011	GWC-49Z	EPA 7470A	35362	EPA 7470A	35389
2623134012	Dup-2	EPA 7470A	35362	EPA 7470A	35389
2623134013	EQBL 091119	EPA 7470A	35362	EPA 7470A	35389
2623134014	FBL 091119	EPA 7470A	35362	EPA 7470A	35389
2623134001	GWA-39RZ	SM 2540C	35360		
2623134002	GWA-43	SM 2540C	35434		
2623134003	GWA-43R	SM 2540C	35434		
2623134004	GWC-44	SM 2540C	35434		
2623134005	GWC-45	SM 2540C	35434		
2623134006	GWC-45R	SM 2540C	35434		
2623134007	GWC-46R	SM 2540C	35434		
2623134008	GWC-47R	SM 2540C	35434		
2623134009	GWC-48	SM 2540C	35434		
2623134010	GWC-49R	SM 2540C	35434		
2623134011	GWC-49Z	SM 2540C	35434		
2623134012	Dup-2	SM 2540C	35434		
2623134013	EQBL 091119	SM 2540C	35434		
2623134014	FBL 091119	SM 2540C	35434		
2623134001	GWA-39RZ	EPA 300.0 Rev 2.1 1993	498356		
2623134002	GWA-43	EPA 300.0 Rev 2.1 1993	498356		
2623134003	GWA-43R	EPA 300.0 Rev 2.1 1993	498356		
2623134004	GWC-44	EPA 300.0 Rev 2.1 1993	498356		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 9+10

Pace Project No.: 2623134

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623134005	GWC-45	EPA 300.0 Rev 2.1 1993	498356		
2623134006	GWC-45R	EPA 300.0 Rev 2.1 1993	498356		
2623134007	GWC-46R	EPA 300.0 Rev 2.1 1993	498356		
2623134008	GWC-47R	EPA 300.0 Rev 2.1 1993	498356		
2623134009	GWC-48	EPA 300.0 Rev 2.1 1993	498356		
2623134010	GWC-49R	EPA 300.0 Rev 2.1 1993	498356		
2623134011	GWC-49Z	EPA 300.0 Rev 2.1 1993	498356		
2623134012	Dup-2	EPA 300.0 Rev 2.1 1993	498356		
2623134013	EQBL 091119	EPA 300.0 Rev 2.1 1993	498356		
2623134014	FBL 091119	EPA 300.0 Rev 2.1 1993	498356		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: **Section B** Required Project Information: **Section C** Invoice Information:

Company: Georgia Power - Coal Combustion Residuals
 Report To: John Abraham
 Address: 2480 Manor Road
 Copy To: Wood Environmental
 Atlanta, GA 30339
 Project Name: Plant Bowen Cells - State List
 Email: jabraham@southernco.com
 Purchase Order #: SCS10382775
 Project #: **calls 9110**
 Phone: (404)506-7239
 Fac:
 Requested Due Date:
 Pace Project Manager: betsy.medanias@paceelabs.com
 Pace Profile #: 317.5
 Regulatory Agency:
 State / Location: GA

Page: 1 of 2

ITEM #	MATRIX CODE (see valid codes to left)	MATRIX	COLLECTED		DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analyzes Test	R/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)
			START	END									
1	GWA-39RZ	Drinking Water	9/11/19	0900	9/11/19	0900	2	1	H2SO4	Unpreserved			
2	GWA-43	Waste Water	9/11/19	1022	9/11/19	1022	2	1	HNO3	Unpreserved			
3	GWA-43R	Waste Water	9/11/19	0921	9/11/19	0921	2	1	HCl	Unpreserved			
4	GWC-44	Waste Water	9/11/19	1142	9/11/19	1142	2	1	HNO3	Unpreserved			
5	GWC-45	Waste Water	9/11/19	1146	9/11/19	1146	2	1	HNO3	Unpreserved			
6	GWC-45R	Waste Water	9/11/19	1351	9/11/19	1351	2	1	HNO3	Unpreserved			
7	GWC-46R	Waste Water	9/11/19	1405	9/11/19	1405	2	1	HNO3	Unpreserved			
8	GWC-47R	Waste Water	9/11/19	1513	9/11/19	1513	2	1	HNO3	Unpreserved			
9	GWC-48	Waste Water	9/11/19	1306	9/11/19	1306	2	1	HNO3	Unpreserved			
10	GWC-49R	Waste Water	9/11/19	1022	9/11/19	1022	2	1	HNO3	Unpreserved			
11	GWC-49Z	Waste Water	9/11/19	1145	9/11/19	1145	2	1	HNO3	Unpreserved			
12	DUP-2	Waste Water	9/11/19	-	9/11/19	-	2	1	HNO3	Unpreserved			

WO#: 2623134



RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Samples Intact (Y/N)
Lindy Mandes	9/11/19	12:30	Mandalman	9/11/19	12:30	1.6				

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Audrey Crafton, Joe Booth
 SIGNATURE of SAMPLER: *Audrey Crafton* DATE Signed: 9/11/19



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Section A

Required Client Information:

Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Manor Road
 Atlanta, GA 30339
 Email: jbrahann@southemco.com
 Phone: (404)506-7239
 Requested Due Date: 9/11/19

Section B

Required Project Information:

Report To: Jolu Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10392775
 Project Name: Plant Bowen Cells - State List
 Project #: 0115 9410

Section C

Invoice Information:

Attention: scsvoices@southemco.com
 Company Name:
 Address:
 Pace Quote:
 Pace Project Manager: betsy.mcdanis@pacelabs.com
 Pace Profile #: 317.5

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	Preservatives	Y/N	Requested/Analysis Filtered (Y/N)	GA
			START DATE	END DATE			TIME	TIME					
1	Drinking Water	DW	9/11/19		G	WT		21	H2SO4				
2	Waste Water	WW	9/11/19		G	WT		21	HNO3				
3	Waste Water	WW							HCl				
4	Waste Water	WW							NaOH				
5	Waste Water	WW							Na2S2O3				
6	Waste Water	WW							Unpreserved				
7	Waste Water	WW											
8	Waste Water	WW											
9	Waste Water	WW											
10	Waste Water	WW											
11	Waste Water	WW											
12	Waste Water	WW											

WO#: 2623134

PM: 8M Due Date: 09/20/19
CLIENT: GAPower-CCR

REL. INDUSTRY BY AFFILIATION	DATE	TIME	ACCEPTED BY AFFILIATION	DATE	TIME	TEMP IN C	Received on	Y/N	Custody	Sealed	Cooler	Samples	(Y/N)
Udny Mardn	9/13	12:30	M. Rabman	9/13	12:30	1.6	Y	Y	Y	Y	Y	Y	Y
Udny Mardn	9/13	14:08	M. Rabman	9/13	16:09								

SAMPLER NAME AND SIGNATURE: Audrey Crafton
 PRINT Name of SAMPLER: Audrey Crafton
 SIGNATURE of SAMPLER: Audrey Crafton
 DATE Signed: 9/11/19



Sample Condition Upon Receipt

Client Name: GTA Power

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

WO#: **2623134**

PM: **BM** Due Date: **09/20/19**
CLIENT: **GAPower-CCR**

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 83 Type of Ice: Wet Blue None Samples on Ice, cooling process has begun

Cooler Temperature 1.6 Biological Tissue is Frozen: Yes No
Temp should be above freezing to 6°C

Date and initials of person examining contents: 9/13/19 MR

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix:	<u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):	_____		

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 9+10

Pace Project No.: 2623137

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

Massachusetts Certification #: M-NC030

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 9+10

Pace Project No.: 2623137

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623137001	GWA-41	Water	09/10/19 11:01	09/13/19 16:09
2623137002	GWA-41R	Water	09/10/19 12:03	09/13/19 16:09
2623137003	GWA-42	Water	09/10/19 14:48	09/13/19 16:09
2623137004	Dup-1	Water	09/10/19 00:00	09/13/19 16:09
2623137005	FBL 091019	Water	09/10/19 16:21	09/13/19 16:09
2623137006	EQBL 091019	Water	09/10/19 16:24	09/13/19 16:09

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623137001	GWA-41	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623137002	GWA-41R	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623137003	GWA-42	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623137004	Dup-1	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623137005	FBL 091019	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2623137006	EQBL 091019	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

Sample: GWA-41		Lab ID: 2623137001		Collected: 09/10/19 11:01		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 20:08	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 20:08	7440-38-2		
Barium	0.018	mg/L	0.010	0.00049	1	09/16/19 14:10	09/21/19 15:01	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 20:08	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 20:08	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 20:08	7440-43-9		
Calcium	6.0	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 20:08	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 20:08	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 20:08	7440-48-4		
Copper	0.00044J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 20:08	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 20:08	7439-92-1		
Nickel	0.00041J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 20:08	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 20:08	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 20:08	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 20:08	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 20:08	7440-62-2		
Zinc	0.0061J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 20:08	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 13:53	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	36.0	mg/L	10.0	10.0	1		09/16/19 13:01			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.1	mg/L	1.0	0.60	1		09/18/19 16:11	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 16:11	16984-48-8		
Sulfate	1.2	mg/L	1.0	0.50	1		09/18/19 16:11	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

Sample: GWA-41R		Lab ID: 2623137002		Collected: 09/10/19 12:03		Received: 09/13/19 16:09		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.0029J	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 20:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 20:20	7440-38-2	
Barium	0.031	mg/L	0.010	0.00049	1	09/16/19 14:10	09/21/19 15:07	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 20:20	7440-41-7	
Boron	0.015J	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 20:20	7440-42-8	B
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 20:20	7440-43-9	
Calcium	29.6	mg/L	5.0	0.55	50	09/16/19 14:10	09/20/19 20:25	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 20:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 20:20	7440-48-4	
Copper	0.0022J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 20:20	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 20:20	7439-92-1	
Nickel	0.0084J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 20:20	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 20:20	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 20:20	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 20:20	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 20:20	7440-62-2	
Zinc	0.0075J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 20:20	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:27	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	113	mg/L	10.0	10.0	1		09/16/19 13:01		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	1.7	mg/L	1.0	0.60	1		09/18/19 16:26	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 16:26	16984-48-8	
Sulfate	8.4	mg/L	1.0	0.50	1		09/18/19 16:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

Sample: GWA-42		Lab ID: 2623137003		Collected: 09/10/19 14:48		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 20:31	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 20:31	7440-38-2		
Barium	0.0068J	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 20:31	7440-39-3		
Beryllium	0.00015J	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 20:31	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 20:31	7440-42-8		
Cadmium	0.00014J	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 20:31	7440-43-9		
Calcium	34.0	mg/L	5.0	0.55	50	09/16/19 14:10	09/20/19 20:37	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 20:31	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 20:31	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 20:31	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 20:31	7439-92-1		
Nickel	0.0012J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 20:31	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 20:31	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 20:31	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 20:31	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 20:31	7440-62-2		
Zinc	0.014	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 20:31	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:29	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	105	mg/L	10.0	10.0	1		09/16/19 13:01			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	2.0	mg/L	1.0	0.60	1		09/18/19 16:40	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 16:40	16984-48-8		
Sulfate	1.2	mg/L	1.0	0.50	1		09/18/19 16:40	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

Sample: Dup-1		Lab ID: 2623137004		Collected: 09/10/19 00:00		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 20:54	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 20:54	7440-38-2		
Barium	0.021	mg/L	0.010	0.00049	1	09/16/19 14:10	09/21/19 15:13	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 20:54	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 20:54	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 20:54	7440-43-9		
Calcium	6.9	mg/L	0.10	0.011	1	09/16/19 14:10	09/21/19 15:13	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 20:54	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 20:54	7440-48-4		
Copper	0.00032J	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 20:54	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 20:54	7439-92-1		
Nickel	0.00039J	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 20:54	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 20:54	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 20:54	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 20:54	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 20:54	7440-62-2		
Zinc	0.0088J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 20:54	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:31	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	34.0	mg/L	10.0	10.0	1		09/16/19 13:01			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	1.2	mg/L	1.0	0.60	1		09/18/19 16:55	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 16:55	16984-48-8		
Sulfate	1.3	mg/L	1.0	0.50	1		09/18/19 16:55	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

Sample: FBL 091019		Lab ID: 2623137005		Collected: 09/10/19 16:21	Received: 09/13/19 16:09	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 21:11	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 21:11	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 21:11	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 21:11	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 21:11	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 21:11	7440-43-9		
Calcium	0.018J	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 21:11	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 21:11	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 21:11	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 21:11	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 21:11	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 21:11	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 21:11	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 21:11	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 21:11	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 21:11	7440-62-2		
Zinc	0.0067J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 21:11	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:34	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/16/19 13:01			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/18/19 17:09	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 17:09	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/18/19 17:09	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

Sample: EQBL 091019		Lab ID: 2623137006		Collected: 09/10/19 16:24		Received: 09/13/19 16:09		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 14:10	09/20/19 21:17	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 14:10	09/20/19 21:17	7440-38-2		
Barium	ND	mg/L	0.010	0.00049	1	09/16/19 14:10	09/20/19 21:17	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 14:10	09/20/19 21:17	7440-41-7		
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 14:10	09/20/19 21:17	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 14:10	09/20/19 21:17	7440-43-9		
Calcium	0.038J	mg/L	0.10	0.011	1	09/16/19 14:10	09/20/19 21:17	7440-70-2		
Chromium	ND	mg/L	0.010	0.00039	1	09/16/19 14:10	09/20/19 21:17	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 14:10	09/20/19 21:17	7440-48-4		
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 14:10	09/20/19 21:17	7440-50-8		
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 14:10	09/20/19 21:17	7439-92-1		
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 14:10	09/20/19 21:17	7440-02-0		
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 14:10	09/20/19 21:17	7782-49-2		
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 14:10	09/20/19 21:17	7440-22-4		
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 14:10	09/20/19 21:17	7440-28-0		
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 14:10	09/20/19 21:17	7440-62-2		
Zinc	0.0075J	mg/L	0.010	0.0015	1	09/16/19 14:10	09/20/19 21:17	7440-66-6	B	
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/16/19 15:28	09/17/19 14:36	7439-97-6		
2540C Total Dissolved Solids		Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/16/19 13:01			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		09/18/19 17:24	16887-00-6		
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 17:24	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/18/19 17:24	14808-79-8		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

QC Batch: 35365 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2623137001, 2623137002, 2623137003, 2623137004, 2623137005, 2623137006

METHOD BLANK: 159315 Matrix: Water
Associated Lab Samples: 2623137001, 2623137002, 2623137003, 2623137004, 2623137005, 2623137006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/17/19 13:49	

LABORATORY CONTROL SAMPLE: 159316

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159317 159318

Parameter	Units	2623137001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0027	0.0026	107	103	75-125	4	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

QC Batch: 35366 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623137001, 2623137002, 2623137003, 2623137004, 2623137005, 2623137006

METHOD BLANK: 159319 Matrix: Water
Associated Lab Samples: 2623137001, 2623137002, 2623137003, 2623137004, 2623137005, 2623137006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/20/19 13:31	
Arsenic	mg/L	ND	0.0050	0.00035	09/20/19 13:31	
Barium	mg/L	ND	0.010	0.00049	09/20/19 13:31	
Beryllium	mg/L	ND	0.0030	0.000074	09/20/19 13:31	
Boron	mg/L	0.0052J	0.040	0.0049	09/20/19 13:31	
Cadmium	mg/L	ND	0.0025	0.00011	09/20/19 13:31	
Calcium	mg/L	ND	0.10	0.011	09/20/19 13:31	
Chromium	mg/L	ND	0.010	0.00039	09/20/19 13:31	
Cobalt	mg/L	ND	0.0050	0.00030	09/20/19 13:31	
Copper	mg/L	ND	0.025	0.00019	09/20/19 13:31	
Lead	mg/L	ND	0.0050	0.000046	09/20/19 13:31	
Nickel	mg/L	ND	0.010	0.00031	09/20/19 13:31	
Selenium	mg/L	ND	0.010	0.0013	09/20/19 13:31	
Silver	mg/L	ND	0.010	0.00028	09/20/19 13:31	
Thallium	mg/L	ND	0.0010	0.000052	09/20/19 13:31	
Vanadium	mg/L	ND	0.010	0.00071	09/20/19 13:31	
Zinc	mg/L	0.0049J	0.010	0.0015	09/20/19 13:31	

LABORATORY CONTROL SAMPLE: 159320

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Calcium	mg/L	1	1.0	100	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Copper	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Nickel	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	
Silver	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	
Vanadium	mg/L	0.1	0.10	100	80-120	
Zinc	mg/L	0.1	0.10	102	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2623137

Parameter	Units	2623127002		159321		159322		% Rec	% Rec	% Rec	Limits	RPD	Max RPD	Qual
		MS Result	MS Spike Conc.	MS Spike Conc.	MS Result	MS Result	MS % Rec							
Antimony	mg/L	0.0013J	0.1	0.1	0.10	0.10	103	102	75-125	2	20			
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	0	20			
Barium	mg/L	0.0042J	0.1	0.1	0.11	0.11	103	101	75-125	2	20			
Beryllium	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20			
Boron	mg/L	ND	1	1	1.0	1.0	100	103	75-125	4	20			
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	1	20			
Calcium	mg/L	0.94	1	1	2.0	2.0	101	103	75-125	1	20			
Chromium	mg/L	0.00073J	0.1	0.1	0.11	0.11	106	105	75-125	2	20			
Cobalt	mg/L	0.00046J	0.1	0.1	0.10	0.10	104	101	75-125	2	20			
Copper	mg/L	0.026	0.1	0.1	0.13	0.13	105	104	75-125	1	20			
Lead	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	1	20			
Nickel	mg/L	0.012	0.1	0.1	0.12	0.12	105	104	75-125	1	20			
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20			
Silver	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	1	20			
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20			
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20			
Zinc	mg/L	0.036	0.1	0.1	0.14	0.14	104	104	75-125	0	20			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2623137

QC Batch: 35360 Analysis Method: SM 2540C
 QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
 Associated Lab Samples: 2623137001, 2623137002, 2623137003, 2623137004, 2623137005, 2623137006

LABORATORY CONTROL SAMPLE: 159298

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	399	100	84-108	

SAMPLE DUPLICATE: 159299

Parameter	Units	2622885003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2560	2560	0	10	

SAMPLE DUPLICATE: 159300

Parameter	Units	2623137006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623137

QC Batch: 498348 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623137001, 2623137002, 2623137003, 2623137004, 2623137005, 2623137006

METHOD BLANK: 2682971 Matrix: Water
Associated Lab Samples: 2623137001, 2623137002, 2623137003, 2623137004, 2623137005, 2623137006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/18/19 15:40	
Fluoride	mg/L	ND	0.10	0.050	09/18/19 15:40	
Sulfate	mg/L	ND	1.0	0.50	09/18/19 15:40	

LABORATORY CONTROL SAMPLE: 2682972

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.0	98	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	50.2	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683007 2683008

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92445860001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	61.7	50	50	50	105	104	86	85	90-110	1	10	M1
Fluoride	mg/L	0.61	2.5	2.5	2.5	3.2	3.1	104	102	90-110	2	10	
Sulfate	mg/L	5.7	50	50	50	57.2	57.3	103	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683009 2683010

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92445729001 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	34.6	50	50	50	85.8	85.2	102	101	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	2.6	101	102	90-110	1	10	
Sulfate	mg/L	9.2	50	50	50	61.1	60.6	104	103	90-110	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 9+10

Pace Project No.: 2623137

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 9+10

Pace Project No.: 2623137

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623137001	GWA-41	EPA 3005A	35366	EPA 6020B	35393
2623137002	GWA-41R	EPA 3005A	35366	EPA 6020B	35393
2623137003	GWA-42	EPA 3005A	35366	EPA 6020B	35393
2623137004	Dup-1	EPA 3005A	35366	EPA 6020B	35393
2623137005	FBL 091019	EPA 3005A	35366	EPA 6020B	35393
2623137006	EQBL 091019	EPA 3005A	35366	EPA 6020B	35393
2623137001	GWA-41	EPA 7470A	35365	EPA 7470A	35390
2623137002	GWA-41R	EPA 7470A	35365	EPA 7470A	35390
2623137003	GWA-42	EPA 7470A	35365	EPA 7470A	35390
2623137004	Dup-1	EPA 7470A	35365	EPA 7470A	35390
2623137005	FBL 091019	EPA 7470A	35365	EPA 7470A	35390
2623137006	EQBL 091019	EPA 7470A	35365	EPA 7470A	35390
2623137001	GWA-41	SM 2540C	35360		
2623137002	GWA-41R	SM 2540C	35360		
2623137003	GWA-42	SM 2540C	35360		
2623137004	Dup-1	SM 2540C	35360		
2623137005	FBL 091019	SM 2540C	35360		
2623137006	EQBL 091019	SM 2540C	35360		
2623137001	GWA-41	EPA 300.0 Rev 2.1 1993	498348		
2623137002	GWA-41R	EPA 300.0 Rev 2.1 1993	498348		
2623137003	GWA-42	EPA 300.0 Rev 2.1 1993	498348		
2623137004	Dup-1	EPA 300.0 Rev 2.1 1993	498348		
2623137005	FBL 091019	EPA 300.0 Rev 2.1 1993	498348		
2623137006	EQBL 091019	EPA 300.0 Rev 2.1 1993	498348		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company: Georgia Power - Coal Combustion Residuals	Report To: Jelu Abraham	Copy To: Wood Environmental	Address: Atlanta, GA 30339	Attention: scsinvoices@southemco.com	Company Name:
Address: 2480 Maner Road				Address:	
Email: jabraham@southemco.com	Purchase Order #: SCS10382775	Project Name: Plant Bowen Cells - State List	Pace Project Manager: belsy.mcdonald@pacelabs.com	Pace Profile #: 317.5	Respiratory Agency:
Phone: (404)506-7289	Project #: <u>Cells 9/12</u>				State / Location:
Requested Due Date:					GA

Page : | Of

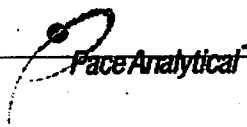
ITEM #	MATRIX CODE (see valid codes in M)	SAMPLE TYPE (G-GRAB C-COMP)	COLLECTED		SAMPLER TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES	ANALYSES TEST	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	RECEIVED ON	TEMP IN C	CUSTODY	COOLER	SAMPLE CONDITIONS	
			START DATE	END TIME															
1	GW	6	9/10/14	1101		2	Unpreserved	H2SO4	9/13	12:30	SS	9.13	12:50						
2	GW	6	9/16/14	1203		2	Unpreserved	HNO3	9.13	1409	M. Zalman	9/13/14	1609						
3	GW	6	9/16/14	1445		2	Unpreserved	HNO3											
4	DWP	1	9/16/14			2	Unpreserved	HNO3											
5	FB	6	9/16/14	1621		2	Unpreserved	HNO3											
6	EQ	6	9/16/14	1624		2	Unpreserved	HNO3											
7																			
8																			
9																			
10																			
11																			
12																			

NO#: 2623137

2623137

ADDITIONAL COMMENTS:		SAMPLER NAME AND SIGNATURE:		DATE SIGNED:	
*Metha State List: Sb, As, Ba, Be, B, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, V, Zn, Hg		Cindy Mando		9/16/14	
PRINT Name of SAMPLER:		SIGNATURE of SAMPLER:		DATE SIGNED:	
		Cindy Mando		9/16/14	

Sample Condition Upon Receipt



Client Name: GCA Power

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

WO#: 2623137

PM: BM Due Date: 09/20/19

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

CLIENT: GAPower-CCR

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 83

Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature 1.6

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/13/19 ml

Temp should be above freezing to 6°C

Comments: _____

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen cells 9+10
Pace Project No.: 2623140

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623140

Pace Analytical Services Atlanta

110 Technology Parkway Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen cells 9+10

Pace Project No.: 2623140

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2623140001	GWC-47	Water	09/12/19 10:00	09/13/19 16:09

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen cells 9+10

Pace Project No.: 2623140

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2623140001	GWC-47	EPA 6020B	CSW	17	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		SM 2540C	ALW	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen cells 9+10
Pace Project No.: 2623140

Sample: GWC-47		Lab ID: 2623140001		Collected: 09/12/19 10:00		Received: 09/13/19 16:09		Matrix: Water	
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	ND	mg/L	0.0030	0.00027	1	09/16/19 15:56	09/18/19 21:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/16/19 15:56	09/18/19 21:48	7440-38-2	
Barium	0.0085J	mg/L	0.010	0.00049	1	09/16/19 15:56	09/18/19 21:48	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/16/19 15:56	09/18/19 21:48	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	09/16/19 15:56	09/18/19 21:48	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/16/19 15:56	09/18/19 21:48	7440-43-9	
Calcium	21.1	mg/L	5.0	0.55	50	09/16/19 15:56	09/18/19 21:54	7440-70-2	
Chromium	0.0014J	mg/L	0.010	0.00039	1	09/16/19 15:56	09/18/19 21:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	09/16/19 15:56	09/18/19 21:48	7440-48-4	
Copper	ND	mg/L	0.025	0.00019	1	09/16/19 15:56	09/18/19 21:48	7440-50-8	
Lead	ND	mg/L	0.0050	0.000046	1	09/16/19 15:56	09/18/19 21:48	7439-92-1	
Nickel	ND	mg/L	0.010	0.00031	1	09/16/19 15:56	09/18/19 21:48	7440-02-0	
Selenium	ND	mg/L	0.010	0.0013	1	09/16/19 15:56	09/18/19 21:48	7782-49-2	
Silver	ND	mg/L	0.010	0.00028	1	09/16/19 15:56	09/18/19 21:48	7440-22-4	
Thallium	ND	mg/L	0.0010	0.000052	1	09/16/19 15:56	09/18/19 21:48	7440-28-0	
Vanadium	ND	mg/L	0.010	0.00071	1	09/16/19 15:56	09/18/19 21:48	7440-62-2	
Zinc	0.035	mg/L	0.010	0.0015	1	09/16/19 15:56	09/18/19 21:48	7440-66-6	B
7470 Mercury		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	ND	mg/L	0.00050	0.00014	1	09/18/19 09:31	09/18/19 13:53	7439-97-6	
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	121	mg/L	10.0	10.0	1		09/18/19 13:27		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Rev 2.1 1993							
Chloride	2.3	mg/L	1.0	0.60	1		09/18/19 23:26	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		09/18/19 23:26	16984-48-8	
Sulfate	4.7	mg/L	1.0	0.50	1		09/18/19 23:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2623140

QC Batch: 35498	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
Associated Lab Samples: 2623140001	

METHOD BLANK: 159775 Matrix: Water
Associated Lab Samples: 2623140001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/18/19 13:37	

LABORATORY CONTROL SAMPLE: 159776

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159777 159778

Parameter	Units	2623211001 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
Mercury	mg/L	0.00033J	0.0025	0.0025	0.0026	0.0026	92	92	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623140

QC Batch: 35380 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2623140001

METHOD BLANK: 159344 Matrix: Water
Associated Lab Samples: 2623140001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/18/19 18:28	
Arsenic	mg/L	ND	0.0050	0.00035	09/18/19 18:28	
Barium	mg/L	ND	0.010	0.00049	09/18/19 18:28	
Beryllium	mg/L	ND	0.0030	0.000074	09/18/19 18:28	
Boron	mg/L	ND	0.040	0.0049	09/18/19 18:28	
Cadmium	mg/L	ND	0.0025	0.00011	09/18/19 18:28	
Calcium	mg/L	ND	0.10	0.011	09/18/19 18:28	
Chromium	mg/L	ND	0.010	0.00039	09/18/19 18:28	
Cobalt	mg/L	ND	0.0050	0.00030	09/18/19 18:28	
Copper	mg/L	ND	0.025	0.00019	09/18/19 18:28	
Lead	mg/L	ND	0.0050	0.000046	09/18/19 18:28	
Nickel	mg/L	ND	0.010	0.00031	09/18/19 18:28	
Selenium	mg/L	ND	0.010	0.0013	09/18/19 18:28	
Silver	mg/L	ND	0.010	0.00028	09/18/19 18:28	
Thallium	mg/L	ND	0.0010	0.000052	09/18/19 18:28	
Vanadium	mg/L	ND	0.010	0.00071	09/18/19 18:28	
Zinc	mg/L	0.0045J	0.010	0.0015	09/18/19 18:28	

LABORATORY CONTROL SAMPLE: 159345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	0.1	0.10	104	80-120	
Calcium	mg/L	1	0.99	99	80-120	
Chromium	mg/L	0.1	0.11	106	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	103	80-120	
Silver	mg/L	0.1	0.10	102	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	
Vanadium	mg/L	0.1	0.11	106	80-120	
Zinc	mg/L	0.1	0.11	111	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2623140

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 159346												159347	
Parameter	Units	2623134003 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual	
			Spike Conc.	Spike Conc.									
Antimony	mg/L	0.00029J	0.1	0.1	0.10	0.10	101	103	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20		
Barium	mg/L	0.0079J	0.1	0.1	0.11	0.11	98	100	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20		
Boron	mg/L	0.021J	1	1	0.98	0.99	96	97	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Calcium	mg/L	29.5	1	1	30.2	30.5	65	95	75-125	1	20	M6	
Chromium	mg/L	0.00066J	0.1	0.1	0.10	0.10	103	103	75-125	0	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20		
Copper	mg/L	0.00026J	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Lead	mg/L	0.000092J	0.1	0.1	0.098	0.10	98	100	75-125	1	20		
Nickel	mg/L	ND	0.1	0.1	0.10	0.10	100	99	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	106	103	75-125	3	20		
Silver	mg/L	ND	0.1	0.1	0.10	0.10	103	104	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20		
Vanadium	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	20		
Zinc	mg/L	0.0053J	0.1	0.1	0.11	0.11	102	102	75-125	0	20		

SAMPLE DUPLICATE: 159348

Parameter	Units	92445435001	Dup	RPD	Max RPD	Qualifiers
		Result	Result			
Antimony	mg/L	1.7J ug/L	0.0017J		20	
Arsenic	mg/L	63.4 ug/L	0.066	3	20	
Barium	mg/L	221 ug/L	0.23	2	20	
Beryllium	mg/L	2.8 ug/L	0.0026J	5	20	
Boron	mg/L	159J ug/L	0.16J		20	
Cadmium	mg/L	ND	ND		20	
Calcium	mg/L	1350000 ug/L	1370	1	20	
Chromium	mg/L	132 ug/L	0.14	5	20	
Cobalt	mg/L	63.8 ug/L	0.067	5	20	
Copper	mg/L	37.6 ug/L	0.040J	5	20	
Lead	mg/L	36.6 ug/L	0.037	1	20	
Nickel	mg/L	76.9 ug/L	0.079	3	20	
Selenium	mg/L	24.8J ug/L	0.023J		20	
Silver	mg/L	ND	ND		20	
Thallium	mg/L	0.79J ug/L	0.00078J		20	
Vanadium	mg/L	142 ug/L	0.15	5	20	
Zinc	mg/L	419 ug/L	0.43	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10

Pace Project No.: 2623140

QC Batch:	35535	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	2623140001		

LABORATORY CONTROL SAMPLE: 159910

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	84-108	

SAMPLE DUPLICATE: 159911

Parameter	Units	2623139001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	312	317	2	10	H1

SAMPLE DUPLICATE: 159912

Parameter	Units	2623127004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	115	118	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen cells 9+10
Pace Project No.: 2623140

QC Batch: 498356 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2623140001

METHOD BLANK: 2682991 Matrix: Water
Associated Lab Samples: 2623140001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/18/19 22:58	
Fluoride	mg/L	ND	0.10	0.050	09/18/19 22:58	
Sulfate	mg/L	ND	1.0	0.50	09/18/19 22:58	

LABORATORY CONTROL SAMPLE: 2682992

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.8	102	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683011 2683012

Parameter	Units	92445745001		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Chloride	mg/L	29.8	50	50	80.6	81.2	101	103	90-110	1	10		
Fluoride	mg/L	0.15	2.5	2.5	2.7	2.7	102	102	90-110	0	10		
Sulfate	mg/L	12.5	50	50	63.8	64.4	103	104	90-110	1	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2683013 2683014

Parameter	Units	92445858008		MS		MSD		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result						
Chloride	mg/L	17.5	50	50	69.5	69.1	104	103	90-110	1	10		
Fluoride	mg/L	0.15	2.5	2.5	2.6	2.7	96	102	90-110	6	10		
Sulfate	mg/L	30.5	50	50	83.0	83.3	105	105	90-110	0	10		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen cells 9+10

Pace Project No.: 2623140

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-GA Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

H1 Analysis conducted outside the EPA method holding time.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen cells 9+10

Pace Project No.: 2623140

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2623140001	GWC-47	EPA 3005A	35380	EPA 6020B	35396
2623140001	GWC-47	EPA 7470A	35498	EPA 7470A	35531
2623140001	GWC-47	SM 2540C	35535		
2623140001	GWC-47	EPA 300.0 Rev 2.1 1993	498356		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A		Section B		Section C		Page: <input type="text"/> Of <input type="text"/>	
Required Client Information:		Required Project Information:		Invoice Information:			
Company:	Georgia Power - Coal Combustion Residuals	Report To:	Johu Abraham	Attention:	scsinvoices@southhamco.com		
Address:	2480 Maner Road	Copy To:	Wood Environmental	Company Name:			
	Atlanta, GA 30339	Purchase Order #:	SCS10382775	Pace Profile #:	317.5		
Email:	jabraham@southhamco.com	Project Name:	Plant Bowen Cells - State List	Pace Project Manager:	betsy.mcdaniel@pacoslabs.com		
Phone:	(404)506-7239	Project #:	Cells 9-10				
Requested Due Date:							

ITEM #	MATRIX	MATRIX CODE	SAMPLE TYPE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Y/N	Analyses Test	Requester/Analysis Filtered (Y/N)	State	Location	Received on	Custody	Sealed	Samples
				START	END												
	Drinking Water	DW		DATE	TIME	DATE	TIME	H2SO4									
1			wfG	9/12/19	1000		2			TDS, Cl, F, SO4		GA					
2								Unpreserved		Metals 60207470							
3								HCl									
4								NaOH									
5								Na2S2O3									
6								Methanol									
7								Other									

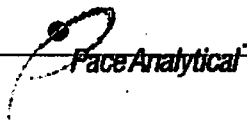
SAMPLE ID
 One Character per box.
 (A-Z, 0-9 / -)

GWC-47

WO#: 2623140

RECEIVED BY / AFFILIATION	DATE	TIME
Cindy Mandor	9/13	12:30
Audrey Crafton	9/13	1609
ACCEPTED BY / AFFILIATION	DATE	TIME
Audrey Crafton	9/13	12:30
DATE SIGNED	9/12/19	

Sample Condition Upon Receipt



Client Name: GTA Powder

Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

WO#: **2623140**

Tracking #: _____

PM: **BH** Due Date: **09/20/19**

Custody Seal on Cooler/Box Present: yes no Seals intact: yes

CLIENT: **GAPower-CCR**

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used 83

Type of Ice: Wet Blue None

Samples on ice, cooling process has begun

Cooler Temperature 1.6

Biological Tissue Is Frozen: Yes No

Date and initials of person examining contents: 9/13/19 ml

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes date/time/ID/Analysis Matrix:	<u>W</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.	
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____

Date: _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

October 30, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Bowen Cells
Pace Project No.: 2624563

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Rhonda Quinn, Wood E&I Solutions, Inc. - Kennesaw
Rebecca Thornton, Pace Analytical Atlanta
Greg Wrenn, Wood PLC



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: Plant Bowen Cells

Pace Project No.: 2624563

Atlanta Certification IDs

110 Technology Parkway Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

Virginia Certification #: 460204

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: Plant Bowen Cells

Pace Project No.: 2624563

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624563001	GWC-45	Water	10/21/19 10:29	10/21/19 13:25
2624563002	GWC-21R	Water	10/21/19 11:03	10/21/19 13:25

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: Plant Bowen Cells

Pace Project No.: 2624563

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624563001	GWC-45	EPA 6020B	CSW	2
2624563002	GWC-21R	EPA 6020B	CSW	2

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2624563

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Sample: GWC-45 Lab ID: 2624563001 Collected: 10/21/19 10:29 Received: 10/21/19 13:25 Matrix: Water									
6020B MET ICPMS Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Antimony	0.0057	mg/L	0.0030	0.00027	1	10/25/19 16:01	10/28/19 16:31	7440-36-0	
Copper	0.00021J	mg/L	0.025	0.00019	1	10/25/19 16:01	10/28/19 16:31	7440-50-8	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: Plant Bowen Cells

Pace Project No.: 2624563

Sample: GWC-21R		Lab ID: 2624563002		Collected: 10/21/19 11:03	Received: 10/21/19 13:25	Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS		Analytical Method: EPA 6020B Preparation Method: EPA 3005A							
Antimony	0.0020J	mg/L	0.0030	0.00027	1	10/25/19 16:01	10/28/19 16:37	7440-36-0	
Zinc	0.017	mg/L	0.010	0.0015	1	10/25/19 16:01	10/28/19 16:37	7440-66-6	B

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: Plant Bowen Cells

Pace Project No.: 2624563

QC Batch: 37567 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2624563001, 2624563002

METHOD BLANK: 170375 Matrix: Water

Associated Lab Samples: 2624563001, 2624563002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	10/28/19 15:45	
Copper	mg/L	ND	0.025	0.00019	10/28/19 15:45	
Zinc	mg/L	0.0039J	0.010	0.0015	10/28/19 15:45	

LABORATORY CONTROL SAMPLE: 170376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Copper	mg/L	0.1	0.099	99	80-120	
Zinc	mg/L	0.1	0.10	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 170377 170378

Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		2624682003 Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20		
Copper	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20		
Zinc	mg/L	0.025	0.1	0.1	0.12	0.12	95	95	75-125	0	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: Plant Bowen Cells

Pace Project No.: 2624563

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Bowen Cells

Pace Project No.: 2624563

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624563001	GWC-45	EPA 3005A	37567	EPA 6020B	37589
2624563002	GWC-21R	EPA 3005A	37567	EPA 6020B	37589

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must

WUH: 2624563
2624563

Section A
 Required Client Information:
 Company: Georgia Power - Coal Combustion Residuals
 Address: 2480 Mianer Road
 Atlanta, GA 30339
 Email: jbraham@southernco.com
 Phone: (404)506-7239
 Fax: []
 Requested Due Date: []

Section B
 Required Project Information:
 Report To: Joji Abraham
 Copy To: Wood Environmental
 Purchase Order #: SCS10382775
 Project Name: Plant Bowen Cells - State-List
 Project #: Landfill Resample

Section C
 Invoice Information:
 Attention: scsinvoices@southernco.com
 Company Name: []
 Address: []
 Pace Project Manager: betsy.mcdaniel@pacelabs.com
 Pace Profile #: 317.5
 Regulatory Agency: []
 State / Location: GA

ITEM #	MATRIX CODE (see valid codes to left)	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	PRESERVATIVES	ANALYSES TEST Y/N	REQUESTED ANALYSIS FILTERED (Y/N)	RESIDUAL CHROME (Y/N)
		START DATE TIME	END DATE TIME							
1	GWC-45	10/21/19 1029		G		1	H2SO4 HNO3 HCl NaOH Na2S2O3 Methanol Other	Metals (58 Zn) (6208) Metals (58 Cu) (6208)		
2	GWC-21R	10/21/19 1103		G		1	H2SO4 HNO3 HCl NaOH Na2S2O3 Methanol Other	Metals (58 Zn) (6208) Metals (58 Cu) (6208)		
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

ADDITIONAL COMMENTS
 Veronica Fay / Resolute
 10/21/19
 GMSL-IPACE
 10/21/19
 1.7

RELIQUISHED BY / AFFILIATION
 DATE TIME
 10/21/19

ACCEPTED BY / AFFILIATION
 DATE TIME
 10/21/19

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: Audrey Crafton, Veronica Fay
 SIGNATURE of SAMPLER: [Signature]
 DATE Signed: 10/21/19

TEMP in C
 Received on []
 Custody (Y/N) []
 Sealed Cooler (Y/N) []
 Samples Intact (Y/N) []



Sample Condition Upon Receipt

Client Name: _____ Project # _____

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer Used _____ Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 9
Temp should be above freezing to 6°C

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: _____

		Comments:
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed _____ Lot # of added preservative _____
Samples checked for dechlorination:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	_____	

Client Notification/ Resolution: _____ Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Product Name: Low-Flow System

Date: 2019-09-12 13:22:38

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 151 ft

Pump placement from TOC 1468 ft

Well Information:

Well ID GWA-1
Well diameter 2 in
Well Total Depth 151.8 ft
Screen Length 10 ft
Depth to Water 86.71 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.028977 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 86.04 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:05:19	3365.37	20.38	7.39	304.85	0.40	93.40	0.48	53.56
Last 5	13:09:19	3605.37	20.88	7.36	305.75	0.51	93.65	0.48	51.80
Last 5	13:13:19	3845.37	20.93	7.36	305.51	0.48	93.73	0.51	49.24
Last 5	13:17:19	4085.37	21.09	7.36	305.80	0.51	93.80	0.53	47.01
Last 5	13:21:19	4325.37	21.10	7.36	304.79	0.48	93.88	0.55	45.03
Variance 0			0.05	0.00	-0.24			0.03	-2.56
Variance 1			0.17	0.00	0.29			0.02	-2.23
Variance 2			0.01	-0.01	-1.01			0.02	-1.98

Notes

Prepurged 1.5L

Grab Samples

GWA-1
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-12 15:05:22

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 155 ft

Pump placement from TOC 149.3 ft

Well Information:

Well ID GWA-2
Well diameter 2 in
Well Total Depth 154.3 ft
Screen Length 10 ft
Depth to Water 82.47 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 1.046831 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.72 in
Total Volume Pumped 5.76 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:46:48	1920.02	20.16	5.59	25.45	0.39	82.53	5.75	109.18
Last 5	14:50:48	2160.08	19.95	5.54	24.90	0.66	82.53	5.72	111.95
Last 5	14:54:49	2400.79	19.71	5.51	24.61	0.56	82.54	5.68	114.12
Last 5	14:58:49	2640.76	19.59	5.47	24.55	0.48	82.53	5.68	117.24
Last 5	15:02:49	2880.76	19.51	5.45	25.30	0.91	82.52	5.73	117.91
Variance 0			-0.24	-0.03	-0.29			-0.04	2.17
Variance 1			-0.12	-0.04	-0.07			-0.00	3.12
Variance 2			-0.08	-0.02	0.75			0.05	0.67

Notes

Prepurged 1L

Grab Samples

GWA-1
Metals, Inorganics
DUP-1
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-13 10:19:08

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 109 ft

Pump placement from TOC 102.4 ft

Well Information:

Well ID GWA-2R
Well diameter 2 in
Well Total Depth 107.4 ft
Screen Length 10 ft
Depth to Water 82.18 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.8415131 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 13.2 in
Total Volume Pumped 11.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:01:48	3600.65	19.95	7.22	216.28	0.05	83.28	4.71	77.27
Last 5	10:05:48	3840.65	19.97	7.24	213.63	0.06	83.27	4.96	75.82
Last 5	10:09:48	4080.65	20.08	7.25	211.00	0.18	83.28	5.18	74.96
Last 5	10:13:48	4320.65	20.08	7.27	209.40	0.36	83.28	5.37	74.32
Last 5	10:17:48	4560.65	20.16	7.29	207.03	0.04	83.28	5.60	74.40
Variance 0			0.12	0.01	-2.64			0.22	-0.86
Variance 1			-0.00	0.02	-1.59			0.19	-0.64
Variance 2			0.08	0.01	-2.37			0.24	0.08

Notes

Prepurged 1L

Grab Samples

GWA-2R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-13 12:20:42

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 98 ft

Pump placement from TOC 93.2 ft

Well Information:

Well ID GWA-3
Well diameter 2 in
Well Total Depth 98.2 ft
Screen Length 10 ft
Depth to Water 66.85 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.7924154 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 134.88 in
Total Volume Pumped 9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:03:24	3600.94	19.44	5.06	20.75	0.34	77.25	7.13	172.36
Last 5	12:07:24	3840.94	19.70	5.04	20.86	0.34	77.55	7.12	172.60
Last 5	12:11:24	4080.94	19.89	5.05	20.69	0.23	77.80	7.07	172.61
Last 5	12:15:24	4320.94	19.87	5.07	20.72	0.51	77.95	7.04	171.69
Last 5	12:19:24	4560.94	19.79	5.07	20.75	0.23	78.09	7.19	171.29
Variance 0			0.19	0.01	-0.17			-0.06	0.01
Variance 1			-0.02	0.02	0.03			-0.02	-0.92
Variance 2			-0.08	0.00	0.03			0.15	-0.41

Notes

Prepurged 2L

Grab Samples

GWA-3
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-12 12:32:34

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 1 & 2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 120 ft

Pump placement from TOC 115.0 ft

Well Information:

Well ID GWA-4RZ
Well diameter 2 in
Well Total Depth 120.97 ft
Screen Length 10 ft
Depth to Water 87.97 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.6258858 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 374.4 in
Total Volume Pumped 36.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:14:23	9120.04	21.89	7.16	383.86	0.43	107.27	0.78	6.56
Last 5	12:18:23	9360.04	19.24	7.20	378.35	0.55	108.07	0.85	11.32
Last 5	12:22:23	9600.04	19.01	7.21	380.47	1.15	109.02	0.84	12.49
Last 5	12:26:23	9840.04	19.15	7.22	380.80	0.67	110.05	0.78	11.81
Last 5	12:30:23	10080.04	19.10	7.20	379.78	1.12	111.01	0.75	13.20
Variance 0			-0.23	0.01	2.12			-0.00	1.17
Variance 1			0.14	0.01	0.33			-0.06	-0.69
Variance 2			-0.05	-0.02	-1.02			-0.03	1.39

Notes

Prepurged 2 liters
Water level below top of screen. Performing complete evacuation of the well.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-16 11:49:24

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 114 ft

Pump placement from TOC 108.8 ft

Well Information:

Well ID GWC-5
Well diameter 2 in
Well Total Depth 113.8 ft
Screen Length 10 ft
Depth to Water 80.86 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.9888302 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 65.52 in
Total Volume Pumped 10.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:33:40	4140.90	19.51	6.24	40.27	0.83	85.84	8.07	101.45
Last 5	11:36:40	4320.90	19.37	6.19	39.60	0.48	85.91	8.14	101.67
Last 5	11:39:47	4507.89	19.22	6.15	39.06	0.73	85.99	8.12	102.47
Last 5	11:42:47	4687.89	19.06	6.13	38.54	0.69	86.06	8.29	102.55
Last 5	11:45:47	4867.88	19.06	6.09	38.10	0.72	86.14	8.27	103.23
Variance 0			-0.15	-0.04	-0.54			-0.02	0.81
Variance 1			-0.16	-0.02	-0.52			0.17	0.08
Variance 2			-0.01	-0.03	-0.43			-0.02	0.68

Notes

Prepurged 2L
Well took a while to stabilize for drawdown, pH, and conductivity.

Grab Samples

GWC-5
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-16 14:59:48

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 112.0 ft

Pump placement from TOC 106.4 ft

Well Information:

Well ID GWC-6
Well diameter 2 in
Well Total Depth 111.40 ft
Screen Length 10 ft
Depth to Water 75.37 ft

Pumping Information:

Final Pumping Rate 145 mL/min
Total System Volume 0.9799034 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 3 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:45:17	1439.99	19.29	7.29	135.42	2.34	75.60	7.10	58.24
Last 5	14:48:17	1619.98	19.11	7.30	135.29	2.77	75.60	7.11	58.36
Last 5	14:51:17	1799.98	18.97	7.33	135.28	2.90	75.60	7.14	58.16
Last 5	14:54:17	1979.97	18.98	7.33	136.05	2.32	75.60	7.19	58.09
Last 5	14:57:17	2159.97	18.91	7.35	134.83	1.77	75.62	7.17	57.96
Variance 0			-0.15	0.02	-0.02			0.03	-0.20
Variance 1			0.02	0.01	0.77			0.05	-0.07
Variance 2			-0.07	0.02	-1.23			-0.01	-0.13

Notes

Prepurged 1L
Well performed well

Grab Samples

GWC-6
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-16 13:21:05

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 109 ft

Pump placement from TOC 103.1 ft

Well Information:

Well ID GWC-6RZ
Well diameter 2 in
Well Total Depth 108.10 ft
Screen Length 10 ft
Depth to Water 79.02 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.9665131 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:01:34	1439.98	19.07	6.71	101.80	1.21	79.04	7.16	44.20
Last 5	13:04:34	1619.98	19.15	6.74	101.40	0.93	79.04	7.20	45.16
Last 5	13:10:34	1979.97	19.25	6.80	101.14	0.78	79.04	7.36	46.32
Last 5	13:13:34	2159.96	19.46	6.81	100.59	0.80	79.04	7.32	47.40
Last 5	13:16:34	2339.96	19.16	6.83	100.14	0.64	79.04	7.37	48.54
Variance 0			0.10	0.06	-0.26			0.15	1.15
Variance 1			0.21	0.01	-0.55			-0.03	1.08
Variance 2			-0.30	0.02	-0.45			0.05	1.14

Notes

Prepurged 1L
Well took a little while to stabilize for pH. Other than that, well performed well.

Grab Samples

GWC-6RZ
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-13 12:28:04

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 1 & 2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 110 ft

Pump placement from TOC 105.7 ft

Well Information:

Well ID GWC-7Z
Well diameter 2 in
Well Total Depth 110.7 ft
Screen Length 10 ft
Depth to Water 60.36 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.5812514 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 1.56 in
Total Volume Pumped 2.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:10:14	240.03	21.37	6.68	231.45	0.16	60.49	0.69	-43.35
Last 5	12:14:14	480.02	21.46	6.73	231.59	0.03	60.49	0.30	-57.83
Last 5	12:18:14	720.02	21.73	6.75	232.16	0.15	60.49	0.21	-70.41
Last 5	12:22:14	960.03	21.70	6.78	232.15	0.18	60.49	0.18	-78.20
Last 5	12:26:14	1200.03	21.64	6.80	231.67	0.12	60.49	0.18	-84.61
Variance 0			0.27	0.02	0.57			-0.09	-12.57
Variance 1			-0.03	0.03	-0.01			-0.03	-7.80
Variance 2			-0.06	0.02	-0.48			-0.00	-6.41

Notes

Prepurged 1.5 liters

Grab Samples

GWC-7Z
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-16 13:14:27

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 112 ft

Pump placement from TOC 106.8 ft

Well Information:

Well ID GWC-8RR
Well diameter 2 in
Well Total Depth 111.8 ft
Screen Length 10 ft
Depth to Water 49.39 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.8549034 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.72 in
Total Volume Pumped 2.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:55:44	240.03	19.37	7.79	195.55	0.42	49.74	7.97	21.47
Last 5	12:59:44	480.02	19.28	7.82	196.76	0.21	49.75	8.01	23.88
Last 5	13:03:44	720.11	19.23	7.84	195.88	0.22	49.74	8.04	26.76
Last 5	13:07:44	960.05	19.34	7.85	197.64	0.24	49.75	8.03	28.47
Last 5	13:11:44	1200.28	19.36	7.90	195.74	0.19	49.74	7.96	29.33
Variance 0			-0.04	0.02	-0.88			0.03	2.88
Variance 1			0.10	0.01	1.75			-0.01	1.71
Variance 2			0.03	0.05	-1.89			-0.07	0.86

Notes

Prepurged 2L

Grab Samples

GWC-8RR
Metals, Inorganics
DUP-2
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-16 11:38:40

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 77 ft

Pump placement from TOC 71.4 ft

Well Information:

Well ID GWC-8Z
Well diameter 2 in
Well Total Depth 76.4 ft
Screen Length 10 ft
Depth to Water 49.9 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.6986836 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 4.44 in
Total Volume Pumped 7.93 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:20:20	3364.17	18.44	6.99	152.01	1.22	50.28	7.54	87.73
Last 5	11:24:20	3604.17	18.40	7.03	154.19	1.04	50.26	7.26	86.88
Last 5	11:28:20	3844.17	18.57	7.08	157.81	1.37	50.26	7.66	85.09
Last 5	11:32:20	4084.16	18.57	7.11	158.56	1.11	50.27	7.35	84.00
Last 5	11:36:20	4324.17	18.72	7.15	160.24	1.07	50.27	7.18	83.63
Variance 0			0.17	0.05	3.62			0.40	-1.80
Variance 1			0.00	0.03	0.75			-0.31	-1.08
Variance 2			0.15	0.03	1.68			-0.17	-0.37

Notes

Prepurged 2L

Grab Samples

GWC-8Z
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-16 15:05:36

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 78 ft

Pump placement from TOC 72.2 ft

Well Information:

Well ID GWC-9
Well diameter 2 in
Well Total Depth 77.2 ft
Screen Length 10 ft
Depth to Water 43.62 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.703147 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:47:06	960.02	20.41	5.97	103.46	0.41	43.65	6.21	91.14
Last 5	14:51:06	1200.02	20.60	6.01	105.89	0.35	43.65	6.18	88.92
Last 5	14:55:06	1440.02	20.59	6.00	107.08	0.25	43.65	6.18	88.40
Last 5	14:59:06	1680.02	20.61	6.01	107.37	0.22	43.65	6.16	87.81
Last 5	15:03:06	1920.02	20.75	6.03	108.13	0.29	43.64	6.07	86.80
Variance 0			-0.01	-0.01	1.19			-0.00	-0.52
Variance 1			0.01	0.01	0.29			-0.02	-0.60
Variance 2			0.14	0.02	0.76			-0.09	-1.01

Notes

Prepurged 1L

Grab Samples

GWC-9
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-17 11:55:35

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 73 ft

Pump placement from TOC 66.8 ft

Well Information:

Well ID GWC-10
Well diameter 2 in
Well Total Depth 71.8 ft
Screen Length 10 ft
Depth to Water 36.72 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.8058299 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:41:14	1619.98	18.19	7.09	303.76	1.58	36.74	7.15	33.87
Last 5	11:44:14	1799.97	18.08	7.12	301.43	1.65	36.74	7.28	34.84
Last 5	11:47:14	1979.97	18.17	7.14	299.49	1.61	36.74	7.41	35.36
Last 5	11:50:14	2159.96	18.16	7.15	299.22	1.39	36.74	7.35	36.26
Last 5	11:53:14	2339.96	18.17	7.16	299.41	1.36	36.74	7.44	37.08
Variance 0			0.09	0.02	-1.94			0.14	0.52
Variance 1			-0.00	0.02	-0.27			-0.06	0.90
Variance 2			0.00	0.01	0.19			0.09	0.82

Notes

Prepurged 2L
Well performed well

Grab Samples

GWC-10
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-17 10:42:36

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 101 ft

Pump placement from TOC 95.2 ft

Well Information:

Well ID GWC-10R
Well diameter 2 in
Well Total Depth 100.2 ft
Screen Length 10 ft
Depth to Water 36.78 ft

Pumping Information:

Final Pumping Rate 135 mL/min
Total System Volume 0.9308057 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0 in
Total Volume Pumped 7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:28:53	2519.95	17.54	7.45	290.21	0.19	36.78	4.60	6.85
Last 5	10:31:53	2699.94	17.54	7.46	289.17	0.23	36.78	4.83	6.31
Last 5	10:34:53	2879.94	17.57	7.48	288.30	0.20	36.78	5.08	6.43
Last 5	10:37:53	3059.93	17.53	7.50	287.21	0.36	36.78	5.30	6.52
Last 5	10:40:53	3239.93	17.59	7.51	286.94	0.18	36.78	5.42	6.65
Variance 0			0.02	0.02	-0.86			0.25	0.12
Variance 1			-0.03	0.02	-1.09			0.22	0.09
Variance 2			0.05	0.01	-0.27			0.13	0.13

Notes

Prepurged 2L
Well performed well

Grab Samples

GWC-10R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-17 14:36:55

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 48 ft

Pump placement from TOC 42.4 ft

Well Information:

Well ID GWC-11
Well diameter 2 in
Well Total Depth 47.4 ft
Screen Length 10 ft
Depth to Water 26.62 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.6942443 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.12 in
Total Volume Pumped 8.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:22:01	3420.92	22.65	6.42	152.26	0.97	26.63	4.04	61.82
Last 5	14:25:01	3600.92	22.98	6.45	155.90	0.98	26.63	4.09	60.95
Last 5	14:28:01	3780.91	22.98	6.49	159.76	0.99	26.63	4.25	60.23
Last 5	14:31:01	3960.91	22.73	6.52	163.70	0.82	26.63	4.36	59.79
Last 5	14:34:01	4140.90	22.98	6.55	167.34	0.82	26.63	4.45	58.68
Variance 0			0.00	0.04	3.86			0.16	-0.72
Variance 1			-0.25	0.03	3.94			0.12	-0.44
Variance 2			0.25	0.03	3.64			0.09	-1.10

Notes

Prepurged 1L
Well performed well. Took a while for conductivity to stabilize.

Grab Samples

GWC-11
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-17 15:36:06

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 84 ft

Pump placement from TOC 78.2 ft

Well Information:

Well ID GWC-11R
Well diameter 2 in
Well Total Depth 83.2 ft
Screen Length 10 ft
Depth to Water 26.53 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.8549275 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.36 in
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:21:21	360.02	20.50	7.42	269.61	3.76	26.57	3.52	18.89
Last 5	15:24:21	540.01	20.83	7.47	269.56	2.63	26.56	3.66	19.67
Last 5	15:27:21	720.01	20.49	7.52	269.03	2.64	26.56	3.79	20.66
Last 5	15:30:21	900.00	20.39	7.55	270.82	2.41	26.56	3.93	21.04
Last 5	15:33:21	1080.00	20.53	7.58	271.09	1.97	26.56	4.03	21.41
Variance 0			-0.34	0.05	-0.53			0.13	0.99
Variance 1			-0.10	0.03	1.79			0.14	0.38
Variance 2			0.13	0.03	0.28			0.10	0.36

Notes

Prepurged 3L
Dead ants in initial purge water. Well cleared quickly.

Grab Samples

GWC-11R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-17 15:16:59

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 54 ft

Pump placement from TOC 49.0 ft

Well Information:

Well ID GWC-12
Well diameter 2 in
Well Total Depth 54.0 ft
Screen Length 10 ft
Depth to Water 25.74 ft

Pumping Information:

Final Pumping Rate 115 mL/min
Total System Volume 0.5960249 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 5.76 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:59:09	960.02	20.97	6.17	112.35	2.65	26.20	0.64	20.64
Last 5	15:03:09	1200.02	21.00	6.19	113.01	2.27	26.21	0.53	15.87
Last 5	15:07:09	1440.02	20.97	6.19	114.09	2.41	26.21	0.47	12.66
Last 5	15:11:09	1680.02	20.97	6.18	114.69	2.16	26.21	0.44	9.37
Last 5	15:15:09	1920.02	20.95	6.19	114.30	2.12	26.22	0.42	6.24
Variance 0			-0.03	-0.00	1.07			-0.06	-3.21
Variance 1			0.00	-0.01	0.61			-0.03	-3.29
Variance 2			-0.02	0.00	-0.39			-0.02	-3.13

Notes

Prepurged 1L

Grab Samples

GWC-12
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-18 10:17:08

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 86 ft

Pump placement from TOC 79.8 ft

Well Information:

Well ID GWC-13
Well diameter 2 in
Well Total Depth 84.8 ft
Screen Length 10 ft
Depth to Water 35.05 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.8638543 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.6 in
Total Volume Pumped 4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:01:09	1259.99	18.72	7.29	322.22	4.61	35.10	4.41	52.22
Last 5	10:04:09	1439.98	18.74	7.29	323.43	4.97	35.10	4.42	51.19
Last 5	10:07:09	1619.98	18.76	7.29	324.02	4.22	35.10	4.42	50.59
Last 5	10:10:09	1799.97	18.88	7.28	324.22	4.26	35.10	4.43	50.33
Last 5	10:13:09	1979.97	19.01	7.28	324.98	4.08	35.10	4.44	50.05
Variance 0			0.02	0.00	0.59			0.00	-0.61
Variance 1			0.12	-0.01	0.20			0.00	-0.25
Variance 2			0.13	-0.00	0.76			0.02	-0.29

Notes

Prepurged 2L
Well purged organic flecks, may be insect (ants) in origin. However, well cleared up relatively quickly.

Grab Samples

GWC-13
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-18 14:28:24

Project Information:

Operator Name Audrey Crafton
Company Name Resolute Env
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 105 ft

Pump placement from TOC 99.3 ft

Well Information:

Well ID GWC-13RZ
Well diameter 2 in
Well Total Depth 104.3 ft
Screen Length 10 ft
Depth to Water 53.1 ft

Pumping Information:

Final Pumping Rate 115 mL/min
Total System Volume 0.8236594 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 494.4 in
Total Volume Pumped 33.58 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:09:29	16560.07	20.87	7.49	444.43	0.52	92.35	3.49	59.49
Last 5	14:13:29	16800.07	20.87	7.50	447.74	0.41	92.95	3.50	58.55
Last 5	14:17:29	17040.07	21.05	7.50	448.80	0.44	93.15	3.48	58.55
Last 5	14:21:29	17280.07	20.44	7.51	449.12	0.47	94.05	3.54	58.49
Last 5	14:25:29	17520.07	20.84	7.50	448.90	0.38	94.30	3.51	58.63
Variance 0			0.18	0.00	1.06			-0.03	-0.00
Variance 1			-0.62	0.01	0.32			0.06	-0.06
Variance 2			0.40	-0.01	-0.23			-0.03	0.14

Notes

Prepurged 1L
Well evacuated to top of screen due to water level issue. Will return tomorrow to collect sample.

Grab Samples

Report Created: 2019-09-19 09:17:38
 Site: Plant Bowen **GWC-13RZ**
 GPS:
 Log Created: 2019-09-19 09:15:56
 Number Readings: 11
 Battery Type: SmarTROLLâ„¢, C Battery Pack
 Battery SN: 637617
 Device Type: SmarTROLLâ„¢, C MP
 Device SN: 553835

Created	Baro (mm Hg)	Temp (C)	RDO (mg/l)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (µS/cm)	Sp Cond (µS/cm)	Salinity (ppt)	Resist (Ohm)	Density (g/cm³)	TDS (ppt)	Depth (ft)	Pressure (psi)	Air Temp (C)
9/19/2019 9:15	749.6	21.62	6.5	75.3	7.8	187.3	593.7	632.2	0.3	1684	0.998	0	-0.16	-0.07	23.5
9/19/2019 9:16	749.6	21.3	5.62	64.5	7.65	181	527.3	566.5	0.3	1897	0.998	0	-0.15	-0.067	23.5
9/19/2019 9:16	749.6	20.9	5.26	60.2	7.57	182.4	490.4	528.4	0.3	2039	0.998	0	-0.14	-0.06	23.5
9/19/2019 9:16	749.5	20.67	4.97	56.3	7.55	178.5	474.6	516.5	0.3	2107	0.998	0	-0.13	-0.055	23.5
9/19/2019 9:16	749.5	20.45	4.78	53.9	7.53	173.6	446.9	489.1	0.2	2238	0.998	0	-0.15	-0.064	23.6
9/19/2019 9:16	749.5	20.16	4.67	52.5	7.51	173.2	435	477.5	0.2	2299	0.998	0	-0.14	-0.06	23.6
9/19/2019 9:16	749.5	20.04	4.61	51.7	7.51	170.7	430.7	474.8	0.2	2322	0.998	0	-0.15	-0.067	23.6
9/19/2019 9:17	749.5	19.74	4.58	51	7.51	167.8	421.1	467.5	0.2	2375	0.998	0	-0.17	-0.075	23.7
9/19/2019 9:17	749.5	19.48	4.53	50.3	7.5	165.8	416.8	463.6	0.2	2399	0.998	0	-0.16	-0.069	23.7
9/19/2019 9:17	749.6	19.34	4.53	50	7.51	163.7	415	464.6	0.2	2409	0.998	0	-0.14	-0.061	23.7
9/19/2019 9:17	749.6	19.19	4.49	49.4	7.5	161.1	411.4	462.1	0.2	2431	0.999	0	-0.2	-0.085	23.7

Product Name: Low-Flow System

Date: 2019-09-17 13:51:11

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 77 ft

Pump placement from TOC 71.3 ft

Well Information:

Well ID GWC-14Z
Well diameter 2 in
Well Total Depth 76.3 ft
Screen Length 10 ft
Depth to Water 34.50 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.6986836 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 27.96 in
Total Volume Pumped 3.12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:33:04	480.02	23.30	6.01	125.98	0.98	36.34	4.65	82.54
Last 5	13:37:04	720.02	23.12	5.98	127.28	0.29	36.54	4.60	82.56
Last 5	13:41:05	960.52	23.08	5.99	129.02	0.21	36.63	4.59	82.55
Last 5	13:45:05	1200.52	22.96	6.02	130.90	0.16	36.75	4.51	82.73
Last 5	13:49:05	1440.52	22.87	6.04	134.31	0.20	36.83	4.59	82.60
Variance 0			-0.04	0.01	1.74			-0.02	-0.01
Variance 1			-0.12	0.03	1.88			-0.08	0.18
Variance 2			-0.09	0.02	3.42			0.08	-0.13

Notes

Prepurged 1L

Grab Samples

GWC-14Z
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-17 10:47:06

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 98 ft

Pump placement from TOC 92.5 ft

Well Information:

Well ID GWC-15R
Well diameter 2 in
Well Total Depth 97.5 ft
Screen Length 10 ft
Depth to Water 43.75 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.7924154 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 2.64 in
Total Volume Pumped 2.88 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:29:41	480.02	21.95	7.23	347.55	0.49	44.01	1.89	34.44
Last 5	10:33:42	720.84	22.27	7.25	347.12	0.78	44.00	1.91	41.75
Last 5	10:37:42	960.84	22.26	7.29	345.97	1.10	44.00	2.00	40.35
Last 5	10:41:42	1200.84	22.45	7.32	345.02	1.30	43.99	2.07	32.49
Last 5	10:45:42	1440.84	22.75	7.35	343.64	1.33	43.97	2.13	39.02
Variance 0			-0.00	0.05	-1.15			0.09	-1.41
Variance 1			0.18	0.02	-0.94			0.07	-7.86
Variance 2			0.30	0.03	-1.38			0.06	6.53

Notes

Prepurged 0.5L

Grab Samples

GWC-15R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-17 11:40:48

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 1&2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 75 ft

Pump placement from TOC 69.9 ft

Well Information:

Well ID GWC-15Z
Well diameter 2 in
Well Total Depth 74.9 ft
Screen Length 10 ft
Depth to Water 43.46 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.6897567 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 6.24 in
Total Volume Pumped 2.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:23:40	240.03	21.40	7.73	229.34	0.31	43.95	6.86	57.59
Last 5	11:27:40	480.02	21.27	7.75	229.28	0.27	43.97	6.68	55.14
Last 5	11:31:40	720.02	21.15	7.78	228.42	0.31	43.97	6.54	53.13
Last 5	11:35:40	960.02	21.09	7.76	230.18	0.53	43.97	6.50	53.52
Last 5	11:39:40	1200.02	21.11	7.76	230.02	0.54	43.98	6.42	52.80
Variance 0			-0.11	0.02	-0.85			-0.14	-2.02
Variance 1			-0.06	-0.02	1.76			-0.04	0.39
Variance 2			0.01	0.00	-0.16			-0.08	-0.72

Notes

Prepurged 1L

Grab Samples

GWC-15Z
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-09 14:33:59

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 97 ft

Pump placement from TOC 92.6 ft

Well Information:

Well ID GWC-16R
Well diameter 2 in
Well Total Depth 97.6 ft
Screen Length 10 ft
Depth to Water 78.53 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.522952 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 39.84 in
Total Volume Pumped 2.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:14:55	720.02	21.12	7.19	530.20	0.18	81.04	1.16	55.11
Last 5	14:18:55	960.03	22.19	7.16	526.32	0.12	81.21	1.09	50.97
Last 5	14:22:55	1200.03	22.50	7.14	519.48	0.11	81.46	1.06	48.17
Last 5	14:26:55	1440.03	22.83	7.13	520.31	0.06	81.68	1.06	45.53
Last 5	14:30:55	1680.03	22.64	7.13	513.69	0.21	81.85	1.06	44.57
Variance 0			0.31	-0.01	-6.84			-0.03	-2.80
Variance 1			0.32	-0.01	0.83			-0.00	-2.64
Variance 2			-0.19	-0.00	-6.62			0.00	-0.96

Notes

Prepurged 1.5 liters

Grab Samples

GWC-16R
Metals, Inorganics

Report Created: 2019-09-10 09:26:04

Site: Plant Bowen

GWC-17R

GPS:

Log Created: 2019-09-10 09:23:59

Number Readings: 13

Battery Type: SmarTROLLá,ç Battery Pack

Battery SN: 609178

Device Type: SmarTROLLá,ç MP

Device SN: 613229

Created	Baro (atm)	Temp (C)	RDO (mg/L)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (ÅµS/cm)	Sp Cond (ÅµS/cm)	Salinity (psu)	Resist (Ohm-cm)	Density (g/cm^3)	TDS (ppm)	Depth (ft)	Pressure (Air Temp (C)
9/10/2019 9:23	0.988	25.46	7.03	88.1	7.26	172.7	590.2	578.1	0.3	1694	0.997	375.8	-0.3	-0.132	28.8
9/10/2019 9:24	0.988	25.29	7.08	87.4	7.2	171.1	559.7	555.9	0.3	1787	0.997	361.35	-0.32	-0.14	28.9
9/10/2019 9:24	0.988	24.78	7	85.8	7.17	170.3	544.8	545.1	0.3	1836	0.997	354.35	-0.36	-0.155	29
9/10/2019 9:24	0.988	24.33	7.18	87.6	7.17	169.4	550.6	553.4	0.3	1816	0.997	359.68	-0.34	-0.148	29.1
9/10/2019 9:24	0.988	24.11	7.25	87.7	7.16	167.5	543	551.2	0.3	1842	0.997	358.28	-0.32	-0.14	29.2
9/10/2019 9:24	0.988	23.52	7.32	87.7	7.16	166.4	535.9	549.3	0.3	1866	0.998	357.03	-0.36	-0.155	29.3
9/10/2019 9:24	0.988	23.22	7.35	87.9	7.17	165.4	539.7	554.8	0.3	1853	0.998	360.59	-0.36	-0.158	29.4
9/10/2019 9:25	0.988	23.03	7.43	87.9	7.16	163.2	536.3	557.1	0.3	1865	0.998	362.1	-0.35	-0.152	29.5
9/10/2019 9:25	0.988	22.62	7.47	87.8	7.16	161.7	532.9	556.8	0.3	1876	0.998	361.9	-0.35	-0.153	29.5
9/10/2019 9:25	0.988	22.32	7.57	88.8	7.17	159.9	535.6	561.4	0.3	1867	0.998	364.93	-0.37	-0.16	29.6
9/10/2019 9:25	0.988	22.26	7.61	88.6	7.17	158.1	533.1	562.5	0.3	1876	0.998	365.63	-0.39	-0.171	29.7
9/10/2019 9:25	0.988	22	7.59	88.2	7.17	156.1	530.8	561.6	0.3	1884	0.998	365.05	-0.38	-0.166	29.8
9/10/2019 9:25	0.988	21.82	7.63	88.5	7.17	154.4	532.4	564.8	0.3	1878	0.998	367.13	-0.36	-0.157	29.9

Product Name: Low-Flow System

Date: 2019-09-09 11:52:25

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Bladder
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 81 ft

Pump placement from TOC 77.6 ft

Well Information:

Well ID GWC-18
Well diameter 2 in
Well Total Depth 80.3 ft
Screen Length 10 ft
Depth to Water 74.94 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.5515373 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:35:24	240.13	18.25	6.78	154.65	4.35	74.97	8.04	118.14
Last 5	11:39:24	480.02	18.02	6.74	156.85	3.18	74.96	7.95	102.13
Last 5	11:43:24	720.02	18.12	6.72	159.50	3.17	74.96	7.95	95.18
Last 5	11:47:24	960.02	18.12	6.70	161.73	2.60	74.96	7.92	91.23
Last 5	11:51:24	1200.02	18.09	6.71	164.05	2.22	74.96	7.89	88.45
Variance 0			0.09	-0.02	2.65			-0.01	-6.95
Variance 1			0.00	-0.01	2.23			-0.03	-3.95
Variance 2			-0.03	0.01	2.32			-0.03	-2.78

Notes

Prepurged 11L (just over 3 well volumes)

Grab Samples

GWC-18
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-06 11:17:42

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 140 ft

Pump placement from TOC 135.1 ft

Well Information:

Well ID GWC-18R
Well diameter 2 in
Well Total Depth 140.1 ft
Screen Length 10 ft
Depth to Water 74.17 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.7148792 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.36 in
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	10:59:05	720.02	18.73	7.53	277.97	0.84	74.20	6.74	113.81
Last 5	11:03:05	960.02	18.83	7.57	278.29	0.51	74.20	6.77	102.80
Last 5	11:07:05	1200.02	18.90	7.60	277.27	0.47	74.20	6.76	95.26
Last 5	11:11:05	1440.03	18.70	7.63	277.75	0.72	74.20	6.78	90.28
Last 5	11:15:05	1680.03	18.57	7.65	278.08	0.40	74.20	6.81	86.70
Variance 0			0.06	0.03	-1.02			-0.02	-7.53
Variance 1			-0.20	0.03	0.48			0.02	-4.99
Variance 2			-0.13	0.02	0.33			0.03	-3.57

Notes

Prepurged 2 liters

Grab Samples

GWC-18R
Metals Inorganics

Product Name: Low-Flow System

Date: 2019-09-09 11:23:26

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 147 ft

Pump placement from TOC 141.6 ft

Well Information:

Well ID GWC-19R
Well diameter 2 in
Well Total Depth 146.6 ft
Screen Length 10 ft
Depth to Water 78.69 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.7461232 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.36 in
Total Volume Pumped 3.36 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:05:02	480.02	20.17	7.62	285.37	0.71	78.72	6.67	88.33
Last 5	11:09:02	720.02	19.97	7.68	286.37	0.75	78.72	6.66	74.92
Last 5	11:13:02	960.03	19.95	7.70	285.60	0.60	78.72	6.65	65.77
Last 5	11:17:02	1200.03	19.95	7.71	285.29	0.82	78.72	6.64	61.08
Last 5	11:21:02	1440.03	19.99	7.73	284.96	1.14	78.72	6.63	57.12
Variance 0			-0.02	0.02	-0.78			-0.00	-9.15
Variance 1			-0.00	0.01	-0.31			-0.01	-4.69
Variance 2			0.04	0.01	-0.33			-0.01	-3.96

Notes

Prepurged 1.5 liters

Grab Samples

GWC-19R

Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-06 11:25:26

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 88 ft

Pump placement from TOC 82.5 ft

Well Information:

Well ID GWC-20R
Well diameter 2 in
Well Total Depth 87.5 ft
Screen Length 10 ft
Depth to Water 72.1 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.8727813 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 1.56 in
Total Volume Pumped 2.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:10:50	180.04	20.72	7.69	313.29	0.03	72.21	7.14	63.99
Last 5	11:13:50	360.01	20.72	7.72	311.33	0.10	72.22	7.04	64.06
Last 5	11:16:50	540.01	20.92	7.73	309.79	0.09	72.23	6.96	65.28
Last 5	11:19:50	720.00	20.81	7.74	308.92	0.05	72.23	6.79	66.93
Last 5	11:22:50	900.00	20.77	7.75	309.11	0.03	72.23	6.75	67.71
Variance 0			0.20	0.01	-1.55			-0.08	1.21
Variance 1			-0.11	0.01	-0.87			-0.16	1.65
Variance 2			-0.04	0.00	0.19			-0.04	0.78

Notes

Prepurged 1L
Well performed well

Grab Samples

GWC-20R

Metals, Inorganics

DUP-3

Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-06 11:01:18

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 92 ft

Pump placement from TOC 85.6 ft

Well Information:

Well ID GWC-21R
Well diameter 2 in
Well Total Depth 90.6 ft
Screen Length 10 ft
Depth to Water 72.6 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.8956349 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 39.72 in
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:42:48	3122.47	21.15	7.03	533.93	0.64	75.38	3.02	34.15
Last 5	10:46:48	3362.47	20.54	7.03	539.49	0.67	75.60	3.22	34.06
Last 5	10:50:48	3602.47	20.95	7.04	543.18	0.68	75.75	3.30	32.78
Last 5	10:54:48	3842.47	21.53	7.04	543.61	0.68	75.82	3.28	32.66
Last 5	10:58:48	4082.47	21.82	7.04	541.28	0.74	75.91	3.26	33.43
Variance 0			0.41	0.01	3.69			0.08	-1.28
Variance 1			0.59	-0.01	0.43			-0.01	-0.12
Variance 2			0.29	0.00	-2.32			-0.03	0.77

Notes

Prepurged 1L

Grab Samples

GWC-21R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-10-21 11:00:49

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Landfill Resample Cell 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 642531
Turbidity Make/Model LaMotte2020we

Pump Information:

Pump Model/Type QED Dedicated Pump
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 91 ft

Pump placement from TOC 85.6 ft

Well Information:

Well ID GWC-21R
Well diameter 2 in
Well Total Depth 90.6 ft
Screen Length 10 ft
Depth to Water 73.14 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.7611715 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 49.9 in
Total Volume Pumped 5.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:42:47	2340.00	17.91	7.10	556.58	0.21	76.90	4.43	16.13
Last 5	10:45:47	2520.00	18.07	7.10	556.93	0.10	77.00	4.45	16.12
Last 5	10:48:47	2700.00	18.21	7.10	557.60	0.14	77.09	4.49	16.26
Last 5	10:51:47	2880.00	18.28	7.10	557.89	0.23	77.20	4.55	16.41
Last 5	10:54:47	3060.00	18.41	7.10	557.70	0.16	77.30	4.63	16.54
Variance 0			0.13	0.00	0.67			0.04	0.14
Variance 1			0.07	0.00	0.28			0.06	0.14
Variance 2			0.13	0.00	-0.19			0.08	0.13

Notes

Prepurged 2L

Ants starting to make nest at top of casing. Coming in through hole in casing for telemetry wire. No dead ants purged from well. Slight drawdown issue. Takes a while to stabilize. Prefers lower pump rate. Dropped pump rate to 130ml/ min at 1013 then to 100ml/min at 1043 to attempt to stabilize drawdown.

Grab Samples
GWC-21R
Metals

Product Name: Low-Flow System

Date: 2019-09-05 15:56:42

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 120 ft

Pump placement from TOC 114.6 ft

Well Information:

Well ID GWC-22R
Well diameter 2 in
Well Total Depth 119.6 ft
Screen Length 10 ft
Depth to Water 65.23 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.6256108 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.72 in
Total Volume Pumped 7.28 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:38:12	2160.03	20.21	7.06	337.25	3.80	65.29	3.31	-44.36
Last 5	15:42:12	2400.03	20.16	7.09	332.79	3.60	65.29	3.53	-43.20
Last 5	15:46:12	2640.03	20.30	7.09	332.98	2.54	65.29	3.57	-42.64
Last 5	15:50:12	2880.03	20.23	7.09	330.32	2.15	65.29	3.74	-41.84
Last 5	15:54:12	3120.03	20.30	7.09	329.67	1.83	65.29	3.76	-41.74
Variance 0			0.15	-0.00	0.19			0.03	0.55
Variance 1			-0.07	0.01	-2.65			0.17	0.81
Variance 2			0.07	0.00	-0.65			0.02	0.09

Notes

Prepurged 1.5 liters

Grab Samples

GWC-22R

Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-05 16:17:32

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 51 ft

Pump placement from TOC 44.6 ft

Well Information:

Well ID GWC-23R
Well diameter 2 in
Well Total Depth 49.6 ft
Screen Length 10 ft
Depth to Water 41.94 ft

Pumping Information:

Final Pumping Rate 220 mL/min
Total System Volume 0.5826346 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 62.79 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:01:06	1799.97	18.77	7.19	619.69	16.30	45.40	3.30	31.78
Last 5	16:04:06	1979.97	18.80	7.20	620.54	16.40	45.75	3.58	32.26
Last 5	16:07:06	2159.96	18.77	7.20	619.09	18.20	46.10	3.90	31.91
Last 5	16:10:06	2339.96	18.79	7.21	613.52	21.10	46.40	4.01	30.92
Last 5	16:13:06	2519.95	18.76	7.22	604.37	18.40	46.76	4.14	30.04
Variance 0			-0.04	0.01	-1.45			0.32	-0.35
Variance 1			0.02	0.01	-5.58			0.10	-1.00
Variance 2			-0.02	0.01	-9.15			0.13	-0.88

Notes

Initial water level reading was below top of screen. Performing well evacuation. Collecting sample on 9.6.19. Prepurged 3L
Dead ants in well. Water is merky in color.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-06 09:56:22

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Bladder
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 51 ft

Pump placement from TOC 44.6 ft

Well Information:

Well ID GWC-23R
Well diameter 2 in
Well Total Depth 49.6 ft
Screen Length 10 ft
Depth to Water 42.35 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.4176346 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 12.6 in
Total Volume Pumped 2.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	09:38:30	180.11	18.23	7.31	561.32	4.45	42.77	3.85	119.04
Last 5	09:41:30	360.02	18.07	7.31	551.10	1.95	42.94	4.61	104.91
Last 5	09:44:30	540.01	18.01	7.31	542.98	1.75	43.10	4.92	94.10
Last 5	09:47:30	720.00	18.08	7.31	537.52	1.70	43.25	5.12	86.68
Last 5	09:50:30	899.99	18.06	7.32	535.51	1.82	43.40	5.20	80.71
Variance 0			-0.06	0.00	-8.12			0.31	-10.81
Variance 1			0.07	-0.00	-5.46			0.20	-7.41
Variance 2			-0.01	0.01	-2.01			0.07	-5.97

Notes

Prepurged 0.25L
Groundwater much clearer than water that was purged on 9.5.19 during well evacuation.

Grab Samples

GWC-23R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-05 14:01:20

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 40 ft

Pump placement from TOC 35.1 ft

Well Information:

Well ID GWC-24R
Well diameter 2 in
Well Total Depth 40.1 ft
Screen Length 10 ft
Depth to Water 26.18 ft

Pumping Information:

Final Pumping Rate 115 mL/min
Total System Volume 0.6635369 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 7.2 in
Total Volume Pumped 5.06 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:41:29	1682.99	21.46	7.34	289.57	0.78	26.65	2.57	-38.20
Last 5	13:45:29	1922.99	20.49	7.38	286.52	0.46	26.76	2.81	-36.71
Last 5	13:49:29	2162.99	20.46	7.39	288.46	0.56	26.80	2.73	-42.22
Last 5	13:53:29	2402.99	21.05	7.38	289.95	0.59	26.77	2.66	-45.00
Last 5	13:57:29	2642.99	21.46	7.40	286.38	0.40	26.78	2.72	-43.01
Variance 0			-0.03	0.01	1.94			-0.08	-5.51
Variance 1			0.59	-0.00	1.49			-0.07	-2.78
Variance 2			0.41	0.02	-3.56			0.06	1.99

Notes

Prepurged 0.5 L

Grab Samples

GWC-24R

Metals, Inorganics

DUP-2

Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-05 11:41:23

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 100 ft

Pump placement from TOC 95.0ft

Well Information:

Well ID GWC-25R
Well diameter 2 in
Well Total Depth 100.0ft
Screen Length 10 ft
Depth to Water 25.43 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.9313423 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 4.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:23:53	720.02	18.79	7.50	314.34	0.72	25.40	6.28	75.03
Last 5	11:27:53	960.02	18.64	7.56	314.37	0.75	25.41	6.43	70.71
Last 5	11:31:53	1200.02	18.48	7.58	315.42	0.71	25.41	6.45	68.64
Last 5	11:35:53	1440.02	18.44	7.59	315.94	0.65	25.41	6.40	67.47
Last 5	11:39:53	1680.02	18.36	7.59	314.51	0.70	25.41	6.33	66.56
Variance 0			-0.16	0.02	1.04			0.02	-2.08
Variance 1			-0.04	0.02	0.52			-0.05	-1.17
Variance 2			-0.08	0.00	-1.43			-0.07	-0.91

Notes

Prepurged 1L

Grab Samples

GWC-25R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-04 11:22:03

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 79 ft

Pump placement from TOC 73.4 ft

Well Information:

Well ID GWA-36
Well diameter 2 in
Well Total Depth 78.6 ft
Screen Length 10 ft
Depth to Water 34.93 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.4426104 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 6 in
Total Volume Pumped 2.88 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:02:52	480.02	20.07	6.96	150.82	2.53	34.98	6.16	64.34
Last 5	11:06:52	720.02	19.99	6.91	151.74	2.91	34.98	6.35	64.32
Last 5	11:10:52	960.03	19.99	6.88	152.94	2.61	34.98	6.43	64.05
Last 5	11:14:52	1200.03	20.12	6.86	153.50	2.65	34.98	6.51	64.24
Last 5	11:18:52	1440.03	19.90	6.85	153.77	2.32	34.98	6.57	64.12
Variance 0			-0.00	-0.03	1.20			0.08	-0.26
Variance 1			0.13	-0.02	0.56			0.08	0.19
Variance 2			-0.22	-0.01	0.26			0.05	-0.12

Notes

Prepurged 1.5 liters

Grab Samples

GWA-36
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-04 10:16:37

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 88 ft

Pump placement from TOC 83.7 ft

Well Information:

Well ID GWA-36R
Well diameter 2 in
Well Total Depth 88.7 ft
Screen Length 10 ft
Depth to Water 34.58 ft

Pumping Information:

Final Pumping Rate 115 mL/min
Total System Volume 0.4827812 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 2.4 in
Total Volume Pumped 2.76 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	09:55:52	480.02	21.68	7.13	277.68	1.20	34.57	4.67	126.65
Last 5	09:59:52	720.02	21.47	7.14	277.14	1.19	34.57	4.75	111.62
Last 5	10:03:52	960.02	21.39	7.14	276.23	1.10	34.58	4.72	100.81
Last 5	10:07:52	1200.02	21.42	7.14	276.79	1.47	34.58	4.72	93.44
Last 5	10:11:52	1440.02	21.72	7.14	276.30	1.03	34.58	4.71	88.20
Variance 0			-0.08	0.00	-0.90			-0.03	-10.81
Variance 1			0.02	-0.00	0.56			0.00	-7.36
Variance 2			0.30	-0.00	-0.50			-0.01	-5.24

Notes

Prepurged 1.5 liters

Grab Samples

GWA-36R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-04 11:43:32

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 107 ft

Pump placement from TOC 102.5 ft

Well Information:

Well ID GWA-37
Well diameter 2 in
Well Total Depth 107.5 ft
Screen Length 10 ft
Depth to Water 51.65 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.9625863 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 58.2 in
Total Volume Pumped 4.84 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:25:19	1680.02	24.41	5.11	19.58	0.57	55.75	3.53	120.57
Last 5	11:29:20	1920.21	25.09	5.10	19.55	0.62	55.98	3.55	122.50
Last 5	11:33:20	2160.21	25.17	5.11	18.96	0.70	56.20	3.57	121.14
Last 5	11:37:20	2400.21	25.19	5.10	19.13	0.74	56.38	3.60	120.65
Last 5	11:41:20	2640.21	25.80	5.09	18.89	0.69	56.50	3.62	122.44
Variance 0			0.08	0.02	-0.60			0.02	-1.36
Variance 1			0.01	-0.01	0.18			0.03	-0.50
Variance 2			0.62	-0.01	-0.24			0.02	1.79

Notes

Prepurged 0.75 L

Grab Samples

GWA-37
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-04 10:02:36

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 70 ft

Pump placement from TOC 64.4 ft

Well Information:

Well ID GWA-38
Well diameter 2 in
Well Total Depth 69.4 ft
Screen Length 10 ft
Depth to Water 52.83 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.6674396 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 12.84 in
Total Volume Pumped 2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	09:46:08	360.01	21.57	5.99	39.44	0.04	53.52	7.29	102.03
Last 5	09:49:08	540.02	21.57	5.94	39.24	0.06	53.62	7.23	105.04
Last 5	09:52:08	720.00	21.44	5.94	38.82	0.05	53.72	7.21	107.59
Last 5	09:55:08	900.02	21.51	5.92	38.99	0.02	53.82	7.20	109.98
Last 5	09:58:08	1080.01	21.41	5.91	38.43	0.03	53.90	7.18	112.09
Variance 0			-0.13	-0.01	-0.42			-0.02	2.55
Variance 1			0.07	-0.02	0.17			-0.01	2.39
Variance 2			-0.10	-0.01	-0.56			-0.02	2.12

Notes

Prepurged 1L
Well performed well

Grab Samples

GWA-38
Metals, Inorganics
DUP-1
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-09 15:23:05

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 119 ft

Pump placement from TOC 112.5 ft

Well Information:

Well ID GWA-39Z
Well diameter 2 in
Well Total Depth 117.5 ft
Screen Length 10 ft
Depth to Water 68.42 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.016147 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 4.56 in
Total Volume Pumped 12.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:04:35	4080.17	18.28	6.39	111.95	0.32	68.80	6.29	87.67
Last 5	15:08:35	4320.05	18.03	6.42	115.12	0.33	68.80	6.51	87.02
Last 5	15:12:35	4560.03	18.08	6.46	117.16	0.23	68.79	6.40	86.22
Last 5	15:16:35	4800.03	18.01	6.48	120.15	0.27	68.78	6.42	84.94
Last 5	15:20:36	5041.03	18.06	6.49	123.15	0.28	68.80	6.41	84.32
Variance 0			0.05	0.03	2.04			-0.11	-0.80
Variance 1			-0.07	0.02	2.99			0.02	-1.28
Variance 2			0.05	0.01	3.00			-0.01	-0.62

Notes

Prepurged 1L

Grab Samples

GWA-39Z
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-10 17:11:32

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 140 ft

Pump placement from TOC 135.1 ft

Well Information:

Well ID GWA-39RZ
Well diameter 2 in
Well Total Depth 140.1 ft
Screen Length 10 ft
Depth to Water 66.82 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.9798792 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 706.5 in
Total Volume Pumped 70 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	16:45:15	24483.63	19.06	7.41	304.45	0.35	125.90	1.15	7.55
Last 5	16:49:15	24723.63	19.81	7.40	303.28	0.42	125.80	1.20	6.96
Last 5	16:53:15	24963.63	20.61	7.40	301.87	0.47	125.75	1.24	6.88
Last 5	16:57:15	25203.63	20.46	7.41	304.98	--	--	1.21	7.57
Last 5	17:01:15	25443.63	21.37	7.39	305.27	--	--	1.18	8.62
Variance 0			0.81	-0.00	-1.41			0.04	-0.09
Variance 1			-0.15	0.01	3.11			-0.04	0.70
Variance 2			0.92	-0.01	0.28			-0.03	1.05

Notes

Prepurged 2L
Well evac. Stopped due to equipment issues

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-10 17:28:39

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 140 ft

Pump placement from TOC 135.1 ft

Well Information:

Well ID GWA-39RZ
Well diameter 2 in
Well Total Depth 140.1 ft
Screen Length 10 ft
Depth to Water 66.82 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.9798792 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 755.76 in
Total Volume Pumped 2.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	17:18:21	240.03	16.78	7.53	285.93	0.71	126.85	3.49	11.71
Last 5	17:22:21	480.02	16.99	7.52	301.51	1.01	127.90	2.72	13.86
Last 5	17:26:21	720.02	17.81	7.48	311.33	1.38	129.80	2.16	10.95
Last 5									
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.20	-0.01	15.59			-0.77	2.14
Variance 2			0.82	-0.04	9.81			-0.56	-2.91

Notes

Second set of LowFlow for evac in 39RZ
Well evacuated to top of screen

Grab Samples

Report Created: 2019-09-11 09:05:16
 Site: Plant Bowen **GWA-39RZ**
 GPS:
 Log Created: 2019-09-11 09:03:37
 Number Readings: 11
 Battery Type: SmarTROLLâ„¢ Battery Pack
 Battery SN: 637617
 Device Type: SmarTROLLâ„¢ MP
 Device SN: 553835

Created	Baro (mm Hg)	Temp (C)	RDO (mg/L)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (ÂµS/cm)	Sp Cond (ÂµS/cm)	Salinity (psu)	Resist (Ohm-cm)	Density (g/cm^3)	TDS (ppt)	Depth (ft)	Pressure (psi)	Air Temp (C)
9/11/2019 9:03	750.8	22.98	8.24	101.1	8.6	197.8	427.1	427	0.2	2342	0.997	0	-0.12	-0.051	25.5
9/11/2019 9:03	750.7	22.31	8.79	103.4	8.17	192.1	411.4	429.9	0.2	2431	0.998	0	-0.16	-0.068	25.5
9/11/2019 9:03	750.8	22.09	4.72	54.9	7.82	184	359.9	380.3	0.2	2778	0.998	0	-0.16	-0.067	25.5
9/11/2019 9:04	750.8	21.42	3.52	40.6	7.56	184.7	333.9	355.9	0.2	2995	0.998	0	-0.18	-0.08	25.5
9/11/2019 9:04	750.8	21.02	2.81	32.1	7.44	186.4	316.2	339.9	0.2	3162	0.998	0	-0.18	-0.078	25.5
9/11/2019 9:04	750.8	20.7	2.43	27.5	7.39	180.5	293.2	318.8	0.2	3411	0.998	0	-0.19	-0.083	25.5
9/11/2019 9:04	750.7	20.26	2.33	26.3	7.34	180.3	283.4	310.5	0.1	3528	0.998	0	-0.21	-0.093	25.4
9/11/2019 9:04	750.8	19.86	2.47	27.6	7.34	179.2	278.8	307.2	0.1	3587	0.998	0	-0.19	-0.083	25.5
9/11/2019 9:04	750.8	19.63	2.69	29.7	7.33	173.3	269.9	300.6	0.1	3705	0.998	0	-0.2	-0.089	25.5
9/11/2019 9:05	750.8	19.29	2.86	31.5	7.31	172.3	263.2	294.6	0.1	3799	0.998	0	-0.18	-0.077	25.4
9/11/2019 9:05	750.8	19.06	3.09	34	7.32	169.8	263.2	295.7	0.1	3799	0.998	0	-0.2	-0.086	25.5

Product Name: Low-Flow System

Date: 2019-09-09 16:29:34

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 155 ft

Pump placement from TOC 150.02 ft

Well Information:

Well ID GWA-40
Well diameter 2 in
Well Total Depth 155.02 ft
Screen Length 10 ft
Depth to Water 70.74 ft

Pumping Information:

Final Pumping Rate 135 mL/min
Total System Volume 0.7818305 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.48 in
Total Volume Pumped 3.55 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	16:11:39	240.02	21.82	7.11	159.52	0.24	70.78	8.25	37.15
Last 5	16:15:39	480.02	21.69	7.09	158.07	0.31	70.78	8.50	39.47
Last 5	16:19:39	720.03	21.55	7.08	158.48	0.29	70.78	8.60	41.23
Last 5	16:23:39	960.03	21.50	7.07	158.31	0.34	70.78	8.60	42.90
Last 5	16:27:39	1200.03	21.53	7.07	159.48	0.27	70.78	8.69	44.32
Variance 0			-0.14	-0.01	0.41			0.10	1.77
Variance 1			-0.05	-0.01	-0.18			-0.01	1.67
Variance 2			0.02	-0.01	1.17			0.10	1.43

Notes

Prepurged 3 liters

Grab Samples

GWA-40
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-10 10:59:23

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 102 ft

Pump placement from TOC 97.52 ft

Well Information:

Well ID GWA-41
Well diameter 2 in
Well Total Depth 102.52 ft
Screen Length 10 ft
Depth to Water 80.74 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.5452692 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.48 in
Total Volume Pumped 2.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:40:22	1439.98	21.46	5.73	43.94	0.64	80.78	7.12	81.86
Last 5	10:44:22	1679.98	21.75	5.67	43.16	0.56	80.78	7.05	83.66
Last 5	10:48:21	1919.96	21.77	5.66	42.23	0.61	80.78	7.07	84.35
Last 5	10:52:21	2159.96	21.75	5.65	42.28	0.59	80.78	7.01	85.33
Last 5	10:56:21	2399.95	21.85	5.66	44.12	0.71	80.78	7.07	85.12
Variance 0			0.01	-0.02	-0.93			0.02	0.69
Variance 1			-0.02	-0.01	0.05			-0.06	0.98
Variance 2			0.10	0.01	1.84			0.05	-0.21

Notes

Prepurged 2.0 liters

Grab Samples

GWA-41
Metals, Inorganics
DUP-01
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-10 12:01:21

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 129 ft

Pump placement from TOC 126.05 ft

Well Information:

Well ID GWA-41R
Well diameter 2 in
Well Total Depth 131.05 ft
Screen Length 10 ft
Depth to Water 80.59 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.9307815 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.6 in
Total Volume Pumped 2.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	11:43:02	240.03	21.33	6.70	249.71	0.25	80.64	0.71	38.19
Last 5	11:47:02	480.01	21.00	6.71	242.91	0.31	80.64	0.44	43.89
Last 5	11:51:02	720.00	20.88	6.72	240.59	0.58	80.64	0.35	46.89
Last 5	11:55:02	960.00	20.86	6.72	239.51	0.52	80.64	0.31	48.73
Last 5	11:59:02	1199.99	20.79	6.72	237.31	0.22	80.64	0.27	50.37
Variance 0			-0.12	0.00	-2.31			-0.09	3.00
Variance 1			-0.02	0.00	-1.08			-0.04	1.84
Variance 2			-0.07	0.00	-2.20			-0.03	1.64

Notes

Prepurged 2 liters

Grab Samples

GWA-41R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-10 14:02:15

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 88 ft

Pump placement from TOC 83 ft

Well Information:

Well ID GWA-42
Well diameter 2 in
Well Total Depth 87.90 ft
Screen Length 10 ft
Depth to Water 77.86 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.7477813 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	13:45:18	480.01	18.46	7.39	246.02	0.51	78.01	4.87	46.92
Last 5	13:49:18	720.01	18.12	7.43	248.43	0.61	78.09	4.88	46.99
Last 5	13:53:18	960.00	18.03	7.46	249.88	0.61	78.09	4.85	46.61
Last 5	13:57:18	1199.99	17.99	7.51	253.45	0.70	78.09	4.84	47.03
Last 5	14:01:18	1439.98	19.86	7.48	253.15	0.56	77.94	4.84	47.06
Variance 0			-0.10	0.04	1.45			-0.03	-0.38
Variance 1			-0.04	0.04	3.58			-0.00	0.42
Variance 2			1.87	-0.02	-0.30			-0.00	0.02

Notes

Prepurged 2 Liters.

Water level didn't stabilize and was below top of screen.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-10 14:45:46

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 88 ft

Pump placement from TOC 82.9 ft

Well Information:

Well ID GWA-42
Well diameter 2 in
Well Total Depth 87.90 ft
Screen Length 10 ft
Depth to Water 77.94 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.7477813 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 2.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	14:27:12	240.03	19.53	7.54	254.97	0.07	77.96	4.85	42.15
Last 5	14:31:12	480.02	19.90	7.54	253.18	0.11	77.96	4.81	44.19
Last 5	14:35:12	720.01	19.91	7.53	253.57	0.08	77.96	4.83	45.91
Last 5	14:39:12	960.00	20.04	7.53	252.74	0.14	77.96	4.80	47.10
Last 5	14:43:12	1199.99	19.74	7.53	253.90	0.07	77.96	4.83	48.08
Variance 0			0.01	-0.00	0.40			0.02	1.72
Variance 1			0.14	0.00	-0.83			-0.03	1.19
Variance 2			-0.30	-0.00	1.16			0.03	0.98

Notes

Prepurged 12 liters
Water stable 0.06' below top of screen. Pete Robinson authorized sample to be taken.

Grab Samples

GWA-42
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 10:20:49

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 92 ft

Pump placement from TOC 87.55 ft

Well Information:

Well ID GWA-43
Well diameter 2 in
Well Total Depth 92.55 ft
Screen Length 10 ft
Depth to Water 55.95 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.5009099 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 1.2 in
Total Volume Pumped 4.32 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:02:05	1200.03	19.32	5.62	28.35	3.15	56.05	7.81	92.43
Last 5	10:06:05	1440.03	19.36	5.58	28.09	2.22	56.05	8.06	92.60
Last 5	10:10:05	1680.03	19.32	5.55	28.04	1.72	56.05	8.28	92.70
Last 5	10:14:05	1920.02	19.34	5.54	27.95	1.16	56.05	8.24	92.54
Last 5	10:18:05	2160.01	19.28	5.53	28.07	1.35	56.05	8.12	92.57
Variance 0			-0.04	-0.03	-0.05			0.21	0.10
Variance 1			0.02	-0.01	-0.10			-0.03	-0.16
Variance 2			-0.06	-0.01	0.12			-0.13	0.03

Notes

Prepurged 1.5 liters

Grab Samples

GWA-43
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 09:19:01

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 112 ft

Pump placement from TOC 109.58 ft

Well Information:

Well ID GWA-43R
Well diameter 2 in
Well Total Depth 114.58 ft
Screen Length 10 ft
Depth to Water 56.18 ft

Pumping Information:

Final Pumping Rate 135 mL/min
Total System Volume 0.5901784 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 1.32 in
Total Volume Pumped 3.7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	09:00:57	240.06	18.64	7.66	281.85	8.72	56.28	5.91	129.45
Last 5	09:04:57	480.02	18.58	7.70	281.15	3.98	56.29	6.09	109.78
Last 5	09:08:57	720.02	18.58	7.73	280.19	2.79	56.29	6.30	94.30
Last 5	09:12:57	960.02	18.62	7.74	278.46	1.66	56.29	6.45	82.61
Last 5	09:16:57	1200.02	18.69	7.75	278.07	1.68	56.29	6.48	74.44
Variance 0			-0.00	0.03	-0.96			0.20	-15.48
Variance 1			0.04	0.02	-1.73			0.15	-11.69
Variance 2			0.08	0.00	-0.38			0.03	-8.17

Notes

Prepurged 1.5 liters

Grab Samples

GWA-43R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 11:39:53

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 88 ft

Pump placement from TOC 86.80 ft

Well Information:

Well ID GWA-44
Well diameter 2 in
Well Total Depth 91.1 ft
Screen Length 10 ft
Depth to Water 56.30 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.4830562 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 1.8 in
Total Volume Pumped 2.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:21:41	240.01	20.76	4.38	90.44	0.37	56.45	4.86	105.27
Last 5	11:25:41	480.02	20.75	4.37	89.54	0.15	56.45	4.84	107.92
Last 5	11:29:41	720.02	20.84	4.38	88.78	0.03	56.48	4.85	109.93
Last 5	11:33:41	960.02	20.87	4.37	88.32	0.30	56.48	4.84	111.63
Last 5	11:37:41	1200.02	20.79	4.36	88.35	0.08	56.48	4.82	113.45
Variance 0			0.09	0.00	-0.76			0.01	2.01
Variance 1			0.03	-0.00	-0.46			-0.01	1.70
Variance 2			-0.08	-0.01	0.03			-0.02	1.82

Notes

Prepurged 2 liters

Grab Samples

GWA-44
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 14:42:38

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 57 ft

Pump placement from TOC 52.4 ft

Well Information:

Well ID GWC-45
Well diameter 2 in
Well Total Depth 67.55 ft
Screen Length 10 ft
Depth to Water 46.28 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.3446901 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 40.7 in
Total Volume Pumped 3.12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:24:16	480.04	20.12	5.01	22.45	1.26	48.75	4.77	80.40
Last 5	14:28:16	720.03	20.08	4.98	22.40	0.66	49.03	4.75	80.63
Last 5	14:32:16	960.03	20.13	4.97	22.37	0.36	49.32	4.85	81.24
Last 5	14:36:17	1201.03	20.48	4.94	22.45	0.70	49.49	5.02	83.08
Last 5	14:40:17	1441.03	20.26	4.93	22.42	0.38	49.68	5.19	84.41
Variance 0			0.05	-0.02	-0.02			0.11	0.60
Variance 1			0.36	-0.03	0.07			0.16	1.84
Variance 2			-0.22	-0.01	-0.02			0.17	1.34

Notes

Prepurged 2 liters

Grab Samples

GWC-45
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-10-21 10:28:49

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Landfill Resample
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 513028
Turbidity Make/Model LaMotte2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 68 ft

Pump placement from TOC 62.6 ft

Well Information:

Well ID GWC-45
Well diameter 2 in
Well Total Depth 67.6 ft
Screen Length 10 ft
Depth to Water 47.76 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.6605128 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 34.56 in
Total Volume Pumped 3.36 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:09:51	720.02	18.11	4.91	24.20	0.20	50.26	5.91	164.69
Last 5	10:13:51	960.02	18.27	4.86	23.95	0.15	50.40	5.88	172.20
Last 5	10:17:51	1200.02	18.25	4.84	23.96	0.06	50.48	5.82	178.47
Last 5	10:21:51	1440.02	18.16	4.80	23.52	0.04	50.57	5.79	184.78
Last 5	10:25:51	1680.02	18.14	4.81	23.45	0.05	50.64	5.77	187.58
Variance 0			-0.02	-0.02	0.00			-0.06	6.26
Variance 1			-0.08	-0.04	-0.44			-0.03	6.31
Variance 2			-0.03	0.01	-0.07			-0.02	2.80

Notes

Prepurged 1.5L

Grab Samples

GWC-45
Metals (Sb & Cu only)

Product Name: Low-Flow System

Date: 2019-09-11 13:49:12

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 128 ft

Pump placement from TOC 123.2 ft

Well Information:

Well ID GWC-45R
Well diameter 2 in
Well Total Depth 130.12 ft
Screen Length 10 ft
Depth to Water 53.48 ft

Pumping Information:

Final Pumping Rate 105 mL/min
Total System Volume 0.6615932 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.96 in
Total Volume Pumped 2.64 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:29:22	480.02	21.86	7.07	340.73	0.13	53.54	3.71	34.34
Last 5	13:33:22	720.02	22.00	7.12	341.35	0.08	53.54	3.80	41.31
Last 5	13:37:22	960.02	21.95	7.15	340.99	0.03	53.54	3.89	45.25
Last 5	13:41:22	1200.03	21.78	7.18	339.15	0.21	53.54	3.90	47.28
Last 5	13:45:22	1440.03	21.33	7.20	340.03	0.17	53.54	3.97	48.30
Variance 0			-0.04	0.03	-0.36			0.09	3.93
Variance 1			-0.18	0.03	-1.84			0.01	2.04
Variance 2			-0.45	0.03	0.89			0.07	1.02

Notes

Prepurged 2 liters

Grab Samples

GWC-45R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 16:03:21

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 58 ft

Pump placement from TOC 53.8 ft

Well Information:

Well ID GWC-46R
Well diameter 2 in
Well Total Depth 59.10 ft
Screen Length 10 ft
Depth to Water 41.90 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.3491535 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 11.4 in
Total Volume Pumped 2.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:45:11	240.03	23.19	7.32	460.78	0.15	43.05	6.45	68.38
Last 5	15:49:11	480.02	22.85	7.32	452.32	0.12	42.93	6.39	68.62
Last 5	15:53:11	720.03	22.44	7.34	449.64	0.15	42.90	6.34	67.38
Last 5	15:57:11	960.03	21.87	7.36	446.51	0.14	42.87	6.32	66.36
Last 5	16:01:11	1200.03	22.13	7.36	442.19	0.13	42.85	6.25	65.33
Variance 0			-0.40	0.02	-2.69			-0.05	-1.25
Variance 1			-0.58	0.02	-3.13			-0.02	-1.01
Variance 2			0.26	0.00	-4.31			-0.07	-1.03

Notes

Prepurged 2 liters

Grab Samples

GWC-46R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-12 09:58:03

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 68 ft

Pump placement from TOC 62.6 ft

Well Information:

Well ID GWC-47
Well diameter 2 in
Well Total Depth 67.6 ft
Screen Length 10 ft
Depth to Water 42.83 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.6585128 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	09:38:30	720.02	20.38	7.35	237.90	0.43	42.85	2.74	99.31
Last 5	09:42:30	960.02	20.43	7.40	237.03	0.37	42.86	2.77	93.85
Last 5	09:46:30	1200.02	20.48	7.43	236.06	0.18	42.86	2.79	90.93
Last 5	09:50:30	1440.03	20.59	7.45	234.10	0.32	42.86	2.84	88.87
Last 5	09:54:30	1680.02	20.70	7.48	233.65	0.19	42.85	2.88	84.91
Variance 0			0.05	0.02	-0.97			0.02	-2.92
Variance 1			0.11	0.03	-1.96			0.05	-2.06
Variance 2			0.11	0.02	-0.45			0.04	-3.97

Notes

Prepurged 1.25L

Grab Samples

GWC-47
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 15:10:51

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 85 ft

Pump placement from TOC 79.6 ft

Well Information:

Well ID GWC-47R
Well diameter 2 in
Well Total Depth 84.6 ft
Screen Length 10 ft
Depth to Water 42.83 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.734391 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 51.6 in
Total Volume Pumped 6.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:53:05	2400.02	22.66	7.45	300.11	0.25	46.99	2.56	51.15
Last 5	14:57:05	2640.02	22.76	7.48	298.65	0.25	47.05	2.70	50.62
Last 5	15:01:05	2880.41	22.57	7.50	299.71	0.23	47.12	2.82	50.31
Last 5	15:05:05	3120.41	22.84	7.53	300.12	0.22	47.15	2.96	49.57
Last 5	15:09:05	3360.41	23.10	7.55	301.03	0.18	47.13	3.05	49.38
Variance 0			-0.19	0.02	1.06			0.12	-0.31
Variance 1			0.27	0.04	0.41			0.13	-0.74
Variance 2			0.26	0.01	0.91			0.10	-0.19

Notes

Prepurged 1L

Grab Samples

GWC-47R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 13:05:06

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 60 ft

Pump placement from TOC 54.5 ft

Well Information:

Well ID GWC-48
Well diameter 2 in
Well Total Depth 59.5 ft
Screen Length 10 ft
Depth to Water 39.47 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.6138785 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 3.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	12:47:26	480.02	21.01	4.81	38.36	0.10	39.56	3.90	172.52
Last 5	12:51:26	720.02	21.15	4.88	39.16	0.13	39.58	3.78	162.31
Last 5	12:55:26	960.05	21.39	4.91	39.25	0.11	39.60	3.62	156.62
Last 5	12:59:26	1200.05	21.39	4.93	38.98	0.21	39.58	3.52	153.01
Last 5	13:03:26	1440.05	21.09	4.93	38.78	0.09	39.58	3.50	149.25
Variance 0			0.25	0.03	0.09			-0.16	-5.68
Variance 1			-0.00	0.02	-0.27			-0.09	-3.61
Variance 2			-0.30	0.00	-0.20			-0.02	-3.76

Notes

Prepurged 1L

Grab Samples

GWC-48
Metals, Inorganics
DUP-2
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 10:20:29

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 135 ft

Pump placement from TOC 129.4 ft

Well Information:

Well ID GWC-49R
Well diameter 2 in
Well Total Depth 134.4 ft
Screen Length 10 ft
Depth to Water 58.0 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.9575621 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:02:58	960.02	20.36	8.12	238.18	0.09	58.02	5.17	68.55
Last 5	10:07:00	1202.02	20.39	8.15	237.80	0.06	58.03	5.24	62.75
Last 5	10:11:00	1442.02	20.42	8.19	236.98	0.07	58.03	5.31	63.45
Last 5	10:15:00	1682.02	20.43	8.21	236.15	0.13	58.02	5.39	57.80
Last 5	10:19:00	1922.02	20.58	8.22	236.05	0.22	58.02	5.45	54.82
Variance 0			0.03	0.04	-0.82			0.07	0.70
Variance 1			0.01	0.03	-0.83			0.08	-5.65
Variance 2			0.14	0.01	-0.10			0.07	-2.98

Notes

Prepurged 1L

Grab Samples

GWC-49R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-11 11:43:51

Project Information:

Operator Name Audrey Crafton
Company Name Resolute
Project Name Cells 9&10
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 553835
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 95 ft

Pump placement from TOC 89.5 ft

Well Information:

Well ID GWC-**49Z**
Well diameter 2 in
Well Total Depth 94.5 ft
Screen Length 10 ft
Depth to Water 57.26 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.7790251 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 12.6 in
Total Volume Pumped 6.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:26:08	2160.97	20.96	5.44	26.89	1.28	58.28	6.65	160.82
Last 5	11:30:08	2400.97	20.97	5.43	26.74	1.26	58.30	6.64	160.33
Last 5	11:34:08	2640.97	21.11	5.40	26.62	1.69	58.30	6.67	162.39
Last 5	11:38:08	2880.97	21.02	5.36	26.25	1.21	58.30	6.71	164.83
Last 5	11:42:08	3120.97	21.19	5.35	26.19	1.12	58.31	6.73	166.83
Variance 0			0.13	-0.03	-0.12			0.03	2.06
Variance 1			-0.08	-0.03	-0.37			0.04	2.44
Variance 2			0.17	-0.02	-0.06			0.02	2.00

Notes

Prepurged 1L

Grab Samples

GWC-**49Z**
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-13 11:18:26

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 1 & 2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 97 ft

Pump placement from TOC 91.7 ft

Well Information:

Well ID GWA-50
Well diameter 2 in
Well Total Depth 96.7 ft
Screen Length 10 ft
Depth to Water 62.24 ft

Pumping Information:

Final Pumping Rate 120 mL/min
Total System Volume 0.523227 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 118.32 in
Total Volume Pumped 9.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:57:55	3600.03	18.98	5.64	23.52	0.16	71.47	6.50	97.67
Last 5	11:01:55	3840.03	18.90	5.64	23.61	0.18	71.66	6.53	98.17
Last 5	11:05:55	4080.03	18.83	5.63	23.77	0.20	71.83	6.51	97.64
Last 5	11:09:55	4320.03	18.89	5.65	23.86	0.30	71.97	6.48	95.90
Last 5	11:13:55	4560.03	18.96	5.61	24.06	0.24	72.10	6.46	99.22
Variance 0			-0.07	-0.02	0.16			-0.01	-0.53
Variance 1			0.06	0.02	0.09			-0.03	-1.74
Variance 2			0.07	-0.04	0.19			-0.02	3.31

Notes

Prepurged 4 liters

Grab Samples

GWA-50
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-12 16:02:56

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 1 & 2
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 142 ft

Pump placement from TOC 136.5 ft

Well Information:

Well ID GWA-50R
Well diameter 2 in
Well Total Depth 141.50 ft
Screen Length 10 ft
Depth to Water 77.47 ft

Pumping Information:

Final Pumping Rate 135 mL/min
Total System Volume 0.7240812 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.6 in
Total Volume Pumped 15.08 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	15:44:26	5520.02	20.39	5.83	36.03	0.08	77.51	9.80	109.59
Last 5	15:48:26	5760.04	20.26	5.84	36.70	0.08	77.51	9.80	109.26
Last 5	15:52:26	6000.04	20.17	5.87	37.15	0.12	77.51	9.82	108.25
Last 5	15:56:26	6240.04	19.79	5.89	37.74	0.22	77.51	10.02	107.43
Last 5	16:00:26	6480.04	19.75	5.89	38.12	0.09	77.51	9.82	107.08
Variance 0			-0.09	0.03	0.45			0.02	-1.01
Variance 1			-0.38	0.02	0.60			0.20	-0.82
Variance 2			-0.04	0.00	0.38			-0.20	-0.35

Notes

Prepurged 1.5 liters

Grab Samples

GWA-50R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-04 15:32:34

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 95 ft

Pump placement from TOC 89.2 ft

Well Information:

Well ID GWA-51RZ
Well diameter 2 in
Well Total Depth 94.2 ft
Screen Length 10 ft
Depth to Water 58.05 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.7790251 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 317.4 in
Total Volume Pumped 20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	15:13:22	9839.72	23.25	7.42	348.96	0.03	82.87	4.40	57.40
Last 5	15:17:22	10079.72	23.05	7.42	346.78	0.09	83.30	4.42	58.25
Last 5	15:21:22	10319.71	23.09	7.41	347.37	0.26	83.75	4.42	58.10
Last 5	15:25:22	10559.70	23.36	7.42	349.36	0.30	84.20	4.44	58.14
Last 5	15:29:22	10799.70	22.72	7.39	352.47	0.07	84.50	4.45	60.34
Variance 0			0.04	-0.00	0.58			-0.00	-0.15
Variance 1			0.27	0.00	1.99			0.02	0.04
Variance 2			-0.64	-0.03	3.11			0.01	2.21

Notes

Prepurged 0.25L

Well has drawdown issues. Water level dropped below top of screen at 1528. Performing well evacuation. Will collect sample 9/5/19.

Grab Samples

Report Created: 2019-09-05 09:23:14
 Site: Plant Bowen **GWA-51RZ**
 GPS:
 Log Created: 2019-09-05 09:21:35
 Number Readings: 11
 Battery Type: SmarTROLLâ„ƒ Battery Pack
 Battery SN: 466615
 Device Type: SmarTROLLâ„ƒ MP
 Device SN: 541714

Created	Baro (atm)	Temp (C)	RDO (mg/L)	RDO Sat (%)	pH (pH)	ORP (mV)	Act Cond (ÂµS/cm)	Sp Cond (ÂµS/cm)	Salinity (psu)	Resist (Ohm-cm)	Density (g/cm^3)	TDS (ppm)	Depth (ft)	Pressure (psi)	Air Temp (C)
9/5/2019 9:21	0.978	27.52	4.28	55.5	7.38	150.2	462.2	440.9	0.2	2163	0.997	286.59	-0.37	-0.158	32
9/5/2019 9:21	0.978	27.51	4.3	55.8	7.38	149	455.1	434.3	0.2	2197	0.997	282.32	-0.37	-0.162	32
9/5/2019 9:21	0.978	27.52	4.32	56	7.37	147.9	455.6	434.7	0.2	2195	0.997	282.56	-0.37	-0.16	32
9/5/2019 9:22	0.978	27.54	4.32	56.1	7.37	146.8	456	434.9	0.2	2193	0.997	282.71	-0.35	-0.151	32.1
9/5/2019 9:22	0.978	27.59	4.34	56.3	7.36	145.7	456.3	435.1	0.2	2191	0.997	282.79	-0.32	-0.14	32.1
9/5/2019 9:22	0.978	27.63	4.36	56.6	7.36	144.7	456.5	435	0.2	2190	0.997	282.75	-0.4	-0.174	32.2
9/5/2019 9:22	0.978	27.68	4.38	56.9	7.35	143.8	456.7	434.8	0.2	2190	0.996	282.59	-0.37	-0.162	32.3
9/5/2019 9:22	0.978	27.73	4.38	57	7.34	142.9	456.8	434.4	0.2	2189	0.996	282.38	-0.37	-0.16	32.4
9/5/2019 9:22	0.978	27.8	4.39	57.2	7.34	142	457	434	0.2	2188	0.996	282.07	-0.36	-0.155	32.5
9/5/2019 9:23	0.978	27.87	4.4	57.4	7.34	141.2	457.1	433.7	0.2	2188	0.996	281.89	-0.38	-0.166	32.6
9/5/2019 9:23	0.978	27.96	4.39	57.4	7.33	140.4	457.3	433.2	0.2	2187	0.996	281.57	-0.35	-0.154	32.7

Product Name: Low-Flow System

Date: 2019-09-04 11:26:12

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 85 ft

Pump placement from TOC 79.0 ft

Well Information:

Well ID GWA-52
Well diameter 2 in
Well Total Depth 84.0 ft
Screen Length 10 ft
Depth to Water 58.6 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.734391 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.12 in
Total Volume Pumped 2.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:10:38	360.01	21.17	7.29	271.63	0.06	58.61	6.95	128.64
Last 5	11:13:38	540.01	21.08	7.34	265.99	0.05	58.61	6.97	126.74
Last 5	11:16:38	720.00	21.06	7.38	265.21	0.13	58.61	6.96	126.68
Last 5	11:19:38	900.00	20.97	7.41	263.51	0.10	58.61	6.96	126.15
Last 5	11:22:38	1079.99	21.03	7.43	262.78	0.08	58.61	6.98	126.19
Variance 0			-0.02	0.04	-0.78			-0.01	-0.07
Variance 1			-0.09	0.03	-1.70			-0.01	-0.53
Variance 2			0.07	0.02	-0.73			0.03	0.04

Notes

Prepurged 1L
Well performed well

Grab Samples

GWA-52
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-05 11:04:21

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Bladder
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 120 ft

Pump placement from TOC 115.9 ft

Well Information:

Well ID GWA-53
Well diameter 2 in
Well Total Depth 120.9 ft
Screen Length 10 ft
Depth to Water 59.63 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.6256108 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 2.4 in
Total Volume Pumped 3.52 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:46:39	960.02	20.84	7.46	276.17	3.21	59.65	6.68	68.25
Last 5	10:50:39	1200.02	20.70	7.51	275.44	3.34	59.65	6.72	61.21
Last 5	10:54:39	1440.02	20.75	7.53	274.76	2.68	59.65	6.73	57.24
Last 5	10:58:39	1680.03	20.57	7.56	274.74	3.00	59.65	6.80	54.32
Last 5	11:02:39	1920.03	20.84	7.57	274.12	2.35	59.65	6.84	52.54
Variance 0			0.05	0.03	-0.67			0.00	-3.97
Variance 1			-0.18	0.03	-0.02			0.07	-2.92
Variance 2			0.27	0.01	-0.62			0.05	-1.78

Notes

Prepurged 10 liters

Grab Samples

GWA-53
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-05 13:30:32

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Bladder
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 169 ft

Pump placement from TOC 163.8 ft

Well Information:

Well ID GWA-53R
Well diameter 2 in
Well Total Depth 168.6 ft
Screen Length 10 ft
Depth to Water 60.28 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.8443186 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.48 in
Total Volume Pumped 8.32 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	13:07:50	2640.03	21.46	7.68	281.23	6.16	60.32	6.65	36.56
Last 5	13:15:50	3120.03	21.11	7.67	280.69	3.32	60.32	6.46	37.58
Last 5	13:19:50	3360.04	21.35	7.69	280.42	1.22	60.32	6.37	37.07
Last 5	13:23:50	3600.03	21.15	7.68	279.35	2.12	60.32	6.40	37.73
Last 5	13:27:50	3840.04	21.26	7.68	277.84	3.07	60.32	6.40	37.89
Variance 0			0.24	0.01	-0.27			-0.09	-0.51
Variance 1			-0.20	-0.01	-1.07			0.03	0.66
Variance 2			0.11	0.01	-1.51			-0.00	0.16

Notes

Prepurged 8 liters

Grab Samples

GWA-53R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-05 10:16:52

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 77 ft

Pump placement from TOC 71.1 ft

Well Information:

Well ID GWA-54
Well diameter 2 in
Well Total Depth 76.1 ft
Screen Length 10 ft
Depth to Water 52.73 ft

Pumping Information:

Final Pumping Rate 175 mL/min
Total System Volume 0.6986836 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.12 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	10:02:22	360.01	19.28	7.43	231.38	0.05	52.74	2.93	69.78
Last 5	10:05:22	540.01	19.21	7.45	233.42	0.06	52.74	2.82	68.43
Last 5	10:08:22	720.01	19.21	7.49	234.67	0.07	52.74	2.94	67.46
Last 5	10:11:22	900.00	19.17	7.52	235.47	0.05	52.74	3.10	66.70
Last 5	10:14:22	1079.99	19.21	7.54	235.90	0.01	52.74	3.23	65.61
Variance 0			0.00	0.04	1.25			0.12	-0.97
Variance 1			-0.04	0.03	0.81			0.15	-0.76
Variance 2			0.04	0.02	0.42			0.13	-1.09

Notes

Prepurged 2L
Well performed well

Grab Samples

GWA-54
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-05 11:18:25

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 66 ft

Pump placement from TOC 60.2 ft

Well Information:

Well ID GWA-55
Well diameter 2 in
Well Total Depth 65.2 ft
Screen Length 10 ft
Depth to Water 45.21 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.649586 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.12 in
Total Volume Pumped 3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	11:04:08	180.03	20.70	7.26	414.83	0.08	45.22	2.20	71.52
Last 5	11:07:08	360.01	20.59	7.26	413.70	0.06	45.22	2.21	70.69
Last 5	11:10:08	540.01	20.48	7.26	413.63	0.07	45.22	2.28	70.11
Last 5	11:13:08	720.00	20.61	7.26	412.68	0.12	45.22	2.32	69.59
Last 5	11:16:08	900.00	20.42	7.26	411.77	0.02	45.22	2.38	69.25
Variance 0			-0.11	-0.00	-0.06			0.07	-0.58
Variance 1			0.14	-0.00	-0.96			0.03	-0.51
Variance 2			-0.19	-0.00	-0.91			0.06	-0.34

Notes

Prepurged 2L
Well performed well

Grab Samples

GWA-55
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-05 12:19:27

Project Information:

Operator Name Veronica Fay
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 541714
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter 0.17 in
Tubing Length 106 ft

Pump placement from TOC 100.7 ft

Well Information:

Well ID GWA-55R
Well diameter 2 in
Well Total Depth 105.4 ft
Screen Length 10 ft
Depth to Water 45.08 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.8281228 L
Calculated Sample Rate 180 sec
Stabilization Drawdown 0.24 in
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Last 5	12:04:26	360.02	20.06	7.48	334.94	0.44	45.10	0.15	38.25
Last 5	12:07:26	540.00	20.32	7.51	339.48	0.65	45.10	0.15	40.94
Last 5	12:10:26	720.00	21.30	7.52	340.94	0.50	45.10	0.18	42.91
Last 5	12:13:26	900.00	21.53	7.53	341.58	0.45	45.10	0.22	44.82
Last 5	12:16:26	1079.99	21.39	7.53	344.99	0.43	45.10	0.28	46.83
Variance 0			0.98	0.01	1.45			0.04	1.97
Variance 1			0.23	0.01	0.65			0.04	1.91
Variance 2			-0.14	0.00	3.41			0.06	2.01

Notes

Prepurged 1L
Well performed well. Dropped Pump rate to 130 ml/min at 1206 to prevent turbidity from rising.

Grab Samples

GWA-55R
Metals, Inorganics

Product Name: Low-Flow System

Date: 2019-09-04 14:24:00

Project Information:

Operator Name Joe Booth
Company Name Resolute
Project Name Cells 3&4
Site Name Plant Bowen
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 613229
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Dedicated
Tubing Type LDPE
Tubing Diameter .17 in
Tubing Length 85 ft

Pump placement from TOC 80.90 ft

Well Information:

Well ID GWA-56
Well diameter 2 in
Well Total Depth 85.90 ft
Screen Length 10 ft
Depth to Water 40.69 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.469391 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 4.68 in
Total Volume Pumped 9.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 1000%	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 1000%
Stabilization									
Last 5	14:04:51	3600.04	23.35	7.84	574.99	0.62	41.08	1.79	19.97
Last 5	14:08:51	3840.04	23.30	7.84	568.32	0.45	41.08	1.86	21.94
Last 5	14:12:51	4080.04	23.06	7.82	568.37	0.38	41.08	1.96	22.64
Last 5	14:16:51	4320.04	22.60	7.82	563.23	1.02	41.08	2.02	24.37
Last 5	14:20:51	4560.04	22.96	7.79	567.53	0.85	41.08	2.11	24.68
Variance 0			-0.24	-0.02	0.05			0.10	0.69
Variance 1			-0.47	0.00	-5.14			0.06	1.73
Variance 2			0.37	-0.03	4.30			0.09	0.31

Notes

Prepurged 1.5 liters

Grab Samples

GWA-56
Metals, Inorganics

DQE SUMMARIES

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616508

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWC-6RZ	03/21/19	II	<u>QC Samples</u>		
GWC-6	03/21/19	II	FBL032119	03/21/19	II
GWA-4RZ	03/21/19	II	EQBL032119	03/21/19	II
GWC-7Z	03/21/19	II			
GWC-9	03/21/19	II			

These samples were collected from Landfill Cells 1&2 on March 21, 2019. Sample FBL032119 is a field blank sample and EQBL032119 is an equipment blank sample. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL031919 (SDG: 2616511) collected on the tubing
- EQBL032119 (SDG 2616508) collected on the nitrile gloves
- EQBL032219 (SDG 2616600) collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary. Field blank FBL032119 is associated with the samples in this SDG.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for field and equipment blank contamination, and MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A batch MS/MSD analysis for mercury was performed on project sample GWC-6RZ and the recoveries and RPD were within QC limits. A batch MS/MSD for metals was performed on sample GWC-7Z, and the recoveries were outside of QC limits for calcium. The MS recovery was above the upper limit, and the MSD recovery was below the lower QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than 4x the spiked concentration: **Reason Code: M**

Action: No qualification was required because the sample result was greater than 4x the spike concentration.

Post Digestion Spike (PDS)

A PDS analysis was not performed on any project samples for metals.

Field Duplicate Precision

No field duplicate sample pairs were collected and submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy is measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The equipment and field blanks associated with the samples in this SDG reported mercury and calcium between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: The positive mercury results less than 5 times the blank value were qualified as not detected due to possible blank contamination flagged "U". No qualification was necessary for calcium because the associated results were greater than 5 times the blank value.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-6	Ca	50x	GWA-4RZ	Ca	50x
GWC-7Z	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of method, field, and equipment blank contamination, and MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained chloride between the MDL and the RL, indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL**

Action: The chloride results for samples GWC-6RZ, GWC-6, GWC-7Z, EQBL032119, FBL032119 were qualified as not detected due to possible blank contamination flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for anions were performed project samples GWC-6RZ and GWC-6 from this SDG. The recoveries and RPDs were within QC limits with the exception of the MSD recovery for sulfate in sample GWC-6RZ, which was above the upper QC limit.

Action: No qualification was necessary because the MS recovery and RPD were within QC limits.

Field Duplicate Precision

No field duplicate sample pairs were collected and submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment and field blanks associated with the samples in this SDG reported chloride and sulfate between the MDL and RL. Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF.**

Action: The associated chloride results in EQBL032119 and FBL032119 were considered not detected due to method blank contamination and therefore, not used in the evaluation of potential cross contamination during sampling. No qualification was necessary for sulfate because the associated results were greater than five times the blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected and submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment blanks associated with the samples in this SDG reported TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the validator.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-6RZ, GWC-6, GWA-4RZ, GWC-7Z, and GWC-9 along with field and equipment blanks were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: DWK 04/23/19
Checked By/Date: JAH 04/24/19
Revised by/Date: JAH 07/29/19

**TABLE 1
SUMMARY OF DATA QUALIFIERS**

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616508
SAMPLING DATE: March 21, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-6RZ	GWC-6RZ	N	2616508	6020B	barium	0.0075	J	J	--	mg/L
GWC-6RZ	GWC-6RZ	N	2616508	6020B	beryllium	0.000076	J	J	--	mg/L
GWC-6RZ	GWC-6RZ	N	2616508	6020B	chromium	0.0025	J	J	--	mg/L
GWC-6RZ	GWC-6RZ	N	2616508	7470A	mercury	0.000039	J	U*	BE	mg/L
GWC-6RZ	GWC-6RZ	N	2616508	300.0	chloride	1.5	B	U*	BL	mg/L
GWC-6	GWC-6	N	2616508	6020B	barium	0.0074	J	J	--	mg/L
GWC-6	GWC-6	N	2616508	6020B	calcium	14.9	J, D3	J	--	mg/L
GWC-6	GWC-6	N	2616508	6020B	chromium	0.0029	J	J	--	mg/L
GWC-6	GWC-6	N	2616508	6020B	copper	0.0018	J	J	--	mg/L
GWC-6	GWC-6	N	2616508	7470A	mercury	0.000045	J	U*	BE	mg/L
GWC-6	GWC-6	N	2616508	300.0	chloride	1.4	B	U*	BL	mg/L
GWA-4RZ	GWA-4RZ	N	2616508	6020B	boron	0.0066	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2616508	6020B	zinc	0.0034	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2616508	7470A	mercury	0.000068	J	U*	BE	mg/L
GWA-4RZ	GWA-4RZ	N	2616508	300.0	fluoride	0.19	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2616508	6020B	arsenic	0.00077	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2616508	6020B	cobalt	0.00059	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2616508	6020B	nickel	0.00099	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2616508	7470A	mercury	0.000043	J	U*	BE	mg/L
GWC-7Z	GWC-7Z	N	2616508	300.0	chloride	1.0	B	U*	BL	mg/L
GWC-9	GWC-9	N	2616508	6020B	beryllium	0.00015	J	J	--	mg/L
GWC-9	GWC-9	N	2616508	6020B	boron	0.0060	J	J	--	mg/L
GWC-9	GWC-9	N	2616508	6020B	nickel	0.0010	J	J	--	mg/L
GWC-9	GWC-9	N	2616508	6020B	zinc	0.0024	J	J	--	mg/L
GWC-9	GWC-9	N	2616508	7470A	mercury	0.000042	J	U*	BE	mg/L
FBL032119	Field Blank	FB	2616508	300.0	chloride	0.058	J, B	U*	BL	mg/L
FBL032119	Field Blank	FB	2616508	300.0	sulfate	0.048	J	J	--	mg/L
EQBL32119	Equipment Blank	EB	2616508	7470A	mercury	0.000046	J	J	--	mg/L
EQBL32119	Equipment Blank	EB	2616508	2540C	total dissolved solids	11.0	J	J	--	mg/L
EQBL32119	Equipment Blank	EB	2616508	300.0	chloride	0.069	J, B	U*	BL	mg/L
EQBL32119	Equipment Blank	EB	2616600	300.0	sulfate	0.028	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.
 J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".
 BL = Laboratory blank contamination. The result should be considered "not-detected".
 -- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL); estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.
 U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: DWK 04/23/19
 Checked by/Date: JAH 04/24/19
 Revised by/Date: JAH 07/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616508

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 03/21/19 Prep: metals – 03/27/19 Hg – 03/27/19 Anal: metals: 03/28/19 Hg – 03/28/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 12 MB 113834 Hg = ND p. 13 MB 113720 = ND</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) Ca= 0.019J x5 = 0.095 mg/L EQBL032119 (SDG 2616508) Hg = 0.000046J x5 = 0.00023 mg/L EQBL032219 (SDG 2616600) Hg = 0.00011J x5 = 0.00055 mg/L</p> <p>Assoc. results < 5x flagged "U*", results < RL become the MDL: Reason Code: BE Hg - GWC-6RZ, GWC-6, GWA-4RZ, GWC-7Z, GWC-9 Ca - none</p> <p><u>Field Blank:</u> FBL032119 = All ND</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 12 LCS 113835 Hg = 102% p. 13 LCS 113721 metals = All OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG</p>
	<input checked="" type="checkbox"/>		<p>Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) p. 12 GWC-6RZ Hg = 99, 97% RPD = 3 OK p. 14 GWC-7Z Ca = 144, 65% RPD = 3 Reason Code: M+/M- = M No flag, sample result > 4x spike concentration</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)
No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616508

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (Cl, SO₄, F – 28 days) Coll: 03/21/19 Anal: 04/02/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 16 MB 114378 Cl = 0.31 J x5 = 1.55 mg/L Assoc. results flagged "U*" Reason Code: BL Results become the RL: GWC-6RZ, GWC-6, GWC-7Z Results < RL become the MDL: EQBL032119, FBL032119</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) SO₄ = 0.048 J x5 = 0.24 mg/L Cl = 0.091 U* <i>Flagged for MB, no add. flags necessary</i> EQBL032119 (SDG 2616508) SO₄ = 0.028 J x5 = 0.14 mg/L Cl = 0.069 U* <i>Flagged for MB, no add. flags necessary</i> EQBL032219 (SDG 2616600) SO₄ = 0.029 U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.065 J x5 = 0.325 mg/L Assoc. results flagged "U*": results < RL become the MDL, Reason Code: BE <i>None, assoc. results > 5x blank</i></p> <p><u>Field Blank:</u> FBL032119 SO₄ = 0.048 J x5 = 0.24 mg/L Assoc. results flagged "U*", results < RL become the MDL, Reason Code: BF <i>None, assoc. results > 5x blank</i> Cl = 0.058 U* <i>Flagged for MB, no add. flags necessary</i></p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 16 LCS 114379 – All OK</p>
	<input checked="" type="checkbox"/>		<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG</p>

Anions by EPA 300.0 (cont.)

YES NO NA

COMMENTS

Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)

p. 16 GWC-6RZ SO₄ = 110, 112% RPD = 1 **Reason Code: M+**

No flag necessary, MS and RPD OK

p. 16 GWC-6 (MS only) %Rec OK

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616508

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19; revised 07/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/21/19 Anal: 03/28/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL031919 (SDG 2616511) TDS = 12.0J mg/L EQBL032119 (SDG 2616508) TDS = 11.0J mg/L EQBL032219 (SDG 2616600) TDS = ND <i>No flags applied due to new ES rule</i> <u>Field Blank:</u> FBL032119 TDS = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 15 LCS 114103 TDS = 106% - OK
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG p. 15 lab dup on GWC-6RZ RPD = 6 OK
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616509

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the Laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-1	03/20/19	II	<u>QC Samples</u>		
GWA-2	03/20/19	II	Dup-2	03/20/19	II
GWA-5	03/20/19	II			
GWA-3	03/20/19	II			

These samples were collected from Landfill Cells 1&2 on March 20, 2019. Sample Dup-2 is a field duplicate of GWA-1. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL031919 (SDG: 2616511) collected on the tubing
- EQBL032119 (SDG 2616508) collected on the nitrile gloves
- EQBL032219 (SDG 2616600) collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary. Field blank FBL031919 (SDG 2616511) is associated with the samples in this SDG.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for metals were not performed on project samples in this SDG.

Post Digestion Spike (PDS)

A PDS analysis was not performed on any project samples for metals.

Field Duplicate Precision

One field duplicate sample pair (Dup-2/GWA-1) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy is measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The equipment and field blanks associated with the samples in this SDG reported mercury and calcium between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: The positive mercury results less than 5 times the blank value were qualified as not detected due to possible blank contamination flagged "U". No qualification was necessary for calcium because the associated results were greater than 5 times the blank value.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

Sample	Metal	Dilution	Sample	Metal	Dilution
GWA-1	Ca	50x	Dup-2	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of method, field, and equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained chloride between the MDL and the RL, indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL**

Action: The associated positive chloride results less than five times the blank value were qualified as not detected due to possible blank contamination flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for anions were not performed on any project samples in this SDG.

Field Duplicate Precision

One field duplicate sample pair (Dup-2/GWA-1) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment and field blanks associated with the samples in this SDG reported chloride and sulfate between the MDL and RL. Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: Associated sulfate and chloride results in the field and equipment blanks considered not detected due to method blank contamination were not used in the evaluation of potential cross contamination during sampling. No qualification was necessary for sulfate and chloride because the associated results were greater than five times the blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected and submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment blanks associated with the samples in this SDG reported TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and the RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-1, GWA-2, GWC-5, GWA-3, and Dup-2, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: DWK 04/24/19
Checked By/Date: JAH 04/24/19
Revised by/Date: JAH 07/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616509
SAMPLING DATE: March 20, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-1	GWA-1	N	2616509	6020B	boron	0.0042	J	J	--	mg/L
GWA-1	GWA-1	N	2616509	6020B	cobalt	0.00078	J	J	--	mg/L
GWA-1	GWA-1	N	2616509	7470A	mercury	0.00004	J	U*	BE	mg/L
GWA-1	GWA-1	N	2616509	300.0	chloride	1.4	B	U*	BL	mg/L
GWA-2	GWA-2	N	2616509	6020B	barium	0.0072	J	J	--	mg/L
GWA-2	GWA-2	N	2616509	7470A	mercury	0.000039	J	U*	BE	mg/L
GWA-2	GWA-2	N	2616509	300.0	chloride	0.86	B	U*	BL	mg/L
GWC-5	GWC-5	N	2616509	6020B	beryllium	0.00046	J	J	--	mg/L
GWC-5	GWC-5	N	2616509	6020B	copper	0.023	J	J	--	mg/L
GWC-5	GWC-5	N	2616509	6020B	nickel	0.008	J	J	--	mg/L
GWC-5	GWC-5	N	2616509	7470A	mercury	0.000043	J	U*	BE	mg/L
GWC-5	GWC-5	N	2616509	300.0	chloride	0.93	B	U*	BL	mg/L
GWA-3	GWA-3	N	2616509	6020B	antimony	0.0019	J	J	--	mg/L
GWA-3	GWA-3	N	2616509	6020B	barium	0.0042	J	J	--	mg/L
GWA-3	GWA-3	N	2616509	300.0	chloride	1.5	B	U*	BL	mg/L
GWA-3	GWA-3	N	2616509	300.0	sulfate	0.38	J	J	--	mg/L
Dup-2	GWA-1	FD	2616509	6020B	antimony	0.00085	J	J	--	mg/L
Dup-2	GWA-1	FD	2616509	6020B	cobalt	0.00079	J	J	--	mg/L
Dup-2	GWA-1	FD	2616509	300.0	chloride	1.4	B	U*	BL	mg/L
Dup-2	GWA-1	FD	2616509	300.0	fluoride	0.043	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL); estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: DWK 04/24/19

Checked by/Date: JAH 04/24/19

Revised by/Date: JAH 07/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616509

Reviewer/Date: D. Knaub 04/24/19 **Senior Reviewer/Date:** J. Hartness 04/24/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>																																										
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>																																										
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.2°C</p>																																										
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 03/20/19 Prep: metals – 03/27/19; Hg – 03/27/19 Anal: metals - 03/28/19; Hg – 03/28/19</p>																																										
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 10 MB 113834 Hg = ND p. 11 MB 113720 = ND</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) Ca= 0.019J x5 = 0.095 mg/L EQBL032119 (SDG 2616508) Hg = 0.000046J x5 = 0.00023 mg/L EQBL032219 (SDG 2616600) Hg = 0.00011J x5 = 0.00055 mg/L Assoc. results < 5x flagged "U*", results < RL become the MDL: Reason Code: BE Hg - GWA-1, GWA-2, GWA-5 Ca - none</p> <p><u>Field Blank:</u> FBL031919 Ca = 0.014J x5 = 0.07 mg/L Assoc. results < 5x flagged "U*", Reason Code: BF None, assoc. results > 5x blank</p>																																										
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 10 LCS 113835 Hg = 102% p. 11 LCS 113721 metals = All OK</p>																																										
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="width: 100%;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Dup-2</u></th> <th style="text-align: center;">=</th> <th style="text-align: center;"><u>GWA-1</u></th> <th style="text-align: center;"><u>*Diff/RPD</u></th> <th style="text-align: center;"><u>RL</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Sb</td> <td>0.00085 J</td> <td></td> <td><0.00078</td> <td>*0.00007</td> <td>0.003</td> <td>ok</td> </tr> <tr> <td>Ba</td> <td>0.020</td> <td></td> <td>0.019</td> <td>5.1</td> <td>--</td> <td>ok</td> </tr> <tr> <td>Ca</td> <td>30.0</td> <td></td> <td>30.1</td> <td>0.3</td> <td>--</td> <td>ok</td> </tr> <tr> <td>Co</td> <td>0.00079 J</td> <td></td> <td>0.00078 J</td> <td>*0.00001</td> <td>0.01</td> <td>ok</td> </tr> <tr> <td>Hg</td> <td><0.000036</td> <td></td> <td>0.000040 J</td> <td>*0.000004</td> <td>0.0005</td> <td>ok</td> </tr> </tbody> </table> <p><i>*for results <RL, diff must be <RL</i></p>		<u>Dup-2</u>	=	<u>GWA-1</u>	<u>*Diff/RPD</u>	<u>RL</u>		Sb	0.00085 J		<0.00078	*0.00007	0.003	ok	Ba	0.020		0.019	5.1	--	ok	Ca	30.0		30.1	0.3	--	ok	Co	0.00079 J		0.00078 J	*0.00001	0.01	ok	Hg	<0.000036		0.000040 J	*0.000004	0.0005	ok
	<u>Dup-2</u>	=	<u>GWA-1</u>	<u>*Diff/RPD</u>	<u>RL</u>																																								
Sb	0.00085 J		<0.00078	*0.00007	0.003	ok																																							
Ba	0.020		0.019	5.1	--	ok																																							
Ca	30.0		30.1	0.3	--	ok																																							
Co	0.00079 J		0.00078 J	*0.00001	0.01	ok																																							
Hg	<0.000036		0.000040 J	*0.000004	0.0005	ok																																							

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
p. 10 Hg – not a project sample from this SDG
p. 12 metals - not a project sample from this SDG

- Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)**
No dissolved metals in this SDG

- EDD Data Verification vs. Hardcopy (10% samples for each SDG)**

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616509

Reviewer/Date: D. Knaub 04/24/19 **Senior Reviewer/Date:** J. Hartness 04/24/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/20/19 Anal: 04/02/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 14 MB 114378 Cl = 0.31J x5 = 1.55 mg/L Assoc. results flagged "U*" Results become the RL, Reason Code: BL GWA-1, GWA-2, GWC-5, GWA-3, Dup-2 <u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) SO ₄ = 0.048 J x5 = 0.24 mg/L Cl = 0.091U* <i>Flagged for MB, no add. flags necessary</i> EQBL032119 (SDG 2616508) SO ₄ = 0.028 J x5 = 0.14 mg/L Cl = 0.069U* <i>Flagged for MB, no add. flags necessary</i> EQBL032219 (SDG 2616600) SO ₄ = 0.029U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.065J x5 = 0.325 mg/L Assoc. results flagged "U*", Reason Code: BE <i>None, assoc. results > 5x blank</i> <u>Field Blank:</u> FBL031919 SO ₄ = 0.028J x 5 = 0.14 mg/L Assoc. results flagged "U*": Reason Code: BF <i>None, assoc. results > 5x blank</i> Cl = 0.10U* <i>Flagged for MB, no add. flags necessary</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 14 LCS 114379 – All OK

Anions by EPA 300.0 (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>Dup-2</u>	=	<u>GWA-1</u>	<u>*Diff/RPD</u>	<u>RL</u>	
Cl	1.4		1.4	0.0	--	ok
F	0.043 J		<0.029	*0.014	0.3	ok
SO ₄	1.5		1.5	0.0	--	ok

**for results <RL, diff must be <RL*

Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)

p. 14 Not project samples from this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616509

Reviewer/Date: D. Knaub 04/24/19 **Senior Reviewer/Date:** J. Hartness 04/24/19; revised 07/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>														
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK														
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C														
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/20/19 Anal: 03/27/19														
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL031919 (SDG 2616511) TDS = 12.0J mg/L EQBL032119 (SDG 2616508) TDS = 11.0J mg/L EQBL032219 (SDG 2616600) TDS = ND <i>No flags applied due to new ES rule</i> <u>Field Blank:</u> FBL031919 (SDG 2616511) TDS = ND														
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 13 LCS 113666 TDS = 106% - OK														
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="0"> <tr> <td></td> <td><u>Dup-2</u></td> <td>=</td> <td><u>GWA-1</u></td> <td></td> <td><u>RPD</u></td> <td></td> </tr> <tr> <td>TDS</td> <td>176</td> <td></td> <td>175</td> <td></td> <td>0.6</td> <td>ok</td> </tr> </table>		<u>Dup-2</u>	=	<u>GWA-1</u>		<u>RPD</u>		TDS	176		175		0.6	ok
	<u>Dup-2</u>	=	<u>GWA-1</u>		<u>RPD</u>												
TDS	176		175		0.6	ok											
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>														
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)														

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616511

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-50	03/19/19	II	<u>QC Samples</u>		
GWA-50R	03/19/19	II	Dup-1	03/19/19	II
GWA-2R	03/19/19	II	FBL031919	03/19/19	II
			EQL031919	03/19/19	II

These samples were collected from Landfill Cells 1&2 on March 19, 2019. Sample Dup-1 is a field duplicate of sample GWA-50. Sample FBL031919 is a field blank and sample EQL031919 is an equipment blank. Three equipment blanks were collected on different equipment used to sample the locations:

- EQL031919 (SDG: 2616511) collected on the tubing
- EQL032119 (SDG 2616508) collected on the nitrile gloves
- EQL032219 (SDG 2616600) collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary. Field blank FBL031919 is associated with the samples in this SDG.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analysis for metals was not performed on any sample from this SDG.

Post Digestion Spike (PDS)

A PDS analysis was not available for review.

Field Duplicate Precision

One field duplicate sample pair (Dup-1/GWA-50) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy is measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The equipment and field blanks associated with the samples in this SDG reported mercury and calcium between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: The positive mercury results less than 5 times the blank value were qualified as not detected due to possible blank contamination flagged "U". No qualification was necessary for calcium because the associated results were greater than 5 times the blank value.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-2R	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of method, field, and equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blanks associated with the samples analyzed in this SDG contained chloride between the MDL and the RL, indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL**

Action: The associated positive chloride results less than five times the blank value were qualified as not detected due to possible blank contamination flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was performed project samples Dup-1 and GWA-2R (MS only). Recoveries and RPDs were within QC limits except for sulfate in sample GWA-2R. Sulfate recovered below the QC limit. **Reason Code: M-**

Action: The sulfate results reported in sample GWA-2R were qualified as estimated and flagged "J".

Field Duplicate Precision

One field duplicate sample pair (Dup-1/GWA-50) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment and field blanks associated with the samples in this SDG reported chloride and sulfate between the MDL and RL. Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: The associated chloride results in EQBL031919 and FBL031919 were considered not detected due to method blank contamination and therefore, not used in the evaluation of potential cross contamination during sampling. No qualification was necessary for sulfate because the associated results were greater than five times the blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate sample pair (Dup-1/GWA-50) was collected with this SDG, and the RPD was within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment blanks associated with the samples in this SDG reported TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-50 and its field duplicate (Dup-1), GWA-50R, and GWA-2R, along with field and equipment blanks were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: DWK 04/23/19
Checked By/Date: JAH 04/25/19
Revised by/Date: JAH 07/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616511
SAMPLING DATE: March 19, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-50	GWA-50	N	2616511	6020B	copper	0.0023	J	J	--	mg/L
GWA-50	GWA-50	N	2616511	300.0	chloride	1.2	B	U*	BL	mg/L
GWA-50	GWA-50	N	2616511	300.0	sulfate	0.52	J	J	--	mg/L
GWA-50R	GWA-50R	N	2616511	6020B	copper	0.0029	J	J	--	mg/L
GWA-50R	GWA-50R	N	2616511	6020B	nickel	0.0016	J	J	--	mg/L
GWA-50R	GWA-50R	N	2616511	6020B	silver	0.0017	J	J	--	mg/L
GWA-50R	GWA-50R	N	2616511	300.0	chloride	0.88	J, B	U*	BL	mg/L
GWA-50R	GWA-50R	N	2616511	300.0	sulfate	0.97	J	J	--	mg/L
Dup-1	GWA-50	FD	2616511	6020B	copper	0.0026	J	J	--	mg/L
Dup-1	GWA-50	FD	2616511	300.0	chloride	1.3	B	U*	BL	mg/L
GWA-2R	GWA-2R	N	2616511	6020B	antimony	0.0019	J	J	--	mg/L
GWA-2R	GWA-2R	N	2616511	6020B	boron	0.014	J	J	--	mg/L
GWA-2R	GWA-2R	N	2616511	300.0	fluoride	0.056	J	J	--	mg/L
GWA-2R	GWA-2R	N	2616511	300.0	sulfate	32.5		J	M+	mg/L
FBL031919	Field Blank	FB	2616511	6020B	calcium	0.014	J	J	--	mg/L
FBL031919	Field Blank	FB	2616511	300.0	chloride	0.1	J, B	U*	BL	mg/L
FBL031919	Field Blank	FB	2616511	300.0	sulfate	0.028	J	J	--	mg/L
EQBL31919	Equipment Blank	EB	2616511	6020B	calcium	0.019	J	J	--	mg/L
EQBL31919	Equipment Blank	EB	2616511	2540C	total dissolved solids	12.0	J	J	--	mg/L
EQBL31919	Equipment Blank	EB	2616511	300.0	chloride	0.091	J, B	U*	BL	mg/L
EQBL32119	Equipment Blank	EB	2616600	300.0	sulfate	0.048	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

BL = Laboratory blank contamination. The result should be considered "not-detected".

M+ = MS and MSD recoveries outside acceptance limits. The result may be biased high.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: DWK 04/23/19

Checked by/Date: JAH 04/24/19

Revised by/Date: JAH 07/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616511

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>																												
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>																												
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.2°C</p>																												
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 03/19/19 Prep: metals – 03/27/19 Hg – 03/27/19 Anal: metals: 03/28/19 Hg – 03/28/19</p>																												
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 11 MB 1138348 Hg = ND p. 12 MB 113720 = ND</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) Ca= 0.019J x5 = 0.095 mg/L EQBL032119 (SDG 2616508) Hg = 0.000046J x5 = 0.00023 mg/L EQBL032219 (SDG 2616600) Hg = 0.00011J x5 = 0.00055 mg/L</p> <p>Assoc. results < 5x flagged "U*", Reason Code: BE Hg – none Ca - none</p> <p><u>Field Blank:</u> FBL031919 Ca = 0.014J x5 = 0.07 mg/L</p> <p>Assoc. results < 5x flagged "U*", Reason Code: BF None, assoc. results > 5x blank</p>																												
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 11 LCS 113835 Hg = 102% p. 12 LCS 113721 metals = All OK</p>																												
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="width: 100%;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Dup-1</u></th> <th style="text-align: center;">=</th> <th style="text-align: center;"><u>GWA-50</u></th> <th style="text-align: center;"><u>*Diff/RPD</u></th> <th style="text-align: center;"><u>RL</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Ba</td> <td style="text-align: center;">0.012</td> <td></td> <td style="text-align: center;">0.012</td> <td style="text-align: center;">0.0</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Ca</td> <td style="text-align: center;">4.2</td> <td></td> <td style="text-align: center;">4.2</td> <td style="text-align: center;">0.0</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Cu</td> <td style="text-align: center;">0.0026 J</td> <td></td> <td style="text-align: center;">0.0023 J</td> <td style="text-align: center;">*0.0003</td> <td></td> <td style="text-align: center;">ok</td> </tr> </tbody> </table> <p><i>*for results <RL, diff must be <RL</i></p>		<u>Dup-1</u>	=	<u>GWA-50</u>	<u>*Diff/RPD</u>	<u>RL</u>		Ba	0.012		0.012	0.0	--	ok	Ca	4.2		4.2	0.0	--	ok	Cu	0.0026 J		0.0023 J	*0.0003		ok
	<u>Dup-1</u>	=	<u>GWA-50</u>	<u>*Diff/RPD</u>	<u>RL</u>																										
Ba	0.012		0.012	0.0	--	ok																									
Ca	4.2		4.2	0.0	--	ok																									
Cu	0.0026 J		0.0023 J	*0.0003		ok																									

Metals and Mercury by SW6020B/SW7470 (cont.)

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
		<input checked="" type="checkbox"/>	Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) <i>p. 11 and 13 - Not performed on any samples from this SDG</i>
		<input checked="" type="checkbox"/>	Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG
		<input checked="" type="checkbox"/>	EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616511

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/19/19 Anal: 04/01/19, 04/02/19
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 15 MB 114378 Cl = 0.31J x5 = 1.55 mg/L p. 15 MB 114771 Cl = 0.31J x5 = 1.55 mg/L Assoc. results flagged "U*": Reason Code: <i>BL</i> Results become the RL: <i>Dup-1, GWA-50R, GWA-50</i> Results < RL become the MDL: <i>EQBL031919, FBL031919</i> <u>Equipment Blanks:</u> EQBL031919 (SDG 2616511) SO ₄ = 0.048 J x5 = 0.24 mg/L Cl = 0.091U* <i>Flagged for MB, no add. flags necessary</i> EQBL032119 (SDG 2616508) SO ₄ = 0.028 J x5 = 0.14 mg/L Cl = 0.069U* <i>Flagged for MB, no add. flags necessary</i> EQBL032219 (SDG 2616600) SO ₄ = 0.029U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.065J x5 = 0.325 mg/L Assoc. results flagged "U*": Reason Code: <i>BE</i> <i>None, assoc. results > 5x blank</i> <u>Field Blank:</u> FBL031919 SO ₄ = 0.028J x 5 = 0.14 mg/L Assoc. results flagged "U*": Reason Code: <i>BF</i> <i>None, assoc. results > 5x blank</i> Cl = 0.10U* <i>Flagged for MB, no add. flags necessary</i>

Anions by EPA 300.0 (cont.)

YES NO NA

COMMENTS

Laboratory Control Sample (LCS) recovery within limits (90-110%)

p. 15 LCS 114379 – All OK

p. 16 LCS 114772 – All OK

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>Dup-1</u>	=	<u>GWA-50</u>	<u>*Diff/RPD</u>	<u>RL</u>	
Cl	1.3		1.2	8.0	--	ok
F	ND		ND	NC		
SO4	1.3		0.52J	*0.78	1.0	ok

**for results <RL, diff must be <RL*

Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)

p. 15 Not performed on samples from this SDG

p. 16 Dup-1 - %Rec and RPDs OK

GWA-2R (MS only) SO₄ = 70%

Flag assoc. result "J" Reason Code: M-

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616511

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19; 07/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/19/19 Anal: 03/26/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL031919 (SDG 2616511) TDS = 12.0J mg/L EQBL032119 (SDG 2616508) TDS = 11.0J mg/L EQBL032219 (SDG 2616600) TDS = ND <i>no flags applied due to new ES rule</i> <u>Field Blank:</u> FBL031919 TDS = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 16 LCS 114103 TDS = 106% - OK
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <u>Dup-1 = GWA-50 RPD</u> TDS 32.0 34 6.1 <i>p. 14 lab dup on a non-project sample</i>
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616596

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWC-13	03/23/19	II	GWC-11	03/23/19	II
GWC-12	03/23/19	II	GWC-11R	03/23/19	II

These samples were collected from Landfill Cells 1&2 on March 23, 2019. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL031919 (SDG: 2616511) collected on the tubing
- EQBL032119 (SDG 2616508) collected on the nitrile gloves
- EQBL032219 (SDG 2616600) collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary. Field blank FBL032219 (SDG 2616600) is associated with the samples in this SDG.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analysis for metals was not performed on any sample from this SDG. A batch MS/MSD for mercury was performed on sample GWC-13 and the recoveries and RPD were within QC limits.

Post Digestion Spike (PDS)

A PDS analysis was not performed on any project samples for metals.

Field Duplicate Precision

No field duplicate sample pairs were collected and submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy is measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The equipment and field blanks associated with the samples in this SDG reported mercury and calcium between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: The positive mercury results less than 5 times the blank value were qualified as not detected due to possible blank contamination flagged "U". No qualification was necessary for calcium because the associated results were greater than 5 times the blank value.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

Sample	Metal	Dilution	Sample	Metal	Dilution
GWC-13	Ca	50x	GWC-11R	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of method, field, and equipment blank contamination, and MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blanks associated with the samples analyzed in this SDG contained sulfate between the MDL and the RL, indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL**

Action: No qualification was necessary for sulfate because the associated results were greater than five times the blank value.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was performed on sample GWC-13, and the sulfate recoveries were outside of QC limits. Associated results should be considered estimated due to matrix interference:

Reason Code: M-

Action: The sulfate result for sample GWC-13 was qualified as estimated and flagged "J".

Field Duplicate Precision

No field duplicate sample pairs were collected and submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment and field blanks associated with the samples in this SDG reported chloride and sulfate between the MDL and RL. Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: Associated chloride results in the field and equipment blanks considered not detected due to method blank contamination were not used in the evaluation of potential cross contamination during sampling. No qualification was necessary for sulfate and chloride because the associated results were greater than five times the blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected and analyzed with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment blanks associated with the samples in this SDG reported TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-11, GWC-11R, GWC-12, and GWC-13 were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: DWK 04/23/19

Checked By/Date: JAH 04/24/19

Revised by/Date: JAH 07/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616596
SAMPLING DATE: March 23, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-13	GWC-13	N	2616596	6020B	arsenic	0.00067	J	J	--	mg/L
GWC-13	GWC-13	N	2616596	6020B	beryllium	0.000061	J	J	--	mg/L
GWC-13	GWC-13	N	2616596	6020B	boron	0.012	J	J	--	mg/L
GWC-13	GWC-13	N	2616596	6020B	chromium	0.0058	J	J	--	mg/L
GWC-13	GWC-13	N	2616596	7470A	mercury	0.00017	J	U*	BE/BF	mg/L
GWC-13	GWC-13	N	2616596	300.0	sulfate	15.5	M1	J	M-	mg/L
GWC-12	GWC-12	N	2616596	6020B	cadmium	0.00035	J	J	--	mg/L
GWC-12	GWC-12	N	2616596	6020B	cobalt	0.0032	J	J	--	mg/L
GWC-12	GWC-12	N	2616596	6020B	nickel	0.0026	J	J	--	mg/L
GWC-12	GWC-12	N	2616596	7470A	mercury	0.00015	J	U*	BE/BF	mg/L
GWC-12	GWC-12	N	2616596	300.0	sulfate	0.3	J, B	J	--	mg/L
GWC-11	GWC-11	N	2616596	6020B	antimony	0.00094	J	J	--	mg/L
GWC-11	GWC-11	N	2616596	6020B	barium	0.0081	J	J	--	mg/L
GWC-11	GWC-11	N	2616596	6020B	beryllium	0.000057	J	J	--	mg/L
GWC-11	GWC-11	N	2616596	7470A	mercury	0.00015	J	U*	BE/BF	mg/L
GWC-11R	GWC-11R	N	2616596	6020B	arsenic	0.0016	J	J	--	mg/L
GWC-11R	GWC-11R	N	2616596	6020B	chromium	0.0048	J	J	--	mg/L
GWC-11R	GWC-11R	N	2616596	7470A	mercury	0.00013	J	U*	BE/BF	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

M1 = Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

BF = Field blank contamination. The result should be considered "not-detected".

BL = Laboratory blank contamination. The result should be considered "not-detected".

M- = MS and MSD recoveries outside acceptance limits. The result may be biased low.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL); estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: DWK 04/23/19

Checked by/Date: JAH 04/24/19

Revised by/Date: JAH 07/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616596

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.3°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 03/23/19 Prep: metals – 03/31/19 Hg – 04/02/19 Anal: metals: 04/01/19 Hg – 04/02/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 9 MB 114228 Hg = ND p. 10 MB 114744 = ND</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) Ca= 0.019J x5 = 0.095 mg/L EQBL032119 (SDG 2616508) Hg = 0.000046J x5 = 0.00023 mg/L EQBL032219 (SDG 2616600) Hg = 0.00011J x5 = 0.00055 mg/L</p> <p>Assoc. results < 5x flagged "U*", results < RL become the MDL: Reason Code: BE Hg - GWC-13, GWC-12, GWC-11, GWC-11R Ca – none, assoc. results > 5x blank</p> <p><u>Field Blank:</u> FBL032219 Hg = 0.00012J x5 = 0.0006 mg/L</p> <p>Assoc. results < 5x flagged "U*", results < RL become the MDL Reason Code: BF GWC-13, GWC-12, GWC-11, GWC-11R</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 9 LCS 114229 Hg = 107% p. 10 LCS 114745 metals = All OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG.</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			<p>Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) p. 9 GWC-13 Hg = 95, 98% RPD = 4 OK p. 11 <i>Not a project sample from this SDG</i></p>
		<input checked="" type="checkbox"/>	<p>Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG</p>
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616596

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK, 1.3°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (Cl, SO₄, F – 28 days) Coll: 03/23/19 Anal: 04/02/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 13 MB 115031 SO₄ = 0.045J x5 = 0.225 mg/L Assoc. results flagged "U*", result becomes the RL Reason Code: BL: <i>No flag - SO₄ >5x blank in samples</i></p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) SO₄ = 0.048 J x5 = 0.24 mg/L Cl = 0.091U* <i>Flagged for MB, no add. flags necessary</i> EQBL032119 (SDG 2616508) SO₄ = 0.028 J x5 = 0.14 mg/L Cl = 0.069U* <i>Flagged for MB, no add. flags necessary</i> EQBL032219 (SDG 2616600) SO₄ = 0.029U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.065J x5 = 0.325 mg/L Assoc. results flagged "U*": Reason Code: BE <i>None, assoc. results > 5x blank or qualified for MB</i></p> <p><u>Field Blank</u> FBL032219 SO₄ = 0.065U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.10 J x 5 = 0.5 mg/L Assoc. results flagged "U*": Reason Code: BF <i>None, assoc. results > 5x blank</i></p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 13 LCS 115032 – All OK</p>

Anions by 300.0 (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

No field dups in this SDG

Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)

p. 13 GWC-13

SO₄ = 87, 86% RPD = 0 Reason Code: M-

Flag assoc. result "J"

GWC-12 (MS only) - %Rec OK

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616596

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/24/19; 07/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.3°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/23/19 Anal: 03/28/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL031919 (SDG 2616511) TDS = 12.0J mg/L EQBL032119 (SDG 2616508) TDS = 11.0J mg/L EQBL032219 (SDG 2616600) TDS = ND <i>No flags applied due to new ES rule</i> <u>Field Blanks:</u> FBL032219 TDS = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 12 LCS 114103 TDS = 106% - OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG <i>p. 12 lab dup on a non-project sample</i>
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616600

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWC-13RZ	03/22/19	II	<u>QC Samples</u>		
GWC-10R	03/22/19	II	Dup-3	03/22/19	II
GWC-10	03/22/19	II	FBL032219	03/22/19	II
GWC-14Z	03/22/19	II	EQBL032219	03/22/19	II
GWC-15Z	03/22/19	II			

These samples were collected from Landfill Cells 1&2 on March 22, 2019. Sample Dup-3 is a field duplicate of sample GWC-14Z. Sample FBL032219 is a field blank and EQBL032219 is an equipment blank. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL031919 (SDG: 2616511) collected on the tubing
- EQBL032119 (SDG 2616508) collected on the nitrile gloves
- EQBL032219 (SDG 2616600) collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary. Field blank FBL032219 is associated with the samples in this SDG.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analysis for metals was not performed on any sample from this SDG.

Post Digestion Spike (PDS)

A PDS analysis was not available for review.

Field Duplicate Precision

One field duplicate sample pair (Dup-3/GWC-14Z) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy is measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The equipment and field blanks associated with the samples in this SDG reported mercury and calcium between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: The positive mercury results less than 5 times the blank value were qualified as not detected due to possible blank contamination flagged "U". No qualification was necessary for calcium because the associated results were greater than 5 times the blank value.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

Sample	Metal	Dilution	Sample	Metal	Dilution
GWC-13RZ	Ca	50x	GWC-14Z	Ca	50x
GWC-10R	Ca	50x	GWC-15Z	Ca	50x
GWC-10	Ca	50x	Dup-3	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of method, field, and equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained sulfate between the MDL and the RL, indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL**

Action: The positive sulfate results for samples EQBL032219 and FBL0332219 were qualified as not detected due to possible blank contamination flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG.

Field Duplicate Precision

One field duplicate sample pair (Dup-3/GWC-14Z) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment and field blanks associated with the samples in this SDG reported chloride and sulfate between the MDL and RL. Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF**.

Action: The associated sulfate results in EQBL032219 and FBL032219 were considered not detected due to method blank contamination and therefore, not used in the evaluation of potential cross contamination during sampling. No qualification was necessary for chloride because the associated results were greater than five times the blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate sample pair (Dup-3/GWC-14Z) was collected with this SDG, and the RPD was within QC limits.

Laboratory Duplicate Precision

The laboratory analyzed a non-project sample in duplicate and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field blank did not contain TDS. The equipment blanks associated with the samples in this SDG reported TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-13RZ, GWC-10R, GWC-10, GWC-14Z and its field duplicate (Dup-3), GWC-15Z along with field and equipment blanks, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: DWK 04/23/19
Checked By/Date: JAH 04/25/19
Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616600
SAMPLING DATE: March 22, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-13RZ	GWC-13RZ	N	2616600	6020B	antimony	0.0014	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2616600	6020B	arsenic	0.00097	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2616600	6020B	boron	0.013	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2616600	6020B	zinc	0.0048	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2616600	7470A	mercury	0.00014	J	U*	BE/BF	mg/L
GWC-13RZ	GWC-13RZ	N	2616600	300.0	fluoride	0.12	J	J	--	mg/L
GWC-10R	GWC-10R	N	2616600	7470A	mercury	0.00014	J	U*	BE/BF	mg/L
GWC-10	GWC-10	N	2616600	6020B	beryllium	0.00018	J	J	--	mg/L
GWC-10	GWC-10	N	2616600	6020B	calcium	15.4	J	J	--	mg/L
GWC-10	GWC-10	N	2616600	6020B	cobalt	0.0011	J	J	--	mg/L
GWC-10	GWC-10	N	2616600	6020B	nickel	0.0022	J	J	--	mg/L
GWC-10	GWC-10	N	2616600	7470A	mercury	0.00014	J	U*	BE/BF	mg/L
GWC-10	GWC-10	N	2616600	300.0	fluoride	0.045	J	J	--	mg/L
GWC-14Z	GWC-14Z	N	2616600	6020B	beryllium	0.000094	J	J	--	mg/L
GWC-14Z	GWC-14Z	N	2616600	6020B	calcium	16.7	J	J	--	mg/L
GWC-14Z	GWC-14Z	N	2616600	7470A	mercury	0.00014	J	U*	BE/BF	mg/L
GWC-15Z	GWC-15Z	N	2616600	6020B	calcium	21.3	J	J	--	mg/L
GWC-15Z	GWC-15Z	N	2616600	7470A	mercury	0.00012	J	U*	BE/BF	mg/L
Dup-3	GWC-14Z	FD	2616600	6020B	beryllium	0.000096	J	J	--	mg/L
Dup-3	GWC-14Z	FD	2616600	6020B	calcium	16.3	J	J	--	mg/L
Dup-3	GWC-14Z	FD	2616600	7470A	mercury	0.00013	J	U*	BE/BF	mg/L
FBL032219	Field Blank	FB	2616600	7470A	mercury	0.00012	J	J	--	mg/L
FBL032219	Field Blank	FB	2616600	300.0	chloride	0.1	J	J	--	mg/L
FBL032219	Field Blank	FB	2616600	300.0	sulfate	0.065	J, B	U*	BL	mg/L
EQBL32219	Equipment Blank	EB	2616600	7470A	mercury	0.00011	J	J	--	mg/L
EQBL32219	Equipment Blank	EB	2616600	300.0	chloride	0.065	J	J	--	mg/L
EQBL32219	Equipment Blank	EB	2616600	300.0	sulfate	0.029	J, B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

BF = Field blank contamination. The result should be considered "not-detected".

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: DWK 04/23/19

Checked by/Date: JAH 04/24/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616600

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>																																			
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>																																			
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.3°C</p>																																			
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 03/22/19 Prep: metals – 03/31/19; Hg – 04/02/19 Anal: metals - 04/01/19; Hg – 04/02/19</p>																																			
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 13 MB 114228 Hg = ND p. 14 MB 114744 = ND</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) Ca= 0.019J x5 = 0.095 mg/L EQBL032119 (SDG 2616508) Hg = 0.000046J x5 = 0.00023 mg/L EQBL032219 (SDG 2616600) Hg = 0.00011J x5 = 0.00055 mg/L</p> <p>Assoc. results < 5x flagged "U*", results < RL become the MDL: Reason Code: BE Hg - GWC-13RZ, GWC-10R, GWC-10, GWC-14Z, GWC-15, Dup-3 Ca - none</p> <p><u>Field Blank:</u> FBL032219 Hg = 0.00012J x5 = 0.0006 mg/L Reason Code: BF</p> <p>Assoc. results < 5x flagged "U*", results < RL become the MDL GWC-13RZ, GWC-10R, GWC-10, GWC-14Z, GWC-15, Dup-3</p>																																			
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 13 LCS 114229 Hg = 107% p. 14 LCS 114745 metals = All OK</p>																																			
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="width: 100%;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Dup-3</u></th> <th style="text-align: center;">=</th> <th style="text-align: center;"><u>GWC-14Z</u></th> <th style="text-align: center;"><u>*Diff/RPD</u></th> <th style="text-align: center;"><u>RL</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Ba</td> <td style="text-align: center;">0.015</td> <td></td> <td style="text-align: center;">0.014</td> <td style="text-align: center;">6.9</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Be</td> <td style="text-align: center;">0.000096J</td> <td></td> <td style="text-align: center;">0.000094J</td> <td style="text-align: center;">*0.000002</td> <td style="text-align: center;">0.003</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Ca</td> <td style="text-align: center;">16.3 J</td> <td></td> <td style="text-align: center;">16.7 J</td> <td style="text-align: center;">0.4</td> <td style="text-align: center;">25</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Hg</td> <td style="text-align: center;">0.00013 U*</td> <td></td> <td style="text-align: center;">0.00014 U*</td> <td style="text-align: center;">NC</td> <td style="text-align: center;">--</td> <td style="text-align: center;">--</td> </tr> </tbody> </table> <p><i>*for results <RL, diff must be <RL</i></p>		<u>Dup-3</u>	=	<u>GWC-14Z</u>	<u>*Diff/RPD</u>	<u>RL</u>		Ba	0.015		0.014	6.9	--	ok	Be	0.000096J		0.000094J	*0.000002	0.003	ok	Ca	16.3 J		16.7 J	0.4	25	ok	Hg	0.00013 U*		0.00014 U*	NC	--	--
	<u>Dup-3</u>	=	<u>GWC-14Z</u>	<u>*Diff/RPD</u>	<u>RL</u>																																	
Ba	0.015		0.014	6.9	--	ok																																
Be	0.000096J		0.000094J	*0.000002	0.003	ok																																
Ca	16.3 J		16.7 J	0.4	25	ok																																
Hg	0.00013 U*		0.00014 U*	NC	--	--																																

Metals and Mercury by SW6020B/SW7470 (cont.)

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
		<input checked="" type="checkbox"/>	Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) <i>p. 15 Not performed on any samples from this SDG</i>
		<input checked="" type="checkbox"/>	Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG
		<input checked="" type="checkbox"/>	EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616600

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19

YES	NO	NA	COMMENTS
X			<p>Case Narrative and COC Completeness Review OK</p>
X			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK, 1.3°C</p>
X			<p>Holding times met (Cl, SO₄, F – 28 days) Coll: 03/22/19 Anal: 04/02/19, 04/03/19</p>
	X		<p>QC Blanks Review <u>Method Blanks:</u> p. 17 MB 115031 anions SO₄ = 0.045J x5 = 0.225 mg/L Assoc. results flagged "U*", results < RL become the MDL Reason Code: BL EQBL032219, FBL032219</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) SO₄ = 0.048 J x5 = 0.24 mg/L Cl = 0.091U* <i>Flagged for MB, no add. flags necessary</i> EQBL032119 (SDG 2616508) SO₄ = 0.028 J x5 = 0.14 mg/L Cl = 0.069U* <i>Flagged for MB, no add. flags necessary</i> EQBL032219 (SDG 2616600) SO₄ = 0.029U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.065J x5 = 0.325 mg/L Assoc. results flagged "U*": Reason Code: BE <i>None, assoc. results > 5x blank</i></p> <p><u>Field Blank</u> FBL032219 SO₄ = 0.065U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.10 J x 5 = 0.5 mg/L Assoc. results flagged "U*": Reason Code: BF <i>None, assoc. results > 5x blank</i></p>
X			<p>Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 17 LCS 115032 – All OK</p>

Anions by 300.0 (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>Dup-3</u>	=	<u>GWC-14Z</u>	<u>RPD</u>	
Cl	3.7		3.7	0.0	ok
F	ND		ND	NC	--
SO4	6.1		6.2	1.6	ok

Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)

p. 17 Not performed on samples in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616600

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19; 07/30/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.3°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/22/19 Anal: 03/28/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL031919 (SDG 2616511) TDS = 12.0J mg/L EQBL032119 (SDG 2616508) TDS = 11.0J mg/L EQBL032219 (SDG 2616600) TDS = ND <i>No qualification applied due to new ES rule</i> <u>Field Blanks:</u> FBL032219 TDS = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 16 LCS 114103 TDS = 106% - OK
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <u>Dup-3 = GWC-14Z RPD</u> TDS 95.0 104 9.0 <i>p. 16 lab dup on a non-project sample</i>
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616602

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and/or quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-15R	03/25/19	II

This sample was collected from Landfill Cells 1&2 on March 25, 2019. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL031919 (SDG: 2616511) collected on the tubing
- EQBL032119 (SDG 2616508) collected on the nitrile gloves
- EQBL032219 (SDG 2616600) collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary. Field blank FBL032219 (SDG 2616600) is associated with the samples in this SDG.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for MS/MSD recoveries and field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD for metals was performed sample GWC-15R, and the calcium recoveries were outside of QC limits. The MS recovery was above the upper QC limit, and the MSD recovery was below the lower QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than 4x the spiked concentration: **Reason Code: M.**

Action: No qualification was required because the sample result was greater than 4x the spike concentration.

Post Digestion Spike (PDS)

A PDS analysis was available for review.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy is measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The equipment and field blanks associated with the samples in this SDG reported mercury and calcium between the method detection limit (MDL) and the reporting limit (RL).

Results less than five times the blank are considered not detected as a possible field artifact: **Reason**

Code: BE/BF.

Action: The mercury result for sample GWC-15R was qualified as not detected due to possible blank contamination flagged "U". No qualification was necessary for calcium because the associated results were greater than 5 times the blank value.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-15R	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of method, field, and equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained sulfate between the MDL and the RL, indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL.**

Action: No qualification was necessary because the associated sample results were greater than five times the blank value.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment and field blanks associated with the samples in this SDG reported chloride and sulfate between the MDL and RL. Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF.**

Action: Associated sulfate and chloride results in the field and equipment blanks considered not detected due to method blank contamination were not used in the evaluation of potential cross contamination during sampling. No qualification was necessary for sulfate and chloride because the associated results were greater than five times the blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however there were none in this SDG.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed a non-project sample and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field blank did not contain TDS. The equipment blanks associated with the samples in this SDG reported TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-15R was reported in this SDG and was sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: DWK 04/23/19

Checked By/Date: JAH 04/25/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616602
SAMPLING DATE: March 25, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-15R	GWC-15R	N	2616602	6020B	lead	0.00047	J	J	--	mg/L
GWC-15R	GWC-15R	N	2616602	6020B	nickel	0.0011	J	J	--	mg/L
GWC-15R	GWC-15R	N	2616602	6020B	zinc	0.0039	J	J	--	mg/L
GWC-15R	GWC-15R	N	2616602	7470A	mercury	0.00011	J	U*	BE/BF	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

BF = Field blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL); estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: DWK 04/23/19

Checked by/Date: JAH 04/24/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616602

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.3°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 03/25/19 Prep: metals – 03/31/19 Hg – 04/02/19 Anal: metals: 04/01/19 Hg – 04/02/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 6 MB 114228 Hg = ND p. 7 MB 114744 = ND</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) Ca= 0.019J x5 = 0.095 mg/L EQBL032119 (SDG 2616508) Hg = 0.000046J x5 = 0.00023 mg/L EQBL032219 (SDG 2616600) Hg = 0.00011J x5 = 0.00055 mg/L Assoc. results < 5x flagged "U*", results < RL become the MDL: Reason Code: BE Hg - GWC-15R Ca - none</p> <p><u>Equipment/Field Blanks</u> FBL032219 Hg = 0.00012J x5 = 0.0006 mg/L Assoc. results < 5x flagged "U*", results < RL become the MDL: Reason Code: BF Hg - GWC-15R</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 6 LCS 114229 Hg = 107% p. 7 LCS 114745 metals = All OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 6 Hg not a sample from this SDG

p. 8 GWC-15R

Ca = 185, -62% RPD = 7 Reason Codes: M+/M-=M

No flag, sample result > 4x spike amt.

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616602

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK, 1.3°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (Cl, SO₄, F – 28 days) Coll: 03/25/19 Anal: 04/03/19</p>
		<input checked="" type="checkbox"/>	<p>QC Blanks Review <u>Method Blanks:</u> p. 10 MB 115031 SO₄ = 0.045J x5 = 0.225 mg/L Assoc. results flagged "U*" Reason Code: BL <i>None, assoc. results > 5x blank</i></p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) SO₄ = 0.048 J x5 = 0.24 mg/L Cl = 0.091U* <i>Flagged for MB, no add. flags necessary</i> EQBL032119 (SDG 2616508) SO₄ = 0.028 J x5 = 0.14 mg/L Cl = 0.069U* <i>Flagged for MB, no add. flags necessary</i> EQBL032219 (SDG 2616600) SO₄ = 0.029U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.065J x5 = 0.325 mg/L Assoc. results flagged "U*": results < RL become the MDL, Reason Code: BE <i>None, assoc. results > 5x blank</i></p> <p><u>Field Blank:</u> FBL032219 SO₄ = 0.065U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.10 J x 5 = 0.5 mg/L Assoc. results flagged "U*" Reason Code: BF <i>None, assoc. results > 5x blank</i></p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 10 LCS 115032 – All OK</p>
		<input checked="" type="checkbox"/>	<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG</p>

Anions by EPA 300.0 (cont.)

YES NO NA

COMMENTS

 Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)
p. 10 Not performed on samples in this SDG

 EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616602

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19; 07/30/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.3°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/25/19 Anal: 03/28/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL031919 (SDG 2616511) TDS = 12.0J mg/L EQBL032119 (SDG 2616508) TDS = 11.0J mg/L EQBL032219 (SDG 2616600) TDS = ND <i>No qualification applied due to new ES rule</i> <u>Field Blanks:</u> FBL032219 TDS = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 9 LCS 114103 TDS = 106% - OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG <i>p. 16 lab dup on a non-project sample</i>
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616671

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-8RR	03/27/19	II

This sample was collected from Landfill Cells 1&2 on March 27, 2019. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL031919 (SDG: 2616511) collected on the tubing
- EQBL032119 (SDG 2616508) collected on the nitrile gloves
- EQBL032219 (SDG 2616600) collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary. Field blank FBL032219 (SDG 2616600) is associated with the samples in this SDG.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method, field, and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained mercury between the MDL and the RL indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The mercury result for sample GWC-8RR was qualified as not detected due to possible blank contamination flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for metals was not performed any project samples in this SDG. The batch MS/MSD for mercury was performed on sample GWC-8RR and the recoveries and RPDs were within QC limits.

Post Digestion Spike (PDS)

A PDS analysis was not available for review.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy is measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The equipment and field blanks associated with the samples in this SDG reported mercury and calcium between the method detection limit (MDL) and the reporting limit (RL).

Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF.**

Action: No additional qualification was necessary for mercury because the associated result was previously qualified due to method blank contamination. No qualification was necessary for calcium because the associated results were greater than 5 times the blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-8RR	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The equipment and field blanks associated with the samples in this SDG reported chloride and/or sulfate between the MDL and RL. Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE/BF.**

Action: Associated chloride and sulfate results in the field and equipment blanks considered not detected due to method blank contamination were not used in the evaluation of potential cross contamination during sampling. No qualification was necessary for chloride and sulfate because the associated results were greater than five times the blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however there were none in this SDG.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed a non-project sample and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field blank did not contain TDS. The equipment blanks associated with the samples in this SDG reported TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-8RR was reported in this SDG and was sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: DWK 04/23/19

Checked By/Date: JAH 04/25/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616671
SAMPLING DATE: March 27, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-8RR	GWC-8RR	N	2616671	6020B	boron	0.0078	J	J	--	mg/L
GWC-8RR	GWC-8RR	N	2616671	6020B	calcium	20.6	J, D3	J	--	mg/L
GWC-8RR	GWC-8RR	N	2616671	6020B	chromium	0.0021	J	J	--	mg/L
GWC-8RR	GWC-8RR	N	2616671	7470A	mercury	0.000039	J, B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: DWK 04/23/19

Checked by/Date: JAH 04/24/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616671

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 7.0°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 03/27/19 Prep: metals – 04/01/19 Hg – 04/03/19 Anal: metals: 04/03/19 Hg – 04/03/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 6 MB 115427 Hg = 0.000039J x5 = 0.000195 mg/L Assoc. results flagged "U*", results < RL become the MDL Reason Code: BL GWC-8RR p. 7 MB 115226 = ND</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) Ca= 0.019J x5 = 0.095 mg/L EQBL032119 (SDG 2616508) Hg = 0.000046J x5 = 0.00023 mg/L EQBL032219 (SDG 2616600) Hg = 0.00011J x5 = 0.00055 mg/L Assoc. results < 5x flagged "U*": Reason Code: BE Hg – None, assoc. result flagged for MB Ca – none, assoc. result > 5x</p> <p><u>Field Blank: (SDG 2616600)</u> FBL032219 Hg = 0.00012J x5 = 0.0006 mg/L Assoc. results <5x flagged "U*": Reason Code: BF None, assoc. result flagged for MB</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 6 LCS 115428 Hg = 100% p. 7 LCS 115227 metals = All OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 6 GWC-8RR Hg = 90, 90% RPD = 0.0

p. 8 *Not a project sample from this SDG*

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616671

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 7.0°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/27/19 Anal: 04/04/19
	<input checked="" type="checkbox"/>		QC Blanks Review Method Blanks: p. 10 MB 115682 – All ND <u>Equipment Blanks: (use highest result to apply flags)</u> EQBL031919 (SDG 2616511) SO ₄ = 0.048 J x5 = 0.24 mg/L Cl = 0.091U* <i>Flagged for MB, no add. flags necessary</i> EQBL032119 (SDG 2616508) SO ₄ = 0.028 J x5 = 0.14 mg/L Cl = 0.069U* <i>Flagged for MB, no add. flags necessary</i> EQBL032219 (SDG 2616600) SO ₄ = 0.029U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.065J x5 = 0.325 mg/L Assoc. results flagged "U*", Reason Code: BE <i>None, assoc. results > 5x blank</i> <u>Field Blank:</u> FBL032219 (SDG 2616600) SO ₄ = 0.065U* <i>Flagged for MB, no add. flags necessary</i> Cl = 0.10 J x 5 = 0.5 mg/L Assoc. results flagged "U*", Reason Code: BF <i>None, assoc. results > 5x blank</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 10 LCS 115683 – All OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) <i>p. 10 Not performed on samples in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616671

Reviewer/Date: D. Knaub 04/23/19 **Senior Reviewer/Date:** J. Hartness 04/25/19; 07/30/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 7.0°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/27/19 Anal: 04/02/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL031919 (SDG 2616511) TDS = 12.0J mg/L EQBL032119 (SDG 2616508) TDS = 11.0J mg/L EQBL032219 (SDG 2616600) TDS = ND <i>No qualification applied due to new ES rule</i> <u>Field Blank:</u> FBL032219 TDS = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 9 LCS 115527 TDS = 102% - OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG <i>p. 9 lab dup on a non-project sample</i>
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2618213

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in May 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

Qualifier Unusable Data

- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
- UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-8Z	05/06/19	II

This sample was collected from Landfill Cells 1&2 on May 6, 2019 after redevelopment due to high turbidity during the March event. No equipment or field blanks were collected since only one well was sampled.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained dissolved barium between the method detection limit (MDL) and the reporting limit (RL) indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL.**

Action: No qualification was required because the associated sample results were greater than five times the blank value.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSDs for total and dissolved metals and mercury were performed on sample GWC-8Z, and the MS recovery and RPD for dissolved mercury were outside of QC limits. **Reason Codes: MS-L, MS-P**

Action: The dissolved mercury result for sample GWC-8Z was qualified as not detected with an approximated detection limit and flagged "UJ".

Post Digestion Spike (PDS)

A PDS analysis was not available for review.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy is measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No equipment or field blanks were collected because only one well was sampled and no equipment decontamination was performed.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-8Z	Ca (total)	50x
GWC-8Z	Ca (diss.)	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than five times the RL. The samples analyzed for both total and dissolved metals include GWC-8Z, and the dissolved results are less than or equal to the respective total metal results.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of method blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained chloride and sulfate between the MDL and the RL indicating possible interference from the analytical system. Results less than five times the method blank value are considered not detected as a possible laboratory artifact: **Reason Code: BL.**

Action: No qualification was required for chloride and sulfate because the associated results were greater than five times the blank value.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No equipment or field blanks were collected because only one well was sampled and no equipment decontamination was performed.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required a dilution; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however there were none in this SDG.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed a non-project sample and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No equipment or field blanks were collected because only one well was sampled and no equipment decontamination was performed.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however there were none in this SDG.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. Professional judgment was not used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March/May event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-8Z was reported in this SDG and was sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 05/15/19

Checked By/Date: DWK 05/15/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2618213
SAMPLING DATE: May 6, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-8Z	GWC-8Z	N	2618213	6020B	arsenic	0.00063	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	beryllium	0.0001	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	boron	0.0065	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	boron, dissolved	0.0065	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	calcium, dissolved	19.7	J, D3	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	calcium	20.0	J, D3	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	chromium, dissolved	0.0037	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	chromium	0.0048	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	lead	0.00032	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	zinc	0.0024	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	6020B	zinc, dissolved	0.0024	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2618213	7470A	mercury, dissolved	<0.00014		UJ	M-,MP	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Reason Codes:

M- = MS and MSD recoveries outside acceptance limits. The result may be biased low.
 MP = MS/MSD imprecision.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL); estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.

Prepared by/Date: JPM 05/15/19
 Checked by/Date: DWK 05/15/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2618213

Reviewer/Date: J. McIntyre 05/15/19 **Senior Reviewer/Date:** D. Knaub 05/15/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.4°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 05/06/19 Prep: metals (total) – 05/09/19 Metals (diss.) – 05/13/19 Hg (total) – 05/08/19 Hg (diss) – 05/13/19 Anal: metals (total) – 05/09/19 metals (diss.) – 05/14/19 Hg (total) – 05/08/19 Hg (diss) – 05/13/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 7 MB 125836 Hg (total) = ND p. 8 MB 127245 Hg (diss) = ND p. 9 MB 126481 Metals (total) = ND p. 11 MB 127316 Metals (diss.) Ba = 0.0016 J x 5 = 0.008 mg/L Assoc. results < 5x flagged "U*": Reason Code: BL <i>No flags, assoc. results > 5x</i></p> <p><u>Equipment Blanks:</u> No EBs collected since no decontamination was performed <u>Field Blank:</u> No FBs collected since no decontamination was performed</p>
		<input checked="" type="checkbox"/>	<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 7 LCS 125837 Hg (tot) = 94% p. 8 LCS 127246 Hg (diss) = 87% p. 9 LCS 126482 metals (tot) = All OK p. 11 LCS 127317 (diss) metals = All OK</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

No field or lab dups in this SDG

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 7 GWC-8Z Hg = 95, 90% RPD = 6

p. 8 GWC-8Z Hg (diss) = 70, 95% RPD = 31

Assoc. result flagged "UJ" Reason Codes: MS-L, MS-P

p. 10, 12 GWC-8Z total and diss. metals = All %rec and RPDs OK

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

1 sample was analyzed for total and dissolved metals. Dissolved metal results were less than or equal to total metals.

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2618213

Reviewer/Date: J. McIntyre 05/15/19 **Senior Reviewer/Date:** D. Knaub 05/15/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 1.4°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 05/06/19 Anal: 05/09/19
	<input checked="" type="checkbox"/>		QC Blanks Review Method Blanks: p. 14 MB 125764 – Cl ⁻ = 0.10 J x5 = 0.5 mg/L SO ₄ = 0.022 J x5 = 0.11 mg/L Assoc. results flagged "U*", Reason Code: BL <i>None, assoc. results > 5x blank</i> <u>Equipment Blanks:</u> No EBs collected since no decontamination was performed <u>Field Blank:</u> No FBs collected since no decontamination was performed
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 14 LCS 125765 – All OK
		<input checked="" type="checkbox"/>	Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab dups in this SDG
		<input checked="" type="checkbox"/>	Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) <i>p. 14 Not performed on samples from this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2618213

Reviewer/Date: J. McIntyre 05/15/19 **Senior Reviewer/Date:** D. Knaub 05/15/19

YES	NO	NA	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.4°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 05/06/19 Anal: 05/08/19
		<input checked="" type="checkbox"/>	QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks</u> : No EBs collected since no decontamination was performed <u>Field Blank</u> : No FBs collected since no decontamination was performed
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 13 LCS 125894 TDS = 106% - OK
		<input checked="" type="checkbox"/>	Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG <i>p. 13 lab dup not a project sample from this SDG</i>
		<input checked="" type="checkbox"/>	Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2615878

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

Qualifier Unusable Data

- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
- UR The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-36	03/06/19	II	QC Samples		
GWA-37	03/06/19	II	Dup-1	03/06/19	II

These samples were collected from Landfill Cells 3&4 on March 6, 2019. Sample Dup-1 is a field duplicate of sample GWA-36. No field blanks are associated with this day of sampling. However, equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL030819 (SDG: 2615881), collected on the nitrile gloves
- EQBL031219-1 (SDG: 2616284), collected on the tubing
- EQBL031219-2 (SDG: 2616284), collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of MS/MSD recoveries and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

A batch MS/MSD analysis was performed for mercury on a non-project sample, therefore, matrix effects specific to mercury in these project samples were not assessed. A batch MS/MSD analysis was performed for metals on sample GWA-56 (reported in SDG 2615879) and the MSD recovery of calcium was above the upper QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than four times the spiked concentration. **Reason Code: M+**

Action: No qualification was required for the calcium results because the sample was analyzed at a dilution and the concentration was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-36) was submitted in this SDG, and the RPDs were within limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. One of the associated equipment blanks (EQBL030819 - SDG 2615581) contained calcium, chromium, copper, and nickel between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: The nickel and copper results less than five times the blank value were qualified as not detected due to possible blank contamination flagged "U". No qualification was required for calcium and chromium results because the associated results were non-detect or greater than five times the blank.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-36	Ca	50x	Dup-1	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions were performed on non-project samples, therefore, matrix effects specific to anions in these project samples were not assessed.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-36) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL030819, EQBL031219-1, and EQBL031219-2) contained chloride between the MDL and RL. Results less than five times the equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: The positive chloride results less than five times the blank value were qualified as not detected due to possible blank contamination flagged "U".*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of field duplicate RPDs and equipment blank contamination. No qualification was applied due to equipment blank contamination.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-36) was submitted in this SDG and the RPD was outside of the QC limit.

Action: The associated TDS results for samples GWA-36 and Dup-1 were qualified as estimated and flagged "J" unless overridden or combined with flags for other QC criteria.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL030819, EQBL031219-1, and EQBL031219-2) contained TDS between the MDL and the RL or above the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-36 and GWA-37 were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 04/22/19

Checked By/Date: DWK 04/25/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2615878
SAMPLING DATE: March 6, 2019
Plant Bowen Landfill Cells 3 & 4: Event 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-36	GWA-36	N	2615878	300.0	sulfate	0.45	J	J	--	mg/L
GWA-36	GWA-36	N	2615878	2540C	total dissolved solids	71		J	FD	mg/L
GWA-36	GWA-36	N	2615878	6020B	beryllium	0.00029	J	J	--	mg/L
GWA-36	GWA-36	N	2615878	6020B	calcium	11.2	J, D3	J	--	mg/L
DUP-1	GWA-36	FD	2615878	2540C	total dissolved solids	260		J	FD	mg/L
DUP-1	GWA-36	FD	2615878	300.0	sulfate	0.43	J	J	--	mg/L
DUP-1	GWA-36	FD	2615878	6020B	beryllium	0.00026	J	J	--	mg/L
DUP-1	GWA-36	FD	2615878	6020B	calcium	10.5	J, D3	J	--	mg/L
GWA-37	GWA-37	N	2615878	300.0	sulfate	0.46	J	J	--	mg/L
GWA-37	GWA-37	N	2615878	300.0	chloride	1.1	J	U*	BE	mg/L
GWA-37	GWA-37	N	2615878	6020B	antimony	0.0019	J	J	--	mg/L
GWA-37	GWA-37	N	2615878	6020B	barium	0.0052	J	J	--	mg/L
GWA-37	GWA-37	N	2615878	6020B	cadmium	0.000093	J	J	--	mg/L
GWA-37	GWA-37	N	2615878	6020B	copper	0.0052	J	U*	BE	mg/L
GWA-37	GWA-37	N	2615878	6020B	nickel	0.0075	J	U*	BE	mg/L

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".
 FD = Field duplicate imprecision.
 PJ = Professional judgment
 -- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.
 U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 04/22/19
 Checked by/Date: DWK 04/25/19
 Revised by/Date: JAH 07/30/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2615878

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>																																				
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>																																				
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.1°C</p>																																				
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 03/06/19 Prep: metals: 03/13/19 Hg: 03/13/19 Anal: metals: 03/14/19 Hg: 03/13/19</p>																																				
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 8 MB 108124 Hg = ND p. 9 MB 108347 = ND <u>Field Blanks:</u> No field blanks associated with this day of sampling. <u>Equipment Blanks:</u> EQBL030819 (SDG 2615881) = Ca 0.015J x 5 = 0.075 mg/L Cr 0.025 x 5 = 0.125 mg/L Cu 0.0013 J x 5 = 0.0065 mg/L Ni 0.0038 J x 5 = 0.019 mg/L - Reason Code BE Assoc. results <5x flagged "U*": GWA-37 (Cu and Ni) EQBL031219-1 (SDG 2616191) = ND EQBL031219-2 (SDG 2616191) = ND</p>																																				
	<input checked="" type="checkbox"/>		<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 8 LCS 108125 Hg = 103% p. 9 LCS 108348 metals = All OK</p>																																				
	<input checked="" type="checkbox"/>		<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="width: 100%;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>GWA-36</u></th> <th style="text-align: center;"><u>DUP-1</u></th> <th style="text-align: center;"><u>*Diff/RPD</u></th> <th style="text-align: center;"><u>RL</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Ba</td> <td style="text-align: center;">0.018</td> <td style="text-align: center;">0.018</td> <td style="text-align: center;">0.0</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Be</td> <td style="text-align: center;">0.00029J</td> <td style="text-align: center;">0.00026J</td> <td style="text-align: center;">0.00003</td> <td style="text-align: center;">0.0030</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Cd</td> <td style="text-align: center;">0.0013</td> <td style="text-align: center;">0.0012</td> <td style="text-align: center;">8.0</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Ca</td> <td style="text-align: center;">11.2J</td> <td style="text-align: center;">10.5J</td> <td style="text-align: center;">0.7</td> <td style="text-align: center;">25</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Zn</td> <td style="text-align: center;">0.56</td> <td style="text-align: center;">0.53</td> <td style="text-align: center;">5.5</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> </tbody> </table> <p style="text-align: center;">*for results <RL, diff must be <RL</p> <p>Both samples were ND for Hg</p>		<u>GWA-36</u>	<u>DUP-1</u>	<u>*Diff/RPD</u>	<u>RL</u>		Ba	0.018	0.018	0.0	--	ok	Be	0.00029J	0.00026J	0.00003	0.0030	ok	Cd	0.0013	0.0012	8.0	--	ok	Ca	11.2J	10.5J	0.7	25	ok	Zn	0.56	0.53	5.5	--	ok
	<u>GWA-36</u>	<u>DUP-1</u>	<u>*Diff/RPD</u>	<u>RL</u>																																			
Ba	0.018	0.018	0.0	--	ok																																		
Be	0.00029J	0.00026J	0.00003	0.0030	ok																																		
Cd	0.0013	0.0012	8.0	--	ok																																		
Ca	11.2J	10.5J	0.7	25	ok																																		
Zn	0.56	0.53	5.5	--	ok																																		

Metals and Mercury by SW6020B/SW7470 (cont.)

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
		<input checked="" type="checkbox"/>	<p>Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) p. 8 non-project - %Rec and RPD ok p. 10 GWA-56 (SDG 2615879) Ca = 111, 297% RPD = 5 <i>No flags, sample result > 4x spike and analyzed at a dilution.</i></p>
		<input checked="" type="checkbox"/>	<p>Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG</p>
		<input checked="" type="checkbox"/>	<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2615878

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

YES NO NA COMMENTS

Case Narrative and COC Completeness Review
OK

Sample Preservation and cooler temperature met (Cool to 6°C)
OK, 1.1°C

Holding times met (Cl, SO₄, F – 28 days)
Coll: 03/06/19
Anal: 03/13/19

QC Blanks Review
Method Blanks:
p. 12 MB 108159 anions = ND

Field Blanks:
No field blanks associated with this day of sampling.
Equipment Blanks:
EQBL030819 (SDG 2615881)= ND
EQBL031219-1 (SDG 2616191) = Cl **0.32** x 5 = **1.6 mg/L**
EQBL031219-2 (SDG 2616191) = Cl **0.32** x 5 = **1.6 mg/L**
Assoc. results <5x flagged "U*": GWA-37

Laboratory Control Sample (LCS) recovery within limits (90-110%)
p. 12 LCS 108160 – All OK

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>GWA-36</u>	<u>DUP-1</u>	<u>*Diff/RPD</u>	<u>RL</u>	
Cl	2.4	2.5	4.1	--	ok
SO ₄	0.45J	0.43J	0.02	1.0	ok

*for results <RL, diff must be <RL

Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)
p. 12 non-project MS/MSD Cl = **38, 39%** RPD = 0 No flags for non-project sample
SO₄ = **-162, -159%** RPD = 0 No flag, result > 4x spike
non-project MS - %rec OK

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2615878

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19; JAH 07/30/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
------------	-----------	-----------	-----------------

- | | | | |
|-------------------------------------|--|--|---|
| <input checked="" type="checkbox"/> | | | <p>Case Narrative and COC Completeness Review
OK</p> |
|-------------------------------------|--|--|---|
- | | | | |
|-------------------------------------|--|--|--|
| <input checked="" type="checkbox"/> | | | <p>Sample Preservation and cooler temperature met (Cool to 6°C)
OK; 1.1°C</p> |
|-------------------------------------|--|--|--|
- | | | | |
|-------------------------------------|--|--|--|
| <input checked="" type="checkbox"/> | | | <p>Holding times met (7 days)
Coll: 03/06/19
Anal: 03/13/19</p> |
|-------------------------------------|--|--|--|
- | | | | |
|--|-------------------------------------|--|---|
| | <input checked="" type="checkbox"/> | | <p>QC Blanks Review
<u>Method Blanks</u> (not required for method)</p> <p><u>Equipment Blanks:</u>
EQBL030819 (SDG 2615881)= TDS 12 J mg/L
EQBL031219-1 (SDG 2616191)= TDS 29 mg/L
EQBL031219-2 (SDG 2616191)= TDS 29 mg/L
<i>No flags applied due to new ES rule</i></p> <p><u>Field Blanks:</u>
No field blanks associated with this day of sampling.</p> |
|--|-------------------------------------|--|---|
- | | | | |
|-------------------------------------|--|--|---|
| <input checked="" type="checkbox"/> | | | <p>Laboratory Control Sample (LCS) recovery within lab limits
p. 11 LCS 108435 TDS = 100% - OK</p> |
|-------------------------------------|--|--|---|
- | | | | | | | | | | | | | | | | |
|--|--------------|------------------|---|---------------|--------------|------------------|-----------|-----|----|-----|-----|--|--|--|--|
| <input checked="" type="checkbox"/> | | | <p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="width: 100%; margin-left: 20px;"> <tr> <td style="text-align: center;"><u>GWA-36</u></td> <td style="text-align: center;"><u>DUP-1</u></td> <td style="text-align: center;"><u>*Diff/RPD</u></td> <td style="text-align: center;"><u>RL</u></td> </tr> <tr> <td style="text-align: center;">TDS</td> <td style="text-align: center;">71</td> <td style="text-align: center;">260</td> <td style="text-align: center;">189</td> </tr> <tr> <td colspan="4" style="text-align: center;"> <p>Assoc. results flagged "J"#: Reason Code: FD
*for results <RL, diff must be <RL</p> </td> </tr> </table> <p>p. 11 lab dup on a non-project sample RPD = 1 OK</p> | <u>GWA-36</u> | <u>DUP-1</u> | <u>*Diff/RPD</u> | <u>RL</u> | TDS | 71 | 260 | 189 | <p>Assoc. results flagged "J"#: Reason Code: FD
*for results <RL, diff must be <RL</p> | | | |
| <u>GWA-36</u> | <u>DUP-1</u> | <u>*Diff/RPD</u> | <u>RL</u> | | | | | | | | | | | | |
| TDS | 71 | 260 | 189 | | | | | | | | | | | | |
| <p>Assoc. results flagged "J"#: Reason Code: FD
*for results <RL, diff must be <RL</p> | | | | | | | | | | | | | | | |
- | | | | |
|--|-------------------------------------|--|--|
| | <input checked="" type="checkbox"/> | | <p>Matrix Spike recoveries and RPDs within limits (if applicable)
<i>None for TDS</i></p> |
|--|-------------------------------------|--|--|
- | | | | |
|-------------------------------------|--|--|---|
| <input checked="" type="checkbox"/> | | | <p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p> |
|-------------------------------------|--|--|---|

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2615879

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

Qualifier Unusable Data

- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
- UR The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-36R	03/07/19	II	GWA-54	03/07/19	II
GWA-38	03/07/19	II	GWA-55R	03/07/19	II
GWA-52	03/07/19	II	GWA-56	03/07/19	II

The samples were collected from Landfill Cells 3&4 on March 7, 2019. No field blanks are associated with this day of sampling. However, equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL030819 (SDG: 2615881), collected on the nitrile gloves
- EQBL031219-1 (SDG: 2616284), collected on the tubing
- EQBL031219-2 (SDG: 2616284), collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for MS/MSD recoveries and equipment blank contamination; however, no qualification was required.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analysis for metals was performed on sample GWA-56 and the MSD recovery for calcium was above the upper QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than four times the spiked concentration. **Reason Code: M+**

Action: No qualification was required for the calcium result because the sample was analyzed at a dilution and the concentration was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pairs were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. One of the associated equipment blanks (EQBL030819 - SDG 2615581) contained calcium, chromium, copper, and nickel between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: No qualification was required because the associated results were non-detect or greater than five times the blank concentration.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-36R	Ca	50x	GWA-55R	Ca	50x
GWA-52	Ca	50x	GWA-56	Ca	50x
GWA-54	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits except for equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG, therefore matrix affects specific to anions in these project samples were not assessed.

Field Duplicate Precision

No field duplicate pairs were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. Two of the equipment blank samples (EQBL031219-1 and EQBL031219-2 in SDG 2616284) contained chloride above the RL. Results less than five times the equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: The positive chloride results less than five times the blank value were qualified as not detected due to possible blank contamination flagged "U".*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits except for equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pairs were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL030819, EQBL031219-1, and EQBL031219-2) contained TDS between the MDL and the RL or above the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-36R, GWA-38, GWA-52, GWA-54, GWA-55R and GWA-56, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 04/22/19

Checked By/Date: DWK 04/25/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2615879
SAMPLING DATE: March 7, 2019
Plant Bowen Landfill Cells 3 & 4: Event 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-36R	GWA-36R	N	2615879	6020B	beryllium	0.000068	J	J	--	mg/L
GWA-36R	GWA-36R	N	2615879	6020B	boron	0.0049	J	J	--	mg/L
GWA-36R	GWA-36R	N	2615879	6020B	cadmium	0.00017	J	J	--	mg/L
GWA-38	GWA-38	N	2615879	6020B	cobalt	0.00087	J	J	--	mg/L
GWA-54	GWA-54	N	2615879	300	chloride	1.2		U*	BE	mg/L
GWA-54	GWA-54	N	2615879	6020B	calcium	23.8	J, D3	J	--	mg/L
GWA-55R	GWA-55R	N	2615879	6020B	selenium	0.0016	J	J	--	mg/L
GWA-56	GWA-56	N	2615879	300.0	fluoride	0.089	J	J	--	mg/L
GWA-56	GWA-56	N	2615879	6020B	arsenic	0.00085	J	J	--	mg/L
GWA-56	GWA-56	N	2615879	6020B	boron	0.02	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 04/22/19

Checked by/Date: DWK 04/25/19

Revised by/Date: JAH 07/30/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2615879

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.1°C
<input checked="" type="checkbox"/>			Holding times met (180 days; Hg = 28 days) Coll: 03/07/19 Prep: metals: 03/13/19 Hg: 03/13/19 Anal: metals: 03/14/19 Hg: 03/13/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 11 MB 108124 Hg = ND p. 12 MB 108347 = ND <u>Field blank:</u> No field blanks associated with this day of sampling. <u>Equipment Blanks:</u> EQBL030819 (SDG 2615881) = Ca 0.015J x 5 = 0.075 mg/L Cr 0.025 x 5 = 0.125 mg/L Cu 0.0013 J x 5 = 0.0065 mg/L Ni 0.0038 J x 5 = 0.019 mg/L - Reason Code BE Assoc. results <5x flagged "U*": No flags – samples >5x EB EQBL031219-1 (SDG 2616191) = ND EQBL031219-2 (SDG 2616191) = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 11 LCS 108125 Hg = 103% p. 12-13 LCS 108348 metals = All OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab duplicates in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) p. 11 non-project sample - %Rec and RPDs OK p. 13 GWA-56 –Ca = 111, 297% RPD= 5 No flags, MS and RPD OK and sample >4x spike concentration.
	<input checked="" type="checkbox"/>		Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2615879

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK, 1.1°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (Cl, SO₄, F – 28 days) Coll: 03/06/19 Anal: 03/13/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 15 MB 108159 anions = ND</p> <p><u>Field blank:</u> No field blanks associated with this day of sampling.</p> <p><u>Equipment Blanks:</u> EQBL030819 (SDG 2615881)= ND EQBL031219-1 (SDG 2616191) = Cl 0.32 x 5 = 1.6 mg/L Reason Code: BE EQBL031219-2 (SDG 2616191) = Cl 0.32 x 5 = 1.6 mg/L Reason Code: BE Assoc. results <5x flagged "U*": GWA-54</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 15 LCS 108160 – All OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab duplicates in this SDG</p>
	<input checked="" type="checkbox"/>		<p>Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 15 non-project MS/MSD Cl = 38, 39% RPD = 0 No flags for non-project sample SO₄ = -162, -159% RPD = 0 No flag, result > 4x spike non-project MS - %rec OK</p>
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2615879

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19; JAH 07/30/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.1°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (7 days) Coll: 03/06/19 Anal: 03/13/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks</u> (not required for method)</p> <p><u>Equipment Blanks:</u> EQBL030819 (SDG 2615881)= TDS 12 J mg/L EQBL031219-1 (SDG 2616191)= TDS 29 mg/L EQBL031219-2 (SDG 2616191)= TDS 29 mg/L <i>No qualification applied due to new ES rule</i></p> <p><u>Field blank:</u> No field blanks associated with this day of sampling.</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within lab limits p. 14 LCS 108435 TDS = 100% - OK</p>
	<input checked="" type="checkbox"/>		<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field duplicates in this SDG <i>p. 14 lab dup on a non-project sample RPD = 1 OK</i></p>
	<input checked="" type="checkbox"/>		<p>Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i></p>
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2615881

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-51RZ	03/08/19	II	GWC-25R	03/08/19	II
GWA-53	03/08/19	II	QC Samples		
GWA-55	03/08/19	II	FBL030819	03/08/19	II
GWC-24R	03/08/19	II	EQBL030819	03/08/19	II

These samples were collected from Landfill Cells 3&4 on March 8, 2019. Sample FBL030819 is a field blank associated with the samples in this SDG, and sample EQBL030819 is an equipment blank. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL030819 (SDG: 2615881), collected on the nitrile gloves
- EQBL031219-1 (SDG: 2616284), collected on the tubing
- EQBL031219-2 (SDG: 2616284), collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary. The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except MS/MSD recoveries and field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analysis for metals was performed on sample GWA-56 (reported in SDG 2615879) and the MSD recovery for calcium was above the upper QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than four times the spiked concentration. **Reason Code: M+**

Action: No qualification was required for the calcium result because the sample was analyzed at a dilution and the concentration was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pairs were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The associated field blank (FBL030819) contained chromium between the method detection limit (MDL) and the reporting limit (RL), and one of the associated equipment blanks (EQBL030819) contained calcium, chromium, copper, and nickel between the MDL and the RL. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BF/BE.**

Action: The copper result for sample GWC-25R was qualified as not detected due to possible blank contamination flagged "U". No qualification was required for calcium, chromium and nickel because the associated samples were non-detect or greater than 5x the blank result.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

Sample	Metal	Dilution	Sample	Metal	Dilution
GWA-51RZ	Ca	50x	GWC-24R	Ca	50x
GWA-53	Ca	50x	GWC-25R	Ca	50x
GWA-55	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits except for field and equipment blank contamination; however, no qualification was necessary.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG, therefore matrix effects specific to anions in these project samples were not assessed

Field Duplicate Precision

No field duplicate pairs were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The associated field blank sample (FBL030819) contained chloride between the MDL and RL, and two of the equipment blank samples (EQBL031219-1 and EQBL031219-2 in SDG 2616284) contained chloride above the RL. Results less than five times the field or equipment blank are considered “not detected” as a possible field artifact: **Reason Codes: BF, BE.**

Action: No qualification was required for chloride because the associated results were greater than five times the blank result.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged “J” by the laboratory, however no anion results were reported between the MDL and RL.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits except for field and equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pairs were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The associated field blank sample (FBL030819) contained TDS between the MDL and RL, and the equipment blank samples (EQBL030819, EQBL031219-1, and EQBL031219-2) contained TDS between the MDL and the RL or above the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-51RZ, GWA-53, GWA-55, GWC-24R, GWC-25R, along with one equipment blank and one field blank were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 04/22/19

Checked By/Date: DWK 04/25/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2615881
SAMPLING DATE: March 8, 2019
Plant Bowen Landfill Cells 3 & 4: Event 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-51RZ	GWA-51RZ	N	2615881	300.0	fluoride	0.075	J	J	--	mg/L
GWA-51RZ	GWA-51RZ	N	2615881	6020B	boron	0.0085	J	J	--	mg/L
GWA-51RZ	GWA-51RZ	N	2615881	6020B	selenium	0.0052	J	J	--	mg/L
GWA-53	GWA-53	N	2615881	6020B	beryllium	0.000057	J	J	--	mg/L
GWA-55	GWA-55	N	2615881	6020B	boron	0.0056	J	J	--	mg/L
GWA-55	GWA-55	N	2615881	6020B	cobalt	0.0044	J	J	--	mg/L
GWA-55	GWA-55	N	2615881	6020B	selenium	0.0026	J	J	--	mg/L
GWC-25R	GWC-25R	N	2615881	6020B	copper	0.0018	J	U*	BE	mg/L
GWC-25R	GWC-25R	N	2615881	6020B	lead	0.00035	J	J	--	mg/L
EB030819	Equipment Blank	EB	2615881	2540C	total dissolved solids	12	J	J	--	mg/L
EB030819	Equipment Blank	EB	2615881	6020B	calcium	0.015	J	J	--	mg/L
EB030819	Equipment Blank	EB	2615881	6020B	copper	0.0013	J	J	--	mg/L
EB030819	Equipment Blank	EB	2615881	6020B	nickel	0.0038	J	J	--	mg/L
FB030819	Field Blank	FB	2615881	300.0	chloride	0.067	J	J	--	mg/L
FB030819	Field Blank	FB	2615881	2540C	total dissolved solids	21	J	J	--	mg/L
FB030819	Field Blank	FB	2615881	6020B	chromium	0.0026	J	J	--	mg/L

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 04/22/19

Checked by/Date: DWK 04/25/19

Revised by/Date: JAH 07/30/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2615881

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.1°C
<input checked="" type="checkbox"/>			Holding times met (180 days; Hg = 28 days) Coll: 03/08/19 Prep: metals:03/13/19 Hg: 03/13/19 Anal: metals: 03/14/19 Hg: 03/13/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 12 MB 108124 Hg = ND p. 13 MB 108347 = ND <u>Field Blank:</u> FBL030819 = Cr 0.0026J x 5 = 0.013 mg/L - Reason Code BF Assoc. results <5x flagged "U*": No flags – samples ND <u>Equipment Blanks</u> EQBL030819 = Ca 0.015J x 5 = 0.075 mg/L Cr 0.025 x 5 = 0.125 mg/L Cu 0.0013 J x 5 = 0.0065 mg/L Ni 0.0038 J x 5 = 0.019 mg/L - Reason Code BE Assoc. results <5x flagged "U*": GWC-25R -Cu EQBL031219-1 (SDG 2616191) = ND EQBL031219-2 (SDG 2616191) = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 12 LCS 108125 Hg = 103% p. 13 LCS 108348 metals = All OK
		<input checked="" type="checkbox"/>	Lab Duplicate - Field Duplicate precision goals met (20%) <i>No field or lab duplicates</i>

Metals and Mercury by SW6020B/SW7470 (cont.)

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
	<input checked="" type="checkbox"/>		<p>Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) <i>p. 12 Hg - non-project sample</i> <i>p. GWA-56 (SDG 2615879) Ca = 111, 297% RPD= 5</i> <i>No flags, MS and RPD OK and sample >4x spike concentration.</i></p>
		<input checked="" type="checkbox"/>	<p>Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG</p>
		<input checked="" type="checkbox"/>	<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2615881

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 1.1°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/08/19 Anal: 03/13/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 16 MB 108159 anions = ND <u>Field Blank:</u> FBL030819 = Cl 0.067 J x 5 = 0.335 mg/L Reason Code: BF <i>No flags - results > 5x blank</i> <u>Equipment Blanks:</u> EQBL030819 (SDG 2615881) = ND EQBL031219-1 (SDG 2616191) = Cl 0.32 x 5 = 1.6 mg/L Reason Code: BE EQBL031219-2 (SDG 2616191) = Cl 0.32 x 5 = 1.6 mg/L Reason Code: BE <i>No flags - results > 5x blank</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 16 LCS 108160 – All OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) <i>No field or lab duplicates</i>
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 16 non-project MS/MSD Cl = 38 , 39% RPD = 0 <i>No flags for non-project sample</i> SO ₄ = -162 , -159% RPD = 0 <i>No flag, result > 4x spike</i> non-project MS - %rec OK
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2615881

Reviewer/Date: J. McIntyre 04/22/19 **Senior Reviewer/Date:** D. Knaub 04/25/19; JAH 07/30/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.1°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/08/19 Anal: 03/13/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL030819 (SDG 2615881)= TDS 12 J mg/L EQBL031219-1 (SDG 2616191)= TDS 29 mg/L EQBL031219-2 (SDG 2616191)= TDS 29 mg/L <i>No qualification applied due to new ES rule</i> <u>Field Blank:</u> FBL030819 = TDS 21.0 J mg/L <i>No qualification applied due to new ES rule</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 15 LCS 108435 TDS = 100% - OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) <i>p. 15 lab dup on a non-project sample RPD = 1 OK</i>
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2615967

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWC-16R	03/11/19	II	QC Samples		
GWC-22R	03/11/19	II	Dup-2	03/11/19	II
GWC-21R	03/11/19	II			

These samples were collected from Landfill Cells 3&4 on March 11, 2019. Sample Dup-2 is a field duplicate of GWC-22R. No field blanks are associated with this day of sampling. However, equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL030819 (SDG: 2615881), collected on the nitrile gloves
- EQBL031219-1 (SDG: 2616284), collected on the tubing
- EQBL031219-2 (SDG: 2616284), collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for MS/MSD recoveries, field duplicate precision, and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analysis for mercury was performed on sample GWA-16R, and the recoveries and RPDs were in QC limits. The batch MS/MSD analysis for metals was performed on a non-project sample, and the recoveries of calcium were outside of the QC limits. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than four times the spiked concentration. **Reason Code: M+, M-**

Action: No qualification was necessary because the sample result was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWC-22R) was submitted with this SDG and the RPDs were within QC limits except for zinc.

Action: The zinc result for sample Dup-2 was qualified as not detected with an approximate detection limit and flagged "UJ". No additional qualification was necessary for the zinc result in sample GWC-22R.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. One of the associated equipment blanks (EQBL030819 - SDG 2615581) contained calcium, chromium, copper, and nickel between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the equipment blank are considered “not detected” as a possible field artifact: **Reason Code: BE.**

Action: The copper and nickel results less than five times the blank value were qualified as not detected due to possible blank contamination flagged “U”. No qualification was necessary for calcium and chromium because the associated results were non-detect or greater than five times the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-16R	Ca	50x	GWC-21R	Ca	50x
GWC-22	Ca	50x	Dup-2	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged “J” by the laboratory. The “J” qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits except for equipment blank contamination, however no qualification was necessary.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG, therefore matrix affects specific to anions in these project samples were not assessed.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWC-22R) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. Two of the equipment blank samples (EQBL031219-1 and EQBL031219-2 in SDG 2616284) contained chloride above the RL. Results less than five times the equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: No qualification was required because the associated chloride results were greater than five times the blank result.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no anion results were reported between the MDL and RL.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWC-22R) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL030819, EQBL031219-1, and EQBL031219-2) contained TDS between the MDL and the RL or above the RL. No qualification applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-16R, GWC-22R, and GWC-21R were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 04/24/19
Checked By/Date: DWK 04/26/19
Revised by/Date: JAH 07/30/19

**TABLE 1
SUMMARY OF DATA QUALIFIERS**

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2615967
SAMPLING DATE: March 11, 2019
Plant Bowen Landfill Cells 3 & 4: Event 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-16R	GWC-16R	N	2615967	300.0	fluoride	0.23	J	J	--	mg/L
GWC-16R	GWC-16R	N	2615967	6020B	boron	0.013	J	J	--	mg/L
GWC-16R	GWC-16R	N	2615967	6020B	copper	0.0018	J	U*	BE	mg/L
GWC-16R	GWC-16R	N	2615967	6020B	nickel	0.0079	J	U*	BE	mg/L
GWC-16R	GWC-16R	N	2615967	6020B	thallium	0.00026	J	J	--	mg/L
GWC-21R	GWC-21R	N	2615967	6020B	antimony	0.0029	J	J	--	mg/L
GWC-21R	GWC-21R	N	2615967	6020B	arsenic	0.0038	J	J	--	mg/L
GWC-21R	GWC-21R	N	2615967	6020B	boron	0.005	J	J	--	mg/L
GWC-21R	GWC-21R	N	2615967	6020B	cobalt	0.00056	J	J	--	mg/L
GWC-21R	GWC-21R	N	2615967	6020B	nickel	0.0012	J	U*	BE	mg/L
GWC-21R	GWC-21R	N	2615967	6020B	zinc	0.0034	J	J	--	mg/L
GWC-22R	GWC-22R	N	2615967	6020B	arsenic	0.00099	J	J	--	mg/L
GWC-22R	GWC-22R	N	2615967	6020B	thallium	0.00015	J	J	--	mg/L
GWC-22R	GWC-22R	N	2615967	6020B	zinc	0.0021	J	J	--	mg/L
Dup-2	GWC-22R	FD	2615967	6020B	arsenic	0.00075	J	J	--	mg/L
Dup-2	GWC-22R	FD	2615967	6020B	thallium	0.00015	J	J	--	mg/L
Dup-2	GWC-22R	FD	2615967	6020B	zinc	<0.0021		UJ	FD	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

FD = Field duplicate imprecision.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ = The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 04/24/19

Checked by/Date: DWK 04/26/19

DQE CHECKLISTS

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 9 GWC-16R Hg = 100, 102% RPD = 3

p. 11 non-project sample Ca = 38, 170% RPD = 2

No flag - sample result > 4x spike amt.

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2615967

Reviewer/Date: J. McIntyre 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/26/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>												
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK												
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C												
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/11/19 Anal: 03/15/19												
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 14 MB 109447 anions = ND <u>Field blank:</u> No field blanks associated with this day of sampling. <u>Equipment Blanks:</u> EQBL030819 (SDG 2615881) = ND EQBL031219-1 (SDG 2616191) = Cl 0.32 x 5 = 1.6 mg/L Reason Code: BE EQBL031219-2 (SDG 2616191) = Cl 0.32 x 5 = 1.6 mg/L Reason Code: BE <i>No flags – samples >5x EB</i>												
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 14 LCS 109448 – <i>All OK</i>												
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th><u>DUP-2</u></th> <th><u>GWC-22R</u></th> <th><u>RPD</u></th> </tr> </thead> <tbody> <tr> <td>Cl</td> <td>3.2</td> <td>3.2</td> <td>0.0</td> </tr> <tr> <td>SO₄</td> <td>1.9</td> <td>2.0</td> <td>5.1</td> </tr> </tbody> </table>		<u>DUP-2</u>	<u>GWC-22R</u>	<u>RPD</u>	Cl	3.2	3.2	0.0	SO ₄	1.9	2.0	5.1
	<u>DUP-2</u>	<u>GWC-22R</u>	<u>RPD</u>												
Cl	3.2	3.2	0.0												
SO ₄	1.9	2.0	5.1												
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 14 non-project sample Cl = -292, -293% F = 82, 81% SO ₄ = 30, 29% p. 14 non-project sample (MS only) Cl = 22% F = 117% SO ₄ = -636% <i>No flags applied for non-project samples</i>												
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)												

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616191

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWC-17R	03/12/19	II	QC Samples		
GWC-18	03/12/19	II	FBL031219-1	03/12/19	II
GWC-18R	03/12/19	II	EQBL031219-1	03/12/19	II
GWC-19R	03/12/19	II	FBL031219-2	03/12/19	II
GWC-20R	03/12/19	II	EQBL031219-2	03/12/19	II
GWC-23R	03/12/19	II	Dup-3	03/12/19	II
GWA-53R	03/12/19	II			

These samples were collected from Landfill Cells 3&4 on March 12, 2019. Sample Dup-3 is a field duplicate of GWC-19R. Samples FBL031219-1 and FBL031219-2 are field blanks associated with the samples in this SDG, and EQBL031219-1 and EQBL031219-2 are equipment blanks. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL030819 (SDG: 2615881), collected on the nitrile gloves
- EQBL031219-1 (SDG: 2616284), collected on the tubing
- EQBL031219-2 (SDG: 2616284), collected on the bladder pump

The highest result of any detected analyte between the three equipment blanks or two field blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for MS/MSD recoveries and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of constituents of interest.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for mercury were performed on samples GWA-37Z (SDG 2616179) and GWA-41 (SDG 2616193), and the recoveries and RPDs were within QC limits. Batch MS/MSD analyses for metals were performed samples GWA-47 (SDG 2616179) and GWA-41 (SDG 2616193), and the calcium recoveries were above and below the QC limits, respectively. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than four times the spiked concentration.

Reason Codes: M+, M-

Action: No qualification was necessary because the sample result was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-3/GWC-19R) was submitted with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The associated field blanks (FBL031219-1 and FBL031219-2) were non-detect for metals and mercury. Equipment blank sample FBL030819 contained calcium, chromium, copper, and nickel between Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: The chromium results less than five times the blank value were qualified as not detected due to possible blank contamination and flagged "U". No qualification was required for calcium, copper and nickel results because the associated results were non-detect or greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-17R	Ca	50x	GWC-19R	Ca	50x
GWC-18	Ca	50x	GWC-20R	Ca	50x
GWC-18R	Ca	50x	GWC-23R	Ca	50x
GWC-53R	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits except for field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG, therefore matrix affects specific to anions in these project samples were not assessed.

Field Duplicate Precision

One field duplicate pair (Dup-3/GWC-19R) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG (FBL031219-1, FBL031219-2, EQBL031219-1, and EQBL031219-2) contained chloride above the RL. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BF/BE.**

Action: No qualification was required for chloride results because the associated samples were greater than five times the blank result.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no anion results were reported between the MDL and RL.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits except for LCS recoveries and field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were outside of the upper QC limit in one of two LCSs associated with the samples in this SDG. Associated positive results may be biased high and require qualification.

Reason Code: L+.

Action: The associated TDS results were qualified as estimated and flagged "J" unless overridden by qualification for other criteria.

Field Duplicate Precision

One field duplicate pair (Dup-3/GWC-19R) was submitted with this SDG and the RPDs were within QC limits. A laboratory duplicate of sample GWC-17R was performed and the RPD was within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG (EQBL031219-1, FBL031219-1, EQBL031219-2 and FBL031219-2) contained TDS between the MDL and the RL and above the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-17R, GWC-18, GWC-18R, GWC-19R, GWC-20R, GWC-23R and GWC-53R, along with 2 field and 2 equipment blank samples were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 04/23/19

Checked By/Date: DWK 04/26/19

Revised by/Date: JAH 07/30/19

**TABLE 1
SUMMARY OF DATA QUALIFIERS**

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616191
SAMPLING DATE: March 12, 2019
Plant Bowen Landfill Cells 3 & 4: Event 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-53R	GWA-53R	N	2616191	300.0	fluoride	0.046	J	J	--	mg/L
GWA-53R	GWA-53R	N	2616191	2540C	total dissolved solids	150	1A, L1	J	L+	mg/L
GWA-53R	GWA-53R	N	2616191	6020B	antimony	0.002	J	J	--	mg/L
GWC-17R	GWC-17R	N	2616191	300.0	fluoride	0.056	J	J	--	mg/L
GWC-17R	GWC-17R	N	2616191	6020B	boron	0.0099	J	J	--	mg/L
GWC-17R	GWC-17R	N	2616191	6020B	nickel	0.001	J	U*	BE	mg/L
GWC-17R	GWC-17R	N	2616191	6020B	zinc	0.0038	J	J	--	mg/L
GWC-18	GWC-18	N	2616191	300.0	fluoride	0.05	J	J	--	mg/L
GWC-18	GWC-18	N	2616191	2540C	total dissolved solids	135	H5	J	L+	mg/L
GWC-18	GWC-18	N	2616191	6020B	calcium	23.2	J, D3	J	--	mg/L
GWC-18	GWC-18	N	2616191	6020B	chromium	0.002	J	U*	BE	mg/L
GWC-18R	GWC-18R	N	2616191	300.0	fluoride	0.042	J	J	--	mg/L
GWC-18R	GWC-18R	N	2616191	2540C	total dissolved solids	143	1A, L1	J	L+	mg/L
GWC-18R	GWC-18R	N	2616191	6020B	antimony	0.00091	J	J	--	mg/L
GWC-19R	GWC-19R	N	2616191	300.0	fluoride	0.04	J	J	--	mg/L
GWC-19R	GWC-19R	N	2616191	2540C	total dissolved solids	156	H5	J	L+	mg/L
Dup-3	GWC-19R	FD	2616191	300.0	fluoride	0.045	J	J	--	mg/L
Dup-3	GWC-19R	FD	2616191	2540C	total dissolved solids	164		J	L+	mg/L
GWC-20R	GWC-20R	N	2616191	300.0	fluoride	0.048	J	J	--	mg/L
GWC-20R	GWC-20R	N	2616191	2540C	total dissolved solids	191	1A, L1	J	L+	mg/L
GWC-20R	GWC-20R	N	2616191	6020B	boron	0.0045	J	J	--	mg/L
GWC-23R	GWC-23R	N	2616191	300.0	fluoride	0.06	J	J	--	mg/L
GWC-23R	GWC-23R	N	2616191	2540C	total dissolved solids	310	1A, L1	J	L+	mg/L
GWC-23R	GWC-23R	N	2616191	6020B	boron	0.0047	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
 H5 = Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.
 1A = Out of hold rerun result confirms original. Original reported.
 L1 = Analyte recovery in the LCS was above QC limits. Results for this analyte in associated samples may be biased high.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".
 BF = Field blank contamination. The result should be considered "not-detected".
 L+ = LCS and LCSD recoveries outside acceptance limits. The result may be biased high.
 -- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL); estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.
 U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 04/24/19
 Checked by/Date: DWK 04/26/19
 Revised by/Date: JAH 07/30/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616191

Reviewer/Date: J. McIntyre 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/26/19

YES	NO	NA	COMMENTS												
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK												
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.5°C												
<input checked="" type="checkbox"/>			Holding times met (180 days; Hg = 28 days) Coll: 03/12/19 Prep: metals: 03/19/19, 03/20/19 Hg: 03/20/19 Anal: metals: 03/21/19 Hg: 03/20/19												
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 18 MB 110677 Hg = ND p. 19 MB 110914 Hg = ND p. 20 MB 110486 = ND p. 22 MB 111121 = ND <u>Field Blanks:</u> FBL031219-1 = ND FBL031219-2 = ND <u>Equipment Blanks:</u> EQBL030819 (SDG 2615881) = Ca 0.015J x 5 = 0.075 mg/L Cr 0.025 x 5 = 0.125 mg/L Cu 0.0013 J x 5 = 0.0065 mg/L Ni 0.0038 J x 5 = 0.019 mg/L - Reason Code BE Assoc. results <5x flagged "U*": GWC-18 (Cr), GWC-17R (Ni) EQBL031219-1 (SDG 2616191) = ND EQBL031219-2 (SDG 2616191) = ND												
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 18 LCS 110678 Hg = 96% p. 19 LCS 110915 Hg = 100% p. 20 LCS 110487 metals = All OK p. 22 LCS 111122 metals = All OK												
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th>DUP-3</th> <th>GWA-19R</th> <th>RPD</th> </tr> </thead> <tbody> <tr> <td>Ba</td> <td>0.015</td> <td>0.016</td> <td>6.4</td> </tr> <tr> <td>Ca</td> <td>29.3</td> <td>31.1</td> <td>6</td> </tr> </tbody> </table> Both samples ND for Hg		DUP-3	GWA-19R	RPD	Ba	0.015	0.016	6.4	Ca	29.3	31.1	6
	DUP-3	GWA-19R	RPD												
Ba	0.015	0.016	6.4												
Ca	29.3	31.1	6												

Metals and Mercury by SW6020B/SW7470 (cont.)

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			<p>Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) p. 18 Hg GWA-37Z (SDG 2616179) Hg = 99,99% RPD = 0 OK p. 19 Hg GWA-41 (SDG 2616193) Hg = 97, 101% RPD = 4 OK p. 21 metals GWA-47 (SDG 2616179) Ca = 150, 298% RPD=7 <i>No flags, sample result > 4x spike and analyzed at a dilution.</i> p. 23 metals GWA-41 (SDG 2616193) Ca = 67, 68% RPD=0 <i>No flags, sample result > 4x spike and analyzed at a dilution.</i></p>
		<input checked="" type="checkbox"/>	<p>Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG</p>
		<input checked="" type="checkbox"/>	<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616191

Reviewer/Date: J. McIntyre 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/26/19; JAH 07/30/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>								
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK								
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.5°C								
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/12/19 Anal: 03/13/19								
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL030819 (SDG 2615881) TDS 12 J mg/L EQBL031219-1 (SDG 2616191) TDS 29 mg/L EQBL031219-2 (SDG 2616191) TDS 29 mg/L <i>No qualification applied due to new ES rule</i> <u>Field Blanks:</u> FBL031219-1 TDS 41 mg/L FBL031219-2 TDS 25 mg/L <i>No qualification applied due to new ES rule</i>								
	<input checked="" type="checkbox"/>		Laboratory Control Sample (LCS) recovery within lab limits p. 24 LCS 110196 TDS = 110% (GWC-18R, GWC-20R, GWC-23R, GWA-53R) <i>GWC-18R, GWC-23R and GWA-53R flagged "U*" for FB/EB.</i> Results flagged "J": GWC-20R p. 25 LCS 112717 TDS = 106%								
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th><u>Dup-3</u></th> <th><u>GWA-19R</u></th> <th><u>RPD</u></th> </tr> </thead> <tbody> <tr> <td>TDS</td> <td>164</td> <td>156</td> <td>5.0</td> </tr> </tbody> </table> <i>p. 25 lab dup on GWC-17R RPD = 5 OK</i>		<u>Dup-3</u>	<u>GWA-19R</u>	<u>RPD</u>	TDS	164	156	5.0
	<u>Dup-3</u>	<u>GWA-19R</u>	<u>RPD</u>								
TDS	164	156	5.0								
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>								
	<input checked="" type="checkbox"/>		EDD Data Verification vs. Hardcopy (10% samples for each SDG)								

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616179

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan (FSP)*, Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
<u>Qualifier</u>	<u>Unusable Data</u>

- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
- UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-39Z	03/15/19	II	QC Samples		
GWA-47	03/15/19	II	FBL031519	03/15/19	II
GWA-48	03/15/19	II	EQBL031519	03/15/19	II

The samples reported in this SDG were collected from Landfill Cells 9&10 on March 15, 2019. Sample FBL031519 is a field blank, and sample EQBL031519 is an equipment blank. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL031519 (SDG: 2616179), collected on the poly tubing
- EQBL031819 (SDG: 2616284), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of equipment blank contamination and MS/MSD recoveries; however, no qualification was required.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG did not contain metals indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for mercury on sample GWA-39Z and the recoveries and RPD were within the QC limits. An MS/MSD analysis was performed for metals on sample GWA-47 and the recoveries of calcium were above the upper QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than 4x the spiked concentration.

Reason Code: M+

Action: No qualification was required for the calcium results because the sample was analyzed at a dilution and the concentration was greater than 4x the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The field blank samples did not contain metals. However, one of the equipment blanks (EQBL031819 – SDG: 2616284) contained Ca between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact:

Reason Code: BE.

Action: No qualification was required because the calcium present in the samples was greater than 5x the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-39Z	Ca	50x	GWA-47	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits with the exception of field and equipment blank contamination; however, no qualification was required.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG did not contain anions indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on a non-project sample; therefore, matrix effects specific to anions in these project samples were not assessed.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field blank samples (FBL031519 and FBL031819) and/or the equipment blank samples (EQBL031519 and EQBL031819) contained chloride between the MDL and the RL. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE/BF.**

Action: No qualification was required for chloride because the sample results were greater than 5x the field and equipment blank values.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits with the exception of the laboratory duplicate RPD and field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed sample FBL031519 in duplicate and the RPD was greater than the laboratory QC limits but within project QC limits. Both results were reported at concentrations below the RL. When one or more results are below the RL the difference between the values must not exceed the RL.

Action: No qualification was required because the RPD was within project QC limits and the difference between the results was less than the RL.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field blank (FBL031519 and FBL031819) and the equipment blank (EQBL031519 and EQBL031819) samples contained TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWA-39Z, GWA-47, and GWC-48, along with the field and equipment blank samples, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JAH 04/23/19

Checked By/Date: DWK 04/24/19

Revised by/Date: JAH 07/30/19

**TABLE 1
SUMMARY OF DATA QUALIFIERS**

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616179
SAMPLING DATE: March 15, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
EQBL-031519	Equipment Blank	EB	2616179	2540C	total dissolved solids	20	J	J	--	mg/L
EQBL-031519	Equipment Blank	EB	2616179	300.0	chloride	0.094	J	J	--	mg/L
FBL-031519	Field Blank	FB	2616179	2540C	total dissolved solids	15	J	J	--	mg/L
FBL-031519	Field Blank	FB	2616179	300.0	chloride	0.079	J	J	--	mg/L
GWA-39Z	GWA-39Z	N	2616179	6020B	boron	0.005	J	J	--	mg/L
GWA-39Z	GWA-39Z	N	2616179	6020B	calcium	20.3	J, D3	J	--	mg/L
GWA-39Z	GWA-39Z	N	2616179	6020B	zinc	0.0023	J	J	--	mg/L
GWC-47	GWC-47	N	2616179	6020B	cadmium	0.00015	J	J	--	mg/L
GWC-47	GWA-41	N	2616179	6020B	calcium	20.4	J, D3, M6	J	--	mg/L
GWC-48	GWC-48	N	2616179	6020B	beryllium	0.00022	J	J	--	mg/L
GWC-48	GWC-48	N	2616179	6020B	cadmium	0.00018	J	J	--	mg/L
GWC-48	GWC-48	N	2616179	6020B	chromium	0.0023	J	J	--	mg/L
GWC-48	GWC-48	N	2616179	6020B	colbalt	0.0012	J	J	--	mg/L
GWC-48	GWC-48	N	2616179	6020B	nickel	0.0033	J	J	--	mg/L
GWC-48	GWC-48	N	2616179	6020B	zinc	0.0058	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
 M6 = Matrix spike and matrix duplicate recovery not evaluated against control limits due to sample dilution.

Reason Codes:

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.The associated numerical value is the approximate concentration of the analyte in the sample.

Prepared by/Date: JAH 04/23/19
 Checked by/Date: DWK 04/24/19
 Revised by/Date: JAH 07/30/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616179

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19

YES NO NA COMMENTS

- Dilutions necessary for Ca (50x)

Case Narrative and COC Completeness Review
OK
- Sample Preservation and cooler temperature met (HNO₃ to pH<2)**
OK, 5.0°C
- Holding times met (180 days; Hg = 28 days)**
Coll: 03/15/19
Prep: metals – 03/19/19, Hg – 03/20/19
Anal: metals – 03/21/19, Hg – 03/20/19
- QC Blanks Review**
Method Blanks:
p. 10 MB 110677 Hg = ND
p. 11 MB 110486 metals = ND

Field blank:
FBL031519 (SDG: 2616179) =ND
FBL031819 (SDG: 2616284) = ND

Equipment blanks:
EQBL031519 (SDG 2616179) =ND
EQBL031819 (SDG: 2616284) Ca = **0.016J** x 5 = **0.08 mg/L**
No flags – samples >5x EB
- Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%)**
p. 10 LCS 110678 Hg = 96%
p. 11 LCS 110487 metals = All OK
- Lab Duplicate - Field Duplicate precision goals met (20%)**
No field dup submitted with this SDG
- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
p. 10 GWA-37Z Hg = 99, 99% RPD = 0 OK
p. 12 metals - GWA-47 Ca = **150, 298%** RPD=7
No flags, sample result > 4x spike and analyzed at a dilution.

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)
No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616179

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 5.0°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/15/19 Anal: 03/22/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 15 MB 111327 = ND <u>Field blank:</u> FBL031519 (SDG: 2616179) Cl = 0.079J x 5 = 0.395 mg/L FBL031819 (SDG: 2616284) = ND <i>No flag – samples >5x FB</i> <u>Equipment blanks:</u> EQBL031519 (SDG: 2616179) Cl = 0.094J x 5 = 0.47 mg/L EQBL031819 (SDG: 2616284) Cl = 0.057J x 5 = 0.285 mg/L <i>No flag – samples >5x EB</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 15 LCS 111328 – All OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab dup in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 15 not a sample in this SDG- %Rec out for all ; RPDs OK p. 15 not a sample in this SDG (MS only) - %Rec out for all
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616179

Reviewer/Date: J. Hartness 04/23/19
07/30/19

Senior Reviewer/Date: D. Knaub 04/24/19; JAH

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 5.0°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/15/19 Anal: 03/21/19, 03/22/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> No MB required by the method. <u>Equipment blanks:</u> EQBL031519 (SDG 2616179) TDS = 20.0J mg/L EQBL031819 (SDG 2616284) TDS = 18.0J mg/L <i>No qualification applied due to new ES rule</i> <u>Field blank:</u> FBL031519 (SDG: 2616179) TDS = 15.0 J mg/L FBL031819 (SDG: 2616284) TDS = 19.0 J mg/L <i>No qualification applied due to new ES rule</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 13 LCS 111467 TDS = 104% - OK p. 14 LCS 112147 TDS = 106% - OK
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) No field dups submitted with this SDG Lab dups: p. 13 Non-project sample; RPD = 3 OK p. 14 FBL031519; RPDs = 12 (>Lab QC limit of 10; <project QC limit of 20) <i>Results below RL- Difference =2; <RL – no qualification - OK</i>
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616189

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan (FSP)*, Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-40	03/13/19	II	QC Samples		
GWA-43	03/13/19	II	Dup-1	03/13/19	II
GWA-43R	03/13/19	II			

The samples reported in this SDG were collected from Landfill Cells 9&10 on March 13, 2019. Sample Dup-1 is the field duplicate of sample GWA-40. No field blanks are associated with this day of sampling. However, equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL031519 (SDG: 2616179), collected on the poly tubing
- EQBL031819 (SDG: 2616284), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of equipment blank contamination and MS/MSD recoveries; however, no qualification was required.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG did not contain metals indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for mercury on sample GWA-39Z (reported in SDG: 2616179) and the recoveries and RPD were within the QC limits. An MS/MSD analysis was performed for metals on sample GWA-47 (reported in SDG: 2616179) and the recoveries of calcium were above the upper QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than 4x the spiked concentration. **Reason Code: M+**

Action: No qualification was required for the calcium results because the sample was analyzed at a dilution and the concentration was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-40) was submitted in this SDG and RPDs were within limits indicating good sampling precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. However, one of the equipment blanks (EQBL031819 – SDG: 2616284) contained Ca between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact:

Reason Code: BE.

Action: No qualification was required because the calcium present in the samples was greater than five times the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-40	Ca	50x	Dup-1	Ca	50x
GWA-43R	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was required.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG did not contain anions indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on a project samples GWA-40 and GWA-43 (MS only) and the recoveries and RPDs were within QC limits indicating no matrix effects were apparent.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-40) was submitted in this SDG and RPDs were within limits indicating good sampling precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL031519 and EQBL031819) contained chloride between the MDL and the RL. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: No qualification was required for chloride because the sample results were greater than five times the equipment blank values.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-40) was submitted in this SDG and RPDs were within limits indicating good sampling precision.

Laboratory Duplicate Precision

The laboratory analyzed a non-project sample and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL031519 and EQBL031819) contained TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory; however, there were none reported in this SDG.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWA-40, GWA-43, and GWC-43R, along with the field and equipment blank samples, and a field duplicate were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JAH 04/23/19

Checked By/Date: DWK 04/24/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616189
SAMPLING DATE: March 13, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-40	GWA-40	N	2616189	300	fluoride	0.045	J	J	--	mg/L
GWA-40	GWA-40	N	2616189	6020B	barium	0.0076	J	J	--	mg/L
GWA-40	GWA-40	N	2616189	6020B	calcium	23.8	J, D3	J	--	mg/L
Dup-1	GWA-40	FD	2616189	300	fluoride	0.041	J	J	--	mg/L
Dup-1	GWA-40	FD	2616189	6020B	barium	0.0071	J	J	--	mg/L
Dup-1	GWA-40	FD	2616189	6020B	calcium	24.2	J, D3	J	--	mg/L
GWA-43	GWA-43	N	2616189	300	fluoride	0.43	J	J	--	mg/L
GWA-43	GWA-43	N	2616189	6020B	zinc	0.0022	J	J	--	mg/L
GWA-43R	GWA-43R	N	2616189	300	fluoride	0.036	J	J	--	mg/L
GWA-43R	GWA-43R	N	2616189	6020B	barium	0.0077	J	J	--	mg/L
GWA-43R	GWA-43R	N	2616189	6020B	boron	0.012	J	J	--	mg/L
GWA-43R	GWA-43R	N	2616189	6020B	copper	0.0015	J	J	--	mg/L
GWA-43R	GWA-43R	N	2616189	6020B	zinc	0.0023	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
 D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

Reason Codes:

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

Prepared by/Date: JAH 04/23/19
 Checked by/Date: DWK 04/24/19
 Revised by/Date: JAH 07/30/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616189

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19

YES NO NA COMMENTS

- Dilutions necessary for Ca (50x)
Case Narrative and COC Completeness Review
 OK
- Sample Preservation and cooler temperature met (HNO₃ to pH<2)**
 OK, 0.5°C
- Holding times met (180 days; Hg = 28 days)**
 Coll: 03/13/19
 Prep: metals – 03/19/19, Hg – 03/20/19
 Anal: metals – 03/21/19, Hg – 03/20/19
- QC Blanks Review**
Method Blanks:
 p. 9 MB 110677= ND
 p. 10 MB 110486 metals = ND

Field blank:
 No field blanks associated with this day of sampling.
Equipment blanks:
 EQBL031519 (SDG 2616179) =ND
 EQBL031819 (SDG: 2616284) Ca = 0.016J x 5 = **0.08 mg/L**
 No flags – samples >5x EB
- Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%)**
 p. 9 LCS 110678 Hg = 96%
 p. 10 LCS 110487 metals = All OK
- Lab Duplicate - Field Duplicate precision goals met (20%)**

	<u>GWA-40</u>	<u>Dup-1</u>	<u>*Diff/RPD</u>	<u>RL</u>	
Ba	0.0076J	0.0071J	*0.0005	0.01	ok
Ca	23.8J	24.2J	*0.4	25	ok

*for results <RL, diff must be <RL

Hg not detected in either sample
- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
 p. 9 GWA-37Z (SDG: 2616179) Hg = 99, 99% RPD = 0 OK
 p. 11 metals - GWA-47 (SDG: 2616179) Ca = **150, 298%** RPD=7
 No flags, sample result > 4x spike and analyzed at a dilution.

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS



Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)
No dissolved metals in this SDG



EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616189

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>																								
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>																								
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.5°C</p>																								
<input checked="" type="checkbox"/>			<p>Holding times met (Cl, SO₄, F – 28 days) Coll: 03/13/19 Anal: 03/22/19</p>																								
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 13 MB 111639 = ND</p> <p><u>Field blank:</u> No field blanks associated with this day of sampling.</p> <p><u>Equipment blanks:</u> EQBL031519 (SDG: 2616179) Cl = 0.094J x 5 = 0.47 mg/L EQBL031819 (SDG: 2616284) Cl = 0.057J x 5 = 0.285 mg/L <i>No flag – samples >5x EB</i></p>																								
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 13 LCS 111640 – All OK</p>																								
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="width: 100%;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>GWA-40</u></th> <th style="text-align: center;"><u>Dup-1</u></th> <th style="text-align: center;"><u>*Diff/RPD</u></th> <th style="text-align: center;"><u>RL</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Cl</td> <td style="text-align: center;">2.2</td> <td style="text-align: center;">2.1</td> <td style="text-align: center;">4.6</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>F</td> <td style="text-align: center;">0.045J</td> <td style="text-align: center;">0.041J</td> <td style="text-align: center;">*0.004</td> <td style="text-align: center;">0.3</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>SO₄</td> <td style="text-align: center;">2.1</td> <td style="text-align: center;">2.2</td> <td style="text-align: center;">4.6</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> </tbody> </table> <p style="text-align: center;"><i>*for results <RL, diff must be <RL</i></p>		<u>GWA-40</u>	<u>Dup-1</u>	<u>*Diff/RPD</u>	<u>RL</u>		Cl	2.2	2.1	4.6	--	ok	F	0.045J	0.041J	*0.004	0.3	ok	SO ₄	2.1	2.2	4.6	--	ok
	<u>GWA-40</u>	<u>Dup-1</u>	<u>*Diff/RPD</u>	<u>RL</u>																							
Cl	2.2	2.1	4.6	--	ok																						
F	0.045J	0.041J	*0.004	0.3	ok																						
SO ₄	2.1	2.2	4.6	--	ok																						
<input checked="" type="checkbox"/>			<p>Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 13 GWA-40 - %Rec and RPDs OK p. 13 GWA-43 (MS only) - %Rec ok</p>																								
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>																								

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616189

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19; JAH 07/30/19

YES NO NA COMMENTS

 Case Narrative and COC Completeness Review
OK

 Sample Preservation and cooler temperature met (Cool to 6°C)
OK; 0.5°C

 Holding times met (7 days)
Coll: 03/13/19
Anal: 03/20/19

 QC Blanks Review
Method Blanks:
No MB required by the method.

Equipment blanks:
EQBL031519 (SDG 2616179) TDS = 20.0J mg/L
EQBL031819 (SDG 2616284) TDS = 18.0J mg/L
No qualification applied due to new ES rule

Field blank:
No field blanks associated with this day of sampling.

 Laboratory Control Sample (LCS) recovery within lab limits
p. 12 LCS 110746 TDS = 103% - OK

 Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>GWA-40</u>	<u>Dup-1</u>	<u>RPD</u>	
TDS	130	142	8.8	ok

Lab dup:
p. 12 Non-project sample; RPD = 5 OK

 Matrix Spike recoveries and RPDs within limits (if applicable)
None for TDS

 EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616193

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan (FSP)*, Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-41	03/14/19	II	GWC-45	03/14/19	II
GWA-41R	03/14/19	II	GWC-45R	03/14/19	II
GWA-42	03/14/19	II	GWA-39RZ	03/14/19	II
GWC-44	03/14/19	II			

The samples reported in this SDG were collected from Landfill Cells 9&10 on March 14, 2019. No field blanks are associated with this day of sampling. However, equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL031519 (SDG: 2616179), collected on the poly tubing
- EQBL031819 (SDG: 2616284), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of equipment blank contamination and MS/MSD recoveries; however, no qualification was required.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG did not contain metals indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed for mercury and metals on sample GWA-41, and the recoveries of calcium were below the lower QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than four times the spiked concentration.

Reason Code: M-

Action: No qualification was required for the calcium results because the sample was analyzed at a dilution and the concentration was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. However, one of the equipment blanks (EQBL031819 – SDG: 2616284) contained Ca between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact:

Reason Code: BE.

Action: No qualification was required because the calcium present in the samples was greater than five times the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

Sample	Metal	Dilution	Sample	Metal	Dilution
GWA-41	Ca	50x	GWC-44	Ca	50x
GWA-41R	Ca	50x	GWC-45R	Ca	50X
GWA-42	Ca	50x	GWA-39RZ	Ca	50X

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value verses the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits with the exception of method and equipment blank contamination and MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG contained chloride at a concentration below the MDL and the RL (0.31 J mg/L). Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive chloride results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on sample GWC-45 and the recoveries and RPDs were within QC limits with the exception of the MSD recovery and RPD for chloride. **Reason Code: M-**

Action: The associated chloride result was qualified as estimated and flagged "J" unless overridden by or combined with other QC qualifiers. See the Professional Judgment section below for final flag applied to the associated result.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL031519 and EQBL031819) contained chloride between the MDL and the RL. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: No qualification was required because the chloride present in the samples was greater than five times the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed a non-project sample and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL031519 and EQBL031819) contained TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory; however, there were none reported in this SDG.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. Professional judgment was used to modify the flags applied above to the chloride result for sample GWC-45, which required qualification for both method blank contamination and low MSD recovery. The "U*" and "J" flags were therefore combined to indicate the result should be considered not detected due to blank contamination and the reported MDL and RL should be considered estimated.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWA-41, GWA-41R, GWA-42, GWC-44, GWC-45, GWC-45R, and GWA-39RZ, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JAH 04/23/19

Checked By/Date: DWK 04/24/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616193
SAMPLING DATE: March 14, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-39RZ	GWA-39RZ	N	2616193	300	fluoride	0.066	J	J	--	mg/L
GWA-39RZ	GWA-39RZ	N	2616193	6020B	boron	0.0059	J	J	--	mg/L
GWA-39RZ	GWA-39RZ	N	2616193	6020B	chromium	0.004	J	J	--	mg/L
GWA-39RZ	GWA-39RZ	N	2616193	6020B	nickel	0.0017	J	J	--	mg/L
GWA-39RZ	GWA-39RZ	N	2616193	6020B	zinc	0.0035	J	J	--	mg/L
GWA-41	GWA-41	N	2616193	300	fluoride	0.039	J	J	--	mg/L
GWA-41	GWA-41	N	2616193	6020B	boron	0.007	J	J	--	mg/L
GWA-41	GWA-41	N	2616193	6020B	calcium	22.7	J, D3, M6	J	--	mg/L
GWA-41R	GWA-41R	N	2616193	300	fluoride	0.04	J	J	--	mg/L
GWA-41R	GWA-41R	N	2616193	6020B	beryllium	0.000052	J	J	--	mg/L
GWA-41R	GWA-41R	N	2616193	6020B	boron	0.015	J	J	--	mg/L
GWA-41R	GWA-41R	N	2616193	6020B	copper	0.0022	J	J	--	mg/L
GWA-41R	GWA-41R	N	2616193	6020B	lead	0.00031	J	J	--	mg/L
GWA-41R	GWA-41R	N	2616193	6020B	nickel	0.001	J	J	--	mg/L
GWA-41R	GWA-41R	N	2616193	6020B	zinc	0.0021	J	J	--	mg/L
GWA-42	GWA-42	N	2616193	300	fluoride	0.058	J	J	--	mg/L
GWA-42	GWA-42	N	2616193	6020B	barium	0.0066	J	J	--	mg/L
GWA-42	GWA-42	N	2616193	6020B	beryllium	0.00017	J	J	--	mg/L
GWA-42	GWA-42	N	2616193	6020B	cadmium	0.00013	J	J	--	mg/L
GWA-42	GWA-42	N	2616193	6020B	nickel	0.0015	J	J	--	mg/L
GWC-44	GWC-44	N	2616193	300	fluoride	0.13	J	J	--	mg/L
GWC-44	GWC-44	N	2616193	6020B	beryllium	0.000078	J	J	--	mg/L
GWC-44	GWC-44	N	2616193	6020B	boron	0.018	J	J	--	mg/L
GWC-44	GWC-44	N	2616193	6020B	calcium	17.2	J, D3	J	--	mg/L
GWC-44	GWC-44	N	2616193	6020B	cobalt	0.0022	J	J	--	mg/L
GWC-44	GWC-44	N	2616193	6020B	lead	0.00077	J	J	--	mg/L
GWC-44	GWC-44	N	2616193	6020B	selenium	0.0042	J	J	--	mg/L
GWC-44	GWC-44	N	2616193	6020B	zinc	0.0039	J	J	--	mg/L
GWC-45	GWC-45	N	2616193	300	chloride	1.3	B, M1	U*J	BL, M-	mg/L
GWC-45	GWC-45	N	2616193	300	sulfate	0.72	J	J	--	mg/L
GWC-45	GWC-45	N	2616193	6020B	antimony	0.0015	J	J	--	mg/L
GWC-45	GWC-45	N	2616193	6020B	barium	0.0066	J	J	--	mg/L
GWC-45	GWC-45	N	2616193	6020B	cobalt	0.0015	J	J	--	mg/L
GWC-45	GWC-45	N	2616193	6020B	nickel	0.001	J	J	--	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616193
SAMPLING DATE: March 14, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-45R	GWC-45R	N	2616193	300	fluoride	0.039	J	J	--	mg/L
GWC-45R	GWC-45R	N	2616193	6020B	boron	0.006	J	J	--	mg/L
GWC-45R	GWC-45R	N	2616193	6020B	zinc	0.0022	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

- J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- B = Analyte was detected in the associated method blank.
- D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- M1 = Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- M6 = Matrix spike and matrix duplicate recovery not evaluated against control limits due to sample dilution.

Reason Codes:

- BE = Equipment blank contamination. The result should be considered "not-detected".
- BL = Laboratory blank contamination. The result should be considered "not-detected".
- M- = MS and MSD recoveries outside acceptance limits. The result may be biased low.
- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

- J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
- U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JAH 04/23/19
 Checked by/Date: DWK 04/24/19
 Revised by/Date: JAH 07/30/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616193

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19

YES NO NA COMMENTS

- Dilutions necessary for Ca (50x)

Case Narrative and COC Completeness Review
OK
- Sample Preservation and cooler temperature met (HNO₃ to pH<2)**
OK, 0.5°C
- Holding times met (180 days; Hg = 28 days)**
Coll: 03/14/19
Prep: metals – 03/20/19, Hg – 03/20/19
Anal: metals – 03/21/19, Hg – 03/20/19
- QC Blanks Review**
Method Blanks:
p. 12 MB 110914= ND
p. 13 MB 111121 metals = ND

Field blank:
No field blanks associated with this day of sampling.

Equipment blanks:
EQBL031519 (SDG 2616179) =ND
EQBL031819 (SDG: 2616284) Ca = 0.016J x 5 = 0.08 mg/L
No flags – samples >5x EB
- Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%)**
p. 12 LCS 110915 Hg = 100%
p. 13 LCS 111122 metals = All OK
- Lab Duplicate - Field Duplicate precision goals met (20%)**
No field dups in this SDG
- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
p. 12 GWA-41 = 97, 101% RPD = 4 OK
p. 14 metals - GWA-41 Ca = 67, 68% RPD=0
No flags, sample result > 4x spike and analyzed at a dilution.

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)
No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616193

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.5°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/14/19 Anal: 03/21/19, 03/23/19, 03/26/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 16 MB 111639 = ND p. 17 MB 111657 = Cl = 0.31J x 5 = 1.55 mg/L Reason Code: BL Assoc. results <5x flagged "U*": GWC-45 <u>Field blank:</u> No field blanks associated with this day of sampling. <u>Equipment blanks:</u> EQBL031519 (SDG: 2616179) Cl = 0.094J x 5 = 0.47 mg/L EQBL031819 (SDG: 2616284) Cl = 0.057J x 5 = 0.285 mg/L <i>No flag – samples >5x EB</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 16 LCS 111640 – <i>All OK</i> p. 17 LCS 111658 – <i>All OK</i>
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 16 GWA-40 (SDG: 2616189)- %Rec and RPDs OK p. 16 GWA-43 (SDG: 2616189) (MS only) - %Rec ok p. 17 GWC-45 – Cl = 91, -13% Rec and RPD out – Flag Cl " J " Reason Code: M-Flagged above as ND due to MB – combination flag = "U*J"
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616284

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan (FSP)*, Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
			QC Samples		
GWC-46R	03/18/19	II	Dup-2	03/18/19	II
GWC-49R	03/18/19	II	FBL031819	03/18/19	II
			EQBL031819	03/18/19	II

The samples reported in this SDG were collected from Landfill Cells 9&10 on March 18, 2019. Sample Dup-2 is a field duplicate of sample GWC-49R. Sample FBL031819 is a field blank, and sample EQBL031819 is an equipment blank. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL031519 (SDG: 2616179), collected on the poly tubing
- EQBL031819 (SDG: 2616284), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was required.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG did not contain metals indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for mercury on sample GWC-46R and the recoveries and RPD were within the QC limits. An MS/MSD analysis was performed for metals on a non-project therefore, matrix affects specific to anions in these project samples were not assessed.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWA-49R) was submitted in this SDG and the RPDs were within limits indicating good sampling precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The field blank sample did not contain metals. However, one of the equipment blanks (EQBL031819 – SDG: 2616284) contained Ca between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact:

Reason Code: BE.

Action: No qualification was required because the calcium present in the samples was greater than five times the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-46R	Ca	50x	Dup-2	Ca	50x
GWA-49R	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value verses the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was required.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG did not contain anions indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on a non-project sample; therefore, matrix affects specific to anions in these project samples were not assessed.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWA-49R) was submitted in this SDG and RPDs were within QC limits indicating good sampling precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field blank sample (FBL031819) did not contain anions; however, the equipment blank samples (EQBL031519 and EQBL031819) contained chloride between the MDL and the RL. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: No qualification was required for chloride because the sample results were greater than five times the equipment blank values.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits with the exception of laboratory duplicate RPD and field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWA-49R) was submitted in this SDG and RPDs were within limits indicating good sampling precision.

Laboratory Duplicate Precision

The laboratory analyzed sample FBL031519 in duplicate and the RPD was greater than the laboratory QC limits but within project QC limits. Both results were reported at concentrations below the RL. When one or more results are below the RL the difference between the values must not exceed the RL.

Action: No qualification was required because the RPD was within project QC limits and the difference between results was less than the RL.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field blank (FBL031819) and the equipment blank (EQBL031519 and EQBL031819) samples contained TDS between the MDL and the RL. No qualification applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWC-46R, GWC-49R and its field duplicate (Dup-2), along with the field and equipment blank samples, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JAH 04/23/19

Checked By/Date: DWK 04/24/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616284
SAMPLING DATE: March 18, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-46R	GWC-46R	N	2616284	6020B	boron	0.022	J	J	--	mg/L
GWC-46R	GWC-46R	N	2616284	6020B	chromium	0.0022	J	J	--	mg/L
GWC-49R	GWC-49R	N	2616284	6020B	boron	0.0099	J	J	--	mg/L
Dup-2	GWC-49R	FD	2616284	6020B	boron	0.0058	J	J	--	mg/L
EQBL031819	Equipment Blank	EB	2616284	300	chloride	0.057	J	J	--	mg/L
EQBL031819	Equipment Blank	EB	2616284	2540C	total dissolved solids	18	J	J	--	mg/L
EQBL031819	Equipment Blank	EB	2616284	6020B	calcium	0.016	J	J	--	mg/L
FBLO31819	Field Blank	FB	2616284	2540C	total dissolved solids	19	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL); estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

Prepared by/Date: JAH 04/23/19

Checked by/Date: DWK 04/24/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616284

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19

YES NO NA COMMENTS

- Dilutions necessary for Ca (50x)
Case Narrative and COC Completeness Review
 OK
- Sample Preservation and cooler temperature met (HNO₃ to pH<2)**
 OK, 2.0°C
- Holding times met (180 days; Hg = 28 days)**
 Coll: 03/18/19
 Prep: metals – 03/21/19, Hg – 03/25/19
 Anal: metals – 03/22/19, Hg – 03/25/19
- QC Blanks Review**
Method Blanks:
 p. 10 MB 112756 Hg = ND
 p. 11 MB 111716 metals = ND

Field blank:
 FBL031819 (SDG: 2616284) = ND
Equipment blanks:
 EQBL031519 (SDG 2616179) =ND
 EQBL031819 (SDG: 2616284) Ca = 0.016J x 5 = **0.08 mg/L**
 No flags – samples >5x EB
- Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%)**
 p. 10 LCS 112757 Hg = 95%
 p. 11 LCS 111717 metals = All OK
- Lab Duplicate - Field Duplicate precision goals met (20%)**

	<u>GWA-49R</u>	<u>Dup-2</u>	<u>*Diff/RPD</u>	<u>RL</u>	
Ba	0.015	0.015	0	--	ok
B	0.0099J	0.0058J	*0.0041	0.04	ok
Ca	31	30.3	2.3	--	ok

*for results <RL, diff must be <RL

Hg not detected in either sample
- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
 p. 10 GWC-46R Hg = 91, 94% RPD = 3 OK
 p. 12 metals – non-project

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)
No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616284

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>																				
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK																				
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 2.0°C																				
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/18/19 Anal: 03/24/19																				
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 14 MB 112760 = ND <u>Field blank:</u> FBL031819 (SDG: 2616284) = ND <u>Equipment blanks:</u> EQBL031519 (SDG: 2616179) Cl = 0.094J x 5 = 0.47 mg/L EQBL031819 (SDG: 2616284) Cl = 0.057J x 5 = 0.285 mg/L <i>No flag – samples >5x EB</i>																				
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 14 LCS 112761 – All OK																				
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th><u>GWA-49R</u></th> <th><u>Dup-2</u></th> <th><u>RPD</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Cl</td> <td>2.7</td> <td>2.8</td> <td>3.6</td> <td>ok</td> </tr> <tr> <td>F</td> <td>ND</td> <td>ND</td> <td>NA</td> <td>ok</td> </tr> <tr> <td>SO₄</td> <td>5.8</td> <td>5.9</td> <td>1.7</td> <td>ok</td> </tr> </tbody> </table>		<u>GWA-49R</u>	<u>Dup-2</u>	<u>RPD</u>		Cl	2.7	2.8	3.6	ok	F	ND	ND	NA	ok	SO ₄	5.8	5.9	1.7	ok
	<u>GWA-49R</u>	<u>Dup-2</u>	<u>RPD</u>																				
Cl	2.7	2.8	3.6	ok																			
F	ND	ND	NA	ok																			
SO ₄	5.8	5.9	1.7	ok																			
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 14 not a sample in this SDG- %Rec out for Cl & SO ₄ ; RPDs OK																				
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)																				

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616284

Reviewer/Date: J. Hartness 04/23/19 **Senior Reviewer/Date:** D. Knaub 04/24/19; JAH 07/30/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>										
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK										
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 2.0°C										
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 03/18/19 Anal: 03/22/19										
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> No MB required by the method. <u>Equipment blanks:</u> EQBL031519 (SDG 2616179) TDS = 20.0J mg/L EQBL031819 (SDG 2616284) TDS = 18.0J mg/L <i>No qualification applied due to new ES rule</i> <u>Field blank:</u> FBL031819 (SDG: 2616284) TDS = 19.0 J mg/L <i>No qualification applied due to new ES rule</i>										
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 13 LCS 112147 TDS = 106% - OK										
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th><u>GWA-49R</u></th> <th><u>Dup-2</u></th> <th><u>RPD</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>TDS</td> <td>170</td> <td>157</td> <td>7.9</td> <td>ok</td> </tr> </tbody> </table> <u>Lab dup:</u> p. 13 Non-project sample; RPD = 12 >lab QC limit but below RL -OK p. 13 Non-project sample; RPD = 156 No flags applied – not a project sample		<u>GWA-49R</u>	<u>Dup-2</u>	<u>RPD</u>		TDS	170	157	7.9	ok
	<u>GWA-49R</u>	<u>Dup-2</u>	<u>RPD</u>										
TDS	170	157	7.9	ok									
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>										
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)										

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616510

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan (FSP)*, Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and/or quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-49Z	03/19/19	II
GWC-47R	03/19/19	II

These samples reported in this SDG were collected from Landfill Cells 9&10 on March 19, 2019. No field blanks are associated with this day of sampling. However, equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL031519 (SDG: 2616179), collected on the poly tubing
- EQBL031819 (SDG: 2616284), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was required.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG did not contain metals indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for metals on non-project samples; therefore, project-specific matrix accuracy and precision could not be assessed.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. However, one of the equipment blanks (EQBL031819 – SDG: 2616284) contained Ca between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact:

Reason Code: BE.

Action: No qualification was required because the calcium present in the samples was greater than five times the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-47R	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits with the exception of method and equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG contained chloride at a concentration below the MDL and the RL (0.31 J mg/L). Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL.**

Action: The positive chloride results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on non-project samples; therefore, project-specific matrix accuracy and precision could not be assessed.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL031519 and EQBL031819) contained chloride between the MDL and the RL. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: No qualification was required because the chloride present in the samples was greater than five times the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed a project sample GWC-49Z and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL031519 and EQBL031819) contained TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory; however, there were none reported in this SDG.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWC-49Z and GWC-47R, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JAH 04/24/19

Checked By/Date: DWK 04/25/19

Revised by/Date: JAH 07/30/19

**TABLE 1
SUMMARY OF DATA QUALIFIERS**

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616510
SAMPLING DATE: March 19, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-47R	GWC-47R	N	2616510	6020B	barium	0.0088	J	J	--	mg/L
GWC-47R	GWC-47R	N	2616510	6020B	nickel	0.0042	J	J	--	mg/L
GWC-47R	GWC-47R	N	2616510	6020B	thallium	0.00027	J	J	--	mg/L
GWC-47R	GWC-47R	N	2616510	7470A	mercury	0.00005	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	300	chloride	1.1	B	U*	BL	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	antimony	0.0011	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	barium	0.0033	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	boron	0.0043	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	chromium	0.0017	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	cobalt	0.00069	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	nickel	0.0047	J	J	--	mg/L
GWC-45R	GWC-45R	N	2616510	6020B	zinc	0.0034	J	J	--	mg/L
GWC-45R	GWC-45R	N	2616510	7470A	mercury	0.000045	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

B = Analyte was detected in the associated method blank.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JAH 04/24/19

Checked by/Date: DWK 04/25/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616510

Reviewer/Date: J. Hartness 04/24/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

YES NO NA COMMENTS

- Dilutions necessary for Ca (50x)
Case Narrative and COC Completeness Review
 OK
- Sample Preservation and cooler temperature met (HNO₃ to pH<2)**
 OK, 0.2°C
- Holding times met (180 days; Hg = 28 days)**
 Coll: 03/19/19
 Prep: metals – 03/27/19, Hg – 03/27/19
 Anal: metals – 03/28/19, Hg – 03/28/19
- QC Blanks Review**
Method Blanks:
 p. 7 MB 113834 Hg = ND
 p. 8 MB 113720 metals = ND

Field blank:
 No field blanks associated with this day of sampling.
Equipment blanks:
 EQBL031519 (SDG 2616179) =ND
 EQBL031819 (SDG: 2616284) Ca = 0.016J x 5 = **0.08 mg/L**
 No flags – samples >5x EB
- Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%)**
 p. 7 LCS 113835 Hg = 102%
 p. 8 LCS 113721 metals = All OK
- Lab Duplicate - Field Duplicate precision goals met (20%)**
 No field dups in this SDG
- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
 p. 7 non-project Hg = 99, 97% RPD = 2 OK
 p. 9 metals – non-project Ca = **144, 65%** RPD=3
 No flags, sample result > 4x spike and analyzed at a dilution.

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)
No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616510

Reviewer/Date: J. Hartness 04/24/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/19/19 Anal: 04/02/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 11 MB 114378 = Cl = 0.31J x 5 = 1.55 mg/L Reason Code: BL Assoc. results <5x flagged "U*": GWC-49Z <u>Field blank:</u> No field blanks associated with this day of sampling. <u>Equipment blanks:</u> EQBL031519 (SDG: 2616179) Cl = 0.094J x 5 = 0.47 mg/L EQBL031819 (SDG: 2616284) Cl = 0.057J x 5 = 0.285 mg/L <i>No flag – samples >5x EB</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 11 LCS 114379 – <i>All OK</i>
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 11 non-project-%Rec ok except MSD for SO ₄ , however MS and RPD OK- <i>no flag</i> p. 11 non-project (MS only) - %Rec ok
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2616510

Reviewer/Date: J. Hartness 04/24/19 **Senior Reviewer/Date:** D. Knaub 04/25/19; JAH 07/30/19

YES NO NA COMMENTS

<input checked="" type="checkbox"/>	<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>	<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C</p>
<input checked="" type="checkbox"/>	<p>Holding times met (7 days) Coll: 03/19/19 Anal: 03/26/19</p>
<input checked="" type="checkbox"/>	<p>QC Blanks Review <u>Method Blanks:</u> No MB required by the method.</p> <p><u>Equipment blanks:</u> EQBL031519 (SDG 2616179) TDS = 20.0J mg/L EQBL031819 (SDG 2616284) TDS = 18.0J mg/L <i>No qualification applied due to new ES rule</i></p> <p><u>Field blank:</u> No field blanks associated with this day of sampling.</p>
<input checked="" type="checkbox"/>	<p>Laboratory Control Sample (LCS) recovery within lab limits p. 10 LCS 112956 TDS = 101% - OK</p>
<input checked="" type="checkbox"/>	<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG <u>Lab dup:</u> p. 10 GWC-49Z; RPD = 3 OK</p>
<input checked="" type="checkbox"/>	<p>Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i></p>
<input checked="" type="checkbox"/>	<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 12 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2616510

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 12 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in March 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan (FSP)*, Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and/or quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-49Z	03/19/19	II
GWC-47R	03/19/19	II

These samples reported in this SDG were collected from Landfill Cells 9&10 on March 19, 2019. No field blanks are associated with this day of sampling. However, equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL031519 (SDG: 2616179), collected on the poly tubing
- EQBL031819 (SDG: 2616284), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was required.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG did not contain metals indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for metals on non-project samples; therefore, project-specific matrix accuracy and precision could not be assessed.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. However, one of the equipment blanks (EQBL031819 – SDG: 2616284) contained Ca between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact:

Reason Code: BE.

Action: No qualification was required because the calcium present in the samples was greater than five times the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-47R	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits with the exception of method and equipment blank contamination.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG contained chloride at a concentration below the MDL and the RL (0.31 J mg/L). Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive chloride results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on non-project samples; therefore, project-specific matrix accuracy and precision could not be assessed.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL031519 and EQBL031819) contained chloride between the MDL and the RL. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact: **Reason Code: BE.**

Action: No qualification was required because the chloride present in the samples was greater than five times the equipment blank value.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed a project sample GWC-49Z and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank samples (EQBL031519 and EQBL031819) contained TDS between the MDL and the RL. No qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory; however, there were none reported in this SDG.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWC-49Z and GWC-47R, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JAH 04/24/19

Checked By/Date: DWK 04/25/19

Revised by/Date: JAH 07/30/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2616510
SAMPLING DATE: March 19, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 12

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-47R	GWC-47R	N	2616510	6020B	barium	0.0088	J	J	--	mg/L
GWC-47R	GWC-47R	N	2616510	6020B	nickel	0.0042	J	J	--	mg/L
GWC-47R	GWC-47R	N	2616510	6020B	thallium	0.00027	J	J	--	mg/L
GWC-47R	GWC-47R	N	2616510	7470A	mercury	0.00005	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	300	chloride	1.1	B	U*	BL	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	antimony	0.0011	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	barium	0.0033	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	boron	0.0043	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	chromium	0.0017	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	cobalt	0.00069	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2616510	6020B	nickel	0.0047	J	J	--	mg/L
GWC-45R	GWC-45R	N	2616510	6020B	zinc	0.0034	J	J	--	mg/L
GWC-45R	GWC-45R	N	2616510	7470A	mercury	0.000045	J	J	--	mg/L

Notes:

Laboratory Qualifiers:

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

B = Analyte was detected in the associated method blank.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JAH 04/24/19

Checked by/Date: DWK 04/25/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2616510

Reviewer/Date: J. Hartness 04/24/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

YES NO NA COMMENTS

- Dilutions necessary for Ca (50x)

Case Narrative and COC Completeness Review
OK
- Sample Preservation and cooler temperature met (HNO₃ to pH<2)**
OK, 0.2°C
- Holding times met (180 days; Hg = 28 days)**
Coll: 03/19/19
Prep: metals – 03/27/19, Hg – 03/27/19
Anal: metals – 03/28/19, Hg – 03/28/19
- QC Blanks Review**
Method Blanks:
p. 7 MB 113834 Hg = ND
p. 8 MB 113720 metals = ND

Field blank:
No field blanks associated with this day of sampling.

Equipment blanks:
EQBL031519 (SDG 2616179) =ND
EQBL031819 (SDG: 2616284) Ca = 0.016J x 5 = 0.08 mg/L
No flags – samples >5x EB
- Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%)**
p. 7 LCS 113835 Hg = 102%
p. 8 LCS 113721 metals = All OK
- Lab Duplicate - Field Duplicate precision goals met (20%)**
No field dups in this SDG
- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
p. 7 non-project Hg = 99, 97% RPD = 2 OK
p. 9 metals – non-project Ca = 144, 65% RPD=3
No flags, sample result > 4x spike and analyzed at a dilution.

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)
No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2616510

Reviewer/Date: J. Hartness 04/24/19 **Senior Reviewer/Date:** D. Knaub 04/25/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 03/19/19 Anal: 04/02/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 11 MB 114378 = Cl = 0.31J x 5 = 1.55 mg/L Reason Code: BL Assoc. results <5x flagged "U*": GWC-49Z <u>Field blank:</u> No field blanks associated with this day of sampling. <u>Equipment blanks:</u> EQBL031519 (SDG: 2616179) Cl = 0.094J x 5 = 0.47 mg/L EQBL031819 (SDG: 2616284) Cl = 0.057J x 5 = 0.285 mg/L <i>No flag – samples >5x EB</i>
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 11 LCS 114379 – <i>All OK</i>
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 11 non-project-%Rec ok except MSD for SO ₄ , however MS and RPD OK- <i>no flag</i> p. 11 non-project (MS only) - %Rec ok
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623127

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-2R	09/13/19	II	GWC-7Z	09/13/19	II
GWA-3	09/13/19	II	GWA-50	09/13/19	II
GWA-4RZ	09/13/19	II			

These samples were collected from Landfill Cells 1&2 on September 13, 2019. No field blanks were collected on this day or were reported for this SDG. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL091219 (SDG: 2623138) collected on the nitrile gloves
- EQBL091619 (SDG: 2623221) collected on the tubing
- EQBL091719 (SDG: 2623393) collected on the bladder pump grab plate

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained boron and zinc at concentrations between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive boron and zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analysis for mercury and metals was performed on samples GWA-2R and GWA-3 respectively, and the recoveries and RPD were within QC limits.

Post Digestion Spike (PDS)

A PDS analysis was not performed on any project samples for metals.

Field Duplicate Precision

No field duplicate sample pairs were collected and submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. Equipment blank samples EQBL091219 (SDG 2623138), EQBL091619 (SDG 26223221) and EQBL091719 (SDG 2623393) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 1 & 2 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 3 and 4 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

Sample	Metal	Dilution	Sample	Metal	Dilution
GWA-2R	Ca	50x	GWC-7Z	Ca	50x
GWA-4RZ	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was performed on sample GWA-2R and the percent recoveries and RPDs were within QC limits.

Field Duplicate Precision

No field duplicate sample pairs were collected and submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank(s) associated with the samples of this SDG (EQBL091219, EQBL091619, and EQBL091719) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected and analyzed with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank(s) associated with the samples of this SDG (EQBL091219) contained TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-2R, GWA-3, GWA-4RZ, GWC-7Z, and GWA-50 were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/18/19
Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623127
SAMPLING DATE: September 13, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-2R	GWA-2R	N	2623127	300	chloride	0.94	J	J	--	mg/L
GWA-2R	GWA-2R	N	2623127	300	fluoride	0.055	J	J	--	mg/L
GWA-2R	GWA-2R	N	2623127	6020B	arsenic	0.00051	J	J	--	mg/L
GWA-2R	GWA-2R	N	2623127	6020B	boron	0.012	J,B	U*	BL	mg/L
GWA-2R	GWA-2R	N	2623127	6020B	copper	0.00055	J	J	--	mg/L
GWA-2R	GWA-2R	N	2623127	6020B	thallium	0.000062	J	J	--	mg/L
GWA-2R	GWA-2R	N	2623127	300.0	vanadium	0.001	J	J	--	mg/L
GWA-2R	GWA-2R	N	2623127	6020B	zinc	0.0078	J,B	U*	BL	mg/L
GWA-3	GWA-3	N	2623127	6020B	antimony	0.0013	J	J	--	mg/L
GWA-3	GWA-3	N	2623127	6020B	barium	0.0042	J	J	--	mg/L
GWA-3	GWA-3	N	2623127	6020B	chromium	0.00073	J	J	--	mg/L
GWA-3	GWA-3	N	2623127	6020B	cobalt	0.00046	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	300	fluoride	0.1	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	6020B	antimony	0.00052	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	7470A	arsenic	0.0006	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	6020B	boron	0.012	J,B	U*	BL	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	6020B	copper	0.00045	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	6020B	lead	0.000065	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	6020B	nickel	0.00032	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	6020B	vanadium	0.00084	J	J	--	mg/L
GWA-4RZ	GWA-4RZ	N	2623127	6020B	zinc	0.0072	J,B	U*	BL	mg/L
GWA-50	GWA-50	N	2623127	300	sulfate	0.55	J	J	--	mg/L
GWA-50	GWA-50	N	2623127	6020B	barium	0.0088	J	J	--	mg/L
GWA-50	GWA-50	N	2623127	6020B	copper	0.0023	J	J	--	mg/L
GWA-50	GWA-50	N	2623127	6020B	nickel	0.00063	J	J	--	mg/L
GWA-50	GWA-50	N	2623127	6020B	silver	0.00045	J	J	--	mg/L
GWA-50	GWA-50	N	2623127	6020B	zinc	0.0061	J,B	U*	BL	mg/L
GWC-7Z	GWC-7Z	N	2623127	300.0	chloride	1	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2623127	300.0	sulfate	0.76	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2623127	6020B	antimony	0.002	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2623127	6020B	arsenic	0.0017	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2623127	6020B	boron	0.0065	J,B	U*	BL	mg/L
GWC-7Z	GWC-7Z	N	2623127	7470A	cobalt	0.00099	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2623127	6020B	copper	0.00025	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2623127	6020B	nickel	0.00061	J	J	--	mg/L
GWC-7Z	GWC-7Z	N	2623127	6020B	thallium	0.000057	J	J	--	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623127
SAMPLING DATE: September 13, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-7Z	GWC-7Z	N	2623127	7470A	zinc	0.0053	J,B	J	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/18/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623127

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 2.8°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/13/19 Prep: metals – 09/16/19 Hg – 09/16/19 Anal: metals: 09/20/19 Hg – 09/17/19</p>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks: Reason Code: BL</u> p. 10 MB 159305 Hg = ND p. 11 MB 159319 = B – 0.0052 J x 5 = 0.026 mg/L & Zn – 0.0049 J x 5 = 0.0245 mg/L Assoc. B and Zn results < 5x flagged "U*" results < RL become the MDL</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = Zn = 0.006J,B x5 = 0.030 mg/L EQBL091619 (SDG: 2623221) = Ca= 0.019J x5 = 0.095 mg/L Zn = 0.0066J,B x5 = 0.033 mg/L EQBL091719 (SDG 2623393) = Zn = 0.0061J,B x5 = 0.0305 mg/L All EBs zinc results flagged "U*" due to MB contamination, No flags applied Ca- no flags applied; results >5x blank result</p> <p><u>Field Blank:</u> No field blanks associated with this SDG</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 10 LCS 159306 Hg = 103% p. 11 LCS 159320 metals = All OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG.</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			<p>Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) p. 10 GWA-2R Hg = 99, 99% RPD = 0 OK p. 12 GWA-3 %Rec and RPDs OK</p>
		<input checked="" type="checkbox"/>	<p>Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG</p>
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2623127

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 2.8°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/13/19 Anal: 09/17/19
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 14 MB 2682071 = ND <u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = ND EQBL091619 (SDG: 2623221) = ND EQBL091719 (SDG 2623393) = ND <u>Field Blank</u> No field blanks associated with this SDG
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 14 LCS 2682072 – All OK
		<input checked="" type="checkbox"/>	Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 14 GWA-2R - %Rec and RPDs OK non-project sample (2622907001) of this SDG
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623127

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 2.8°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 09/13/19 Anal: 09/18/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL091219 (SDG 2623138) = TDS = 14J mg/L EQBL091619 (SDG: 2623221) = ND EQBL091719 (SDG 2623393) = ND <i>No flags applied due to new ES rule</i> <u>Field Blanks:</u> No field blanks associated with this SDG
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 13 LCS 159910 TDS = 101% - OK
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG <i>p. 13 lab dup on GWC-7Z; RPD = 3, OK</i>
		<input checked="" type="checkbox"/>	Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623138

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the Laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
			<u>QC Samples</u>		
GWA-1	09/12/19	II	Dup-1	09/12/19	II
GWA-2	09/12/19	II	FBL 091219	09/12/19	II
GWA-50R	09/12/19	II	EQBL 091219	09/12/19	II

These samples were collected from Landfill Cells 1&2 on September 12, 2019. Sample Dup-1 is a field duplicate of GWA-2. Samples FBL091219 and EQBL091219 are field and equipment blanks (respectively) and are associated with the samples in this SDG. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL091219 (SDG: 2623138) collected on the nitrile gloves
- EQBL091619 (SDG: 2623221) collected on the tubing
- EQBL091719 (SDG: 2623393) collected on the bladder pump grab plate

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method, field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for metals were not performed on project samples in this SDG.

Post Digestion Spike (PDS)

A PDS analysis was not performed on any project samples for metals.

Field Duplicate Precision

One field duplicate sample pair (Dup-1/GWA-2) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The associated field blank FBL091219 was reported with detections of zinc; however, method blank contamination resulted in the qualification of zinc in this field blank. Therefore, this field blank does not qualify as a representative determinant of zinc contamination. Equipment blank samples EQBL091219, EQBL091619 (SDG 2623221) and EQBL091719 (SDG 2623393) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 1 & 2 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 1 & 2 do not qualify as representative determinants of field and sampling accuracy for zinc. Results

less than five times the field and/or equipment blank are considered “not detected” as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged “U”. No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-1	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged “J” by the laboratory. The “J” qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of field duplicate precision.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for anions were not performed on any project samples in this SDG.

Field Duplicate Precision

One field duplicate sample pair (Dup-1/GWA-2) was collected with this SDG, and the RPD for sulfate was outside of QC limits.

Action: The sulfate results of the field duplicate pair (Dup-1/GWA-2) was qualified and flagged "J".

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank(s) associated with the samples of this SDG (FBL091219, EQBL091219, EQBL091619, and EQBL091719) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate sample pair (Dup-1/GWA-2) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG reported TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged “J” by the laboratory, however no TDS results were reported between the MDL and the RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-1, GWA-2, GWA-50R, and Dup-2, along with field and equipment blank samples were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/18/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623138
SAMPLING DATE: September 12, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-1	GWA-1	N	2623138	300.0	fluoride	0.051	J	J	--	mg/L
GWA-1	GWA-1	N	2623138	300.0	sulfate	0.98	J	J	--	mg/L
GWA-1	GWA-1	N	2623138	6020B	arsenic	0.0004	J	J	--	mg/L
GWA-1	GWA-1	N	2623138	6020B	cobalt	0.00047	J	J	--	mg/L
GWA-1	GWA-1	N	2623138	6020B	nickel	0.00038	J	J	--	mg/L
GWA-1	GWA-1	N	2623138	6020B	zinc	0.0047	J,B	U*	BL	mg/L
GWA-2	GWA-2	N	2623138	300.0	chloride	0.8	J	J	--	mg/L
GWA-2	GWA-2	N	2623138	300.0	sulfate	5.2		J	FD	mg/L
GWA-2	GWA-2	N	2623138	6020B	barium	0.0056	J	J	--	mg/L
GWA-2	GWA-2	N	2623138	6020B	lead	0.000072	J	J	--	mg/L
GWA-2	GWA-2	N	2623138	6020B	zinc	0.005	J,B	U*	BL	mg/L
Dup-1	GWA-2	FD	2623138	300.0	chloride	0.83	J	J	--	mg/L
Dup-1	GWA-2	FD	2623138	300.0	sulfate	6.9		J	FD	mg/L
Dup-1	GWA-2	FD	2623138	6020B	barium	0.006	J	J	--	mg/L
Dup-1	GWA-2	FD	2623138	6020B	copper	0.00046	J	J	--	mg/L
Dup-1	GWA-2	FD	2623138	6020B	nickel	0.00036	J	J	--	mg/L
Dup-1	GWA-2	FD	2623138	6020B	zinc	0.0051	J,B	U*	BL	mg/L
GWA-50R	GWA-50R	N	2623138	300.0	chloride	0.74	J	J	--	mg/L
GWA-50R	GWA-50R	N	2623138	300.0	sulfate	0.8	J	J	--	mg/L
GWA-50R	GWA-50R	N	2623138	6020B	copper	0.0028	J	J	--	mg/L
GWA-50R	GWA-50R	N	2623138	6020B	nickel	0.0015	J	J	--	mg/L
GWA-50R	GWA-50R	N	2623138	6020B	silver	0.0028	J	J	--	mg/L
GWA-50R	GWA-50R	N	2623138	6020B	zinc	0.0058	J,B	U*	BL	mg/L
EQBL-091219	Equipment Blank	EB	2623138	6020B	zinc	0.006	J,B	U*	BL	mg/L
FBL-091219	Field Blank	FB	2623138	6020B	zinc	0.0059	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

FD = Field duplicate imprecision.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623138
SAMPLING DATE: September 12, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
-----------------	-------------	------	-----	--------	----------------	------------	----------	----------	--------------	-------

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/18/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623138

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS																																										
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>																																										
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.6°C</p>																																										
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/12/19 Prep: metals – 09/16/19; Hg – 09/16/19 Anal: metals – 09/18/19; Hg – 09/17/19</p>																																										
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 11 MB 159315 Hg = ND p. 12 MB 159344 = Zn – 0.0045 J x 5 = 0.0225 mg/L Assoc. Zn results < 5x flagged "U*" results < RL become the MDL</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = Zn = 0.0060J,B x5 = 0.030 mg/L EQBL091619 (SDG: 2623221) = Ca= 0.019J x5 = 0.095 mg/L Zn = 0.0066J,B x5 = 0.033 mg/L EQBL091719 (SDG 2623393) = Zn = 0.0061J,B x5 = 0.0305 mg/L All EBs zinc results flagged "U*" due to MB contamination, No flags applied Ca- no flags applied; results >5x blank result</p> <p><u>Field Blank:</u> FBL091219 Zn = 0.0059J,B x5 = 0.0295 mg/L FB flagged "U*" due to MB contamination, No flags applied</p>																																										
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 11 LCS 159316 Hg = 104% p. 12 LCS 159345 metals = All OK</p>																																										
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="1"> <thead> <tr> <th></th> <th>Dup-1</th> <th>=</th> <th>GWA-2</th> <th>*Diff/RPD</th> <th>RL</th> </tr> </thead> <tbody> <tr> <td>Ba</td> <td>0.006J</td> <td></td> <td>0.0056J</td> <td>0.0004</td> <td>0.01 ok</td> </tr> <tr> <td>Ca</td> <td>2.1</td> <td></td> <td>1.8</td> <td>15.4</td> <td>ok</td> </tr> <tr> <td>Cu</td> <td>0.00046J</td> <td></td> <td><0.00019</td> <td>0.00046</td> <td>0.025 ok</td> </tr> <tr> <td>Pb</td> <td><0.000046</td> <td></td> <td>0.000072J</td> <td>0.000036</td> <td>0.005 ok</td> </tr> <tr> <td>Ni</td> <td>0.00036 J</td> <td></td> <td><0.00031</td> <td>0.00005</td> <td>0.01 ok</td> </tr> <tr> <td>Zn</td> <td>0.0051JB</td> <td></td> <td>0.005JB</td> <td>0.0001</td> <td>0.01 ok</td> </tr> </tbody> </table>		Dup-1	=	GWA-2	*Diff/RPD	RL	Ba	0.006J		0.0056J	0.0004	0.01 ok	Ca	2.1		1.8	15.4	ok	Cu	0.00046J		<0.00019	0.00046	0.025 ok	Pb	<0.000046		0.000072J	0.000036	0.005 ok	Ni	0.00036 J		<0.00031	0.00005	0.01 ok	Zn	0.0051JB		0.005JB	0.0001	0.01 ok
	Dup-1	=	GWA-2	*Diff/RPD	RL																																								
Ba	0.006J		0.0056J	0.0004	0.01 ok																																								
Ca	2.1		1.8	15.4	ok																																								
Cu	0.00046J		<0.00019	0.00046	0.025 ok																																								
Pb	<0.000046		0.000072J	0.000036	0.005 ok																																								
Ni	0.00036 J		<0.00031	0.00005	0.01 ok																																								
Zn	0.0051JB		0.005JB	0.0001	0.01 ok																																								

*for results <RL, diff must be <RL

Metals and Mercury by SW6020B/SW7470 (cont.)

YES

NO

NA

COMMENTS

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 11 Hg – not a project sample from this SDG

p. 12 metals - not a project sample from this SDG

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623138

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS												
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>												
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.6°C</p>												
<input checked="" type="checkbox"/>			<p>Holding times met (7 days) Coll: 09/12/19 Anal: 09/17/19</p>												
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks</u> (not required for method)</p> <p><u>Equipment Blanks:</u> EQBL091219 (SDG 2623138) = TDS = 14J mg/L EQBL091619 (SDG: 2623221) = ND EQBL091719 (SDG 2623393) = ND</p> <p><i>No flags applied due to new ES rule</i></p> <p><u>Field Blank:</u> FBL091219 TDS = 10 x 5 = 50 mg/L <i>No flags applied due to new ES rule</i></p>												
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within lab limits p. 14 LCS 159482 TDS = 100% - OK</p>												
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0"> <tr> <td></td> <td><u>Dup-1</u></td> <td>=</td> <td><u>GWA-2</u></td> <td><u>*Diff/RPD</u></td> <td><u>RL</u></td> </tr> <tr> <td>TDS</td> <td>41</td> <td></td> <td>44</td> <td>7</td> <td>ok</td> </tr> </table> <p><i>No lab dups on samples in this SDG</i></p>		<u>Dup-1</u>	=	<u>GWA-2</u>	<u>*Diff/RPD</u>	<u>RL</u>	TDS	41		44	7	ok
	<u>Dup-1</u>	=	<u>GWA-2</u>	<u>*Diff/RPD</u>	<u>RL</u>										
TDS	41		44	7	ok										
	<input checked="" type="checkbox"/>		<p>Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i></p>												
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>												

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623221

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the Laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWC-5	09/16/19	II	GWC-9	09/16/19	II
GWC-6	09/16/19	II	<u>QC Samples</u>		
GWC-6RZ	09/16/19	II	Dup-2	09/16/19	II
GWC-8Z	09/16/19	II	FBL091619	09/16/19	II
GWC-8RR	09/16/19	II	EQBL091619	09/16/19	II

These samples were collected from Landfill Cells 1&2 on September 16, 2019. Sample Dup-2 is a field duplicate of GWC-8RR. Samples FBL091619 and EQBL091619 are field and equipment blanks (respectively) and are associated with the samples in this SDG. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL091219 (SDG: 2623138) collected on the nitrile gloves
- EQBL091619 (SDG: 2623221) collected on the tubing
- EQBL091719 (SDG: 2623393) collected on the bladder pump grab plate

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method, field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analysis for metals was performed on sample GWC-5 and the recoveries and RPD were within QC limits.

Post Digestion Spike (PDS)

A PDS analysis was not performed on any project samples for metals.

Field Duplicate Precision

One field duplicate sample pair (Dup-2/GWC-8RR) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The associated field blank FBL091619 was reported with detections of zinc; however, method blank contamination resulted in the qualification of zinc in this field blank. Therefore, this field blank does not qualify as a representative determinant of zinc contamination. Equipment blank samples EQBL091219 (SDG 2623138), EQBL091619 and EQBL091719 (SDG 2623393) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 1 & 2 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks

in Cells 1 & 2 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered “not detected” as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged “U”. No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-6	Ca	50x	GWC-8RR	Ca	50x
GWC-6RZ	Ca	50x	GWC-9	Ca	50x
GWC-8Z	Ca	50x	Dup-2	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged “J” by the laboratory. The “J” qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value verses the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for anions were not performed on any project samples in this SDG.

Field Duplicate Precision

One field duplicate sample pair (Dup-2/GWC-8RR) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinse Blanks, Field Blanks)

The field and equipment blank(s) associated with the samples of this SDG (FBL091619, EQBL091219, EQBL091619, and EQBL091719) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate sample pair (Dup-2/GWC-8RR) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG reported TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and the RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-5, GWC-6, GWC-6RZ, GWC-8Z, GWC-8RR, GWC-9, and Dup-2, along with field and equipment blank samples were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/18/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623221
SAMPLING DATE: September 16, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-5	GWC-5	N	2623221	300.0	chloride	0.73	J	J	--	mg/L
GWC-5	GWC-5	N	2623221	6020B	beryllium	0.00051	J	J	--	mg/L
GWC-5	GWC-5	N	2623221	6020B	boron	0.0051	J	J	--	mg/L
GWC-5	GWC-5	N	2623221	6020B	copper	0.016	J	J	--	mg/L
GWC-5	GWC-5	N	2623221	6020B	nickel	0.008	J	J	--	mg/L
GWC-5	GWC-5	N	2623221	6020B	thallium	0.000084	J	J	--	mg/L
GWC-6	GWC-6	N	2623221	6020B	arsenic	0.00071	J	J	--	mg/L
GWC-6	GWC-6	N	2623221	6020B	barium	0.0075	J	J	--	mg/L
GWC-6	GWC-6	N	2623221	6020B	chromium	0.002	J	J	--	mg/L
GWC-6	GWC-6	N	2623221	6020B	lead	0.0001	J	J	--	mg/L
GWC-6	GWC-6	N	2623221	6020B	zinc	0.0058	J,B	U*	BL	mg/L
GWC-6RZ	GWC-6RZ	N	2623221	6020B	arsenic	0.00038	J	J	--	mg/L
GWC-6RZ	GWC-6RZ	N	2623221	6020B	barium	0.0072	J	J	--	mg/L
GWC-6RZ	GWC-6RZ	N	2623221	6020B	chromium	0.002	J	J	--	mg/L
GWC-6RZ	GWC-6RZ	N	2623221	6020B	zinc	0.0057	J,B	U*	BL	mg/L
GWC-8RR	GWC-8RR	N	2623221	300.0	chloride	0.76	J	J	--	mg/L
GWC-8RR	GWC-8RR	N	2623221	300.0	sulfate	0.69	J	J	--	mg/L
GWC-8RR	GWC-8RR	N	2623221	6020B	arsenic	0.00039	J	J	--	mg/L
GWC-8RR	GWC-8RR	N	2623221	6020B	chromium	0.00046	J	J	--	mg/L
GWC-8RR	GWC-8RR	N	2623221	6020B	zinc	0.0056	J,B	U*	BL	mg/L
Dup-2	GWC-8RR	FD	2623221	300.0	chloride	0.74	J	J	--	mg/L
Dup-2	GWC-8RR	FD	2623221	300.0	sulfate	0.69	J	J	--	mg/L
Dup-2	GWC-8RR	FD	2623221	6020B	arsenic	0.00041	J	J	--	mg/L
Dup-2	GWC-8RR	FD	2623221	6020B	chromium	0.00047	J	J	--	mg/L
Dup-2	GWC-8RR	FD	2623221	6020B	zinc	0.0049	J,B	U*	BL	mg/L
GWC-8Z	GWC-8Z	N	2623221	6020B	arsenic	0.00043	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2623221	6020B	chromium	0.002	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2623221	6020B	lead	0.000054	J	J	--	mg/L
GWC-8Z	GWC-8Z	N	2623221	6020B	zinc	0.0065	J,B	U*	BL	mg/L
GWC-9	GWC-9	N	2623221	6020B	arsenic	0.00044	J	J	--	mg/L
GWC-9	GWC-9	N	2623221	6020B	beryllium	0.0001	J	J	--	mg/L
GWC-9	GWC-9	N	2623221	6020B	copper	0.00021	J	J	--	mg/L
GWC-9	GWC-9	N	2623221	6020B	lead	0.000061	J	J	--	mg/L
GWC-9	GWC-9	N	2623221	6020B	nickel	0.00062	J	J	--	mg/L
GWC-9	GWC-9	N	2623221	6020B	zinc	0.0062	J,B	U*	BL	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623221
SAMPLING DATE: September 16, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
EQBL-091619	Equipment Blank	EB	2623221	6020B	calcium	0.019	J		--	mg/L
EQBL-091619	Equipment Blank	EB	2623221	6020B	zinc	0.0066	J,B	U*	BL	mg/L
FBL-091619	Field Blank	FB	2623221	6020B	zinc	0.0062	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/18/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623221

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>																																										
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>																																										
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 3.1°C</p>																																										
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/16/19 Prep: metals – 09/19/19; Hg – 09/19/19 Anal: metals – 09/24/19; Hg – 09/19/19</p>																																										
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 14 MB 160217 Hg = ND p. 15 MB 160430 = Zn – 0.0048 J x 5 = 0.024 mg/L Assoc. Zn results < 5x flagged "U*" results < RL become the MDL</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = Zn = 0.0060J,B x5 = 0.030 mg/L EQBL091619 (SDG: 2623221) = Ca= 0.019J x5 = 0.095 mg/L Zn = 0.0066J,B x5 = 0.033 mg/L EQBL091719 (SDG 2623393) = Zn = 0.0061J,B x5 = 0.0305 mg/L All EBs zinc results flagged "U*" due to MB contamination, No flags applied Ca- no flags applied; results >5x blank result</p> <p><u>Field Blank:</u> FBL091619 Zn = 0.0062J,B x5 = 0.031 mg/L FB flagged "U*" due to MB contamination, No flags applied</p>																																										
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 14 LCS 160218 Hg = 97% p. 15 LCS 160431 metals = All OK</p>																																										
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Dup-2</u></th> <th style="text-align: center;">=</th> <th style="text-align: center;"><u>GWC-8RR</u></th> <th style="text-align: center;"><u>*Diff/RPD</u></th> <th style="text-align: center;"><u>RL</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>As</td> <td style="text-align: center;">0.00041J</td> <td></td> <td style="text-align: center;">0.00039J</td> <td style="text-align: center;">*0.00002</td> <td style="text-align: center;">0.005</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Ba</td> <td style="text-align: center;">0.015</td> <td></td> <td style="text-align: center;">0.015</td> <td style="text-align: center;">0</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Ca</td> <td style="text-align: center;">22.9</td> <td></td> <td style="text-align: center;">23</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Cr</td> <td style="text-align: center;">0.00047J</td> <td></td> <td style="text-align: center;">0.00046J</td> <td style="text-align: center;">0.00001</td> <td style="text-align: center;">0.01</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Zn</td> <td style="text-align: center;">0.0049J</td> <td></td> <td style="text-align: center;">0.0056J</td> <td style="text-align: center;">0.0007</td> <td style="text-align: center;">0.01</td> <td style="text-align: center;">ok</td> </tr> </tbody> </table> <p><i>*for results <RL, diff must be <RL</i></p>		<u>Dup-2</u>	=	<u>GWC-8RR</u>	<u>*Diff/RPD</u>	<u>RL</u>		As	0.00041J		0.00039J	*0.00002	0.005	ok	Ba	0.015		0.015	0	--	ok	Ca	22.9		23	0.1	--	ok	Cr	0.00047J		0.00046J	0.00001	0.01	ok	Zn	0.0049J		0.0056J	0.0007	0.01	ok
	<u>Dup-2</u>	=	<u>GWC-8RR</u>	<u>*Diff/RPD</u>	<u>RL</u>																																								
As	0.00041J		0.00039J	*0.00002	0.005	ok																																							
Ba	0.015		0.015	0	--	ok																																							
Ca	22.9		23	0.1	--	ok																																							
Cr	0.00047J		0.00046J	0.00001	0.01	ok																																							
Zn	0.0049J		0.0056J	0.0007	0.01	ok																																							

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
p. 14 Hg – not a project sample from this SDG
p. 16 metals – GWC-5 %Rec and RPDs OK

- Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)**
No dissolved metals in this SDG

- EDD Data Verification vs. Hardcopy (10% samples for each SDG)**

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDG: 2623221

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES NO NA COMMENTS

- Case Narrative and COC Completeness Review**
 OK
- Sample Preservation and cooler temperature met (Cool to 6°C)**
 OK, 3.1°C
- Holding times met (Cl, SO₄, F – 28 days)**
 Coll: 09/16/19
 Anal: 09/20/19
- QC Blanks Review**
Method Blanks:
 p. 18 MB 2685331 = ND

Equipment Blanks: (use highest result to apply flags)
 EQBL091219 (SDG 2623138) = ND
 EQBL091619 (SDG: 2623221) = ND
 EQBL091719 (SDG 2623393) = ND

Field Blank:
 FBL091219= ND
- Laboratory Control Sample (LCS) recovery within limits (90-110%)**
 p. 18 LCS 2685332 – All OK
- Lab Duplicate - Field Duplicate precision goals met (20%)**

	<u>Dup-2</u>	=	<u>GWC-8RR</u>	<u>*Diff/RPD</u>	<u>RL</u>	
Cl ⁻	0.74J		0.76J	*0.02	1.0	ok
SO ₄	0.69J		0.69J	*0	1.0	ok
- Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20)**
 p. 18 Not project samples from this SDG
- EDD Data Verification vs. Hardcopy (10% samples for each SDG)**

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623221

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES NO NA COMMENTS

- Case Narrative and COC Completeness Review**
 OK
- Sample Preservation and cooler temperature met (Cool to 6°C)**
 OK; 3.1°C
- Holding times met (7 days)**
 Coll: 09/16/19
 Anal: 09/20/19
- QC Blanks Review**
 Method Blanks (not required for method)

Equipment Blanks:
 EQBL091219 (SDG 2623138) = TDS = **14J** mg/L
 EQBL091619 (SDG: 2623221) = ND
 EQBL091719 (SDG 2623393) = ND

No flags applied due to new ES rule

Field Blank:
 FBL091619 TDS = **11** x 5 = **55** mg/L
No flags applied due to new ES rule
- Laboratory Control Sample (LCS) recovery within lab limits**
 p. 17 LCS 160813 TDS = 103% - OK
- Lab Duplicate - Field Duplicate precision goals met (20%)**

	<u>Dup-2</u>	=	<u>GWC-8RR</u>	<u>*Diff/RPD</u>	<u>RL</u>	
TDS	112		113	0.89	--	ok

*for results <RL, diff must be <RL
 Lab dup: GWC-5; RPD = 7 **All OK**
- Matrix Spike recoveries and RPDs within limits (if applicable)**
 No MS/MSD on project sample(s) for TDS in this SDG
- EDD Data Verification vs. Hardcopy (10% samples for each SDG)**

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623391

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and/or quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-13	09/18/19	II

This sample was collected from Landfill Cells 1&2 on September 18, 2019. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL091219 (SDG: 2623138) collected on the nitrile gloves
- EQBL091619 (SDG: 2623221) collected on the tubing
- EQBL091719 (SDG: 2623393) collected on the bladder pump grab plate

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method blank contamination, MS/MSD recoveries and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD for metals was performed sample GWC-13, and the calcium MSD recovery was below the lower QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than 4x the spiked concentration: **Reason Code: M-**.

Action: No qualification was required because the sample result was greater than 4x the spike concentration.

Post Digestion Spike (PDS)

A PDS analysis was available for review.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. Equipment blank samples EQBL091219 (SDG 2623138), EQBL091619 (SDG 2623221) and EQBL091719 (SDG 2623393) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 1 & 2 contained concentrations of

zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 1 & 2 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-13	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was not performed any project samples in this SDG.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blanks were associated with this SDG. The equipment blanks associated with the samples of this SDG (EQBL091219, EQBL091619, and EQBL091719) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however there were none in this SDG.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed a non-project sample and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected that is associated with samples in this SDG. The equipment blanks associated with the samples in this SDG reported TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-13 was reported in this SDG and was sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/18/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623391
SAMPLING DATE: September 18, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-13	GWC-13	N	2623391	6020B	antimony	0.0012	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	arsenic	0.00052	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	beryllium	0.000074	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	boron	0.017	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	chromium	0.0063	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	cobalt	0.0005	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	copper	0.00057	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	lead	0.0002	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	nickel	0.00046	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	selenium	0.0018	J	J	--	mg/L
GWC-13	GWC-13	N	2623391	6020B	zinc	0.007	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/21/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623391

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/18/19 Prep: metals – 09/23/19 Hg – 09/24/19 Anal: metals: 09/26/19 Hg – 09/24/19</p>
<input checked="" type="checkbox"/>			<p>QC Blanks Review <u>Method Blanks:</u> p. 6 MB 161413 Hg = ND p. 7 MB 161204 = Zn – 0.0044 J x 5 = 0.022 mg/L Assoc. Zn results < 5x flagged "U*" results < RL become the MDL</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = Zn = 0.0060J,B x5 = 0.030 mg/L EQBL091619 (SDG: 2623221) = Ca= 0.019J x5 = 0.095 mg/L Zn = 0.0066 J,B x5 = 0.033 mg/L EQBL091719 (SDG 2623393) = Zn = 0.0061 J,B x5 = 0.0305 mg/L All EBs zinc results flagged "U*" due to MB contamination, No flags applied Ca- no flags applied; results >5x blank result <u>Field Blank:</u> None</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 6 LCS 161413 Hg = 96% p. 7 LCS 161205 metals = All OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 6 Hg not a sample from this SDG

p. 8 GWC-13

Ca = 85, -78% RPD = 4 Reason Codes: M-=M

No flag, sample result > 4x spike amt.

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDG: 2623391

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/18/19 Anal: 09/25/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks:</u> p. 10 MB 2688835 = ND <u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = ND EQBL091619 (SDG: 2623221) = ND EQBL091719 (SDG 2623393) = ND <u>Field Blank:</u> None
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 10 LCS 2688836 – All OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) <i>p. 10 Not performed on samples in this SDG</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623391

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (7 days) Coll: 09/18/19 Anal: 09/24/19</p>
<input checked="" type="checkbox"/>			<p>QC Blanks Review <u>Method Blanks</u> (not required for method)</p> <p><u>Equipment Blanks:</u> EQBL091219 (SDG 2623138) = TDS = 14J mg/L EQBL091619 (SDG: 2623221) = ND EQBL091719 (SDG 2623393) = ND</p> <p><i>No flags applied due to new ES rule</i></p> <p><u>Field Blank:</u> None</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within lab limits p. 9 LCS 161459 TDS = 103% - OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG <i>p. 9 lab dup on a non-project sample</i></p>
<input checked="" type="checkbox"/>			<p>Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i></p>
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623392

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and/or quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-13RZ	09/19/19	II

This sample was collected from Landfill Cells 1&2 on September 19, 2019. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL091219 (SDG: 2623138) collected on the nitrile gloves
- EQBL091619 (SDG: 2623221) collected on the tubing
- EQBL091719 (SDG: 2623393) collected on the bladder pump grab plate

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method blank and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for metals were not performed on any project samples in this SDG.

Post Digestion Spike (PDS)

A PDS analysis was available for review.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. Equipment blank samples EQBL091219 (SDG 2623138), EQBL091619 (SDG 2623221) and EQBL091719 (SDG 2623393) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 1 & 2 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 1 & 2 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-13RZ	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits with the exception of MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD for anions was performed sample GWC-13RZ, and the sulfate recoveries were below the lower QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than 4x the spiked concentration: **Reason Code: M-**.

Action: Sulfate results were qualified as estimated and flagged "J".

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blanks were associated with this SDG. The equipment blanks associated with the samples of this SDG (EQBL091219, EQBL091619, and EQBL091719) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate sample pairs were collected with this SDG.

Laboratory Duplicate Precision

The laboratory analyzed a non-project sample and the RPD was within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected that is associated with samples in this SDG. The equipment blank(s) associated with the samples in this SDG reported TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-13RZ was reported in this SDG and was sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/18/19

Checked By/Date: JAH 10/29/19

**TABLE 1
SUMMARY OF DATA QUALIFIERS**

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623392
SAMPLING DATE: September 19, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-13RZ	GWC-13RZ	N	2623392	300	fluoride	0.17	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2623392	300	sulfate	68.1	M1	J	M-	mg/L
GWC-13RZ	GWC-13RZ	N	2623392	6020B	antimony	0.00077	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2623392	6020B	arsenic	0.00045	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2623392	6020B	boron	0.014	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2623392	6020B	copper	0.00021	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2623392	6020B	lead	0.000048	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2623392	6020B	lead	0.0002	J	J	--	mg/L
GWC-13RZ	GWC-13RZ	N	2623392	6020B	zinc	0.0091	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

M1 = Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

M- = MS and MSD recoveries outside acceptance limits. The result may be biased low.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL); estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/21/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623392

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/19/19 Prep: metals – 09/23/19 Hg – 09/24/19 Anal: metals: 09/26/19 Hg – 09/24/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 6 MB 161413 Hg = ND p. 7 MB 161204 = Zn – 0.0044 J x 5 = 0.022 mg/L Assoc. Zn results < 5x flagged "U*" results < RL become the MDL</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = Zn = 0.0061 J,B x5 = 0.0305 mg/L EQBL091619 (SDG: 2623221) = Ca= 0.019J x5 = 0.095 mg/L Zn = 0.0066 J,B x5 = 0.033 mg/L EQBL091719 (SDG 2623393) = Zn = 0.0061 J,B x5 = 0.0305 mg/L All EBs zinc results flagged "U*" due to MB contamination, No flags applied Ca- no flags applied; results >5x blank result <u>Field Blank:</u> None</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 6 LCS 161413 Hg = 96% p. 7 LCS 161205 metals = All OK</p>
	<input checked="" type="checkbox"/>		<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 6 Hg not a sample from this SDG

p. 8 metals, not a sample from this SDG.

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDG: 2623392

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/19/19 Anal: 09/25/19
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 10 MB 2688835= ND <u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = ND EQBL091619 (SDG 2623221) = ND EQBL091719 (SDG 2623393) = ND <u>Field Blank:</u> None
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 10 LCS 2688836 – All OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG
		<input checked="" type="checkbox"/>	Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 10 GWC-13RZ SO ₄ = 67, 66% RPD = 1 Sample flagged "J" p. 10 non-project sample of this SDG
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623392

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (7 days) Coll: 09/19/19 Anal: 09/24/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks</u> (not required for method)</p> <p><u>Equipment Blanks:</u> EQBL091219 (SDG 2623138) = TDS = 14J mg/L EQBL091619 (SDG: 2623221) = ND EQBL091719 (SDG 2623393) = ND</p> <p><i>No flags applied due to new ES rule</i></p> <p><u>Field Blank:</u> None</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within lab limits p. 9 LCS 161459 TDS = 103% - OK</p>
	<input checked="" type="checkbox"/>		<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups in this SDG <i>p. 9 lab dup on a sample not from this SDG</i></p>
	<input checked="" type="checkbox"/>		<p>Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i></p>
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 1&2 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623393

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 1 & 2 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.

UR The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method SW6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and/or quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWC-10	09/17/19	II	GWC-15R	09/17/19	II
GWC-10R	09/17/19	II	GWC-15Z	09/17/19	II
GWC-11	09/17/19	II	<u>QC Samples</u>		
GWC-11R	09/17/19	II	Dup-3	09/17/19	II
GWC-12	09/17/19	II	FBL091719	09/17/19	II
GWC-14Z	09/17/19	II	EQBL091719	09/17/19	II

This sample was collected from Landfill Cells 1&2 on September 17, 2019. Sample Dup-3 is a field duplicate of sample GWC-12. Sample FBL091719 is a field blank and EQBL091719 is an equipment blank. Three equipment blanks were collected on different equipment used to sample the locations:

- EQBL091219 (SDG: 2623138) collected on the nitrile gloves
- EQBL091619 (SDG: 2623221) collected on the tubing
- EQBL091719 (SDG: 2623393) collected on the bladder pump grab plate

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method, field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for metals were not performed on any project samples in this SDG.

Post Digestion Spike (PDS)

A PDS analysis was available for review.

Field Duplicate Precision

One field duplicate sample pair (Dup-3/GWC-12) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The associated field blank FBL091719 was reported with detections of zinc; however, method blank contamination resulted in the qualification of zinc in this field blank. Therefore, this field blank does not qualify as a representative determinant of zinc contamination. Equipment blank samples EQBL091219 (SDG 2623138), EQBL091619 (SDG 2623221) and EQBL091719 (SDG 2623393) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 1 & 2 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 1 & 2 do not qualify as representative determinants of field and sampling accuracy

for zinc. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Methods SW6020B and SW7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-10	Ca	50x	GWC-14Z	Ca	50x
GWC-10R	Ca	50x	GWC-15R	Ca	50x
GWC-11	Ca	50x	GWC-15Z	Ca	50x
GWC-11R	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD for anions was performed sample FBL091719 and the percent recoveries and RPDs were within QC limits.

Field Duplicate Precision

One field duplicate sample pair (Dup-3/GWC-12) was collected with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank(s) associated with the samples of this SDG (FBL091719, EQBL091219, EQBL091619, and EQBL091719) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is maintained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate sample pair (Dup-3/GWC-12) was collected with this SDG, and the RPDs were within QC limits.

Laboratory Duplicate Precision

The laboratory analyzed a duplicate sample of GWC-10 and Dup-3 and the RPDs were within QC limits indicating good method precision.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG did not contain TDS. There are equipment blank(s) associated with Cells 1&2 reported TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 1&2 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-10, GWC-10R, GWC-11, GWC-11R, GWC-12, GWC-14Z, GWC-15R, GWC-15Z, and Dup-3, along with field and equipment blank samples were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/18/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623393
SAMPLING DATE: September 17, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-10	GWC-10	N	2623393	6020B	chromium	0.0009	J	J	--	mg/L
GWC-10	GWC-10	N	2623393	6020B	lead	0.000047	J	J	--	mg/L
GWC-10	GWC-10	N	2623393	6020B	zinc	0.0052	J,B	U*	BL	mg/L
GWC-10R	GWC-10R	N	2623393	6020B	chromium	0.00067	J	J	--	mg/L
GWC-10R	GWC-10R	N	2623393	6020B	copper	0.00029	J	J	--	mg/L
GWC-10R	GWC-10R	N	2623393	6020B	lead	0.00017	J	J	--	mg/L
GWC-10R	GWC-10R	N	2623393	6020B	zinc	0.0048	J,B	U*	BL	mg/L
GWC-11	GWC-11	N	2623393	6020B	antimony	0.00041	J	J	--	mg/L
GWC-11	GWC-11	N	2623393	6020B	chromium	0.0079	J	J	--	mg/L
GWC-11	GWC-11	N	2623393	6020B	lead	0.000046	J	J	--	mg/L
GWC-11	GWC-11	N	2623393	6020B	zinc	0.0056	J,B	U*	BL	mg/L
GWC-11R	GWC-11R	N	2623393	6020B	antimony	0.0013	J	J	--	mg/L
GWC-11R	GWC-11R	N	2623393	6020B	arsenic	0.0016	J	J	--	mg/L
GWC-11R	GWC-11R	N	2623393	6020B	chromium	0.0042	J	J	--	mg/L
GWC-11R	GWC-11R	N	2623393	6020B	copper	0.00031	J	J	--	mg/L
GWC-11R	GWC-11R	N	2623393	6020B	lead	0.000082	J	J	--	mg/L
GWC-11R	GWC-11R	N	2623393	6020B	zinc	0.0075	J,B	U*	BL	mg/L
GWC-12	GWC-12	N	2623393	300	chloride	0.84	J	J	--	mg/L
GWC-12	GWC-12	N	2623393	6020B	arsenic	0.0047	J	J	--	mg/L
GWC-12	GWC-12	N	2623393	6020B	cadmium	0.00057	J	J	--	mg/L
GWC-12	GWC-12	N	2623393	6020B	nickel	0.0021	J	J	--	mg/L
GWC-12	GWC-12	N	2623393	6020B	zinc	0.016	B	U*	BL	mg/L
Dup-3	GWC-12	FD	2623393	300	chloride	0.83	J	J	--	mg/L
Dup-3	GWC-12	FD	2623393	6020B	arsenic	0.0046	J	J	--	mg/L
Dup-3	GWC-12	FD	2623393	6020B	cadmium	0.00058	J	J	--	mg/L
Dup-3	GWC-12	FD	2623393	6020B	chromium	0.016	J	J	--	mg/L
Dup-3	GWC-12	FD	2623393	6020B	nickel	0.0045	J	J	--	mg/L
Dup-3	GWC-12	FD	2623393	6020B	zinc	0.02	B	U*	BL	mg/L
GWC-14Z	GWC-14Z	N	2623393	6020B	beryllium	0.00013	J	J	--	mg/L
GWC-14Z	GWC-14Z	N	2623393	6020B	chromium	0.00046	J	J	--	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623393
SAMPLING DATE: September 17, 2019
Plant Bowen Landfill Cells 1 & 2

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-14Z	GWC-14Z	N	2623393	6020B	nickel	0.0007	J	J	--	mg/L
GWC-14Z	GWC-14Z	N	2623393	6020B	zinc	0.0057	J,B	U*	BL	mg/L
GWC-15R	GWC-15R	N	2623393	6020B	antimony	0.0017	J	J	--	mg/L
GWC-15R	GWC-15R	N	2623393	6020B	chromium	0.00044	J	J	--	mg/L
GWC-15R	GWC-15R	N	2623393	6020B	lead	0.00016	J	J	--	mg/L
GWC-15R	GWC-15R	N	2623393	6020B	nickel	0.00057	J	J	--	mg/L
GWC-15R	GWC-15R	N	2623393	6020B	zinc	0.0066	J,B	U*	BL	mg/L
GWC-15Z	GWC-15Z	N	2623393	300	chloride	0.78	J	J	--	mg/L
GWC-15Z	GWC-15Z	N	2623393	6020B	chromium	0.00064	J	J	--	mg/L
GWC-15Z	GWC-15Z	N	2623393	6020B	zinc	0.0048	J,B	U*	BL	mg/L
EQBL-091719	Equipment Blank	EB	2623393	6020B	zinc	0.0061	J,B	U*	BL	mg/L
FBL-091719	Field Blank	FB	2623393	6020B	zinc	0.0053	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/21/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623393

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/17/19 Prep: metals – 09/23/19 Hg – 09/24/19 Anal: metals: 09/26/19 Hg – 09/24/19</p>
<input checked="" type="checkbox"/>			<p>QC Blanks Review <u>Method Blanks:</u> p. 17 MB 161413 Hg = ND p. 18 MB 161204 = Zn – 0.0044 J x 5 = 0.022 mg/L Assoc. Zn results < 5x flagged "U*" results < RL become the MDL</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = Zn = 0.006J,B x5 = 0.0305 mg/L EQBL091619 (SDG: 2623221) = Ca= 0.019J x5 = 0.095 mg/L Zn = 0.0066J,B x5 = 0.033 mg/L EQBL091719 (SDG 2623393) = Zn = 0.0061J,B x5 = 0.0305 mg/L All EBs zinc results flagged "U*" due to MB contamination, No flags applied Ca- no flags applied; results >5x blank result</p> <p><u>Field Blank:</u> FBL091719 Zn = 0.0053J,B x5 = 0.027 mg/L FB flagged "U*" due to MB contamination, No flags applied</p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 17 LCS 161413 Hg = 96% p. 18 LCS 161205 metals = All OK</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES	NO	NA	COMMENTS					
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%)					
			Dup-3	=	GWC-12	*Diff/RPD	RL	
			As	0.0046J	0.0047J	*0.001	0.005	ok
			Ba	0.024	0.025	4.1	--	ok
			Cd	0.00058J	0.00057J	*0.00001	0.0025	ok
			Ca	8.1	7.8	3.7	--	ok
			Cr	0.0016J	<0.00039	*0.0016	0.01	ok
			Co	0.0031	0.003	3.3	--	ok
			Ni	0.0045J	0.0021J	*0.0024	0.01	ok
			Zn	0.02B	0.016B	22.2	***	See below

*for results <RL, diff must be <RL

*****Zinc already flagged for blank contamination U*>J**

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 17 Hg not a sample from this SDG
p. 19 metals, not a sample of this SDG.

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDG: 2623393

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>												
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>												
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C</p>												
<input checked="" type="checkbox"/>			<p>Holding times met (Cl, SO₄, F – 28 days) Coll: 09/17/19 Anal: 09/25/19</p>												
<input checked="" type="checkbox"/>			<p>QC Blanks Review <u>Method Blanks:</u> p. 21 MB 2688835 = ND</p> <p><u>Equipment Blanks: (use highest result to apply flags)</u> EQBL091219 (SDG 2623138) = ND EQBL091619 (SDG 2623221) = ND EQBL091719 (SDG 2623393) = ND</p> <p><u>Field Blank:</u> FBL091719 = ND</p>												
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 21 LCS 2688836 – All OK</p>												
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="margin-left: 40px;"> <tr> <td></td> <td style="text-align: center;"><u>Dup-3</u></td> <td style="text-align: center;">=</td> <td style="text-align: center;"><u>GWC-12</u></td> <td style="text-align: center;"><u>*Diff/RPD</u></td> <td style="text-align: center;"><u>RL</u></td> </tr> <tr> <td>Cl⁻</td> <td style="text-align: center;">0.83J</td> <td></td> <td style="text-align: center;">0.84J</td> <td style="text-align: center;">*0.01</td> <td style="text-align: center;">1.0</td> </tr> </table> <p><i>*for results <RL, diff must be <RL</i></p>		<u>Dup-3</u>	=	<u>GWC-12</u>	<u>*Diff/RPD</u>	<u>RL</u>	Cl ⁻	0.83J		0.84J	*0.01	1.0
	<u>Dup-3</u>	=	<u>GWC-12</u>	<u>*Diff/RPD</u>	<u>RL</u>										
Cl ⁻	0.83J		0.84J	*0.01	1.0										
<input checked="" type="checkbox"/>			<p>Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 21 non-project sample of this SDG p. 21 FBL091719 – %Rec and RPD ok.</p>												
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>												

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623393

Reviewer/Date: J. McIntyre 10/18/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>														
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>														
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C</p>														
<input checked="" type="checkbox"/>			<p>Holding times met (7 days) Coll: 09/17/19 Anal: 09/24/19</p>														
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks</u> (not required for method)</p> <p><u>Equipment Blanks:</u> EQBL091219 (SDG 2623138) = TDS = 14J mg/L EQBL091619 (SDG: 2623221) = ND EQBL091719 (SDG 2623393) = ND</p> <p><i>No flags applied due to new ES rule</i></p> <p><u>Field Blank:</u> FBL091719 TDS = ND</p>														
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within lab limits p. 20 LCS 161459 TDS = 103% - OK</p>														
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="margin-left: 40px;"> <tr> <td></td> <td style="text-align: center;"><u>Dup-3</u></td> <td style="text-align: center;">=</td> <td style="text-align: center;"><u>GWC-12</u></td> <td style="text-align: center;"><u>*Diff/RPD</u></td> <td style="text-align: center;"><u>RL</u></td> <td></td> </tr> <tr> <td>TDS</td> <td style="text-align: center;">67</td> <td></td> <td style="text-align: center;">62</td> <td style="text-align: center;">7.8</td> <td style="text-align: center;">--</td> <td style="text-align: center;">ok</td> </tr> </table> <p><i>*for results <RL, diff must be <RL</i></p> <p><i>p. 20 Lab dups performed on GWC-10 and Dup-3 = RPDs OK</i></p>		<u>Dup-3</u>	=	<u>GWC-12</u>	<u>*Diff/RPD</u>	<u>RL</u>		TDS	67		62	7.8	--	ok
	<u>Dup-3</u>	=	<u>GWC-12</u>	<u>*Diff/RPD</u>	<u>RL</u>												
TDS	67		62	7.8	--	ok											
	<input checked="" type="checkbox"/>		<p>Matrix Spike recoveries and RPDs within limits (if applicable) <i>No MS/MSD on project sample(s) for TDS in this SDG</i></p>														
<input checked="" type="checkbox"/>			<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>														

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2622807

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level	
GWA-51RZ	09/05/19	II	GWC-24R	09/05/19	II	
GWA-53	09/05/19	II	GWC-22R	09/05/19	II	
GWA-53R	09/05/19	II	QC Samples			
GWA-54	09/05/19	II				
GWA-55	09/05/19	II		Dup-2	09/05/19	II
GWA-55R	09/05/19	II		FBL090519	09/05/19	II
GWC-25R	09/05/19	II		EQBL090519	09/05/19	II

These samples were collected from Landfill Cells 3&4 on September 5, 2019. Sample Dup-2 is a field duplicate of GWC-24R. Samples FBL090519 and EQBL090519 are field blank and equipment blanks respectively and are associated with the samples in this SDG. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL090519 (SDG: 2622807), collected with poly tubing
- EQBL090419 (SDG: 2622808), collected on the nitrile gloves
- EQBL090619 (SDG: 2622810), collected on the grab plate

The highest result of any detected analyte between the three equipment blanks were used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for MS/MSD recoveries, method blank contamination and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained calcium and zinc at concentrations between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for mercury and metals were performed on sample GWA-51RZ and the recoveries and RPDs were within QC limits with the following exception; the percent recoveries were outside of QC limits or calcium. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than four times the spiked concentration. **Reason Code: M+**

Action: No qualification was necessary because the sample result was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWC-24R) was submitted with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The associated field blank FBL090519 was reported with detections of zinc; however, method blank contamination resulted in the qualification of zinc in this field blank. Therefore, this field blank does not qualify as a representative determinant of zinc contamination. Equipment blank sample EQBL090519 and equipment blanks EQBL090419 (SDG 2622808) and EQBL090619 (SDG 2622810) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 3 and 4 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 3 and 4 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-51RZ	Ca	50x	GWA-55	Ca	50x
GWA-53	Ca	50x	GWA-55R	Ca	50x
GWA-53R	Ca	50x	GWC-25R	Ca	50x
GWA-54	Ca	50x	GWC-24R	Ca	50x
GWC-22R	Ca	50x	Dup-2	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was performed on sample FBL090519 and the percent recoveries and RPDs were within QC limits.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWC-24R) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG, FBL090519, EQBL090419, EQBL090519, and EQBL090619, did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits except for field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWA-24R) was submitted with this SDG and the RPDs were within QC limits. A laboratory duplicate of sample GWA-53R was performed and the RPD was within QC limits.

Laboratory Duplicate Precision

A laboratory duplicate of sample GWA-53R was performed and the RPD was within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG (FBL090519, EQBL090419, EQBL090519, and EQBL090619) contained TDS however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-51RZ, GWA-53, GWA-53R, GWA-54, GWA-55, GWA-55R, GWC-25R, GWC-24R, GWC-22R, and Dup-2, along with field and equipment blank samples were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/16/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2622807
SAMPLING DATE: September 5, 2019
Plant Bowen Landfill Cells 3 & 4: Event 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-51RZ	GWA-51RZ	N	2622807	6020B	antimony	0.0006	J	J	--	mg/L
GWA-51RZ	GWA-51RZ	N	2622807	6020B	arsenic	0.00061	J	J	--	mg/L
GWA-51RZ	GWA-51RZ	N	2622807	6020B	boron	0.01	J	J	--	mg/L
GWA-51RZ	GWA-51RZ	N	2622807	6020B	thallium	0.00014	J	J	--	mg/L
GWA-51RZ	GWA-51RZ	N	2622807	6020B	zinc	0.0051	J,B	U*	BL	mg/L
GWA-53	GWA-53	N	2622807	6020B	antimony	0.00035	J	J	--	mg/L
GWA-53	GWA-53	N	2622807	6020B	arsenic	0.00039	J	J	--	mg/L
GWA-53	GWA-53	N	2622807	6020B	chromium	0.00065	J	J	--	mg/L
GWA-53	GWA-53	N	2622807	6020B	lead	0.00008	J	J	--	mg/L
GWA-53	GWA-53	N	2622807	6020B	zinc	0.0064	J,B	U*	BL	mg/L
GWA-53R	GWA-53R	N	2622807	6020B	antimony	0.00035	J	J	--	mg/L
GWA-53R	GWA-53R	N	2622807	6020B	arsenic	0.00046	J	J	--	mg/L
GWA-53R	GWA-53R	N	2622807	6020B	chromium	0.00055	J	J	--	mg/L
GWA-53R	GWA-53R	N	2622807	6020B	lead	0.000083	J	J	--	mg/L
GWA-53R	GWA-53R	N	2622807	6020B	zinc	0.0098	J,B	U*	BL	mg/L
GWA-54	GWA-54	N	2622807	300.0	chloride	0.81	J	J	--	mg/L
GWA-54	GWA-54	N	2622807	6020B	arsenic	0.00038	J	J	--	mg/L
GWA-54	GWA-54	N	2622807	6020B	chromium	0.0016	J	J	--	mg/L
GWA-54	GWA-54	N	2622807	6020B	zinc	0.0048	J,B	U*	BL	mg/L
GWA-55	GWA-55	N	2622807	6020B	arsenic	0.00044	J	J	--	mg/L
GWA-55	GWA-55	N	2622807	6020B	chromium	0.00092	J	J	--	mg/L
GWA-55	GWA-55	N	2622807	6020B	thallium	0.00011	J	J	--	mg/L
GWA-55	GWA-55	N	2622807	6020B	zinc	0.0056	J,B	U*	BL	mg/L
GWA-55R	GWA-55R	N	2622807	6020B	arsenic	0.00042	J	J	--	mg/L
GWA-55R	GWA-55R	N	2622807	6020B	zinc	0.0045	J,B	U*	BL	mg/L
GWC-22R	GWC-22R	N	2622807	6020B	arsenic	0.0024	J	J	--	mg/L
GWC-22R	GWC-22R	N	2622807	6020B	cobalt	0.0012	J	J	--	mg/L
GWC-22R	GWC-22R	N	2622807	6020B	nickel	0.0011	J	J	--	mg/L
GWC-22R	GWC-22R	N	2622807	6020B	thallium	0.000055	J	J	--	mg/L
GWC-22R	GWC-22R	N	2622807	6020B	vanadium	0.00094	J	J	--	mg/L
GWC-22R	GWC-22R	N	2622807	6020B	zinc	0.0053	J,B	U*	BL	mg/L
GWC-24R	GWC-24R	N	2622807	6020B	antimony	0.00033	J	J	--	mg/L
GWC-24R	GWC-24R	N	2622807	6020B	arsenic	0.00053	J	J	--	mg/L
GWC-24R	GWC-24R	N	2622807	6020B	copper	0.0012	J	J	--	mg/L
GWC-24R	GWC-24R	N	2622807	6020B	lead	0.000095	J	J	--	mg/L
GWC-24R	GWC-24R	N	2622807	6020B	vanadium	0.0012	J	J	--	mg/L
GWC-24R	GWC-24R	N	2622807	6020B	zinc	0.0066	J,B	U*	BL	mg/L
Dup-2	GWC-24R	FD	2622807	6020B	antimony	0.00029	J	J	--	mg/L
Dup-2	GWC-24R	FD	2622807	6020B	arsenic	0.00047	J	J	--	mg/L
Dup-2	GWC-24R	FD	2622807	6020B	cooper	0.0008	J	J	--	mg/L
Dup-2	GWC-24R	FD	2622807	6020B	lead	0.000086	J	J	--	mg/L
Dup-2	GWC-24R	FD	2622807	6020B	vanadium	0.0012	J	J	--	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2622807
SAMPLING DATE: September 5, 2019
Plant Bowen Landfill Cells 3 & 4: Event 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
Dup-2	GWC-24R	FD	2622807	6020B	zinc	0.0069	J,B	U*	BL	mg/L
GWC-25R	GWC-25R	N	2622807	6020B	chromium	0.00044	J	J	--	mg/L
GWC-25R	GWC-25R	N	2622807	6020B	lead	0.00006	J	J	--	mg/L
GWC-25R	GWC-25R	N	2622807	6020B	zinc	0.0053	J,B	U*	BL	mg/L
EQBL-090519	Equipment Blank	EB	2622807	6020B	zinc	0.0049	J,B	U*	BL	mg/L
FBL-090519	Field Blank	FB	2622807	6020B	zinc	0.005	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte detected in associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/16/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2622807

Reviewer/Date: J. McIntyre 10/16/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/05/19 Prep: metals: 09/09/19 Hg: 09/10/19 Anal: metals: 09/11/19 Hg: 09/10/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 18 MB 157551 Hg = ND p. 19 MB 157237 = Ca – 0.021J x 5 = 0.105, Zn – 0.0043J x 5 = 0.0215 <i>All Zn results flagged U*, All Ca results >5x, no flags applied.</i></p> <p><u>Field Blanks:</u> FBL-090519 (SDG 2622807) Zn- 0.005 x 5 = 0.025 mg/L Flagged U* by MB, N/A to qualify samples</p> <p><u>Equipment Blanks:</u> (Highest EB in SDG 2622808) EQBL090519 (SDG 2622807) Zn – 0.0049J,B x 5 = 0.0245 mg/L EQB-090419 (SDG 2622808) Ca – 0.054J x 5 = 0.27 * mg/L, Zn – 0.0054J,B x 5 = 0.027 * EQBL090619 (SDG 2622810) Zn – 0.0049J,B x 5 = 0.0245 mg/L All EBs zinc results flagged “U*” due to MB contamination - No flags applied Ca- no flags applied; results >5x blank result <i>*Highest concentration for analyte.</i></p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 18 LCS 157552 Hg = 103% p. 19 LCS 157238 metals = All OK</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>DUP-2</u>	<u>GWA-24R</u>	<u>RPD</u>
Sb	0.00029J	0.00033J	NC
As	0.00047J	0.00053J	NC
Ba	0.020	0.022	9.5
Ca	28.6	30.6	6.8
Cu	0.00080J	0.0012J	NC
Pb	0.000086J	0.000095J	NC
V	0.0012J	0.0012J	NC
Zn	0.0069JB	0.0066JB	NC
Both samples ND for Hg			

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 18 Hg GWA-51RZ = 102, 96% RPD = 6 OK

p. 20 metals GWA-51RZ Ca = **336, 515**% RPD=4

No flags, sample result > 4x spike and analyzed at a dilution.

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2622807

Reviewer/Date: J. McIntyre 10/16/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>		<u>COMMENTS</u>
------------	-----------	-----------	--	-----------------

<input checked="" type="checkbox"/>				<p>Case Narrative and COC Completeness Review OK</p>
-------------------------------------	--	--	--	---

<input checked="" type="checkbox"/>				<p>Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C</p>
-------------------------------------	--	--	--	--

<input checked="" type="checkbox"/>				<p>Holding times met (Cl, SO₄, F – 28 days) Coll: 09/05/19 Anal: 09/10/19, 09/11/19</p>
-------------------------------------	--	--	--	---

<input checked="" type="checkbox"/>				<p>QC Blanks Review</p> <p><u>Method Blanks:</u> p. 22 MB 2675526 anions = ND p. 23 MB 2675532 anions = ND</p> <p><u>Field and Equipment Blanks:</u> EQBL090519 (SDG 2622807) = ND EQBL090419 (SDG 2622808) = ND EQBL090619 (SDG 2622810) =ND</p> <p>FBL090519 (SDG 2622807) = ND</p>
-------------------------------------	--	--	--	--

<input checked="" type="checkbox"/>				<p>Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 22 LCS 2675527 – <i>All %Rec OK</i> p. 23 LCS 2675533 – <i>All %Rec OK</i></p>
-------------------------------------	--	--	--	--

<input checked="" type="checkbox"/>				<p>Lab Duplicate - Field Duplicate precision goals met (20%)</p> <table border="0" style="width: 100%; margin-left: 40px;"> <tr> <td></td> <td style="text-align: center;"><u>DUP-2</u></td> <td style="text-align: center;"><u>GWA-24R</u></td> <td style="text-align: center;"><u>Diff./RPD*</u></td> <td style="text-align: center;"><u>RL</u></td> <td></td> </tr> <tr> <td>Cl</td> <td style="text-align: center;">2.3</td> <td style="text-align: center;">2.2</td> <td style="text-align: center;">4.4</td> <td></td> <td style="text-align: right;">ok</td> </tr> <tr> <td>F</td> <td style="text-align: center;">ND</td> <td style="text-align: center;">ND</td> <td style="text-align: center;">NC</td> <td></td> <td style="text-align: right;">ok</td> </tr> <tr> <td>SO₄</td> <td style="text-align: center;">1.8</td> <td style="text-align: center;">1.8</td> <td style="text-align: center;">0</td> <td></td> <td style="text-align: right;">ok</td> </tr> </table>		<u>DUP-2</u>	<u>GWA-24R</u>	<u>Diff./RPD*</u>	<u>RL</u>		Cl	2.3	2.2	4.4		ok	F	ND	ND	NC		ok	SO ₄	1.8	1.8	0		ok
	<u>DUP-2</u>	<u>GWA-24R</u>	<u>Diff./RPD*</u>	<u>RL</u>																								
Cl	2.3	2.2	4.4		ok																							
F	ND	ND	NC		ok																							
SO ₄	1.8	1.8	0		ok																							

**for results <RL, diff must be <RL*

<input checked="" type="checkbox"/>				<p>Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 22 MS/MSDs on non-project samples of this SDG (2622774001 & 2622808009) p. 23 FBL090519 %Recs and RPDs – OK; non-project sample (2622766001)</p>
-------------------------------------	--	--	--	--

<input checked="" type="checkbox"/>				<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>
-------------------------------------	--	--	--	---

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 12 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2622807

Reviewer/Date: J. McIntyre 10/16/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS								
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK								
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C								
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 09/05/19 Anal: 09/10/19								
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL-090519 (SDG 2622807) TDS = 12 mg/L EQBL-090419 (SDG 2622808) TDS = ND EQBL-090619 (SDG 2622810) TDS = 10 mg/L <i>No qualification applied due to new ES rule</i> <u>Field Blanks:</u> FBL-090519 (SDG 2622807) TDS = 15 mg/L <i>No qualification applied due to new ES rule</i>								
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 21 LCS 157796 TDS = 100%								
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th><u>Dup-2</u></th> <th><u>GWA-24R</u></th> <th><u>RPD</u></th> </tr> </thead> <tbody> <tr> <td>TDS</td> <td>154</td> <td>157</td> <td>1.9</td> </tr> </tbody> </table> <p>p. 21 lab dup on GWA-53R RPD = 3 OK</p>		<u>Dup-2</u>	<u>GWA-24R</u>	<u>RPD</u>	TDS	154	157	1.9
	<u>Dup-2</u>	<u>GWA-24R</u>	<u>RPD</u>								
TDS	154	157	1.9								
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>								
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)								

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2622808

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-36	09/04/19	II	GWA-56	09/04/19	II
GWA-36R	09/04/19	II	QC Samples		
GWA-37	09/04/19	II	Dup-1	09/04/19	II
GWA-38	09/04/19	II	FBL090419	09/04/19	II
GWA-52	09/04/19	II	EQBL090419	09/04/19	II

These samples were collected from Landfill Cells 3&4 on September 4, 2019. Sample Dup-1 is a field duplicate of GWA-38. Samples FBL090419 and EQBL090419 are field blank and equipment blanks respectively and are associated with the samples in this SDG. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL090519 (SDG: 2622807), collected with poly tubing
- EQBL090419 (SDG: 2622808), collected on the nitrile gloves
- EQBL090619 (SDG: 2622810), collected on the grab plate

The highest result of any detected analyte between the three equipment blanks were used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method, field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained calcium and/or zinc at concentrations between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL.**

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for mercury and metals were performed on a non-project sample of this SDG and therefore matrix effects could not be evaluated.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-38) was submitted with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The associated field blank FBL090419 was reported with detections of zinc; however, method blank contamination resulted in the qualification of zinc in this field blank. Therefore, this field blank does not qualify as a representative determinant of zinc contamination. Equipment blank sample EQBL090419

and equipment blanks EQBL090519(SDG 2622807) and EQBL090619(SDG 2622810) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 3 and 4 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 3 and 4 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered “not detected” as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged “U”. No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-36	Ca	50x	GWA-52	Ca	50x
GWA-36R	Ca	50x	GWA-56	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged “J” by the laboratory. The “J” qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was performed on sample EQBL090419 and the percent recoveries and RPDs were within QC limits.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-38) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG (FBL090419 and EQBL090419, EQBL090519, EQBL090619) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits except for field duplicate precision and field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair (Dup-1/GWA-38) was submitted with this SDG and the RPDs was outside of QC limits. A laboratory duplicate of sample GWA-36R was performed and the RPD was within QC limits.

Action: TDS results of the Dup-1/GWA-38 field duplicate pair were qualified and flagged "J".

Laboratory Duplicate Precision

A laboratory duplicate of sample GWA-36R was performed and the RPD was within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The associated equipment blanks (EQBL090419, EQBL090519, EQBL090619) and the field blank associated with the samples in this SDG (FBL090419) contained TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWA-36, GWA-36R, GWA-37, GWA-38, GWA-52, GWA-56, and Dup-1, along with field and equipment blank samples were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/16/19
Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2622808
SAMPLING DATE: September 4, 2019
Plant Bowen Landfill Cells 3 & 4: Event 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-36	GWA-36	N	2622808	300.0	sulfate	0.68	J	J	--	mg/L
GWA-36	GWA-36	N	2622808	6020B	antimony	0.001	J	J	--	mg/L
GWA-36	GWA-36	N	2622808	6020B	beryllium	0.00016	J	J	--	mg/L
GWA-36	GWA-36	N	2622808	6020B	cadmium	0.00088	J	J	--	mg/L
GWA-36	GWA-36	N	2622808	6020B	copper	0.00023	J	J	--	mg/L
GWA-36	GWA-36	N	2622808	6020B	lead	0.000076	J	J	--	mg/L
GWA-36	GWA-36	N	2622808	6020B	nickel	0.00041	J	J	--	mg/L
GWA-36R	GWA-36R	N	2622808	6020B	cadmium	0.00016	J	J	--	mg/L
GWA-36R	GWA-36R	N	2622808	6020B	chromium	0.0013	J	J	--	mg/L
GWA-37	GWA-37	N	2622808	300.0	chloride	0.81	J	J	--	mg/L
GWA-37	GWA-37	N	2622808	6020B	antimony	0.0029	J	J	--	mg/L
GWA-37	GWA-37	N	2622808	6020B	barium	0.005	J	J	--	mg/L
GWA-37	GWA-37	N	2622808	6020B	copper	0.0082	J	J	--	mg/L
GWA-37	GWA-37	N	2622808	6020B	nickel	0.0059	J	J	--	mg/L
GWA-37	GWA-37	N	2622808	300.0	vanadium	0.00073	J	J	--	mg/L
GWA-37	GWA-37	N	2622808	6020B	zinc	0.0086	J,B	U*	BL	mg/L
GWA-38	GWA-38	N	2622808	300.0	sulfate	0.83	J	J	--	mg/L
GWA-38	GWA-38	N	2622808	2540C	total dissolved solids	44		J	FD	mg/L
GWA-38	GWA-38	N	2622808	6020B	chromium	0.0017	J	J	--	mg/L
GWA-38	GWA-38	N	2622808	6020B	cobalt	0.00094	J	J	--	mg/L
GWA-38	GWA-38	N	2622808	6020B	nickel	0.0008	J	J	--	mg/L
GWA-38	GWA-38	N	2622808	6020B	vanadium	0.00076	J	J	--	mg/L
GWA-38	GWA-38	N	2622808	6020B	zinc	0.0056	J,B	U*	BL	mg/L
Dup-1	GWA-38	FD	2622808	300.0	sulfate	0.81	J	J	--	mg/L
Dup-1	GWA-38	FD	2622808	2540C	total dissolved solids	17		J	FD	mg/L
Dup-1	GWA-38	FD	2622808	6020B	chromium	0.0014	J	J	--	mg/L
Dup-1	GWA-38	FD	2622808	6020B	cobalt	0.00093	J	J	--	mg/L
Dup-1	GWA-38	FD	2622808	6020B	nickel	0.00085	J	J	--	mg/L
Dup-1	GWA-38	FD	2622808	6020B	zinc	0.0057	J,B	U*	BL	mg/L
GWA-52	GWA-52	N	2622808	6020B	chromium	0.00096	J	J	--	mg/L
GWA-52	GWA-52	N	2622808	6020B	zinc	0.0045	J,B	U*	BL	mg/L
GWA-56	GWA-56	N	2622808	300.0	fluoride	0.11	J	J	--	mg/L
GWA-56	GWA-56	N	2622808	6020B	boron	0.015	J	J	--	mg/L
GWA-56	GWA-56	N	2622808	6020B	chromium	0.0014	J	J	--	mg/L
GWA-56	GWA-56	N	2622808	6020B	copper	0.00047	J	J	--	mg/L
GWA-56	GWA-56	N	2622808	6020B	zinc	0.0052	J,B	U*	BL	mg/L
EQBL-090419	Equipment Blank	EB	2622808	6020B	calcium	0.054	J	J	--	mg/L
EQBL-090419	Equipment Blank	EB	2622808	6020B	zinc	0.0054	J,B	U*	BL	mg/L
FBL-090419	Field Blank	FB	2622808	6020B	zinc	0.005	J,B	U*	BL	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2622808
SAMPLING DATE: September 4, 2019
Plant Bowen Landfill Cells 3 & 4: Event 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
-----------------	-------------	------	-----	--------	----------------	------------	----------	----------	--------------	-------

Notes:

Laboratory Qualifiers:

B = Analyte detected in associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

FD = Field duplicate imprecision.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/16/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2622808

Reviewer/Date: J. McIntyre 10/16/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 0.2°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/04/19 Prep: metals: 09/09/19 Hg: 09/10/19, 09/12/19 Anal: metals: 09/10/19, 09/11/19 Hg: 09/10/19, 09/12/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 14-15 MB 157551, 158199 Hg = ND p. 16 MB 157237 = Ca – 0.021J x 5 = 0.105, Zn – 0.0043J x 5 = 0.0215 <i>Assoc. Zn results flagged U*, All Ca results >5x, no flags applied.</i> p. 18 MB 157450 = Zn – 0.0042J x 5 = 0.021 <i>EQBL-090419 Zn results flagged U*</i></p> <p><u>Field Blanks:</u> FBL-090419 (SDG 2622808) – Zn- 0.005J,B x 5 = 0.025 mg/L Flagged U* by MB, N/A to qualify samples</p> <p><u>Equipment Blanks:</u> (Highest EB in SDG 2622808) EQB-090419 (SDG 2622808) Ca – 0.054J x 5 = 0.27* mg/L, Zn – 0.0054J,B x 5 = 0.027* EQBL090519 (SDG 2622807) Zn – 0.0049J,B x 5 = 0.0245 mg/L EQBL090619 (SDG 2622810) Zn – 0.0049J,B x 5 = 0.0245 mg/L All EBs zinc results flagged “U*” due to MB contamination - No flags applied Ca- no flags applied; results >5x blank result <i>*Highest concentration for analyte.</i></p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 14-15 LCS 157552, 158200 Hg = 103, 94% p. 16 LCS 157238 metals = All OK p. 18 LCS 157451 metals = All OK</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>DUP-1</u>	<u>GWA-38</u>	<u>RPD</u>
Ba	0.012	0.011	8.7
Ca	1.7	1.6	6.1
Cr	00014J	0.0017J	NC
Co	0.00093J	0.00094J	NC
Ni	0.00085J	0.00080J	NC
V	ND	0.00076J	NC
Zn	0.0057J,B	0.0056J,B	NC
Both samples ND for Hg			

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 14-15 Hg non-project samples of this SDG: 2622807001 & 2622810001
%Rec and RPDs OK.

p. 17 *metals* non-project samples of this SDG: 2622807001

p. 19 *metals* non-project samples of this SDG: 2622810004

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2622808

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>												
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK												
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 0.2°C												
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/04/19 Anal: 09/10/19												
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 21 MB 2675526 anions = ND <u>Field and Equipment Blanks:</u> EQBL-090519 (SDG 2622807) ND EQBL-090419 (SDG 2622808) = ND EQBL-090619 (SDG 2622810) =ND FBL-090519 (SDG 2622807) = ND FBL-090419 (SDG 2622808) = ND FBL-090619 (SDG 2622810) = ND												
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 21 LCS 2675527 – <i>All %Rec OK</i>												
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1" style="margin-left: 40px;"> <thead> <tr> <th></th> <th><u>DUP-1</u></th> <th><u>GWA-38</u></th> <th><u>RPD</u></th> </tr> </thead> <tbody> <tr> <td>Cl</td> <td>2.8</td> <td>2.9</td> <td>3.5</td> </tr> <tr> <td>SO₄</td> <td>0.81J</td> <td>0.83J</td> <td>NC</td> </tr> </tbody> </table> <i>*for results <RL, diff must be <RL</i>		<u>DUP-1</u>	<u>GWA-38</u>	<u>RPD</u>	Cl	2.8	2.9	3.5	SO ₄	0.81J	0.83J	NC
	<u>DUP-1</u>	<u>GWA-38</u>	<u>RPD</u>												
Cl	2.8	2.9	3.5												
SO ₄	0.81J	0.83J	NC												
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 21 EQBL090419 %Recs and RPDs – OK; non-project sample (2622774001)												
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)												

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2622808

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>										
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK										
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 0.2°C										
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 09/04/19 Anal: 09/09/19										
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL090519 (SDG 2622807) TDS = 12 mg/L EQBL090419 (SDG 2622808) TDS = ND EQBL090619 (SDG 2622810) TDS = 10 mg/L <i>No qualification applied due to new ES rule</i> <u>Field Blanks:</u> FBL090419 (SDG 2622808) TDS – 11 mg/L <i>No qualification applied due to new ES rule</i>										
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 20 LCS 157364 TDS = 96%										
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) <table border="0"> <tr> <td></td> <td><u>DUP-1</u></td> <td><u>GWA-38</u></td> <td><u>RPD</u></td> <td></td> </tr> <tr> <td>TDS</td> <td>17</td> <td>44</td> <td>88%</td> <td>Flagged J</td> </tr> </table> p. 20 lab dup on GWA-36R RPD = 5 OK		<u>DUP-1</u>	<u>GWA-38</u>	<u>RPD</u>		TDS	17	44	88%	Flagged J
	<u>DUP-1</u>	<u>GWA-38</u>	<u>RPD</u>										
TDS	17	44	88%	Flagged J									
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>										
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)										

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2622810

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWC-18R	09/06/19	II	QC Samples		
GWC-20R	09/06/19	II	Dup-3	09/06/19	II
GWC-21R	09/06/19	II	FBL090619	09/06/19	II
GWC-23R	09/06/19	II	EQBL090619	09/06/19	II

These samples were collected from Landfill Cells 3&4 on September 6, 2019. Sample Dup-3 is a field duplicate of GWC-20R. Samples FBL090619 and EQBL090619 are field blank and equipment blanks respectively and are associated with the samples in this SDG. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL090519 (SDG: 2622807), collected with poly tubing
- EQBL090419 (SDG: 2622808), collected on the nitrile gloves
- EQBL090619 (SDG: 2622810), collected on the grab plate

The highest result of any detected analyte between the three equipment blanks were used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this

narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for MS/MSD recoveries, method blank contamination and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method(s) blank associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Batch MS/MSD analyses for mercury and metals were performed on samples GWC-18R and GWC-23R respectively and the recoveries and RPDs were within QC limits with the following exception; the percent recoveries were outside of QC limits or calcium. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than four times the spiked concentration.

Reason Code: M+

Action: No qualification was necessary because the sample result was greater than four times the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-3/GWC-20R) was submitted with this SDG, and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are

collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The associated field blank FBL090619 was reported with detections of zinc; however, method blank contamination resulted in the qualification of zinc in this field blank. Therefore, this field blank does not qualify as a representative determinant of zinc contamination. Equipment blank sample EQBL090619 and equipment blanks EQBL090519 (SDG 2622807) and EQBL090419 (SDG 2622808) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 3 and 4 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 3 and 4 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered “not detected” as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged “U”. No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWC-18R	Ca	50x	GWC-23R	Ca	50x
GWC-20R	Ca	50x	Dup-3	Ca	50x
GWC-21R	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged “J” by the laboratory. The “J” qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was performed on non-project samples in this SDG, therefore the matrix effects could not be evaluated.

Field Duplicate Precision

One field duplicate pair (Dup-3/GWC-20R) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG, FBL090619, EQBL090419, EQBL090519, and EQBL090619, did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no anion results were reported between the MDL and RL.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits except for field duplicate precision and field and equipment blank contamination.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair (Dup-3/GWC-20R) was submitted with this SDG and the RPDs were outside of QC limits.

Action: TDS results of the Dup-3/GWA-20R field duplicate pair were qualified and flagged "J".

Laboratory Duplicate Precision

A laboratory duplicate of sample GWA-18R was performed and the RPD was within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blanks associated with the samples in this SDG (EQBL090619 and FBL090619) contained TDS however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-18R, GWC-20R, GWC-21R, GWC-23R, and Dup-3, along with field and equipment blank samples were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/17/19
Checked By/Date: DWK 10/29/19

**TABLE 1
SUMMARY OF DATA QUALIFIERS**

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2622810
SAMPLING DATE: September 6, 2019
Plant Bowen Landfill Cells 3 & 4: Event 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-18R	GWC-18R	N	2622810	6020B	antimony	0.00028	J	J	--	mg/L
GWC-18R	GWC-18R	N	2622810	6020B	chromium	0.00053	J	J	--	mg/L
GWC-18R	GWC-18R	N	2622810	6020B	zinc	0.0046	J,B	U*	BL	mg/L
GWC-20R	GWC-20R	N	2622810	2540C	total dissolved solids	24		J	FD	mg/L
GWC-20R	GWC-20R	N	2622810	6020B	arsenic	0.00044	J	U*	BL, BE	mg/L
GWC-20R	GWC-20R	N	2622810	6020B	chromium	0.00076	J	J	--	mg/L
GWC-20R	GWC-20R	N	2622810	6020B	zinc	0.0042	J,B	U*	BL	mg/L
Dup-3	GWC-20R	FD	2622810	2540C	total dissolved solids	179		J	FD	mg/L
Dup-3	GWC-20R	FD	2622810	6020B	antimony	0.00051	J	J	--	mg/L
Dup-3	GWC-20R	FD	2622810	6020B	arsenic	0.0005	J	J	--	mg/L
Dup-3	GWC-20R	FD	2622810	6020B	boron	0.0073	J	J	--	mg/L
Dup-3	GWC-20R	FD	2622810	6020B	chromium	0.00066	J	J	--	mg/L
Dup-3	GWC-20R	FD	2622810	6020B	zinc	0.0049	J,B	U*	BL	mg/L
GWC-21R	GWC-21R	N	2622810	6020B	arsenic	0.0024	J	J	--	mg/L
GWC-21R	GWC-21R	N	2622810	6020B	chromium	0.00078	J	J	--	mg/L
GWC-21R	GWC-21R	N	2622810	300.0	cobalt	0.00051	J	J	--	mg/L
GWC-21R	GWC-21R	N	2622810	6020B	copper	0.01	J	J	--	mg/L
GWC-21R	GWC-21R	N	2622810	6020B	lead	0.0016	J	J	--	mg/L
GWC-21R	GWC-21R	N	2622810	6020B	nickel	0.0028	J	J	--	mg/L
GWC-21R	GWC-21R	N	2622810	6020B	thallium	0.0002	J	J	--	mg/L
GWC-21R	GWC-21R	N	2622810	6020B	vanadium	0.0012	J	J	--	mg/L
GWC-23R	GWC-23R	N	2622810	6020B	antimony	0.00029	J	J	--	mg/L
GWC-23R	GWC-23R	N	2622810	6020B	arsenic	0.00054	J	J	--	mg/L
GWC-23R	GWC-23R	N	2622810	6020B	copper	0.00037	J	J	--	mg/L
GWC-23R	GWC-23R	N	2622810	6020B	lead	0.000068	J	J	--	mg/L
GWC-23R	GWC-23R	N	2622810	6020B	nickel	0.00086	J	J	--	mg/L
GWC-23R	GWC-23R	N	2622810	6020B	thallium	0.0003	J	J	--	mg/L
GWC-23R	GWC-23R	N	2622810	6020B	vanadium	0.0011	J	J	--	mg/L
GWC-23R	GWC-23R	N	2622810	6020B	zinc	0.0059	J,B	U*	BL	mg/L
EQBL-090619	Equipment Blank	EB	2622810	6020B	zinc	0.0049	J,B	U*	BL	mg/L
FBL-090619	Field Blank	FB	2622810	6020B	zinc	0.0055	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

FD = Field duplicate imprecision.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2622810
SAMPLING DATE: September 6, 2019
Plant Bowen Landfill Cells 3 & 4: Event 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
-----------------	-------------	------	-----	--------	----------------	------------	----------	----------	--------------	-------

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/17/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2622810

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** D. Knaub 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 3.4°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/06/19 Prep: metals: 09/09/19 Hg: 09/12/19 Anal: metals: 09/10/19 Hg: 09/12/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 12 MB 158199 Hg = ND p. 13 MB 157450 = Zn – 0.0042J x 5 = 0.021 mg/L <i>Assoc. Zn results flagged U*</i></p> <p><u>Field Blanks:</u> FBL090619 (SDG 2622810) – Zn- 0.0055 x 5 = 0.0275 mg/L Flagged U* by MB, N/A to qualify samples</p> <p><u>Equipment Blanks:</u> (Highest EB in SDG 2622808) EQBL090519 (SDG 2622807) Zn – 0.0049J,B x 5 = 0.0245 mg/L EQB-090419 (SDG 2622808) Ca – 0.054J x 5 = 0.27* mg/L, Zn – 0.0054J,B x 5 = 0.027* EQBL090619 (SDG 2622810) Zn – 0.0049J,B x 5 = 0.0245 mg/L All EBs zinc results flagged “U*” due to MB contamination - No flags applied Ca- no flags applied; results >5x blank result <i>*Highest concentration for analyte.</i></p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 12 LCS 158200 Hg = 94% p. 13 LCS 157451 metals = All OK</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>DUP-3</u>	<u>GWC-20R</u>	<u>RPD</u>
Sb	0.00051J	ND	NC
As	0.00050J	0.00044J	NC
Ba	0.28	0.027	3.6
Bo	0.0073J		
Ca	33.6	31.1	7.8
Cr	0.00066J	0.00076J	NC
Zn	0.0049J	0.0042J	NC
Both samples ND for Hg			

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 12 Hg GWC-18R – %Rec and RPDs OK.

p. 14 *metals* GWC-23R Ca = **167, 173%** RPD=0

No flags, sample result > 4x spike and analyzed at a dilution.

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2622810

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** D. Knaub 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>												
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK												
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 3.4°C												
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/06/19 Anal: 09/11/19												
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 16 MB 2675532 anions = ND <u>Field and Equipment Blanks:</u> EQBL090519 (SDG 2622807) = ND EQBL090419 (SDG 2622808) = ND EQBL090419 (SDG 2622810) = ND FBL090619 (SDG 2622810) = ND												
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 16 LCS 2675533 – All %Rec OK												
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th><u>DUP-3</u></th> <th><u>GWC-20R</u></th> <th><u>RPD</u></th> </tr> </thead> <tbody> <tr> <td>Cl</td> <td>1.6</td> <td>1.6</td> <td>0</td> </tr> <tr> <td>SO₄</td> <td>1.5</td> <td>1.4</td> <td>6.9</td> </tr> </tbody> </table> <p style="text-align: center;"><i>*for results <RL, diff must be <RL</i></p>		<u>DUP-3</u>	<u>GWC-20R</u>	<u>RPD</u>	Cl	1.6	1.6	0	SO ₄	1.5	1.4	6.9
	<u>DUP-3</u>	<u>GWC-20R</u>	<u>RPD</u>												
Cl	1.6	1.6	0												
SO ₄	1.5	1.4	6.9												
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 16 non-project samples of this SDG (2622807011 & 2622766001)												
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)												

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2622810

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** D. Knaub 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>										
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK										
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 3.4°C										
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 09/06/19 Anal: 09/11/19										
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL090519 (SDG 2622807) TDS = 12 mg/L EQBL090419 (SDG 2622808) TDS = ND EQBL090619 (SDG 2622810) TDS = 10 mg/L <i>No qualification applied due to new ES rule</i> <u>Field Blanks:</u> FBL090619 (SDG 2622810) TDS = 10 mg/L <i>No qualification applied due to new ES rule</i>										
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 15 LCS 157900 TDS = 102%										
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th><u>DUP-3</u></th> <th><u>GWC-20R</u></th> <th><u>RPD</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>TDS</td> <td>179</td> <td>24</td> <td>153</td> <td>flag "J"</td> </tr> </tbody> </table> <p><i>p. 15 lab dup on GWC-18R RPD = 4 OK</i></p>		<u>DUP-3</u>	<u>GWC-20R</u>	<u>RPD</u>		TDS	179	24	153	flag "J"
	<u>DUP-3</u>	<u>GWC-20R</u>	<u>RPD</u>										
TDS	179	24	153	flag "J"									
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>										
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)										

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2622908

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-16R	09/09/19	II
GWC-18	09/09/19	II
GWC-19R	09/09/19	II

These samples were collected from Landfill Cells 3&4 on September 9, 2019. No field blanks are associated with this day of sampling. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL090519 (SDG: 2622807), collected with poly tubing
- EQBL090419 (SDG: 2622808), collected on the nitrile gloves
- EQBL090619 (SDG: 2622810), collected on the grab plate

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits except for method and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for metals and mercury were performed on non-project samples in this SDG, therefore the matrix effects could not be evaluated.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pair(s) were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. Equipment blank samples EQBL090519 (SDG 2622807), EQBL090419 (SDG 2622808) and EQBL090619 (SDG 2622810) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 3 and 4 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 3 and 4 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

Sample	Metal	Dilution	Sample	Metal	Dilution
GWC-16R	Ca	50x	GWC-19R	Ca	50x
GWC-18	Ca	50x			

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions was performed on sample GWC-16R and the percent recoveries and RPDs were within QC limits.

Field Duplicate Precision

No field duplicate pair(s) were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank(s) associated with the samples of this SDG (EQBL090419, EQBL090519, and EQBL090619) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no anion results were reported between the MDL and RL.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of equipment blank contamination; however, no qualification was applied.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pair(s) were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank(s) associated with the samples of this SDG (EQBL090419, EQBL090519 and EQBL090619) contained TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-16R, GWC-18, and GWC-19R were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/17/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2622908
SAMPLING DATE: September 9, 2019
Plant Bowen Landfill Cells 3 & 4: Event 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-16R	GWC-16R	N	2622908	6020B	arsenic	0.00094	J	J	--	mg/L
GWC-16R	GWC-16R	N	2622908	6020B	copper	0.00082	J	J	--	mg/L
GWC-16R	GWC-16R	N	2622908	6020B	nickel	0.0066	J	J	--	mg/L
GWC-16R	GWC-16R	N	2622908	6020B	thallium	0.00006	J	J	--	mg/L
GWC-16R	GWC-16R	N	2622908	6020B	vanadium	0.00091	J,B	J	--	mg/L
GWC-18	GWC-18	N	2622908	6020B	arsenic	0.00099	J	J	--	mg/L
GWC-18	GWC-18	N	2622908	6020B	chromium	0.001	J	J	--	mg/L
GWC-18	GWC-18	N	2622908	6020B	lead	0.00005	J	J	--	mg/L
GWC-18	GWC-18	N	2622908	6020B	vanadium	0.00078	J	J	--	mg/L
GWC-18	GWC-18	N	2622908	6020B	zinc	0.0063	J,B	U*	BL	mg/L
GWC-19R	GWC-19R	N	2622908	6020B	arsenic	0.00082	J	J	--	mg/L
GWC-19R	GWC-19R	N	2622908	6020B	chromium	0.00056	J	J	--	mg/L
GWC-19R	GWC-19R	N	2622908	6020B	vanadium	0.00081	J	J	--	mg/L
GWC-19R	GWC-19R	N	2622908	6020B	zinc	0.0062	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte detected in associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/17/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2622908

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 4.5°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/09/19 Prep: metals: 09/12/19 Hg: 09/12/19 Anal: metals: 09/16/19 Hg: 09/12/19</p>
<input checked="" type="checkbox"/>			<p>QC Blanks Review <u>Method Blanks:</u> p. 8 MB 158199 Hg = ND p. 9 MB 158382= Zn – 0.0045J x 5 = 0.0225 Assoc Zn results flagged U*</p> <p><u>Field blank:</u> No field blanks associated with this day of sampling.</p> <p><u>Equipment Blanks:</u> (Highest EB in SDG 2622808) EQB-090419 (SDG 2622808) Ca – 0.054J x 5 = 0.27 * mg/L, Zn – 0.0054J,B x 5 = 0.027 * EQBL090519 (SDG 2622807) Zn – 0.0049J,B x 5 = 0.0245 mg/L EQBL090619 (SDG 2622810) Zn – 0.0049J,B x 5 = 0.0245 mg/L All EBs zinc results flagged "U*" due to MB contamination - No flags applied Ca- no flags applied; results >5x blank result <i>*Highest concentration for analyte.</i></p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 8 LCS 158200 Hg = 94% p. 9 LCS 158383 metals = All OK</p>
<input checked="" type="checkbox"/>			<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab dups in this SDG</p>

Metals and Mercury by SW6020B/SW7470 (cont.)

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
		<input checked="" type="checkbox"/>	<p>Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) p. 8 <i>Hg</i> non-project sample of this SDG (2622810001) p. 10 <i>metals</i> non-project sample (2622907001) %Rec OK</p>
		<input checked="" type="checkbox"/>	<p>Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL) No dissolved metals in this SDG</p>
		<input checked="" type="checkbox"/>	<p>EDD Data Verification vs. Hardcopy (10% samples for each SDG)</p>

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2622908

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 4.5°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/09/19 Anal: 09/17/19
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 12 MB 2682071 anions = ND <u>Field blank:</u> No field blanks associated with this day of sampling. <u>Equipment Blanks:</u> EQBL090519 (SDG 2622807) = ND EQBL090419 (SDG 2622808) = ND EQBL090419 (SDG 2622810) = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 12 LCS 2682072 – <i>All OK</i>
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab dups in this SDG
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 12 GWC-16R <i>All OK</i> p. 12 non-project sample (2623127001) <i>All OK</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2622908

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 4.5°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 09/09/19 Anal: 09/11/19
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL090519 (SDG 2622807) TDS = 12 mg/L EQBL090419 (SDG 2622808) TDS = ND EQBL090619 (SDG 2622810) TDS = 10 mg/L <i>No flags applied due to new ES rule</i> <u>Field blank:</u> No field blanks associated with this day of sampling.
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 12 LCS 157900 TDS = 102%
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab duplicates in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/

Semiannual State Design and Operation Permit Monitoring

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 3&4 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623139

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 3 & 4 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for, but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for, but was not detected above the level of the reported sample reporting or method detection; however the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300.0, and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300.0, and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWC-17R	09/10/19	II

These samples were collected from Landfill Cells 3&4 on September 10, 2019. No field blanks are associated with this day of sampling. However, equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 3&4 and are listed below:

- EQBL090519 (SDG: 2622807), collected with poly tubing
- EQBL090419 (SDG: 2622808), collected on the nitrile gloves
- EQBL090619 (SDG: 2622810), collected on the grab plate

The highest result of any detected analyte between the three equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of method and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank(s) associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for metals and mercury were performed on non-project samples in this SDG, therefore the matrix effects could not be evaluated.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pair(s) were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. No field blank was collected with these samples. Equipment blank samples EQBL090519 (SDG 2622807), EQBL090419 (SDG 2622808) and EQBL090619 (SDG 2622810) contained one or more of the following analytes: calcium and zinc. All of the equipment blanks in Cells 3 and 4 contained concentrations of zinc and were qualified due to method blank contamination in their respective SDG. Therefore, the equipment blanks in Cells 3 and 4 do not qualify as representative determinants of field and sampling accuracy for zinc. Results less than five times the field and/or equipment blank are considered "not detected" as a possible field artifact.

Action: No qualification was applied to zinc results based on field or equipment blanks due to method blank contamination; the blank results were flagged "U". No qualification was required for calcium results because the associated results were greater than 5x the blank concentration.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

Sample	Metal	Dilution
GWC-17R	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No dissolved samples were collected and reported in this SDG.

Anions (EPA 300.0)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300.0. Each of the Level II components were within the QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed in this SDG contained no reportable detections of anions.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

The batch MS/MSD analyses for anions were performed on non-project samples, therefore, matrix effects specific to anions in these project samples were not assessed.

Field Duplicate Precision

No field duplicate pair(s) were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank(s) associated with the samples of this SDG (EQBL090419, EQBL090519, and EQBL090619) did not contain anions.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300 and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no anion results were reported between the MDL and RL.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within the QC limits with the exception of holding time exceedance and equipment blank contamination. No qualification was applied due to equipment blank contamination.

Holding Times

The sample analyses were performed 1-day outside of the 7-day analysis holding time.

Action: The associated TDS results for sample GWC-17R was qualified as estimated and flagged "J".

Method Blanks

The analytical method does not require the analysis of a method blank.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pair(s) were submitted in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

No field blank was collected with these samples. The equipment blank(s) associated with the samples of this SDG (EQBL090419, EQBL090519 and EQBL090619) contained TDS; however, no qualification was applied.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs.

Completeness

A total of 23 wells, along with the required QC samples, were sampled and analyzed during the March event in Landfill Cells 3&4 according to the FSP (Amec Foster Wheeler, 2017). Of those 23 well locations, GWC-17R was reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/17/19
Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623139
SAMPLING DATE: September 10, 2019
Plant Bowen Landfill Cells 3 & 4: Event 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-17R	GWC-17R	N	2623139	2540C	total dissolved solids	312		J	H	mg/L
GWC-17R	GWC-17R	N	2623139	6020B	zinc	0.0055	J,B	U*	BL	mg/L

Laboratory Qualifiers:

B = Analyte detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

H = Holding time was exceeded

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/17/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903 ****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623139

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	COMMENTS
<input checked="" type="checkbox"/>			<p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>			<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.6°C</p>
<input checked="" type="checkbox"/>			<p>Holding times met (180 days; Hg = 28 days) Coll: 09/10/19 Prep: metals: 09/16/19 Hg: 09/18/19 Anal: metals: 09/18/19 Hg: 09/18/19</p>
	<input checked="" type="checkbox"/>		<p>QC Blanks Review <u>Method Blanks:</u> p. 6 MB 159775 Hg = ND p. 7 MB 159344 = Zn – 0.0045J x 5 = 0.0225 GWC-17R flagged U*</p> <p><u>Field Blanks:</u> No field blanks associated with this day of sampling.</p> <p><u>Equipment Blanks:</u> (Highest EB in SDG 2622808) EQB-090419 (SDG 2622808) Ca – 0.054J x 5 = 0.27* mg/L, Zn – 0.0054J,B x 5 = 0.027* EQBL090519 (SDG 2622807) Zn – 0.0049J,B x 5 = 0.0245 mg/L EQBL090619 (SDG 2622810) Zn – 0.0049J,B x 5 = 0.0245 mg/L All EBs zinc results flagged "U*" due to MB contamination - No flags applied Ca- no flags applied; results >5x blank result <i>*Highest concentration for analyte.</i></p>
<input checked="" type="checkbox"/>			<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 6 LCS 159776 Hg = 99% p. 7 LCS 159345 metals = All OK</p>
	<input checked="" type="checkbox"/>		<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dups; lab dup on non-project sample (92445435001)</p>
	<input checked="" type="checkbox"/>		<p>Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20) p. 6 non-project of this SDG (2623211001) - %Rec and RPD ok p. 8 non-project (2623134003) Ca = 65, 95% RPD = 1 <i>No flags on non-project samples; result > 4x spike and analyzed at a dilution.</i></p>

Metals and Mercury by SW6020B/SW7470 (cont.)

YES

NO

NA

COMMENTS

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)
No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2623139

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES	NO	NA	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK, 1.6°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/10/19 Anal: 09/19/19
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 10 MB 2682991 anions = ND <u>Field Blanks:</u> No field blanks associated with this day of sampling. <u>Equipment Blanks:</u> EQBL090519 (SDG 2622807) = ND EQBL090419 (SDG 2622808) = ND EQBL090419 (SDG 2622810) =ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 10 LCS 2682992 – All OK
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) No lab or field dups.
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 10 non-project samples of this SDG (92445745001 and 92445858008)
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623139

Reviewer/Date: J. McIntyre 10/17/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.6°C
	<input checked="" type="checkbox"/>		Holding times met (7 days) Coll: 09/10/19 Anal: 09/18/19* <i>Sample was analyzed outside of hold time: sample flagged "J"</i>
	<input checked="" type="checkbox"/>		QC Blanks Review <u>Method Blanks</u> (not required for method) <u>Equipment Blanks:</u> EQBL090519 (SDG 2622807) TDS = 12 mg/L EQBL090419 (SDG 2622808) TDS = ND EQBL090619 (SDG 2622810) TDS = 10 mg/L <i>No flags applied due to new ES rule</i> <u>Field Blanks:</u> No field blanks associated with this day of sampling.
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 9 LCS 159910 TDS = 101% - OK
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) No field dups Lab dup: p. 9 GWC-17R, RPD = 2 All OK
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2622907

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWA-39Z	09/09/19	II
GWA-40	09/09/19	II

The samples reported in this SDG were collected from Landfill Cells 9&10 on September 9, 2019. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL091119 (SDG: 2623134), collected on the poly tubing
- EQBL091019 (SDG: 2623137), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of method blank contamination and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL (0.0045 J mg/L). Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL.**

Action: The positive zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U". Concurrent qualification of associated zinc results are applicable due to site-specific equipment blank contamination containing zinc. See Sampling Accuracy section below for details.*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for mercury on sample GWA-39Z and the percent recoveries and RPD were within the QC limits.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The field blank samples contained calcium, nickel and/or zinc. However, no qualification was required due to the field blanks not being collected on the same day as the samples of this SDG. Both of the equipment blanks (EQBL091119 – SDG: 2623134 and EQBL091019 – SDG: 2623137) contained calcium and zinc between the method detection limit (MDL) and the reporting limit (RL). Results less than five times

the blank are considered not detected as a possible field artifact: **Reason Code: BE.**

Action: The positive zinc results less than five times the equipment blank were qualified as not detected due to possible blank contamination and flagged "U". Concurrent qualification of associated zinc results are applied due to method blank contamination containing zinc. See Method Blanks section below for details.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-39Z	Ca	50x	GWA-40	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG did not contain anions indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on sample GWA-39Z and the percent recoveries and RPDs were within QC limits.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank samples did not contain anions. No qualification required.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Laboratory Duplicate Precision

The laboratory duplicates analyzed were not for project samples in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank samples did not contain TDS. No qualification required.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWA-39Z and GWC-40 were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/08/19

Checked By/Date: JAH 10/29/19

**TABLE 1
SUMMARY OF DATA QUALIFIERS**

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2622907
SAMPLING DATE: September 9, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-39Z	GWA-39Z	N	2622907	300	fluoride	0.054	J	J	--	mg/L
GWA-39Z	GWA-39Z	N	2622907	6020B	antimony	0.00079	J	J	--	mg/L
GWA-39Z	GWA-39Z	N	2622907	6020B	arsenic	0.00043	J	J	--	mg/L
GWA-39Z	GWA-39Z	N	2622907	6020B	nickel	0.0014	J	J	--	mg/L
GWA-39Z	GWA-39Z	N	2622907	6020B	zinc	0.0047	J,B	U*	BL	mg/L
GWA-40	GWA-40	N	2622907	300	chloride	0.83	J	J	--	mg/L
GWA-40	GWA-40	N	2622907	6020B	arsenic	0.00068	J	J	--	mg/L
GWA-40	GWA-40	N	2622907	6020B	barium	0.0078	J	J	--	mg/L
GWA-40	GWA-40	N	2622907	6020B	copper	0.0022	J	J	--	mg/L
GWA-40	GWA-40	N	2622907	6020B	zinc	0.0058	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte detected in associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/15/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2622907

Reviewer/Date: J. McIntyre 10/08/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES NO NA COMMENTS

<input checked="" type="checkbox"/>	<p>Dilutions necessary for Ca (50x)</p> <p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>	<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 4.5°C</p>
<input checked="" type="checkbox"/>	<p>Holding times met (180 days; Hg = 28 days) Coll: 09/09/19 Prep: metals – 09/12/19, Hg – 09/12/19 Anal: metals – 09/16/19, Hg – 09/12/19</p>
<input checked="" type="checkbox"/>	<p>QC Blanks Review <u>Method Blanks:</u> p. 7 MB 158199 Hg = ND p. 8 MB 158382 metals = Zn - 0.0045J x 5 = 0.0225 mg/L <u>GWA-39Z and GWA-40 flagged "U*", also flagged due to EB cont.</u></p> <p><u>Field blank:</u> FBL-091119 (SDG 2623134) Ca - 0.022 x 5 = 0.11 mg/L Ni - 0.00099 x 5 = 0.00495 mg/L Zn - 0.0065 x 5 = 0.0325 mg/L <i>No flags – samples >5x or flagged based on MB/EB cont.</i> FBL-091019 (SDG 2623137) Ca - 0.018 x 5 = 0.09 mg/L Zn - 0.0067 x 5 = 0.0335 mg/L <i>No flags – samples >5x or flagged based on MB/EB cont.</i></p> <p><u>Equipment blanks:</u> EQBL-091119 (SDG 2623134) Ca - 0.019 x 5 = 0.095 mg/L Zn - 0.0063 x 5 = 0.0315 mg/L <i>No flags – flagged based on EQBL-091119</i> EQBL-091019 (SDG 2623137) Ca - 0.038 x 5 = 0.19 mg/L <i>No flags – samples >5x EB</i> Zn - 0.0075 x 5 = 0.0375 mg/L <u>GWA-39Z and GWA-40 flagged "U*", also flagged due to MB cont.</u></p>
<input checked="" type="checkbox"/>	<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 7 LCS 158200 Hg = 94% p. 8 LCS 158383 metals = All OK</p>
<input checked="" type="checkbox"/>	<p>Lab Duplicate - Field Duplicate precision goals met (20%) No field dup submitted with this SDG</p>

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS

- Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)**
p. 7 non-project sample of this SDG (2622810001)
p. 9 metals - GWA-39Z %Rec and RPDs OK

- Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)**
No dissolved metals in this SDG

- EDD Data Verification vs. Hardcopy (10% samples for each SDG)**

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2622907

Reviewer/Date: J. McIntyre 10/08/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 4.5°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/09/19 Anal: 09/17/19
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 11 MB 2682071 = ND <u>Field blank:</u> FBL091119 (SDG 2623134) = ND FBL091019 (SDG 2623137) = ND <u>Equipment blanks:</u> EQBL091119 (SDG 2623134) = ND EQBL091019 (SDG 2623137) = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 11 LCS 2682072 – All OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab dup in this SDG
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 11 anions - GWA-39Z %Rec and RPDs OK p. 11 non-project sample of this SDG (2623127001) -%Rec and RPDs OK
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2622907

Reviewer/Date: J. McIntyre 10/08/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 4.5°C
<input checked="" type="checkbox"/>			Holding times met (7 days) Coll: 09/09/19 Anal: 09/11/19
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> No MB required by the method. <u>Field blank:</u> FBL-091119 (SDG 2623134) = ND FBL-091019 (SDG 2623137) =ND <u>Equipment blanks:</u> EQBL-091119 (SDG 2623134) = ND EQBL-091019 (SDG 2623137) = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within lab limits p. 10 LCS 157900 TDS = 102% - OK
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) No field dups submitted with this SDG Lab dups: p. 10 Non-project samples; RPD = 4, 4 OK
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (if applicable) <i>None for TDS</i>
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623134

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
GWA-39RZ	09/11/19	II	GWC-48	09/11/19	II
GWA-43	09/11/19	II	GWC-49R	09/11/19	II
GWA-43R	09/11/19	II	GWC-49Z	09/11/19	II
GWC-44	09/11/19	II			
GWC-45	09/11/19	II	QC Samples		
GWC-45R	09/11/19	II	Dup-2	09/11/19	II
GWC-46R	09/11/19	II	FBL091119	09/11/19	II
GWC-47R	09/11/19	II	EQBL091119	09/11/19	II

The samples reported in this SDG were collected from Landfill Cells 9&10 on September 11, 2019. Sample Dup-2 is the field duplicate of sample GWC-48. Sample FBL091119 is a field blank, and sample EQBL091119 is an equipment blank. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL091119 (SDG: 2623134), collected on the poly tubing
- EQBL091019 (SDG: 2623137), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of method, field and equipment blank contamination and MS/MSD recoveries.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method(s) blank associated with the samples analyzed within this SDG contained boron and zinc at concentrations between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive boron and zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U". Concurrent qualification of associated zinc results are applicable due to site-specific equipment blank contamination containing zinc. See Sampling Accuracy section below for details.*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for mercury on sample GWA-43R and the MS recovery was below the lower QC limit. No qualification is required if the sample was analyzed at a dilution prior to analysis or if the sample result is greater than 4x the spiked concentration. **Reason Code: M+**

Action: No qualification was required for the calcium results because the sample was analyzed at a dilution and the concentration was greater than 4x the spike amount potentially masking the spike.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWC-48) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The field blank FLB-091119 contained calcium, nickel, and zinc and qualification was required for nickel and zinc. However, method blank contamination of zinc disqualified the field blank as a potential QC measurement and results were qualified only for nickel for this QC sample. Both of the equipment blanks (EQBL091119 – SDG: 2623134 and EQBL091019 – SDG: 2623137) contained calcium and zinc between the method detection limit (MDL) and the reporting limit (RL). Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE, BF.**

Action: The positive nickel results less than five times the field blank were qualified as not detected due to possible blank contamination and flagged "U". The positive zinc results less than five times the equipment blank were qualified as not detected due to possible blank contamination and flagged "U*". Concurrent qualification of associated zinc results were applied due to method blank contamination containing zinc. See Method Blanks section below for details.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-39RZ	Ca	50x	GWC-46R	Ca	50x
GWA-43R	Ca	50x	GWC-47R	Ca	50x
GWC-45R	Ca	50x	GWC-49R	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG did not contain anions indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on a non-project sample; therefore, matrix effects specific to anions in these project samples were not assessed.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWC-48) was submitted with this SDG and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank samples did not contain anions. No qualification required.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits with the exception of the laboratory and field duplicate RPDs.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair (Dup-2/GWC-48) was submitted with this SDG and the RPD was outside the QC limits.

Action: The TDS results reported in samples Dup-2 and GWC-48 were qualified as estimated and flagged "J".

Laboratory Duplicate Precision

The laboratory analyzed samples GWA-43 and Dup-2 in duplicate and the RPDs were greater than the laboratory QC limits but within project QC limits. Both results were reported at concentrations above the RL. When one or more results are below the RL the difference between the values must not exceed the RL.

Action: No qualification was required for Dup-2 because the RPD was within project QC limits and the difference between the results was less than the RL. Qualification for GWA-43 was required as the RPD was greater than the project limits and the results were flagged "J".

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank samples did not contain TDS. No qualification required.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWA-39RZ, GWA-43, GWA-43R, GWC-44, GWC-45, GWC-45R, GWC-46R, GWC-47R, GWC-48, GWC-49R, GWC-49Z, and Dup-2, along with the field and equipment blank samples, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/09/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623134
SAMPLING DATE: September 11, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-39RZ	GWA-39RZ	N	2623134	300	fluoride	0.055	J	J	--	mg/L
GWA-39RZ	GWA-39RZ	N	2623134	6020B	arsenic	0.00062	J	J	--	mg/L
GWA-39RZ	GWA-39RZ	N	2623134	6020B	boron	0.0081	J,B	U*	BL	mg/L
GWA-39RZ	GWA-39RZ	N	2623134	6020B	cooper	0.0014	J	J	--	mg/L
GWA-39RZ	GWA-39RZ	N	2623134	6020B	vanadium	0.00086	J	J	--	mg/L
GWA-39RZ	GWA-39RZ	N	2623134	6020B	zinc	0.0085	J,B	U*	BL	mg/L
GWA-43	GWA-43	N	2623134	2540C	total dissolved solids	21		J	LD	mg/L
GWA-43	GWA-43	N	2623134	6020B	boron	0.0059	J,B	U*	BL	mg/L
GWA-43	GWA-43	N	2623134	6020B	chromium	0.00051	J	J	--	mg/L
GWA-43	GWA-43	N	2623134	6020B	copper	0.00036	J	J	--	mg/L
GWA-43	GWA-43	N	2623134	6020B	lead	0.0001	J	J	--	mg/L
GWA-43	GWA-43	N	2623134	6020B	nickel	0.00082	J	U*	BF	mg/L
GWA-43	GWA-43	N	2623134	6020B	thallium	0.000062	J	J	--	mg/L
GWA-43	GWA-43	N	2623134	6020B	zinc	0.0065	J,B	U*	BL	mg/L
GWA-43R	GWA-43R	N	2623134	6020B	antimony	0.00029	J	J	--	mg/L
GWA-43R	GWA-43R	N	2623134	6020B	barium	0.0079	J	J	--	mg/L
GWA-43R	GWA-43R	N	2623134	6020B	boron	0.021	J,B	J	--	mg/L
GWA-43R	GWA-43R	N	2623134	6020B	chromium	0.00066	J	J	--	mg/L
GWA-43R	GWA-43R	N	2623134	6020B	copper	0.00026	J	J	--	mg/L
GWA-43R	GWA-43R	N	2623134	6020B	lead	0.000092	J	J	--	mg/L
GWA-43R	GWA-43R	N	2623134	6020B	zinc	0.0053	J,B	U*	BL	mg/L
GWC-44	GWC-44	N	2623134	6020B	boron	0.0088	J,B	J	--	mg/L
GWC-44	GWC-44	N	2623134	6020B	cobalt	0.0018	J	J	--	mg/L
GWC-44	GWC-44	N	2623134	6020B	copper	0.00043	J	J	--	mg/L
GWC-44	GWC-44	N	2623134	6020B	lead	0.00047	J	J	--	mg/L
GWC-44	GWC-44	N	2623134	6020B	nickel	0.00058	J	U*	BF	mg/L
GWC-44	GWC-44	N	2623134	6020B	selenium	0.0021	J	J	--	mg/L
GWC-44	GWC-44	N	2623134	6020B	zinc	0.0068	J,B	U*	BL	mg/L
GWC-45	GWC-45	N	2623134	300	chloride	0.81	J	J	--	mg/L
GWC-45	GWC-45	N	2623134	6020B	barium	0.0061	J	J	--	mg/L
GWC-45	GWC-45	N	2623134	6020B	cobalt	0.0014	J	J	--	mg/L
GWC-45	GWC-45	N	2623134	6020B	copper	0.012	J	J	--	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623134
SAMPLING DATE: September 11, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-45	GWC-45	N	2623134	6020B	lead	0.00016	J	J	--	mg/L
GWC-45	GWC-45	N	2623134	6020B	nickel	0.0012	J	U*	BF	mg/L
GWC-45	GWC-45	N	2623134	6020B	zinc	0.0065	J,B	U*	BL	mg/L
GWC-45R	GWC-45R	N	2623134	6020B	zinc	0.0058	J,B	U*	BL	mg/L
GWC-46R	GWC-46R	N	2623134	6020B	chromium	0.0038	J	J	--	mg/L
GWC-46R	GWC-46R	N	2623134	6020B	zinc	0.0055	J,B	U*	BL	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	antimony	0.00099	J	J	--	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	arsenic	0.00067	J	J	--	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	barium	0.0097	J	J	--	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	boron	0.0054	J,B	U*	BL	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	chromium	0.0015	J	J	--	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	cooper	0.0008	J	J	--	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	lead	0.000085	J	J	--	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	nickel	0.0014	J	U*	BF	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	thallium	0.00023	J	J	--	mg/L
GWC-47R	GWC-47R	N	2623134	6020B	zinc	0.028	J,B	U*	BL	mg/L
GWC-48	GWC-48	N	2623134	2540C	total dissolved solids	20		J	FD	mg/L
GWC-48	GWC-48	N	2623134	300	sulfate	0.86	J	J	--	mg/L
GWC-48	GWC-48	N	2623134	6020B	beryllium	0.00027	J	J	--	mg/L
GWC-48	GWC-48	N	2623134	6020B	cadmium	0.00024	J	J	--	mg/L
GWC-48	GWC-48	N	2623134	6020B	chromium	0.0016	J	J	--	mg/L
GWC-48	GWC-48	N	2623134	6020B	cobalt	0.0013	J	J	--	mg/L
GWC-48	GWC-48	N	2623134	6020B	copper	0.00073	J	J	--	mg/L
GWC-48	GWC-48	N	2623134	6020B	lead	0.000058	J	J	--	mg/L
GWC-48	GWC-48	N	2623134	6020B	nickel	0.004	J	U*	BF	mg/L
GWC-48	GWC-48	N	2623134	6020B	thallium	0.00012	J	J	--	mg/L
GWA-48	GWA-48	N	2623134	6020B	zinc	0.011	B	U*	BL	mg/L
DUP-2-091119	GWC-48	FD	2623134	2540C	total dissolved solids	32		J	FD	mg/L
DUP-2-091119	GWC-48	FD	2623134	300	sulfate	0.93	J	J	--	mg/L
DUP-2-091119	GWC-48	FD	2623134	6020B	beryllium	0.00033	J	J	--	mg/L
DUP-2-091119	GWC-48	FD	2623134	6020B	cadmium	0.00018	J	J	--	mg/L
DUP-2-091119	GWC-48	FD	2623134	6020B	chromium	0.0017	J	J	--	mg/L

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623134
SAMPLING DATE: September 11, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
DUP-2-091119	GWC-48	FD	2623134	6020B	cobalt	0.0014	J	J	--	mg/L
DUP-2-091119	GWC-48	FD	2623134	6020B	copper	0.00034	J	J	--	mg/L
DUP-2-091119	GWC-48	FD	2623134	6020B	nickel	0.0041	J	U*	BF	mg/L
DUP-2-091119	GWC-48	FD	2623134	6020B	thallium	0.00011	J	J	--	mg/L
DUP-2-091119	GWC-48	FD	2623134	6020B	zinc	0.011	B	U*	BL	mg/L
GWC-49R	GWC-49R	N	2623134	6020B	chromium	0.00063	J	J	--	mg/L
GWC-49R	GWC-49R	N	2623134	6020B	zinc	0.005	J	U*	BL	mg/L
GWC-49Z	GWC-49Z	N	2623134	300	chloride	1.0	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2623134	6020B	antimony	0.00065	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2623134	6020B	barium	0.0038	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2623134	6020B	chromium	0.002	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2623134	6020B	cobalt	0.00075	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2623134	6020B	copper	0.00021	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2623134	6020B	lead	0.000082	J	J	--	mg/L
GWC-49Z	GWC-49Z	N	2623134	6020B	nickel	0.0012	J	U*	BF	mg/L
GWC-49Z	GWC-49Z	N	2623134	6020B	zinc	0.0085	J,B	U*	BL	mg/L
EQBL-091119	Equipment Blank	EB	2623134	6020B	calcium	0.019	J	J	--	mg/L
EQBL-091119	Equipment Blank	EB	2623134	6020B	zinc	0.0063	J,B	J	BL	mg/L
FBL-091119	Field Blank	FB	2623134	6020B	calcium	0.022	J	J	--	mg/L
FBL-091119	Field Blank	FB	2623134	6020B	nickel	0.00099	J	J	--	mg/L
FBL-091119	Field Blank	FB	2623134	6020B	zinc	0.0065	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte detected in associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BF = Field blank contamination. The result should be considered "not-detected".

BL = Laboratory blank contamination. The result should be considered "not-detected".

FD = Field duplicate imprecision.

LD = Laboratory duplicate imprecision.

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623134
SAMPLING DATE: September 11, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
-----------------	-------------	------	-----	--------	----------------	------------	----------	----------	--------------	-------

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/15/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623134

Reviewer/Date: J. McIntyre 10/08/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES NO NA COMMENTS

<input checked="" type="checkbox"/>	Dilutions necessary for Ca (50x)
<input checked="" type="checkbox"/>	Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>	Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.6°C
<input checked="" type="checkbox"/>	Holding times met (180 days; Hg = 28 days) Coll: 09/11/19 Prep: metals – 09/16/19, Hg – 09/16/19 Anal: metals – 09/18/19, 09/20/19, Hg – 09/17/19
<input checked="" type="checkbox"/>	QC Blanks Review <u>Method Blanks:</u> p. 20 MB 159305 Hg = ND p. 21 MB 159319 (6010) = B – 0.0052J x 5 = 0.026 ; Zn - 0.0049J x 5 = 0.0245 mg/L <i>Assoc. results flagged "U*"</i> p. 21 MB 159344 metals = Zn - 0.0045J x 5 = 0.0225 ; <i>Assoc. results flagged "U*"</i> <u>Field blank:</u> FBL-091119 (SDG 2623134) Ca - 0.022 x 5 = 0.11 mg/L <i>No flags – samples >5x FB</i> Ni - 0.00099 x 5 = 0.00495 mg/L <i>7 assoc. results flagged "U*"</i> Zn - 0.0065 x 5 = 0.0325 mg/L <i>Flagged "U*" by MB.</i> FBL-091019 (SDG 2623137) <i>No flags – not applicable to this SDG</i> <u>Equipment blanks:</u> EQBL-091119 (SDG 2623134) Ca - 0.019 x 5 = 0.095 mg/L <i>No flags – samples >5x EB</i> Zn - 0.0063 x 5 = 0.0315 mg/L <i>Flagged "U*" by MB. No flags to be applied on qualified data.</i> EQBL-091019 (SDG 2623137) Ca - 0.038 x 5 = 0.19 mg/L <i>No flags – samples >5x EB</i> Zn - 0.0075 x 5 = 0.0375 mg/L <i>Sample GWA-47R flagged "U*"</i>
<input checked="" type="checkbox"/>	Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 10 LCS 159306 Hg = 103% p. 21 LCS 159320 metals = All OK p. 23 LCS 159345 metals = All OK

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>Dup-2</u>	<u>GWC-48</u>	<u>RPD</u>	
Ba	0.028	0.031	10	ok
Ca	3.0	2.9	3	ok
Zn	0.011B	0.011B	0	ok

Lab dup – non- project sample; RPDs all OK

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 20 Hg – non-project sample of this SDG (2623127001)
 p. 21 metals – non-project sample of this SDG (2623127002)
 p. 24 metals - GWA-43R Ca = **65**, 95% RPD=1
No flags, sample result > 4x spike and analyzed at a dilution.

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2623134

Reviewer/Date: J. McIntyre 10/08/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>										
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK										
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.6°C										
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/11/19 Anal: 09/19/19										
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 27 MB 2682991 = ND <u>Field blank:</u> FBL-091119 (SDG 2623134) = ND FBL-091019 (SDG 2623137) =ND <u>Equipment blanks:</u> EQBL-091119 (SDG 2623134) = ND EQBL-091019 (SDG 2623137) = ND										
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 27 LCS 2682992 – All OK										
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="1"> <thead> <tr> <th></th> <th><u>Dup-2</u></th> <th><u>GWC-48</u></th> <th><u>RPD</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Cl-</td> <td>3.2</td> <td>3.3</td> <td>3</td> <td>ok</td> </tr> </tbody> </table>		<u>Dup-2</u>	<u>GWC-48</u>	<u>RPD</u>		Cl-	3.2	3.3	3	ok
	<u>Dup-2</u>	<u>GWC-48</u>	<u>RPD</u>										
Cl-	3.2	3.3	3	ok									
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 27 not a sample in this SDG- %Rec and RPDs OK p. 27 not a sample in this SDG - %Rec and RPDs OK										
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)										

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623134

Reviewer/Date: J. McIntyre 10/08/19

Senior Reviewer/Date: J. Hartness 10/29/19

YES NO NA COMMENTS

 Case Narrative and COC Completeness Review
OK

 Sample Preservation and cooler temperature met (Cool to 6°C)
OK; 1.6°C

 Holding times met (7 days)
Coll: 09/11/19
Anal: 09/16/19, 09/17/19

 QC Blanks Review
Method Blanks:
No MB required by the method.

Field blank:
FBL-091119 (SDG 2623134) = ND
FBL-091019 (SDG 2623137) = ND
Equipment blanks:
EQBL-091119 (SDG 2623134) = ND
EQBL-091019 (SDG 2623137) = ND

 Laboratory Control Sample (LCS) recovery within lab limits
p. 25 LCS 159298 TDS = 100% - OK
p. 26 LCS 159482 TDS = 100% - OK

 Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>Dup-2</u>	<u>GWC-48</u>	<u>RPD</u>	
TDS	32	20	46	flag "J"

Lab dups:
p. 25 Non-project samples (2622885003 and 2623137006); RPD = 0 OK
p. 26 GWA-43; RPDs = 21 (>Lab QC limit of 10; >project QC limit of 20)
Results below RL- Difference = 11; >RL – results flagged "J"
Dup-2; RPD = 14 (>Lab QC limit of 10; <project QC limit of 20)
Results below RL- Difference = 4; <RL – no qualification – OK

 Matrix Spike recoveries and RPDs within limits (if applicable)
None for TDS

 EDD Data Verification vs. Hardcopy (10% samples for each SDG)

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623137

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level	Sample ID	Sample Date	DQE Level
QC Samples					
GWA-41	09/10/19	II	Dup-1	09/10/19	II
GWA-41R	09/10/19	II	FBL091019	09/10/19	II
GWA-42	09/10/19	II	EQBL091019	09/10/19	II

The samples reported in this SDG were collected from Landfill Cells 9&10 on September 10, 2019. Sample FBL091019 is a field blank, and sample EQBL091019 is an equipment blank. Dup-1 is a field duplicate of sample GWA-41. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL091119 (SDG: 2623134), collected on the poly tubing
- EQBL091019 (SDG: 2623137), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of method, field, and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method(s) blank associated with the samples analyzed within this SDG contained boron and zinc at concentrations between the MDL and the RL. Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: The positive boron and zinc results less than five times the method blank were qualified as not detected due to possible blank contamination and flagged "U".*

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for mercury on sample GWA-41 the percent recovery and RPD were within QC limits.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

One field duplicate pair was submitted in this SDG (Dup-1/GWA-41) and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. Field blank FLB-091019 contained calcium and zinc; however, method blank contamination of zinc disqualified the field blank as a potential QC measurement and results were qualified only for calcium for this QC sample. Both of the equipment blanks (EQBL091119 – SDG: 2623134 and EQBL091019 – SDG:

2623137) contained calcium and zinc between the method detection limit (MDL) and the reporting limit (RL). However, method blank contamination of zinc and field blank contamination of calcium disqualified EQBL091019 as a potential QC for those analytes. Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BF**.

Action: The positive calcium results less than five times the field blank were qualified as not detected due to possible blank contamination and flagged "U". No qualification of sample results were required based on equipment blank contamination due to method blank qualification overriding the equipment blank.*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>	<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-41R	Ca	50x	GWC-42	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value versus the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG did not contain anions indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on a non-project sample; therefore, matrix effects specific to anions in these project samples were not assessed.

Field Duplicate Precision

One field duplicate pair was submitted in this SDG (Dup-1/GWA-41) and the RPDs were within QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank samples did not contain anions. No qualification required.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no anion results were reported between the MDL and RL.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

One field duplicate pair was submitted in this SDG (Dup-1/GWA-41) and the RPDs were within QC limits.

Laboratory Duplicate Precision

The laboratory analyzed sample EQBL 091019 in duplicate and the RPDs were in the laboratory QC limits.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank samples did not contain TDS. No qualification required.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWA-41, GWA-41R, GWA-42, and Dup-1, along with the field and equipment blank samples, were reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/14/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623137
SAMPLING DATE: September 10, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWA-41	GWA-41	N	2623137	6020B	copper	0.00044	J	J	--	mg/L
GWA-41	GWA-41	N	2623137	6020B	nickel	0.00041	J	J	--	mg/L
GWA-41	GWA-41	N	2623137	6020B	zinc	0.0061	J,B	U*	BL	mg/L
DUP-1-091019	GWA-41	FD	2623137	6020B	copper	0.00032	J	J	--	mg/L
DUP-1-091019	GWA-41	FD	2623137	6020B	nickel	0.00039	J	J	--	mg/L
DUP-1-091019	GWA-41	FD	2623137	6020B	zinc	0.0088	J,B	U*	BL	mg/L
GWA-41R	GWA-41R	N	2623137	6020B	antimony	0.0029	J	J	--	mg/L
GWA-41R	GWA-41R	N	2623137	6020B	boron	0.015	J,B	U*	BL	mg/L
GWA-41R	GWA-41R	N	2623137	6020B	copper	0.0022	J	J	--	mg/L
GWA-41R	GWA-41R	N	2623137	6020B	nickel	0.00084	J	J	--	mg/L
GWA-41R	GWA-41R	N	2623137	6020B	zinc	0.0075	J,B	U*	BL	mg/L
GWA-42	GWA-42	N	2623137	6020B	barium	0.0068	J	J	--	mg/L
GWA-42	GWA-42	N	2623137	6020B	beryllium	0.00015	J	J	--	mg/L
GWA-42	GWA-42	N	2623137	6020B	cadmium	0.00014	J	J	--	mg/L
GWA-42	GWA-42	N	2623137	6020B	nickel	0.0012	J	J	--	mg/L
GWA-42	GWA-42	N	2623137	6020B	zinc	0.014	B	U*	BL	mg/L
EQBL-091019	Equipment Blank	EB	2623137	6020B	calcium	0.038	J	J	BF	mg/L
EQBL-091019	Equipment Blank	EB	2623137	6020B	zinc	0.0075	J,B	U*	BL	mg/L
FBL-091019	Field Blank	FB	2623137	6020B	calcium	0.018	J	J	--	mg/L
FBL-091019	Field Blank	FB	2623137	6020B	zinc	0.0067	J,B	U*	BL	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BF = Field blank contamination. The result should be considered "not-detected".

BL = Laboratory blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623137
SAMPLING DATE: September 10, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
-----------------	-------------	------	-----	--------	----------------	------------	----------	----------	--------------	-------

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/15/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 2623137

Reviewer/Date: J. McIntyre 10/14/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES NO NA COMMENTS

<input checked="" type="checkbox"/>	<p>Dilutions necessary for Ca (50x)</p> <p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>	<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.6°C</p>
<input checked="" type="checkbox"/>	<p>Holding times met (180 days; Hg = 28 days) Coll: 09/10/19 Prep: metals – 09/16/19, Hg – 09/16/19 Anal: metals – 09/20/19, Hg – 09/17/19</p>
<input checked="" type="checkbox"/>	<p>QC Blanks Review <u>Method Blanks:</u> p. 11 MB 159315 Hg = ND p. 12 MB 159319 (6010) = B – 0.0052J x 5 = 0.026; Zn - 0.0049J x 5 = 0.0245mg/L <u>GWA-41R (boron) and all zinc results flagged "U*"</u></p> <p><u>Field blank:</u> FBL-091119 (SDG 2623134) <i>No flags – not applicable to this SDG</i></p> <p>FBL-091019 (SDG 2623137) Ca - 0.018 x 5 = 0.09 mg/L <u>EQBL-091019 results flagged "U*"</u> Zn - 0.0067 x 5 = 0.0335 mg/L <u>Flagged "U*" by MB. No flags to be applied on data.</u></p> <p><u>Equipment blanks:</u> EQBL-091119 (SDG 2623134) Ca - 0.019 x 5 = 0.095 mg/L <i>Highest EB for Calcium is SDG 2623137; no flags applied</i> Zn - 0.0063 x 5 = 0.0315 mg/L <i>Highest EB for Zinc is SDG 2623137; no flags applied</i> EQBL-091019 (SDG 2623137) Ca - 0.038 x 5 = 0.19 mg/L <u>Flagged "U*" by FB. No flags to be applied on data.</u> Zn - 0.0075 x 5 = 0.0375 mg/L <u>Flagged "U*" by MB. No flags to be applied on data.</u></p>
<input checked="" type="checkbox"/>	<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 11 LCS 159316 Hg = 104% p. 12 LCS 159320 metals = All OK</p>

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS

Lab Duplicate - Field Duplicate precision goals met (20%)

	<u>DUP-1</u>	<u>GWA-41</u>	<u>RPD</u>	
Ba	0.021	0.018	15	ok
Ca	6.9	6.0	14	ok

Lab dup – non- project sample; RPDs all OK

Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 11 Hg – GWA-41 %Rec and RPDs OK

p. 13 metals – non-project sample of this SDG (2623127002)

Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG

EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

Laboratory and Lot: Pace SDGs: 2623137

Reviewer/Date: J. McIntyre 10/14/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>															
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK															
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.6°C															
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/10/19 Anal: 09/18/19															
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 15 MB 2682971 = ND <u>Field blank:</u> FBL-091119 (SDG 2623134) = ND FBL-091019 (SDG 2623137) =ND <u>Equipment blanks:</u> EQBL-091119 (SDG 2623134) = ND EQBL-091019 (SDG 2623137) = ND															
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 15 LCS 2682972 – All OK															
<input checked="" type="checkbox"/>			Lab Duplicate - Field Duplicate precision goals met (20%) <table border="0" style="margin-left: 40px;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>DUP-1</u></th> <th style="text-align: center;"><u>GWA-41</u></th> <th style="text-align: center;"><u>RPD</u></th> <th></th> </tr> </thead> <tbody> <tr> <td>Cl-</td> <td style="text-align: center;">1.2</td> <td style="text-align: center;">1.1</td> <td style="text-align: center;">8.7</td> <td style="text-align: center;">ok</td> </tr> <tr> <td>Fl</td> <td style="text-align: center;">1.3</td> <td style="text-align: center;">1.2</td> <td style="text-align: center;">8</td> <td style="text-align: center;">ok</td> </tr> </tbody> </table>		<u>DUP-1</u>	<u>GWA-41</u>	<u>RPD</u>		Cl-	1.2	1.1	8.7	ok	Fl	1.3	1.2	8	ok
	<u>DUP-1</u>	<u>GWA-41</u>	<u>RPD</u>															
Cl-	1.2	1.1	8.7	ok														
Fl	1.3	1.2	8	ok														
<input checked="" type="checkbox"/>			Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 15 not a sample in this SDG- %Rec and RPDs OK p. 15 not a sample in this SDG- %Rec and RPDs OK															
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)															

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: TDS by SM 2540C

Laboratory and Lot: Pace SDG: 2623137

Reviewer/Date: J. McIntyre 10/14/19

Senior Reviewer/Date: J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
------------	-----------	-----------	-----------------

- | | | | | | | | | | | | | |
|-------------------------------------|--------------|---|------------|--------------|---------------|------------|--|-----|----|----|-----|----|
| <input checked="" type="checkbox"/> | | Case Narrative and COC Completeness Review
OK | | | | | | | | | | |
| <input checked="" type="checkbox"/> | | Sample Preservation and cooler temperature met (Cool to 6°C)
OK; 1.6°C | | | | | | | | | | |
| <input checked="" type="checkbox"/> | | Holding times met (7 days)
Coll: 09/10/19
Anal: 09/16/19 | | | | | | | | | | |
| <input checked="" type="checkbox"/> | | QC Blanks Review
<u>Method Blanks:</u>
No MB required by the method.

<u>Field blank:</u>
FBL-091119 (SDG 2623134) = ND
FBL-091019 (SDG 2623137) = ND

<u>Equipment blanks:</u>
EQBL-091119 (SDG 2623134) = ND
EQBL-091019 (SDG 2623137) = ND | | | | | | | | | | |
| <input checked="" type="checkbox"/> | | Laboratory Control Sample (LCS) recovery within lab limits
p. 14 LCS 159298 TDS = 100% - OK | | | | | | | | | | |
| <input checked="" type="checkbox"/> | | Lab Duplicate - Field Duplicate precision goals met (20%)
<table border="0" style="margin-left: 40px;"> <tr> <td></td> <td style="text-align:center"><u>DUP-1</u></td> <td style="text-align:center"><u>GWA-41</u></td> <td style="text-align:center"><u>RPD</u></td> <td></td> </tr> <tr> <td>TDS</td> <td style="text-align:center">34</td> <td style="text-align:center">36</td> <td style="text-align:center">2.8</td> <td style="text-align:right">ok</td> </tr> </table> Lab dups:
p. 14 EQBL 091019 RPD = NC OK | | <u>DUP-1</u> | <u>GWA-41</u> | <u>RPD</u> | | TDS | 34 | 36 | 2.8 | ok |
| | <u>DUP-1</u> | <u>GWA-41</u> | <u>RPD</u> | | | | | | | | | |
| TDS | 34 | 36 | 2.8 | ok | | | | | | | | |
| <input checked="" type="checkbox"/> | | Matrix Spike recoveries and RPDs within limits (if applicable)
<i>None for TDS</i> | | | | | | | | | | |
| <input checked="" type="checkbox"/> | | EDD Data Verification vs. Hardcopy (10% samples for each SDG) | | | | | | | | | | |

Data Evaluation Narrative

**Project: Plant Bowen CCR Event # 13 Groundwater Detection Monitoring/
Semiannual State Design and Operation Permit Monitoring**

Wood Project Number: 6122160287.1903.****

Site: Landfill Cells 9 & 10 - Plant Bowen, Georgia

Matrix: Groundwater

Pace SDG No: 2623140

Introduction

A data quality evaluation (DQE) was performed on the laboratory data reported for the CCR Event # 13 Groundwater Detection Monitoring Sampling Event and the Semiannual State Design and Operation (D&O) Permit sampling event conducted at Landfill Cells 9 & 10 at Plant Bowen, located in Cartersville, Georgia in September 2019. The samples were collected and analyzed per the protocols presented in the Plant Bowen *Field Sampling Plan* (FSP), Revision 1, Update 3 (Amec Foster Wheeler, 2017). The following sections provide summary discussions of the required data qualifications for the analytical methods for samples collected. A Level II DQE validation was performed on the samples analyzed by the fixed-based laboratory within these sample delivery groups (SDGs). A Level II DQE consists of review of the following criteria: sample integrity, holding times, method blanks, laboratory control samples (LCSs), matrix spikes/matrix spike duplicate (MS/MSD) recoveries and relative percent differences (RPDs), post digestion spikes (PDS), where applicable, laboratory and field duplicate RPDs, field and/or equipment blanks, and reporting limits. Additionally, the data summary tables generated from the electronic data deliverable (EDD) were compared to the laboratory hardcopy data report to verify that the EDD and laboratory data report agree.

The data were reviewed using the laboratory’s precision and accuracy limits, the method requirements, and any requirements listed in the FSP. It should be noted that at the time of this review, a finalized QAPP was not provided. DQE data qualifications were applied, if necessary, using the procedures in USEPA National Functional Guidelines for Inorganic Data Review (USEPA, 2014), as guidance, and professional judgment using the following qualifiers:

<u>Qualifier</u>	<u>Usable Data</u>
J	The analyte was positively identified but the result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. <i>SCS Definition: Value J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce as reliable of a value. Therefore, the value displayed (value J) is qualified by the laboratory as estimated.</i>
UJ	The analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. The reported method detection limit is approximate and may be inaccurate or imprecise.
U	Analyte was analyzed for but was not detected above the level of the reported sample reporting/method detection limit. <i>Note: SCS does not use the “U” flag except when reporting results for radium that are detected below the Minimum Detection Concentration (MDC).</i>
U*	This analyte should be considered “not-detected” because it was detected in an associated blank at a similar level.

<u>Qualifier</u>	<u>Unusable Data</u>
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be confirmed.
UR	The analyte was analyzed for but was not detected above the level of the reported sample reporting or method detection; however, the data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The analyte may or may not be present in the sample.

The analytical results for the samples reported in this SDG are usable with the qualifications discussed in this narrative. A summary of the data with associated qualifiers is presented in **Table 1**.

Deliverables

The data package as submitted to Wood Environment & Infrastructure Solutions, Inc. (Wood, formerly Amec Foster Wheeler) is complete to perform a Level II DQE for United States Environmental Protection Agency (USEPA) Methods SW6020B, SW7470A, EPA 300 and SM 2540C.

Sample Integrity

The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Peachtree Corners, Georgia and analyzed for CCR Appendix III metals and State D&O Permit metals by Method 6020B, mercury by Method SW7470, anions (chloride, fluoride, and sulfate) by Method 300 and total dissolved solids (TDS) by Method SM 2540C.

Based on the information provided on the Chain-of-Custody (COC) forms, the field samples arrived at the laboratory intact and within the temperature range and preservation requirements. Completed COC documents are included in the data package.

Sample Identification

This SDG contains the following groundwater and quality control (QC) samples:

Sample ID	Sample Date	DQE Level
GWA-47	09/12/19	II

The samples reported in this SDG were collected from Landfill Cells 9&10 on September 12, 2019. Equipment blanks were collected on different equipment used to sample the locations at Landfill Cells 9&10 and are listed below:

- EQBL091119 (SDG: 2623134), collected on the poly tubing
- EQBL091019 (SDG: 2623137), collected on the nitrile gloves

The highest result of any detected analyte between the two equipment blanks was used to qualify associated sample results if necessary.

The analytical results for the metals, anions, and TDS data are usable with the qualifications discussed in this narrative. A summary of the data quality is presented below.

Metals (SW6020B/SW7470A)

The samples were submitted to Pace for CCR Appendix III and State D&O Permit metals by Method SW6020B and/or mercury by SW7470A. The CCR Appendix III metals are: boron (B) and calcium (Ca). The State D&O Permit metals are: antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), selenium (Se), silver (Ag), thallium (Tl), vanadium (V), and zinc (Zn). Each of the Level II components were within QC limits with the exception of method blank contamination and equipment blank contamination.

Holding Times

The sample analyses were performed within the 6 month and 28-day (for mercury) analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG contained zinc at a concentration between the MDL and the RL (0.0045 J mg/L). Results less than five times the blank are considered not detected as a possible laboratory artifact: **Reason Code: BL**.

Action: No qualification was required because the sample result was 5x greater than the blank result.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for metals on a non-project sample; therefore, matrix effects specific to metals in these project samples were not assessed.

Post Digestion Spike (PDS)

PDS analysis results were not available for review.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

Field accuracy was measured through the collection of equipment/rinsate blanks and field blanks. Equipment rinsate blanks are collected to monitor the decontamination process and field blanks are collected to assess the water used to decontaminate the equipment and the containers into which samples are placed. The field blank samples contained calcium, nickel and/or zinc. However, no qualification was required due to the field blanks not being collected on the same day as the samples of this SDG. Both of the equipment blanks (EQBL091119 – SDG: 2623134 and EQBL091019 – SDG: 2623137) contained calcium and zinc between the method detection limit (MDL) and the reporting limit (RL).

Results less than five times the blank are considered not detected as a possible field artifact: **Reason Code: BE.**

Action: The positive zinc results less than five times the equipment blank were qualified as not detected due to possible blank contamination and flagged "U".*

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of metals by USEPA Method SW6020B and 7470A. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range. The following samples in this SDG required dilution:

<u>Sample</u>	<u>Metal</u>	<u>Dilution</u>
GWA-47	Ca	50x

Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory. The "J" qualifier is retained by the data validator.

Total and Dissolved Metals Comparison

If total and dissolved metals samples were collected, comparison of the total and dissolved results can aid in the representativeness of the total metals value verses the metals that may be associated with suspended solids and metals actually dissolved within the water column. The dissolved metals results should be less than or equal to the total metals concentration for positive results greater than 5 times the RL. No total and dissolved samples were collected and reported in this SDG.

Anions (EPA 300)

The samples were submitted to Pace for anions (chloride, fluoride, and sulfate) by Method 300. Each of the Level II components were within QC limits.

Holding Times

The sample analyses were performed within the 28-day analysis holding times.

Method Blanks

The method blank associated with the samples analyzed within this SDG did not contain anions indicating the analytical system was contaminant free during analysis.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD analysis was performed for anions on a non-project sample; therefore, matrix effects specific to anions in these project samples were not assessed.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank samples did not contain anions. No qualification required.

Reporting Limits

The laboratory RLs were below the screening values for samples submitted for the analysis of anions by USEPA Method 300. The laboratory RL was elevated where dilutions were required to place the constituent within the calibration range, however no samples in this SDG required a dilution. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no anion results were reported between the MDL and RL.

TDS (SM 2540C)

The samples were submitted to Pace for TDS by Method SM 2540C. Each of the Level II components were within QC limits.

Holding Times

The sample analyses were performed within the 7-day analysis holding times.

Method Blanks

Laboratory method blanks are not required for the analysis of TDS.

Laboratory Control Sample (LCS)

Percent recoveries for target analytes were within quality control limits in the LCS.

Field Duplicate Precision

No field duplicate pairs were submitted with this SDG.

Laboratory Duplicate Precision

The laboratory duplicates analyzed were not for project samples in this SDG.

Sampling Accuracy (Equipment Rinsate Blanks, Field Blanks)

The field and equipment blank samples did not contain TDS. No qualification required.

Reporting Limits

The laboratory RL was below the screening value of 500 mg/L for samples submitted for the analysis of TDS by Method SM 2540C and no samples required dilutions; therefore, RLs were met for this project. Additionally, data are evaluated down to the MDL and results reported between the MDL and RL are considered quantitative estimates. Results reported between the MDL and RL were qualified as estimated and flagged "J" by the laboratory, however no TDS results were reported between the MDL and RL.

Overall Site Evaluation and Professional Judgment Flagging Changes

The chemical data included in this SDG was validated in general accordance with the guidelines contained in the project work plan and validation SOPs. No professional judgment was used to modify flags for results reported in samples presented in this SDG.

Completeness

A total of 17 wells, along with the required QC samples, were sampled and analyzed during the September event in Landfill Cells 9&10 according to the FSP (Amec Foster Wheeler, 2017). Of those 17 well locations, GWA-47 was reported in this SDG and were sampled and analyzed as scoped.

Therefore, both field and analytical completeness calculated for this SDG was 100%.

References

Amec Foster Wheeler, 2017. *Field Sampling Plan – Plant Bowen*, Georgia Power Company, Earth Science and Environmental Engineering Technical Services, Southern Company Services, Inc. (SCS), Revision 1, Update 3, October 16, 2017.

USEPA, 2014. *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Final, EPA-540-R-013-001, August 2014.

Prepared by/Date: JPM 10/14/19

Checked By/Date: JAH 10/29/19

TABLE 1
SUMMARY OF DATA QUALIFIERS

TABLE 1
SUMMARY OF DATA QUALIFIERS
SAMPLE DELIVERY GROUP 2623140
SAMPLING DATE: September 12, 2019
Plant Bowen Landfill Cells 9 & 10: Event # 13

Field Sample ID	Location ID	Type	SDG	Method	Parameter Name	Lab Result	Lab Qual	Val Qual	Reason Codes	Units
GWC-47	GWC-47	N	2623140	6020B	barium	0.0085	J	J	--	mg/L
GWC-47	GWC-47	N	2623140	6020B	chromium	0.0014	J	J	--	mg/L
GWC-47	GWC-47	N	2623140	6020B	zinc	0.035	B	U*	BE	mg/L

Notes:

Laboratory Qualifiers:

B = Analyte was detected in the associated method blank.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Reason Codes:

BE = Equipment blank contamination. The result should be considered "not-detected".

-- = No Reason Code assigned for values detected between the method detection limit (MDL) and the reporting limit (RL);estimated quantitation.

Validation Qualifiers:

J = The compound was positively identified; however, the associated numerical value is an estimated concentration only. The associated numerical value is the approximate concentration of the analyte in the sample.

U* = This analyte should be considered "not-detected" because it was detected in an associated blank at a similar level.

Prepared by/Date: JPM 10/15/19

Checked by/Date: JAH 10/29/19

DQE CHECKLISTS

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Metals and Mercury by SW6020B/SW7470

Laboratory and Lot: Pace SDG: 263140

Reviewer/Date: J. McIntyre 10/14/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

YES NO NA COMMENTS

<input checked="" type="checkbox"/>	<p>Dilutions necessary for Ca (50x)</p> <p>Case Narrative and COC Completeness Review OK</p>
<input checked="" type="checkbox"/>	<p>Sample Preservation and cooler temperature met (HNO₃ to pH<2) OK, 1.6°C</p>
<input checked="" type="checkbox"/>	<p>Holding times met (180 days; Hg = 28 days) Coll: 09/12/19 Prep: metals – 09/16/19, Hg – 09/18/19 Anal: metals – 09/18/19, Hg – 09/18/19</p>
<input checked="" type="checkbox"/>	<p>QC Blanks Review <u>Method Blanks:</u> p. 6 MB 159775 Hg = ND p. 7 MB 159344 metals = Zn - 0.0045J x 5 = 0.0225 mg/L <i><u>No flags applied; assoc results >5x blank result</u></i></p> <p><u>Field blank:</u> FBL-091119 (SDG 2623134) Ca - 0.022 x 5 = 0.11 mg/L Ni - 0.00099 x 5 = 0.00495 mg/L Zn - 0.0065 x 5 = 0.0325 mg/L <i>No flags – FB does not apply to this SDG</i> FBL-091019 (SDG 2623137) Ca - 0.018 x 5 = 0.09 mg/L Zn - 0.0067 x 5 = 0.0335 mg/L <i>No flags – FB does not apply to this SDG</i></p> <p><u>Equipment blanks:</u> EQBL-091119 (SDG 2623134) Ca - 0.019 x 5 = 0.095 mg/L Zn - 0.0063 x 5 = 0.0315 mg/L <i>No flags – EQBL-091019 has highest concentrations.</i> EQBL-091019 (SDG 2623137) Ca - 0.038 x 5 = 0.19 mg/L <i>No flags – samples >5x EB</i> Zn - 0.0075 x 5 = 0.0375 mg/L <i><u>GWA-47 flagged "U*"</u></i></p>
<input checked="" type="checkbox"/>	<p>Laboratory Control Sample (LCS) recovery within limits (Metals 70-130%, Hg = 80-120%) p. 6 LCS 159776 Hg = 99% p. 7 LCS 159345 metals = All OK</p>

Metals and Mercury by 6020B/7470A (cont.)

YES NO NA

COMMENTS



Lab Duplicate - Field Duplicate precision goals met (20%)

No field dup submitted with this SDG; Lab dup – 92445435001 %Rec & RPDs OK



Matrix Spike recoveries and RPDs within limits (75-125%, RPD 20)

p. 6 non-project sample of this SDG (2623211001- Hg)

p. 8 non-project sample of this SDG (2623134003 - metals)



Total metals vs dissolved metals within limits (RPD < 20% or diff. < RL)

No dissolved metals in this SDG



EDD Data Verification vs. Hardcopy (10% samples for each SDG)

LEVEL II DATA QUALITY VALIDATION RECORD

Project: Plant Bowen CCR Event 13 – Semiannual State D&O Permit Event

Project No: 6122160287.1903.****

Method: Anions (chloride, fluoride, sulfate) by EPA 300.0

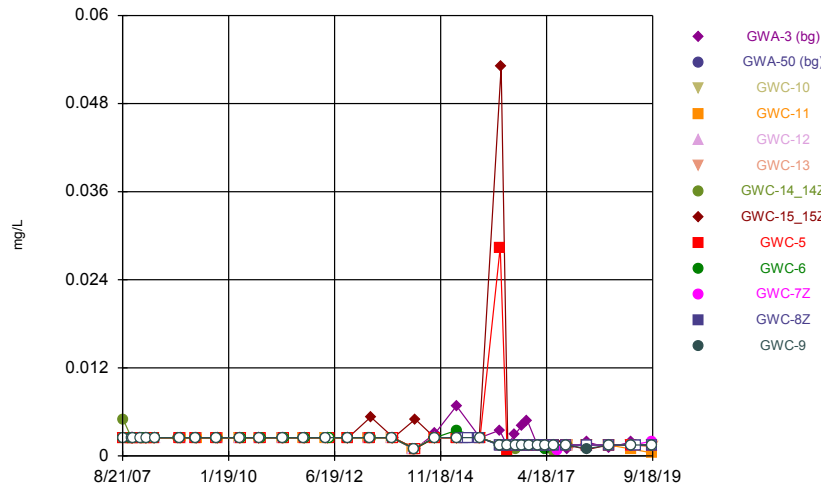
Laboratory and Lot: Pace SDGs: 2623140

Reviewer/Date: J. McIntyre 10/14/19 **Senior Reviewer/Date:** J. Hartness 10/29/19

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>COMMENTS</u>
<input checked="" type="checkbox"/>			Case Narrative and COC Completeness Review OK
<input checked="" type="checkbox"/>			Sample Preservation and cooler temperature met (Cool to 6°C) OK; 1.6°C
<input checked="" type="checkbox"/>			Holding times met (Cl, SO₄, F – 28 days) Coll: 09/12/19 Anal: 09/18/19
<input checked="" type="checkbox"/>			QC Blanks Review <u>Method Blanks:</u> p. 10 MB 2682991 = ND <u>Field blank:</u> FBL-091119 (SDG 2623134) = ND FBL-091019 (SDG 2623137) =ND <u>Equipment blanks:</u> EQBL-091119 (SDG 2623134) = ND EQBL-091019 (SDG 2623137) = ND
<input checked="" type="checkbox"/>			Laboratory Control Sample (LCS) recovery within limits (90-110%) p. 10 LCS 2682992 – All OK
	<input checked="" type="checkbox"/>		Lab Duplicate - Field Duplicate precision goals met (20%) No field or lab dup in this SDG
	<input checked="" type="checkbox"/>		Matrix Spike recoveries and RPDs within limits (lab %Rec limits, RPD = 20) p. 10 non-project sample of this SDG (92445745001) -%Rec and RPDs OK p. 10 non-project sample of this SDG (92445858008) -%Rec and RPDs OK
<input checked="" type="checkbox"/>			EDD Data Verification vs. Hardcopy (10% samples for each SDG)

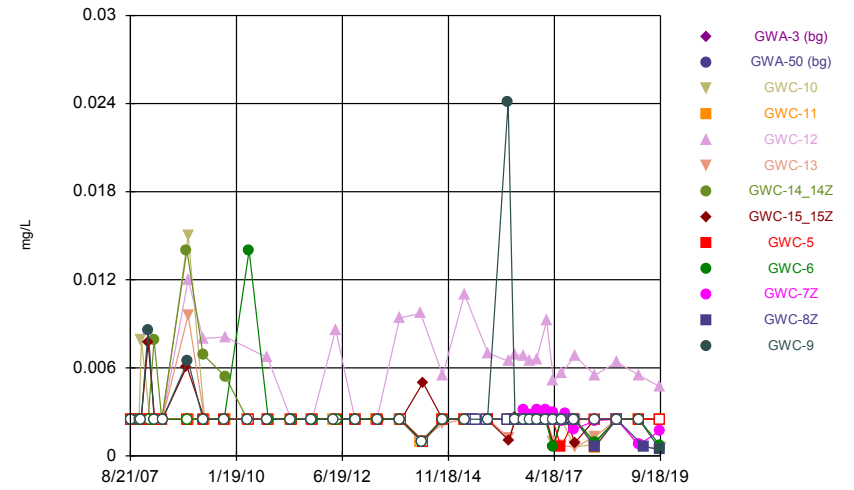
APPENDIX B
HISTORICAL GROUNDWATER MONITORING RESULTS

Time Series



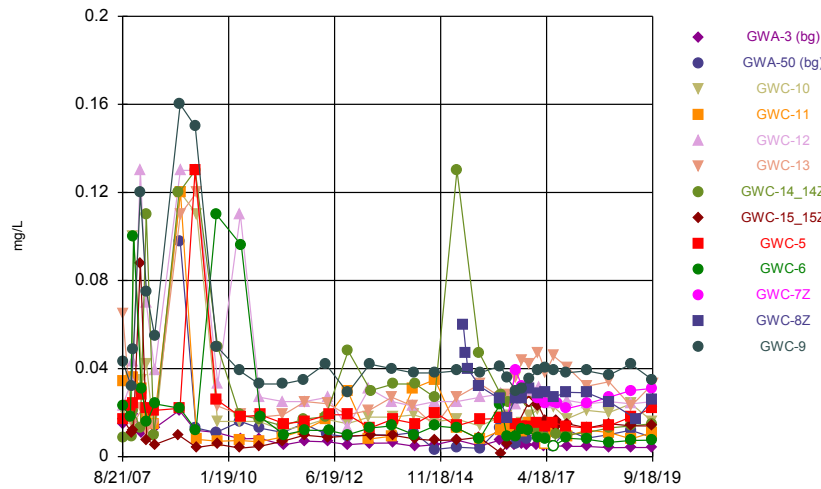
Constituent: Antimony Analysis Run 11/7/2019 8:57 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



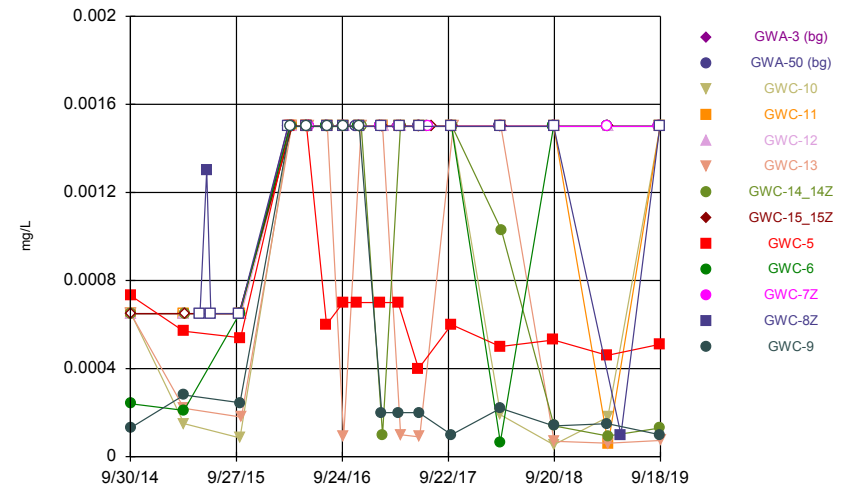
Constituent: Arsenic Analysis Run 11/7/2019 8:58 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Barium Analysis Run 11/7/2019 8:58 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Beryllium Analysis Run 11/7/2019 8:58 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.005	<0.005	<0.005	<0.005			
8/22/2007									
8/23/2007	<0.005								<0.005
8/24/2007							0.005	<0.005	
10/25/2007									<0.005
11/1/2007			<0.005	<0.005	<0.005	<0.005			
11/2/2007	<0.005						<0.005	<0.005	
11/17/2007							<0.005		
11/18/2007	<0.005			<0.005				<0.005	
11/19/2007					<0.005	<0.005			<0.005
11/20/2007			<0.005						
1/15/2008							<0.005	<0.005	
1/16/2008					<0.005				
1/23/2008									<0.005
1/30/2008			<0.005	<0.005					
1/31/2008	<0.005					<0.005			
3/5/2008				<0.005	<0.005	<0.005	<0.005		
3/6/2008			<0.005						
3/10/2008								<0.005	
3/11/2008	<0.005								<0.005
5/7/2008				<0.005			<0.005		
5/12/2008			<0.005			<0.005			<0.005
5/13/2008					<0.005			<0.005	
5/14/2008	<0.005								
12/2/2008							<0.005	<0.005	
12/5/2008	<0.005								
12/11/2008									<0.005
12/12/2008		<0.005							
12/13/2008			<0.005		<0.005	<0.005			
12/14/2008				<0.005					
4/15/2009	<0.005								<0.005
4/16/2009					<0.005		<0.005		
4/23/2009		<0.005							
4/28/2009						<0.005		<0.005	
4/29/2009			<0.005	<0.005					
10/6/2009		<0.005							
10/8/2009	<0.005								
10/9/2009									<0.005
10/13/2009									
10/20/2009			<0.005				<0.005	<0.005	
10/21/2009					<0.005	<0.005			
10/22/2009				<0.005					
4/20/2010							<0.005		
4/21/2010				<0.005					
4/26/2010			<0.005						
4/27/2010		<0.005			<0.005			<0.005	
4/28/2010	<0.005					<0.005			
5/4/2010									<0.005
9/28/2010				<0.005					
9/29/2010			<0.005				<0.005		
9/30/2010		<0.005							
10/5/2010					<0.005	<0.005		<0.005	

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	0.0031 (J)								
3/30/2015		<0.005							
3/31/2015	0.0068								<0.005
4/1/2015				<0.005	<0.005	<0.005			
4/2/2015			<0.005						
4/3/2015							<0.005	<0.005	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								0.0025 (J)	
10/7/2015							<0.005		
10/8/2015									
10/9/2015									
10/10/2015			<0.005						
10/11/2015		<0.005		<0.005					
10/12/2015	<0.005								<0.005
10/14/2015					<0.005				
10/15/2015						<0.005			
3/22/2016									
3/23/2016	0.0035								
3/28/2016		0.00139 (J)							0.0284 (J)
3/29/2016									
3/30/2016									
3/31/2016			<0.003						
4/4/2016				<0.003	<0.003	<0.003			
4/5/2016							<0.003	0.053 (J)	
5/23/2016	<0.003	0.000677 (J)							
5/24/2016									
5/25/2016									0.000686 (J)
5/26/2016			<0.003	0.000722 (J)					
5/27/2016					<0.003				
5/31/2016						<0.003		0.00088 (J)	
6/1/2016							0.000895 (J)		
7/29/2016	0.0029 (J)								
8/1/2016		<0.003 (*)							<0.003 (*)
8/2/2016									
8/3/2016				<0.003 (*)	<0.003 (*)				
8/4/2016						<0.003 (*)			
8/5/2016			<0.003						
8/9/2016							0.00095 (JD)		
9/22/2016	0.0041								
9/26/2016		<0.003							
9/27/2016									<0.003
9/28/2016			<0.003	<0.003					
9/29/2016						<0.003 (*)			
9/30/2016					<0.003				
11/10/2016	0.0048 (J)	<0.003 (*)							
11/11/2016									<0.003
11/18/2016									
11/21/2016									
11/22/2016			<0.003	<0.003	<0.003				
11/23/2016								<0.003	

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/28/2016						<0.003	<0.003		
1/30/2017		<0.003							
1/31/2017	<0.003								<0.003
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.003						
2/8/2017				<0.003					
2/9/2017						<0.003	<0.003		
2/10/2017								<0.003	
2/13/2017					<0.003				
3/30/2017	0.001 (J)								
4/3/2017									<0.003
4/6/2017									
4/7/2017		<0.003							
4/10/2017			<0.003	<0.003					
4/11/2017					<0.003		<0.003	<0.003	
4/12/2017						<0.003			
6/12/2017	<0.003 (*)	<0.003 (*)							<0.003
6/13/2017									
6/14/2017			<0.003 (*)		<0.003		0.0006 (J)		
6/15/2017				<0.003 (*)				<0.003 (*)	
6/16/2017						<0.003 (*)			
7/12/2017							<0.003	<0.003	
7/14/2017									
7/26/2017								<0.003	
10/2/2017		<0.003							
10/3/2017									<0.003
10/4/2017	0.0009 (J)		<0.003	<0.003	<0.003				
10/5/2017							<0.003		
10/6/2017								<0.003	
10/9/2017						<0.003			
3/16/2018		<0.003							
3/19/2018	0.0019 (J)								<0.003
3/20/2018			<0.003						
3/21/2018				<0.003		<0.003			
3/22/2018					<0.003		<0.003		
3/23/2018								0.00089 (J)	
9/17/2018	0.0011 (J)	<0.003							<0.003
9/18/2018			<0.003	<0.003	<0.003				
9/19/2018						<0.003	<0.003	<0.003	
3/19/2019		<0.003							
3/20/2019	0.0019 (X)								<0.003
3/21/2019									
3/22/2019			<0.003				<0.003 (D)	<0.003 (D)	
3/23/2019				0.00094 (X)	<0.003	<0.003			
5/6/2019									
9/13/2019	0.0013 (X)	<0.003							
9/16/2019									<0.003
9/17/2019			<0.003	0.00041 (X)	<0.003		<0.003	<0.003	
9/18/2019						0.0012 (X)			

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.005			
8/23/2007				<0.005
8/24/2007				
10/25/2007	<0.005			
11/1/2007				<0.005
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				<0.005
11/20/2007	<0.005			
1/15/2008				<0.005
1/16/2008				
1/23/2008	<0.005			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				<0.005
3/10/2008				
3/11/2008	<0.005			
5/7/2008				
5/12/2008				
5/13/2008				<0.005
5/14/2008	<0.005			
12/2/2008				
12/5/2008				
12/11/2008	<0.005			
12/12/2008				<0.005
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				<0.005
4/23/2009	<0.005			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	<0.005			
10/13/2009				<0.005
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.005
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.005			
9/28/2010				
9/29/2010				<0.005
9/30/2010				
10/5/2010				

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	<0.005			
10/12/2010				
4/12/2011				
4/13/2011				<0.005
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.005			
4/28/2011				
10/4/2011				
10/5/2011				<0.005
10/12/2011				
10/13/2011				
10/18/2011	<0.005			
10/19/2011				
4/3/2012				
4/4/2012				<0.005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.005			
10/2/2012				
10/3/2012				
10/8/2012	<0.005			<0.005
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.005
4/9/2013				
4/10/2013	<0.005			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.005			
10/9/2013				<0.005
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.002
4/10/2014				
4/14/2014	<0.002			
4/21/2014				
4/23/2014				
9/30/2014				<0.005
10/1/2014				
10/2/2014				
10/3/2014	<0.005			

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	0.0035 (J)			
4/2/2015				<0.005
4/3/2015				
5/26/2015			<0.005	
6/18/2015			<0.005 (D)	
7/2/2015			<0.005	
10/6/2015				
10/7/2015				
10/8/2015			<0.005	
10/9/2015	<0.005			
10/10/2015				<0.005 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.003	
3/23/2016				
3/28/2016				
3/29/2016	<0.003			
3/30/2016				<0.003
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.003			
5/25/2016			<0.003	
5/26/2016				<0.003
5/27/2016				
5/31/2016		<0.003		
6/1/2016				
7/29/2016				
8/1/2016	<0.003			
8/2/2016		<0.003	<0.003	
8/3/2016				
8/4/2016				
8/5/2016				<0.003 (*)
8/9/2016				
9/22/2016				
9/26/2016	<0.003		<0.003	
9/27/2016		<0.003		
9/28/2016				<0.003
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.003			
11/21/2016		<0.003	<0.003	<0.003
11/22/2016				
11/23/2016				

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.003 (*)	<0.003		
2/3/2017			<0.003	
2/6/2017				<0.003
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	0.001 (J)	<0.003		<0.003
4/7/2017			<0.003	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.003 (*)	<0.003 (*)	<0.003 (*)	<0.003
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		0.0008 (J)		
7/26/2017				
10/2/2017				
10/3/2017	<0.003	<0.003	<0.003	<0.003
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.003			
3/20/2018		<0.003	<0.003	0.001 (J)
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.003			
9/18/2018		<0.003	<0.003	<0.003 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.003	<0.003		<0.003
3/22/2019				
3/23/2019				
5/6/2019			<0.003	
9/13/2019		0.002 (X)		
9/16/2019	<0.003		<0.003	<0.003
9/17/2019				
9/18/2019				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.005	<0.005	<0.005	<0.005			
8/22/2007									
8/23/2007	<0.005								<0.005
8/24/2007							<0.005	<0.005	
10/25/2007									<0.005
11/1/2007			<0.005	<0.005	<0.005	<0.005			
11/2/2007	<0.005						<0.005	<0.005	
11/17/2007							<0.005		
11/18/2007	<0.005			<0.005				<0.005	
11/19/2007					<0.005	<0.005			<0.005
11/20/2007			0.0079						
1/15/2008							<0.005	0.0077	
1/16/2008					0.0086				
1/23/2008									<0.005
1/30/2008			<0.005	<0.005					
1/31/2008	<0.005					<0.005			
3/5/2008				<0.005	<0.005	<0.005	0.0079		
3/6/2008			<0.005						
3/10/2008								<0.005	
3/11/2008	<0.005								<0.005
5/7/2008				<0.005			<0.005		
5/12/2008			<0.005			<0.005			<0.005
5/13/2008					<0.005			<0.005	
5/14/2008	<0.005								
12/2/2008							0.014	0.0061	
12/5/2008	<0.005								
12/11/2008									<0.005
12/12/2008		<0.005							
12/13/2008			0.015		0.012	0.0096			
12/14/2008				<0.005					
4/15/2009	<0.005								<0.005
4/16/2009					0.008		0.0069		
4/23/2009		<0.005							
4/28/2009						<0.005		<0.005	
4/29/2009			<0.005	<0.005					
10/6/2009		<0.005							
10/8/2009	<0.005								
10/9/2009									<0.005
10/13/2009									
10/20/2009			<0.005				0.0054	<0.005	
10/21/2009					0.0081	<0.005			
10/22/2009				<0.005					
4/20/2010							<0.005		
4/21/2010				<0.005					
4/26/2010			<0.005						
4/27/2010		<0.005						<0.005	
4/28/2010	<0.005					<0.005			
5/4/2010									<0.005
9/28/2010				<0.005					
9/29/2010			<0.005				<0.005		
9/30/2010		<0.005							
10/5/2010					0.0067	<0.005		<0.005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	<0.005								
3/30/2015		<0.005							
3/31/2015	<0.005								<0.005
4/1/2015				<0.005	0.011	<0.005			
4/2/2015			<0.005						
4/3/2015							<0.005	<0.005	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.005	
10/7/2015							<0.005		
10/8/2015									
10/9/2015									
10/10/2015			<0.005						
10/11/2015		<0.005		<0.005					
10/12/2015	<0.005								<0.005
10/14/2015					0.007				
10/15/2015						<0.005			
3/22/2016									
3/23/2016	<0.005								
3/28/2016		<0.005							<0.005
3/29/2016									
3/30/2016									
3/31/2016			<0.005						
4/4/2016				<0.005	0.00645	0.00124 (J)			
4/5/2016							<0.005	0.00105 (J)	
5/23/2016	<0.005	<0.005							
5/24/2016									
5/25/2016									<0.005
5/26/2016			<0.005	<0.005					
5/27/2016					0.00692				
5/31/2016						<0.005		0.00261 (J)	
6/1/2016							<0.005		
7/29/2016	<0.005								
8/1/2016		<0.005							<0.005
8/2/2016									
8/3/2016				<0.005	0.0068				
8/4/2016						<0.005			
8/5/2016			<0.005						
8/9/2016							<0.005		
9/22/2016	<0.005								
9/26/2016		<0.005							
9/27/2016									<0.005
9/28/2016			<0.005	<0.005					
9/29/2016						<0.005			
9/30/2016					0.0065				
11/10/2016	<0.005	<0.005							
11/11/2016									<0.005
11/18/2016									
11/21/2016									
11/22/2016			<0.005	<0.005	0.0066				
11/23/2016							<0.005		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/28/2016						<0.005	<0.005		
1/30/2017		<0.005							
1/31/2017	<0.005								<0.005
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.005						
2/8/2017				<0.005					
2/9/2017						<0.005	<0.005		
2/10/2017								<0.005	
2/13/2017					0.0092				
3/30/2017	<0.005								
4/3/2017									<0.005
4/6/2017									
4/7/2017		<0.005							
4/10/2017			<0.005	<0.005					
4/11/2017					0.0051		<0.005	0.0007 (J)	
4/12/2017						0.001 (J)			
6/12/2017	<0.005	<0.005							0.0006 (J)
6/13/2017									
6/14/2017			<0.005		0.0056		<0.005		
6/15/2017				<0.005				<0.005	
6/16/2017						0.0007 (J)			
7/12/2017							<0.005	<0.005	
7/14/2017									
7/26/2017								<0.005	
10/2/2017		<0.005							
10/3/2017									<0.005
10/4/2017	<0.005		0.0006 (J)	<0.005	0.0068				
10/5/2017							<0.005		
10/6/2017								0.0009 (J)	
10/9/2017						0.0006 (J)			
3/16/2018		<0.005							
3/19/2018	<0.005								<0.005
3/20/2018			0.00079 (J)						
3/21/2018				0.00058 (J)		0.0013 (J)			
3/22/2018					0.0055		0.00096 (J)		
3/23/2018								<0.005	
9/17/2018	<0.005	<0.005							<0.005
9/18/2018			<0.005	<0.005	0.0064				
9/19/2018						<0.005	<0.005	<0.005	
3/19/2019		<0.005							
3/20/2019	<0.005								<0.005
3/21/2019									
3/22/2019			<0.005				<0.005 (D)	<0.005 (D)	
3/23/2019				<0.005	0.0055	0.00067 (X)			
5/6/2019									
9/13/2019	<0.005	<0.005							
9/16/2019									<0.005
9/17/2019			<0.005	<0.005	0.0047 (X)		<0.005	<0.005	
9/18/2019						0.00052 (X)			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.005			
8/23/2007				<0.005
8/24/2007				
10/25/2007	<0.005			
11/1/2007				<0.005
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				<0.005
11/20/2007	<0.005			
1/15/2008				0.0086
1/16/2008				
1/23/2008	<0.005			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				<0.005
3/10/2008				
3/11/2008	<0.005			
5/7/2008				
5/12/2008				
5/13/2008				<0.005
5/14/2008	<0.005			
12/2/2008				
12/5/2008				
12/11/2008	<0.005			
12/12/2008				0.0065
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				<0.005
4/23/2009	<0.005			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	<0.005			
10/13/2009				<0.005
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.005
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	0.014			
9/28/2010				
9/29/2010				<0.005
9/30/2010				
10/5/2010				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	<0.005			
10/12/2010				
4/12/2011				
4/13/2011				<0.005
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.005			
4/28/2011				
10/4/2011				
10/5/2011				<0.005
10/12/2011				
10/13/2011				
10/18/2011	<0.005			
10/19/2011				
4/3/2012				
4/4/2012				<0.005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.005			
10/2/2012				
10/3/2012				
10/8/2012	<0.005			<0.005
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.005
4/9/2013				
4/10/2013	<0.005			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.005			
10/9/2013				<0.005
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.002
4/10/2014				
4/14/2014	<0.002			
4/21/2014				
4/23/2014				
9/30/2014				<0.005
10/1/2014				
10/2/2014				
10/3/2014	<0.005			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	<0.005			
4/2/2015				<0.005
4/3/2015				
5/26/2015			<0.005	
6/18/2015			<0.005 (D)	
7/2/2015			<0.005	
10/6/2015				
10/7/2015				
10/8/2015			<0.005	
10/9/2015	<0.005			
10/10/2015				<0.005 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.005	
3/23/2016				
3/28/2016				
3/29/2016	<0.005			
3/30/2016				0.0241 (J)
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.005			
5/25/2016			<0.005	
5/26/2016				<0.005
5/27/2016				
5/31/2016		<0.005		
6/1/2016				
7/29/2016				
8/1/2016	<0.005			
8/2/2016		0.0031 (J)	<0.005	
8/3/2016				
8/4/2016				
8/5/2016				<0.005
8/9/2016				
9/22/2016				
9/26/2016	<0.005		<0.005	
9/27/2016		0.0028 (J)		
9/28/2016				<0.005
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.005			
11/21/2016		0.0031 (J)	<0.005	<0.005
11/22/2016				
11/23/2016				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.005	0.0031 (J)		
2/3/2017			<0.005	
2/6/2017				<0.005
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	0.0006 (J)	0.003 (J)		<0.005
4/7/2017			<0.005	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.005	0.0024 (J)	<0.005	<0.005
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		0.0029 (J)		
7/26/2017				
10/2/2017				
10/3/2017	<0.005	0.0018 (J)	<0.005	<0.005
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	0.00089 (J)			
3/20/2018		0.0024 (J)	0.0006 (J)	<0.005
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.005			
9/18/2018		<0.005	<0.005	<0.005 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.005	0.00077 (X)		<0.005
3/22/2019				
3/23/2019				
5/6/2019			0.00063 (X)	
9/13/2019		0.0017 (X)		
9/16/2019	0.00071 (X)		0.00043 (X)	0.00044 (X)
9/17/2019				
9/18/2019				

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			0.021	0.034	0.023	0.065			
8/22/2007									
8/23/2007	0.015								0.017
8/24/2007							0.0089	0.017	
10/25/2007									0.023
11/1/2007			0.017	0.036	0.034	0.019			
11/2/2007	0.017						0.0091	0.011	
11/17/2007							0.021		
11/18/2007	0.019			0.036				0.012 (J)	
11/19/2007					0.043	0.015			0.024
11/20/2007			0.1						
1/15/2008							0.013	0.088	
1/16/2008					0.13				
1/23/2008									0.028
1/30/2008			0.035	0.031 (J)					
1/31/2008	0.011					0.022			
3/5/2008				0.018	0.07	0.012	0.11		
3/6/2008			0.042						
3/10/2008								0.0077	
3/11/2008	0.016								0.022
5/7/2008				0.015			0.01		
5/12/2008			0.0087			0.014			0.021
5/13/2008					0.039			0.0055	
5/14/2008	0.013								
12/2/2008							0.12	0.0097	
12/5/2008	0.021								
12/11/2008									0.022
12/12/2008		0.098							
12/13/2008			0.12		0.13	0.11			
12/14/2008				0.12					
4/15/2009	0.012								0.13
4/16/2009					0.13		0.13		
4/23/2009		0.013							
4/28/2009						0.12		0.0042	
4/29/2009			0.11	0.0079					
10/6/2009		0.011							
10/8/2009	0.011								
10/9/2009									0.026
10/13/2009									
10/20/2009			0.016				0.05	0.0056	
10/21/2009					0.033	0.023			
10/22/2009				0.007					
4/20/2010							0.019		
4/21/2010				0.0074					
4/26/2010			0.016						
4/27/2010		0.016			0.11			0.0039	
4/28/2010	0.0081					0.019			
5/4/2010									0.018
9/28/2010				0.0068					
9/29/2010			0.016				0.017		
9/30/2010		0.013							
10/5/2010					0.027	0.018		0.0047	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	0.0055								
3/30/2015		0.0043							
3/31/2015	0.0076								0.014
4/1/2015				0.013	0.025	0.027			
4/2/2015			0.017						
4/3/2015							0.13	0.0076	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								0.0088	
10/7/2015							0.047		
10/8/2015									
10/9/2015									
10/10/2015			0.014						
10/11/2015		0.0038		0.0079					
10/12/2015	0.0049								0.017
10/14/2015					0.027				
10/15/2015						0.033			
3/22/2016									
3/23/2016	0.00742 (J)								
3/28/2016		0.0133							0.0173
3/29/2016									
3/30/2016									
3/31/2016			0.0179						
4/4/2016				0.0119	0.0285	0.027			
4/5/2016							0.0279	0.00153 (J)	
5/23/2016	0.00532 (J)	0.0109							
5/24/2016									
5/25/2016									0.0175
5/26/2016			0.0186	0.0127					
5/27/2016					0.0257				
5/31/2016						0.0283		0.00589 (J)	
6/1/2016							0.0249		
7/29/2016	0.0053 (J)								
8/1/2016		0.0058 (J)							0.0145
8/2/2016									
8/3/2016				0.0121	0.0237				
8/4/2016						0.0358			
8/5/2016			0.0138						
8/9/2016							0.0268		
9/22/2016	0.0058 (J)								
9/26/2016		0.0092 (J)							
9/27/2016									0.0139
9/28/2016			0.0153	0.0112					
9/29/2016						0.0437			
9/30/2016					0.0279				
11/10/2016	0.0051 (J)	0.0083 (J)							
11/11/2016									0.0135
11/18/2016									
11/21/2016									
11/22/2016			0.0184 (J)	0.0155 (J)	0.0286 (J)				
11/23/2016								<0.05 (*)	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/28/2016						0.0419 (J)	<0.05 (*)		
1/30/2017		0.0117							
1/31/2017	0.0054 (J)								0.0153
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			0.0215						
2/8/2017				0.0115					
2/9/2017						0.0472	0.0119		
2/10/2017								0.0233	
2/13/2017					0.0313				
3/30/2017	0.0049 (J)								
4/3/2017									0.0135
4/6/2017									
4/7/2017		0.0109							
4/10/2017			0.0247	<0.0117 (*)					
4/11/2017					0.0254		0.0084 (D)	0.0162	
4/12/2017						0.0383			
6/12/2017	<0.01 (*)	<0.01 (*)							0.0154
6/13/2017									
6/14/2017			0.0227		0.0241		<0.01 (*)		
6/15/2017				0.0112				0.0148	
6/16/2017						0.0457			
7/12/2017							0.0105	0.0166	
7/14/2017									
7/26/2017								0.0146	
10/2/2017		0.0122							
10/3/2017									0.0138
10/4/2017	0.0047 (J)		0.0172	0.0093 (J)	0.0256				
10/5/2017							0.0099 (J)		
10/6/2017								0.015	
10/9/2017						0.0406			
3/16/2018		0.0084 (J)							
3/19/2018	0.0047 (J)								0.013
3/20/2018			0.021						
3/21/2018				0.012		0.032			
3/22/2018					0.024		0.011		
3/23/2018								0.013	
9/17/2018	0.0041 (J)	0.01							0.014
9/18/2018			0.02	0.011	0.025				
9/19/2018						0.034	0.013	0.015	
3/19/2019		0.012							
3/20/2019	0.0042 (X)								0.018
3/21/2019									
3/22/2019			0.024				0.014 (D)	0.014 (D)	
3/23/2019				0.0081 (X)	0.024	0.023			
5/6/2019									
9/13/2019	0.0042 (X)	0.0088 (X)							
9/16/2019									0.022
9/17/2019			0.016	0.011	0.025		0.015	0.014	
9/18/2019						0.033			

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	0.023			
8/23/2007				0.043
8/24/2007				
10/25/2007	0.018			
11/1/2007				0.032
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				0.049 (J)
11/20/2007	0.1			
1/15/2008				0.12
1/16/2008				
1/23/2008	0.031			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				0.075
3/10/2008				
3/11/2008	0.016			
5/7/2008				
5/12/2008				
5/13/2008				0.055
5/14/2008	0.024			
12/2/2008				
12/5/2008				
12/11/2008	0.022			
12/12/2008				0.16
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				0.15
4/23/2009	0.012			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	0.11			
10/13/2009				0.05
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				0.039
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	0.096			
9/28/2010				
9/29/2010				0.033
9/30/2010				
10/5/2010				

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	0.018			
10/12/2010				
4/12/2011				
4/13/2011				0.033
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	0.01			
4/28/2011				
10/4/2011				
10/5/2011				0.035
10/12/2011				
10/13/2011				
10/18/2011	0.012			
10/19/2011				
4/3/2012				
4/4/2012				0.0422
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	0.0119			
10/2/2012				
10/3/2012				
10/8/2012	0.01			0.029
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				0.042
4/9/2013				
4/10/2013	0.013			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	0.014			
10/9/2013				0.04
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				0.038
4/10/2014				
4/14/2014	0.01			
4/21/2014				
4/23/2014				
9/30/2014				0.038
10/1/2014				
10/2/2014				
10/3/2014	0.014			

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	0.013			
4/2/2015				0.039
4/3/2015				
5/26/2015			0.06	
6/18/2015			0.047 (D)	
7/2/2015			0.04	
10/6/2015				
10/7/2015				
10/8/2015			0.032	
10/9/2015	0.008			
10/10/2015				0.038 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			0.0263	
3/23/2016				
3/28/2016				
3/29/2016	0.0239 (J)			
3/30/2016				0.0412
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	0.00902 (J)			
5/25/2016			0.0178	
5/26/2016				0.0357
5/27/2016				
5/31/2016		0.0178		
6/1/2016				
7/29/2016				
8/1/2016	0.0091 (J)			
8/2/2016		0.0394	0.0265	
8/3/2016				
8/4/2016				
8/5/2016				0.03
8/9/2016				
9/22/2016				
9/26/2016	0.0124		0.0267	
9/27/2016		0.032		
9/28/2016				0.0308
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	0.0117			
11/21/2016		0.0316 (J)	0.0309 (J)	0.0356 (J)
11/22/2016				
11/23/2016				

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	0.0086 (J)	0.0264		
2/3/2017			0.0289	
2/6/2017				0.0391
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	0.0083 (J)	0.0245		0.0402
4/7/2017			0.029	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.01 (*)	0.0247	0.027	0.0394
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		0.0245		
7/26/2017				
10/2/2017				
10/3/2017	0.0084 (J)	0.0218	0.0292	0.0381
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	0.0079 (J)			
3/20/2018		0.024	0.029	0.039
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	0.0065 (J)			
9/18/2018		0.027	0.025	0.037
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	0.0074 (X)	0.03		0.042
3/22/2019				
3/23/2019				
5/6/2019			0.017	
9/13/2019		0.031		
9/16/2019	0.0075 (X)		0.026	0.035
9/17/2019				
9/18/2019				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/18/2016									
11/21/2016									
11/22/2016			<0.003	<0.003	<0.003				
11/23/2016								<0.003	
11/28/2016						<0.003	<0.003		
1/30/2017		<0.003							
1/31/2017	<0.003								0.0007 (J)
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.003						
2/8/2017				<0.003					
2/9/2017						<0.003	0.0001 (J)		
2/10/2017								<0.003	
2/13/2017					<0.003				
3/30/2017	<0.003								
4/3/2017									0.0007 (J)
4/6/2017									
4/7/2017		<0.003							
4/10/2017			<0.003	<0.003					
4/11/2017					<0.003		<0.003	<0.003	
4/12/2017						0.0001 (J)			
6/12/2017	<0.003	<0.003							0.0004 (J)
6/13/2017									
6/14/2017			<0.003		<0.003		<0.003		
6/15/2017				<0.003				<0.003	
6/16/2017						9E-05 (J)			
7/12/2017							<0.003	<0.003	
7/14/2017									
7/26/2017								<0.003	
10/2/2017		<0.003							
10/3/2017									0.0006 (J)
10/4/2017	<0.003		<0.003	<0.003	<0.003				
10/5/2017							<0.003		
10/6/2017								<0.003	
10/9/2017						<0.003			
3/16/2018		<0.003							
3/19/2018	<0.003								0.0005 (J)
3/20/2018			0.00019 (J)						
3/21/2018				<0.003		<0.003			
3/22/2018					<0.003		0.00103 (D)		
3/23/2018								<0.003	
9/17/2018	<0.003	<0.003							0.00053 (J)
9/18/2018			5.4E-05 (J)	<0.003	<0.003				
9/19/2018						7E-05 (J)	0.00014 (J)	<0.003	
3/19/2019		<0.003							
3/20/2019	<0.003								0.00046 (X)
3/21/2019									
3/22/2019			0.00018 (X)				9.4E-05 (XD)	<0.003 (D)	
3/23/2019				5.7E-05 (X)	<0.003	6.1E-05 (X)			
5/6/2019									
9/13/2019	<0.003	<0.003							

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
9/16/2019									0.00051 (X)
9/17/2019			<0.003	<0.003	<0.003		0.00013 (X)	<0.003	
9/18/2019						7.4E-05 (X)			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
9/30/2014				0.00013 (J)
10/1/2014				
10/2/2014				
10/3/2014	0.00024 (J)			
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	0.00021 (J)			
4/2/2015				0.00028 (J)
4/3/2015				
5/26/2015			<0.0013	
6/18/2015			0.0013 (D)	
7/2/2015			<0.0013	
10/6/2015				
10/7/2015				
10/8/2015			<0.0013	
10/9/2015	<0.0013			
10/10/2015				0.000245 (JD)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.003	
3/23/2016				
3/28/2016				
3/29/2016	<0.003			
3/30/2016				<0.003
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.003			
5/25/2016			<0.003	
5/26/2016				<0.003
5/27/2016				
5/31/2016		<0.003		
6/1/2016				
7/29/2016				
8/1/2016	<0.003			
8/2/2016		<0.003	<0.003	
8/3/2016				
8/4/2016				
8/5/2016				<0.003
8/9/2016				
9/22/2016				
9/26/2016	<0.003		<0.003	
9/27/2016		<0.003		
9/28/2016				<0.003
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

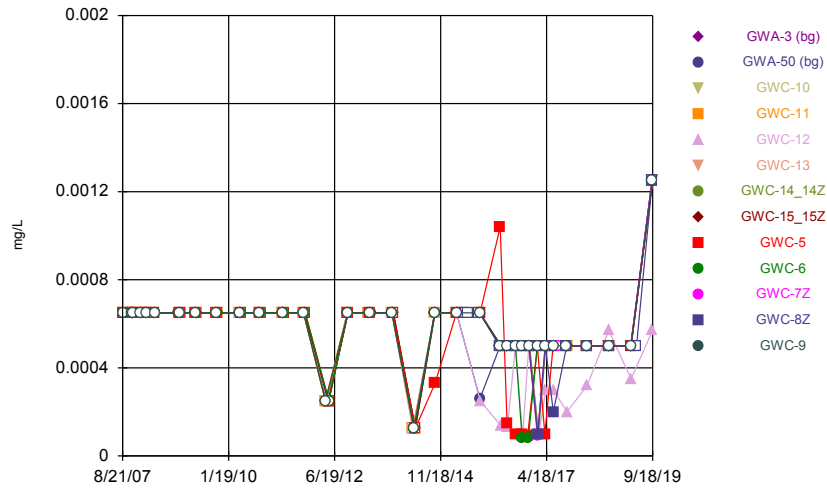
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/18/2016	<0.003			
11/21/2016		<0.003	<0.003	<0.003
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.003	<0.003		
2/3/2017			<0.003	
2/6/2017				0.0002 (J)
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<0.003	<0.003		0.0002 (J)
4/7/2017			<0.003	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.003	<0.003	<0.003	0.0002 (J)
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		<0.003		
7/26/2017				
10/2/2017				
10/3/2017	<0.003	<0.003	<0.003	0.0001 (J)
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	6.6E-05 (J)			
3/20/2018		<0.003	<0.003	0.00022 (J)
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.003			
9/18/2018		<0.003	<0.003	0.00014 (JD)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.003	<0.003		0.00015 (X)
3/22/2019				
3/23/2019				
5/6/2019			0.0001 (X)	
9/13/2019		<0.003		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

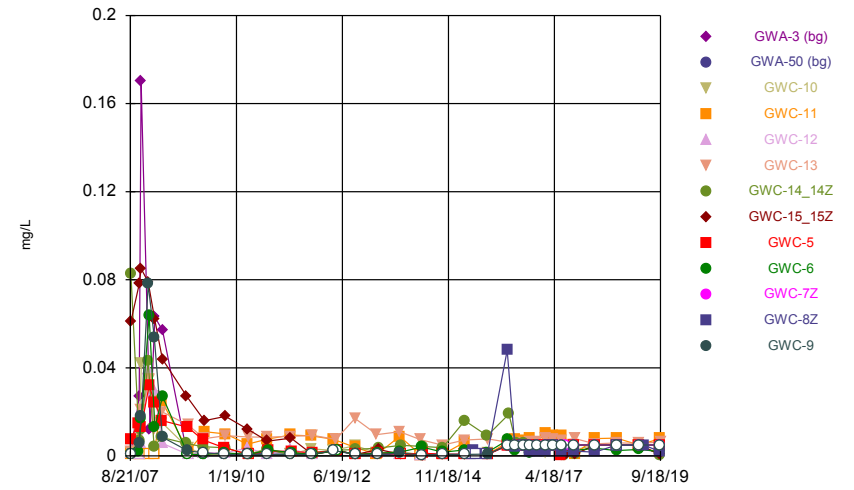
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
9/16/2019	<0.003		<0.003	0.0001 (X)
9/17/2019				
9/18/2019				

Time Series



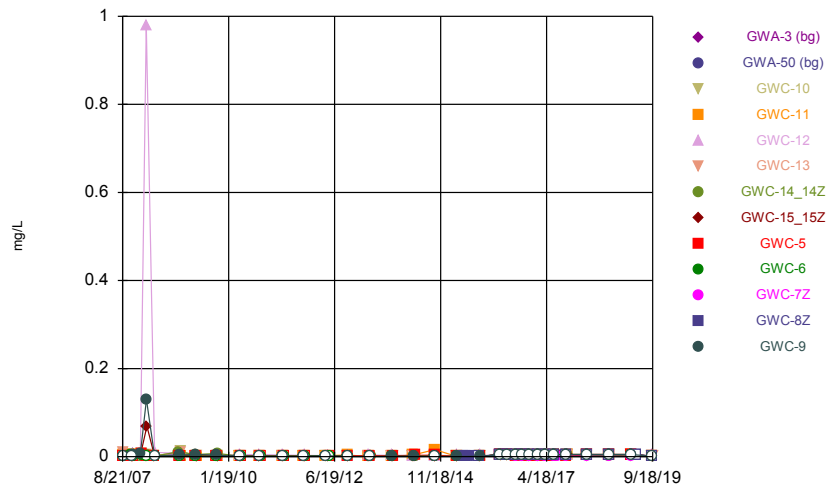
Constituent: Cadmium Analysis Run 11/7/2019 8:58 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



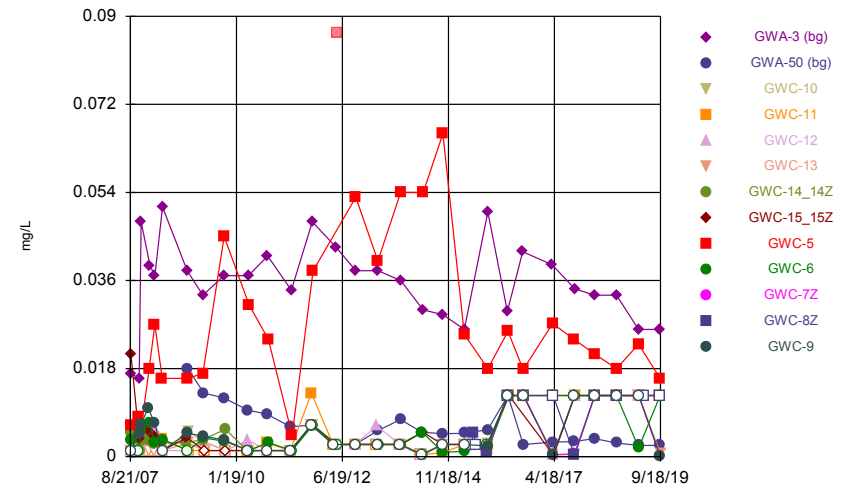
Constituent: Chromium Analysis Run 11/7/2019 8:58 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Cobalt Analysis Run 11/7/2019 8:58 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Copper Analysis Run 11/7/2019 8:58 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.0013	<0.0013	<0.0013	<0.0013			
8/22/2007									
8/23/2007	<0.0013								<0.0013
8/24/2007							<0.0013	<0.0013	
10/25/2007									<0.0013
11/1/2007			<0.0013	<0.0013	<0.0013	<0.0013			
11/2/2007	<0.0013						<0.0013	<0.0013	
11/17/2007							<0.0013		
11/18/2007	<0.0013			<0.0013				<0.0013	
11/19/2007					<0.0013	<0.0013			<0.0013
11/20/2007			<0.0013						
1/15/2008							<0.0013	<0.0013	
1/16/2008					<0.0013				
1/23/2008									<0.0013
1/30/2008			<0.0013	<0.0013					
1/31/2008	<0.0013					<0.0013			
3/5/2008				<0.0013	<0.0013	<0.0013	<0.0013		
3/6/2008			<0.0013						
3/10/2008								<0.0013	
3/11/2008	<0.0013								<0.0013
5/7/2008				<0.0013			<0.0013		
5/12/2008			<0.0013			<0.0013			<0.0013
5/13/2008					<0.0013			<0.0013	
5/14/2008	<0.0013								
12/2/2008							<0.0013	<0.0013	
12/5/2008	<0.0013								
12/11/2008									<0.0013
12/12/2008		<0.0013							
12/13/2008			<0.0013		<0.0013	<0.0013			
12/14/2008				<0.0013					
4/15/2009	<0.0013								<0.0013
4/16/2009					<0.0013		<0.0013		
4/23/2009		<0.0013							
4/28/2009						<0.0013		<0.0013	
4/29/2009			<0.0013	<0.0013					
10/6/2009		<0.0013							
10/8/2009	<0.0013								
10/9/2009									<0.0013
10/13/2009									
10/20/2009			<0.0013				<0.0013	<0.0013	
10/21/2009					<0.0013	<0.0013			
10/22/2009				<0.0013					
4/20/2010							<0.0013		
4/21/2010				<0.0013					
4/26/2010			<0.0013						
4/27/2010		<0.0013			<0.0013			<0.0013	
4/28/2010	<0.0013					<0.0013			
5/4/2010									<0.0013
9/28/2010				<0.0013					
9/29/2010			<0.0013				<0.0013		
9/30/2010		<0.0013							
10/5/2010					<0.0013	<0.0013		<0.0013	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	<0.0013								
3/30/2015		<0.0013							
3/31/2015	<0.0013								<0.0013
4/1/2015				<0.0013	<0.0013	<0.0013			
4/2/2015			<0.0013						
4/3/2015							<0.0013	<0.0013	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.0013	
10/7/2015							<0.0013		
10/8/2015									
10/9/2015									
10/10/2015			<0.0013						
10/11/2015		0.00026 (J)		<0.0013					
10/12/2015	<0.0013								<0.0013
10/14/2015					0.00025 (J)				
10/15/2015						<0.0013			
3/22/2016									
3/23/2016	<0.001								
3/28/2016		<0.001							0.00104 (J)
3/29/2016									
3/30/2016									
3/31/2016			<0.001						
4/4/2016				<0.001	0.000136 (J)	<0.001			
4/5/2016							<0.001	<0.001	
5/23/2016	<0.001	<0.001							
5/24/2016									
5/25/2016									0.000148 (J)
5/26/2016			<0.001	<0.001					
5/27/2016					0.000131 (J)				
5/31/2016						<0.001		<0.001	
6/1/2016							<0.001		
7/29/2016	<0.001								
8/1/2016		<0.001							0.0001 (J)
8/2/2016									
8/3/2016				<0.001	<0.001				
8/4/2016						<0.001			
8/5/2016			<0.001						
8/9/2016							<0.001		
9/22/2016	<0.001								
9/26/2016		<0.001							
9/27/2016									0.0001 (J)
9/28/2016			<0.001	<0.001					
9/29/2016						<0.001			
9/30/2016					9E-05 (J)				
11/10/2016	<0.001	<0.001							
11/11/2016									9E-05 (J)
11/18/2016									
11/21/2016									
11/22/2016			<0.001	<0.001	<0.001				
11/23/2016							<0.001		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/28/2016						<0.001	<0.001		
1/30/2017		<0.001							
1/31/2017	<0.001								<0.001
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.001						
2/8/2017				<0.001					
2/9/2017						<0.001	0.0001 (J)		
2/10/2017								<0.001	
2/13/2017					0.0001 (J)				
3/30/2017	<0.001								
4/3/2017									0.0001 (J)
4/6/2017									
4/7/2017		<0.001							
4/10/2017			<0.001	<0.001					
4/11/2017					0.0003 (J)		<0.001	<0.001	
4/12/2017						<0.001			
6/12/2017	<0.001	<0.001							<0.001
6/13/2017									
6/14/2017			<0.001		0.0003 (J)		<0.001		
6/15/2017				<0.001				<0.001	
6/16/2017						<0.001			
7/12/2017							<0.001	<0.001	
7/14/2017								<0.001	
7/26/2017								<0.001	
10/2/2017		<0.001							
10/3/2017									<0.001
10/4/2017	<0.001		<0.001	<0.001	0.0002 (J)				
10/5/2017							<0.001		
10/6/2017								<0.001	
10/9/2017						<0.001			
3/16/2018		<0.001							
3/19/2018	<0.001								<0.001
3/20/2018			<0.001						
3/21/2018				<0.001		<0.001			
3/22/2018					0.00032 (J)		<0.001		
3/23/2018								<0.001	
9/17/2018	<0.001	<0.001							<0.001
9/18/2018			<0.001	<0.001	0.00057 (J)				
9/19/2018						<0.001	<0.001	<0.001	
3/19/2019		<0.001							
3/20/2019	<0.001								<0.001
3/21/2019									
3/22/2019			<0.001				<0.001 (D)	<0.001 (D)	
3/23/2019				<0.001	0.00035 (X)	<0.001			
5/6/2019									
9/13/2019	<0.0025	<0.0025							
9/16/2019									<0.0025
9/17/2019			<0.0025	<0.0025	0.00057 (X)		<0.0025	<0.0025	
9/18/2019						<0.0025			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.0013			
8/23/2007				<0.0013
8/24/2007				
10/25/2007	<0.0013			
11/1/2007				<0.0013
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				<0.0013
11/20/2007	<0.0013			
1/15/2008				<0.0013
1/16/2008				
1/23/2008	<0.0013			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				<0.0013
3/10/2008				
3/11/2008	<0.0013			
5/7/2008				
5/12/2008				
5/13/2008				<0.0013
5/14/2008	<0.0013			
12/2/2008				
12/5/2008				
12/11/2008	<0.0013			
12/12/2008				<0.0013
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				<0.0013
4/23/2009	<0.0013			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	<0.0013			
10/13/2009				<0.0013
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.0013
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.0013			
9/28/2010				
9/29/2010				<0.0013
9/30/2010				
10/5/2010				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	<0.0013			
10/12/2010				
4/12/2011				
4/13/2011				<0.0013
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.0013			
4/28/2011				
10/4/2011				
10/5/2011				<0.0013
10/12/2011				
10/13/2011				
10/18/2011	<0.0013			
10/19/2011				
4/3/2012				
4/4/2012				<0.0005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.0005			
10/2/2012				
10/3/2012				
10/8/2012	<0.0013			<0.0013
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.0013
4/9/2013				
4/10/2013	<0.0013			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.0013			
10/9/2013				<0.0013
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.00025
4/10/2014				
4/14/2014	<0.00025			
4/21/2014				
4/23/2014				
9/30/2014				<0.0013
10/1/2014				
10/2/2014				
10/3/2014	<0.0013			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	<0.0013			
4/2/2015				<0.0013
4/3/2015				
5/26/2015			<0.0013	
6/18/2015			<0.0013 (D)	
7/2/2015			<0.0013	
10/6/2015				
10/7/2015				
10/8/2015			<0.0013	
10/9/2015	<0.0013			
10/10/2015				<0.0013 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.001	
3/23/2016				
3/28/2016				
3/29/2016	<0.001			
3/30/2016				<0.001
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.001			
5/25/2016			<0.001	
5/26/2016				<0.001
5/27/2016				
5/31/2016		<0.001		
6/1/2016				
7/29/2016				
8/1/2016	<0.001			
8/2/2016		<0.001	<0.001	
8/3/2016				
8/4/2016				
8/5/2016				<0.001
8/9/2016				
9/22/2016				
9/26/2016	8E-05 (J)		<0.001	
9/27/2016		<0.001		
9/28/2016				<0.001
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	8E-05 (J)			
11/21/2016		<0.001	<0.001	<0.001
11/22/2016				
11/23/2016				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.001	9E-05 (J)		
2/3/2017			0.0001 (J)	
2/6/2017				<0.001
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<0.001	<0.001		<0.001
4/7/2017			<0.001	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.001	<0.001	0.0002 (J)	<0.001
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		<0.001		
7/26/2017				
10/2/2017				
10/3/2017	<0.001	<0.001	<0.001	<0.001
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.001			
3/20/2018		<0.001	<0.001	<0.001
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.001			
9/18/2018		<0.001	<0.001	<0.001 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.001	<0.001		<0.001
3/22/2019				
3/23/2019				
5/6/2019			<0.001	
9/13/2019		<0.0025		
9/16/2019	<0.0025		<0.0025	<0.0025
9/17/2019				
9/18/2019				

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			0.0015	<0.0013	0.0013	0.0019			
8/22/2007									
8/23/2007	<0.0013								0.0076
8/24/2007							0.083	0.061	
10/25/2007									0.015
11/1/2007			0.011	<0.0013	<0.0013	0.01			
11/2/2007	0.027						0.0071	0.078	
11/17/2007							0.012		
11/18/2007	0.17			<0.0013				0.085	
11/19/2007					0.0056	0.021			0.013
11/20/2007			0.042						
1/15/2008							0.043	0.079	
1/16/2008					0.039				
1/23/2008									0.032
1/30/2008			0.034	<0.0013					
1/31/2008	0.012					0.035			
3/5/2008				<0.0013	0.03	0.012	0.0044		
3/6/2008			0.027						
3/10/2008								0.062	
3/11/2008	0.063								0.024
5/7/2008				0.025			0.0084		
5/12/2008			0.015			0.02			0.016
5/13/2008					0.0057			0.044	
5/14/2008	0.057								
12/2/2008							0.0056	0.027	
12/5/2008	<0.0013								
12/11/2008									0.013
12/12/2008		<0.0013							
12/13/2008			0.0036		<0.0013	0.014			
12/14/2008				0.0021					
4/15/2009	<0.0013								0.0073
4/16/2009					<0.003		0.0042		
4/23/2009		<0.0013							
4/28/2009						0.0079		0.016	
4/29/2009			<0.0013	0.011					
10/6/2009		<0.0013							
10/8/2009	<0.0013								
10/9/2009									0.0037
10/13/2009									
10/20/2009			<0.0013				0.0037	0.018	
10/21/2009					0.0015	0.0092			
10/22/2009				0.01					
4/20/2010							<0.0013		
4/21/2010				0.0053					
4/26/2010			<0.0013						
4/27/2010		<0.0013			0.0036			0.012	
4/28/2010	<0.0013					0.0086			
5/4/2010									<0.0013
9/28/2010				0.0076					
9/29/2010			0.0034				0.0028		
9/30/2010		0.0014							
10/5/2010					<0.0013	0.0085		0.0067	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	<0.0013								
3/30/2015		<0.0013							
3/31/2015	<0.0013								<0.0013
4/1/2015				0.0062	<0.0013	0.0072			
4/2/2015			<0.0013						
4/3/2015							0.016	<0.0013	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.0013	
10/7/2015							0.0092		
10/8/2015									
10/9/2015									
10/10/2015			0.0013						
10/11/2015		<0.0013		<0.0013					
10/12/2015	<0.0013								<0.0013
10/14/2015					<0.0013				
10/15/2015						0.0077			
3/22/2016									
3/23/2016	<0.01								
3/28/2016		<0.01							<0.01
3/29/2016									
3/30/2016									
3/31/2016			<0.01						
4/4/2016				0.00656 (J)	<0.01	0.00615 (J)			
4/5/2016							0.019 (J)	<0.01	
5/23/2016	<0.01	<0.01							
5/24/2016									
5/25/2016									<0.01
5/26/2016			<0.01	0.00752 (J)					
5/27/2016					<0.01				
5/31/2016						0.00588 (J)		<0.01	
6/1/2016							0.006 (J)		
7/29/2016	<0.01								
8/1/2016		<0.01 (*)							<0.01
8/2/2016									
8/3/2016				0.0067 (J)	<0.01				
8/4/2016						0.0056 (J)			
8/5/2016			<0.01 (*)						
8/9/2016							0.0061 (JD)		
9/22/2016	0.0013 (J)								
9/26/2016		<0.01							
9/27/2016									<0.01
9/28/2016			<0.01	0.0082 (J)					
9/29/2016						0.0065 (J)			
9/30/2016					<0.01				
11/10/2016	<0.01	<0.01							
11/11/2016									<0.01 (*)
11/18/2016									
11/21/2016									
11/22/2016			0.0024 (J)	0.0045 (J)	<0.01				
11/23/2016								<0.01	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/28/2016						0.0064 (J)	<0.01		
1/30/2017		<0.01							
1/31/2017	<0.01								<0.01
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			0.0015 (J)						
2/8/2017				0.0101					
2/9/2017						0.0078 (J)	<0.01		
2/10/2017								<0.01	
2/13/2017					<0.01				
3/30/2017	<0.01								
4/3/2017									<0.01
4/6/2017									
4/7/2017		<0.01							
4/10/2017			<0.01 (*)	0.0094 (J)					
4/11/2017					<0.01		<0.01 (*)	<0.01 (*)	
4/12/2017						0.0077 (J)			
6/12/2017	<0.01	<0.01							0.0005 (J)
6/13/2017									
6/14/2017			0.0006 (J)		<0.01		0.0006 (J)		
6/15/2017				0.009 (J)				0.0005 (J)	
6/16/2017						0.0072 (J)			
7/12/2017							0.0005 (J)	0.0008 (J)	
7/14/2017									
7/26/2017								0.0006 (J)	
10/2/2017		<0.01							
10/3/2017									<0.01
10/4/2017	<0.01		0.0027 (J)	0.0008 (J)	<0.01				
10/5/2017							0.0006 (J)		
10/6/2017								0.0008 (J)	
10/9/2017						0.0079 (J)			
3/16/2018		<0.01							
3/19/2018	<0.01								<0.01
3/20/2018			<0.01						
3/21/2018				0.0079 (J)		0.0055 (J)			
3/22/2018					<0.01		<0.01		
3/23/2018								<0.01	
9/17/2018	<0.01	<0.01							<0.01
9/18/2018			<0.01	0.0081 (J)	<0.01				
9/19/2018						0.0059 (J)	<0.01	<0.01	
3/19/2019		<0.01							
3/20/2019	<0.01								<0.01
3/21/2019									
3/22/2019			<0.01				<0.01 (D)	<0.01 (D)	
3/23/2019				<0.01	<0.01	0.0058 (X)			
5/6/2019									
9/13/2019	0.00073 (X)	<0.01							
9/16/2019									<0.01
9/17/2019			0.0009 (X)	0.0079 (X)	<0.01		0.00046 (X)	0.00064 (X)	
9/18/2019						0.0063 (X)			

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.0013			
8/23/2007				<0.0013
8/24/2007				
10/25/2007	0.002			
11/1/2007				0.0061
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				0.018 (J)
11/20/2007	0.017			
1/15/2008				0.078
1/16/2008				
1/23/2008	0.064			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				0.054
3/10/2008				
3/11/2008	0.013			
5/7/2008				
5/12/2008				
5/13/2008				0.0085
5/14/2008	0.027			
12/2/2008				
12/5/2008				
12/11/2008	<0.0013			
12/12/2008				0.0023
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				<0.003
4/23/2009	<0.0013			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	0.0014			
10/13/2009				<0.0013
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.0013
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.0013			
9/28/2010				
9/29/2010				<0.0013
9/30/2010				
10/5/2010				

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	0.0027			
10/12/2010				
4/12/2011				
4/13/2011				<0.0013
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	0.0015			
4/28/2011				
10/4/2011				
10/5/2011				<0.0013
10/12/2011				
10/13/2011				
10/18/2011	<0.0013			
10/19/2011				
4/3/2012				
4/4/2012				<0.005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.005			
10/2/2012				
10/3/2012				
10/8/2012	<0.0013			<0.0013
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.0013
4/9/2013				
4/10/2013	0.0013			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	0.0017			
10/9/2013				0.0013
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.001
4/10/2014				
4/14/2014	0.004			
4/21/2014				
4/23/2014				
9/30/2014				<0.0013
10/1/2014				
10/2/2014				
10/3/2014	0.0017			

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	0.0027			
4/2/2015				<0.0013
4/3/2015				
5/26/2015			<0.0013	
6/18/2015			0.0024 (D)	
7/2/2015			<0.0013	
10/6/2015				
10/7/2015				
10/8/2015			<0.0013	
10/9/2015	0.0016			
10/10/2015				0.000825 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			0.048 (J)	
3/23/2016				
3/28/2016				
3/29/2016	0.00738 (J)			
3/30/2016				<0.01
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	0.00263 (J)			
5/25/2016			0.00441 (J)	
5/26/2016				<0.01
5/27/2016				
5/31/2016		<0.01		
6/1/2016				
7/29/2016				
8/1/2016	<0.01 (*)			
8/2/2016		<0.01	<0.01 (*)	
8/3/2016				
8/4/2016				
8/5/2016				<0.01 (*)
8/9/2016				
9/22/2016				
9/26/2016	0.0014 (J)		0.002 (J)	
9/27/2016		<0.01		
9/28/2016				<0.01
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.01 (*)			
11/21/2016		<0.01	0.0017 (J)	<0.01
11/22/2016				
11/23/2016				

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	0.0024 (J)	<0.01		
2/3/2017			0.0018 (J)	
2/6/2017				<0.01
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<0.01 (*)	<0.01 (*)		<0.01
4/7/2017			<0.01 (*)	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	0.0031 (J)	<0.01	0.0019 (J)	<0.01
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		<0.01		
7/26/2017				
10/2/2017				
10/3/2017	0.0025 (J)	<0.01	0.0022 (J)	<0.01
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	0.0035 (J)			
3/20/2018		<0.01	0.0017 (J)	<0.01
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	0.0024 (J)			
9/18/2018		<0.01	<0.01	<0.01 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	0.0029 (X)	<0.01		<0.01
3/22/2019				
3/23/2019				
5/6/2019			0.0048 (X)	
9/13/2019		<0.01		
9/16/2019	0.002 (X)		0.002 (X)	<0.01
9/17/2019				
9/18/2019				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.0025	0.0031	<0.0025	0.01			
8/22/2007									
8/23/2007	0.0033								<0.0025
8/24/2007							<0.0025	<0.0025	
10/25/2007									<0.0025
11/1/2007			<0.0025	0.0034	0.0041	<0.0025			
11/2/2007	0.0046						<0.0025	<0.0025	
11/17/2007							0.0039		
11/18/2007	0.0057			0.0045				<0.0025	
11/19/2007					0.0055	<0.0025			<0.0025
11/20/2007			0.0046						
1/15/2008							<0.0025	0.0029	
1/16/2008					0.008				
1/23/2008									0.0073
1/30/2008			0.0079	0.0027					
1/31/2008	0.0055					0.0037			
3/5/2008				<0.0025	0.98	<0.0025	0.005		
3/6/2008			0.0037						
3/10/2008								0.069	
3/11/2008	0.0033								0.0025
5/7/2008				<0.0025			<0.0025		
5/12/2008			<0.0025			<0.0025			<0.0025
5/13/2008					0.01			<0.0025	
5/14/2008	0.0044								
12/2/2008							0.011	0.0027	
12/5/2008	0.0035								
12/11/2008									<0.0025
12/12/2008		<0.0025							
12/13/2008			0.013		0.0073	0.011			
12/14/2008				<0.0025					
4/15/2009	<0.0025								<0.0025
4/16/2009					0.0033		0.005		
4/23/2009		<0.0025							
4/28/2009						<0.0025		<0.0025	
4/29/2009			<0.0025	<0.0025					
10/6/2009		<0.0025							
10/8/2009	<0.0025								
10/9/2009									<0.0025
10/13/2009									
10/20/2009			<0.0025				0.0074	<0.0025	
10/21/2009					0.0039	<0.0025			
10/22/2009				<0.0025					
4/20/2010							<0.0025		
4/21/2010				<0.0025					
4/26/2010			<0.0025						
4/27/2010		<0.0025			0.0044			<0.0025	
4/28/2010	<0.0025					<0.0025			
5/4/2010									<0.0025
9/28/2010				<0.0025					
9/29/2010			<0.0025				<0.0025		
9/30/2010		<0.0025							
10/5/2010					0.005	<0.0025		<0.0025	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	0.00081 (J)								
3/30/2015		<0.0013							
3/31/2015	0.0021								0.00079 (J)
4/1/2015				<0.0013	0.0028	<0.0013			
4/2/2015			<0.0013						
4/3/2015							<0.0013	<0.0013	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.0013	
10/7/2015							<0.0013		
10/8/2015									
10/9/2015									
10/10/2015			<0.0013						
10/11/2015		<0.0013		<0.0013					
10/12/2015	0.00078 (J)								0.00063 (J)
10/14/2015					0.003				
10/15/2015						0.00051 (J)			
3/22/2016									
3/23/2016	<0.01								
3/28/2016		<0.01							<0.01
3/29/2016									
3/30/2016									
3/31/2016			<0.01						
4/4/2016				<0.01	0.00351 (J)	<0.01			
4/5/2016							<0.01	<0.01	
5/23/2016	<0.01	<0.01							
5/24/2016									
5/25/2016									<0.01
5/26/2016			<0.01	<0.01					
5/27/2016					0.00332 (J)				
5/31/2016						<0.01		<0.01	
6/1/2016							<0.01		
7/29/2016	0.0007 (J)								
8/1/2016		<0.01							0.0005 (J)
8/2/2016									
8/3/2016				<0.01	0.003 (J)				
8/4/2016						<0.01			
8/5/2016			<0.01						
8/9/2016							0.0003 (J)		
9/22/2016	0.0007 (J)								
9/26/2016		<0.01							
9/27/2016									<0.01
9/28/2016			<0.01	<0.01					
9/29/2016						<0.01			
9/30/2016					0.0035 (J)				
11/10/2016	0.0007 (J)	<0.01							
11/11/2016									0.0006 (J)
11/18/2016									
11/21/2016									
11/22/2016			0.0006 (J)	<0.01	0.0027 (J)				
11/23/2016								<0.01	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/28/2016						<0.01	<0.01		
1/30/2017		<0.01							
1/31/2017	0.0007 (J)								0.0007 (J)
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			0.0017 (J)						
2/8/2017				<0.01					
2/9/2017						<0.01	<0.01		
2/10/2017								<0.01	
2/13/2017					0.003 (J)				
3/30/2017	0.0007 (J)								
4/3/2017									0.0005 (J)
4/6/2017									
4/7/2017		<0.01							
4/10/2017			<0.01	<0.01					
4/11/2017					0.0031 (J)		<0.01	<0.01	
4/12/2017						<0.01			
6/12/2017	0.0007 (J)	<0.01							0.0004 (J)
6/13/2017									
6/14/2017			<0.01		0.0031 (J)		<0.01		
6/15/2017				<0.01				<0.01	
6/16/2017						<0.01			
7/12/2017							<0.01	<0.01	
7/14/2017									
7/26/2017								<0.01	
10/2/2017		<0.01							
10/3/2017									0.0003 (J)
10/4/2017	0.0006 (J)		<0.01	<0.01	0.0032 (J)				
10/5/2017							<0.01		
10/6/2017								<0.01	
10/9/2017						<0.01			
3/16/2018		<0.01							
3/19/2018	0.00059 (J)								<0.01
3/20/2018			0.0021 (J)						
3/21/2018				<0.01		<0.01			
3/22/2018					0.0033 (J)		<0.01		
3/23/2018								<0.01	
9/17/2018	0.00057 (J)	<0.01							<0.01
9/18/2018			<0.01	<0.01	0.0031 (J)				
9/19/2018						<0.01	0.00058 (J)	<0.01	
3/19/2019		<0.01							
3/20/2019	<0.01								<0.01
3/21/2019									
3/22/2019			0.0011 (X)				<0.01 (D)	<0.01 (D)	
3/23/2019				<0.01	0.0032 (X)	<0.01			
5/6/2019									
9/13/2019	0.00046 (X)	<0.0025							
9/16/2019									<0.0025
9/17/2019			<0.0025	<0.0025	0.003		<0.0025	<0.0025	
9/18/2019						0.0005 (X)			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.0025			
8/23/2007				<0.0025
8/24/2007				
10/25/2007	0.0038			
11/1/2007				<0.0025
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				0.0034
11/20/2007	<0.0025			
1/15/2008				0.0067
1/16/2008				
1/23/2008	0.0047			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				0.13
3/10/2008				
3/11/2008	<0.0025			
5/7/2008				
5/12/2008				
5/13/2008				<0.0025
5/14/2008	<0.0025			
12/2/2008				
12/5/2008				
12/11/2008	<0.0025			
12/12/2008				0.0042
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				0.0047
4/23/2009	<0.0025			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	<0.0025			
10/13/2009				0.0037
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.0025
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.0025			
9/28/2010				
9/29/2010				<0.0025
9/30/2010				
10/5/2010				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	<0.0025			
10/12/2010				
4/12/2011				
4/13/2011				<0.0025
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.0025			
4/28/2011				
10/4/2011				
10/5/2011				<0.0025
10/12/2011				
10/13/2011				
10/18/2011	<0.0025			
10/19/2011				
4/3/2012				
4/4/2012				<0.005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.005			
10/2/2012				
10/3/2012				
10/8/2012	<0.0013			<0.0013
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.0013
4/9/2013				
4/10/2013	<0.0013			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.0013			
10/9/2013				0.0013
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				0.0013 (J)
4/10/2014				
4/14/2014	0.0013 (J)			
4/21/2014				
4/23/2014				
9/30/2014				<0.0013
10/1/2014				
10/2/2014				
10/3/2014	0.00071 (J)			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	<0.0013			
4/2/2015				0.00064 (J)
4/3/2015				
5/26/2015			0.0018	
6/18/2015			0.0018 (D)	
7/2/2015			0.0013	
10/6/2015				
10/7/2015				
10/8/2015			<0.0013	
10/9/2015	<0.0013			
10/10/2015				0.001175 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.01	
3/23/2016				
3/28/2016				
3/29/2016	<0.01			
3/30/2016				<0.01
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.01			
5/25/2016			<0.01	
5/26/2016				<0.01
5/27/2016				
5/31/2016		<0.01		
6/1/2016				
7/29/2016				
8/1/2016	<0.01			
8/2/2016		0.0018 (J)	<0.01	
8/3/2016				
8/4/2016				
8/5/2016				<0.01
8/9/2016				
9/22/2016				
9/26/2016	<0.01		<0.01	
9/27/2016		0.0011 (J)		
9/28/2016				<0.01
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.01			
11/21/2016		0.0008 (J)	<0.01	<0.01
11/22/2016				
11/23/2016				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.01	0.0008 (J)		
2/3/2017			<0.01	
2/6/2017				<0.01
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<0.01	0.0008 (J)		<0.01
4/7/2017			<0.01	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.01	0.0007 (J)	<0.01	<0.01
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		0.0005 (J)		
7/26/2017				
10/2/2017				
10/3/2017	<0.01	0.0007 (J)	<0.01	<0.01
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.01			
3/20/2018		0.00076 (J)	<0.01	<0.01
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.01			
9/18/2018		0.00055 (J)	<0.01	<0.01 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.01	0.00059 (X)		<0.01
3/22/2019				
3/23/2019				
5/6/2019			<0.01	
9/13/2019		0.00099 (X)		
9/16/2019	<0.0025		<0.0025	<0.0025
9/17/2019				
9/18/2019				

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			0.0058	<0.0025	<0.0025	<0.0025			
8/22/2007									
8/23/2007	0.017								0.0064
8/24/2007							0.0048 (J)	0.021	
10/25/2007									0.0081
11/1/2007			<0.0025	<0.0025	<0.0025	<0.0025			
11/2/2007	0.016						<0.0025	0.0037	
11/17/2007							0.0031		
11/18/2007	0.048			<0.0025				0.007 (J)	
11/19/2007					0.0029	0.0035			0.0059
11/20/2007			0.006						
1/15/2008							0.0033	0.0055	
1/16/2008					0.0067				
1/23/2008									0.018
1/30/2008			0.0037	<0.0025					
1/31/2008	0.039					<0.0025			
3/5/2008				<0.0025	0.0058	<0.0025	0.0026		
3/6/2008			0.004						
3/10/2008								0.0042	
3/11/2008	0.037								0.027
5/7/2008				0.0037			0.0028		
5/12/2008			<0.0025			<0.0025			0.016
5/13/2008					<0.0025			<0.0025	
5/14/2008	0.051								
12/2/2008							0.0029	0.0039	
12/5/2008	0.038								
12/11/2008									0.016
12/12/2008		0.018							
12/13/2008			0.0051		<0.0025	0.0028			
12/14/2008				<0.0025					
4/15/2009	0.033								0.017
4/16/2009					0.0032		0.0035		
4/23/2009		0.013							
4/28/2009						<0.0025		<0.0025	
4/29/2009			0.003	<0.0025					
10/6/2009		0.012							
10/8/2009	0.037								
10/9/2009									0.045
10/13/2009									
10/20/2009			<0.0025				0.0056	<0.0025	
10/21/2009					<0.0025	<0.0025			
10/22/2009				<0.0025					
4/20/2010							<0.0025		
4/21/2010				<0.0025					
4/26/2010			<0.0025						
4/27/2010		0.0095			0.0034			<0.0025	
4/28/2010	0.037					<0.0025			
5/4/2010									0.031
9/28/2010				0.0028					
9/29/2010			<0.0025				<0.0025		
9/30/2010		0.0087							
10/5/2010					<0.0025	<0.0025		<0.0025	

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	0.029								
3/30/2015		0.0048 (J)							
3/31/2015	0.026								0.025
4/1/2015				<0.005	<0.005	<0.005			
4/2/2015			<0.005						
4/3/2015							<0.005	<0.005	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.005	
10/7/2015							0.0012 (J)		
10/8/2015									
10/9/2015									
10/10/2015			0.0027 (J)						
10/11/2015		0.0055		<0.005					
10/12/2015	0.05								0.018
10/14/2015					0.0017 (J)				
10/15/2015						<0.005			
3/22/2016									
3/23/2016	0.0297								
3/28/2016		<0.025							0.0256
3/29/2016									
3/30/2016									
3/31/2016			<0.025						
4/4/2016				<0.025	<0.025	<0.025			
4/5/2016							<0.025	<0.025	
7/29/2016	0.0419								
8/1/2016		0.0025 (J)							0.0178 (J)
8/2/2016									
8/3/2016				<0.025	<0.025				
8/4/2016						<0.025			
8/5/2016			<0.025						
8/9/2016							<0.025		
3/30/2017	0.0392								
4/3/2017									0.0272
4/6/2017									
4/7/2017		0.003 (J)							
4/10/2017			<0.025	<0.025					
4/11/2017					0.0003 (J)		<0.025	0.0003 (J)	
4/12/2017						0.0003 (J)			
10/2/2017		0.0031 (J)							
10/3/2017									0.0239 (J)
10/4/2017	0.0343		<0.025	<0.025	<0.025				
10/5/2017							<0.025		
10/6/2017								<0.025	
10/9/2017						0.0005 (J)			
3/16/2018		0.0037 (J)							
3/19/2018	0.033								0.021 (J)
3/20/2018			<0.025						
3/21/2018				<0.025		<0.025			
3/22/2018					<0.025		<0.025		
3/23/2018								<0.025	

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
9/17/2018	0.033	0.0028 (J)							0.018 (J)
9/18/2018			<0.025	<0.025	<0.025				
9/19/2018						<0.025	<0.025	<0.025	
3/19/2019		0.0023 (X)							
3/20/2019	0.026								0.023 (X)
3/21/2019									
3/22/2019			<0.025				<0.025 (D)	<0.025 (D)	
3/23/2019				<0.025	<0.025	<0.025			
5/6/2019									
9/13/2019	0.026	0.0023 (X)							
9/16/2019									0.016 (X)
9/17/2019			<0.025	<0.025	<0.025		<0.025	<0.025	
9/18/2019						0.00057 (X)			

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	0.0033			
8/23/2007				<0.0025
8/24/2007				
10/25/2007	<0.0025			
11/1/2007				0.0047
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				0.0067 (J)
11/20/2007	0.0052			
1/15/2008				0.01
1/16/2008				
1/23/2008	0.0069			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				0.007
3/10/2008				
3/11/2008	0.0029			
5/7/2008				
5/12/2008				
5/13/2008				<0.0025
5/14/2008	0.0035			
12/2/2008				
12/5/2008				
12/11/2008	<0.0025			
12/12/2008				0.0048
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				0.0042
4/23/2009	0.0038			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	0.0032			
10/13/2009				0.0034
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.0025
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.0025			
9/28/2010				
9/29/2010				<0.0025
9/30/2010				
10/5/2010				

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	0.0029			
10/12/2010				
4/12/2011				
4/13/2011				<0.0025
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.0025			
4/28/2011				
10/4/2011				
10/5/2011				<0.013
10/12/2011				
10/13/2011				
10/18/2011	<0.013			
10/19/2011				
4/3/2012				
4/4/2012				<0.005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.005			
10/2/2012				
10/3/2012				
10/8/2012	<0.005			<0.005
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.005
4/9/2013				
4/10/2013	<0.005			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.005			
10/9/2013				<0.005
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.000825
4/10/2014				
4/14/2014	0.005 (J)			
4/21/2014				
4/23/2014				
9/30/2014				<0.005
10/1/2014				
10/2/2014				
10/3/2014	0.00091 (J)			

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

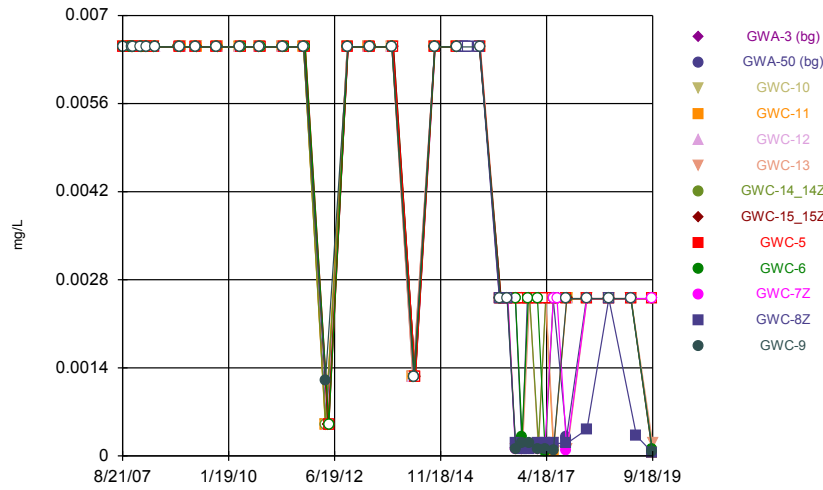
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	0.0011 (J)			
4/2/2015				<0.005
4/3/2015				
5/26/2015			<0.005	
6/18/2015			0.005 (D)	
7/2/2015			<0.005	
10/6/2015				
10/7/2015				
10/8/2015			0.00091 (J)	
10/9/2015	<0.005			
10/10/2015				0.0022 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.025	
3/23/2016				
3/28/2016				
3/29/2016	<0.025			
3/30/2016				<0.025
3/31/2016				
4/4/2016				
4/5/2016				
7/29/2016				
8/1/2016	<0.025			
8/2/2016		<0.025	<0.025	
8/3/2016				
8/4/2016				
8/5/2016				<0.025
8/9/2016				
3/30/2017				
4/3/2017				
4/6/2017	<0.025	0.0004 (J)		0.0003 (J)
4/7/2017			<0.025	
4/10/2017				
4/11/2017				
4/12/2017				
10/2/2017				
10/3/2017	<0.025	0.0006 (J)	0.0003 (J)	<0.025
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.025			
3/20/2018		<0.025	<0.025	<0.025
3/21/2018				
3/22/2018				
3/23/2018				

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

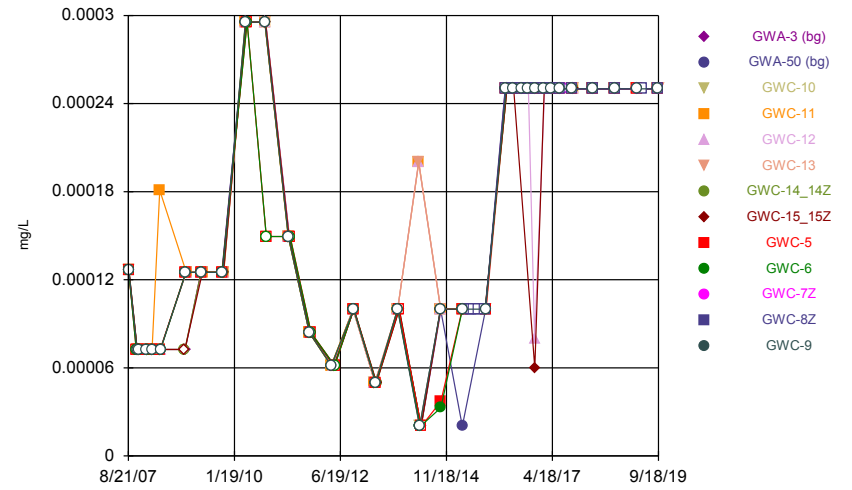
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
9/17/2018	<0.025			
9/18/2018		<0.025	<0.025	<0.025 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	0.0018 (X)	<0.025		<0.025
3/22/2019				
3/23/2019				
5/6/2019			<0.025	
9/13/2019		0.00025 (X)		
9/16/2019	<0.025		<0.025	0.00021 (X)
9/17/2019				
9/18/2019				

Time Series



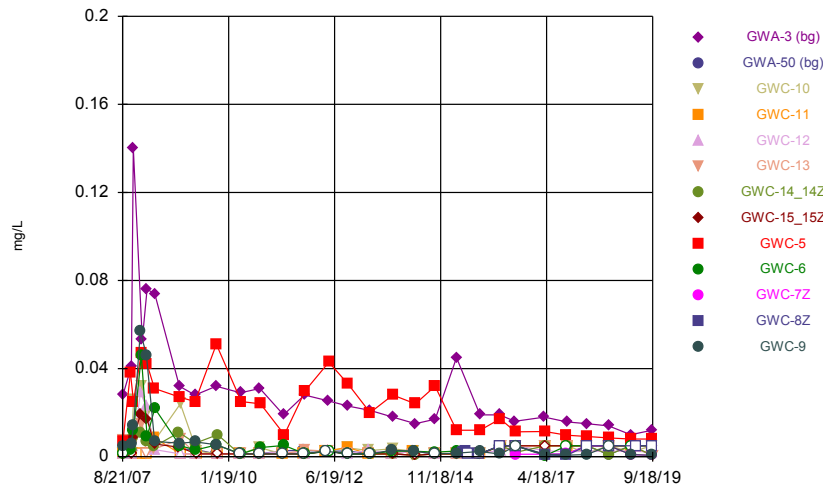
Constituent: Lead Analysis Run 11/7/2019 8:59 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



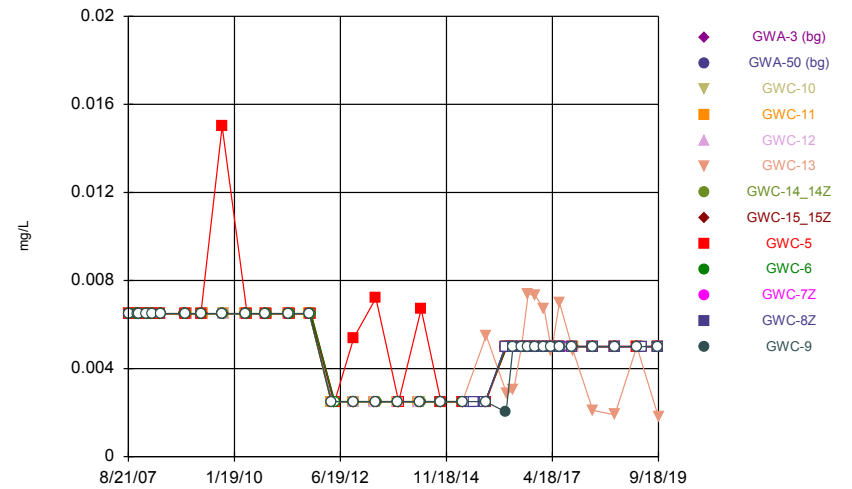
Constituent: Mercury Analysis Run 11/7/2019 8:59 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Nickel Analysis Run 11/7/2019 8:59 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Selenium Analysis Run 11/7/2019 8:59 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.013	<0.013	<0.013	<0.013			
8/22/2007									
8/23/2007	<0.013								<0.013
8/24/2007							<0.013	<0.013	
10/25/2007									<0.013
11/1/2007			<0.013	<0.013	<0.013	<0.013			
11/2/2007	<0.013						<0.013	<0.013	
11/17/2007							<0.013		
11/18/2007	<0.013			<0.013				<0.013	
11/19/2007					<0.013	<0.013			<0.013
11/20/2007			<0.013						
1/15/2008							<0.013	<0.013	
1/16/2008					<0.013				
1/23/2008									<0.013
1/30/2008			<0.013	<0.013					
1/31/2008	<0.013					<0.013			
3/5/2008				<0.013	<0.013	<0.013	<0.013		
3/6/2008			<0.013						
3/10/2008								<0.013	
3/11/2008	<0.013								<0.013
5/7/2008				<0.013			<0.013		
5/12/2008			<0.013			<0.013			<0.013
5/13/2008					<0.013			<0.013	
5/14/2008	<0.013								
12/2/2008							<0.013	<0.013	
12/5/2008	<0.013								
12/11/2008									<0.013
12/12/2008		<0.013							
12/13/2008			<0.013		<0.013	<0.013			
12/14/2008				<0.013					
4/15/2009	<0.013								<0.013
4/16/2009					<0.013		<0.013		
4/23/2009		<0.013							
4/28/2009						<0.013		<0.013	
4/29/2009			<0.013	<0.013					
10/6/2009		<0.013							
10/8/2009	<0.013								
10/9/2009									<0.013
10/13/2009									
10/20/2009			<0.013				<0.013	<0.013	
10/21/2009					<0.013	<0.013			
10/22/2009				<0.013					
4/20/2010							<0.013		
4/21/2010				<0.013					
4/26/2010			<0.013						
4/27/2010		<0.013			<0.013			<0.013	
4/28/2010	<0.013					<0.013			
5/4/2010									<0.013
9/28/2010				<0.013					
9/29/2010			<0.013				<0.013		
9/30/2010		<0.013							
10/5/2010					<0.013	<0.013		<0.013	

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	<0.013								
3/30/2015		<0.013							
3/31/2015	<0.013								<0.013
4/1/2015				<0.013	<0.013	<0.013			
4/2/2015			<0.013						
4/3/2015							<0.013	<0.013	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.013	
10/7/2015							<0.013		
10/8/2015									
10/9/2015									
10/10/2015			<0.013						
10/11/2015		<0.013		<0.013					
10/12/2015	<0.013								<0.013
10/14/2015					<0.013				
10/15/2015						<0.013			
3/22/2016									
3/23/2016	<0.005								
3/28/2016		<0.005							<0.005
3/29/2016									
3/30/2016									
3/31/2016			<0.005						
4/4/2016				<0.005	<0.005	<0.005			
4/5/2016							<0.005	<0.005	
5/23/2016	<0.005	<0.005							
5/24/2016									
5/25/2016									<0.005
5/26/2016			<0.005	<0.005					
5/27/2016					<0.005				
5/31/2016						<0.005		<0.005	
6/1/2016							<0.005		
7/29/2016	<0.005								
8/1/2016		<0.005							<0.005
8/2/2016									
8/3/2016				<0.005	<0.005				
8/4/2016						0.0001 (J)			
8/5/2016			<0.005						
8/9/2016							<0.005		
9/22/2016	<0.005 (*)								
9/26/2016		0.0001 (J)							
9/27/2016									<0.005
9/28/2016			<0.005	<0.005					
9/29/2016						0.0001 (J)			
9/30/2016					<0.005				
11/10/2016	<0.005	<0.005							
11/11/2016									<0.005
11/18/2016									
11/21/2016									
11/22/2016			<0.005	<0.005	<0.005				
11/23/2016								<0.005	

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/28/2016						<0.005	<0.005		
1/30/2017		<0.005							
1/31/2017	<0.005								<0.005
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.005						
2/8/2017				<0.005					
2/9/2017						0.0001 (J)	0.0002 (J)		
2/10/2017								<0.005	
2/13/2017					<0.005				
3/30/2017	<0.005								
4/3/2017									<0.005
4/6/2017									
4/7/2017		<0.005							
4/10/2017			<0.005	<0.005					
4/11/2017					<0.005 (*)		<0.005	<0.005 (*)	
4/12/2017						<0.005 (*)			
6/12/2017	<0.005	<0.005							<0.005
6/13/2017									
6/14/2017			<0.005		<0.005		<0.005		
6/15/2017				9E-05 (J)				<0.005	
6/16/2017						0.0002 (J)			
7/12/2017							<0.005	<0.005	
7/14/2017									
7/26/2017								<0.005	
10/2/2017		0.0003 (J)							
10/3/2017									<0.005
10/4/2017	<0.005		<0.005	<0.005	<0.005				
10/5/2017							<0.005		
10/6/2017								<0.005	
10/9/2017						0.0001 (J)			
3/16/2018		<0.005							
3/19/2018	<0.005								<0.005
3/20/2018			<0.005						
3/21/2018				<0.005		<0.005			
3/22/2018					<0.005		<0.005		
3/23/2018								<0.005	
9/17/2018	<0.005	<0.005							<0.005
9/18/2018			<0.005	<0.005	<0.005				
9/19/2018						<0.005	<0.005	<0.005	
3/19/2019		<0.005							
3/20/2019	<0.005								<0.005
3/21/2019									
3/22/2019			<0.005				<0.005 (D)	<0.005 (D)	
3/23/2019				<0.005	<0.005	<0.005			
5/6/2019									
9/13/2019	<0.005	<0.005							
9/16/2019									<0.005
9/17/2019			4.7E-05 (X)	4.6E-05 (X)	<0.005		<0.005	<0.005	
9/18/2019						0.0002 (X)			

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.013			
8/23/2007				<0.013
8/24/2007				
10/25/2007	<0.013			
11/1/2007				<0.013
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				<0.013
11/20/2007	<0.013			
1/15/2008				<0.013
1/16/2008				
1/23/2008	<0.013			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				<0.013
3/10/2008				
3/11/2008	<0.013			
5/7/2008				
5/12/2008				
5/13/2008				<0.013
5/14/2008	<0.013			
12/2/2008				
12/5/2008				
12/11/2008	<0.013			
12/12/2008				<0.013
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				<0.013
4/23/2009	<0.013			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	<0.013			
10/13/2009				<0.013
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.013
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.013			
9/28/2010				
9/29/2010				<0.013
9/30/2010				
10/5/2010				

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	<0.013			
10/12/2010				
4/12/2011				
4/13/2011				<0.013
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.013			
4/28/2011				
10/4/2011				
10/5/2011				<0.013
10/12/2011				
10/13/2011				
10/18/2011	<0.013			
10/19/2011				
4/3/2012				
4/4/2012				0.0012
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.001			
10/2/2012				
10/3/2012				
10/8/2012	<0.013			<0.013
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.013
4/9/2013				
4/10/2013	<0.013			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.013			
10/9/2013				<0.013
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.0025
4/10/2014				
4/14/2014	<0.0025			
4/21/2014				
4/23/2014				
9/30/2014				<0.013
10/1/2014				
10/2/2014				
10/3/2014	<0.013			

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	<0.013			
4/2/2015				<0.013
4/3/2015				
5/26/2015			<0.013	
6/18/2015			<0.013 (D)	
7/2/2015			<0.013	
10/6/2015				
10/7/2015				
10/8/2015			<0.013	
10/9/2015	<0.013			
10/10/2015				<0.013 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.005	
3/23/2016				
3/28/2016				
3/29/2016	<0.005			
3/30/2016				<0.005
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.005			
5/25/2016			<0.005	
5/26/2016				<0.005
5/27/2016				
5/31/2016		<0.005		
6/1/2016				
7/29/2016				
8/1/2016	<0.005			
8/2/2016		0.0001 (J)	0.0002 (J)	
8/3/2016				
8/4/2016				
8/5/2016				0.0001 (J)
8/9/2016				
9/22/2016				
9/26/2016	0.0003 (J)		0.0001 (J)	
9/27/2016		0.0001 (J)		
9/28/2016				0.0002 (J)
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.005			
11/21/2016		0.0001 (J)	0.0001 (J)	0.0002 (J)
11/22/2016				
11/23/2016				

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.005	0.0001 (J)		
2/3/2017			0.0002 (J)	
2/6/2017				0.0001 (J)
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	7E-05 (J)	0.0002 (J)		0.0001 (J)
4/7/2017			0.0002 (J)	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.005	<0.005	0.0002 (J)	8E-05 (J)
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		<0.005		
7/26/2017				
10/2/2017				
10/3/2017	<0.005	9E-05 (J)	0.0002 (J)	<0.005
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.005			
3/20/2018		<0.005	0.00042 (J)	<0.005
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.005			
9/18/2018		<0.005	<0.005	<0.005 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.005	<0.005		<0.005
3/22/2019				
3/23/2019				
5/6/2019			0.00032 (X)	
9/13/2019		<0.005		
9/16/2019	0.0001 (X)		5.4E-05 (X)	6.1E-05 (X)
9/17/2019				
9/18/2019				

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.000254	<0.000254	<0.000254	<0.000254			
8/22/2007									
8/23/2007	<0.000254								<0.000254
8/24/2007							<0.000254	<0.000254	
10/25/2007									<0.000145
11/1/2007			<0.000145	<0.000145	<0.000145	<0.000145			
11/2/2007	<0.000145						<0.000145	<0.000145	
11/17/2007							<0.000145		
11/18/2007	<0.000145			<0.000145				<0.000145	
11/19/2007					<0.000145	<0.000145			<0.000145
11/20/2007			<0.000145						
1/15/2008							<0.000145	<0.000145	
1/16/2008					<0.000145				
1/23/2008									<0.000145
1/30/2008			<0.000145	<0.000145					
1/31/2008	<0.000145					<0.000145			
3/5/2008				<0.000145	<0.000145	<0.000145	<0.000145		
3/6/2008			<0.000145						
3/10/2008								<0.000145	
3/11/2008	<0.000145								<0.000145
5/7/2008				0.000181			<0.000145		
5/12/2008			<0.000145			<0.000145			<0.000145
5/13/2008					<0.000145			<0.000145	
5/14/2008	<0.000145								
12/2/2008							<0.000145	<0.000145	
12/5/2008	<0.000145								
12/11/2008									<0.00025
12/12/2008		<0.00025							
12/13/2008			<0.00025		<0.00025	<0.00025			
12/14/2008				<0.00025					
4/15/2009	<0.00025								<0.00025
4/16/2009					<0.00025		<0.00025		
4/23/2009		<0.00025							
4/28/2009						<0.00025		<0.00025	
4/29/2009			<0.00025	<0.00025					
10/6/2009		<0.00025							
10/8/2009	<0.00025								
10/9/2009									<0.00025
10/13/2009									
10/20/2009			<0.00025				<0.00025	<0.00025	
10/21/2009					<0.00025	<0.00025			
10/22/2009				<0.00025					
4/20/2010							<0.000591		
4/21/2010				<0.000591					
4/26/2010			<0.000591						
4/27/2010		<0.000591			<0.000591			<0.000591	
4/28/2010	<0.000591					<0.000591			
5/4/2010									<0.000591
9/28/2010				<0.000591					
9/29/2010			<0.000591				<0.000591		
9/30/2010		<0.000591							
10/5/2010					<0.000591	<0.000591		<0.000591	

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	<0.0002								
3/30/2015		2.02E-05 (J)							
3/31/2015	<0.0002								<0.0002
4/1/2015				<0.0002	<0.0002	<0.0002			
4/2/2015			<0.0002						
4/3/2015							<0.0002	<0.0002	
5/26/2015									
6/18/2015									
7/2/2015									
8/14/2015									
10/6/2015								<0.0002	
10/7/2015							<0.0002		
10/8/2015									
10/9/2015									
10/10/2015			<0.0002						
10/11/2015		<0.0002		<0.0002					
10/12/2015	<0.0002								<0.0002
10/14/2015					<0.0002				
10/15/2015						<0.0002			
3/22/2016									
3/23/2016	<0.0005								
3/28/2016		<0.0005							<0.0005
3/29/2016									
3/30/2016									
3/31/2016			<0.0005						
4/4/2016				<0.0005	<0.0005	<0.0005			
4/5/2016							<0.0005	<0.0005	
5/23/2016	<0.0005	<0.0005							
5/24/2016									
5/25/2016									<0.0005
5/26/2016			<0.0005	<0.0005					
5/27/2016					<0.0005				
5/31/2016						<0.0005		<0.0005	
6/1/2016							<0.0005		
7/29/2016	<0.0005								
8/1/2016		<0.0005							<0.0005
8/2/2016									
8/3/2016				<0.0005	<0.0005				
8/4/2016						<0.0005			
8/5/2016			<0.0005						
8/9/2016							<0.0005		
9/22/2016	<0.0005								
9/26/2016		<0.0005							
9/27/2016									<0.0005
9/28/2016			<0.0005	<0.0005					
9/29/2016						<0.0005			
9/30/2016					<0.0005				
11/10/2016	<0.0005	<0.0005							
11/11/2016									<0.0005
11/18/2016									
11/21/2016									
11/22/2016			<0.0005	<0.0005	8E-05 (J)				

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z 6E-05 (J)	GWC-5
11/23/2016									
11/28/2016						<0.0005	<0.0005		
1/30/2017		<0.0005							
1/31/2017	<0.0005 (*)								<0.0005 (*)
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.0005						
2/8/2017				<0.0005					
2/9/2017						<0.0005	<0.0005		
2/10/2017								<0.0005	
2/13/2017					<0.0005				
3/30/2017	<0.0005								
4/3/2017									<0.0005
4/6/2017									
4/7/2017		<0.0005 (*)							
4/10/2017			<0.0005	<0.0005					
4/11/2017					<0.0005		<0.0005	<0.0005	
4/12/2017						<0.0005			
6/12/2017	<0.0005	<0.0005 (*)							<0.0005
6/13/2017									
6/14/2017			<0.0005 (*)		<0.0005 (*)		<0.0005 (*)		
6/15/2017				<0.0005 (*)				<0.0005 (*)	
6/16/2017						<0.0005 (*)			
7/12/2017							<0.0005	<0.0005	
7/14/2017									
7/26/2017								<0.0005	
10/2/2017		<0.0005							
10/3/2017									<0.0005
10/4/2017	<0.0005		<0.0005	<0.0005	<0.0005				
10/5/2017							<0.0005		
10/6/2017								<0.0005	
10/9/2017						<0.0005			
3/16/2018		<0.0005							
3/19/2018	<0.0005								<0.0005
3/20/2018			<0.0005						
3/21/2018				<0.0005		<0.0005			
3/22/2018					<0.0005		<0.0005		
3/23/2018								<0.0005	
9/17/2018	<0.0005	<0.0005							<0.0005
9/18/2018			<0.0005	<0.0005	<0.0005				
9/19/2018						<0.0005	<0.0005	<0.0005	
3/19/2019		<0.0005							
3/20/2019	<0.0005								<0.0005
3/21/2019									
3/22/2019			<0.0005				<0.0005 (D)	<0.0005 (D)	
3/23/2019				<0.0005	<0.0005	<0.0005			
5/6/2019									
9/13/2019	<0.0005	<0.0005							
9/16/2019									<0.0005
9/17/2019			<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	
9/18/2019						<0.0005			

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.000254			
8/23/2007				<0.000254
8/24/2007				
10/25/2007	<0.000145			
11/1/2007				<0.000145
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				<0.000145
11/20/2007	<0.000145			
1/15/2008				<0.000145
1/16/2008				
1/23/2008	<0.000145			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				<0.000145
3/10/2008				
3/11/2008	<0.000145			
5/7/2008				
5/12/2008				
5/13/2008				<0.000145
5/14/2008	<0.000145			
12/2/2008				
12/5/2008				
12/11/2008	<0.00025			
12/12/2008				<0.00025
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				<0.00025
4/23/2009	<0.00025			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	<0.00025			
10/13/2009				<0.00025
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.000591
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.000591			
9/28/2010				
9/29/2010				<0.000591
9/30/2010				
10/5/2010				

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	<0.000299			
10/12/2010				
4/12/2011				
4/13/2011				<0.000299
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.000299			
4/28/2011				
10/4/2011				
10/5/2011				<0.000168
10/12/2011				
10/13/2011				
10/18/2011	<0.000168			
10/19/2011				
4/3/2012				
4/4/2012				<0.000123
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.000123			
10/2/2012				
10/3/2012				
10/8/2012	<0.0002			<0.0002
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.0001
4/9/2013				
4/10/2013	<0.0001			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.0002			
10/9/2013				<0.0002
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<4.02E-05
4/10/2014				
4/14/2014	<4.02E-05			
4/21/2014				
4/23/2014				
9/30/2014				<0.0002
10/1/2014				
10/2/2014				
10/3/2014	3.29E-05 (J)			

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	<0.0002			
4/2/2015				<0.0002
4/3/2015				
5/26/2015			<0.0002	
6/18/2015			<0.0002 (D)	
7/2/2015			<0.0002	
8/14/2015			<0.0002 (D)	
10/6/2015				
10/7/2015				
10/8/2015			<0.0002	
10/9/2015	<0.0002			
10/10/2015				<0.0002 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.0005	
3/23/2016				
3/28/2016				
3/29/2016	<0.0005			
3/30/2016				<0.0005
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.0005			
5/25/2016			<0.0005	
5/26/2016				<0.0005
5/27/2016				
5/31/2016		<0.0005		
6/1/2016				
7/29/2016				
8/1/2016	<0.0005			
8/2/2016		<0.0005	<0.0005	
8/3/2016				
8/4/2016				
8/5/2016				<0.0005
8/9/2016				
9/22/2016				
9/26/2016	<0.0005		<0.0005	
9/27/2016		<0.0005		
9/28/2016				<0.0005
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.0005			
11/21/2016		<0.0005	<0.0005	<0.0005
11/22/2016				

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.0005 (*)	<0.0005		
2/3/2017			<0.0005	
2/6/2017				<0.0005
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<0.0005	<0.0005		<0.0005
4/7/2017			<0.0005 (*)	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.0005 (*)	<0.0005 (*)	<0.0005 (*)	<0.0005 (*)
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		<0.0005		
7/26/2017				
10/2/2017				
10/3/2017	<0.0005	<0.0005	<0.0005	<0.0005
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.0005			
3/20/2018		<0.0005	<0.0005	<0.0005
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.0005			
9/18/2018		<0.0005	<0.0005	<0.0005 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.0005	<0.0005		<0.0005
3/22/2019				
3/23/2019				
5/6/2019			<0.0005	
9/13/2019		<0.0005		
9/16/2019	<0.0005		<0.0005	<0.0005
9/17/2019				
9/18/2019				

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.0025	<0.0025	<0.0025	0.0076			
8/22/2007									
8/23/2007	0.028								0.0069
8/24/2007							<0.0025	<0.0025	
10/25/2007									0.038
11/1/2007			0.0042	<0.0025	<0.0025	0.0043			
11/2/2007	0.041						0.0029	<0.0025	
11/17/2007							0.0086		
11/18/2007	0.14			<0.0025				0.0088 (J)	
11/19/2007					0.0047	0.0061			0.025
11/20/2007			0.026						
1/15/2008							0.011	0.019	
1/16/2008					0.029				
1/23/2008									0.047
1/30/2008			0.032	<0.0025					
1/31/2008	0.053					0.015			
3/5/2008				<0.0025	0.023	<0.0025	0.0072		
3/6/2008			0.019						
3/10/2008								0.017	
3/11/2008	0.076								0.042
5/7/2008				0.0087			0.0045		
5/12/2008			0.0072			0.0035			0.031
5/13/2008					0.0032			0.0058	
5/14/2008	0.074								
12/2/2008							0.011	0.0043	
12/5/2008	0.032								
12/11/2008									0.027
12/12/2008		0.0035							
12/13/2008			0.024		<0.0025	0.0079			
12/14/2008				<0.0025					
4/15/2009	0.028								0.025
4/16/2009					<0.0025		0.0061		
4/23/2009		0.0032							
4/28/2009						<0.0025		<0.0025	
4/29/2009			0.0026	<0.0025					
10/6/2009		<0.0025							
10/8/2009	0.032								
10/9/2009									0.051
10/13/2009									
10/20/2009			<0.0025				0.01	<0.0025	
10/21/2009					<0.0025	<0.0025			
10/22/2009				<0.0025					
4/20/2010							<0.0025		
4/21/2010				<0.0025					
4/26/2010			<0.0025						
4/27/2010		<0.0025			<0.0025			<0.0025	
4/28/2010	0.029					<0.0025			
5/4/2010									0.025
9/28/2010				<0.0025					
9/29/2010			0.0042				<0.0025		
9/30/2010		<0.0025							
10/5/2010					<0.0025	<0.0025		<0.0025	

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	0.017								
3/30/2015		0.0015 (J)							
3/31/2015	0.045								0.012
4/1/2015				<0.0025	0.0014 (J)	<0.0025			
4/2/2015			<0.0025						
4/3/2015							<0.0025	<0.0025	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.0025	
10/7/2015							<0.0025		
10/8/2015									
10/9/2015									
10/10/2015			<0.0025						
10/11/2015		0.0013 (J)		<0.0025					
10/12/2015	0.019								0.012
10/14/2015					0.0021 (J)				
10/15/2015						<0.0025			
3/22/2016									
3/23/2016	0.019								
3/28/2016		<0.01							0.0172
3/29/2016									
3/30/2016									
3/31/2016			<0.01						
4/4/2016				<0.01	0.00264 (J)	<0.01			
4/5/2016							<0.01	<0.01	
7/29/2016	0.0161								
8/1/2016		<0.01 (*)							0.0113
8/2/2016									
8/3/2016				<0.01	<0.01 (*)				
8/4/2016						<0.01			
8/5/2016			<0.01 (*)						
8/9/2016							0.0021 (J)		
3/30/2017	0.018								
4/3/2017									0.0114
4/6/2017									
4/7/2017		0.0011 (J)							
4/10/2017			<0.01 (*)	<0.01 (*)					
4/11/2017					0.0027 (J)		<0.01	<0.01 (*)	
4/12/2017						<0.01 (*)			
10/2/2017		0.0013 (J)							
10/3/2017									0.0098 (J)
10/4/2017	0.0158		<0.01	<0.01	0.0022 (J)				
10/5/2017							<0.01		
10/6/2017								<0.01	
10/9/2017						<0.01			
3/16/2018		<0.01							
3/19/2018	0.015								0.0092 (J)
3/20/2018			0.0016 (J)						
3/21/2018				<0.01		<0.01			
3/22/2018					0.0025 (J)		<0.01		
3/23/2018								<0.01	

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
9/17/2018	0.014	0.00096 (J)							0.0085 (J)
9/18/2018			<0.01	<0.01	0.0024 (J)				
9/19/2018						<0.01	0.00096 (J)	<0.01	
3/19/2019		<0.01							
3/20/2019	0.01								0.008 (X)
3/21/2019									
3/22/2019			0.0022 (X)				<0.01 (D)	<0.01 (D)	
3/23/2019				<0.01	0.0026 (X)	<0.01			
5/6/2019									
9/13/2019	0.012	0.00063 (X)							
9/16/2019									0.008 (X)
9/17/2019			<0.01	<0.01	0.0021 (X)		0.0007 (X)	<0.01	
9/18/2019						0.00046 (X)			

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.0025			
8/23/2007				0.0046
8/24/2007				
10/25/2007	0.0028			
11/1/2007				0.0057
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				0.014 (J)
11/20/2007	0.012			
1/15/2008				0.057
1/16/2008				
1/23/2008	0.046			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				0.046
3/10/2008				
3/11/2008	0.0091			
5/7/2008				
5/12/2008				
5/13/2008				0.0069
5/14/2008	0.022			
12/2/2008				
12/5/2008				
12/11/2008	0.005			
12/12/2008				0.0061
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				0.0067 (J)
4/23/2009	0.0031			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	0.0053			
10/13/2009				0.0054
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.0025
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.0025			
9/28/2010				
9/29/2010				<0.0025
9/30/2010				
10/5/2010				

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	0.0042			
10/12/2010				
4/12/2011				
4/13/2011				<0.0025
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	0.0051			
4/28/2011				
10/4/2011				
10/5/2011				<0.0025
10/12/2011				
10/13/2011				
10/18/2011	<0.0025			
10/19/2011				
4/3/2012				
4/4/2012				<0.005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.005			
10/2/2012				
10/3/2012				
10/8/2012	<0.0025			<0.0025
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.0025
4/9/2013				
4/10/2013	<0.0025			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	0.0025			
10/9/2013				0.0029
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				0.0025 (J)
4/10/2014				
4/14/2014	0.0025 (J)			
4/21/2014				
4/23/2014				
9/30/2014				<0.0025
10/1/2014				
10/2/2014				
10/3/2014	0.0021 (J)			

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	0.0026			
4/2/2015				0.0016 (J)
4/3/2015				
5/26/2015			0.002 (J)	
6/18/2015			0.0025 (D)	
7/2/2015			<0.0025	
10/6/2015				
10/7/2015				
10/8/2015			<0.0025	
10/9/2015	<0.0025			
10/10/2015				0.002325 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.01	
3/23/2016				
3/28/2016				
3/29/2016	<0.01			
3/30/2016				0.00116 (J)
3/31/2016				
4/4/2016				
4/5/2016				
7/29/2016				
8/1/2016	<0.01			
8/2/2016		0.0011 (J)	<0.01 (*)	
8/3/2016				
8/4/2016				
8/5/2016				<0.01
8/9/2016				
3/30/2017				
4/3/2017				
4/6/2017	0.0005 (J)	0.0011 (J)		0.001 (J)
4/7/2017			0.0007 (J)	
4/10/2017				
4/11/2017				
4/12/2017				
10/2/2017				
10/3/2017	<0.01	0.0012 (J)	0.0006 (J)	0.0007 (J)
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.01			
3/20/2018		<0.01	<0.01	0.00097 (J)
3/21/2018				
3/22/2018				
3/23/2018				

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
9/17/2018	<0.01			
9/18/2018		<0.01	<0.01	<0.01 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.01	0.00099 (X)		0.001 (X)
3/22/2019				
3/23/2019				
5/6/2019			<0.01	
9/13/2019		0.00061 (X)		
9/16/2019	<0.01		<0.01	0.00062 (X)
9/17/2019				
9/18/2019				

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.013	<0.013	<0.013	<0.013			
8/22/2007									
8/23/2007	<0.013								<0.013
8/24/2007							<0.013	<0.013	
10/25/2007									<0.013
11/1/2007			<0.013	<0.013	<0.013	<0.013			
11/2/2007	<0.013						<0.013	<0.013	
11/17/2007							<0.013		
11/18/2007	<0.013			<0.013				<0.013	
11/19/2007					<0.013	<0.013			<0.013
11/20/2007			<0.013						
1/15/2008							<0.013	<0.013	
1/16/2008					<0.013				
1/23/2008									<0.013
1/30/2008			<0.013	<0.013					
1/31/2008	<0.013					<0.013			
3/5/2008				<0.013	<0.013	<0.013	<0.013		
3/6/2008			<0.013						
3/10/2008								<0.013	
3/11/2008	<0.013								<0.013
5/7/2008				<0.013			<0.013		
5/12/2008			<0.013			<0.013			<0.013
5/13/2008					<0.013			<0.013	
5/14/2008	<0.013								
12/2/2008							<0.013	<0.013	
12/5/2008	<0.013								
12/11/2008									<0.013
12/12/2008		<0.013							
12/13/2008			<0.013		<0.013	<0.013			
12/14/2008				<0.013					
4/15/2009	<0.013								<0.013
4/16/2009					<0.013		<0.013		
4/23/2009		<0.013							
4/28/2009						<0.013		<0.013	
4/29/2009			<0.013	<0.013					
10/6/2009		<0.013							
10/8/2009	<0.013								
10/9/2009									0.015
10/13/2009									
10/20/2009			<0.013				<0.013	<0.013	
10/21/2009					<0.013	<0.013			
10/22/2009				<0.013					
4/20/2010							<0.013		
4/21/2010				<0.013					
4/26/2010			<0.013						
4/27/2010		<0.013			<0.013			<0.013	
4/28/2010	<0.013					<0.013			
5/4/2010									<0.013
9/28/2010				<0.013					
9/29/2010			<0.013				<0.013		
9/30/2010		<0.013							
10/5/2010					<0.013	<0.013		<0.013	

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	<0.005								
3/30/2015		<0.005							
3/31/2015	<0.005								<0.005
4/1/2015				<0.005	<0.005	<0.005			
4/2/2015			<0.005						
4/3/2015							<0.005	<0.005	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.005	
10/7/2015							<0.005		
10/8/2015									
10/9/2015									
10/10/2015			<0.005						
10/11/2015		<0.005		<0.005					
10/12/2015	<0.005								<0.005
10/14/2015					<0.005				
10/15/2015						0.0055			
3/22/2016									
3/23/2016	<0.01								
3/28/2016		<0.01							<0.01
3/29/2016									
3/30/2016									
3/31/2016			<0.01						
4/4/2016				<0.01	<0.01	0.00286 (J)			
4/5/2016							<0.01	<0.01	
5/23/2016	<0.01	<0.01							
5/24/2016									
5/25/2016									<0.01
5/26/2016			<0.01	<0.01					
5/27/2016					<0.01				
5/31/2016						0.00303 (J)		<0.01	
6/1/2016							<0.01		
7/29/2016	<0.01								
8/1/2016		<0.01							<0.01
8/2/2016									
8/3/2016				<0.01	<0.01				
8/4/2016						0.005 (J)			
8/5/2016			<0.01						
8/9/2016							<0.01		
9/22/2016	<0.01								
9/26/2016		<0.01							
9/27/2016									<0.01
9/28/2016			<0.01	<0.01					
9/29/2016						0.0074 (J)			
9/30/2016					<0.01				
11/10/2016	<0.01	<0.01							
11/11/2016									<0.01
11/18/2016									
11/21/2016									
11/22/2016			<0.01	<0.01	<0.01				
11/23/2016							<0.01		

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
11/28/2016						0.0073 (J)	<0.01		
1/30/2017		<0.01							
1/31/2017	<0.01								<0.01
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.01						
2/8/2017				<0.01					
2/9/2017						0.0067 (J)	<0.01		
2/10/2017								<0.01	
2/13/2017					<0.01				
3/30/2017	<0.01								
4/3/2017									<0.01
4/6/2017									
4/7/2017		<0.01							
4/10/2017			<0.01	<0.01					
4/11/2017					<0.01		<0.01	<0.01	
4/12/2017						0.0048 (J)			
6/12/2017	<0.01	<0.01							<0.01
6/13/2017									
6/14/2017			<0.01		<0.01		<0.01		
6/15/2017				<0.01				<0.01	
6/16/2017						0.007 (J)			
7/12/2017							<0.01	<0.01	
7/14/2017									
7/26/2017								<0.01	
10/2/2017		<0.01							
10/3/2017									<0.01
10/4/2017	<0.01		<0.01	<0.01	<0.01				
10/5/2017							<0.01		
10/6/2017								<0.01	
10/9/2017						0.0048 (J)			
3/16/2018		<0.01							
3/19/2018	<0.01								<0.01
3/20/2018			<0.01						
3/21/2018				<0.01		0.0021 (J)			
3/22/2018					<0.01		<0.01		
3/23/2018								<0.01	
9/17/2018	<0.01	<0.01							<0.01
9/18/2018			<0.01	<0.01	<0.01				
9/19/2018						0.0019 (J)	<0.01	<0.01	
3/19/2019		<0.01							
3/20/2019	<0.01								<0.01
3/21/2019									
3/22/2019			<0.01				<0.01 (D)	<0.01 (D)	
3/23/2019				<0.01	<0.01	<0.01			
5/6/2019									
9/13/2019	<0.01	<0.01							
9/16/2019									<0.01
9/17/2019			<0.01	<0.01	<0.01		<0.01	<0.01	
9/18/2019						0.0018 (X)			

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.013			
8/23/2007				<0.013
8/24/2007				
10/25/2007	<0.013			
11/1/2007				<0.013
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				<0.013
11/20/2007	<0.013			
1/15/2008				<0.013
1/16/2008				
1/23/2008	<0.013			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				<0.013
3/10/2008				
3/11/2008	<0.013			
5/7/2008				
5/12/2008				
5/13/2008				<0.013
5/14/2008	<0.013			
12/2/2008				
12/5/2008				
12/11/2008	<0.013			
12/12/2008				<0.013
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				<0.013
4/23/2009	<0.013			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	<0.013			
10/13/2009				<0.013
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.013
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.013			
9/28/2010				
9/29/2010				<0.013
9/30/2010				
10/5/2010				

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	<0.013			
10/12/2010				
4/12/2011				
4/13/2011				<0.013
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.013			
4/28/2011				
10/4/2011				
10/5/2011				<0.013
10/12/2011				
10/13/2011				
10/18/2011	<0.013			
10/19/2011				
4/3/2012				
4/4/2012				<0.005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.005			
10/2/2012				
10/3/2012				
10/8/2012	<0.005			<0.005
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.005
4/9/2013				
4/10/2013	<0.005			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.005			
10/9/2013				<0.005
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.005
4/10/2014				
4/14/2014	<0.005			
4/21/2014				
4/23/2014				
9/30/2014				<0.005
10/1/2014				
10/2/2014				
10/3/2014	<0.005			

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

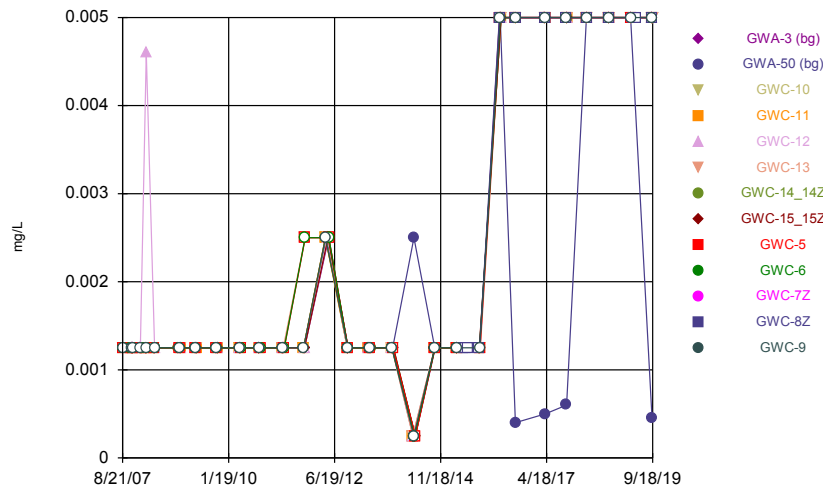
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	<0.005			
4/2/2015				<0.005
4/3/2015				
5/26/2015			<0.005	
6/18/2015			<0.005 (D)	
7/2/2015			<0.005	
10/6/2015				
10/7/2015				
10/8/2015			<0.005	
10/9/2015	<0.005			
10/10/2015				<0.005 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.01	
3/23/2016				
3/28/2016				
3/29/2016	<0.01			
3/30/2016				0.00202 (J)
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.01			
5/25/2016			<0.01	
5/26/2016				<0.01
5/27/2016				
5/31/2016		<0.01		
6/1/2016				
7/29/2016				
8/1/2016	<0.01			
8/2/2016		<0.01	<0.01	
8/3/2016				
8/4/2016				
8/5/2016				<0.01
8/9/2016				
9/22/2016				
9/26/2016	<0.01		<0.01	
9/27/2016		<0.01		
9/28/2016				<0.01
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.01			
11/21/2016		<0.01	<0.01	<0.01
11/22/2016				
11/23/2016				

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

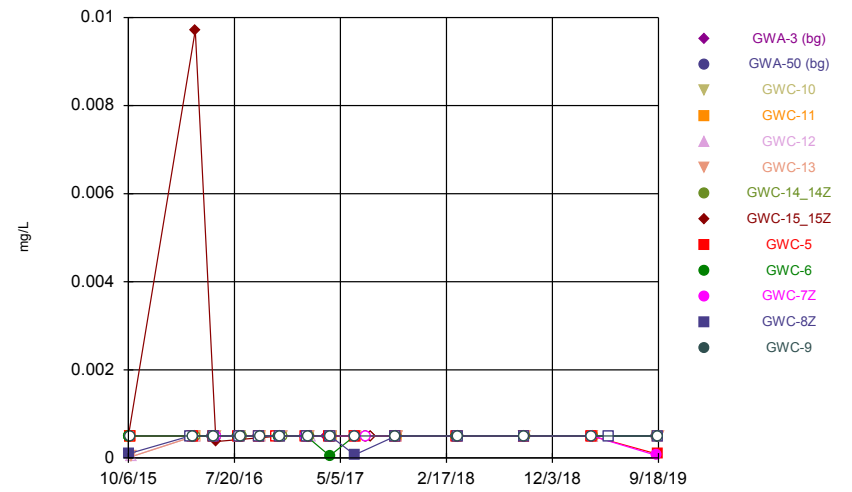
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.01	<0.01		
2/3/2017			<0.01	
2/6/2017				<0.01
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<0.01	<0.01		<0.01
4/7/2017			<0.01	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.01	<0.01	<0.01	<0.01
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		<0.01		
7/26/2017				
10/2/2017				
10/3/2017	<0.01	<0.01	<0.01	<0.01
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.01			
3/20/2018		<0.01	<0.01	<0.01
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.01			
9/18/2018		<0.01	<0.01	<0.01 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.01	<0.01		<0.01
3/22/2019				
3/23/2019				
5/6/2019			<0.01	
9/13/2019		<0.01		
9/16/2019	<0.01		<0.01	<0.01
9/17/2019				
9/18/2019				

Time Series



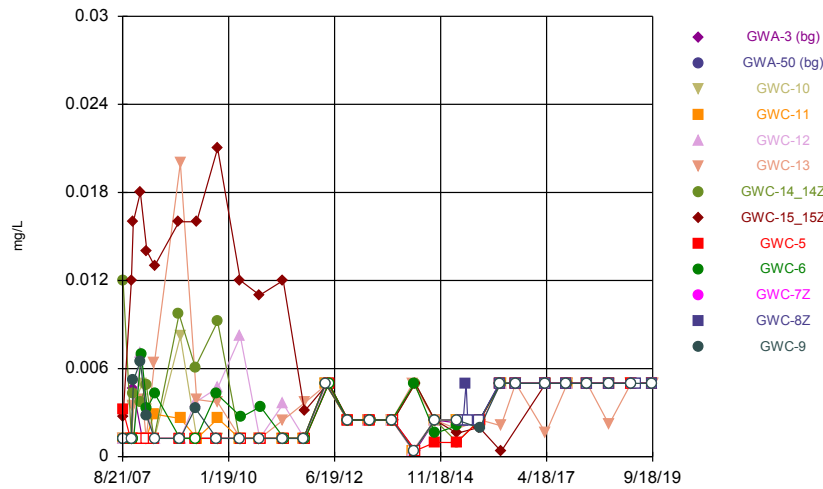
Constituent: Silver Analysis Run 11/7/2019 8:59 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



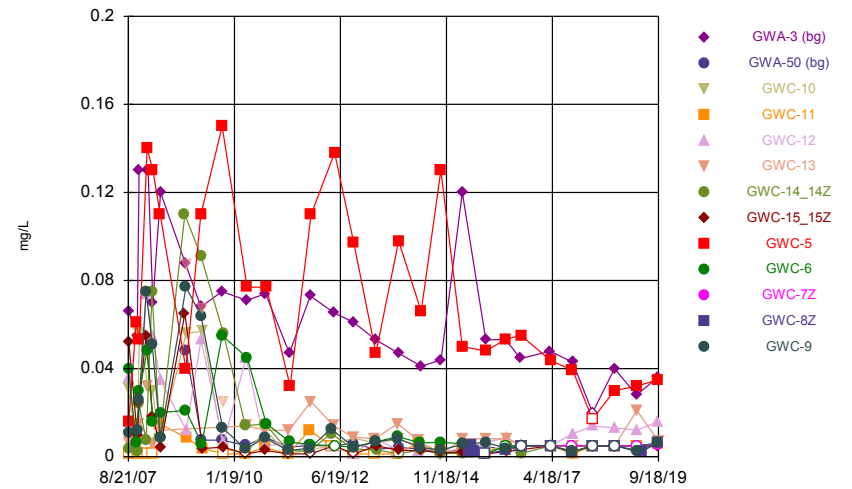
Constituent: Thallium Analysis Run 11/7/2019 8:59 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Vanadium Analysis Run 11/7/2019 8:59 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Zinc Analysis Run 11/7/2019 9:00 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.0025	<0.0025	<0.0025	<0.0025			
8/22/2007									
8/23/2007	<0.0025								<0.0025
8/24/2007							<0.0025	<0.0025	
10/25/2007									<0.0025
11/1/2007			<0.0025	<0.0025	<0.0025	<0.0025			
11/2/2007	<0.0025						<0.0025	<0.0025	
11/17/2007							<0.0025		
11/18/2007	<0.0025			<0.0025				<0.0025	
11/19/2007					<0.0025	<0.0025			<0.0025
11/20/2007			<0.0025						
1/15/2008							<0.0025	<0.0025	
1/16/2008					<0.0025				
1/23/2008									<0.0025
1/30/2008			<0.0025	<0.0025					
1/31/2008	<0.0025					<0.0025			
3/5/2008				<0.0025	0.0046	<0.0025	<0.0025		
3/6/2008			<0.0025						
3/10/2008								<0.0025	
3/11/2008	<0.0025								<0.0025
5/7/2008				<0.0025			<0.0025		
5/12/2008			<0.0025			<0.0025			<0.0025
5/13/2008					<0.0025			<0.0025	
5/14/2008	<0.0025								
12/2/2008							<0.0025	<0.0025	
12/5/2008	<0.0025								
12/11/2008									<0.0025
12/12/2008		<0.0025							
12/13/2008			<0.0025		<0.0025	<0.0025			
12/14/2008				<0.0025					
4/15/2009	<0.0025								<0.0025
4/16/2009					<0.0025		<0.0025		
4/23/2009		<0.0025							
4/28/2009						<0.0025		<0.0025	
4/29/2009			<0.0025	<0.0025					
10/6/2009		<0.0025							
10/8/2009	<0.0025								
10/9/2009									<0.0025
10/13/2009									
10/20/2009			<0.0025				<0.0025	<0.0025	
10/21/2009					<0.0025	<0.0025			
10/22/2009				<0.0025					
4/20/2010							<0.0025		
4/21/2010				<0.0025					
4/26/2010			<0.0025						
4/27/2010		<0.0025			<0.0025			<0.0025	
4/28/2010	<0.0025					<0.0025			
5/4/2010									<0.0025
9/28/2010				<0.0025					
9/29/2010			<0.0025				<0.0025		
9/30/2010		<0.0025							
10/5/2010					<0.0025	<0.0025		<0.0025	

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	<0.0025								
3/30/2015		<0.0025							
3/31/2015	<0.0025								<0.0025
4/1/2015				<0.0025	<0.0025	<0.0025			
4/2/2015			<0.0025						
4/3/2015							<0.0025	<0.0025	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.0025	
10/7/2015							<0.0025		
10/8/2015									
10/9/2015									
10/10/2015			<0.0025						
10/11/2015		<0.0025		<0.0025					
10/12/2015	<0.0025								<0.0025
10/14/2015					<0.0025				
10/15/2015						<0.0025			
3/22/2016									
3/23/2016	<0.01								
3/28/2016		<0.01							<0.01
3/29/2016									
3/30/2016									
3/31/2016			<0.01						
4/4/2016				<0.01	<0.01	<0.01			
4/5/2016							<0.01	<0.01	
7/29/2016	<0.01								
8/1/2016		0.0004 (J)							<0.01
8/2/2016									
8/3/2016				<0.01	<0.01				
8/4/2016						<0.01			
8/5/2016			<0.01						
8/9/2016							<0.01		
3/30/2017	<0.01								
4/3/2017									<0.01
4/6/2017									
4/7/2017		0.0005 (J)							
4/10/2017			<0.01	<0.01					
4/11/2017					<0.01		<0.01	<0.01	
4/12/2017						<0.01			
10/2/2017		0.0006 (J)							
10/3/2017									<0.01
10/4/2017	<0.01		<0.01	<0.01	<0.01				
10/5/2017							<0.01		
10/6/2017								<0.01	
10/9/2017						<0.01			
3/16/2018		<0.01							
3/19/2018	<0.01								<0.01
3/20/2018			<0.01						
3/21/2018				<0.01		<0.01			
3/22/2018					<0.01		<0.01		
3/23/2018								<0.01	

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
9/17/2018	<0.01	<0.01							<0.01
9/18/2018			<0.01	<0.01	<0.01				
9/19/2018						<0.01	<0.01	<0.01	
3/19/2019		<0.01							
3/20/2019	<0.01								<0.01
3/21/2019									
3/22/2019			<0.01				<0.01 (D)	<0.01 (D)	
3/23/2019				<0.01	<0.01	<0.01			
5/6/2019									
9/13/2019	<0.01	0.00045 (X)							
9/16/2019									<0.01
9/17/2019			<0.01	<0.01	<0.01		<0.01	<0.01	
9/18/2019						<0.01			

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.0025			
8/23/2007				<0.0025
8/24/2007				
10/25/2007	<0.0025			
11/1/2007				<0.0025
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				<0.0025
11/20/2007	<0.0025			
1/15/2008				<0.0025
1/16/2008				
1/23/2008	<0.0025			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				<0.0025
3/10/2008				
3/11/2008	<0.0025			
5/7/2008				
5/12/2008				
5/13/2008				<0.0025
5/14/2008	<0.0025			
12/2/2008				
12/5/2008				
12/11/2008	<0.0025			
12/12/2008				<0.0025
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				<0.0025
4/23/2009	<0.0025			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	<0.0025			
10/13/2009				<0.0025
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.0025
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	<0.0025			
9/28/2010				
9/29/2010				<0.0025
9/30/2010				
10/5/2010				

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	<0.0025			
10/12/2010				
4/12/2011				
4/13/2011				<0.0025
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.0025			
4/28/2011				
10/4/2011				
10/5/2011				<0.0025
10/12/2011				
10/13/2011				
10/18/2011	<0.005			
10/19/2011				
4/3/2012				
4/4/2012				<0.005
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.005			
10/2/2012				
10/3/2012				
10/8/2012	<0.0025			<0.0025
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.0025
4/9/2013				
4/10/2013	<0.0025			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.0025			
10/9/2013				<0.0025
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.0005
4/10/2014				
4/14/2014	<0.0005			
4/21/2014				
4/23/2014				
9/30/2014				<0.0025
10/1/2014				
10/2/2014				
10/3/2014	<0.0025			

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	<0.0025			
4/2/2015				<0.0025
4/3/2015				
5/26/2015			<0.0025	
6/18/2015			<0.0025 (D)	
7/2/2015			<0.0025	
10/6/2015				
10/7/2015				
10/8/2015			<0.0025	
10/9/2015	<0.0025			
10/10/2015				<0.0025 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.01	
3/23/2016				
3/28/2016				
3/29/2016	<0.01			
3/30/2016				<0.01
3/31/2016				
4/4/2016				
4/5/2016				
7/29/2016				
8/1/2016	<0.01			
8/2/2016		<0.01	<0.01	
8/3/2016				
8/4/2016				
8/5/2016				<0.01
8/9/2016				
3/30/2017				
4/3/2017				
4/6/2017	<0.01	<0.01		<0.01
4/7/2017			<0.01	
4/10/2017				
4/11/2017				
4/12/2017				
10/2/2017				
10/3/2017	<0.01	<0.01	<0.01	<0.01
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.01			
3/20/2018		<0.01	<0.01	<0.01
3/21/2018				
3/22/2018				
3/23/2018				

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
9/17/2018	<0.01			
9/18/2018		<0.01	<0.01	<0.01 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.01	<0.01		<0.01
3/22/2019				
3/23/2019				
5/6/2019			<0.01	
9/13/2019		<0.01		
9/16/2019	<0.01		<0.01	<0.01
9/17/2019				
9/18/2019				

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/6/2015								0.0005 (D)	
10/7/2015							<0.001 (D)		
10/8/2015									
10/9/2015									
10/10/2015			<0.001						
10/11/2015		<0.001		<0.001					
10/12/2015	<0.001								<0.001
10/14/2015					<6E-05				
10/15/2015						<6E-05			
3/22/2016									
3/23/2016	<0.001								
3/28/2016		<0.001							<0.001
3/29/2016									
3/30/2016									
3/31/2016			<0.001						
4/4/2016				<0.001	<0.001	<0.001			
4/5/2016							<0.001	0.00971 (J)	
5/23/2016	<0.001	<0.001							
5/24/2016									
5/25/2016									<0.001
5/26/2016			<0.001	<0.001					
5/27/2016					<0.001				
5/31/2016						<0.001		0.000373 (J)	
6/1/2016							<0.001		
7/29/2016	<0.001								
8/1/2016		<0.001							<0.001
8/2/2016									
8/3/2016				<0.001	<0.001				
8/4/2016						<0.001			
8/5/2016			<0.001						
8/9/2016							<0.001		
9/22/2016	<0.001								
9/26/2016		<0.001							
9/27/2016									<0.001
9/28/2016			<0.001	<0.001					
9/29/2016						<0.001			
9/30/2016					<0.001				
11/10/2016	<0.001	<0.001							
11/11/2016									<0.001
11/18/2016									
11/21/2016									
11/22/2016			<0.001	<0.001	<0.001				
11/23/2016								<0.001	
11/28/2016						<0.001	<0.001		
1/30/2017		<0.001							
1/31/2017	<0.001								<0.001
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.001						
2/8/2017				<0.001					
2/9/2017						<0.001	<0.001		

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
2/10/2017								<0.001	
2/13/2017					<0.001				
3/30/2017	<0.001								
4/3/2017									<0.001
4/6/2017									
4/7/2017		<0.001							
4/10/2017			<0.001	<0.001					
4/11/2017					<0.001		<0.001	<0.001	
4/12/2017						<0.001			
6/12/2017	<0.001	<0.001							<0.001
6/13/2017									
6/14/2017			<0.001		<0.001		<0.001		
6/15/2017				<0.001				<0.001	
6/16/2017						<0.001			
7/12/2017							<0.001	<0.001	
7/14/2017									
7/26/2017								<0.001	
10/2/2017		<0.001							
10/3/2017									<0.001
10/4/2017	<0.001		<0.001	<0.001	<0.001				
10/5/2017							<0.001		
10/6/2017								<0.001	
10/9/2017						<0.001			
3/16/2018		<0.001							
3/19/2018	<0.001								<0.001
3/20/2018			<0.001						
3/21/2018				<0.001		<0.001			
3/22/2018					<0.001		<0.001		
3/23/2018								<0.001	
9/17/2018	<0.001	<0.001							<0.001
9/18/2018			<0.001	<0.001	<0.001				
9/19/2018						<0.001	<0.001	<0.001	
3/19/2019		<0.001							
3/20/2019	<0.001								<0.001
3/21/2019									
3/22/2019			<0.001				<0.001 (D)	<0.001 (D)	
3/23/2019				<0.001	<0.001	<0.001			
5/6/2019									
9/13/2019	<0.001	<0.001							
9/16/2019									8.4E-05 (X)
9/17/2019			<0.001	<0.001	<0.001		<0.001	<0.001	
9/18/2019						<0.001			

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2015				
10/7/2015				
10/8/2015			0.0001 (D)	
10/9/2015	<0.001			
10/10/2015				<0.001
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.001	
3/23/2016				
3/28/2016				
3/29/2016	<0.001			
3/30/2016				<0.001
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.001			
5/25/2016			<0.001	
5/26/2016				<0.001
5/27/2016				
5/31/2016		<0.001		
6/1/2016				
7/29/2016				
8/1/2016	<0.001			
8/2/2016		<0.001	<0.001	
8/3/2016				
8/4/2016				
8/5/2016				<0.001
8/9/2016				
9/22/2016				
9/26/2016	<0.001		<0.001	
9/27/2016		<0.001		
9/28/2016				<0.001
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.001			
11/21/2016		<0.001	<0.001	<0.001
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.001	<0.001		
2/3/2017			<0.001	
2/6/2017				<0.001
2/7/2017				
2/8/2017				
2/9/2017				

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	5E-05 (J)	<0.001		<0.001
4/7/2017			<0.001	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				
6/13/2017	<0.001	<0.001	7E-05 (J)	<0.001
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		<0.001		
7/26/2017				
10/2/2017				
10/3/2017	<0.001	<0.001	<0.001	<0.001
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.001			
3/20/2018		<0.001	<0.001	<0.001
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.001			
9/18/2018		<0.001	<0.001	<0.001 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.001	<0.001		<0.001
3/22/2019				
3/23/2019				
5/6/2019			<0.001	
9/13/2019		5.7E-05 (X)		
9/16/2019	<0.001		<0.001	<0.001
9/17/2019				
9/18/2019				

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			<0.0025	<0.0025	<0.0025	<0.0025			
8/22/2007									
8/23/2007	<0.0025								0.0032
8/24/2007							0.012	0.0027	
10/25/2007									<0.0025
11/1/2007			<0.0025	<0.0025	<0.0025	<0.0025			
11/2/2007	<0.0025						<0.0025	0.012	
11/17/2007							0.0043		
11/18/2007	0.0046			<0.0025				0.016 (J)	
11/19/2007					<0.0025	0.0035			<0.0025
11/20/2007			0.0034						
1/15/2008							0.0037	0.018	
1/16/2008					0.0071				
1/23/2008									<0.0025
1/30/2008			0.005	<0.0025					
1/31/2008	<0.0025					0.0039			
3/5/2008				<0.0025	0.0031	<0.0025	0.0049		
3/6/2008			0.0032						
3/10/2008								0.014	
3/11/2008	<0.0025								<0.0025
5/7/2008				0.0029			<0.0025		
5/12/2008			<0.0025			0.0064			<0.0025
5/13/2008					<0.0025			0.013	
5/14/2008	<0.0025								
12/2/2008							0.0097	0.016	
12/5/2008	<0.0025								
12/11/2008									<0.0025
12/12/2008		<0.0025							
12/13/2008			0.0082		<0.0025	0.02			
12/14/2008				0.0026					
4/15/2009	<0.0025								<0.0025
4/16/2009					0.0037		0.0061		
4/23/2009		<0.0025							
4/28/2009						0.0039		0.016	
4/29/2009			<0.0025	<0.0025					
10/6/2009		<0.0025							
10/8/2009	<0.0025								
10/9/2009									<0.0025
10/13/2009									
10/20/2009			<0.0025				0.0092	0.021	
10/21/2009					0.0047	0.0037			
10/22/2009				0.0026					
4/20/2010							<0.0025		
4/21/2010				<0.0025					
4/26/2010			<0.0025						
4/27/2010		<0.0025			0.0082			0.012	
4/28/2010	<0.0025					<0.0025			
5/4/2010									<0.0025
9/28/2010				<0.0025					
9/29/2010			<0.0025				<0.0025		
9/30/2010		<0.0025							
10/5/2010					<0.0025	<0.0025		0.011	

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	<0.005								
3/30/2015		<0.005							
3/31/2015	0.0023 (J)								0.00096 (J)
4/1/2015				<0.005	<0.005	0.0019 (J)			
4/2/2015			<0.005						
4/3/2015							0.001 (J)	0.0016 (J)	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								0.002 (J)	
10/7/2015							<0.005		
10/8/2015									
10/9/2015									
10/10/2015			<0.005						
10/11/2015		<0.005		<0.005					
10/12/2015	<0.005								<0.005
10/14/2015					0.0022 (J)				
10/15/2015						<0.005			
3/22/2016									
3/23/2016	<0.01								
3/28/2016		<0.01							<0.01
3/29/2016									
3/30/2016									
3/31/2016			<0.01						
4/4/2016				<0.01	<0.01	0.00211 (J)			
4/5/2016							<0.01	0.00036 (J)	
7/29/2016	<0.01								
8/1/2016		<0.01							<0.01
8/2/2016									
8/3/2016				<0.01	<0.01				
8/4/2016						<0.01			
8/5/2016			<0.01						
8/9/2016							<0.01		
3/30/2017	<0.01								
4/3/2017									<0.01
4/6/2017									
4/7/2017		<0.01							
4/10/2017			<0.01	<0.01					
4/11/2017					<0.01		<0.01	<0.01	
4/12/2017						0.0016 (J)			
10/2/2017		<0.01							
10/3/2017									<0.01
10/4/2017	<0.01		<0.01	<0.01	<0.01				
10/5/2017							<0.01		
10/6/2017								<0.01	
10/9/2017						<0.01			
3/16/2018		<0.01							
3/19/2018	<0.01								<0.01
3/20/2018			<0.01						
3/21/2018				<0.01		<0.01			
3/22/2018					<0.01		<0.01		
3/23/2018								<0.01	

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
9/17/2018	<0.01	<0.01							<0.01
9/18/2018			<0.01	<0.01	<0.01				
9/19/2018						0.0022 (J)	<0.01	<0.01	
3/19/2019		<0.01							
3/20/2019	<0.01								<0.01
3/21/2019									
3/22/2019			<0.01				<0.01 (D)	<0.01 (D)	
3/23/2019				<0.01	<0.01	<0.01			
5/6/2019									
9/13/2019	<0.01	<0.01							
9/16/2019									<0.01
9/17/2019			<0.01	<0.01	<0.01		<0.01	<0.01	
9/18/2019						<0.01			

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	<0.0025			
8/23/2007				<0.0025
8/24/2007				
10/25/2007	<0.0025			
11/1/2007				<0.0025
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				0.0052
11/20/2007	<0.0025			
1/15/2008				0.0065
1/16/2008				
1/23/2008	0.007			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				0.0028
3/10/2008				
3/11/2008	0.0033			
5/7/2008				
5/12/2008				
5/13/2008				<0.0025
5/14/2008	0.0043			
12/2/2008				
12/5/2008				
12/11/2008	<0.0025			
12/12/2008				<0.0025
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				0.0033
4/23/2009	<0.0025			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	0.0043			
10/13/2009				<0.0025
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				<0.0025
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	0.0027			
9/28/2010				
9/29/2010				<0.0025
9/30/2010				
10/5/2010				

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	0.0034			
10/12/2010				
4/12/2011				
4/13/2011				<0.0025
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	<0.0025			
4/28/2011				
10/4/2011				
10/5/2011				<0.0025
10/12/2011				
10/13/2011				
10/18/2011	<0.0025			
10/19/2011				
4/3/2012				
4/4/2012				<0.01
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.01			
10/2/2012				
10/3/2012				
10/8/2012	<0.005			<0.005
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				<0.005
4/9/2013				
4/10/2013	<0.005			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	<0.005			
10/9/2013				<0.005
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				<0.000825
4/10/2014				
4/14/2014	0.005 (J)			
4/21/2014				
4/23/2014				
9/30/2014				<0.005
10/1/2014				
10/2/2014				
10/3/2014	0.0016 (J)			

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	0.0021 (J)			
4/2/2015				<0.005
4/3/2015				
5/26/2015			<0.005	
6/18/2015			0.005 (D)	
7/2/2015			<0.005	
10/6/2015				
10/7/2015				
10/8/2015			<0.005	
10/9/2015	<0.005			
10/10/2015				0.00195 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			<0.01	
3/23/2016				
3/28/2016				
3/29/2016	<0.01			
3/30/2016				<0.01
3/31/2016				
4/4/2016				
4/5/2016				
7/29/2016				
8/1/2016	<0.01			
8/2/2016		<0.01	<0.01	
8/3/2016				
8/4/2016				
8/5/2016				<0.01
8/9/2016				
3/30/2017				
4/3/2017				
4/6/2017	<0.01	<0.01		<0.01
4/7/2017			<0.01	
4/10/2017				
4/11/2017				
4/12/2017				
10/2/2017				
10/3/2017	<0.01	<0.01	<0.01	<0.01
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.01			
3/20/2018		<0.01	<0.01	<0.01
3/21/2018				
3/22/2018				
3/23/2018				

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
9/17/2018	<0.01			
9/18/2018		<0.01	<0.01	<0.01 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.01	<0.01		<0.01
3/22/2019				
3/23/2019				
5/6/2019			<0.01	
9/13/2019		<0.01		
9/16/2019	<0.01		<0.01	<0.01
9/17/2019				
9/18/2019				

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
8/21/2007			0.031	<0.0025	0.036	0.0064			
8/22/2007									
8/23/2007	0.066								0.016
8/24/2007							0.0036 (J)	0.052	
10/25/2007									0.061
11/1/2007			0.0041	<0.0025	0.0041	<0.0025			
11/2/2007	0.055						0.0026 (J)	0.01 (J)	
11/17/2007							0.024		
11/18/2007	0.13			<0.0025				0.025 (J)	
11/19/2007					0.015	0.015			0.053
11/20/2007			0.056						
1/15/2008							0.0074	0.055	
1/16/2008					0.074				
1/23/2008									0.14
1/30/2008			0.032	<0.0025					
1/31/2008	0.13					0.032 (o)			
3/5/2008				<0.0025	0.055	0.0061	0.075		
3/6/2008			0.03						
3/10/2008								0.018	
3/11/2008	0.07								0.13
5/7/2008				0.015			0.0088		
5/12/2008			0.008			0.012			0.11
5/13/2008					0.035			0.0044	
5/14/2008	0.12								
12/2/2008							0.11	0.065	
12/5/2008	0.088								
12/11/2008									0.04 (J)
12/12/2008		0.048 (J)							
12/13/2008			0.056		0.012 (J)	0.087 (o)			
12/14/2008				0.0086 (J)					
4/15/2009	0.068								0.11
4/16/2009					0.053		0.091		
4/23/2009		0.0075							
4/28/2009						0.067 (o)		0.0037 (J)	
4/29/2009			0.057	0.0037					
10/6/2009		0.0075							
10/8/2009	0.075								
10/9/2009									0.15
10/13/2009									
10/20/2009			0.0037				0.056	0.0043	
10/21/2009					0.0063	0.025 (o)			
10/22/2009				<0.0025					
4/20/2010							0.014		
4/21/2010				<0.0025					
4/26/2010			<0.0025						
4/27/2010		0.0051			0.045			<0.0025	
4/28/2010	0.071					0.014			
5/4/2010									0.077
9/28/2010				0.0042					
9/29/2010			0.012				0.015		
9/30/2010		0.0089							
10/5/2010					0.0047	0.012		0.0028	

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
10/4/2014	0.044 (V)								
3/30/2015		0.0032							
3/31/2015	0.12								0.05
4/1/2015				0.0017 (J)	0.0035	0.0082			
4/2/2015			0.0023 (J)						
4/3/2015							0.0015 (J)	0.0021 (J)	
5/26/2015									
6/18/2015									
7/2/2015									
10/6/2015								<0.0025	
10/7/2015							<0.0025		
10/8/2015									
10/9/2015									
10/10/2015			0.0024 (J)						
10/11/2015		0.0048		0.0016 (J)					
10/12/2015	0.053								0.048
10/14/2015					0.0066				
10/15/2015						0.0082			
3/22/2016									
3/23/2016	0.0532								
3/28/2016		0.00282 (J)							0.0534
3/29/2016									
3/30/2016									
3/31/2016			<0.01						
4/4/2016				<0.01	0.00858 (J)	0.00818 (J)			
4/5/2016							<0.01	0.00233 (J)	
7/29/2016	0.0446								
8/1/2016		<0.01 (*)							0.055
8/2/2016									
8/3/2016				<0.01 (*)	<0.0102 (*)				
8/4/2016						<0.01 (*)			
8/5/2016			<0.01 (*)						
8/9/2016							0.0016 (J)		
3/30/2017	0.0479								
4/3/2017									0.0436
4/6/2017									
4/7/2017		<0.01 (*)							
4/10/2017			<0.01	<0.01					
4/11/2017					<0.0104 (*)		<0.01 (*)	<0.01 (*)	
4/12/2017						<0.01 (*)			
10/2/2017		0.0015 (J)							
10/3/2017									0.0393
10/4/2017	0.0429		0.0012 (J)	0.0014 (J)	0.0104				
10/5/2017							0.0024 (J)		
10/6/2017								<0.01	
10/9/2017						<0.01			
3/16/2018		<0.01							
3/19/2018	<0.04								<0.034
3/20/2018			<0.01						
3/21/2018				<0.01		<0.01			
3/22/2018					0.014		<0.01		
3/23/2018								<0.01	

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
9/17/2018	0.04	<0.01							0.03
9/18/2018			<0.01	<0.01	0.013				
9/19/2018						<0.01	<0.01	<0.01	
3/19/2019		<0.01							
3/20/2019	0.028								0.032
3/21/2019									
3/22/2019			<0.01				<0.01 (D)	<0.01 (D)	
3/23/2019				<0.01	0.012	0.021			
5/6/2019									
9/13/2019	0.036	0.0061 (X)							
9/16/2019									0.035
9/17/2019			0.0052 (X)	0.0056 (X)	0.016		0.0057 (X)	0.0048 (X)	
9/18/2019						0.007 (X)			

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
8/21/2007				
8/22/2007	0.04			
8/23/2007				0.011
8/24/2007				
10/25/2007	0.0062			
11/1/2007				0.012
11/2/2007				
11/17/2007				
11/18/2007				
11/19/2007				0.026 (J)
11/20/2007	0.03			
1/15/2008				0.075
1/16/2008				
1/23/2008	0.048			
1/30/2008				
1/31/2008				
3/5/2008				
3/6/2008				0.051
3/10/2008				
3/11/2008	0.016			
5/7/2008				
5/12/2008				
5/13/2008				0.0084
5/14/2008	0.02			
12/2/2008				
12/5/2008				
12/11/2008	0.021 (J)			
12/12/2008				0.077
12/13/2008				
12/14/2008				
4/15/2009				
4/16/2009				0.064
4/23/2009	0.0058 (J)			
4/28/2009				
4/29/2009				
10/6/2009				
10/8/2009				
10/9/2009	0.055			
10/13/2009				0.013
10/20/2009				
10/21/2009				
10/22/2009				
4/20/2010				
4/21/2010				0.0035
4/26/2010				
4/27/2010				
4/28/2010				
5/4/2010	0.045			
9/28/2010				
9/29/2010				0.0085
9/30/2010				
10/5/2010				

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/6/2010				
10/11/2010	0.015			
10/12/2010				
4/12/2011				
4/13/2011				0.0028
4/14/2011				
4/19/2011				
4/21/2011				
4/26/2011	0.0067			
4/28/2011				
10/4/2011				
10/5/2011				0.0038
10/12/2011				
10/13/2011				
10/18/2011	0.0055			
10/19/2011				
4/3/2012				
4/4/2012				0.0126
4/11/2012				
4/24/2012				
4/25/2012				
5/1/2012				
5/2/2012	<0.01			
10/2/2012				
10/3/2012				
10/8/2012	0.0043			0.0043
10/9/2012				
10/10/2012				
4/2/2013				
4/3/2013				
4/8/2013				0.0068
4/9/2013				
4/10/2013	0.0067			
4/11/2013				
4/15/2013				
4/16/2013				
10/8/2013	0.0091			
10/9/2013				0.0082
10/15/2013				
10/16/2013				
10/22/2013				
4/1/2014				
4/2/2014				
4/9/2014				0.0043
4/10/2014				
4/14/2014	0.0063			
4/21/2014				
4/23/2014				
9/30/2014				0.0029
10/1/2014				
10/2/2014				
10/3/2014	0.0065 (V)			

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

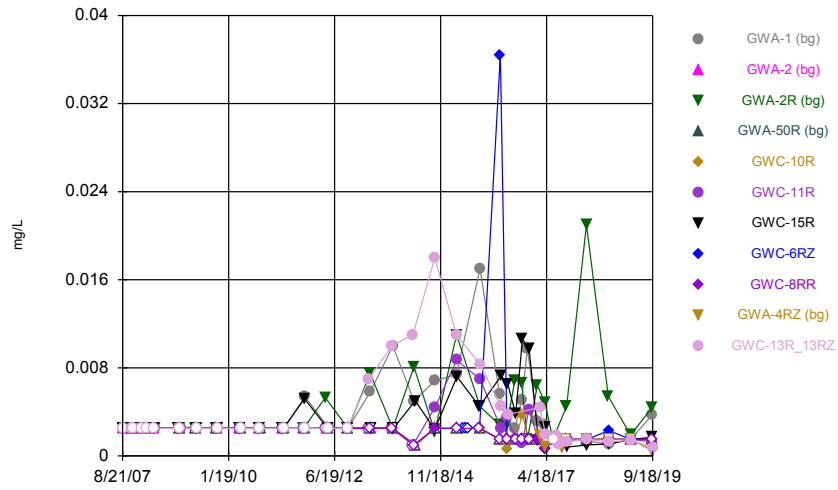
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
10/4/2014				
3/30/2015				
3/31/2015				
4/1/2015	0.0059			
4/2/2015				0.0056
4/3/2015				
5/26/2015			0.0017 (J)	
6/18/2015			0.0052 (D)	
7/2/2015			0.0027	
10/6/2015				
10/7/2015				
10/8/2015			<0.0025	
10/9/2015	<0.0025			
10/10/2015				0.0065 (D)
10/11/2015				
10/12/2015				
10/14/2015				
10/15/2015				
3/22/2016			0.00302 (J)	
3/23/2016				
3/28/2016				
3/29/2016	<0.01			
3/30/2016				0.00388 (J)
3/31/2016				
4/4/2016				
4/5/2016				
7/29/2016				
8/1/2016	<0.01			
8/2/2016		<0.01 (*)	<0.01 (*)	
8/3/2016				
8/4/2016				
8/5/2016				<0.01 (*)
8/9/2016				
3/30/2017				
4/3/2017				
4/6/2017	<0.01 (*)	<0.01 (*)		<0.01 (*)
4/7/2017			<0.01 (*)	
4/10/2017				
4/11/2017				
4/12/2017				
10/2/2017				
10/3/2017	<0.01	<0.01	0.0022 (J)	0.0023 (J)
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.01			
3/20/2018		<0.01	<0.01	<0.01
3/21/2018				
3/22/2018				
3/23/2018				

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 9:55 AM View: cells 1&2 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

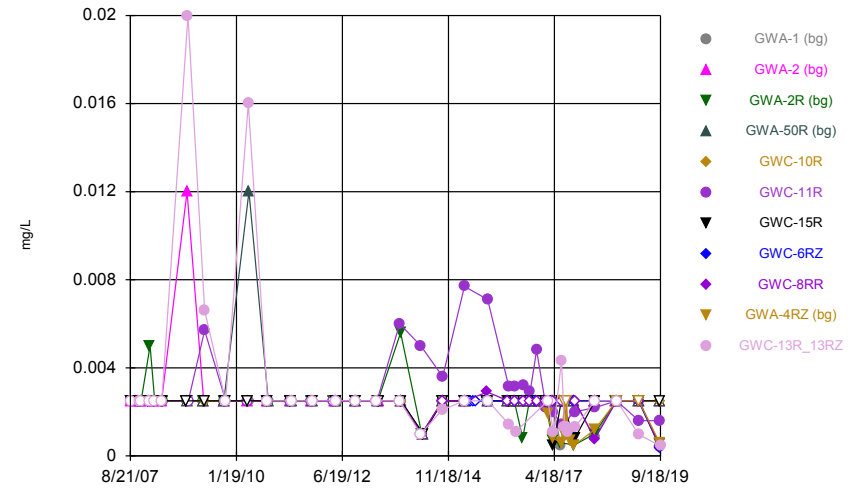
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
9/17/2018	<0.01			
9/18/2018		<0.01	<0.01	<0.01 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.01	<0.01		0.0024 (X)
3/22/2019				
3/23/2019				
5/6/2019			0.0024 (X)	
9/13/2019		0.0053 (X)		
9/16/2019	0.0058 (X)		0.0065 (X)	0.0062 (X)
9/17/2019				
9/18/2019				

Time Series



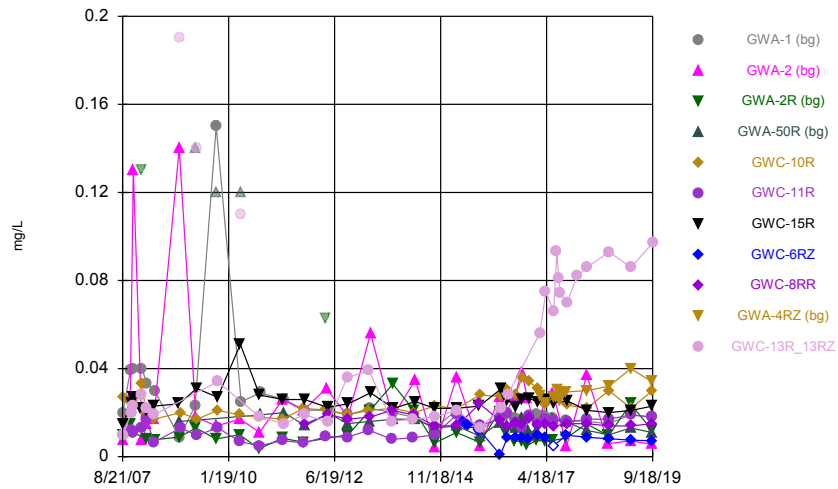
Constituent: Antimony Analysis Run 11/7/2019 10:03 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



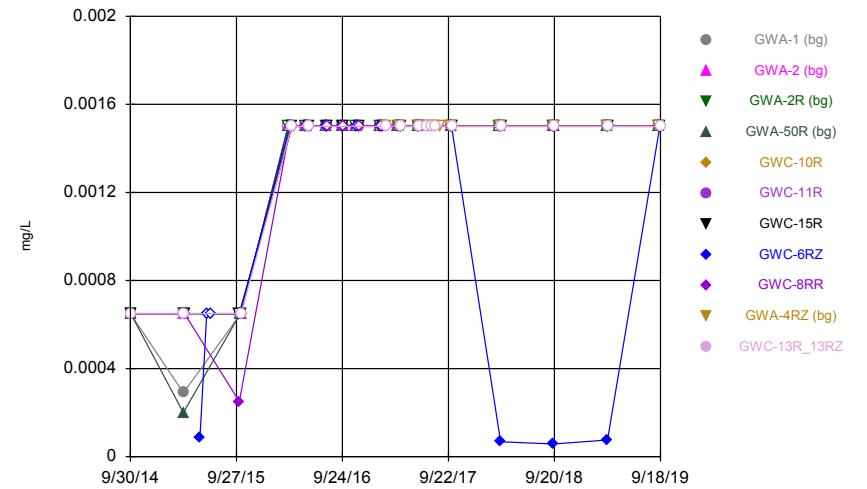
Constituent: Arsenic Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Barium Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Beryllium Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
10/9/2015								<0.005	
10/11/2015				<0.005		0.007			
10/12/2015					<0.005				
10/13/2015	0.017	<0.005	0.0045 (J)						
10/14/2015									
3/22/2016	0.00567								
3/23/2016		<0.003	0.00281 (J)						
3/28/2016				<0.003					
3/29/2016								0.0364 (J)	
3/30/2016									<0.003
3/31/2016					<0.003				
4/4/2016						0.00252 (J)			
4/5/2016							0.00727		
5/19/2016	0.00319		0.00264 (J)						
5/20/2016		<0.003							
5/24/2016								<0.003	<0.003
5/25/2016				<0.003					
5/26/2016					0.000659 (J)	0.00351			
5/31/2016							0.00649		
6/1/2016									
7/29/2016	0.0025 (J)	<0.003	0.0069						
8/1/2016				<0.003 (*)				<0.003 (*)	
8/2/2016									<0.003 (*)
8/3/2016					<0.003 (*)				
8/4/2016						<0.003 (*)	0.0038		
9/22/2016			0.0066						
9/23/2016	0.0051	<0.003							
9/26/2016				<0.003				<0.003	
9/27/2016									<0.003
9/28/2016					0.0037	0.0012 (J)			
9/29/2016							0.0106		
11/9/2016	0.0097 (J)	<0.003 (*)							
11/10/2016			<0.003 (*)						
11/11/2016				<0.003					
11/14/2016								<0.003	
11/22/2016					<0.003	0.0042			<0.003
11/23/2016							0.0098		
1/30/2017	0.0032			<0.003					
1/31/2017		<0.003	0.0064						
2/1/2017								<0.003	
2/6/2017									0.0015 (J)
2/7/2017					<0.003				
2/8/2017						<0.003			
2/10/2017							0.0014 (J)		
2/22/2017									
3/30/2017	0.0028 (J)	<0.003							
4/3/2017			0.0049	<0.003					
4/6/2017								0.0006 (J)	0.0007 (J)
4/7/2017									
4/10/2017					<0.003	<0.003			
4/11/2017									
4/12/2017							0.0026 (J)		

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.005
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.005
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		<0.005
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.005
3/5/2008		<0.005
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.005
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		<0.005
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		<0.005
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.005
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		<0.005
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.005
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.005

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.005
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.005
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		0.007
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		0.01
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		0.011
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		0.018
10/2/2014		
3/30/2015		
3/31/2015		0.011
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		0.0083
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		0.00447
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		0.00377
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	0.0018 (J)	0.0044
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	0.0008 (J)	
4/10/2017		
4/11/2017		0.0019 (J)
4/12/2017		

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	<0.003 (*)	
6/15/2017		
6/16/2017		<0.003 (*)
7/12/2017	0.0015 (J)	0.0018 (J)
7/20/2017	<0.003	
7/28/2017	<0.003	0.0011 (J)
8/9/2017	<0.003	
8/10/2017		0.0012 (J)
8/24/2017	0.0007 (J)	
10/2/2017		
10/3/2017	<0.003	
10/4/2017		
10/6/2017		0.0013 (J)
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.003	
3/22/2018		
3/23/2018		0.0015 (J)
9/14/2018		
9/17/2018		
9/18/2018	<0.003	
9/19/2018		
9/20/2018		0.0013 (J)
3/19/2019		
3/20/2019		
3/21/2019	<0.003	
3/22/2019		0.0014 (XD)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.00052 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		0.00077 (X)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
10/9/2015								<0.005	
10/11/2015				<0.005		0.0071			
10/12/2015					<0.005				
10/13/2015	<0.005	<0.005	<0.005						
10/14/2015									
3/22/2016	<0.005								
3/23/2016		<0.005	<0.005						
3/28/2016				<0.005					
3/29/2016								<0.005	
3/30/2016									<0.005
3/31/2016					<0.005				
4/4/2016						0.00315 (J)			
4/5/2016							<0.005		
5/19/2016	<0.005		<0.005						
5/20/2016		<0.005							
5/24/2016								<0.005	<0.005
5/25/2016				<0.005					
5/26/2016					<0.005	0.00313 (J)			
5/31/2016							<0.005		
6/1/2016									
7/29/2016	<0.005	<0.005	0.0008 (J)						
8/1/2016				<0.005				<0.005	
8/2/2016									<0.005
8/3/2016					<0.005				
8/4/2016						0.0032 (J)	<0.005		
9/22/2016			<0.005						
9/23/2016	<0.005	<0.005							
9/26/2016				<0.005				<0.005	
9/27/2016									<0.005
9/28/2016					<0.005	0.0029 (J)			
9/29/2016							<0.005		
11/9/2016	<0.005	<0.005							
11/10/2016			<0.005						
11/11/2016				<0.005					
11/14/2016								<0.005	
11/22/2016					<0.005	0.0048 (J)			<0.005
11/23/2016							<0.005		
1/30/2017	<0.005			<0.005					
1/31/2017		<0.005	<0.005						
2/1/2017								<0.005	
2/6/2017									<0.005
2/7/2017					<0.005				
2/8/2017						0.0022 (J)			
2/10/2017							<0.005		
2/22/2017									
3/30/2017	<0.005	<0.005							
4/3/2017			0.0007 (J)	<0.005					
4/6/2017								<0.005	<0.005
4/7/2017									
4/10/2017					<0.005	0.002 (J)			
4/11/2017									
4/12/2017							0.0005 (J)		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.005
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.005
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		<0.005
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.005
3/5/2008		<0.005
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.005
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		0.02
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		0.0066
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.005
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		0.016
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.005
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.005
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.005
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.005
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.005
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		<0.002
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		0.0021 (J)
10/2/2014		
3/30/2015		
3/31/2015		<0.005
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.005
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		0.00144 (JD)
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		0.0011 (JD)
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	0.0019 (J)	<0.005
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	0.0008 (J)	
4/10/2017		
4/11/2017		0.0011 (JD)
4/12/2017		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	0.0006 (J)	
6/15/2017		
6/16/2017		0.0043 (JD)
7/12/2017	<0.005	0.0013 (JD)
7/20/2017	0.0009 (J)	
7/28/2017	<0.005	0.0013 (J)
8/9/2017	0.0011 (J)	
8/10/2017		0.0011 (J)
8/24/2017	0.0007 (J)	
10/2/2017		
10/3/2017	0.0005 (J)	
10/4/2017		
10/6/2017		0.0013 (JD)
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	0.0012 (J)	
3/22/2018		
3/23/2018		<0.005
9/14/2018		
9/17/2018		
9/18/2018	<0.005	
9/19/2018		
9/20/2018		<0.005
3/19/2019		
3/20/2019		
3/21/2019	<0.005	
3/22/2019		0.00097 (XD)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.0006 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		0.00045 (X)

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
10/9/2015								0.012	
10/11/2015				0.0093		0.014			
10/12/2015					0.028				
10/13/2015	0.012	0.0048	0.0065						
10/14/2015									
3/22/2016	0.0182								
3/23/2016		0.0271	0.0206						
3/28/2016				0.0155					
3/29/2016								0.000768 (J)	
3/30/2016									0.0163
3/31/2016					0.0273				
4/4/2016						0.0176			
4/5/2016							0.0308		
5/19/2016	0.0193		0.0109						
5/20/2016		0.0206							
5/24/2016								0.00847 (J)	0.0137
5/25/2016				0.0143					
5/26/2016					0.0305	0.0195			
5/31/2016							0.0255		
6/1/2016									
7/29/2016	0.0174	0.0275	0.007 (J)						
8/1/2016				0.0129				0.0086 (J)	
8/2/2016									0.0152
8/3/2016					0.0284				
8/4/2016						0.0151	0.0227		
9/22/2016			0.0071 (J)						
9/23/2016	0.0168	0.0384							
9/26/2016				0.0177				0.0086 (J)	
9/27/2016									0.0147
9/28/2016					0.036	0.0132			
9/29/2016							0.0258		
11/9/2016	0.0171	0.0266							
11/10/2016			0.0052 (J)						
11/11/2016				0.0117					
11/14/2016								0.0083 (J)	
11/22/2016					0.0341 (J)	0.0186 (J)			0.0174 (J)
11/23/2016							0.0263 (J)		
1/30/2017	0.019			0.0113					
1/31/2017		0.0094 (J)	0.0076 (J)						
2/1/2017								0.0096 (J)	
2/6/2017									0.0144
2/7/2017					0.0309				
2/8/2017						0.015			
2/10/2017							0.025		
2/22/2017									
3/30/2017	0.0184	0.0262							
4/3/2017			0.007 (J)	0.0166					
4/6/2017								0.0087 (J)	0.0149
4/7/2017									
4/10/2017					0.0235	0.0172			
4/11/2017									
4/12/2017							0.026		

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		0.0095
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		0.02
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		0.023
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		0.028
3/5/2008		0.022
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		0.019
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		0.19 (O)
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		0.14 (O)
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		0.034
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		0.11 (O)
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		0.018
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		0.015

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		0.019
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		0.0158
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		0.036
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		0.039
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		0.016
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		0.017
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		0.018
10/2/2014		
3/30/2015		
3/31/2015		0.021
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		0.013
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		0.0222
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		0.0283
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	0.0273	0.0561
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	0.024	
4/10/2017		
4/11/2017		0.0748
4/12/2017		

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	0.027	
6/15/2017		
6/16/2017		0.0661
7/12/2017	0.027	0.0932
7/20/2017	0.0304	
7/28/2017	0.0269	0.0808
8/9/2017	0.0254	
8/10/2017		0.0743
8/24/2017	0.0285	
10/2/2017		
10/3/2017	0.0294	
10/4/2017		
10/6/2017		0.0699
12/28/2017		0.082 (Y)
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	0.03	
3/22/2018		
3/23/2018		0.086
9/14/2018		
9/17/2018		
9/18/2018	0.032	
9/19/2018		
9/20/2018		0.093
3/19/2019		
3/20/2019		
3/21/2019	0.04	
3/22/2019		0.086 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.034	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		0.097

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
9/30/2014	<0.0013	<0.0013	<0.0013				<0.0013		
10/1/2014				<0.0013					
10/2/2014					<0.0013	<0.0013			<0.0013
3/30/2015	0.00029 (J)	<0.0013	<0.0013	0.0002 (J)					
3/31/2015									
4/1/2015						<0.0013			
4/2/2015					<0.0013				
4/3/2015							<0.0013		<0.0013
5/26/2015								8.8E-05 (J)	
6/18/2015								<0.0013 (D)	
7/2/2015								<0.0013	
10/7/2015							<0.0013		
10/8/2015									0.00025 (J)
10/9/2015								<0.0013	
10/11/2015				<0.0013		<0.0013			
10/12/2015					<0.0013				
10/13/2015	<0.0013	<0.0013	<0.0013						
10/14/2015									
3/22/2016	<0.003								
3/23/2016		<0.003	<0.003						
3/28/2016				<0.003					
3/29/2016								<0.003	
3/30/2016									<0.003
3/31/2016					<0.003				
4/4/2016						<0.003			
4/5/2016							<0.003		
5/19/2016	<0.003		<0.003						
5/20/2016		<0.003							
5/24/2016								<0.003	<0.003
5/25/2016				<0.003					
5/26/2016					<0.003	<0.003			
5/31/2016							<0.003		
6/1/2016									
7/29/2016	<0.003	<0.003	<0.003						
8/1/2016				<0.003				<0.003	
8/2/2016									<0.003
8/3/2016					<0.003				
8/4/2016						<0.003	<0.003		
9/22/2016			<0.003						
9/23/2016	<0.003	<0.003							
9/26/2016				<0.003				<0.003	
9/27/2016									<0.003
9/28/2016					<0.003	<0.003			
9/29/2016							<0.003		
11/9/2016	<0.003 (*)	<0.003							
11/10/2016			<0.003						
11/11/2016				<0.003					
11/14/2016								<0.003	
11/22/2016					<0.003	<0.003			<0.003
11/23/2016							<0.003		
1/30/2017	<0.003			<0.003					
1/31/2017		<0.003	<0.003						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

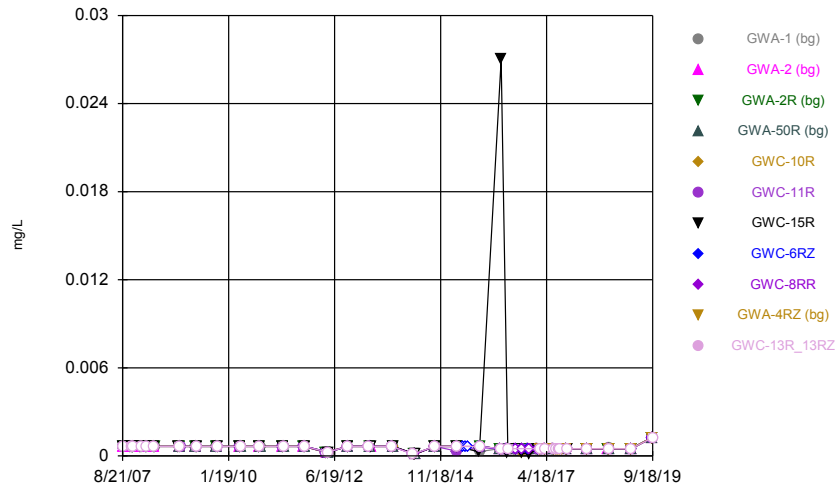
	GWA-4RZ (bg)	GWC-13R_13RZ
9/30/2014		
10/1/2014		<0.0013
10/2/2014		
3/30/2015		
3/31/2015		<0.0013
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.0013
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.003 (D)
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.003 (D)
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

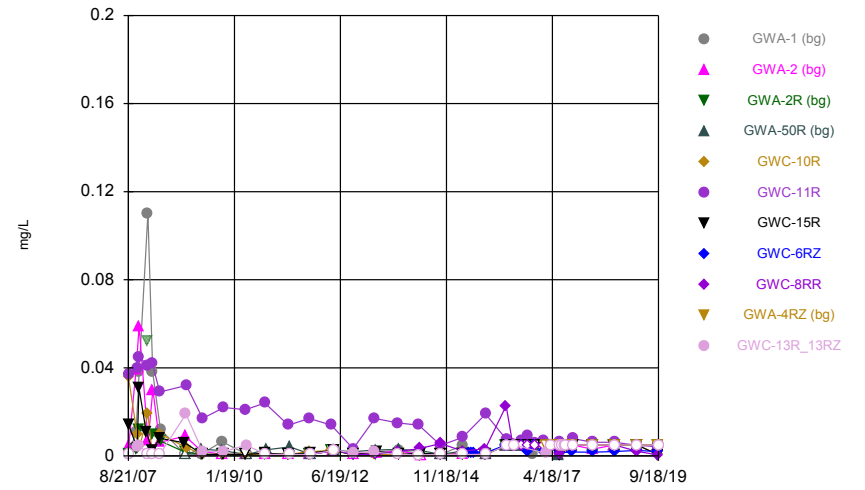
	GWA-4RZ (bg)	GWC-13R_13RZ
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	<0.003	<0.003
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.003	
4/10/2017		
4/11/2017		<0.003
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	<0.003	
6/15/2017		
6/16/2017		<0.003
7/12/2017	<0.003	<0.003
7/20/2017	<0.003	
7/28/2017	<0.003	<0.003
8/9/2017	<0.003	
8/10/2017		<0.003
8/24/2017	<0.003	
10/2/2017		
10/3/2017	<0.003	
10/4/2017		
10/6/2017		<0.003
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.003	
3/22/2018		
3/23/2018		<0.003
9/14/2018		
9/17/2018		
9/18/2018	<0.003	
9/19/2018		
9/20/2018		<0.003
3/19/2019		
3/20/2019		
3/21/2019	<0.003	
3/22/2019		<0.003 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	<0.003	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.003

Time Series



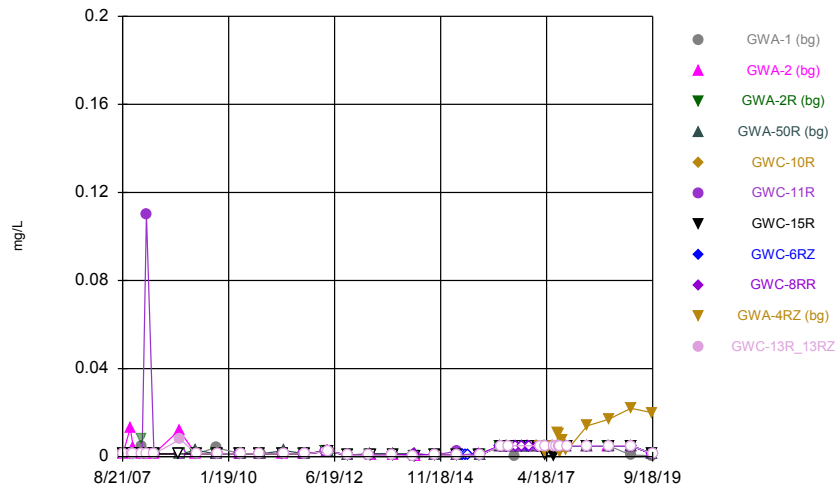
Constituent: Cadmium Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



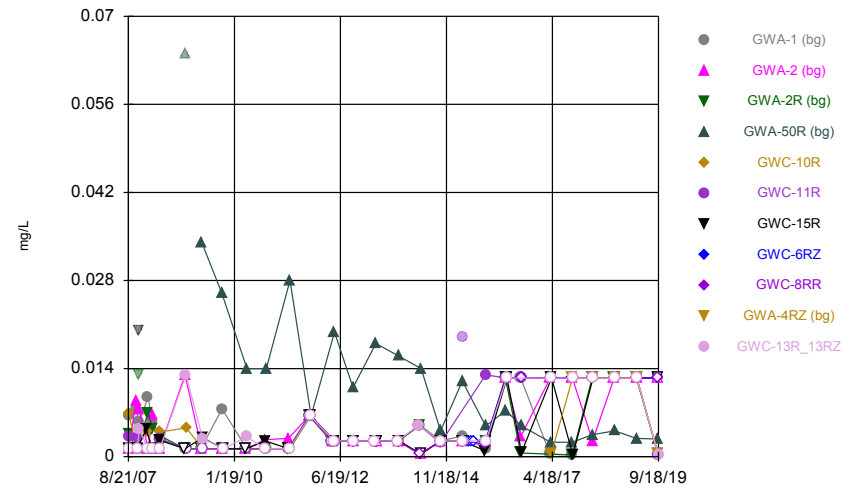
Constituent: Chromium Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Cobalt Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Copper Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
10/9/2015								<0.0013	
10/11/2015				<0.0013		0.00056 (J)			
10/12/2015					<0.0013				
10/13/2015	0.0003 (J)	<0.0013	<0.0013						
10/14/2015									
3/22/2016	<0.001								
3/23/2016		<0.001	<0.001						
3/28/2016				<0.001					
3/29/2016								<0.001	
3/30/2016									<0.001
3/31/2016					<0.001				
4/4/2016						<0.001			
4/5/2016							0.027 (J)		
5/19/2016	<0.001		<0.001						
5/20/2016		<0.001							
5/24/2016								<0.001	<0.001
5/25/2016				<0.001					
5/26/2016					<0.001	<0.001			
5/31/2016							0.000206 (J)		
6/1/2016									
7/29/2016	<0.001	<0.001	<0.001						
8/1/2016				<0.001				<0.001	
8/2/2016									<0.001
8/3/2016					<0.001				
8/4/2016						<0.001	<0.001		
9/22/2016			<0.001						
9/23/2016	<0.001	<0.001							
9/26/2016				<0.001				<0.001	
9/27/2016									<0.001
9/28/2016					0.0002 (J)	<0.001			
9/29/2016							0.0002 (J)		
11/9/2016	<0.001	<0.001							
11/10/2016			<0.001						
11/11/2016				<0.001					
11/14/2016								<0.001	
11/22/2016					<0.001	<0.001			<0.001
11/23/2016							0.0001 (J)		
1/30/2017	<0.001			<0.001					
1/31/2017		<0.001	<0.001						
2/1/2017								<0.001	
2/6/2017									<0.001
2/7/2017					<0.001				
2/8/2017						<0.001			
2/10/2017							<0.001		
2/22/2017									
3/30/2017	<0.001	<0.001							
4/3/2017			<0.001	<0.001					
4/6/2017								<0.001	<0.001
4/7/2017									
4/10/2017					<0.001	<0.001			
4/11/2017									
4/12/2017							<0.001		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.0013
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.0013
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		<0.0013
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.0013
3/5/2008		<0.0013
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.0013
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		<0.0013
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		<0.0013
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.0013
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		<0.0013
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.0013
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.0013

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.0013
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.0005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.0013
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.0013
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.0013
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		<0.00025
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.0013
10/2/2014		
3/30/2015		
3/31/2015		<0.0013
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.0013
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.001
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.001
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	<0.001	<0.001
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.001	
4/10/2017		
4/11/2017		<0.001
4/12/2017		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	<0.001	
6/15/2017		
6/16/2017		<0.001
7/12/2017	<0.001	<0.001
7/20/2017	<0.001	
7/28/2017	<0.001	<0.001
8/9/2017	<0.001	
8/10/2017		<0.001
8/24/2017	<0.001	
10/2/2017		
10/3/2017	<0.001	
10/4/2017		
10/6/2017		<0.001
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.001	
3/22/2018		
3/23/2018		<0.001
9/14/2018		
9/17/2018		
9/18/2018	<0.001	
9/19/2018		
9/20/2018		<0.001
3/19/2019		
3/20/2019		
3/21/2019	<0.001	
3/22/2019		<0.001 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	<0.0025	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.0025

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
10/9/2015								0.0015	
10/11/2015				<0.0013		0.019			
10/12/2015					<0.0013				
10/13/2015	<0.0013	<0.0013	<0.0013						
10/14/2015									
3/22/2016	<0.01								
3/23/2016		<0.01	<0.01						
3/28/2016				<0.01					
3/29/2016								<0.01	
3/30/2016									0.0228 (J)
3/31/2016					<0.01				
4/4/2016						0.00728 (J)			
4/5/2016							<0.01		
5/19/2016	<0.01		<0.01						
5/20/2016		<0.01							
5/24/2016								<0.01	<0.01
5/25/2016				<0.01					
5/26/2016					<0.01	0.00553 (J)			
5/31/2016							<0.01		
6/1/2016									
7/29/2016	<0.01	<0.01 (*)	<0.01 (*)						
8/1/2016				<0.01				<0.01 (*)	
8/2/2016									<0.01 (*)
8/3/2016					<0.01 (*)				
8/4/2016						0.0071 (J)	<0.01 (*)		
9/22/2016			<0.01						
9/23/2016	<0.01	<0.01							
9/26/2016				<0.01				0.002 (J)	
9/27/2016									<0.01
9/28/2016					<0.01	0.0093 (J)			
9/29/2016							<0.01		
11/9/2016	0.0011 (J)	<0.01							
11/10/2016			<0.01						
11/11/2016				<0.01 (*)					
11/14/2016								<0.01 (*)	
11/22/2016					<0.01	0.0058 (J)			<0.01
11/23/2016							<0.01		
1/30/2017	<0.01			<0.01					
1/31/2017		<0.01	<0.01						
2/1/2017								0.0017 (J)	
2/6/2017									<0.01
2/7/2017					0.0019 (J)				
2/8/2017						0.0072 (J)			
2/10/2017							<0.01		
2/22/2017									
3/30/2017	<0.01	<0.01 (*)							
4/3/2017			<0.01 (*)	<0.01 (*)					
4/6/2017								<0.01 (*)	<0.01 (*)
4/7/2017									
4/10/2017					<0.01 (*)	<0.01 (*)			
4/11/2017									
4/12/2017							<0.01 (*)		

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.0013
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		0.0042
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		0.0049
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.0013
3/5/2008		<0.0013
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.0013
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		0.019
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		0.002
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		0.002
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		0.0049
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.0013
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.0013

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.0013
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		0.0015
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		0.0017
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.0013
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		<0.001
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.0013
10/2/2014		
3/30/2015		
3/31/2015		<0.0013
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.0013
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.01 (D)
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.01 (D)
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	<0.01	0.0012 (J)
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.01	
4/10/2017		
4/11/2017		<0.01 (*)
4/12/2017		

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	<0.01	
6/15/2017		
6/16/2017		<0.01
7/12/2017	<0.01	<0.01
7/20/2017	<0.01	
7/28/2017	<0.01	<0.01
8/9/2017	<0.01	
8/10/2017		<0.01
8/24/2017	<0.01	
10/2/2017		
10/3/2017	<0.01	
10/4/2017		
10/6/2017		<0.01
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.01	
3/22/2018		
3/23/2018		<0.01
9/14/2018		
9/17/2018		
9/18/2018	<0.01	
9/19/2018		
9/20/2018		<0.01
3/19/2019		
3/20/2019		
3/21/2019	<0.01	
3/22/2019		<0.01 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	<0.01	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.01

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
10/9/2015								<0.0013	
10/11/2015				<0.0013		0.00065 (J)			
10/12/2015					<0.0013				
10/13/2015	<0.0013	<0.0013	<0.0013						
10/14/2015									
3/22/2016	<0.01								
3/23/2016		<0.01	<0.01						
3/28/2016				<0.01					
3/29/2016								<0.01	
3/30/2016									<0.01
3/31/2016					<0.01				
4/4/2016						<0.01			
4/5/2016							<0.01		
5/19/2016	<0.01		<0.01						
5/20/2016		<0.01							
5/24/2016								<0.01	<0.01
5/25/2016				<0.01					
5/26/2016					<0.01	<0.01			
5/31/2016							<0.01		
6/1/2016									
7/29/2016	0.0004 (J)	<0.01	<0.01						
8/1/2016				<0.01				<0.01	
8/2/2016									<0.01
8/3/2016					<0.01				
8/4/2016						<0.01	<0.01		
9/22/2016			<0.01						
9/23/2016	<0.01	<0.01							
9/26/2016				<0.01				<0.01	
9/27/2016									<0.01
9/28/2016					<0.01	<0.01			
9/29/2016							<0.01		
11/9/2016	<0.01	<0.01							
11/10/2016			<0.01						
11/11/2016				<0.01					
11/14/2016								<0.01	
11/22/2016					<0.01	<0.01			<0.01
11/23/2016							<0.01		
1/30/2017	<0.01			<0.01					
1/31/2017		<0.01	<0.01						
2/1/2017								<0.01	
2/6/2017									<0.01
2/7/2017					<0.01				
2/8/2017						<0.01			
2/10/2017							<0.01		
2/22/2017									
3/30/2017	<0.01	<0.01							
4/3/2017			<0.01	<0.01					
4/6/2017								<0.01	<0.01
4/7/2017									
4/10/2017					<0.01	<0.01			
4/11/2017									
4/12/2017							0.0006 (J)		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.0025
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.0025
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		<0.0025
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.0025
3/5/2008		<0.0025
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.0025
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		0.0079
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		<0.0025
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.0025
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		<0.0025
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.0025
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.0025

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.0025
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.0013
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.0013
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.0013
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		<0.0005
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.0013
10/2/2014		
3/30/2015		
3/31/2015		<0.0013
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.0013
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.01
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.01
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	<0.01	<0.01
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	0.0018 (J)	
4/10/2017		
4/11/2017		<0.01
4/12/2017		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:11 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	0.0045 (J)	
6/15/2017		
6/16/2017		<0.01
7/12/2017	0.0046 (J)	<0.01
7/20/2017	0.0109	
7/28/2017	0.0104	<0.01
8/9/2017	0.0022 (J)	
8/10/2017		<0.01
8/24/2017	0.0076 (J)	
10/2/2017		
10/3/2017	0.0028 (J)	
10/4/2017		
10/6/2017		<0.01
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	0.014	
3/22/2018		
3/23/2018		<0.01
9/14/2018		
9/17/2018		
9/18/2018	0.017	
9/19/2018		
9/20/2018		<0.01
3/19/2019		
3/20/2019		
3/21/2019	0.022	
3/22/2019		<0.01 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.02	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.0025

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.0025
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.0025
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		0.0043
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.0025
3/5/2008		<0.0025
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.0025
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		0.013
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		0.0029
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.0025
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		0.0032
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.0025
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.0025

Time Series

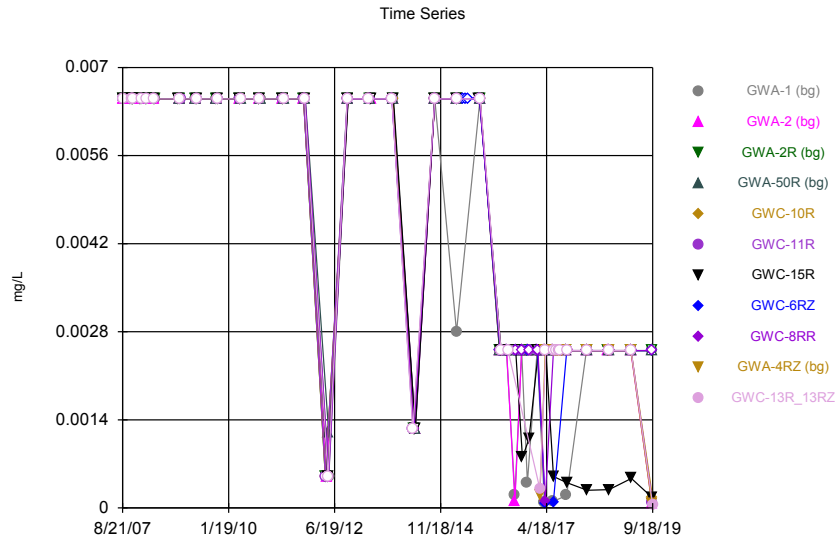
Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.013
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.005
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.005
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.005
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		0.005 (J)
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.005
10/2/2014		
3/30/2015		
3/31/2015		<0.005
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

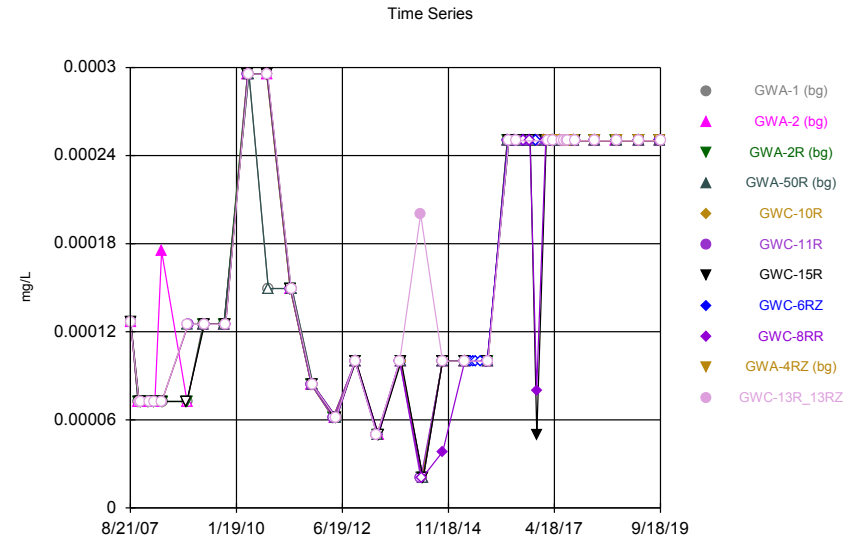
Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

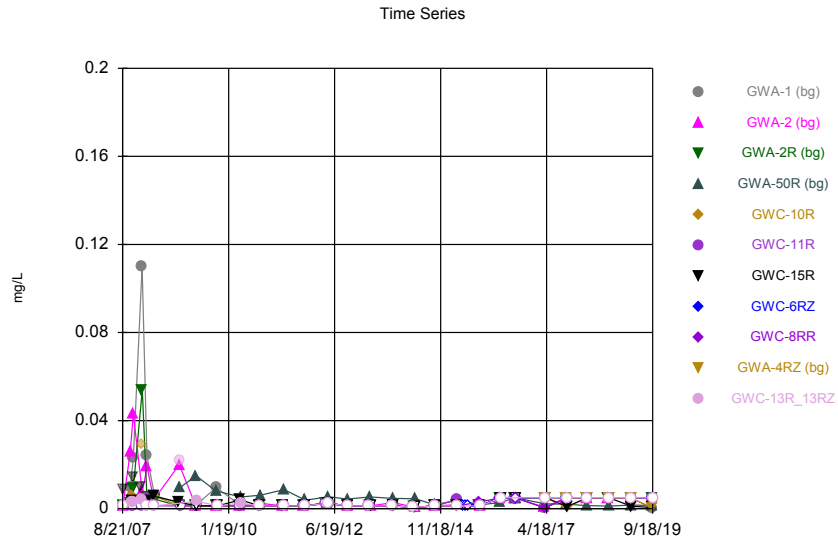
	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.005
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.025
4/5/2016		
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	0.0004 (J)	
4/10/2017		
4/11/2017		<0.025
4/12/2017		
10/2/2017		
10/3/2017	<0.025	
10/4/2017		
10/6/2017		<0.025
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.025	
3/22/2018		
3/23/2018		<0.025
9/14/2018		
9/17/2018		
9/18/2018	<0.025	
9/19/2018		
9/20/2018		<0.025
3/19/2019		
3/20/2019		
3/21/2019	<0.025	
3/22/2019		<0.025 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.00045 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		0.00021 (X)



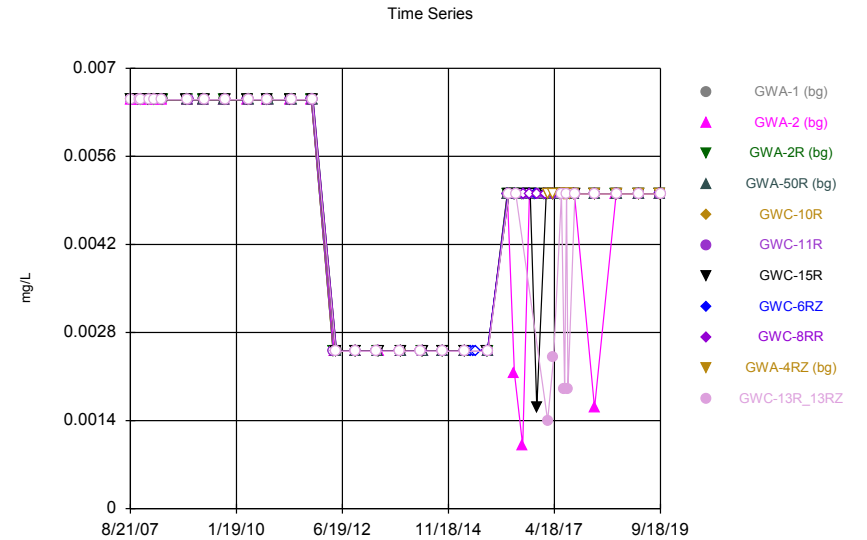
Constituent: Lead Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Mercury Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Nickel Analysis Run 11/7/2019 10:04 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Selenium Analysis Run 11/7/2019 10:05 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
10/9/2015								<0.013	
10/11/2015				<0.013		<0.013			
10/12/2015					<0.013				
10/13/2015	<0.013	<0.013	<0.013						
10/14/2015									
3/22/2016	<0.005								
3/23/2016		<0.005	<0.005						
3/28/2016				<0.005					
3/29/2016								<0.005	
3/30/2016									<0.005
3/31/2016					<0.005				
4/4/2016						<0.005			
4/5/2016							<0.005		
5/19/2016	<0.005		<0.005						
5/20/2016		<0.005							
5/24/2016								<0.005	<0.005
5/25/2016				<0.005					
5/26/2016					<0.005	<0.005			
5/31/2016							<0.005		
6/1/2016									
7/29/2016	0.0002 (J)	0.0001 (J)	<0.005						
8/1/2016				<0.005				<0.005	
8/2/2016									<0.005
8/3/2016					<0.005				
8/4/2016						<0.005	<0.005		
9/22/2016			<0.005						
9/23/2016	<0.005 (*)	<0.005							
9/26/2016				<0.005				<0.005	
9/27/2016									<0.005
9/28/2016					<0.005	<0.005			
9/29/2016							0.0008 (J)		
11/9/2016	0.0004 (J)	<0.005							
11/10/2016			<0.005						
11/11/2016				<0.005					
11/14/2016								<0.005	
11/22/2016					<0.005	<0.005			<0.005
11/23/2016							0.0011 (J)		
1/30/2017	<0.005 (*)			<0.005					
1/31/2017		<0.005 (*)	<0.005						
2/1/2017								<0.005	
2/6/2017									<0.005
2/7/2017					<0.005				
2/8/2017						<0.005			
2/10/2017							<0.005		
2/22/2017									
3/30/2017	8E-05 (J)	<0.005							
4/3/2017			<0.005	<0.005					
4/6/2017								7E-05 (J)	0.0001 (J)
4/7/2017									
4/10/2017					<0.005	<0.005			
4/11/2017									
4/12/2017							<0.005 (*)		

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.013
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.013
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		<0.013
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.013
3/5/2008		<0.013
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.013
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		<0.013
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		<0.013
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.013
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		<0.013
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.013
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.013

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.013
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.001
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.013
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.013
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.013
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		<0.0025
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.013
10/2/2014		
3/30/2015		
3/31/2015		<0.013
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.013
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.005
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.005
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	0.0002 (J)	0.0003 (J)
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.005	
4/10/2017		
4/11/2017		<0.005
4/12/2017		

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	<0.005	
6/15/2017		
6/16/2017		<0.005
7/12/2017	<0.005	<0.005
7/20/2017	<0.005	
7/28/2017	<0.005	<0.005
8/9/2017	<0.005	
8/10/2017		<0.005
8/24/2017	<0.005	
10/2/2017		
10/3/2017	<0.005	
10/4/2017		
10/6/2017		<0.005
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.005	
3/22/2018		
3/23/2018		<0.005
9/14/2018		
9/17/2018		
9/18/2018	<0.005	
9/19/2018		
9/20/2018		<0.005
3/19/2019		
3/20/2019		
3/21/2019	<0.005	
3/22/2019		<0.005 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	6.5E-05 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		4.8E-05 (X)

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
4/27/2011	<0.000299			<0.000299					
10/4/2011			<0.000168		<0.000168	<0.000168			
10/5/2011		<0.000168							
10/12/2011							<0.000168		
10/17/2011	<0.000168								
10/18/2011									<0.000168
10/19/2011				<0.000168					
4/3/2012			<0.000123		<0.000123				
4/4/2012						<0.000123			
4/11/2012		<0.000123							
4/23/2012							<0.000123		
4/25/2012									
4/30/2012									<0.000123
5/1/2012				<0.000123					
5/2/2012	<0.000123								
10/2/2012				<0.0002					
10/3/2012						<0.0002			<0.0002
10/8/2012	<0.0002				<0.0002				
10/9/2012		<0.0002	<0.0002						
10/10/2012							<0.0002		
4/2/2013									
4/3/2013					<0.0001	<0.0001			
4/8/2013									<0.0001
4/10/2013				<0.0001					
4/11/2013			<0.0001						
4/12/2013	<0.0001								
4/15/2013		<0.0001					<0.0001		
10/8/2013									
10/9/2013						<0.0002			<0.0002
10/15/2013		<0.0002			<0.0002				
10/16/2013	<0.0002		<0.0002	<0.0002					
10/22/2013							<0.0002		
4/1/2014									
4/2/2014						<4.02E-05			
4/9/2014					<4.02E-05				
4/10/2014			<4.02E-05						<4.02E-05
4/11/2014	<4.02E-05								
4/21/2014							<4.02E-05		
4/22/2014		<4.02E-05		<4.02E-05					
9/30/2014	<0.0002	<0.0002	<0.0002				<0.0002		
10/1/2014				<0.0002					
10/2/2014					<0.0002	<0.0002			3.83E-05 (J)
3/30/2015	<0.0002	<0.0002	<0.0002	<0.0002					
3/31/2015									
4/1/2015						<0.0002			
4/2/2015					<0.0002				
4/3/2015							<0.0002		<0.0002
5/26/2015								<0.0002	
6/18/2015								<0.0002 (D)	
7/2/2015								<0.0002	
8/13/2015								<0.0002 (D)	
10/7/2015							<0.0002		

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.000254
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.000145
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		<0.000145
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.000145
3/5/2008		<0.000145
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.000145
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		<0.00025
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		<0.00025
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.00025
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		<0.000591
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.000591
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.000299

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.000168
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.000123
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.0002
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.0001
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.0002
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		0.0002 (J)
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.0002
10/2/2014		
3/30/2015		
3/31/2015		<0.0002
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
8/13/2015		
10/7/2015		

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/8/2015		
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.0002
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.0005
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.0005
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	<0.0005	<0.0005
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.0005 (*)	
4/10/2017		
4/11/2017		<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	<0.0005 (*)	
6/15/2017		
6/16/2017		<0.0005 (*)
7/12/2017	<0.0005	<0.0005
7/20/2017	<0.0005	
7/28/2017	<0.0005	<0.0005
8/9/2017	<0.0005	
8/10/2017		<0.0005
8/24/2017	<0.0005	
10/2/2017		
10/3/2017	<0.0005	
10/4/2017		
10/6/2017		<0.0005
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.0005	
3/22/2018		
3/23/2018		<0.0005
9/14/2018		
9/17/2018		
9/18/2018	<0.0005	
9/19/2018		
9/20/2018		<0.0005
3/19/2019		
3/20/2019		
3/21/2019	<0.0005	
3/22/2019		<0.0005 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	<0.0005	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.0005

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.0025
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		0.0033
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		0.0029
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		0.0039
3/5/2008		<0.0025
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.0025
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		0.022 (O)
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		0.0034
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.0025
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		0.0026
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.0025
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.0025

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.0025
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.0025
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.0025
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.0025
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		<0.00125
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.0025
10/2/2014		
3/30/2015		
3/31/2015		<0.0025
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.0025
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.01
4/5/2016		
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.01	
4/10/2017		
4/11/2017		<0.01 (*)
4/12/2017		
10/2/2017		
10/3/2017	<0.01	
10/4/2017		
10/6/2017		<0.01
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.01	
3/22/2018		
3/23/2018		<0.01
9/14/2018		
9/17/2018		
9/18/2018	<0.01	
9/19/2018		
9/20/2018		<0.01
3/19/2019		
3/20/2019		
3/21/2019	<0.01	
3/22/2019		<0.01 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.00032 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
10/9/2015								<0.005	
10/11/2015				<0.005		<0.005			
10/12/2015					<0.005				
10/13/2015	<0.005	<0.005	<0.005						
10/14/2015									
3/22/2016	<0.01								
3/23/2016		<0.01	<0.01						
3/28/2016				<0.01					
3/29/2016								<0.01	
3/30/2016									<0.01
3/31/2016					<0.01				
4/4/2016						<0.01			
4/5/2016							<0.01		
5/19/2016	<0.01		<0.01						
5/20/2016		0.00216 (J)							
5/24/2016								<0.01	<0.01
5/25/2016				<0.01					
5/26/2016					<0.01	<0.01			
5/31/2016							<0.01		
6/1/2016									
7/29/2016	<0.01	0.001 (J)	<0.01						
8/1/2016				<0.01				<0.01	
8/2/2016									<0.01
8/3/2016					<0.01				
8/4/2016						<0.01	<0.01		
9/22/2016			<0.01						
9/23/2016	<0.01	<0.01							
9/26/2016				<0.01				<0.01	
9/27/2016									<0.01
9/28/2016					<0.01	<0.01			
9/29/2016							<0.01		
11/9/2016	<0.01	<0.01							
11/10/2016			<0.01						
11/11/2016				<0.01					
11/14/2016								<0.01	
11/22/2016					<0.01	<0.01			<0.01
11/23/2016							0.0016 (J)		
1/30/2017	<0.01			<0.01					
1/31/2017		<0.01	<0.01						
2/1/2017								<0.01	
2/6/2017									<0.01
2/7/2017					<0.01				
2/8/2017						<0.01			
2/10/2017							<0.01		
2/22/2017									
3/30/2017	<0.01	<0.01							
4/3/2017			<0.01	<0.01					
4/6/2017								<0.01	<0.01
4/7/2017									
4/10/2017					<0.01	<0.01			
4/11/2017									
4/12/2017							<0.01		

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.013
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.013
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		<0.013
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.013
3/5/2008		<0.013
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.013
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		<0.013
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		<0.013
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.013
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		<0.013
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.013
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.013

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.013
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.005
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.005
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.005
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		<0.005
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.005
10/2/2014		
3/30/2015		
3/31/2015		<0.005
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

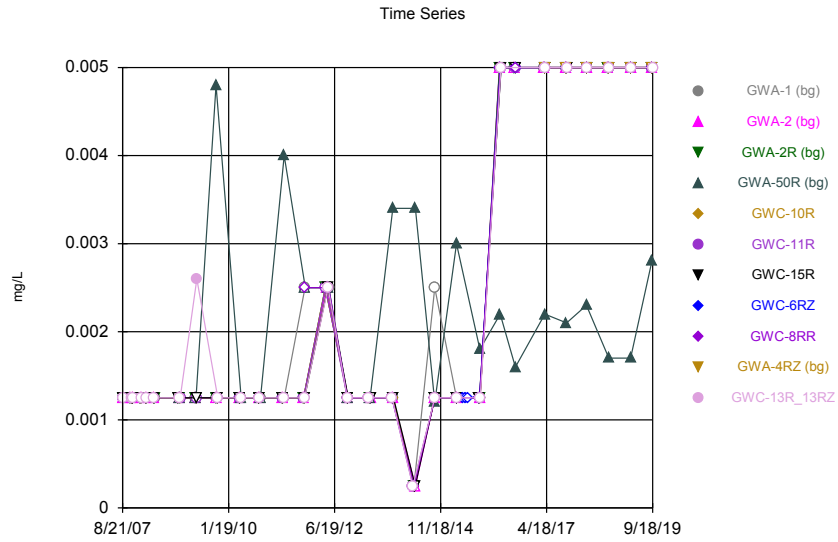
Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.005
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.01
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.01
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	<0.01	0.0014 (J)
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.01	
4/10/2017		
4/11/2017		0.0024 (J)
4/12/2017		

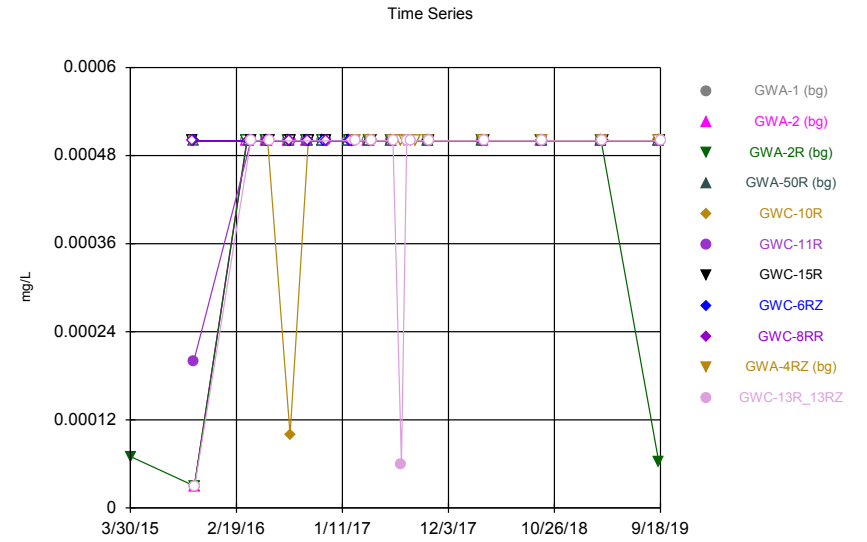
Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

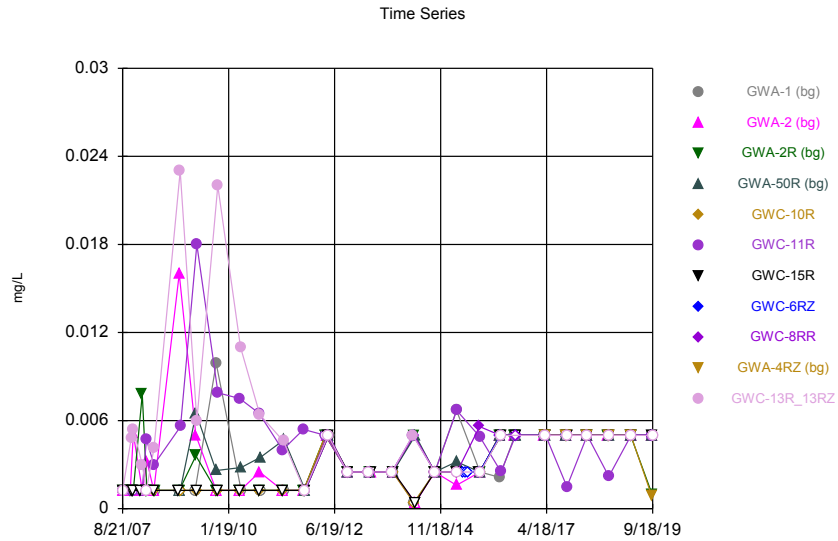
	GWA-4RZ (bg)	GWC-13R_13RZ
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	<0.01	
6/15/2017		
6/16/2017		<0.01
7/12/2017	<0.01	0.0019 (J)
7/20/2017	<0.01	
7/28/2017	<0.01	<0.01
8/9/2017	<0.01	
8/10/2017		0.0019 (J)
8/24/2017	<0.01	
10/2/2017		
10/3/2017	<0.01	
10/4/2017		
10/6/2017		<0.01
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.01	
3/22/2018		
3/23/2018		<0.01
9/14/2018		
9/17/2018		
9/18/2018	<0.01	
9/19/2018		
9/20/2018		<0.01
3/19/2019		
3/20/2019		
3/21/2019	<0.01	
3/22/2019		<0.01 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	<0.01	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.01



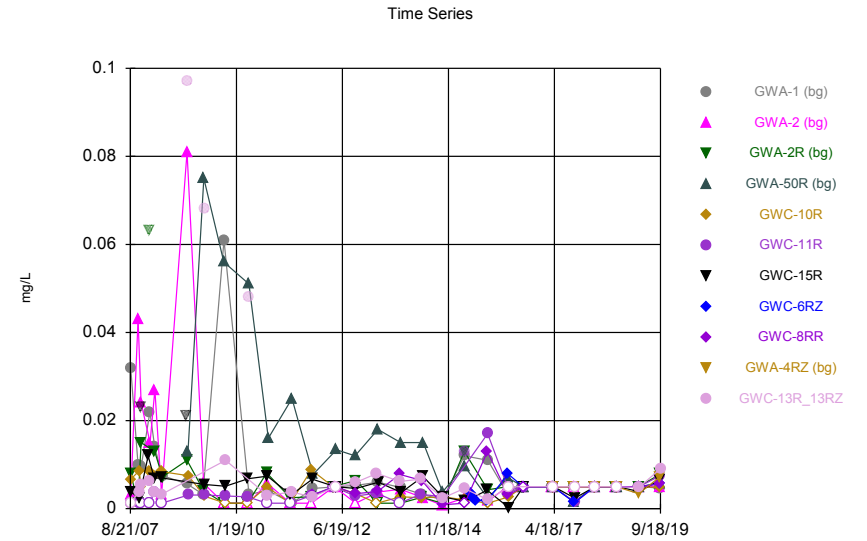
Constituent: Silver Analysis Run 11/7/2019 10:05 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Thallium Analysis Run 11/7/2019 10:05 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Vanadium Analysis Run 11/7/2019 10:05 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Zinc Analysis Run 11/7/2019 10:05 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.0025
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		<0.0025
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		<0.0025
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		<0.0025
3/5/2008		<0.0025
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		<0.0025
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		<0.0025
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		0.0026
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		<0.0025
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		<0.0025
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		<0.0025
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		<0.0025

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.0025
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.005
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.0025
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.0025
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.0025
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		<0.0005
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.0025
10/2/2014		
3/30/2015		
3/31/2015		<0.0025
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.0025
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.01
4/5/2016		
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.01	
4/10/2017		
4/11/2017		<0.01
4/12/2017		
10/2/2017		
10/3/2017	<0.01	
10/4/2017		
10/6/2017		<0.01
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.01	
3/22/2018		
3/23/2018		<0.01
9/14/2018		
9/17/2018		
9/18/2018	<0.01	
9/19/2018		
9/20/2018		<0.01
3/19/2019		
3/20/2019		
3/21/2019	<0.01	
3/22/2019		<0.01 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	<0.01	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.01

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
3/30/2015		
10/7/2015		
10/8/2015		
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<6E-05
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.001
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.001
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	<0.001	<0.001
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/10/2017		
4/11/2017		<0.001
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	<0.001	
6/15/2017		
6/16/2017		<0.001
7/12/2017	<0.001	6E-05 (J)
7/20/2017	<0.001	
7/28/2017	<0.001	<0.001
8/9/2017	<0.001	
8/10/2017		<0.001
8/24/2017	<0.001	
10/2/2017		
10/3/2017	<0.001	
10/4/2017		
10/6/2017		<0.001
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.001	
3/22/2018		
3/23/2018		<0.001
9/14/2018		
9/17/2018		
9/18/2018	<0.001	
9/19/2018		
9/20/2018		<0.001
3/19/2019		
3/20/2019		
3/21/2019	<0.001	
3/22/2019		<0.001 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	<0.001	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.001

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.0025
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		0.0048
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		0.0054
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		0.003
3/5/2008		<0.0025
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		0.0041
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		0.023
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		0.006
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		0.022
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		0.011
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		0.0064
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		0.0046

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		<0.0025
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.01
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		<0.005
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		<0.005
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		<0.005
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		0.005 (J)
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		<0.005
10/2/2014		
3/30/2015		
3/31/2015		<0.005
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		<0.005
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.01
4/5/2016		
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.01	
4/10/2017		
4/11/2017		<0.01
4/12/2017		
10/2/2017		
10/3/2017	<0.01	
10/4/2017		
10/6/2017		<0.01
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.01	
3/22/2018		
3/23/2018		<0.01
9/14/2018		
9/17/2018		
9/18/2018	<0.01	
9/19/2018		
9/20/2018		<0.01
3/19/2019		
3/20/2019		
3/21/2019	<0.01	
3/22/2019		<0.01 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.00084 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		<0.01

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
8/21/2007		<0.0025
8/23/2007		
10/23/2007		
10/24/2007		
11/1/2007		0.0038
11/2/2007		
11/17/2007		
11/18/2007		
11/19/2007		0.0055
11/20/2007		
1/15/2008		
1/30/2008		
1/31/2008		0.0063
3/5/2008		0.0037
3/6/2008		
3/10/2008		
3/11/2008		
5/6/2008		
5/7/2008		0.0033
5/8/2008		
5/13/2008		
12/2/2008		
12/4/2008		
12/5/2008		
12/12/2008		0.097 (O)
12/14/2008		
4/15/2009		
4/21/2009		
4/23/2009		
4/28/2009		
4/29/2009		0.068 (O)
10/6/2009		
10/7/2009		
10/8/2009		
10/19/2009		
10/21/2009		0.011
10/22/2009		
4/21/2010		
4/26/2010		
4/27/2010		
4/28/2010		0.048 (O)
5/3/2010		
9/28/2010		
9/29/2010		
10/4/2010		
10/6/2010		0.003
10/11/2010		
10/12/2010		
4/12/2011		
4/13/2011		
4/18/2011		
4/20/2011		0.0038

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

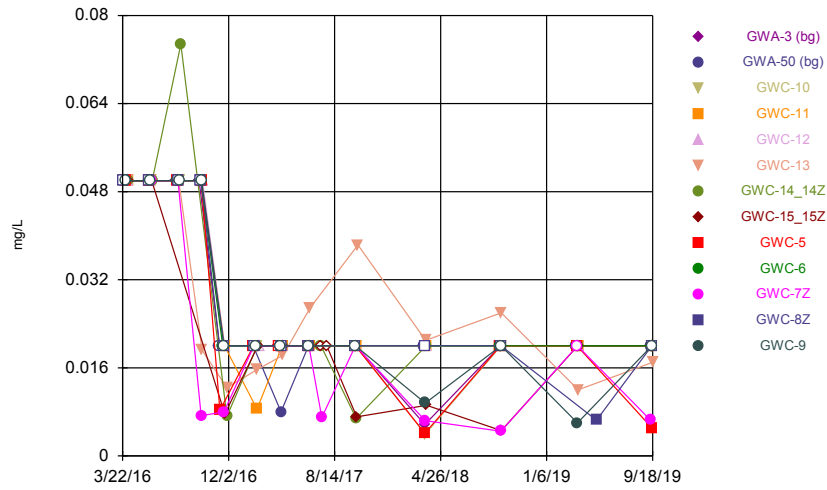
	GWA-4RZ (bg)	GWC-13R_13RZ
4/27/2011		
10/4/2011		
10/5/2011		
10/12/2011		0.0027
10/17/2011		
10/18/2011		
10/19/2011		
4/3/2012		
4/4/2012		
4/11/2012		
4/23/2012		
4/25/2012		<0.01
4/30/2012		
5/1/2012		
5/2/2012		
10/2/2012		0.0059
10/3/2012		
10/8/2012		
10/9/2012		
10/10/2012		
4/2/2013		0.008
4/3/2013		
4/8/2013		
4/10/2013		
4/11/2013		
4/12/2013		
4/15/2013		
10/8/2013		0.0062
10/9/2013		
10/15/2013		
10/16/2013		
10/22/2013		
4/1/2014		0.0067
4/2/2014		
4/9/2014		
4/10/2014		
4/11/2014		
4/21/2014		
4/22/2014		
9/30/2014		
10/1/2014		0.0024 (J)
10/2/2014		
3/30/2015		
3/31/2015		0.0046
4/1/2015		
4/2/2015		
4/3/2015		
5/26/2015		
6/18/2015		
7/2/2015		
10/7/2015		
10/8/2015		

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:12 AM View: cells 1&2 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

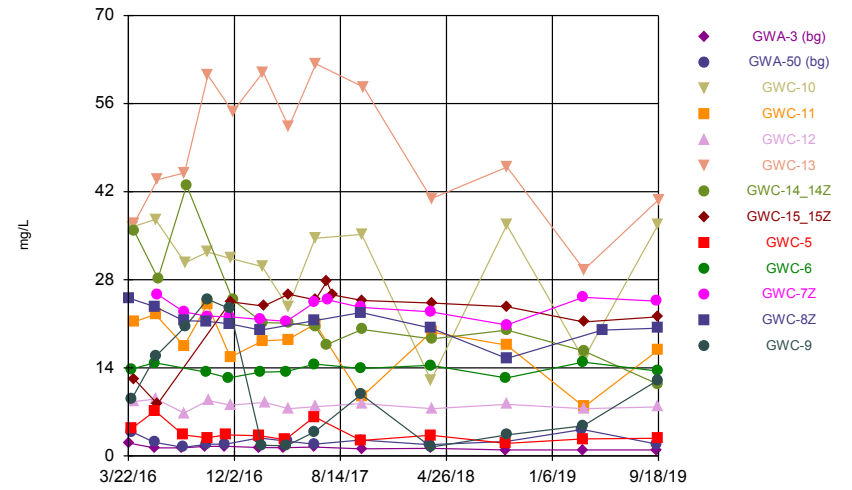
	GWA-4RZ (bg)	GWC-13R_13RZ
10/9/2015		
10/11/2015		
10/12/2015		
10/13/2015		
10/14/2015		0.002 (J)
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.01
4/5/2016		
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	<0.01 (*)	
4/10/2017		
4/11/2017		<0.01 (*)
4/12/2017		
10/2/2017		
10/3/2017	<0.01	
10/4/2017		
10/6/2017		<0.01
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	<0.01	
3/22/2018		
3/23/2018		<0.01
9/14/2018		
9/17/2018		
9/18/2018	<0.01	
9/19/2018		
9/20/2018		<0.01
3/19/2019		
3/20/2019		
3/21/2019	0.0034 (X)	
3/22/2019		0.0048 (XD)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.0072 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		0.0091 (X)

Time Series



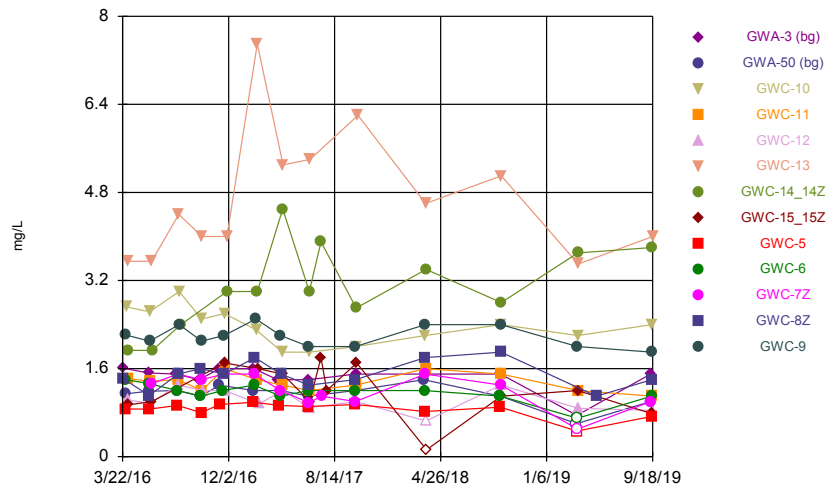
Constituent: Boron Analysis Run 11/7/2019 8:53 AM View: cells 1&2 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



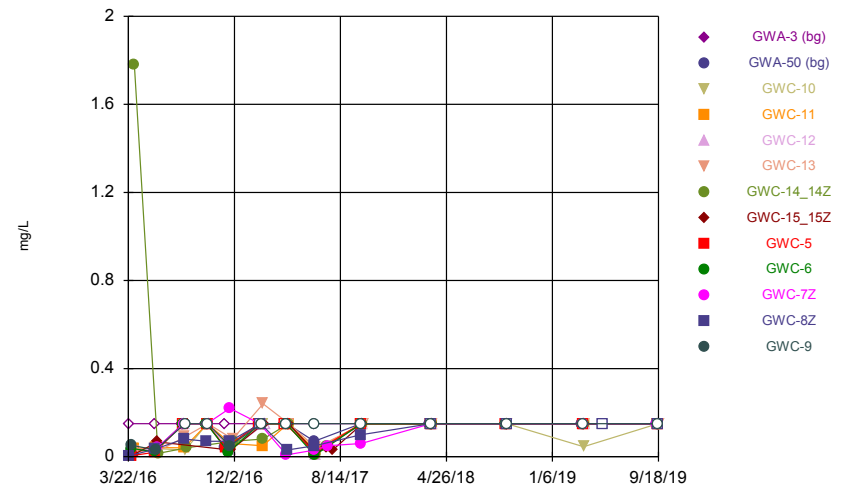
Constituent: Calcium Analysis Run 11/7/2019 8:53 AM View: cells 1&2 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Chloride Analysis Run 11/7/2019 8:53 AM View: cells 1&2 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Fluoride Analysis Run 11/7/2019 8:53 AM View: cells 1&2 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 applll overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
3/22/2016									
3/23/2016	<0.1								
3/28/2016		<0.1							<0.1
3/29/2016									
3/30/2016									
3/31/2016			<0.1						
4/4/2016				<0.1	<0.1	<0.1			
4/5/2016							<0.1	<0.1	
5/23/2016	<0.1	<0.1							
5/24/2016									
5/25/2016									<0.1
5/26/2016			<0.1	<0.1					
5/27/2016					<0.1				
5/31/2016						<0.1		<0.1	
6/1/2016							<0.1		
7/29/2016	<0.1 (*)								
8/1/2016		<0.1 (*)							<0.1 (*)
8/2/2016									
8/3/2016				<0.1 (*)	<0.1				
8/4/2016						<0.1 (*)			
8/5/2016			<0.1						
8/9/2016							0.0748 (D)		
9/22/2016	<0.1								
9/26/2016		<0.1							
9/27/2016									<0.1
9/28/2016			<0.1	<0.1					
9/29/2016						0.0192 (J)			
9/30/2016					<0.1				
11/10/2016	<0.04	<0.04 (*)							
11/11/2016									0.0083 (J)
11/18/2016									
11/21/2016									
11/22/2016			<0.04	<0.04	<0.04				
11/23/2016								0.0076 (J)	
11/28/2016						0.0124 (J)	0.0072 (J)		
1/30/2017		<0.04							
1/31/2017	<0.04								<0.04
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.04						
2/8/2017				0.0085 (J)					
2/9/2017						0.0157 (J)	<0.04		
2/10/2017								<0.04	
2/13/2017					<0.04				
3/30/2017	<0.04								
4/3/2017									<0.04
4/6/2017									
4/7/2017		0.008 (J)							
4/10/2017			<0.04	<0.04					
4/11/2017					<0.04		<0.04	<0.04	
4/12/2017						0.0183 (J)			

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 applll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
6/12/2017	<0.04	<0.04							<0.04
6/13/2017									
6/14/2017			<0.04		<0.04		<0.04		
6/15/2017				<0.04				<0.04	
6/16/2017						0.0269 (J)			
7/12/2017							<0.04	<0.04	
7/14/2017									
7/26/2017								<0.04	
10/2/2017		<0.04							
10/3/2017									<0.04
10/4/2017	<0.04		<0.04	<0.04	<0.04				
10/5/2017							0.0068 (J)		
10/6/2017								0.0071 (J)	
10/9/2017						0.0383 (J)			
3/16/2018		<0.04							
3/19/2018	0.0057 (J)								0.0041 (J)
3/20/2018			0.004 (J)						
3/21/2018				<0.04		0.021 (J)			
3/22/2018					<0.04		<0.04		
3/23/2018								0.0092 (J)	
9/17/2018	<0.04	<0.04							<0.04
9/18/2018			<0.04	<0.04	<0.04				
9/19/2018						0.026 (J)	<0.04	0.0046 (J)	
3/19/2019		<0.04							
3/20/2019	<0.04								<0.04
3/21/2019									
3/22/2019			<0.04				<0.04 (D)	<0.04 (D)	
3/23/2019				<0.04	<0.04	0.012 (X)			
5/6/2019									
9/13/2019	<0.04	<0.04							
9/16/2019									0.0051 (X)
9/17/2019			<0.04	<0.04	<0.04		<0.04	<0.04	
9/18/2019						0.017 (X)			

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 applll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
3/22/2016			<0.1	
3/23/2016				
3/28/2016				
3/29/2016	<0.1			
3/30/2016				<0.1
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	<0.1			
5/25/2016			<0.1	
5/26/2016				<0.1
5/27/2016				
5/31/2016		<0.1		
6/1/2016				
7/29/2016				
8/1/2016	<0.1			
8/2/2016		<0.1 (*)	<0.1 (*)	
8/3/2016				
8/4/2016				
8/5/2016				<0.1
8/9/2016				
9/22/2016				
9/26/2016	<0.1		<0.1	
9/27/2016		0.0073 (J)		
9/28/2016				<0.1
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	<0.04			
11/21/2016		0.008 (J)	<0.04	<0.04
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.04	<0.04		
2/3/2017			<0.04	
2/6/2017				<0.04
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<0.04	<0.04		<0.04
4/7/2017			<0.04	
4/10/2017				
4/11/2017				
4/12/2017				

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 applll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
6/12/2017				
6/13/2017	<0.04	<0.04	<0.04	<0.04
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		0.007 (J)		
7/26/2017				
10/2/2017				
10/3/2017	<0.04	<0.04	<0.04	<0.04
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.04			
3/20/2018		0.0064 (J)	<0.04	0.0096 (J)
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.04			
9/18/2018		0.0045 (J)	<0.04	<0.04 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.04	<0.04		0.006 (X)
3/22/2019				
3/23/2019				
5/6/2019			0.0065 (X)	
9/13/2019		0.0065 (X)		
9/16/2019	<0.04		<0.04	<0.04
9/17/2019				
9/18/2019				

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
3/22/2016									
3/23/2016	2.05								
3/28/2016		3.89							4.29
3/29/2016									
3/30/2016									
3/31/2016			36.4						
4/4/2016				21.3	8.63	36.9			
4/5/2016							35.7	12.2	
5/23/2016	1.29	2.16							
5/24/2016									
5/25/2016									7.15
5/26/2016			37.6	22.5					
5/27/2016					9.07				
5/31/2016						43.9		8.24	
6/1/2016							28.2		
7/29/2016	1.29								
8/1/2016		1.37							3.35
8/2/2016									
8/3/2016				17.5	6.82				
8/4/2016						45			
8/5/2016			30.7						
8/9/2016							43		
9/22/2016	1.51								
9/26/2016		1.86							
9/27/2016									2.89
9/28/2016			32.4	24.1					
9/29/2016						60.5			
9/30/2016					8.8				
11/10/2016	1.54	1.86							
11/11/2016									3.33
11/18/2016									
11/21/2016									
11/22/2016			31.4	15.7	8.08				
11/23/2016								24.5	
11/28/2016						54.7	24.8		
1/30/2017		2.86							
1/31/2017	1.34								3.21
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			30.1						
2/8/2017				18.3					
2/9/2017						61	21.2		
2/10/2017								23.8	
2/13/2017					8.51				
3/30/2017	1.31								
4/3/2017									2.57
4/6/2017									
4/7/2017		2.34							
4/10/2017			23.6	18.5					
4/11/2017					7.5		21.1	25.7	
4/12/2017						52.3			

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
6/12/2017	1.4	1.87							6.22
6/13/2017									
6/14/2017			34.6		7.82		20.6		
6/15/2017				21				24.8	
6/16/2017						62.3			
7/12/2017							17.7	27.7	
7/14/2017									
7/26/2017								25.6	
10/2/2017		2.53							
10/3/2017									2.45
10/4/2017	1.13		35.2	9.4	8.32				
10/5/2017							20.1		
10/6/2017								24.7	
10/9/2017						58.6			
3/16/2018		1.8							
3/19/2018	1.2								3.3
3/20/2018			12 (J)						
3/21/2018				19.7 (J)		40.9			
3/22/2018					7.5		18.6 (J)		
3/23/2018								24.3 (J)	
9/17/2018	0.95	2.3							2
9/18/2018			36.7	17.6 (J)	8.2				
9/19/2018						45.9	20 (J)	23.7 (J)	
3/19/2019		4.2							
3/20/2019	0.96								2.7
3/21/2019									
3/22/2019			15.4 (X)				16.7 (XD)	21.3 (XD)	
3/23/2019				7.8	7.5	29.6			
5/6/2019									
9/13/2019	0.94	1.9							
9/16/2019									2.8
9/17/2019			36.7	16.8	7.8		11.4	22.1	
9/18/2019						40.7			

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
3/22/2016			25.1	
3/23/2016				
3/28/2016				
3/29/2016	13.8			
3/30/2016				9.07
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	14.8			
5/25/2016			23.7	
5/26/2016				15.8
5/27/2016				
5/31/2016		25.7		
6/1/2016				
7/29/2016				
8/1/2016				
8/2/2016		22.9	21.5	
8/3/2016				
8/4/2016				
8/5/2016				20.5
8/9/2016				
9/22/2016				
9/26/2016	13.3		21.4	
9/27/2016		22.2		
9/28/2016				24.9
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	12.4			
11/21/2016		22.1	21	23.4
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	13.3	21.7		
2/3/2017			20	
2/6/2017				1.7
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	13.4	21.4		1.6
4/7/2017				
4/10/2017				
4/11/2017				
4/12/2017				

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
6/12/2017				
6/13/2017	14.6	24.4	21.5	3.82
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		24.8		
7/26/2017				
10/2/2017				
10/3/2017	13.9	23.6	22.8	9.77
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	14.4 (J)			
3/20/2018		22.9 (J)	20.3 (J)	1.4
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	12.4 (J)			
9/18/2018		20.8 (J)	15.5 (J)	3.35 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	14.9 (X)	25.2		4.8
3/22/2019				
3/23/2019				
5/6/2019			20 (X)	
9/13/2019		24.6		
9/16/2019	13.5		20.3	12
9/17/2019				
9/18/2019				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
3/22/2016									
3/23/2016	1.6092								
3/28/2016		1.14							0.8659
3/29/2016									
3/30/2016									
3/31/2016			2.72						
4/4/2016				1.42	1.03	3.55			
4/5/2016							1.93	0.9439	
5/23/2016	1.52	1.19							
5/24/2016									
5/25/2016									0.8639
5/26/2016			2.63	1.37					
5/27/2016					0.9684				
5/31/2016						3.55		1	
6/1/2016							1.93		
7/29/2016	1.5								
8/1/2016		1.2							0.93
8/2/2016									
8/3/2016				1.4	1.3				
8/4/2016						4.4			
8/5/2016			3						
8/9/2016							2.4		
9/22/2016	1.4								
9/26/2016		1.1							
9/27/2016									0.8
9/28/2016			2.5	1.2					
9/29/2016						4			
9/30/2016					1.2				
11/10/2016	1.6	1.3							
11/11/2016									0.95
11/18/2016									
11/21/2016									
11/22/2016			2.6	1.6	1.2				
11/23/2016								1.7	
11/28/2016						4	3		
1/30/2017		1.2							
1/31/2017	1.6								0.99
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			2.3						
2/8/2017				1.4					
2/9/2017						7.5	3		
2/10/2017								1.6	
2/13/2017					0.96				
3/30/2017	1.4								
4/3/2017									0.93
4/6/2017									
4/7/2017		1.2							
4/10/2017			1.9	1.3					
4/11/2017					1.2		4.5	1.5	
4/12/2017						5.3			

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
6/12/2017	1.4	1.1							0.91
6/13/2017									
6/14/2017			1.9		0.89		3		
6/15/2017				1.2				1	
6/16/2017						5.4			
7/12/2017							3.9	1.8	
7/14/2017									
7/26/2017								1.2	
10/2/2017		1.2							
10/3/2017									0.95
10/4/2017	1.5		2	1.3	1				
10/5/2017							2.7		
10/6/2017								1.7	
10/9/2017						6.2			
3/16/2018		1.4							
3/19/2018	1.5								0.82
3/20/2018			2.2						
3/21/2018				1.6		4.6			
3/22/2018					<1.3		3.4		
3/23/2018								<0.25	
9/17/2018	1.5	1.1							0.9
9/18/2018			2.4	1.5	1.3				
9/19/2018						5.1	2.8	1.1	
3/19/2019		<1.2							
3/20/2019	<1.5								<0.93
3/21/2019									
3/22/2019			2.2				3.7 (D)	1.2 (D)	
3/23/2019				1.2	0.88	3.5			
5/6/2019									
9/13/2019	1.5	1							
9/16/2019									0.73 (X)
9/17/2019			2.4	1.1	0.84 (X)		3.8	0.78 (X)	
9/18/2019						4			

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
3/22/2016			1.4231	
3/23/2016				
3/28/2016				
3/29/2016	1.3977			
3/30/2016				2.21
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	1.33			
5/25/2016			1.11	
5/26/2016				2.1
5/27/2016				
5/31/2016		1.33		
6/1/2016				
7/29/2016				
8/1/2016	1.2			
8/2/2016		1.5	1.5	
8/3/2016				
8/4/2016				
8/5/2016				2.4
8/9/2016				
9/22/2016				
9/26/2016	1.1		1.6	
9/27/2016		1.4		
9/28/2016				2.1
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	1.2			
11/21/2016		1.5	1.5	2.2
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	1.3	1.5		
2/3/2017			1.8	
2/6/2017				2.5
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	1.1	1.2		2.2
4/7/2017			1.5	
4/10/2017				
4/11/2017				
4/12/2017				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
6/12/2017				
6/13/2017	1.2	0.98	1.3	2
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		1.1		
7/26/2017				
10/2/2017				
10/3/2017	1.2	1	1.4	2
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	1.2			
3/20/2018		1.5	1.8	2.4
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	1.1			
9/18/2018		1.3	1.9	2.4 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<1.4	<1		2
3/22/2019				
3/23/2019				
5/6/2019			1.1	
9/13/2019		1		
9/16/2019	1.1		1.4	1.9
9/17/2019				
9/18/2019				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
3/22/2016									
3/23/2016	<0.3								
3/28/2016		0.0314 (J)							0.00421 (J)
3/29/2016									
3/30/2016									
3/31/2016			0.0389 (J)						
4/4/2016				0.0357 (J)	0.035 (J)	0.026 (J)			
4/5/2016							1.78243 (J)	0.011 (J)	
5/23/2016	<0.3	0.027 (J)							
5/24/2016									
5/25/2016									0.0207 (J)
5/26/2016			0.0375 (J)	0.042 (J)					
5/27/2016					0.032 (J)				
5/31/2016						0.0234 (J)		0.0669 (J)	
6/1/2016							0.0148 (J)		
7/29/2016	<0.3								
8/1/2016		<0.3							<0.3
8/2/2016									
8/3/2016				0.04 (J)	<0.3				
8/4/2016						0.09 (J)			
8/5/2016			0.03 (J)						
8/9/2016							0.04 (J)		
9/22/2016	<0.3								
9/26/2016		<0.3							
9/27/2016									<0.3
9/28/2016			<0.3	<0.3					
9/29/2016						<0.3			
9/30/2016					<0.3				
11/10/2016	<0.3	0.04 (J)							
11/11/2016									0.04 (J)
11/18/2016									
11/21/2016									
11/22/2016			0.04 (J)	0.06 (J)	0.03 (J)				
11/23/2016								0.03 (J)	
11/28/2016						0.08 (J)	0.07 (J)		
1/30/2017		<0.3							
1/31/2017	<0.3								<0.3
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			<0.3						
2/8/2017				0.05 (J)					
2/9/2017						0.24 (J)	0.08 (J)		
2/10/2017								<0.3	
2/13/2017					<0.3				
3/30/2017	<0.3								
4/3/2017									<0.3
4/6/2017									
4/7/2017		<0.3							
4/10/2017			<0.3	<0.3					
4/11/2017					<0.3		<0.3	<0.3	
4/12/2017						<0.3			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
6/12/2017	<0.3	0.07 (J)							0.02 (J)
6/13/2017									
6/14/2017			0.02 (J)		0.01 (J)		0.01 (J)		
6/15/2017				0.03 (J)				0.02 (J)	
6/16/2017						0.04 (J)			
7/12/2017							0.05 (J)	0.04 (J)	
7/14/2017									
7/26/2017								0.03 (J)	
10/2/2017		<0.3							
10/3/2017									<0.3
10/4/2017	<0.3		<0.3	<0.3	<0.3				
10/5/2017							<0.3		
10/6/2017								<0.3	
10/9/2017						<0.3			
3/16/2018		<0.3							
3/19/2018	<0.3								<0.3
3/20/2018			<0.3						
3/21/2018				<0.3		<0.3			
3/22/2018					<0.3		<0.3		
3/23/2018								<0.3	
9/17/2018	<0.3	<0.3							<0.3
9/18/2018			<0.3	<0.3	<0.3				
9/19/2018						<0.3	<0.3	<0.3	
3/19/2019		<0.3							
3/20/2019	<0.3								<0.3
3/21/2019									
3/22/2019			0.045 (X)				<0.3 (D)	<0.3 (D)	
3/23/2019				<0.3	<0.3	<0.3			
5/6/2019									
9/13/2019	<0.3	<0.3							
9/16/2019									<0.3
9/17/2019			<0.3	<0.3	<0.3		<0.3	<0.3	
9/18/2019						<0.3			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

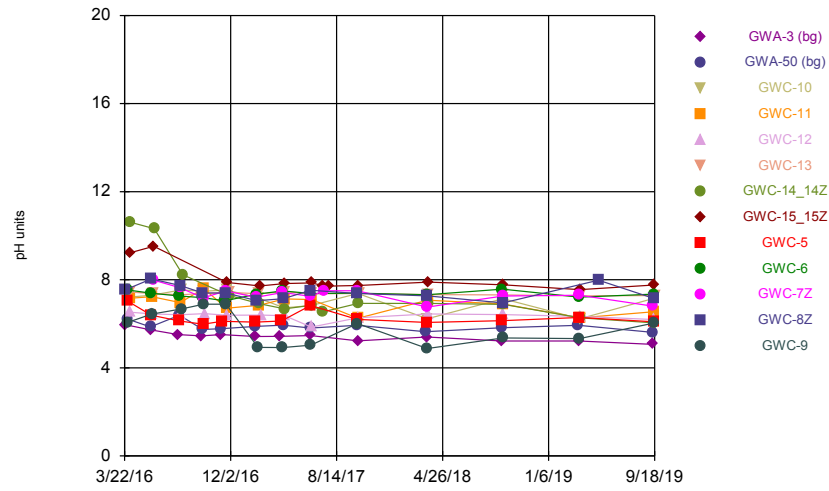
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
3/22/2016			0.00323 (J)	
3/23/2016				
3/28/2016				
3/29/2016	0.0376 (J)			
3/30/2016				0.0518 (J)
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	0.023 (J)			
5/25/2016			0.0345 (J)	
5/26/2016				0.0307 (J)
5/27/2016				
5/31/2016		0.043 (J)		
6/1/2016				
7/29/2016				
8/1/2016	<0.3			
8/2/2016		<0.3	0.08 (J)	
8/3/2016				
8/4/2016				
8/5/2016				<0.3
8/9/2016				
9/22/2016				
9/26/2016	<0.3		0.07 (J)	
9/27/2016		<0.3		
9/28/2016				<0.3
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	0.02 (J)			
11/21/2016		0.22 (J)	0.07 (J)	0.05 (J)
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	<0.3	<0.3		
2/3/2017			<0.3	
2/6/2017				<0.3
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<0.3	0.008 (J)		<0.3
4/7/2017			0.03 (J)	
4/10/2017				
4/11/2017				
4/12/2017				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

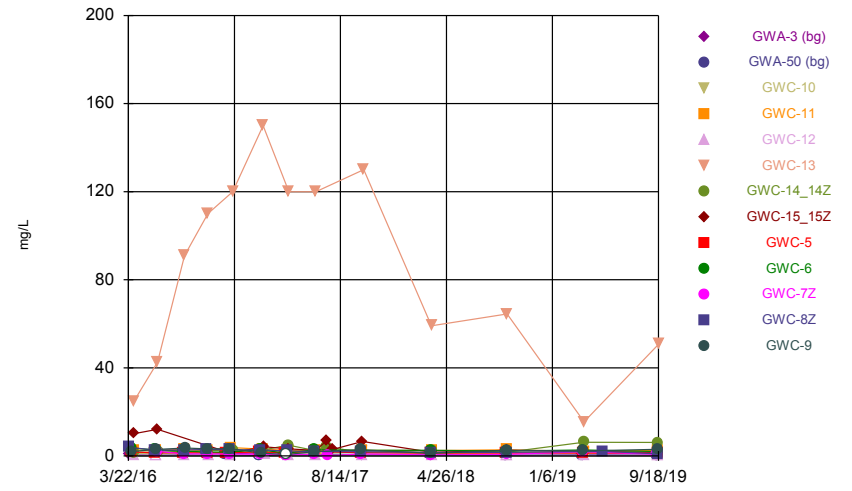
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
6/12/2017				
6/13/2017	0.006 (J)	0.03 (J)	0.05 (J)	<0.3
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		0.05 (J)		
7/26/2017				
10/2/2017				
10/3/2017	<0.3	0.06 (J)	0.1 (J)	<0.3
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	<0.3			
3/20/2018		<0.3	<0.3	<0.3
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	<0.3			
9/18/2018		<0.3	<0.3	<0.3 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	<0.3	<0.3		<0.3
3/22/2019				
3/23/2019				
5/6/2019			<0.3	
9/13/2019		<0.3		
9/16/2019	<0.3		<0.3	<0.3
9/17/2019				
9/18/2019				

Time Series



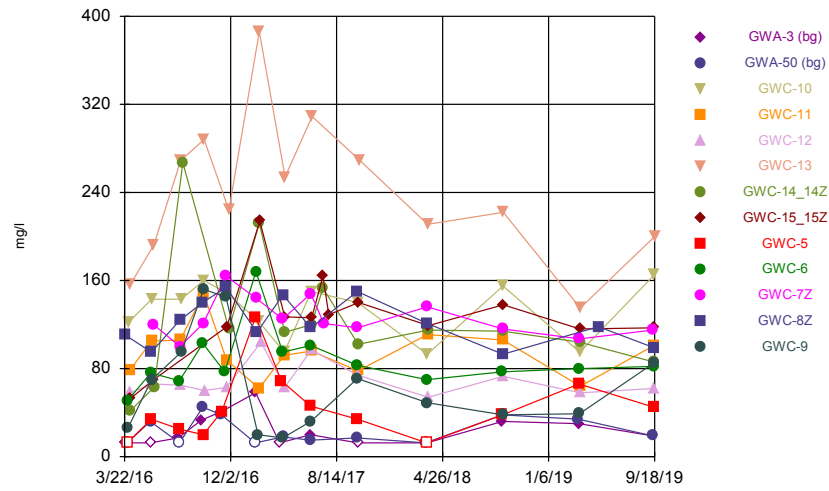
Constituent: pH Analysis Run 11/7/2019 8:53 AM View: cells 1&2 appllI overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Sulfate Analysis Run 11/7/2019 8:53 AM View: cells 1&2 appllI overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/7/2019 8:53 AM View: cells 1&2 appllI overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 applll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
3/22/2016									
3/23/2016	5.96								
3/28/2016		6.22							7.04
3/29/2016									
3/30/2016									
3/31/2016			7.21						
4/4/2016				7.16	6.53 (D)	7.44 (D)			
4/5/2016							10.61	9.23	
5/23/2016	5.73	5.86							
5/24/2016									
5/25/2016									6.39
5/26/2016			7.3	7.23					
5/27/2016					6.45				
5/31/2016						7.37		9.52	
6/1/2016							10.32		
7/29/2016	5.51								
8/1/2016		6.39							6.13
8/2/2016									
8/3/2016				6.96	6.41				
8/4/2016						7.32			
8/5/2016			7.54						
8/9/2016							8.23		
9/22/2016	5.45								
9/26/2016		5.74							
9/27/2016									5.98
9/28/2016			7.48	7.6					
9/29/2016						7.38			
9/30/2016					6.46				
11/10/2016	5.51	5.78							
11/11/2016									6.11
11/18/2016									
11/21/2016									
11/22/2016			7.54	6.71	6.39				
11/23/2016								7.88	
11/28/2016						7.43	7.29		
1/30/2017		5.88							
1/31/2017	5.42								6.08
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			7.17						
2/8/2017				6.84					
2/9/2017						7.36	6.91		
2/10/2017								7.72	
2/13/2017					6.4				
3/30/2017	5.43								
4/3/2017									6.13
4/6/2017									
4/7/2017		5.94							
4/10/2017			6.72	7.13					
4/11/2017					6.37		6.68	7.83	
4/12/2017						7.46			

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 applll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
6/12/2017	5.47	5.81							6.83
6/13/2017									
6/14/2017			6.83		5.85		6.84		
6/15/2017				7.1				7.86	
6/16/2017						7.36			
7/12/2017							6.54	7.73	
7/14/2017									
7/26/2017								7.71	
10/2/2017		5.93							
10/3/2017									6.2
10/4/2017	5.23		7.38	6.25	6.27				
10/5/2017							6.93		
10/6/2017								7.74	
10/9/2017						7.38			
3/16/2018		5.64							
3/19/2018	5.4								6.06
3/20/2018			6.23						
3/21/2018				7.07		7.33			
3/22/2018					6.45		6.93		
3/23/2018								7.89	
9/17/2018	5.22	5.82							6.14
9/18/2018			7.14	6.9	6.42				
9/19/2018						7.31	6.88	7.77	
3/19/2019		5.93							
3/20/2019	5.22								6.29
3/21/2019									
3/22/2019			6.23				6.27 (D)	7.55 (D)	
3/23/2019				6.27	6.34	7.27			
5/6/2019									
9/13/2019	5.07	5.61							
9/16/2019									6.09
9/17/2019			7.16	6.55	6.19		6.04	7.76	
9/18/2019						7.28			

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
3/22/2016			7.53 (D)	
3/23/2016				
3/28/2016				
3/29/2016	7.54			
3/30/2016				6.07
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	7.39			
5/25/2016			8.04	
5/26/2016				6.44
5/27/2016				
5/31/2016		7.98		
6/1/2016				
7/29/2016				
8/1/2016	7.26			
8/2/2016		7.64	7.74	
8/3/2016				
8/4/2016				
8/5/2016				6.67
8/9/2016				
9/22/2016				
9/26/2016	7.19		7.4	
9/27/2016		7.18		
9/28/2016				6.89
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	7.04			
11/21/2016		7.49	7.4	6.89
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	7.34	7.2		
2/3/2017			7.05	
2/6/2017				4.93
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	7.49	7.42		4.92
4/7/2017			7.14	
4/10/2017				
4/11/2017				
4/12/2017				

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
6/12/2017				
6/13/2017	7.38	7.25	7.52	5.03
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		7.5		
7/26/2017				
10/2/2017				
10/3/2017	7.39	7.5	7.38	6.01
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	7.32			
3/20/2018		6.76	7.27	4.88
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	7.57			
9/18/2018		7.26	6.95	5.36 (D)
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	7.21	7.3		5.33
3/22/2019				
3/23/2019				
5/6/2019			7.98	
9/13/2019		6.8		
9/16/2019	7.35		7.15	6.03
9/17/2019				
9/18/2019				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
3/22/2016									
3/23/2016	0.8724 (J)								
3/28/2016		0.7283 (J)							1.87
3/29/2016									
3/30/2016									
3/31/2016			1.17						
4/4/2016				2.57	0.3574 (J)	24.8			
4/5/2016							1.65	10.1	
5/23/2016	0.805 (J)	0.728 (J)							
5/24/2016									
5/25/2016									1.41
5/26/2016			1.01	2.5					
5/27/2016					<1				
5/31/2016						42.5		12.1	
6/1/2016							1.75		
7/29/2016	0.84 (J)								
8/1/2016		0.78 (J)							1.5
8/2/2016									
8/3/2016				3	0.35 (J)				
8/4/2016						91			
8/5/2016			1.1						
9/22/2016	0.94 (J)								
9/26/2016		0.82 (J)							
9/27/2016									1.4
9/28/2016			1	2.3					
9/29/2016						110			
9/30/2016					0.47 (J)				
11/10/2016	1.1	0.92 (J)							
11/11/2016									1.5
11/18/2016									
11/21/2016									
11/22/2016			1.8	3.8	0.36 (J)				
11/23/2016								1.3	
11/28/2016						120	2.7		
1/30/2017		<1 (*)							
1/31/2017	0.92 (J)								1.8
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			1.7						
2/8/2017				3.1					
2/9/2017						150	2.7		
2/10/2017								4.2	
2/13/2017					0.79 (J)				
3/30/2017	0.77 (J)								
4/3/2017									1.5
4/6/2017									
4/7/2017		0.82 (J)							
4/10/2017			1.9	2.5					
4/11/2017					0.42 (J)		4.9	3.2	
4/12/2017						120			
6/12/2017	0.68 (J)	0.78 (J)							2.1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
6/13/2017									
6/14/2017			1.1		0.3 (J)		2.4		
6/15/2017				2.5				2.5	
6/16/2017						120			
7/12/2017							4.1	6.9	
7/14/2017									
7/26/2017								2.9	
10/2/2017		0.71 (J)							
10/3/2017									1.4
10/4/2017	0.5 (J)		1.8	2.5	0.36 (J)				
10/5/2017							1.6		
10/6/2017								6.6	
10/9/2017						130			
3/16/2018		0.67 (J)							
3/19/2018	0.49 (J)								1.3
3/20/2018			1.4						
3/21/2018				2.4		59.1			
3/22/2018					0.3 (J)		2.5		
3/23/2018								1.6	
9/17/2018	0.36 (J)	0.47 (J)							1.3
9/18/2018			1.6	2.8	<1				
9/19/2018						64.5	1.7	2.6	
3/19/2019		0.52 (X)							
3/20/2019	0.38 (X)								1.3
3/21/2019									
3/22/2019			1.6				6.2 (D)	2.1 (D)	
3/23/2019				2.1	0.3 (X)	15.5 (X)			
5/6/2019									
9/13/2019	<1	0.55 (X)							
9/16/2019									1.2
9/17/2019			1.2	2.6	<1		6.1	1.6	
9/18/2019						50.7			

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
3/22/2016			3.9321	
3/23/2016				
3/28/2016				
3/29/2016	3.5801			
3/30/2016				2
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	2.79			
5/25/2016			2.68	
5/26/2016				2.93
5/27/2016				
5/31/2016		2.03		
6/1/2016				
7/29/2016				
8/1/2016	2.2			
8/2/2016		0.96 (J)	2.7	
8/3/2016				
8/4/2016				
8/5/2016				3.6
9/22/2016				
9/26/2016	1.8		2.9	
9/27/2016		0.87 (J)		
9/28/2016				3.2
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	1.8			
11/21/2016		0.93 (J)	2.8	3.3
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	2.8	0.76 (J)		
2/3/2017			2.7	
2/6/2017				1.3
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	<2.5 (*)	<1 (*)		<1.2 (*)
4/7/2017			2.3	
4/10/2017				
4/11/2017				
4/12/2017				
6/12/2017				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-7Z	GWC-8Z	GWC-9
6/13/2017	2.8	0.58 (J)	2	2
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		0.04 (J)		
7/26/2017				
10/2/2017				
10/3/2017	2.6	0.87 (J)	1.9	2.8
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	2.6			
3/20/2018		0.5 (J)	1.6	1.2
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	2.2			
9/18/2018		0.65 (J)	1.6	2.6
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	2.7	1.9		2.3
3/22/2019				
3/23/2019				
5/6/2019			2.1	
9/13/2019		0.76 (X)		
9/16/2019	2		1	3
9/17/2019				
9/18/2019				

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
3/22/2016									
3/23/2016	<25								
3/28/2016		<25							<25
3/29/2016									
3/30/2016									
3/31/2016			122						
4/4/2016				79	58	156			
4/5/2016							42	53	
5/23/2016	<25	32							
5/24/2016									
5/25/2016									34
5/26/2016			143	105					
5/27/2016					66				
5/31/2016						192		70	
6/1/2016							63		
7/29/2016	17 (J)								
8/1/2016		<25							25
8/2/2016									
8/3/2016				106	65				
8/4/2016						269			
8/5/2016			143						
8/9/2016							267		
9/22/2016	33								
9/26/2016		45							
9/27/2016									20 (J)
9/28/2016			160	148					
9/29/2016						288			
9/30/2016					60				
11/10/2016	41	38							
11/11/2016									41
11/18/2016									
11/21/2016									
11/22/2016			149	88	63				
11/23/2016								118	
11/28/2016						224	116		
1/30/2017		<25							
1/31/2017	58								127
2/1/2017									
2/3/2017									
2/6/2017									
2/7/2017			123						
2/8/2017				62					
2/9/2017						386	212 (J)		
2/10/2017								214	
2/13/2017					104 (J)				
3/30/2017	<25								
4/3/2017									69
4/6/2017									
4/7/2017		18 (J)							
4/10/2017			95	92					
4/11/2017					63		113	127	
4/12/2017						254			

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)	GWA-50 (bg)	GWC-10	GWC-11	GWC-12	GWC-13	GWC-14_14Z	GWC-15_15Z	GWC-5
6/12/2017	20 (J)	15 (J)							46
6/13/2017									
6/14/2017			150		97		120		
6/15/2017				96				126	
6/16/2017						309			
7/12/2017							153	164	
7/14/2017									
7/26/2017								129	
10/2/2017		17 (J)							
10/3/2017									34
10/4/2017	<25		140	78	74				
10/5/2017							102		
10/6/2017								140	
10/9/2017						269			
3/16/2018		<25							
3/19/2018	<25								<25
3/20/2018			93						
3/21/2018				111		211			
3/22/2018					54		115		
3/23/2018								119	
9/17/2018	32	38							38
9/18/2018			155	106	73				
9/19/2018						222	114	138	
3/19/2019		34							
3/20/2019	30								66
3/21/2019									
3/22/2019			95				104 (D)	116 (D)	
3/23/2019				64	58	135			
5/6/2019									
9/13/2019	19	19							
9/16/2019									45
9/17/2019			165	101	62		86	117	
9/18/2019						200			

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appll overburden
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

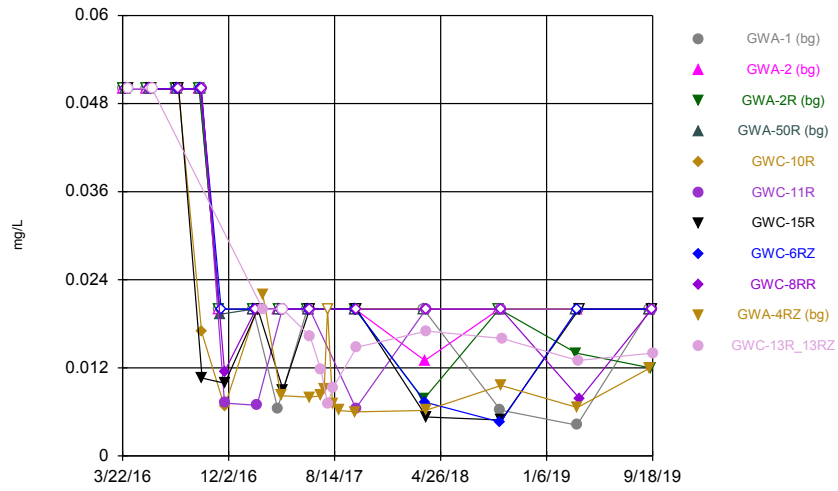
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
3/22/2016			111	
3/23/2016				
3/28/2016				
3/29/2016	51			
3/30/2016				26
3/31/2016				
4/4/2016				
4/5/2016				
5/23/2016				
5/24/2016	76			
5/25/2016			95	
5/26/2016				70
5/27/2016				
5/31/2016		120		
6/1/2016				
7/29/2016				
8/1/2016	69			
8/2/2016		100	124	
8/3/2016				
8/4/2016				
8/5/2016				95
8/9/2016				
9/22/2016				
9/26/2016	103		140	
9/27/2016		121		
9/28/2016				152
9/29/2016				
9/30/2016				
11/10/2016				
11/11/2016				
11/18/2016	77			
11/21/2016		164	154	145
11/22/2016				
11/23/2016				
11/28/2016				
1/30/2017				
1/31/2017				
2/1/2017	168	144		
2/3/2017			113	
2/6/2017				20 (J)
2/7/2017				
2/8/2017				
2/9/2017				
2/10/2017				
2/13/2017				
3/30/2017				
4/3/2017				
4/6/2017	95	125		17 (J)
4/7/2017			147	
4/10/2017				
4/11/2017				
4/12/2017				

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 8:54 AM View: cells 1&2 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

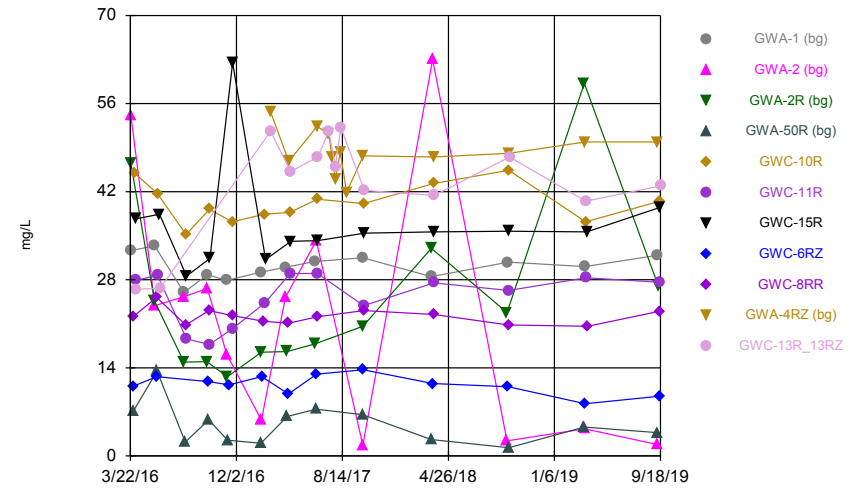
	GWC-6	GWC-7Z	GWC-8Z	GWC-9
6/12/2017				
6/13/2017	101	148	117	32
6/14/2017				
6/15/2017				
6/16/2017				
7/12/2017				
7/14/2017		121		
7/26/2017				
10/2/2017				
10/3/2017	83	117	150	71
10/4/2017				
10/5/2017				
10/6/2017				
10/9/2017				
3/16/2018				
3/19/2018	70			
3/20/2018		136	121	49
3/21/2018				
3/22/2018				
3/23/2018				
9/17/2018	77			
9/18/2018		116	93	38
9/19/2018				
3/19/2019				
3/20/2019				
3/21/2019	80	107		39
3/22/2019				
3/23/2019				
5/6/2019			118	
9/13/2019		115		
9/16/2019	82		99	85
9/17/2019				
9/18/2019				

Time Series



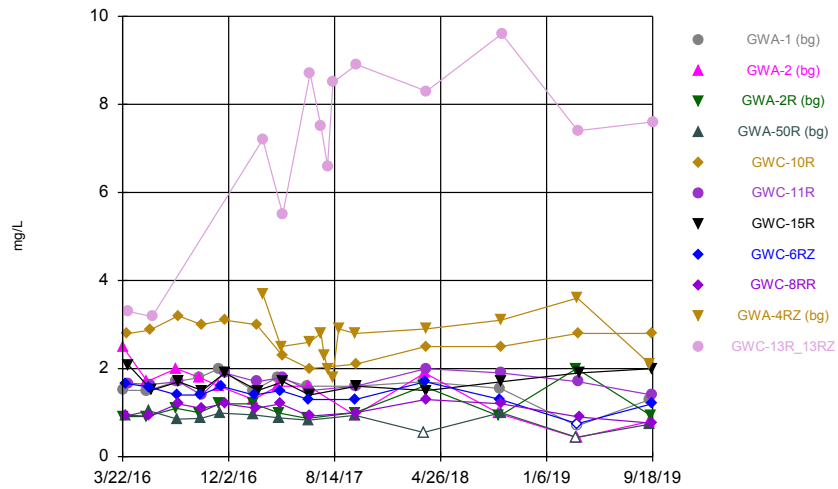
Constituent: Boron Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



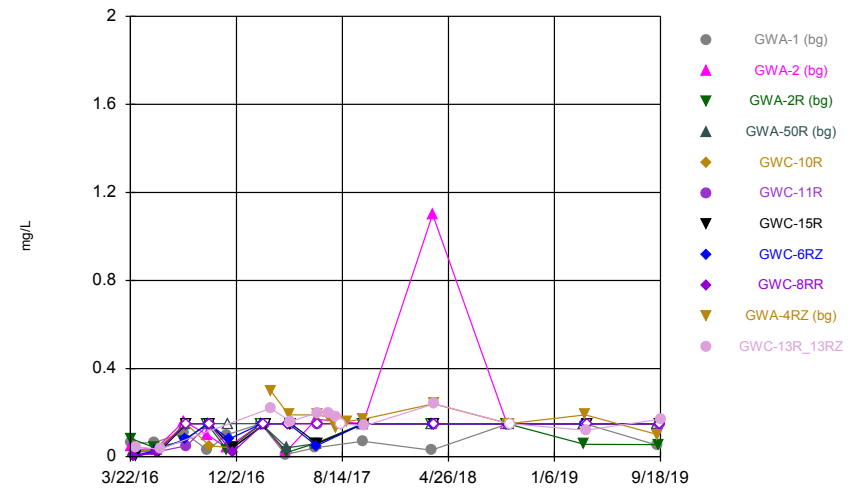
Constituent: Calcium Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Chloride Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Fluoride Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
3/22/2016	<0.1								
3/23/2016		<0.1	<0.1						
3/28/2016				<0.1					
3/29/2016								<0.1	
3/30/2016									<0.1
3/31/2016					<0.1				
4/4/2016						<0.1			
4/5/2016							<0.1		
5/19/2016	<0.1		<0.1						
5/20/2016		<0.1							
5/24/2016								<0.1	<0.1
5/25/2016				<0.1					
5/26/2016					<0.1	<0.1			
5/31/2016							<0.1		
6/1/2016									
7/29/2016	<0.1 (*)	<0.1 (*)	<0.1 (*)						
8/1/2016				<0.1 (*)				<0.1	
8/2/2016									<0.1 (*)
8/3/2016					<0.1 (*)				
8/4/2016						<0.1 (*)	<0.1		
9/22/2016			<0.1						
9/23/2016	<0.1 (*)	<0.1 (*)							
9/26/2016				<0.1				<0.1	
9/27/2016									<0.1
9/28/2016					0.0169 (J)	<0.1			
9/29/2016							0.0106 (J)		
11/9/2016	<0.04 (*)	<0.04 (*)							
11/10/2016			<0.04						
11/11/2016				0.0193 (J)					
11/14/2016								<0.04	
11/22/2016					0.0067 (J)	0.0072 (J)			0.0115 (J)
11/23/2016							0.0099 (J)		
1/30/2017	<0.04			<0.04					
1/31/2017		<0.04	<0.04						
2/1/2017								<0.04	
2/6/2017									<0.04
2/7/2017					<0.04				
2/8/2017						0.0069 (J)			
2/10/2017							<0.04		
2/22/2017									
3/30/2017	0.0065 (J)	<0.04							
4/3/2017			<0.04	<0.04					
4/6/2017								<0.04	<0.04
4/7/2017									
4/10/2017					<0.04	<0.04			
4/11/2017									
4/12/2017							0.009 (J)		
6/9/2017	<0.04		<0.04						
6/12/2017		<0.04		<0.04					
6/13/2017								<0.04	
6/14/2017					<0.04				<0.04
6/15/2017						<0.04	<0.04		

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		<0.1
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		<0.1
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	0.022 (J)	0.02 (J)
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	0.0082 (J)	
4/10/2017		
4/11/2017		<0.04
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	0.008 (J)	
6/15/2017		

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/16/2017		0.0163 (J)
7/12/2017	0.0082 (J)	0.0117 (J)
7/20/2017	0.0091 (J)	
7/28/2017	<0.04	0.0071 (J)
8/9/2017	0.0071 (J)	
8/10/2017		0.0093 (J)
8/24/2017	0.0062 (J)	
10/2/2017		
10/3/2017	0.006 (J)	
10/4/2017		
10/6/2017		0.0148 (J)
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	0.0062 (J)	
3/22/2018		
3/23/2018		0.017 (J)
9/14/2018		
9/17/2018		
9/18/2018	0.0096 (J)	
9/19/2018		
9/20/2018		0.016 (J)
3/19/2019		
3/20/2019		
3/21/2019	0.0066 (X)	
3/22/2019		0.013 (XD)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.012 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		0.014 (X)

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appllI bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
3/22/2016	32.6								
3/23/2016		54.1	46.5						
3/28/2016				7.04					
3/29/2016								11.1	
3/30/2016									22.2
3/31/2016					45				
4/4/2016						27.9			
4/5/2016							37.7		
5/19/2016	33.4		24.6						
5/20/2016		23.9							
5/24/2016								12.6	25.2
5/25/2016				13.5					
5/26/2016					41.7	28.7			
5/31/2016							38.4		
6/1/2016									
7/29/2016	26	25.3	14.9						
8/1/2016				2.2					
8/2/2016									20.8
8/3/2016					35.2				
8/4/2016						18.6	28.6		
9/22/2016			15						
9/23/2016	28.8	26.6							
9/26/2016				5.72				11.8	
9/27/2016									23.1
9/28/2016					39.2	17.7			
9/29/2016							31.4		
11/9/2016	27.9	16.1							
11/10/2016			12.6						
11/11/2016				2.5					
11/14/2016								11.3	
11/22/2016					37.2	20.2			22.3
11/23/2016							62.5		
1/30/2017	29.2			2.01					
1/31/2017		5.68	16.5						
2/1/2017								12.6	
2/6/2017									21.4
2/7/2017					38.4				
2/8/2017						24.3			
2/10/2017							31.2		
2/22/2017									
3/30/2017	30	25.2							
4/3/2017			16.6	6.26					
4/6/2017								9.84	21.1
4/7/2017									
4/10/2017					38.7	29			
4/11/2017									
4/12/2017							34.1		
6/9/2017	30.9		17.8						
6/12/2017		34.2		7.44					
6/13/2017								13	
6/14/2017					40.8				22.1
6/15/2017						29	34.2		

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		26.5
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		26.6
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	54.7	51.6
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	46.8	
4/10/2017		
4/11/2017		45.2
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	52.4	
6/15/2017		

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/16/2017		47.5
7/12/2017	51.1	51.6
7/20/2017	47.5	
7/28/2017	44	46
8/9/2017	48.3	
8/10/2017		52.2
8/24/2017	41.9	
10/2/2017		
10/3/2017	47.7	
10/4/2017		
10/6/2017		42.2
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	47.5	
3/22/2018		
3/23/2018		41.4
9/14/2018		
9/17/2018		
9/18/2018	48.1	
9/19/2018		
9/20/2018		47.5
3/19/2019		
3/20/2019		
3/21/2019	49.9	
3/22/2019		40.5 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	49.9	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		42.9

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
3/22/2016	1.5101								
3/23/2016		2.4904	0.9079						
3/28/2016				0.9204					
3/29/2016								1.6645	
3/30/2016									0.9409
3/31/2016					2.79				
4/4/2016						1.67			
4/5/2016							2.08		
5/19/2016	1.5		0.9136						
5/20/2016		1.71							
5/24/2016								1.58	0.92
5/25/2016				1.04					
5/26/2016					2.87	1.64			
5/31/2016							1.51		
6/1/2016									
7/29/2016	1.7	2	1.1						
8/1/2016				0.85				1.4	
8/2/2016									1.2
8/3/2016					3.2				
8/4/2016						1.7	1.7		
9/22/2016			1						
9/23/2016	1.8	1.8							
9/26/2016				0.87				1.4	
9/27/2016									1.1
9/28/2016					3	1.4			
9/29/2016							1.5		
11/9/2016	2	1.6							
11/10/2016			1.2						
11/11/2016				0.99					
11/14/2016								1.6	
11/22/2016					3.1	1.9			1.2
11/23/2016							1.9		
1/30/2017	1.5			0.95					
1/31/2017		1.3	1.2						
2/1/2017								1.4	
2/6/2017									1.1
2/7/2017					3				
2/8/2017						1.7			
2/10/2017							1.5		
2/22/2017									
3/30/2017	1.8	1.6							
4/3/2017			0.99	0.88					
4/6/2017								1.5	1.2
4/7/2017									
4/10/2017					2.3	1.8			
4/11/2017									
4/12/2017							1.7		
6/9/2017	1.6		0.87						
6/12/2017		1.6		0.83					
6/13/2017								1.3	
6/14/2017					2				0.92
6/15/2017						1.5	1.4		

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		3.3
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		3.18
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	3.7	7.2
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	2.5	
4/10/2017		
4/11/2017		5.5
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	2.6	
6/15/2017		

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appllI bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/16/2017		8.7
7/12/2017	2.8	7.5
7/20/2017	2.3	
7/28/2017	2	6.6
8/9/2017	1.8	
8/10/2017		8.5
8/24/2017	2.9	
10/2/2017		
10/3/2017	2.8	
10/4/2017		
10/6/2017		8.9
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	2.9	
3/22/2018		
3/23/2018		8.3
9/14/2018		
9/17/2018		
9/18/2018	3.1	
9/19/2018		
9/20/2018		9.6
3/19/2019		
3/20/2019		
3/21/2019	3.6	
3/22/2019		7.4 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	2.1	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		7.6

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
3/22/2016	0.0614 (J)								
3/23/2016		0.0477 (J)	0.0826 (J)						
3/28/2016				0.0326 (J)					
3/29/2016								0.00363 (J)	
3/30/2016									0.00345 (J)
3/31/2016					0.0209 (J)				
4/4/2016						0.022 (J)			
4/5/2016							0.00288 (J)		
5/19/2016	0.064 (J)		0.0409 (J)						
5/20/2016		0.033 (J)							
5/24/2016								0.0286 (J)	0.019 (J)
5/25/2016				0.0285 (J)					
5/26/2016					0.037 (J)	0.023 (J)			
5/31/2016							0.0233 (J)		
6/1/2016									
7/29/2016	0.11 (J)	0.16 (J)	0.07 (J)						
8/1/2016				<0.3				0.08 (J)	
8/2/2016									<0.3
8/3/2016					<0.3				
8/4/2016						0.05 (J)	<0.3		
9/22/2016			<0.3						
9/23/2016	0.03 (J)	0.1 (J)							
9/26/2016				<0.3				<0.3	
9/27/2016									<0.3
9/28/2016					0.05 (J)	<0.3			
9/29/2016							<0.3		
11/9/2016	0.1 (J)	0.04 (J)							
11/10/2016			0.03 (J)						
11/11/2016				<0.3					
11/14/2016								0.08 (J)	
11/22/2016					0.04 (J)	0.04 (J)			0.02 (J)
11/23/2016							0.04 (J)		
1/30/2017	<0.3			<0.3					
1/31/2017		<0.3	<0.3						
2/1/2017								<0.3	
2/6/2017									<0.3
2/7/2017					<0.3				
2/8/2017						<0.3			
2/10/2017							<0.3		
2/22/2017									
3/30/2017	0.01 (J)	0.02 (J)							
4/3/2017			0.02 (J)	0.04 (J)					
4/6/2017								<0.3	<0.3
4/7/2017									
4/10/2017					<0.3	<0.3			
4/11/2017									
4/12/2017							<0.3		
6/9/2017	0.04 (J)		0.06 (J)						
6/12/2017		0.17 (J)		0.06 (J)					
6/13/2017								0.05 (J)	
6/14/2017					<0.3				<0.3
6/15/2017						<0.3	0.06 (J)		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

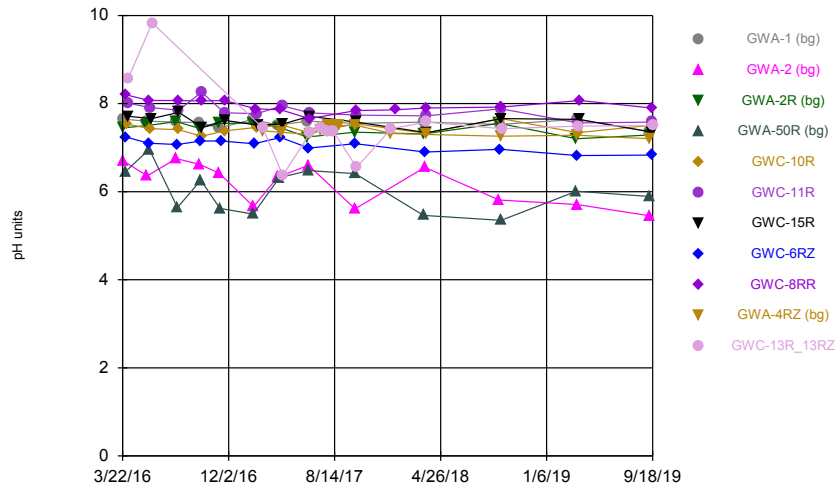
	GWA-4RZ (bg)	GWC-13R_13RZ
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		0.044 (J)
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		0.0338 (J)
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	0.3	0.22 (J)
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	0.19 (J)	
4/10/2017		
4/11/2017		0.16 (J)
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	0.19 (J)	
6/15/2017		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

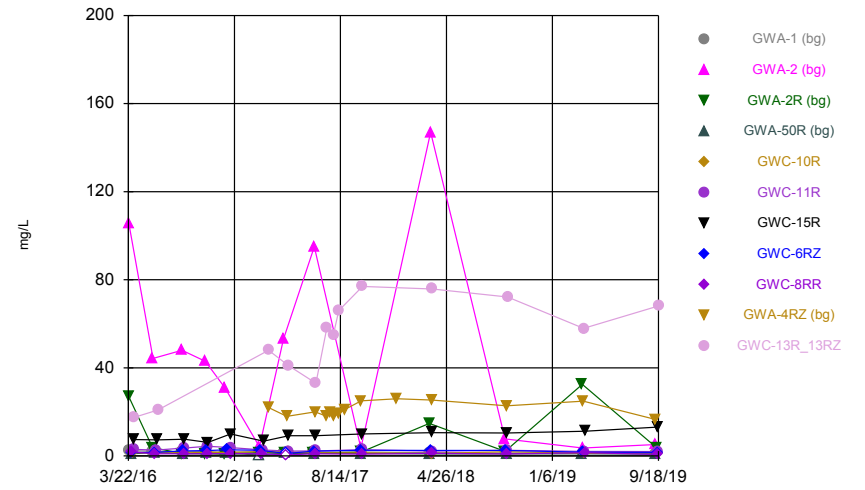
	GWA-4RZ (bg)	GWC-13R_13RZ
6/16/2017		0.2 (J)
7/12/2017	0.18 (J)	0.2 (J)
7/20/2017	0.17 (J)	
7/28/2017	0.13 (J)	0.18 (J)
8/9/2017	<0.3 (*)	
8/10/2017		<0.3 (*)
8/24/2017	0.16 (J)	
10/2/2017		
10/3/2017	0.17 (J)	
10/4/2017		
10/6/2017		0.14 (J)
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	0.24 (J)	
3/22/2018		
3/23/2018		0.24 (J)
9/14/2018		
9/17/2018		
9/18/2018	<0.3	
9/19/2018		
9/20/2018		<0.3
3/19/2019		
3/20/2019		
3/21/2019	0.19 (X)	
3/22/2019		0.12 (XD)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	0.1 (X)	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		0.17 (X)

Time Series



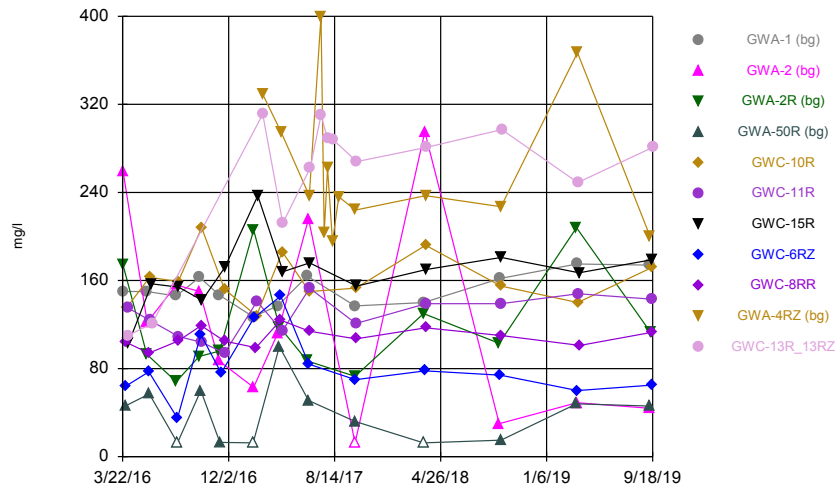
Constituent: pH Analysis Run 11/7/2019 10:01 AM View: cells 1&2 apIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Sulfate Analysis Run 11/7/2019 10:01 AM View: cells 1&2 apIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/7/2019 10:01 AM View: cells 1&2 apIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
3/22/2016	7.65								
3/23/2016		6.7	7.45						
3/28/2016				6.45 (D)					
3/29/2016								7.24	
3/30/2016									8.2
3/31/2016					7.54				
4/4/2016						8.01			
4/5/2016							7.71		
5/19/2016	7.6		7.5						
5/20/2016		6.36							
5/24/2016								7.1	8.07
5/25/2016				6.96					
5/26/2016					7.43	7.91			
5/31/2016							7.66		
6/1/2016									
7/29/2016	7.58	6.75	7.59						
8/1/2016				5.64				7.07	
8/2/2016									8.07
8/3/2016					7.41				
8/4/2016						7.85	7.8		
9/22/2016			7.44						
9/23/2016	7.57	6.62							
9/26/2016				6.26				7.15	
9/27/2016									8.06
9/28/2016					7.26	8.26			
9/29/2016							7.46		
11/9/2016	7.45	6.42							
11/10/2016			7.55						
11/11/2016				5.62					
11/14/2016								7.15	
11/22/2016					7.38	7.79			8.07
11/23/2016							7.62		
1/30/2017	7.64			5.49					
1/31/2017		5.66	7.56						
2/1/2017								7.09	
2/6/2017									7.88
2/7/2017					7.46				
2/8/2017						7.77			
2/10/2017							7.51		
2/22/2017									
3/30/2017	7.51	6.33							
4/3/2017			7.46	6.32					
4/6/2017								7.23	7.86
4/7/2017									
4/10/2017					7.51	7.95			
4/11/2017									
4/12/2017							7.54		
6/9/2017	7.6		7.24						
6/12/2017		6.6		6.48					
6/13/2017								6.99	
6/14/2017					7.34				7.66
6/15/2017						7.79	7.71		

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		8.56
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		9.83
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	7.38	7.45
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	7.35	
4/10/2017		
4/11/2017		6.37
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	7.3	
6/15/2017		

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 applll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/16/2017		7.33
7/12/2017	7.39	7.46
7/20/2017	7.44	
7/27/2017		7.37
7/28/2017	7.5	7.37
8/9/2017	7.52	7.38
8/10/2017		7.38
8/24/2017	7.5	
10/2/2017		
10/3/2017	7.51	
10/4/2017		
10/6/2017		6.55
12/28/2017	7.32 (Y)	7.43 (Y)
1/9/2018		
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	7.3	
3/22/2018		
3/23/2018		7.58
9/14/2018		
9/17/2018		
9/18/2018	7.26	
9/19/2018		
9/20/2018		7.43
3/19/2019		
3/20/2019		
3/21/2019	7.28	
3/22/2019		7.49 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	7.2	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		7.5

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
3/22/2016	2.3685								
3/23/2016		105.552	26.8249						
3/28/2016				0.9594 (J)					
3/29/2016								1.4863	
3/30/2016									1.9542
3/31/2016					1.5				
4/4/2016						2.99			
4/5/2016							7.45		
5/19/2016	2.14		3.81						
5/20/2016		44.3							
5/24/2016								1.62	0.989 (J)
5/25/2016				1.59					
5/26/2016					1.51	2.68			
5/31/2016							7.29		
6/1/2016									
7/29/2016	1.9	48	1.1						
8/1/2016				1				2.3	
8/2/2016									1
8/3/2016					1.4				
8/4/2016						3.6	7.6		
9/22/2016			0.96 (J)						
9/23/2016	2	43							
9/26/2016				1.2				2.4	
9/27/2016									0.95 (J)
9/28/2016					1.6	4.4			
9/29/2016							6.1		
11/9/2016	1.6	31							
11/10/2016			0.72 (J)						
11/11/2016				1.2					
11/14/2016							2.8		
11/22/2016					1.6	3.8			1.1
11/23/2016							10		
1/30/2017	1.8			<1 (*)					
1/31/2017		4.2	1.5						
2/1/2017								2.6	
2/6/2017									0.96 (J)
2/7/2017					2				
2/8/2017						2.7			
2/10/2017							6.7		
2/22/2017									
3/30/2017	1.6	53							
4/3/2017			1.3	1.3					
4/6/2017								<2.3 (*)	<1 (*)
4/7/2017									
4/10/2017					1.7	2.2			
4/11/2017									
4/12/2017							9.2		
6/9/2017	1.7		1.2						
6/12/2017		95		1.1					
6/13/2017							2.2		
6/14/2017					1.4				0.97 (J)
6/15/2017						2.3	9.2		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		17.5
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		20.9
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	22	48
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	18	
4/10/2017		
4/11/2017		41
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	20	
6/15/2017		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/16/2017		33
7/12/2017	18	58
7/20/2017	20	
7/28/2017	18	55
8/9/2017	19	
8/10/2017		66
8/24/2017	21	
10/2/2017		
10/3/2017	25	
10/4/2017		
10/6/2017		77
12/28/2017	26 (Y)	
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	25.4	
3/22/2018		
3/23/2018		75.8
9/14/2018		
9/17/2018		
9/18/2018	22.8	
9/19/2018		
9/20/2018		72.2
3/19/2019		
3/20/2019		
3/21/2019	24.9	
3/22/2019		57.9 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	16.5	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		68.1

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWA-50R (bg)	GWC-10R	GWC-11R	GWC-15R	GWC-6RZ	GWC-8RR
3/22/2016	150								
3/23/2016		259	174						
3/28/2016				46					
3/29/2016								64	
3/30/2016									104
3/31/2016					135				
4/4/2016						135			
4/5/2016							103		
5/19/2016	150		93						
5/20/2016		122							
5/24/2016								77	94
5/25/2016				57					
5/26/2016					163	124			
5/31/2016							157		
6/1/2016									
7/29/2016	146	156	68						
8/1/2016				<25				35	
8/2/2016									105
8/3/2016					159				
8/4/2016						109	154		
9/22/2016			91						
9/23/2016	163	150							
9/26/2016				60				111	
9/27/2016									119
9/28/2016					208	104			
9/29/2016							142		
11/9/2016	147	87							
11/10/2016			96						
11/11/2016				13 (J)					
11/14/2016								76	
11/22/2016					152	94			105
11/23/2016							172		
1/30/2017	127			<25					
1/31/2017		63	206						
2/1/2017								126	
2/6/2017									99
2/7/2017					128				
2/8/2017						141 (J)			
2/10/2017							237		
2/22/2017									
3/30/2017	137	112							
4/3/2017			118	100					
4/6/2017								146	124
4/7/2017									
4/10/2017					186	114			
4/11/2017									
4/12/2017							168		
6/9/2017	164		87						
6/12/2017		216		51					
6/13/2017								84	
6/14/2017					150				114
6/15/2017						153	176		

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

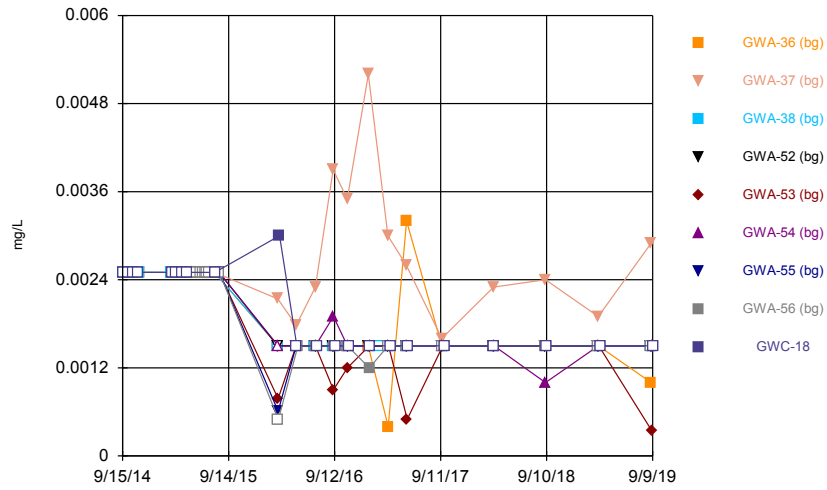
	GWA-4RZ (bg)	GWC-13R_13RZ
3/22/2016		
3/23/2016		
3/28/2016		
3/29/2016		
3/30/2016		
3/31/2016		
4/4/2016		110
4/5/2016		
5/19/2016		
5/20/2016		
5/24/2016		
5/25/2016		
5/26/2016		
5/31/2016		
6/1/2016		121
7/29/2016		
8/1/2016		
8/2/2016		
8/3/2016		
8/4/2016		
9/22/2016		
9/23/2016		
9/26/2016		
9/27/2016		
9/28/2016		
9/29/2016		
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016		
11/22/2016		
11/23/2016		
1/30/2017		
1/31/2017		
2/1/2017		
2/6/2017		
2/7/2017		
2/8/2017		
2/10/2017		
2/22/2017	329	311
3/30/2017		
4/3/2017		
4/6/2017		
4/7/2017	295	
4/10/2017		
4/11/2017		212
4/12/2017		
6/9/2017		
6/12/2017		
6/13/2017		
6/14/2017	237	
6/15/2017		

Time Series

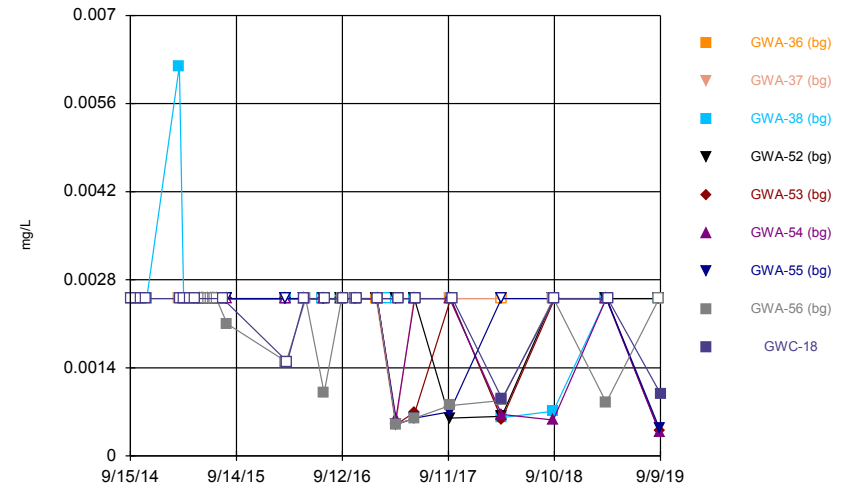
Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:01 AM View: cells 1&2 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)	GWC-13R_13RZ
6/16/2017		262
7/12/2017	400	310
7/20/2017	203	
7/28/2017	262	289
8/9/2017	195	
8/10/2017		288
8/24/2017	236	
10/2/2017		
10/3/2017	224	
10/4/2017		
10/6/2017		268
3/16/2018		
3/19/2018		
3/20/2018		
3/21/2018	237	
3/22/2018		
3/23/2018		281
9/14/2018		
9/17/2018		
9/18/2018	227	
9/19/2018		
9/20/2018		297
3/19/2019		
3/20/2019		
3/21/2019	367	
3/22/2019		249 (D)
3/23/2019		
3/25/2019		
3/27/2019		
9/12/2019	200	
9/13/2019		
9/16/2019		
9/17/2019		
9/18/2019		281

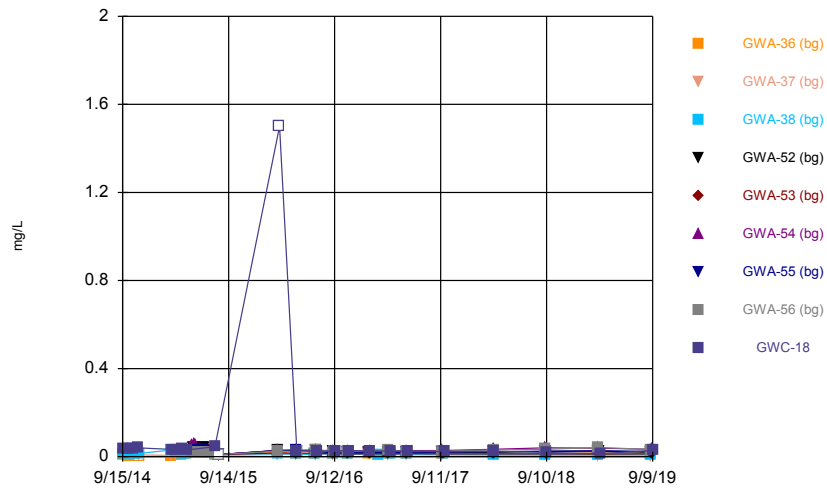
Time Series



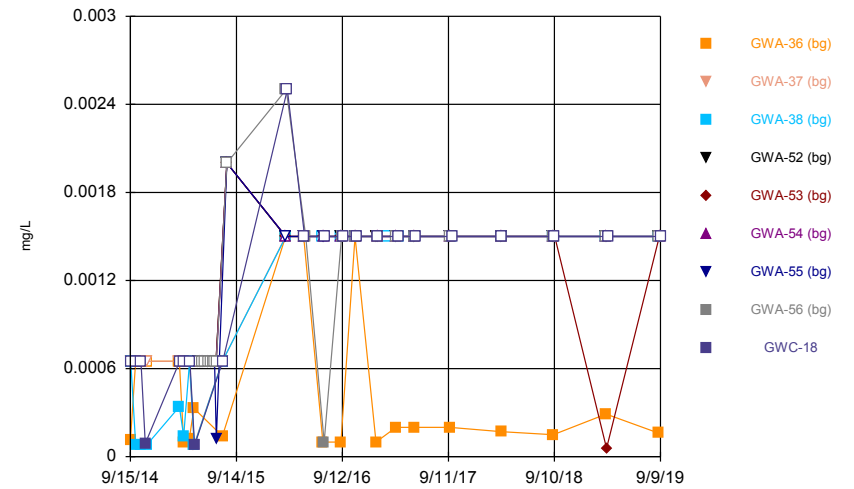
Time Series



Time Series



Time Series



Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.005								
9/16/2014		<0.005	<0.005						
9/17/2014									<0.005
10/3/2014	<0.005	<0.005	<0.005						
10/4/2014									<0.005
10/20/2014	<0.005	<0.005	<0.005						
10/21/2014									<0.005
11/5/2014									<0.005
11/10/2014	<0.005	<0.005	<0.005						
3/2/2015	<0.005	<0.005	<0.005						
3/3/2015									<0.005
3/17/2015	<0.005	<0.005	<0.005						
3/18/2015									<0.005
4/5/2015	<0.005	<0.005							
4/6/2015			<0.005						
4/7/2015									<0.005
4/21/2015	<0.005								
4/22/2015		<0.005	<0.005						
4/23/2015									<0.005
5/8/2015				<0.005					
5/9/2015					<0.005	<0.005	<0.005	<0.005	
5/17/2015				<0.005					
5/18/2015					<0.005	<0.005	<0.005		
5/19/2015								<0.005	
5/25/2015				<0.005	<0.005	<0.005			
5/26/2015							<0.005	<0.005	
6/8/2015				<0.005	<0.005				
6/9/2015						<0.005	<0.005	<0.005	
6/17/2015					<0.005	<0.005	<0.005	<0.005	
6/18/2015				<0.005					
6/24/2015				<0.005	<0.005				
6/25/2015						<0.005	<0.005	<0.005	
6/30/2015				<0.005	<0.005				
7/1/2015						<0.005	<0.005	<0.005	
7/6/2015				<0.005	<0.005				
7/7/2015						<0.005	<0.005	<0.005	
7/28/2015	<0.005	<0.005	<0.005						
7/29/2015									<0.005
8/12/2015				<0.005	<0.005	<0.005			
8/13/2015							<0.005	<0.005	
2/29/2016				<0.003					
3/1/2016	<0.003	0.00214 (J)							
3/2/2016			<0.003		0.000782 (J)	<0.003	0.000608 (J)		
3/3/2016								<0.001	
3/7/2016									0.003
5/2/2016	<0.003								
5/3/2016		0.00178 (J)	<0.003		<0.003		<0.003		
5/4/2016				<0.003		<0.003			
5/5/2016									<0.003
5/9/2016								<0.003	
7/7/2016	<0.003 (*)		<0.003						
7/8/2016		0.0023 (J)		<0.003 (*)	<0.003 (*)	<0.003			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.005								
9/16/2014		<0.005	<0.005						
9/17/2014									<0.005
10/3/2014	<0.005	<0.005	<0.005						
10/4/2014									<0.005
10/20/2014	<0.005	<0.005	<0.005						
10/21/2014									<0.005
11/5/2014									<0.005
11/10/2014	<0.005	<0.005	<0.005						
3/2/2015	<0.005	<0.005	0.0062						
3/3/2015									<0.005
3/17/2015	<0.005	<0.005	<0.005						
3/18/2015									<0.005
4/5/2015	<0.005	<0.005							
4/6/2015			<0.005						
4/7/2015									<0.005
4/21/2015	<0.005								
4/22/2015		<0.005	<0.005						
4/23/2015									<0.005
5/8/2015				<0.005					
5/9/2015					<0.005	<0.005	<0.005	<0.005	
5/17/2015				<0.005					
5/18/2015					<0.005	<0.005	<0.005		
5/19/2015								<0.005	
5/25/2015				<0.005	<0.005	<0.005			
5/26/2015							<0.005	<0.005	
6/8/2015				<0.005	<0.005				
6/9/2015						<0.005	<0.005	<0.005	
6/17/2015					<0.005	<0.005	<0.005	<0.005	
6/18/2015				<0.005					
6/24/2015				<0.005	<0.005				
6/25/2015						<0.005	<0.005	<0.005	
6/30/2015				<0.005	<0.005				
7/1/2015						<0.005	<0.005	<0.005	
7/6/2015				<0.005	<0.005				
7/7/2015						<0.005	<0.005	<0.005	
7/28/2015	<0.005	<0.005	<0.005						
7/29/2015									<0.005
8/12/2015				<0.005	<0.005	<0.005			
8/13/2015							<0.005	0.0021 (J)	
2/29/2016				<0.005					
3/1/2016	<0.005	<0.005							
3/2/2016			<0.005		<0.005	<0.005	<0.005		
3/3/2016								<0.003	
3/7/2016									<0.003
5/2/2016	<0.005								
5/3/2016		<0.005	<0.005		<0.005		<0.005		
5/4/2016				<0.005		<0.005			
5/5/2016									<0.005
5/9/2016								<0.005	
7/7/2016	<0.005		<0.005						
7/8/2016		<0.005		<0.005	<0.005	<0.005			

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	0.0069								
9/16/2014		0.0071	0.014						
9/17/2014									0.035
10/3/2014	0.0045	0.0087	0.016						
10/4/2014									0.038
10/20/2014	0.0044	0.0085	0.014						
10/21/2014									0.034
11/5/2014									0.04
11/10/2014	<0.0013	0.008	0.015						
3/2/2015	0.0045	0.0063	0.03						
3/3/2015									0.033
3/17/2015	0.0078	0.0066	0.018						
3/18/2015									0.031
4/5/2015	0.01	0.0068							
4/6/2015			0.014						
4/7/2015									0.038
4/21/2015	0.013								
4/22/2015		0.0094	0.012						
4/23/2015									0.031
5/8/2015				0.033					
5/9/2015					0.044	0.054	0.022	0.018	
5/17/2015				0.04					
5/18/2015					0.04	0.058	0.031		
5/19/2015								0.02	
5/25/2015				0.039	0.036	0.051			
5/26/2015							0.028	0.02	
6/8/2015				0.031	0.028				
6/9/2015						0.034	0.031	0.02	
6/17/2015					0.026	0.032	0.029	0.019	
6/18/2015				0.039					
6/24/2015				0.042	0.021				
6/25/2015						0.032	0.024	0.019	
6/30/2015				0.033	0.018				
7/1/2015						0.029	0.026	0.018	
7/6/2015				0.031	0.018				
7/7/2015						0.029	0.027	0.019	
7/28/2015	0.011	0.0057	0.012						
7/29/2015									0.045
8/12/2015				<0.02	<0.02	<0.02	<0.02	<0.02	
2/29/2016				0.028					
3/1/2016	0.0189	0.0101							
3/2/2016			0.0123		0.017	0.0297	0.0276		
3/3/2016								0.0259	
3/7/2016									<3
5/2/2016	0.0133								
5/3/2016		0.0104	0.0114		0.016		0.0291		
5/4/2016				0.0273		0.0299			
5/5/2016									0.0278
5/9/2016								0.0236	
7/7/2016	0.013		0.012						
7/8/2016		0.0095 (J)		0.0284	0.0156	0.0294			
7/11/2016							0.0225	0.0295	

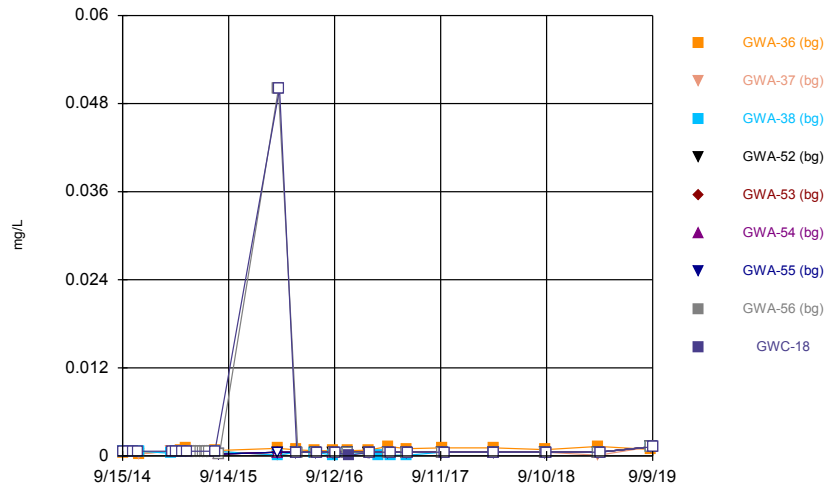
Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

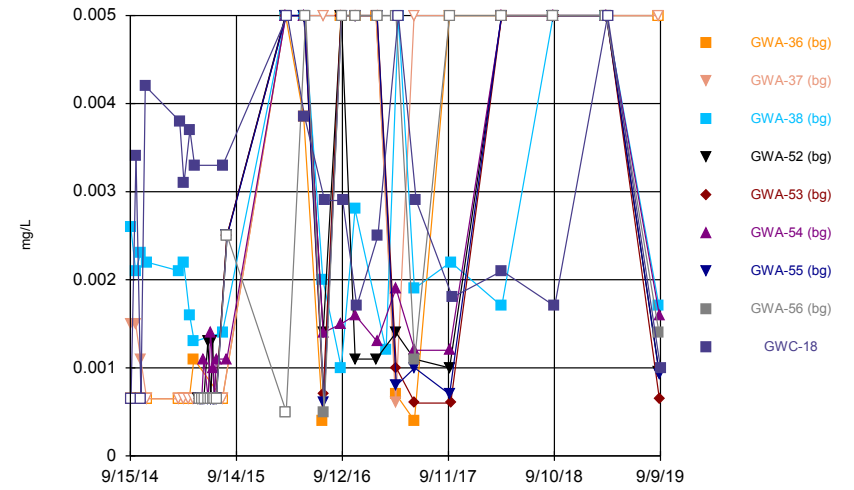
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	0.00011 (J)								
9/16/2014		<0.0013	<0.0013						
9/17/2014									<0.0013
10/3/2014	<0.0013	<0.0013	8.3E-05 (J)						
10/4/2014									<0.0013
10/20/2014	<0.0013	<0.0013	7.8E-05 (J)						
10/21/2014									<0.0013
11/5/2014									9E-05 (J)
11/10/2014	<0.0013	<0.0013	8E-05 (J)						
3/2/2015	<0.0013	<0.0013	0.00034 (J)						
3/3/2015									<0.0013
3/17/2015	0.0001 (J)	<0.0013	0.00014 (J)						
3/18/2015									<0.0013
4/5/2015	0.00012 (J)	<0.0013							
4/6/2015			<0.0013						
4/7/2015									<0.0013
4/21/2015	0.00033 (J)								
4/22/2015		8.3E-05 (J)	7.8E-05 (J)						
4/23/2015									7.8E-05 (J)
5/8/2015				<0.0013					
5/9/2015					<0.0013	<0.0013	<0.0013	<0.0013	
5/17/2015				<0.0013					
5/18/2015					<0.0013	<0.0013	<0.0013		
5/19/2015								<0.0013	
5/25/2015				<0.0013	<0.0013	<0.0013			
5/26/2015							<0.0013	<0.0013	
6/8/2015				<0.0013	<0.0013				
6/9/2015						<0.0013	<0.0013	<0.0013	
6/17/2015					<0.0013	<0.0013	<0.0013	<0.0013	
6/18/2015				<0.0013					
6/24/2015				<0.0013	<0.0013				
6/25/2015						<0.0013	<0.0013	<0.0013	
6/30/2015				<0.0013	<0.0013				
7/1/2015						<0.0013	<0.0013	<0.0013	
7/6/2015				<0.0013	<0.0013				
7/7/2015						<0.0013	0.00012 (J)	<0.0013	
7/28/2015	0.00014 (J)	<0.0013	<0.0013						
7/29/2015									<0.0013
8/12/2015				<0.004	<0.004	<0.004	<0.004	<0.004	
2/29/2016				<0.003					
3/1/2016	<0.003	<0.003							
3/2/2016			<0.003		<0.003	<0.003	<0.003		
3/3/2016								<0.005	
3/7/2016									<0.005
5/2/2016	<0.003								
5/3/2016		<0.003	<0.003		<0.003		<0.003		
5/4/2016				<0.003		<0.003			
5/5/2016									<0.003
5/9/2016								<0.003	
7/7/2016	0.0001 (J)		<0.003						
7/8/2016		<0.003		<0.003	<0.003	<0.003			
7/11/2016							<0.003	0.0001 (J)	

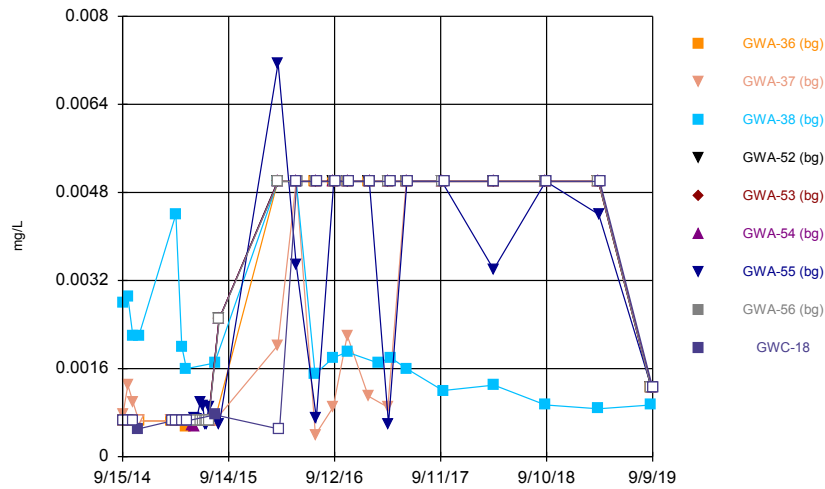
Time Series



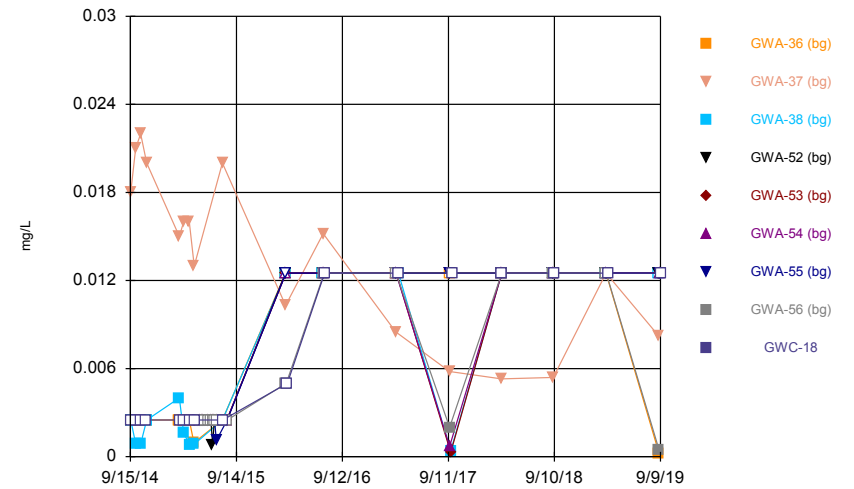
Time Series



Time Series



Time Series



Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	0.00035 (J)								
9/16/2014		<0.0013	<0.0013						
9/17/2014									<0.0013
10/3/2014	<0.0013	<0.0013	<0.0013						
10/4/2014									<0.0013
10/20/2014	<0.0013	<0.0013	<0.0013						
10/21/2014									<0.0013
11/5/2014									<0.0013
11/10/2014	0.00033 (J)	0.00026 (J)	<0.0013						
3/2/2015	<0.0013	<0.0013	0.00035 (J)						
3/3/2015									<0.0013
3/17/2015	0.00057 (J)	<0.0013	<0.0013						
3/18/2015									<0.0013
4/5/2015	0.00068 (J)	<0.0013							
4/6/2015			<0.0013						
4/7/2015									<0.0013
4/21/2015	0.0011 (J)								
4/22/2015		<0.0013	<0.0013						
4/23/2015									<0.0013
5/8/2015				<0.0013					
5/9/2015					<0.0013	<0.0013	<0.0013	<0.0013	
5/17/2015				<0.0013					
5/18/2015					<0.0013	<0.0013	<0.0013		
5/19/2015								<0.0013	
5/25/2015				<0.0013	<0.0013	<0.0013			
5/26/2015							<0.0013	<0.0013	
6/8/2015				<0.0013	<0.0013				
6/9/2015						<0.0013	<0.0013	<0.0013	
6/17/2015					<0.0013	<0.0013	<0.0013	<0.0013	
6/18/2015				<0.0013					
6/24/2015				<0.0013	<0.0013				
6/25/2015						<0.0013	<0.0013	<0.0013	
6/30/2015				<0.0013	<0.0013				
7/1/2015						<0.0013	<0.0013	<0.0013	
7/6/2015				<0.0013	<0.0013				
7/7/2015						<0.0013	<0.0013	<0.0013	
7/28/2015	0.00073 (J)	<0.0013	<0.0013						
7/29/2015									<0.0013
8/12/2015				<0.0005	<0.0005	<0.0005			
8/13/2015							<0.0005	<0.0005	
2/29/2016				<0.001					
3/1/2016	0.00103	0.000103 (J)							
3/2/2016			0.000109 (J)		<0.001	<0.001	<0.001		
3/3/2016								<0.1	
3/7/2016									<0.1
5/2/2016	0.000846 (J)								
5/3/2016		<0.001	<0.001		<0.001		<0.001		
5/4/2016				<0.001		<0.001			
5/5/2016									<0.001
5/9/2016								<0.001	
7/7/2016	0.0007 (J)		<0.001						
7/8/2016		<0.001		<0.001	<0.001	<0.001			

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.0013								
9/16/2014		0.0015	0.0026						
9/17/2014									<0.0013
10/3/2014	<0.0013	0.0015	0.0021						
10/4/2014									0.0034
10/20/2014	<0.0013	0.0011 (J)	0.0023						
10/21/2014									<0.0013
11/5/2014									0.0042
11/10/2014	<0.0013	<0.0013	0.0022						
3/2/2015	<0.0013	<0.0013	0.0021						
3/3/2015									0.0038
3/17/2015	<0.0013	<0.0013	0.0022						
3/18/2015									0.0031
4/5/2015	<0.0013	<0.0013							
4/6/2015			0.0016						
4/7/2015									0.0037
4/21/2015	0.0011 (J)								
4/22/2015		<0.0013	0.0013						
4/23/2015									0.0033
5/8/2015				<0.0013					
5/9/2015					<0.0013	<0.0013	<0.0013	<0.0013	
5/17/2015				<0.0013					
5/18/2015					<0.0013	<0.0013	<0.0013		
5/19/2015								<0.0013	
5/25/2015				<0.0013	<0.0013	0.0011 (J)			
5/26/2015							<0.0013	<0.0013	
6/8/2015				0.0013	<0.0013				
6/9/2015						<0.0013	<0.0013	<0.0013	
6/17/2015					<0.0013	0.0014	<0.0013	<0.0013	
6/18/2015				<0.0013					
6/24/2015				0.0013	<0.0013				
6/25/2015						0.001 (J)	<0.0013	<0.0013	
6/30/2015				<0.0013	<0.0013				
7/1/2015						<0.0013	<0.0013	<0.0013	
7/6/2015				<0.0013	<0.0013				
7/7/2015						0.0011 (J)	<0.0013	<0.0013	
7/28/2015	<0.0013	<0.0013	0.0014						
7/29/2015									0.0033
8/12/2015				<0.005	<0.005	0.0011 (J)			
8/13/2015							<0.005	<0.005	
2/29/2016				<0.01					
3/1/2016	<0.01	<0.01							
3/2/2016			<0.01		<0.01	<0.01	<0.01		
3/3/2016								<0.001	
3/7/2016									<0.01
5/2/2016	0.00385 (J)								
5/3/2016		<0.01	<0.01		<0.01		<0.01		
5/4/2016				<0.01		<0.01			
5/5/2016									0.00385 (J)
5/9/2016								<0.01	
7/7/2016	0.0004 (J)		0.002 (J)						
7/8/2016		<0.01		0.0014 (J)	0.0007 (J)	0.0014 (J)			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.0013								
9/16/2014		0.00077 (J)	0.0028						
9/17/2014									<0.0013
10/3/2014	<0.0013	0.0013	0.0029						
10/4/2014									<0.0013
10/20/2014	<0.0013	0.001 (J)	0.0022						
10/21/2014									<0.0013
11/5/2014									0.0005 (J)
11/10/2014	<0.0013	<0.0013	0.0022						
3/2/2015	<0.0013	<0.0013							
3/3/2015									<0.0013
3/17/2015	<0.0013	<0.0013	0.0044						
3/18/2015									<0.0013
4/5/2015	<0.0013	<0.0013							
4/6/2015			0.002						
4/7/2015									<0.0013
4/21/2015	0.00055 (J)								
4/22/2015		<0.0013	0.0016						
4/23/2015									<0.0013
5/8/2015				<0.0013					
5/9/2015					<0.0013	0.00057 (J)	<0.0013	<0.0013	
5/17/2015				<0.0013					
5/18/2015					<0.0013	0.00055 (J)	0.00071 (J)		
5/19/2015								<0.0013	
5/25/2015				<0.0013	<0.0013	<0.0013			
5/26/2015							0.00067 (J)	<0.0013	
6/8/2015				<0.0013	<0.0013				
6/9/2015						<0.0013	0.001 (J)	<0.0013	
6/17/2015					<0.0013	<0.0013	0.00093 (J)	<0.0013	
6/18/2015				<0.0013					
6/24/2015				<0.0013	<0.0013				
6/25/2015						<0.0013	0.00059 (J)	<0.0013	
6/30/2015				<0.0013	<0.0013				
7/1/2015						<0.0013	0.00059 (J)	<0.0013	
7/6/2015				<0.0013	<0.0013				
7/7/2015						<0.0013	0.00091 (J)	<0.0013	
7/28/2015	<0.0013	<0.0013	0.0017						
7/29/2015									0.00076 (J)
8/12/2015				<0.005	<0.005	<0.005			
8/13/2015							0.0006 (J)	<0.005	
2/29/2016				<0.01					
3/1/2016	<0.01	0.00202 (J)							
3/2/2016			<0.01		<0.01	<0.01	0.00715 (J)		
3/3/2016								<0.01	
3/7/2016									<0.001
5/2/2016	<0.01								
5/3/2016		<0.01	<0.01		<0.01		0.00349 (J)		
5/4/2016				<0.01		<0.01			
5/5/2016									<0.01
5/9/2016								<0.01	
7/7/2016	<0.01		0.0015 (J)						
7/8/2016		0.0004 (J)		<0.01	<0.01	<0.01			

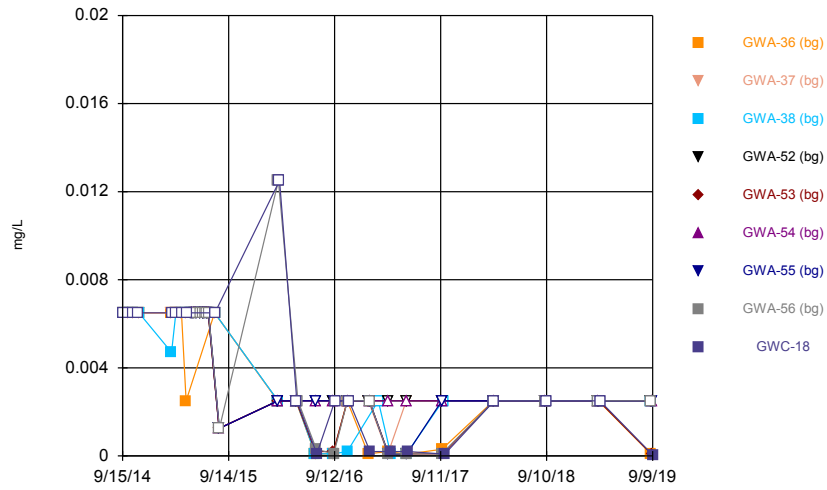
Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

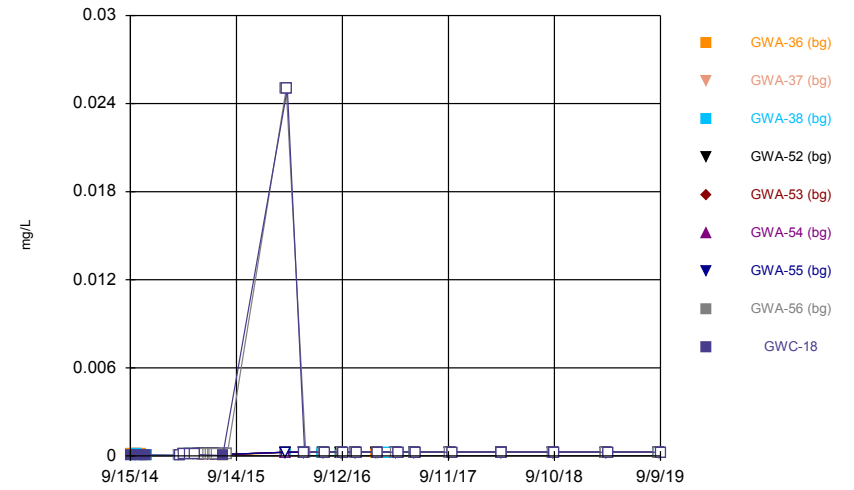
	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.005								
9/16/2014		0.018	<0.005						
9/17/2014									<0.005
10/3/2014	<0.005	0.021	0.00089 (J)						
10/4/2014									<0.005
10/20/2014	<0.005	0.022	0.00087 (J)						
10/21/2014									<0.005
11/5/2014									<0.005
11/10/2014	<0.005	0.02	<0.005						
3/2/2015	<0.005	0.015	0.004 (J)						
3/3/2015									<0.005
3/17/2015	<0.005	0.016	0.0016 (J)						
3/18/2015									<0.005
4/5/2015	<0.005	0.016							
4/6/2015			0.00083 (J)						
4/7/2015									<0.005
4/21/2015	0.00095 (J)								
4/22/2015		0.013	0.00085 (J)						
4/23/2015									<0.005
5/8/2015				<0.005					
5/9/2015					<0.005	<0.005	<0.005	<0.005	
5/17/2015				<0.005					
5/18/2015					<0.005	<0.005	<0.005		
5/19/2015								<0.005	
5/25/2015				<0.005	<0.005	<0.005			
5/26/2015							<0.005	<0.005	
6/8/2015				<0.005	<0.005				
6/9/2015						<0.005	<0.005	<0.005	
6/17/2015					<0.005	<0.005	<0.005	<0.005	
6/18/2015				<0.005					
6/24/2015				0.00082 (J)	<0.005				
6/25/2015						<0.005	<0.005	<0.005	
6/30/2015				<0.005	<0.005				
7/1/2015						<0.005	<0.005	<0.005	
7/6/2015				<0.005	<0.005				
7/7/2015						<0.005	0.0011 (J)	<0.005	
7/28/2015	<0.005	0.02	<0.005						
7/29/2015									<0.005
8/12/2015				<0.005	<0.005	<0.005			
8/13/2015							<0.005	<0.005	
2/29/2016				<0.025					
3/1/2016	<0.025	0.0103 (J)							
3/2/2016			<0.025		<0.025	<0.025	<0.025		
3/3/2016								<0.01	
3/7/2016									<0.01
7/7/2016	<0.025		<0.025						
7/8/2016		0.0152 (J)		<0.025	<0.025	<0.025			
7/11/2016							<0.025	<0.025	
7/13/2016									<0.025
3/14/2017		0.0085 (J)							
3/15/2017	<0.025 (*)			<0.025		<0.025		<0.025 (*)	
3/16/2017					<0.025		<0.025		

Time Series



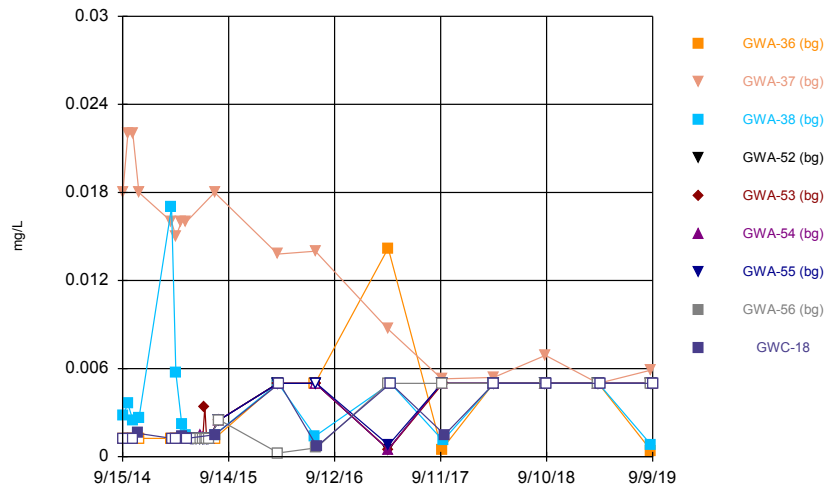
Constituent: Lead Analysis Run 11/7/2019 10:21 AM View: cell_3&4_metals_overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



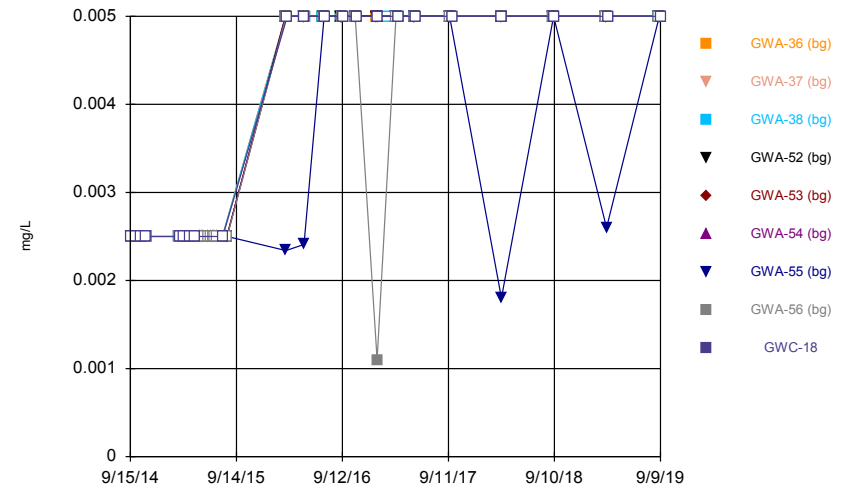
Constituent: Mercury Analysis Run 11/7/2019 10:21 AM View: cell_3&4_metals_overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



Constituent: Nickel Analysis Run 11/7/2019 10:21 AM View: cell_3&4_metals_overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



Constituent: Selenium Analysis Run 11/7/2019 10:21 AM View: cell_3&4_metals_overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.013								
9/16/2014		<0.013	<0.013						
9/17/2014									<0.013
10/3/2014	<0.013	<0.013	<0.013						
10/4/2014									<0.013
10/20/2014	<0.013	<0.013	<0.013						
10/21/2014									<0.013
11/5/2014									<0.013
11/10/2014	<0.013	<0.013	<0.013						
3/2/2015	<0.013	<0.013	0.0047 (J)						
3/3/2015									<0.013
3/17/2015	<0.013	<0.013	<0.013						
3/18/2015									<0.013
4/5/2015	<0.013	<0.013							
4/6/2015			<0.013						
4/7/2015									<0.013
4/21/2015	0.0025 (J)								
4/22/2015		<0.013	<0.013						
4/23/2015									<0.013
5/8/2015				<0.013					
5/9/2015					<0.013	<0.013	<0.013	<0.013	
5/17/2015				<0.013					
5/18/2015					<0.013	<0.013	<0.013		
5/19/2015								<0.013	
5/25/2015				<0.013	<0.013	<0.013			
5/26/2015							<0.013	<0.013	
6/8/2015				<0.013	<0.013				
6/9/2015						<0.013	<0.013	<0.013	
6/17/2015					<0.013	<0.013	<0.013	<0.013	
6/18/2015				<0.013					
6/24/2015				<0.013	<0.013				
6/25/2015						<0.013	<0.013	<0.013	
6/30/2015				<0.013	<0.013				
7/1/2015						<0.013	<0.013	<0.013	
7/6/2015				<0.013	<0.013				
7/7/2015						<0.013	<0.013	<0.013	
7/28/2015	<0.013	<0.013	<0.013						
7/29/2015									<0.013
8/12/2015				<0.0025	<0.0025	<0.0025			
8/13/2015							<0.0025	<0.0025	
2/29/2016				<0.005					
3/1/2016	<0.005	<0.005							
3/2/2016			<0.005		<0.005	<0.005	<0.005		
3/3/2016								<0.025	
3/7/2016									<0.025
5/2/2016	<0.005								
5/3/2016		<0.005	<0.005		<0.005		<0.005		
5/4/2016				<0.005		<0.005			
5/5/2016									<0.005
5/9/2016								<0.005	
7/7/2016	0.0001 (J)		0.0001 (J)						
7/8/2016		0.0001 (J)		<0.005	0.0002 (J)	<0.005			

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.0002								
9/16/2014		4.23E-05 (J)	2.75E-05 (J)						
9/17/2014									4.24E-05 (J)
10/3/2014	<0.0002	<0.0002	<0.0002						
10/4/2014									2.5E-05 (J)
10/20/2014	<0.0002	3.87E-05 (J)	4.07E-05 (J)						
10/21/2014									6.4E-05 (J)
11/5/2014									7.02E-05 (J)
11/10/2014	5.8E-05 (J)	3.34E-05 (J)	6.86E-05 (J)						
3/2/2015	2.04E-05 (J)	<0.0001	3.07E-05 (J)						
3/3/2015									<0.0001
3/17/2015	<0.0002	<0.0002	<0.0002						
3/18/2015									<0.0002
4/5/2015	<0.0002	<0.0002							
4/6/2015			<0.0002						
4/7/2015									<0.0002
4/21/2015	<0.0002								
4/22/2015		<0.0002	<0.0002						
4/23/2015									<0.0002
5/8/2015				<0.0002					
5/9/2015					<0.0002	<0.0002	<0.0002	<0.0002	
5/17/2015				<0.0002					
5/18/2015					<0.0002	<0.0002	<0.0002		
5/19/2015								<0.0002	
5/25/2015				<0.0002	<0.0002	<0.0002			
5/26/2015							<0.0002	<0.0002	
6/8/2015				<0.0002	<0.0002				
6/9/2015						<0.0002	<0.0002	<0.0002	
6/17/2015					<0.0002	<0.0002	<0.0002	<0.0002	
6/18/2015				<0.0002					
6/24/2015				<0.0002	<0.0002				
6/25/2015						<0.0002	<0.0002	<0.0002	
6/30/2015				<0.0002	<0.0002				
7/1/2015						<0.0002	<0.0002	<0.0002	
7/6/2015				<0.0002	<0.0002				
7/7/2015						<0.0002	<0.0002	<0.0002	
7/28/2015	2.13E-05 (J)	<0.0002	<0.0002						
7/29/2015									3.14E-05 (J)
8/12/2015				<0.0002	<0.0002	<0.0002			
8/13/2015							<0.0002	<0.0002	
2/29/2016				<0.0005					
3/1/2016	<0.0005	<0.0005							
3/2/2016			<0.0005		<0.0005	<0.0005	<0.0005		
3/3/2016								<0.05	
3/7/2016									<0.05
5/2/2016	<0.0005								
5/3/2016		<0.0005	<0.0005		<0.0005		<0.0005		
5/4/2016				<0.0005		<0.0005			
5/5/2016									<0.0005
5/9/2016								<0.0005	
7/7/2016	<0.0005		<0.0005						
7/8/2016		<0.0005		<0.0005	<0.0005	<0.0005			

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

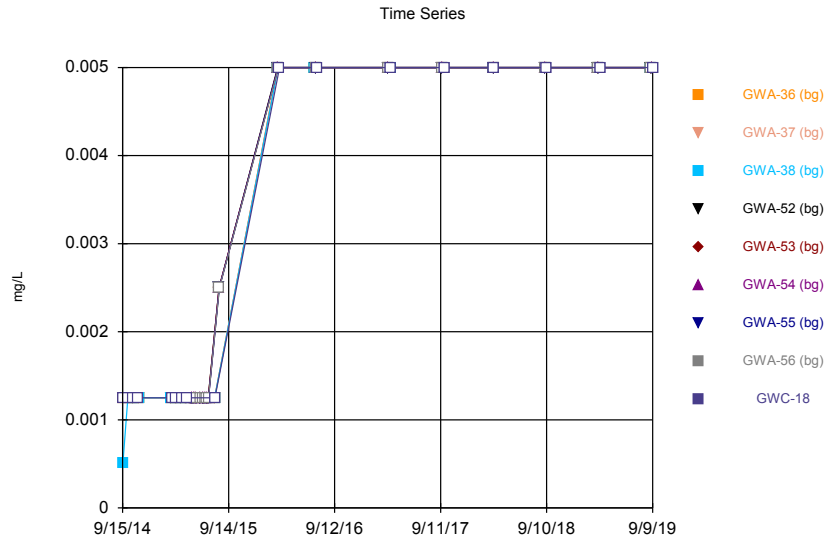
	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.0025								
9/16/2014		0.018	0.0028						
9/17/2014									<0.0025
10/3/2014	<0.0025	0.022	0.0036						
10/4/2014									<0.0025
10/20/2014	<0.0025	0.022	0.0025						
10/21/2014									<0.0025
11/5/2014									0.0016 (J)
11/10/2014	<0.0025	0.018	0.0026						
3/2/2015	<0.0025	0.016	0.017						
3/3/2015									<0.0025
3/17/2015	<0.0025	0.015	0.0057						
3/18/2015									<0.0025
4/5/2015	<0.0025	0.016							
4/6/2015			0.0022 (J)						
4/7/2015									0.0014 (J)
4/21/2015	0.0014 (J)								
4/22/2015		0.016	0.0015 (J)						
4/23/2015									<0.0025
5/8/2015				<0.0025					
5/9/2015					<0.0025	<0.0025	<0.0025	<0.0025	
5/17/2015				<0.0025					
5/18/2015					<0.0025	<0.0025	<0.0025		
5/19/2015								<0.0025	
5/25/2015				<0.0025	<0.0025	<0.0025			
5/26/2015							<0.0025	<0.0025	
6/8/2015				<0.0025	<0.0025				
6/9/2015						0.0015 (J)	<0.0025	<0.0025	
6/17/2015					<0.0025	0.0013 (J)	<0.0025	<0.0025	
6/18/2015				<0.0025					
6/24/2015				<0.0025	0.0034				
6/25/2015						<0.0025	<0.0025	<0.0025	
6/30/2015				<0.0025	<0.0025				
7/1/2015						<0.0025	<0.0025	<0.0025	
7/6/2015				<0.0025	<0.0025				
7/7/2015						<0.0025	<0.0025	<0.0025	
7/28/2015	<0.0025	0.018	0.0015 (J)						
7/29/2015									0.0015 (J)
8/12/2015				<0.005	<0.005	<0.005			
8/13/2015							<0.005	<0.005	
2/29/2016				<0.01					
3/1/2016	<0.01	0.0138							
3/2/2016			<0.01		<0.01	<0.01	<0.01		
3/3/2016								<0.0005	
3/7/2016									<0.01
7/7/2016	<0.01		0.0014 (J)						
7/8/2016		0.014		<0.01	<0.01	<0.01			
7/11/2016							<0.01	0.0006 (J)	
7/13/2016									0.0007 (J)
3/14/2017		0.0087 (J)							
3/15/2017	0.0142			0.0005 (J)		0.0005 (J)		<0.01	
3/16/2017					0.0005 (J)		0.0008 (J)		

Time Series

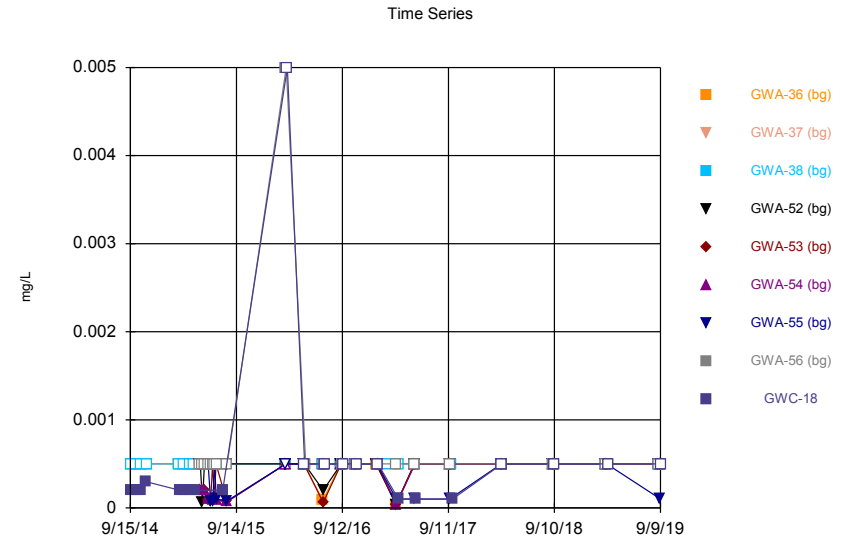
Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

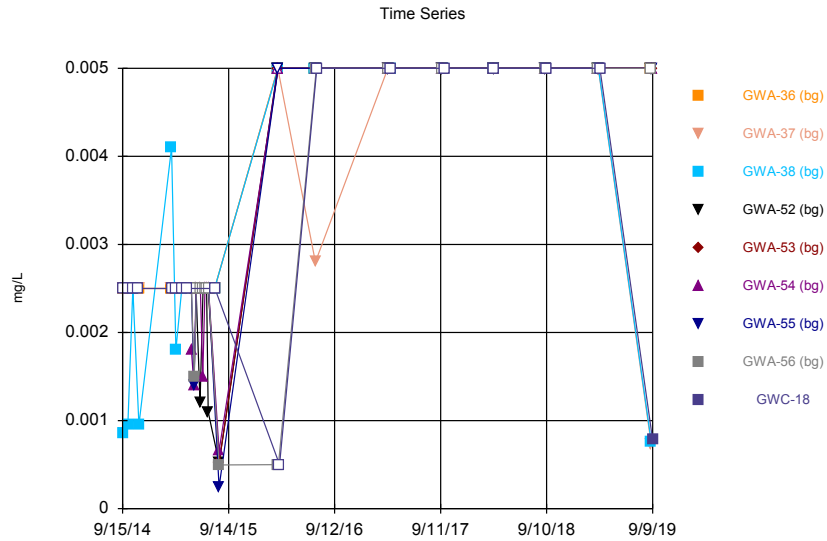
	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.005								
9/16/2014		<0.005	<0.005						
9/17/2014									<0.005
10/3/2014	<0.005	<0.005	<0.005						
10/4/2014									<0.005
10/20/2014	<0.005	<0.005	<0.005						
10/21/2014									<0.005
11/5/2014									<0.005
11/10/2014	<0.005	<0.005	<0.005						
3/2/2015	<0.005	<0.005	<0.005						
3/3/2015									<0.005
3/17/2015	<0.005	<0.005	<0.005						
3/18/2015									<0.005
4/5/2015	<0.005	<0.005							
4/6/2015			<0.005						
4/7/2015									<0.005
4/21/2015	<0.005								
4/22/2015		<0.005	<0.005						
4/23/2015									<0.005
5/8/2015				<0.005					
5/9/2015					<0.005	<0.005	<0.005	<0.005	
5/17/2015				<0.005					
5/18/2015					<0.005	<0.005	<0.005		
5/19/2015								<0.005	
5/25/2015				<0.005	<0.005	<0.005			
5/26/2015							<0.005	<0.005	
6/8/2015				<0.005	<0.005				
6/9/2015						<0.005	<0.005	<0.005	
6/17/2015					<0.005	<0.005	<0.005	<0.005	
6/18/2015				<0.005					
6/24/2015				<0.005	<0.005				
6/25/2015						<0.005	<0.005	<0.005	
6/30/2015				<0.005	<0.005				
7/1/2015						<0.005	<0.005	<0.005	
7/6/2015				<0.005	<0.005				
7/7/2015						<0.005	<0.005	<0.005	
7/28/2015	<0.005	<0.005	<0.005						
7/29/2015									<0.005
8/12/2015				<0.005	<0.005	<0.005			
8/13/2015							<0.005	<0.005	
2/29/2016				<0.01					
3/1/2016	<0.01	<0.01							
3/2/2016			<0.01		<0.01	<0.01	0.00234 (J)		
3/3/2016								<0.01	
3/7/2016									<0.01
5/2/2016	<0.01								
5/3/2016		<0.01	<0.01		<0.01		0.00241 (J)		
5/4/2016				<0.01		<0.01			
5/5/2016									<0.01
5/9/2016								<0.01	
7/7/2016	<0.01		<0.01						
7/8/2016		<0.01		<0.01	<0.01	<0.01			



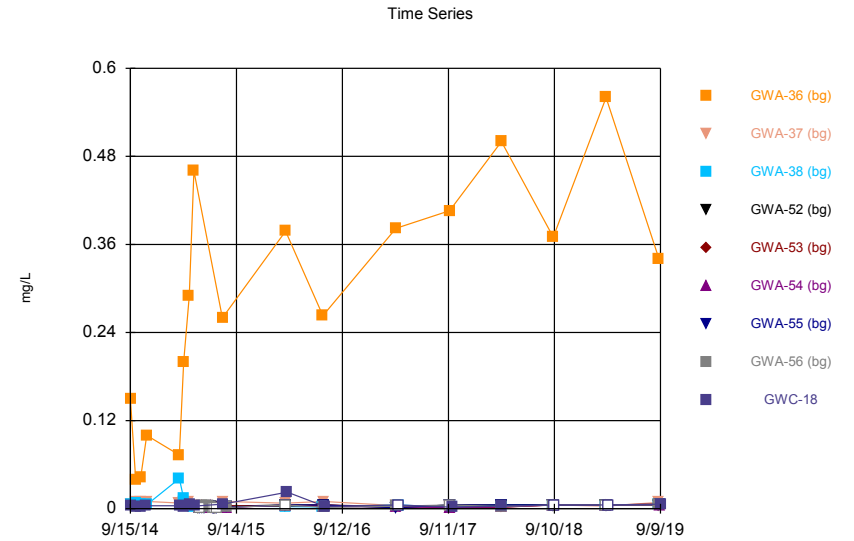
Constituent: Silver Analysis Run 11/7/2019 10:21 AM View: cell_3&4_metals_overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Thallium Analysis Run 11/7/2019 10:21 AM View: cell_3&4_metals_overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 11/7/2019 10:21 AM View: cell_3&4_metals_overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 11/7/2019 10:21 AM View: cell_3&4_metals_overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.0025								
9/16/2014		<0.0025	0.00051 (J)						
9/17/2014									<0.0025
10/3/2014	<0.0025	<0.0025	<0.0025						
10/4/2014									<0.0025
10/20/2014	<0.0025	<0.0025	<0.0025						
10/21/2014									<0.0025
11/5/2014									<0.0025
11/10/2014	<0.0025	<0.0025	<0.0025						
3/2/2015	<0.0025	<0.0025	<0.0025						
3/3/2015									<0.0025
3/17/2015	<0.0025	<0.0025	<0.0025						
3/18/2015									<0.0025
4/5/2015	<0.0025	<0.0025							
4/6/2015			<0.0025						
4/7/2015									<0.0025
4/21/2015	<0.0025								
4/22/2015		<0.0025	<0.0025						
4/23/2015									<0.0025
5/8/2015				<0.0025					
5/9/2015					<0.0025	<0.0025	<0.0025	<0.0025	
5/17/2015				<0.0025					
5/18/2015					<0.0025	<0.0025	<0.0025		
5/19/2015								<0.0025	
5/25/2015				<0.0025	<0.0025	<0.0025			
5/26/2015							<0.0025	<0.0025	
6/8/2015				<0.0025	<0.0025				
6/9/2015						<0.0025	<0.0025	<0.0025	
6/17/2015					<0.0025	<0.0025	<0.0025	<0.0025	
6/18/2015				<0.0025					
6/24/2015				<0.0025	<0.0025				
6/25/2015						<0.0025	<0.0025	<0.0025	
6/30/2015				<0.0025	<0.0025				
7/1/2015						<0.0025	<0.0025	<0.0025	
7/6/2015				<0.0025	<0.0025				
7/7/2015						<0.0025	<0.0025	<0.0025	
7/28/2015	<0.0025	<0.0025	<0.0025						
7/29/2015									<0.0025
8/12/2015				<0.005	<0.005	<0.005			
8/13/2015							<0.005	<0.005	
2/29/2016				<0.01					
3/1/2016	<0.01	<0.01							
3/2/2016			<0.01		<0.01	<0.01	<0.01		
3/3/2016								<0.01	
3/7/2016									<0.01
7/7/2016	<0.01		<0.01						
7/8/2016		<0.01		<0.01	<0.01	<0.01			
7/11/2016							<0.01	<0.01	
7/13/2016									<0.01
3/14/2017		<0.01							
3/15/2017	<0.01			<0.01		<0.01		<0.01	
3/16/2017					<0.01		<0.01		

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.001								
9/16/2014		<0.001	<0.001						
9/17/2014									0.0002 (J)
10/3/2014	<0.001	<0.001							
10/4/2014									0.0002 (J)
10/6/2014			<0.001						
10/20/2014	<0.001	<0.001	<0.001						
10/21/2014									0.0002 (J)
11/5/2014									0.0003 (J)
11/10/2014	<0.001	<0.001	<0.001						
3/2/2015	<0.001	<0.001	<0.001						
3/3/2015									0.0002 (J)
3/17/2015	<0.001	<0.001	<0.001						
3/18/2015									0.0002 (J)
4/5/2015	<0.001	<0.001							
4/6/2015			<0.001						
4/7/2015									0.0002 (J)
4/21/2015	<0.001								
4/22/2015		<0.001	<0.001						
4/23/2015									0.0002 (J)
5/13/2015				<0.001	0.0002 (J)	0.0002 (J)	<0.001	<0.001	
5/20/2015				6E-05 (J)	0.0002 (J)	0.0002 (J)	<0.001	<0.001	
5/27/2015				<0.001	0.0002 (J)	0.0002 (J)	<0.001	<0.001	
6/8/2015				<0.001	9E-05 (J)				
6/9/2015						0.0001 (J)	<0.001	<0.001	
6/17/2015					7E-05 (J)	0.0001 (J)	8E-05 (J)	<0.001	
6/18/2015				<0.001					
6/24/2015				<0.001	<0.001				
6/25/2015						0.0001 (J)	7E-05 (J)	<0.001	
6/30/2015				<0.001	9E-05 (J)				
7/1/2015						0.0001 (J)	<0.001	<0.001	
7/6/2015				<0.001	<0.001				
7/7/2015						9E-05 (J)	0.0001 (J)	<0.001	
7/28/2015	<0.001	<0.001	<0.001						
7/29/2015									0.0002 (J)
8/12/2015				<0.001	7E-05 (J)	7E-05 (J)			
8/13/2015							8E-05 (J)	<0.001	
2/29/2016				<0.001					
3/1/2016	<0.001	<0.001							
3/2/2016			<0.001		<0.001	<0.001	<0.001		
3/3/2016								<0.01	
3/7/2016									<0.01
5/2/2016	<0.001								
5/3/2016		<0.001	<0.001		<0.001		<0.001		
5/4/2016				<0.001		<0.001			
5/5/2016									<0.001
5/9/2016								<0.001	
7/7/2016	9E-05 (J)		<0.001						
7/8/2016		<0.001		0.0002 (J)	6E-05 (J)	<0.001			
7/11/2016							<0.001 (*)	<0.001	
7/13/2016									<0.001 (*)
9/7/2016	<0.001	<0.001							

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	<0.005								
9/16/2014		<0.005	0.00085 (J)						
9/17/2014									<0.005
10/3/2014	<0.005	<0.005	0.00096 (J)						
10/4/2014									<0.005
10/20/2014	<0.005	<0.005	<0.005						
10/21/2014									<0.005
11/5/2014									<0.005
11/10/2014	<0.005	<0.005	0.00095 (J)						
3/2/2015	<0.005	<0.005	0.0041 (J)						
3/3/2015									<0.005
3/17/2015	<0.005	<0.005	0.0018 (J)						
3/18/2015									<0.005
4/5/2015	<0.005	<0.005							
4/6/2015			<0.005						
4/7/2015									<0.005
4/21/2015	<0.005								
4/22/2015		<0.005	<0.005						
4/23/2015									<0.005
5/8/2015				<0.005					
5/9/2015					<0.005	0.0018 (J)	<0.005	<0.005	
5/17/2015				<0.005					
5/18/2015					<0.005	0.0014 (J)	0.0014 (J)		
5/19/2015								0.0015 (J)	
5/25/2015				<0.005	<0.005	<0.005			
5/26/2015							<0.005	<0.005	
6/8/2015				0.0012 (J)	<0.005				
6/9/2015						<0.005	<0.005	<0.005	
6/17/2015					<0.005	0.0015 (J)	<0.005	<0.005	
6/18/2015				<0.005					
6/24/2015				<0.005	<0.005				
6/25/2015						<0.005	<0.005	<0.005	
6/30/2015				<0.005	<0.005				
7/1/2015						<0.005	<0.005	<0.005	
7/6/2015				0.0011 (J)	<0.005				
7/7/2015						<0.005	<0.005	<0.005	
7/28/2015	<0.005	<0.005	<0.005						
7/29/2015									<0.005
8/12/2015				0.000519 (J)	0.000525 (J)	0.000656 (J)	0.000246 (J)	0.000497 (J)	
2/29/2016				<0.01					
3/1/2016	<0.01	<0.01							
3/2/2016			<0.01		<0.01	<0.01	<0.01		
3/3/2016								<0.001	
3/7/2016									<0.001
7/7/2016	<0.01		<0.01						
7/8/2016		0.0028 (J)		<0.01	<0.01	<0.01			
7/11/2016							<0.01	<0.01	
7/13/2016									<0.01
3/14/2017		<0.01							
3/15/2017	<0.01			<0.01		<0.01		<0.01	
3/16/2017					<0.01		<0.01		
3/23/2017			<0.01						<0.01

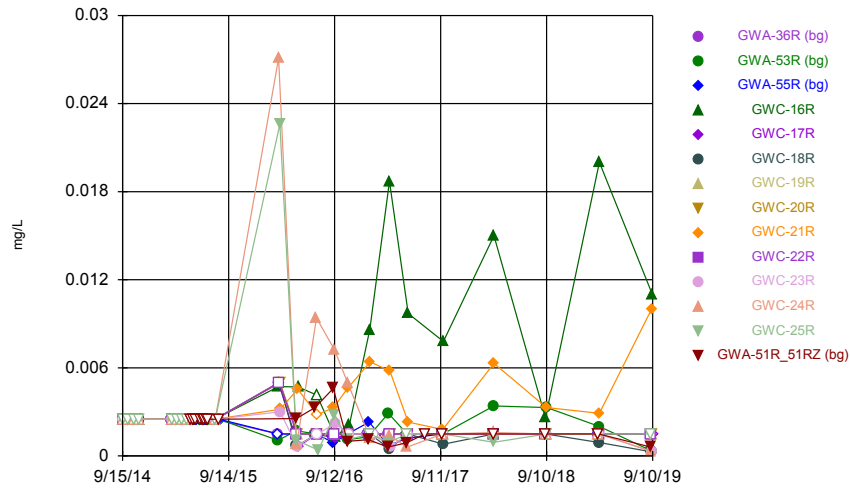
Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:22 AM View: cell_3&4_metals_overburden

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

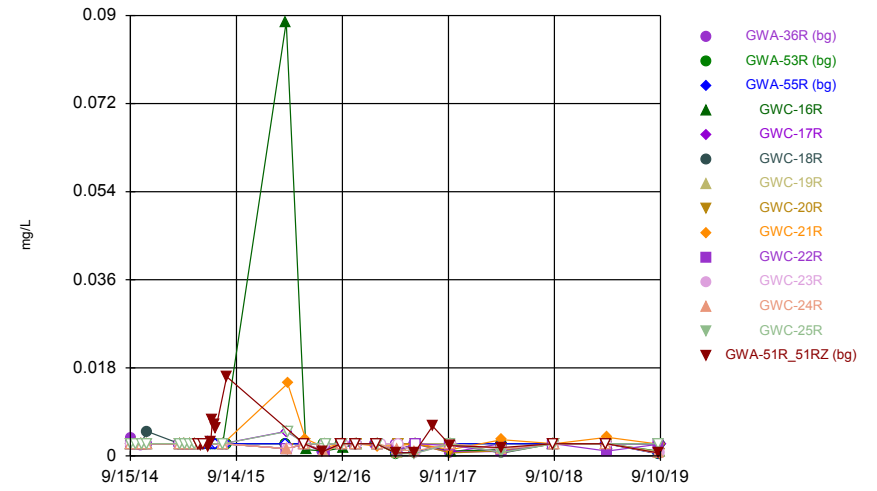
	GWA-36 (bg)	GWA-37 (bg)	GWA-38 (bg)	GWA-52 (bg)	GWA-53 (bg)	GWA-54 (bg)	GWA-55 (bg)	GWA-56 (bg)	GWC-18
9/15/2014	0.15								
9/16/2014		0.0062	0.0054						
9/17/2014									0.0035
10/3/2014	0.04	0.0085	0.007						
10/4/2014									0.0032
10/20/2014	0.042	0.0087	0.0052						
10/21/2014									0.0028
11/5/2014									0.004
11/10/2014	0.1	0.01	0.0054						
3/2/2015	0.073	0.0077	0.041						
3/3/2015									0.004
3/17/2015	0.2	0.0086	0.014						
3/18/2015									0.0024 (J)
4/5/2015	0.29	0.0098							
4/6/2015			0.0044						
4/7/2015									0.0055
4/21/2015	0.46								
4/22/2015		0.0049	0.0023 (J)						
4/23/2015									0.0035
5/8/2015				<0.0025					
5/9/2015					0.0023 (J)	<0.0025	<0.0025	<0.0025	
5/17/2015				0.0017 (J)					
5/18/2015					0.0034	0.0019 (J)	0.0016 (J)		
5/19/2015								0.0045	
5/25/2015				0.003	<0.0025	0.0022 (J)			
5/26/2015							<0.0025	0.0038	
6/8/2015				0.0025	0.0015 (J)				
6/9/2015						0.0015 (J)	0.0026	0.0037	
6/17/2015					<0.0025	0.0035	0.0017 (J)	0.0018 (J)	
6/18/2015				0.0019 (J)					
6/24/2015				0.0028	<0.0025				
6/25/2015						<0.0025	<0.0025	<0.0025	
6/30/2015				<0.0025	<0.0025				
7/1/2015						<0.0025	<0.0025	<0.0025	
7/6/2015				<0.0025	<0.0025				
7/7/2015						<0.0025	<0.0025	<0.0025	
7/28/2015	0.26	0.0099	0.0035						
7/29/2015									0.0062
8/12/2015				0.0033 (BJ)	0.004 (BJ)	0.0015 (BJ)			
8/13/2015							0.002 (BJ)	0.0017 (BJ)	
2/29/2016				<0.01					
3/1/2016	0.378	0.00756 (J)							
3/2/2016			0.0029 (J)		0.0035 (J)	<0.01	<0.01		
3/3/2016								<0.01	
3/7/2016									0.0225 (J)
7/7/2016	0.263		0.0023 (J)						
7/8/2016		0.0098 (J)		<0.01	<0.01	0.0029 (J)			
7/11/2016							<0.01	0.0018 (J)	
7/13/2016									0.0031 (J)
3/14/2017		0.0042 (J)							
3/15/2017	0.382			0.0013 (J)		0.0024 (J)		0.0034 (J)	
3/16/2017					0.0029 (J)		0.0015 (J)		

Time Series



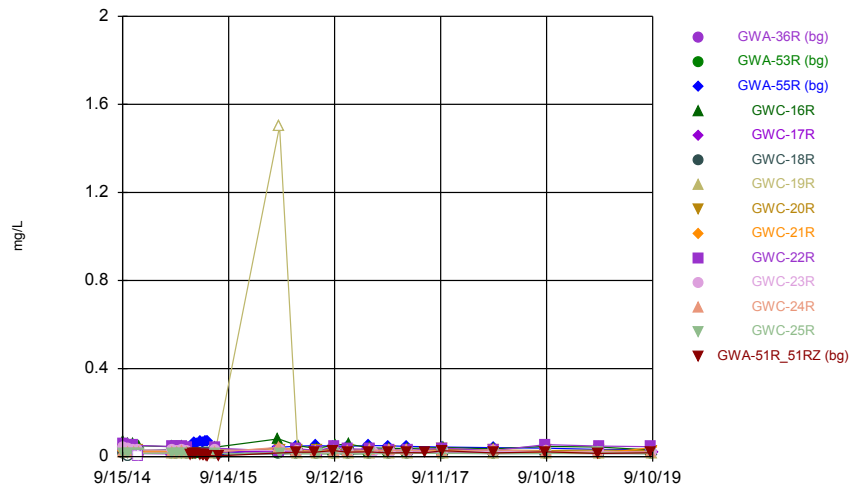
Constituent: Antimony Analysis Run 11/7/2019 10:27 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



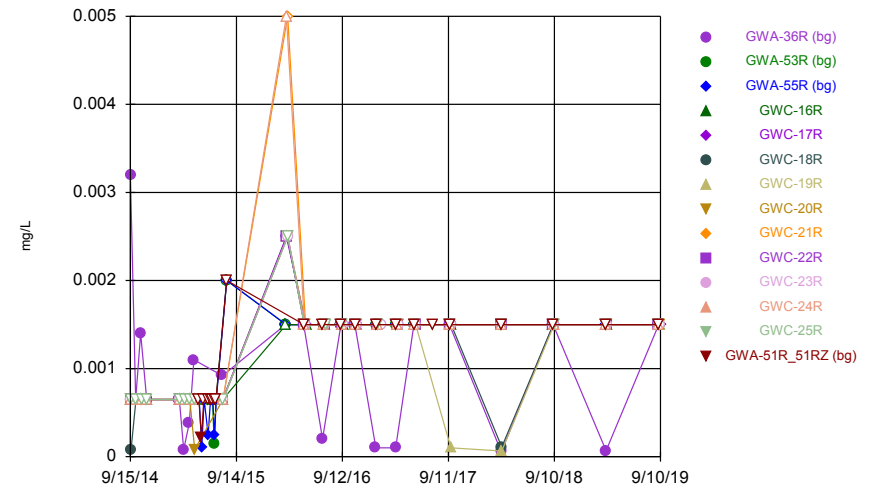
Constituent: Arsenic Analysis Run 11/7/2019 10:27 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



Constituent: Barium Analysis Run 11/7/2019 10:27 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



Constituent: Beryllium Analysis Run 11/7/2019 10:27 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	<0.005								
9/16/2014				<0.005					
9/17/2014					<0.005	<0.005	<0.005		
9/18/2014								<0.005	<0.005
10/3/2014	<0.005								
10/4/2014				<0.005	<0.005	<0.005	<0.005		
10/5/2014								<0.005	<0.005
10/20/2014	<0.005								
10/21/2014				<0.005	<0.005	<0.005	<0.005		
10/22/2014								<0.005	<0.005
10/23/2014									
11/5/2014							<0.005	<0.005	<0.005
11/10/2014	<0.005								
11/11/2014				<0.005	<0.005	<0.005			
3/2/2015	<0.005								
3/3/2015				<0.005	<0.005	<0.005	<0.005		
3/4/2015								<0.005	<0.005
3/17/2015	<0.005								
3/18/2015				<0.005	<0.005	<0.005			
3/19/2015							<0.005	<0.005	<0.005
3/20/2015									
4/5/2015	<0.005								
4/6/2015				<0.005	<0.005				
4/7/2015						<0.005	<0.005	<0.005	
4/8/2015									<0.005
4/9/2015									
4/21/2015	<0.005								
4/23/2015				<0.005	<0.005	<0.005			
4/24/2015							<0.005	<0.005	<0.005
5/8/2015		<0.005							
5/9/2015			<0.005						
5/17/2015		<0.005							
5/18/2015			<0.005						
5/25/2015		<0.005							
5/26/2015			<0.005						
6/8/2015		<0.005							
6/9/2015			<0.005						
6/17/2015			<0.005						
6/18/2015		<0.005							
6/24/2015		<0.005							
6/25/2015			<0.005						
6/30/2015		<0.005							
7/1/2015			<0.005						
7/6/2015		<0.005							
7/7/2015			<0.005						
7/28/2015	<0.005								
7/29/2015				<0.005	<0.005	<0.005	<0.005		
7/30/2015								<0.005	<0.005
8/12/2015		<0.005							
8/13/2015			<0.005						
3/1/2016	<0.003								
3/2/2016		0.00106 (J)							

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
7/19/2017									
9/15/2017	<0.003								
9/18/2017			<0.003						
9/19/2017		<0.003						<0.003	0.0018 (J)
9/20/2017							<0.003		
9/21/2017				0.0078		0.0008 (J)			
9/22/2017					<0.003				
3/12/2018	<0.003		<0.003						
3/13/2018		0.0034							
3/14/2018				0.015	<0.003	<0.003	<0.003	<0.003	0.0063
9/6/2018	<0.003								
9/7/2018			<0.003	0.0026 (J)		<0.003			
9/10/2018							<0.003	<0.003	0.0033
9/11/2018		0.0033			<0.003				
3/7/2019	<0.003		<0.003						
3/8/2019									
3/11/2019				0.02					0.0029 (X)
3/12/2019		0.002 (X)			<0.003	0.00091 (X)	<0.003	<0.003	
9/4/2019	<0.003								
9/5/2019		0.00035 (X)	<0.003						
9/6/2019						0.00028 (X)		<0.003	0.01
9/9/2019				0.011			<0.003		
9/10/2019					<0.003				

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.005	<0.005	
9/17/2014					
9/18/2014	<0.005	<0.005			
10/3/2014					
10/4/2014			<0.005	<0.005	
10/5/2014	<0.005	<0.005			
10/20/2014					
10/21/2014					
10/22/2014	<0.005	<0.005			
10/23/2014			<0.005	<0.005	
11/5/2014	<0.005	<0.005			
11/10/2014			<0.005	<0.005	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.005	<0.005	<0.005	<0.005	
3/17/2015					
3/18/2015					
3/19/2015	<0.005				
3/20/2015		<0.005	<0.005	<0.005	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.005	<0.005	<0.005		
4/9/2015				<0.005	
4/21/2015					
4/23/2015		<0.005	<0.005	<0.005	
4/24/2015	<0.005				
5/8/2015					<0.005
5/9/2015					
5/17/2015					<0.005
5/18/2015					
5/25/2015					<0.005
5/26/2015					
6/8/2015					<0.005
6/9/2015					
6/17/2015					
6/18/2015					<0.005
6/24/2015					<0.005
6/25/2015					
6/30/2015					<0.005
7/1/2015					
7/6/2015					<0.005
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.005	<0.005	<0.005	<0.005	
8/12/2015					<0.005
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			0.0271 (J)		
3/7/2016	<0.01				
3/8/2016				0.0226 (J)	
3/9/2016		0.003			
5/2/2016					
5/3/2016					
5/4/2016				0.00107 (J)	0.00254 (JD)
5/5/2016	<0.003		0.000761 (J)		
5/6/2016		0.000666 (J)			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					0.0033 (D)
7/11/2016					
7/12/2016			0.0094		
7/13/2016					
7/14/2016	<0.003				
7/15/2016		<0.003 (*)			
7/18/2016				0.0004 (J)	
9/7/2016					
9/8/2016					0.0046 (D)
9/9/2016					
9/12/2016	<0.003				
9/13/2016			0.0072	0.0028 (J)	
9/14/2016		0.0022 (J)			
9/15/2016					
10/25/2016					
10/26/2016					0.001 (JD)
10/27/2016	<0.003		0.005	0.0011 (J)	
10/31/2016					
11/1/2016		<0.003			
11/2/2016					
1/5/2017					
1/6/2017					0.0011 (JD)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.003		0.0012 (J)	<0.003	
1/25/2017		<0.003			
3/14/2017					
3/15/2017					0.0006 (JD)
3/16/2017				0.0009 (J)	
3/20/2017	<0.003		0.0014 (J)		
3/21/2017					
3/22/2017		0.0006 (J)			
5/16/2017					
5/18/2017					0.0009 (JD)
5/19/2017			0.0006 (J)	<0.003	
5/22/2017					
5/23/2017	<0.003				
5/24/2017		<0.003			

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
7/19/2017					<0.003 (D)
9/15/2017					
9/18/2017					
9/19/2017	<0.003		<0.003	<0.003	<0.003 (D)
9/20/2017					
9/21/2017		<0.003			
9/22/2017					
3/12/2018					
3/13/2018	<0.003		0.0016 (J)	0.00093 (J)	<0.003
3/14/2018		<0.003			
9/6/2018					
9/7/2018	<0.003				<0.003
9/10/2018					
9/11/2018		<0.003	<0.003	<0.003	
3/7/2019					
3/8/2019			<0.003	<0.003	<0.003
3/11/2019	<0.003				
3/12/2019		<0.003			
9/4/2019					0.0006 (X)
9/5/2019	<0.003		0.00033 (X)	<0.003	
9/6/2019		0.00029 (X)			
9/9/2019					
9/10/2019					

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.0036 (J)								
9/16/2014				<0.005					
9/17/2014					<0.005	<0.005	<0.005		
9/18/2014								<0.005	<0.005
10/3/2014	<0.005								
10/4/2014				<0.005	<0.005	<0.005	<0.005		
10/5/2014								<0.005	<0.005
10/20/2014	0.0022 (J)								
10/21/2014				<0.005	<0.005	<0.005	<0.005		
10/22/2014								<0.005	<0.005
10/23/2014									
11/5/2014							<0.005	<0.005	<0.005
11/10/2014	<0.005								
11/11/2014				<0.005	<0.005	0.005			
3/2/2015	<0.005								
3/3/2015				<0.005	<0.005	<0.005	<0.005		
3/4/2015								<0.005	<0.005
3/17/2015	<0.005								
3/18/2015				<0.005	<0.005	<0.005			
3/19/2015							<0.005	<0.005	<0.005
3/20/2015									
4/5/2015	<0.005								
4/6/2015				<0.005	<0.005				
4/7/2015						<0.005	<0.005	<0.005	
4/8/2015									<0.005
4/9/2015									
4/21/2015	<0.005								
4/23/2015				<0.005	<0.005	<0.005			
4/24/2015							<0.005	<0.005	<0.005
5/8/2015		<0.005							
5/9/2015			<0.005						
5/17/2015		<0.005							
5/18/2015			<0.005						
5/25/2015		<0.005							
5/26/2015			<0.005						
6/8/2015	<0.005								
6/9/2015			0.0028 (J)						
6/17/2015			<0.005						
6/18/2015	<0.005								
6/24/2015	<0.005								
6/25/2015			<0.005						
6/30/2015	<0.005								
7/1/2015			0.0024 (J)						
7/6/2015	<0.005								
7/7/2015			<0.005						
7/28/2015	<0.005								
7/29/2015				<0.005	<0.005	<0.005	<0.005		
7/30/2015								<0.005	<0.005
8/12/2015		<0.005							
8/13/2015			<0.005						
3/1/2016	<0.005								
3/2/2016		<0.005							

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
7/19/2017									
9/15/2017	0.0007 (J)								
9/18/2017			<0.005						
9/19/2017		<0.005						0.0006 (J)	0.0013 (J)
9/20/2017							<0.005		
9/21/2017				0.001 (J)		<0.005			
9/22/2017					0.0008 (J)				
3/12/2018	<0.005		<0.005						
3/13/2018		<0.005							
3/14/2018				0.0013 (J)	0.00092 (J)	0.00057 (J)	0.00076 (J)	0.0011 (J)	0.0033 (J)
9/6/2018	<0.005								
9/7/2018			<0.005	<0.005		<0.005			
9/10/2018							<0.005	<0.005	<0.005
9/11/2018		<0.005			<0.005				
3/7/2019	<0.005		<0.005						
3/8/2019									
3/11/2019				<0.005					0.0038 (X)
3/12/2019		<0.005			<0.005	<0.005	<0.005	<0.005	
9/4/2019	<0.005								
9/5/2019		0.00046 (X)	0.00042 (X)						
9/6/2019						<0.005		0.00044 (X)	0.0024 (X)
9/9/2019				0.00094 (X)			0.00082 (X)		
9/10/2019					<0.005				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.005	<0.005	
9/17/2014					
9/18/2014	<0.005	<0.005			
10/3/2014					
10/4/2014			<0.005	<0.005	
10/5/2014	<0.005	<0.005			
10/20/2014					
10/21/2014					
10/22/2014	<0.005	<0.005			
10/23/2014			<0.005	<0.005	
11/5/2014	<0.005	<0.005			
11/10/2014			<0.005	<0.005	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.005	<0.005	<0.005	<0.005	
3/17/2015					
3/18/2015					
3/19/2015	<0.005				
3/20/2015		<0.005	<0.005	<0.005	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.005	<0.005	<0.005		
4/9/2015				<0.005	
4/21/2015					
4/23/2015		<0.005	<0.005	<0.005	
4/24/2015	<0.005				
5/8/2015					<0.005
5/9/2015					
5/17/2015					0.0021 (J)
5/18/2015					
5/25/2015					<0.005
5/26/2015					
6/8/2015					0.002 (J)
6/9/2015					
6/17/2015					
6/18/2015					0.0028 (J)
6/24/2015					0.0074
6/25/2015					
6/30/2015					0.0065
7/1/2015					
7/6/2015					0.0057
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.005	<0.005	<0.005	<0.005	
8/12/2015					0.0162
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			0.0015 (J)		
3/7/2016	<0.003				
3/8/2016				<0.01	
3/9/2016		<0.003			
5/2/2016					
5/3/2016					
5/4/2016				<0.005	<0.005 (D)
5/5/2016	<0.005		<0.005		
5/6/2016		<0.005			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					0.0009 (JD)
7/11/2016					
7/12/2016			0.0009 (J)		
7/13/2016					
7/14/2016	0.001 (J)				
7/15/2016		<0.005			
7/18/2016				<0.005	
9/7/2016					
9/8/2016					<0.005 (D)
9/9/2016					
9/12/2016	<0.005				
9/13/2016			<0.005	<0.005	
9/14/2016		<0.005			
9/15/2016					
10/25/2016					
10/26/2016					<0.005 (D)
10/27/2016	<0.005		<0.005	<0.005	
10/31/2016					
11/1/2016		<0.005			
11/2/2016					
1/5/2017					
1/6/2017					<0.005 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.005		<0.005	<0.005	
1/25/2017		<0.005			
3/14/2017					
3/15/2017					0.0006 (JD)
3/16/2017				0.0004 (J)	
3/20/2017	0.0012 (J)		0.0013 (J)		
3/21/2017					
3/22/2017		<0.005			
5/16/2017					
5/18/2017					0.0007 (JD)
5/19/2017			0.001 (J)	0.0005 (J)	
5/22/2017					
5/23/2017	<0.005				
5/24/2017		0.0006 (J)			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
7/19/2017					0.0061 (D)
9/15/2017					
9/18/2017					
9/19/2017	0.0021 (J)		<0.005	<0.005	0.0021 (JD)
9/20/2017					
9/21/2017		<0.005			
9/22/2017					
3/12/2018					
3/13/2018	0.00087 (J)		0.0015 (J)	0.00073 (J)	0.0017 (J)
3/14/2018		0.0014 (J)			
9/6/2018					
9/7/2018	<0.005				<0.005
9/10/2018					
9/11/2018		<0.005	<0.005	<0.005	
3/7/2019					
3/8/2019			<0.005	<0.005	<0.005
3/11/2019	0.00099 (X)				
3/12/2019		<0.005			
9/4/2019					0.00061 (X)
9/5/2019	0.0024 (X)		0.00053 (X)	<0.005	
9/6/2019		0.00054 (X)			
9/9/2019					
9/10/2019					

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.031								
9/16/2014				0.069					
9/17/2014					0.019	0.015	0.018		
9/18/2014								0.031	0.023
10/3/2014	0.024								
10/4/2014				0.057	0.02	<0.0013	0.017		
10/5/2014								0.032	0.025
10/20/2014	0.024								
10/21/2014				0.056	0.02	0.027	0.017		
10/22/2014								0.03	0.025
10/23/2014									
11/5/2014							0.017	0.031	0.025
11/10/2014	0.014								
11/11/2014				0.05	0.021	0.028			
3/2/2015	0.013								
3/3/2015				0.045	0.02	0.034	0.016		
3/4/2015								0.026	0.024
3/17/2015	0.013								
3/18/2015				0.044	0.019	0.014			
3/19/2015							0.015	0.028	0.024
3/20/2015									
4/5/2015	0.022								
4/6/2015				0.045	0.02				
4/7/2015						0.017	0.017	0.031	
4/8/2015									0.027
4/9/2015									
4/21/2015	0.018								
4/23/2015				0.041	0.019	0.013			
4/24/2015							0.015	0.027	0.025
5/8/2015		0.014							
5/9/2015			0.042						
5/17/2015		0.015							
5/18/2015			0.063						
5/25/2015		0.014							
5/26/2015			0.057						
6/8/2015		0.014							
6/9/2015			0.07						
6/17/2015			0.065						
6/18/2015		0.013							
6/24/2015		0.014							
6/25/2015			0.068						
6/30/2015		0.014							
7/1/2015			0.069						
7/6/2015		0.013							
7/7/2015			0.071						
7/28/2015	0.022								
7/29/2015				0.043	0.02	0.013	0.016		
7/30/2015								0.032	0.025
8/12/2015		0.015 (J)	<0.02						
3/1/2016	0.021								
3/2/2016		0.015							
3/3/2016			0.0424	0.0806 (D)					

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2017	0.0231								
9/18/2017			0.0436						
9/19/2017		0.0153						0.034	0.0276
9/20/2017							0.0164		
9/21/2017				0.0418		0.0152			
9/22/2017					0.0195				
3/12/2018	0.023		0.041						
3/13/2018		0.015							
3/14/2018				0.036	0.02	0.014	0.016	0.03	0.024
9/6/2018	0.024								
9/7/2018			0.039	0.047		0.015			
9/10/2018							0.016	0.028	0.016
9/11/2018		0.015			0.019				
3/7/2019	0.018		0.033						
3/8/2019									
3/11/2019				0.044					0.015
3/12/2019		0.016			0.021	0.014	0.016	0.03	
9/4/2019	0.026								
9/5/2019		0.014	0.032						
9/6/2019						0.014		0.027	0.041
9/9/2019				0.03			0.015		
9/10/2019					0.019				

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			0.019	0.015	
9/17/2014					
9/18/2014	0.057	0.042			
10/3/2014					
10/4/2014			0.019	0.015	
10/5/2014	0.052	0.038			
10/20/2014					
10/21/2014					
10/22/2014	0.052	0.029			
10/23/2014			0.019	0.015	
11/5/2014	<0.0013 (o)	0.031			
11/10/2014			0.019	0.015	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	0.046	0.03	0.021	0.016	
3/17/2015					
3/18/2015					
3/19/2015	0.045				
3/20/2015		0.027	0.02	0.015	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	0.045	0.032	0.023		
4/9/2015				0.016	
4/21/2015					
4/23/2015		0.026	0.02	0.015	
4/24/2015	0.039				
5/8/2015					0.0094
5/9/2015					
5/17/2015					0.014
5/18/2015					
5/25/2015					0.012
5/26/2015					
6/8/2015					0.0094
6/9/2015					
6/17/2015					
6/18/2015					0.0075
6/24/2015					0.0056
6/25/2015					
6/30/2015					0.0047
7/1/2015					
7/6/2015					0.0047
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	0.039	0.029	0.021	0.015	
8/12/2015					0.00383 (J)
3/1/2016					
3/2/2016					
3/3/2016					

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/4/2016			0.0422		
3/7/2016	0.026				
3/8/2016				0.0161	
3/9/2016		0.0284 (J)			
5/2/2016					
5/3/2016					
5/4/2016				0.0167	0.0207 (D)
5/5/2016	0.0374		0.0249		
5/6/2016		0.0233			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					0.0207 (D)
7/11/2016					
7/12/2016			0.0246		
7/13/2016					
7/14/2016	0.0271				
7/15/2016		0.0208			
7/18/2016				0.0162	
9/7/2016					
9/8/2016					0.0278 (D)
9/9/2016					
9/12/2016	0.045				
9/13/2016			0.0236	0.0161	
9/14/2016		0.0198			
9/15/2016					
10/25/2016					
10/26/2016					0.0204 (D)
10/27/2016	0.0359		0.0229	0.016	
10/31/2016					
11/1/2016		0.0207			
11/2/2016					
1/5/2017					
1/6/2017					0.0221 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	0.0338		0.0292	0.015	
1/25/2017		0.0195			
3/14/2017					
3/15/2017					0.0172 (D)
3/16/2017				0.0163	
3/20/2017	0.033		0.029		
3/21/2017					
3/22/2017		0.0211			
5/16/2017					
5/18/2017					0.0181 (D)
5/19/2017			0.0295	0.0164	
5/22/2017					
5/23/2017	0.0287				
5/24/2017		0.0217			
7/19/2017					0.018 (D)

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2017					
9/18/2017					
9/19/2017	0.0389		0.0248	0.0147	0.0271 (D)
9/20/2017					
9/21/2017		0.0226			
9/22/2017					
3/12/2018					
3/13/2018	0.028		0.031	0.015	0.017
3/14/2018		0.024			
9/6/2018					
9/7/2018	0.055				0.022
9/10/2018					
9/11/2018		0.023	0.024	0.015	
3/7/2019					
3/8/2019			0.02	0.017	0.015
3/11/2019	0.048				
3/12/2019		0.022			
9/4/2019					0.018
9/5/2019	0.045		0.022	0.016	
9/6/2019		0.021			
9/9/2019					
9/10/2019					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.0032								
9/16/2014				<0.0013					
9/17/2014					<0.0013	7.8E-05 (J)	<0.0013		
9/18/2014								<0.0013	<0.0013
10/3/2014	<0.0013								
10/4/2014				<0.0013	<0.0013	<0.0013	<0.0013		
10/5/2014								<0.0013	<0.0013
10/20/2014	0.0014								
10/21/2014				<0.0013	<0.0013	<0.0013	<0.0013		
10/22/2014								<0.0013	<0.0013
10/23/2014									
11/5/2014							<0.0013	<0.0013	<0.0013
11/10/2014	<0.0013								
11/11/2014				<0.0013	<0.0013	<0.0013			
3/2/2015	<0.0013								
3/3/2015				<0.0013	<0.0013	<0.0013	<0.0013		
3/4/2015								<0.0013	<0.0013
3/17/2015	8.3E-05 (J)								
3/18/2015				<0.0013	<0.0013	<0.0013			
3/19/2015							<0.0013	<0.0013	<0.0013
3/20/2015									
4/5/2015	0.00038 (J)								
4/6/2015				<0.0013	<0.0013				
4/7/2015						<0.0013	<0.0013	<0.0013	
4/8/2015									<0.0013
4/9/2015									
4/21/2015	0.0011 (J)								
4/23/2015				<0.0013	<0.0013	<0.0013			
4/24/2015							<0.0013	8.3E-05 (J)	<0.0013
5/8/2015		<0.0013							
5/9/2015			<0.0013						
5/17/2015		<0.0013							
5/18/2015			0.00011 (J)						
5/25/2015		<0.0013							
5/26/2015			<0.0013						
6/8/2015		<0.0013							
6/9/2015			0.00025 (J)						
6/17/2015			<0.0013						
6/18/2015		<0.0013							
6/24/2015		<0.0013							
6/25/2015			<0.0013						
6/30/2015		0.00014 (J)							
7/1/2015			0.00024 (J)						
7/6/2015		<0.0013							
7/7/2015			<0.0013						
7/28/2015	0.00092 (J)								
7/29/2015				<0.0013	<0.0013	<0.0013	<0.0013		
7/30/2015								<0.0013	<0.0013
8/12/2015		<0.004	<0.004						
3/1/2016	<0.003								
3/2/2016		<0.003							
3/3/2016			<0.003	<0.003 (D)					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2017	<0.003								
9/18/2017			<0.003						
9/19/2017		<0.003						<0.003	<0.003
9/20/2017							0.0001 (J)		
9/21/2017				<0.003		<0.003			
9/22/2017					<0.003				
3/12/2018	5.6E-05 (J)		<0.003						
3/13/2018		<0.003							
3/14/2018				<0.003	<0.003	0.00011 (J)	6.5E-05 (J)	<0.003	<0.003
9/6/2018	<0.003								
9/7/2018			<0.003	<0.003		<0.003			
9/10/2018							<0.003	<0.003	<0.003
9/11/2018		<0.003			<0.003				
3/7/2019	6.8E-05 (X)		<0.003						
3/8/2019									
3/11/2019				<0.003					<0.003
3/12/2019		<0.003			<0.003	<0.003	<0.003	<0.003	
9/4/2019	<0.003								
9/5/2019		<0.003	<0.003						
9/6/2019						<0.003		<0.003	<0.003
9/9/2019				<0.003			<0.003		
9/10/2019					<0.003				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.0013	<0.0013	
9/17/2014					
9/18/2014	<0.0013	<0.0013			
10/3/2014					
10/4/2014			<0.0013	<0.0013	
10/5/2014	<0.0013	<0.0013			
10/20/2014					
10/21/2014					
10/22/2014	<0.0013	<0.0013			
10/23/2014			<0.0013	<0.0013	
11/5/2014	<0.0013	<0.0013			
11/10/2014			<0.0013	<0.0013	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.0013	<0.0013	<0.0013	<0.0013	
3/17/2015					
3/18/2015					
3/19/2015	<0.0013				
3/20/2015		<0.0013	<0.0013	<0.0013	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.0013	<0.0013	<0.0013		
4/9/2015				<0.0013	
4/21/2015					
4/23/2015		<0.0013	<0.0013	<0.0013	
4/24/2015	<0.0013				
5/8/2015					<0.0013
5/9/2015					
5/17/2015					0.00022 (J)
5/18/2015					
5/25/2015					<0.0013
5/26/2015					
6/8/2015					<0.0013
6/9/2015					
6/17/2015					
6/18/2015					<0.0013
6/24/2015					<0.0013
6/25/2015					
6/30/2015					<0.0013
7/1/2015					
7/6/2015					<0.0013
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.0013	<0.0013	<0.0013	<0.0013	
8/12/2015					<0.004
3/1/2016					
3/2/2016					
3/3/2016					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

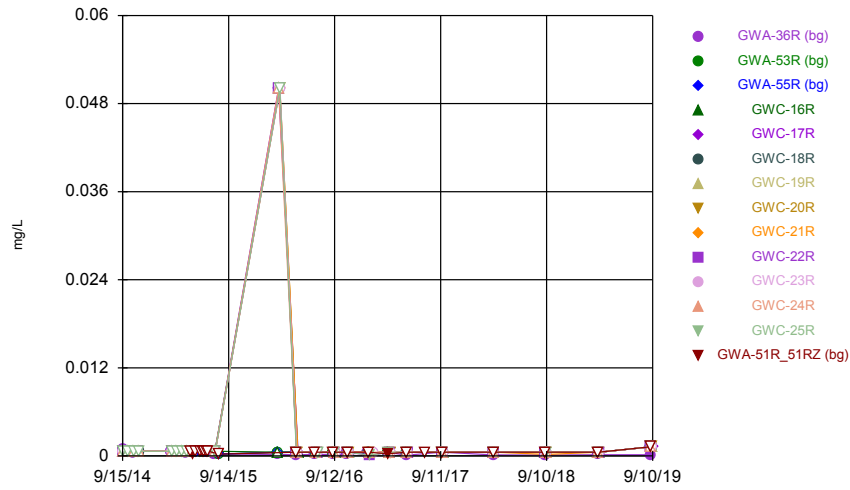
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/4/2016			<0.01		
3/7/2016	<0.005				
3/8/2016				<0.005	
3/9/2016		<0.005			
5/2/2016					
5/3/2016					
5/4/2016				<0.003	<0.003 (D)
5/5/2016	<0.003		<0.003		
5/6/2016		<0.003			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					<0.003 (D)
7/11/2016					
7/12/2016			<0.003		
7/13/2016					
7/14/2016	<0.003				
7/15/2016		<0.003			
7/18/2016				<0.003	
9/7/2016					
9/8/2016					<0.003 (D)
9/9/2016					
9/12/2016	<0.003				
9/13/2016			<0.003	<0.003	
9/14/2016		<0.003			
9/15/2016					
10/25/2016					
10/26/2016					<0.003 (D)
10/27/2016	<0.003		<0.003	<0.003	
10/31/2016					
11/1/2016		<0.003			
11/2/2016					
1/5/2017					
1/6/2017					<0.003 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.003		<0.003	<0.003	
1/25/2017		<0.003			
3/14/2017					
3/15/2017					<0.003 (D)
3/16/2017				<0.003	
3/20/2017	<0.003		<0.003		
3/21/2017					
3/22/2017		<0.003			
5/16/2017					
5/18/2017					<0.003 (D)
5/19/2017			<0.003	<0.003	
5/22/2017					
5/23/2017	<0.003				
5/24/2017		<0.003			
7/19/2017					<0.003 (D)

Time Series

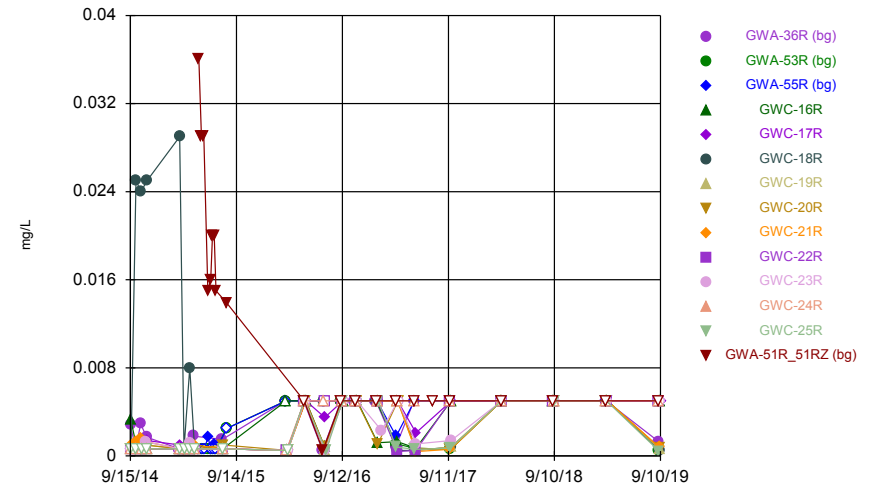
Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2017					
9/18/2017					
9/19/2017	<0.003		<0.003	<0.003	<0.003 (D)
9/20/2017					
9/21/2017		<0.003			
9/22/2017					
3/12/2018					
3/13/2018	<0.003		<0.003	<0.003	<0.003
3/14/2018		<0.003			
9/6/2018					
9/7/2018	<0.003				<0.003
9/10/2018					
9/11/2018		<0.003	<0.003	<0.003	
3/7/2019					
3/8/2019			<0.003	<0.003	<0.003
3/11/2019	<0.003				
3/12/2019		<0.003			
9/4/2019					<0.003
9/5/2019	<0.003		<0.003	<0.003	
9/6/2019		<0.003			
9/9/2019					
9/10/2019					

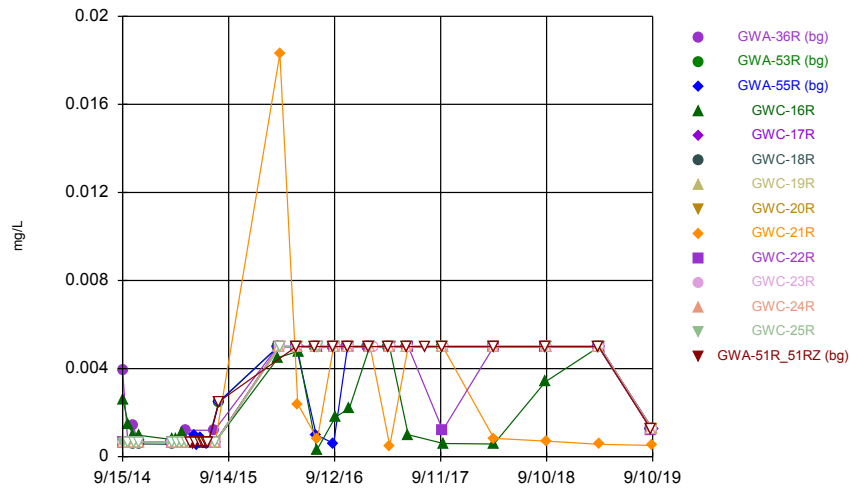
Time Series



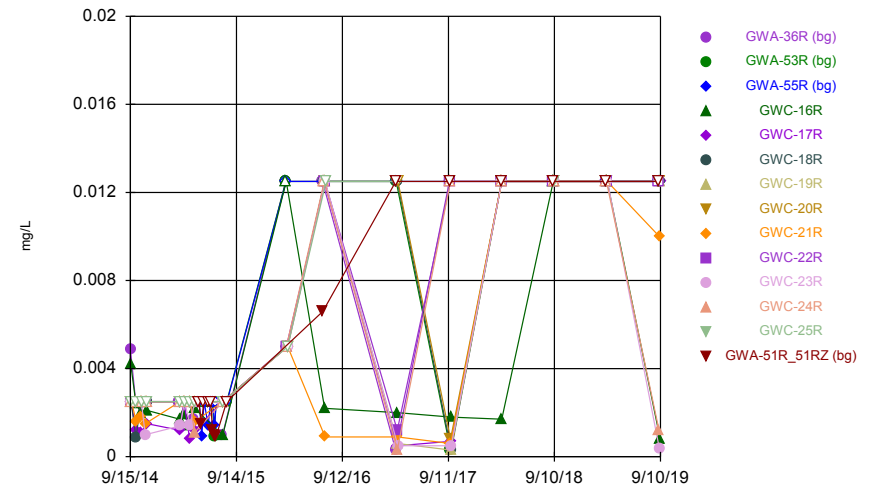
Time Series



Time Series



Time Series



Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.001 (J)								
9/16/2014				<0.0013					
9/17/2014					<0.0013	<0.0013	<0.0013		
9/18/2014								<0.0013	<0.0013
10/3/2014	<0.0013								
10/4/2014				<0.0013	<0.0013	<0.0013	<0.0013		
10/5/2014								<0.0013	<0.0013
10/20/2014	0.00036 (J)								
10/21/2014				<0.0013	<0.0013	<0.0013	<0.0013		
10/22/2014								<0.0013	<0.0013
10/23/2014									
11/5/2014							<0.0013	<0.0013	<0.0013
11/10/2014	<0.0013								
11/11/2014				<0.0013	<0.0013	<0.0013			
3/2/2015	<0.0013								
3/3/2015				<0.0013	<0.0013	<0.0013	<0.0013		
3/4/2015								<0.0013	<0.0013
3/17/2015	<0.0013								
3/18/2015				<0.0013	<0.0013	<0.0013			
3/19/2015							<0.0013	<0.0013	<0.0013
3/20/2015									
4/5/2015	<0.0013								
4/6/2015				<0.0013	<0.0013				
4/7/2015						<0.0013	<0.0013	<0.0013	
4/8/2015									<0.0013
4/9/2015									
4/21/2015	0.00044 (J)								
4/23/2015				<0.0013	<0.0013	<0.0013			
4/24/2015							<0.0013	<0.0013	<0.0013
5/8/2015		<0.0013							
5/9/2015			<0.0013						
5/17/2015		<0.0013							
5/18/2015			<0.0013						
5/25/2015		<0.0013							
5/26/2015			<0.0013						
6/8/2015		<0.0013							
6/9/2015			<0.0013						
6/17/2015			<0.0013						
6/18/2015		<0.0013							
6/24/2015		<0.0013							
6/25/2015			<0.0013						
6/30/2015		<0.0013							
7/1/2015			<0.0013						
7/6/2015		<0.0013							
7/7/2015			<0.0013						
7/28/2015	0.00027 (J)								
7/29/2015				<0.0013	<0.0013	<0.0013	<0.0013		
7/30/2015								<0.0013	<0.0013
8/12/2015		<0.0005							
8/13/2015			<0.0005						
3/1/2016	0.000207 (J)								
3/2/2016		<0.001							

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
7/19/2017									
9/15/2017	<0.001								
9/18/2017			<0.001						
9/19/2017		<0.001						<0.001	<0.001
9/20/2017							<0.001		
9/21/2017				<0.001		<0.001			
9/22/2017					<0.001				
3/12/2018	0.00013 (J)		<0.001						
3/13/2018		<0.001							
3/14/2018				<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/6/2018	0.00011 (J)								
9/7/2018			<0.001	<0.001		<0.001			
9/10/2018							<0.001	<0.001	0.00021 (J)
9/11/2018		<0.001			<0.001				
3/7/2019	0.00017 (X)		<0.001						
3/8/2019									
3/11/2019				<0.001					<0.001
3/12/2019		<0.001			<0.001	<0.001	<0.001	<0.001	
9/4/2019	0.00016 (X)								
9/5/2019		<0.0025	<0.0025						
9/6/2019						<0.0025		<0.0025	<0.0025
9/9/2019				<0.0025			<0.0025		
9/10/2019					<0.0025				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.0013	<0.0013	
9/17/2014					
9/18/2014	<0.0013	<0.0013			
10/3/2014					
10/4/2014			<0.0013	<0.0013	
10/5/2014	<0.0013	<0.0013			
10/20/2014					
10/21/2014					
10/22/2014	<0.0013	<0.0013			
10/23/2014			<0.0013	<0.0013	
11/5/2014	<0.0013	<0.0013			
11/10/2014			<0.0013	<0.0013	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.0013	<0.0013	<0.0013	<0.0013	
3/17/2015					
3/18/2015					
3/19/2015	<0.0013				
3/20/2015		<0.0013	<0.0013	<0.0013	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.0013	<0.0013	<0.0013		
4/9/2015				<0.0013	
4/21/2015					
4/23/2015		<0.0013	<0.0013	<0.0013	
4/24/2015	<0.0013				
5/8/2015					<0.0013
5/9/2015					
5/17/2015					0.00029 (J)
5/18/2015					
5/25/2015					<0.0013
5/26/2015					
6/8/2015					<0.0013
6/9/2015					
6/17/2015					
6/18/2015					<0.0013
6/24/2015					<0.0013
6/25/2015					
6/30/2015					<0.0013
7/1/2015					
7/6/2015					<0.0013
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.0013	<0.0013	<0.0013	<0.0013	
8/12/2015					<0.0005
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.1		
3/7/2016	<0.1				
3/8/2016				<0.1	
3/9/2016		<0.1			
5/2/2016					
5/3/2016					
5/4/2016				<0.001	<0.001 (D)
5/5/2016	<0.001		<0.001		
5/6/2016		<0.001			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					<0.001 (D)
7/11/2016					
7/12/2016			<0.001		
7/13/2016					
7/14/2016	<0.001				
7/15/2016		<0.001			
7/18/2016				<0.001	
9/7/2016					
9/8/2016					<0.001 (D)
9/9/2016					
9/12/2016	<0.001				
9/13/2016			<0.001	<0.001	
9/14/2016		<0.001			
9/15/2016					
10/25/2016					
10/26/2016					<0.001 (D)
10/27/2016	<0.001		<0.001	<0.001	
10/31/2016					
11/1/2016		<0.001			
11/2/2016					
1/5/2017					
1/6/2017					<0.001 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	8E-05 (J)		<0.001	0.0001 (J)	
1/25/2017		<0.001			
3/14/2017					
3/15/2017					0.0003 (D)
3/16/2017				<0.001 (*)	
3/20/2017	<0.001		<0.001		
3/21/2017					
3/22/2017		<0.001			
5/16/2017					
5/18/2017					<0.001 (D)
5/19/2017			<0.001	<0.001	
5/22/2017					
5/23/2017	<0.001				
5/24/2017		<0.001			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
7/19/2017					<0.001 (D)
9/15/2017					
9/18/2017					
9/19/2017	<0.001		<0.001	<0.001	<0.001 (D)
9/20/2017					
9/21/2017		<0.001			
9/22/2017					
3/12/2018					
3/13/2018	<0.001		<0.001	<0.001	<0.001
3/14/2018		<0.001			
9/6/2018					
9/7/2018	<0.001				<0.001
9/10/2018					
9/11/2018		<0.001	<0.001	<0.001	
3/7/2019					
3/8/2019			<0.001	<0.001	<0.001
3/11/2019	<0.001				
3/12/2019		<0.001			
9/4/2019					<0.0025
9/5/2019	<0.0025		<0.0025	<0.0025	
9/6/2019		<0.0025			
9/9/2019					
9/10/2019					

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.0028								
9/16/2014				0.0033					
9/17/2014					<0.0013	<0.0013	<0.0013		
9/18/2014								<0.0013	0.001 (J)
10/3/2014	<0.0013								
10/4/2014				0.0011 (J)	<0.0013	0.025	0.001 (J)		
10/5/2014								<0.0013	0.0013
10/20/2014	0.0029								
10/21/2014				<0.0013	<0.0013	0.024	0.0011 (J)		
10/22/2014								<0.0013	0.0016
10/23/2014									
11/5/2014							0.001 (J)	0.001 (J)	0.0013
11/10/2014	0.0017								
11/11/2014				<0.0013	0.0014	0.025			
3/2/2015	<0.0013								
3/3/2015				<0.0013	0.001 (J)	0.029	<0.0013		
3/4/2015								<0.0013	<0.0013
3/17/2015	<0.0013								
3/18/2015				<0.0013	<0.0013	<0.0013			
3/19/2015							<0.0013	<0.0013	<0.0013
3/20/2015									
4/5/2015	<0.0013								
4/6/2015				<0.0013	<0.0013				
4/7/2015						0.008	<0.0013	<0.0013	
4/8/2015									<0.0013
4/9/2015									
4/21/2015	0.0018								
4/23/2015				0.001 (J)	<0.0013	<0.0013			
4/24/2015							<0.0013	<0.0013	0.001 (J)
5/8/2015		<0.0013							
5/9/2015			<0.0013						
5/17/2015		<0.0013							
5/18/2015			<0.0013						
5/25/2015		<0.0013							
5/26/2015			<0.0013						
6/8/2015		<0.0013							
6/9/2015			0.0017						
6/17/2015			<0.0013						
6/18/2015		<0.0013							
6/24/2015		<0.0013							
6/25/2015			<0.0013						
6/30/2015		<0.0013							
7/1/2015			0.0011 (J)						
7/6/2015		<0.0013							
7/7/2015			<0.0013						
7/28/2015	0.0015								
7/29/2015				<0.0013	<0.0013	<0.0013	<0.0013		
7/30/2015								0.001 (J)	<0.0013
8/12/2015		<0.005							
8/13/2015			<0.005						
3/1/2016	<0.01								
3/2/2016		<0.01							

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
7/19/2017									
9/15/2017	<0.01								
9/18/2017			<0.01						
9/19/2017		0.0006 (J)						0.0006 (J)	0.0006 (J)
9/20/2017							0.0008 (J)		
9/21/2017				<0.01		0.0008 (J)			
9/22/2017					<0.01				
3/12/2018	<0.01		<0.01						
3/13/2018		<0.01							
3/14/2018				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9/6/2018	<0.01								
9/7/2018			<0.01	<0.01		<0.01			
9/10/2018							<0.01	<0.01	<0.01
9/11/2018		<0.01			<0.01				
3/7/2019	<0.01		<0.01						
3/8/2019									
3/11/2019				<0.01					<0.01
3/12/2019		<0.01			<0.01	<0.01	<0.01	<0.01	
9/4/2019	0.0013 (X)								
9/5/2019		0.00055 (X)	<0.01						
9/6/2019						0.00053 (X)		0.00076 (X)	0.00078 (X)
9/9/2019				<0.01			0.00056 (X)		
9/10/2019					<0.01				

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.0013	<0.0013	
9/17/2014					
9/18/2014	<0.0013	<0.0013			
10/3/2014					
10/4/2014			<0.0013	<0.0013	
10/5/2014	<0.0013	<0.0013			
10/20/2014					
10/21/2014					
10/22/2014	<0.0013	<0.0013			
10/23/2014			<0.0013	<0.0013	
11/5/2014	<0.0013	0.0013			
11/10/2014			<0.0013	<0.0013	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.0013	<0.0013	<0.0013	<0.0013	
3/17/2015					
3/18/2015					
3/19/2015	<0.0013				
3/20/2015		<0.0013	<0.0013	<0.0013	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.0013	0.0012 (J)	<0.0013		
4/9/2015				<0.0013	
4/21/2015					
4/23/2015		<0.0013	<0.0013	<0.0013	
4/24/2015	<0.0013				
5/8/2015					0.036
5/9/2015					
5/17/2015					0.029
5/18/2015					
5/25/2015					0.029
5/26/2015					
6/8/2015					0.015
6/9/2015					
6/17/2015					
6/18/2015					0.016
6/24/2015					0.02
6/25/2015					
6/30/2015					0.02
7/1/2015					
7/6/2015					0.015
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.0013	<0.0013	<0.0013	<0.0013	
8/12/2015					0.0139
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.001		
3/7/2016	<0.001				
3/8/2016				<0.001	
3/9/2016		<0.001			
5/2/2016					
5/3/2016					
5/4/2016				<0.01	<0.01 (D)
5/5/2016	<0.01		<0.01		
5/6/2016		<0.01			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					0.0005 (JD)
7/11/2016					
7/12/2016			<0.01		
7/13/2016					
7/14/2016	<0.01				
7/15/2016		0.0005 (J)			
7/18/2016				0.0005 (J)	
9/7/2016					
9/8/2016					<0.01 (D)
9/9/2016					
9/12/2016	<0.01				
9/13/2016			<0.01	<0.01	
9/14/2016		<0.01			
9/15/2016					
10/25/2016					
10/26/2016					<0.01 (D)
10/27/2016	<0.01		<0.01	<0.01	
10/31/2016					
11/1/2016		<0.01			
11/2/2016					
1/5/2017					
1/6/2017					<0.01 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.01		<0.01	<0.01	
1/25/2017		0.0023 (J)			
3/14/2017					
3/15/2017					<0.01 (D)
3/16/2017				0.0008 (J)	
3/20/2017	0.0004 (J)		<0.01		
3/21/2017					
3/22/2017		<0.01 (*)			
5/16/2017					
5/18/2017					<0.01 (D)
5/19/2017			<0.01	0.0006 (J)	
5/22/2017					
5/23/2017	0.0005 (J)				
5/24/2017		0.0011 (J)			

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
7/19/2017					<0.01 (D)
9/15/2017					
9/18/2017					
9/19/2017	<0.01		<0.01	0.0007 (J)	<0.01 (D)
9/20/2017					
9/21/2017		0.0014 (J)			
9/22/2017					
3/12/2018					
3/13/2018	<0.01		<0.01	<0.01	<0.01
3/14/2018		<0.01			
9/6/2018					
9/7/2018	<0.01				<0.01
9/10/2018					
9/11/2018		<0.01	<0.01	<0.01	
3/7/2019					
3/8/2019			<0.01	<0.01	<0.01
3/11/2019	<0.01				
3/12/2019		<0.01			
9/4/2019					<0.01
9/5/2019	<0.01		<0.01	0.00044 (X)	
9/6/2019		<0.01			
9/9/2019					
9/10/2019					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.0039								
9/16/2014				0.0026					
9/17/2014					<0.0013	<0.0013	<0.0013		
9/18/2014								<0.0013	<0.0013
10/3/2014	<0.0013								
10/4/2014				0.0015	<0.0013	0.00063 (J)	<0.0013		
10/5/2014								<0.0013	<0.0013
10/20/2014	0.0014								
10/21/2014				0.00099 (J)	<0.0013	0.00058 (J)	<0.0013		
10/22/2014								<0.0013	<0.0013
10/23/2014									
11/5/2014							<0.0013	<0.0013	<0.0013
11/10/2014	<0.0013								
11/11/2014				0.00097 (J)	<0.0013	0.00058 (J)			
3/2/2015	<0.0013								
3/3/2015				0.00078 (J)	<0.0013	0.00056 (J)	<0.0013		
3/4/2015								<0.0013	<0.0013
3/17/2015	<0.0013								
3/18/2015				0.00081 (J)	<0.0013	<0.0013			
3/19/2015							<0.0013	<0.0013	<0.0013
3/20/2015									
4/5/2015	<0.0013								
4/6/2015				0.0011 (J)	<0.0013				
4/7/2015						<0.0013	<0.0013	<0.0013	
4/8/2015									<0.0013
4/9/2015									
4/21/2015	0.0012 (J)								
4/23/2015				0.0007 (J)	<0.0013	<0.0013			
4/24/2015							<0.0013	<0.0013	<0.0013
5/8/2015		<0.0013							
5/9/2015			<0.0013						
5/17/2015		<0.0013							
5/18/2015			0.001 (J)						
5/25/2015		<0.0013							
5/26/2015			0.00052 (J)						
6/8/2015		<0.0013							
6/9/2015			0.00087 (J)						
6/17/2015			<0.0013						
6/18/2015		<0.0013							
6/24/2015		<0.0013							
6/25/2015			<0.0013						
6/30/2015		<0.0013							
7/1/2015			0.0006 (J)						
7/6/2015		<0.0013							
7/7/2015			<0.0013						
7/28/2015	0.0012 (J)								
7/29/2015				<0.0013	<0.0013	<0.0013	<0.0013		
7/30/2015								<0.0013	<0.0013
8/12/2015		<0.005							
8/13/2015			<0.005						
3/1/2016	<0.01								
3/2/2016		<0.01							

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
7/19/2017									
9/15/2017	<0.01								
9/18/2017			<0.01						
9/19/2017		<0.01						<0.01	<0.01
9/20/2017							<0.01		
9/21/2017				0.0006 (J)		<0.01			
9/22/2017					<0.01				
3/12/2018	<0.01		<0.01						
3/13/2018		<0.01							
3/14/2018				0.00058 (J)	<0.01	<0.01	<0.01	<0.01	0.00083 (J)
9/6/2018	<0.01								
9/7/2018			<0.01	0.0034 (J)		<0.01			
9/10/2018							<0.01	<0.01	0.00071 (J)
9/11/2018		<0.01			<0.01				
3/7/2019	<0.01		<0.01						
3/8/2019									
3/11/2019				<0.01					0.00056 (X)
3/12/2019		<0.01			<0.01	<0.01	<0.01	<0.01	
9/4/2019	<0.0025								
9/5/2019		<0.0025	<0.0025						
9/6/2019						<0.0025		<0.0025	0.00051 (X)
9/9/2019				<0.0025			<0.0025		
9/10/2019					<0.0025				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.0013	0.0006 (J)	
9/17/2014					
9/18/2014	<0.0013	<0.0013			
10/3/2014					
10/4/2014			<0.0013	<0.0013	
10/5/2014	<0.0013	<0.0013			
10/20/2014					
10/21/2014					
10/22/2014	<0.0013	<0.0013			
10/23/2014			<0.0013	<0.0013	
11/5/2014	<0.0013	<0.0013			
11/10/2014			<0.0013	<0.0013	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.0013	<0.0013	<0.0013	<0.0013	
3/17/2015					
3/18/2015					
3/19/2015	<0.0013				
3/20/2015		<0.0013	<0.0013	<0.0013	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.0013	<0.0013	<0.0013		
4/9/2015				<0.0013	
4/21/2015					
4/23/2015		<0.0013	<0.0013	<0.0013	
4/24/2015	<0.0013				
5/8/2015					<0.0013
5/9/2015					
5/17/2015					0.00059 (J)
5/18/2015					
5/25/2015					<0.0013
5/26/2015					
6/8/2015					<0.0013
6/9/2015					
6/17/2015					
6/18/2015					<0.0013
6/24/2015					<0.0013
6/25/2015					
6/30/2015					<0.0013
7/1/2015					
7/6/2015					<0.0013
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.0013	<0.0013	<0.0013	<0.0013	
8/12/2015					<0.005
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.01		
3/7/2016	<0.01				
3/8/2016				<0.01	
3/9/2016		<0.01			
5/2/2016					
5/3/2016					
5/4/2016				<0.01	<0.01 (D)
5/5/2016	<0.01		<0.01		
5/6/2016		<0.01			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					<0.01 (D)
7/11/2016					
7/12/2016			<0.01		
7/13/2016					
7/14/2016	<0.01				
7/15/2016		<0.01			
7/18/2016				<0.01	
9/7/2016					
9/8/2016					<0.01 (D)
9/9/2016					
9/12/2016	<0.01				
9/13/2016			<0.01	<0.01	
9/14/2016		<0.01			
9/15/2016					
10/25/2016					
10/26/2016					<0.01 (D)
10/27/2016	<0.01		<0.01	<0.01	
10/31/2016					
11/1/2016		<0.01			
11/2/2016					
1/5/2017					
1/6/2017					<0.01 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.01		<0.01	<0.01	
1/25/2017		<0.01			
3/14/2017					
3/15/2017					<0.01 (D)
3/16/2017				<0.01	
3/20/2017	<0.01		<0.01		
3/21/2017					
3/22/2017		<0.01			
5/16/2017					
5/18/2017					<0.01 (D)
5/19/2017			<0.01	<0.01	
5/22/2017					
5/23/2017	<0.01				
5/24/2017		<0.01			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
7/19/2017					<0.01 (D)
9/15/2017					
9/18/2017					
9/19/2017	0.0012 (J)		<0.01	<0.01	<0.01 (D)
9/20/2017					
9/21/2017		<0.01			
9/22/2017					
3/12/2018					
3/13/2018	<0.01		<0.01	<0.01	<0.01
3/14/2018		<0.01			
9/6/2018					
9/7/2018	<0.01				<0.01
9/10/2018					
9/11/2018		<0.01	<0.01	<0.01	
3/7/2019					
3/8/2019			<0.01	<0.01	<0.01
3/11/2019	<0.01				
3/12/2019		<0.01			
9/4/2019					<0.0025
9/5/2019	0.0012 (X)		<0.0025	<0.0025	
9/6/2019		<0.0025			
9/9/2019					
9/10/2019					

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.0049 (J)								
9/16/2014				0.0042 (J)					
9/17/2014					<0.005	<0.005	<0.005		
9/18/2014								<0.005	<0.005
10/3/2014	<0.005								
10/4/2014				0.0024 (J)	0.0012 (J)	0.00086 (J)	<0.005		
10/5/2014								<0.005	0.0016 (J)
10/20/2014	0.0024 (J)								
10/21/2014				0.002 (J)	0.0011 (J)	<0.005	<0.005		
10/22/2014								<0.005	0.0018 (J)
10/23/2014									
11/5/2014							<0.005	<0.005	0.0015 (J)
11/10/2014	<0.005								
11/11/2014				0.0021 (J)	0.0015 (J)	<0.005			
3/2/2015	<0.005								
3/3/2015				0.0017 (J)	0.0012 (J)	<0.005	<0.005		
3/4/2015								<0.005	<0.005
3/17/2015	<0.005								
3/18/2015				0.0019 (J)	<0.005	<0.005			
3/19/2015							<0.005	<0.005	<0.005
3/20/2015									
4/5/2015	<0.005								
4/6/2015				0.0014 (J)	0.00083 (J)				
4/7/2015						<0.005	<0.005	<0.005	
4/8/2015									<0.005
4/9/2015									
4/21/2015	0.0017 (J)								
4/23/2015				0.0022 (J)	0.0012 (J)	<0.005			
4/24/2015							<0.005	<0.005	0.0016 (J)
5/8/2015		<0.005							
5/9/2015			<0.005						
5/17/2015		<0.005							
5/18/2015			0.00093 (J)						
5/25/2015		<0.005							
5/26/2015			<0.005						
6/8/2015		<0.005							
6/9/2015			0.0014 (J)						
6/17/2015			<0.005						
6/18/2015		<0.005							
6/24/2015		<0.005							
6/25/2015			<0.005						
6/30/2015		0.00093 (J)							
7/1/2015			0.0014 (J)						
7/6/2015		<0.005							
7/7/2015			<0.005						
7/28/2015	0.00097 (J)								
7/29/2015				0.00098 (J)	<0.005	<0.005	<0.005		
7/30/2015								<0.005	<0.005
8/12/2015		<0.005							
8/13/2015			<0.005						
3/1/2016	<0.025								
3/2/2016		<0.025							

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/3/2016			<0.025	<0.025 (D)					
3/4/2016					<0.01				
3/7/2016						<0.01	<0.01		
3/8/2016								<0.01	<0.01
3/9/2016									
7/6/2016	<0.025								
7/7/2016									
7/11/2016		<0.025	<0.025						
7/12/2016									
7/13/2016				0.0022 (J)		<0.025			
7/14/2016					0.0124 (J)		<0.025	<0.025	
7/15/2016									0.0009 (J)
7/18/2016									
3/14/2017	0.0003 (J)								
3/15/2017									
3/16/2017		<0.025	<0.025 (*)						
3/20/2017				0.002 (J)		<0.025			
3/21/2017					0.0005 (J)		0.0006 (J)		0.0009 (J)
3/22/2017								<0.025	
9/15/2017	<0.025								
9/18/2017			<0.025						
9/19/2017		0.0003 (J)						0.0008 (J)	0.0006 (J)
9/20/2017							0.0003 (J)		
9/21/2017				0.0018 (J)		0.0003 (J)			
9/22/2017					0.0007 (J)				
3/12/2018	<0.025		<0.025						
3/13/2018		<0.025							
3/14/2018				0.0017 (J)	<0.025	<0.025	<0.025	<0.025	<0.025
9/6/2018	<0.025								
9/7/2018			<0.025	<0.025		<0.025			
9/10/2018							<0.025	<0.025	<0.025
9/11/2018		<0.025			<0.025				
3/7/2019	<0.025		<0.025						
3/8/2019									
3/11/2019				<0.025					<0.025
3/12/2019		<0.025			<0.025	<0.025	<0.025	<0.025	
9/4/2019	<0.025								
9/5/2019		<0.025	<0.025						
9/6/2019						<0.025		<0.025	0.01 (X)
9/9/2019				0.00082 (X)			<0.025		
9/10/2019					<0.025				

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

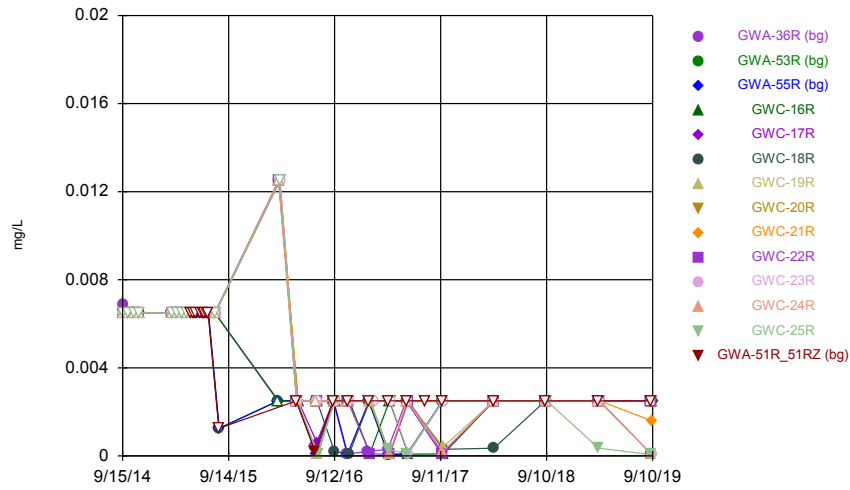
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.005	<0.005	
9/17/2014					
9/18/2014	<0.005	<0.005			
10/3/2014					
10/4/2014			<0.005	<0.005	
10/5/2014	<0.005	<0.005			
10/20/2014					
10/21/2014					
10/22/2014	<0.005	<0.005			
10/23/2014			<0.005	<0.005	
11/5/2014	<0.005	0.001 (J)			
11/10/2014			<0.005	<0.005	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.005	0.0014 (J)	<0.005	<0.005	
3/17/2015					
3/18/2015					
3/19/2015	<0.005				
3/20/2015		<0.005	<0.005	<0.005	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.005	0.0014 (J)	<0.005		
4/9/2015				<0.005	
4/21/2015					
4/23/2015		<0.005	0.0011 (J)	<0.005	
4/24/2015	<0.005				
5/8/2015					<0.005
5/9/2015					
5/17/2015					0.0015 (J)
5/18/2015					
5/25/2015					<0.005
5/26/2015					
6/8/2015					<0.005
6/9/2015					
6/17/2015					
6/18/2015					<0.005
6/24/2015					0.0012 (J)
6/25/2015					
6/30/2015					0.00096 (J)
7/1/2015					
7/6/2015					0.00091 (J)
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.005	<0.005	<0.005	<0.005	
8/12/2015					<0.005
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

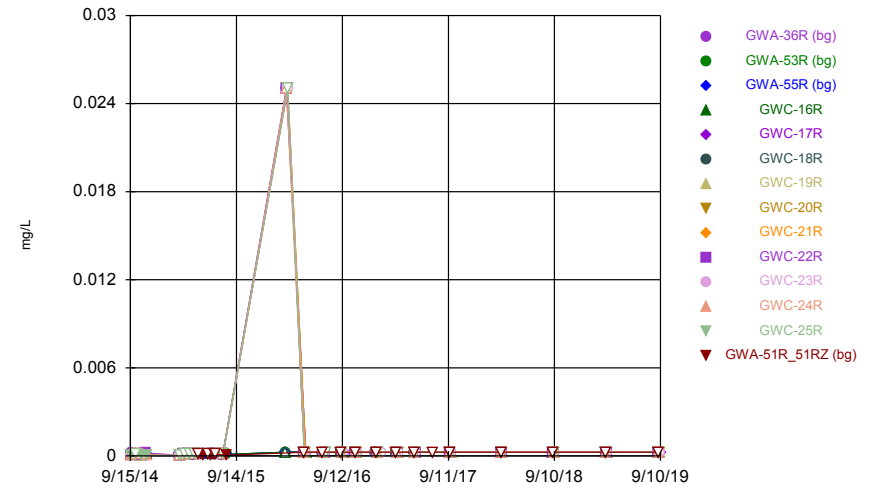
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.01		
3/7/2016	<0.01				
3/8/2016				<0.01	
3/9/2016		<0.01			
7/6/2016					
7/7/2016					0.0066 (JD)
7/11/2016					
7/12/2016			<0.025		
7/13/2016					
7/14/2016	<0.025				
7/15/2016		<0.025			
7/18/2016				<0.025	
3/14/2017					
3/15/2017					<0.025 (D)
3/16/2017				<0.025 (*)	
3/20/2017	0.0012 (J)		0.0003 (J)		
3/21/2017					
3/22/2017		0.0005 (J)			
9/15/2017					
9/18/2017					
9/19/2017	<0.025		<0.025	<0.025	<0.025 (D)
9/20/2017					
9/21/2017		0.0005 (J)			
9/22/2017					
3/12/2018					
3/13/2018	<0.025		<0.025	<0.025	<0.025
3/14/2018		<0.025			
9/6/2018					
9/7/2018	<0.025				<0.025
9/10/2018					
9/11/2018		<0.025	<0.025	<0.025	
3/7/2019					
3/8/2019			<0.025	<0.025	<0.025
3/11/2019	<0.025				
3/12/2019		<0.025			
9/4/2019					<0.025
9/5/2019	<0.025		0.0012 (X)	<0.025	
9/6/2019		0.00037 (X)			
9/9/2019					
9/10/2019					

Time Series



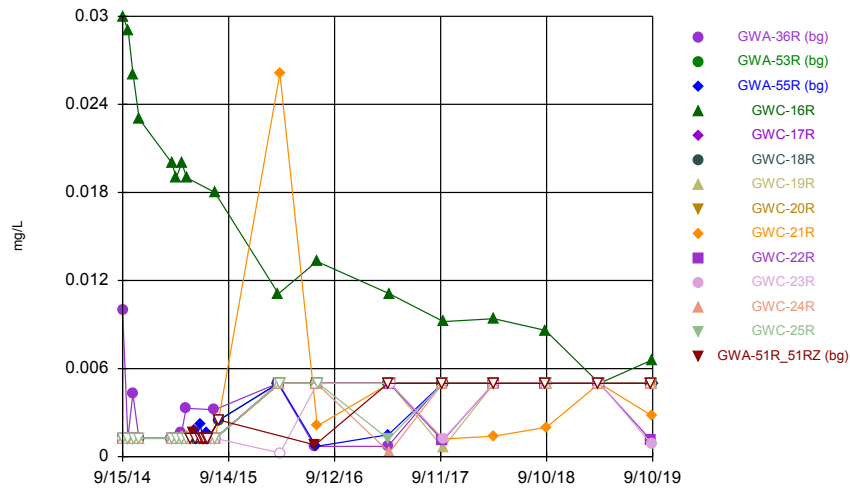
Constituent: Lead Analysis Run 11/7/2019 10:28 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



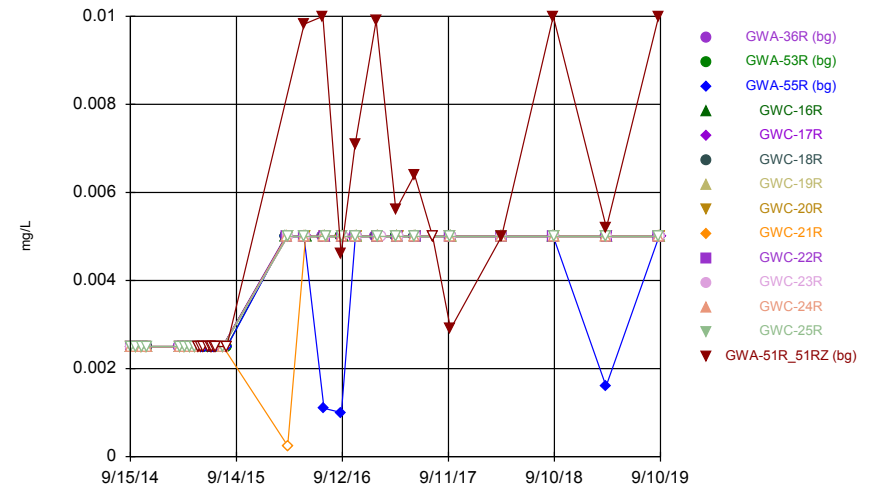
Constituent: Mercury Analysis Run 11/7/2019 10:28 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



Constituent: Nickel Analysis Run 11/7/2019 10:28 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



Constituent: Selenium Analysis Run 11/7/2019 10:28 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.0069 (J)								
9/16/2014				<0.013					
9/17/2014					<0.013	<0.013	<0.013		
9/18/2014								<0.013	<0.013
10/3/2014	<0.013								
10/4/2014				<0.013	<0.013	<0.013	<0.013		
10/5/2014								<0.013	<0.013
10/20/2014	<0.013								
10/21/2014				<0.013	<0.013	<0.013	<0.013		
10/22/2014								<0.013	<0.013
10/23/2014									
11/5/2014							<0.013	<0.013	<0.013
11/10/2014	<0.013								
11/11/2014				<0.013	<0.013	<0.013			
3/2/2015	<0.013								
3/3/2015				<0.013	<0.013	<0.013	<0.013		
3/4/2015								<0.013	<0.013
3/17/2015	<0.013								
3/18/2015				<0.013	<0.013	<0.013			
3/19/2015							<0.013	<0.013	<0.013
3/20/2015									
4/5/2015	<0.013								
4/6/2015				<0.013	<0.013				
4/7/2015						<0.013	<0.013	<0.013	
4/8/2015									<0.013
4/9/2015									
4/21/2015	<0.013								
4/23/2015				<0.013	<0.013	<0.013			
4/24/2015							<0.013	<0.013	<0.013
5/8/2015		<0.013							
5/9/2015			<0.013						
5/17/2015		<0.013							
5/18/2015			<0.013						
5/25/2015		<0.013							
5/26/2015			<0.013						
6/8/2015		<0.013							
6/9/2015			<0.013						
6/17/2015			<0.013						
6/18/2015		<0.013							
6/24/2015		<0.013							
6/25/2015			<0.013						
6/30/2015		<0.013							
7/1/2015			<0.013						
7/6/2015		<0.013							
7/7/2015			<0.013						
7/28/2015	<0.013								
7/29/2015				<0.013	<0.013	<0.013	<0.013		
7/30/2015								<0.013	<0.013
8/12/2015		<0.0025							
8/13/2015			<0.0025						
3/1/2016	<0.005								
3/2/2016		<0.005							

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
7/19/2017									
9/15/2017	8E-05 (J)								
9/18/2017			<0.005						
9/19/2017		<0.005						<0.005	<0.005
9/20/2017							0.0004 (J)		
9/21/2017				9E-05 (J)		0.0003 (J)			
9/22/2017					<0.005				
3/12/2018	<0.005		<0.005						
3/13/2018		<0.005							
3/14/2018				<0.005	<0.005	0.00035 (J)	<0.005	<0.005	<0.005
9/6/2018	<0.005								
9/7/2018			<0.005	<0.005		<0.005			
9/10/2018							<0.005	<0.005	<0.005
9/11/2018		<0.005			<0.005				
3/7/2019	<0.005		<0.005						
3/8/2019									
3/11/2019				<0.005					<0.005
3/12/2019		<0.005			<0.005	<0.005	<0.005	<0.005	
9/4/2019	<0.005								
9/5/2019		8.3E-05 (X)	<0.005						
9/6/2019						<0.005		<0.005	0.0016 (X)
9/9/2019				<0.005			<0.005		
9/10/2019					<0.005				

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.013	<0.013	
9/17/2014					
9/18/2014	<0.013	<0.013			
10/3/2014					
10/4/2014			<0.013	<0.013	
10/5/2014	<0.013	<0.013			
10/20/2014					
10/21/2014					
10/22/2014	<0.013	<0.013			
10/23/2014			<0.013	<0.013	
11/5/2014	<0.013	<0.013			
11/10/2014			<0.013	<0.013	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.013	<0.013	<0.013	<0.013	
3/17/2015					
3/18/2015					
3/19/2015	<0.013				
3/20/2015		<0.013	<0.013	<0.013	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.013	<0.013	<0.013		
4/9/2015				<0.013	
4/21/2015					
4/23/2015		<0.013	<0.013	<0.013	
4/24/2015	<0.013				
5/8/2015					<0.013
5/9/2015					
5/17/2015					<0.013
5/18/2015					
5/25/2015					<0.013
5/26/2015					
6/8/2015					<0.013
6/9/2015					
6/17/2015					
6/18/2015					<0.013
6/24/2015					<0.013
6/25/2015					
6/30/2015					<0.013
7/1/2015					
7/6/2015					<0.013
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.013	<0.013	<0.013	<0.013	
8/12/2015					<0.0025
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.025		
3/7/2016	<0.025				
3/8/2016				<0.025	
3/9/2016		<0.025			
5/2/2016					
5/3/2016					
5/4/2016				<0.005	<0.005 (D)
5/5/2016	<0.005		<0.005		
5/6/2016		<0.005			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					0.0002 (JD)
7/11/2016					
7/12/2016			<0.005		
7/13/2016					
7/14/2016	<0.005				
7/15/2016		<0.005			
7/18/2016				0.0001 (J)	
9/7/2016					
9/8/2016					<0.005 (D)
9/9/2016					
9/12/2016	<0.005				
9/13/2016			<0.005	<0.005	
9/14/2016		<0.005			
9/15/2016					
10/25/2016					
10/26/2016					<0.005 (D)
10/27/2016	<0.005		<0.005	<0.005	
10/31/2016					
11/1/2016		<0.005			
11/2/2016					
1/5/2017					
1/6/2017					<0.005 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	0.0001 (J)		<0.005	<0.005	
1/25/2017		<0.005			
3/14/2017					
3/15/2017					<0.005 (D)
3/16/2017				0.0003 (J)	
3/20/2017	7E-05 (J)		0.0001 (J)		
3/21/2017					
3/22/2017		<0.005			
5/16/2017					
5/18/2017					<0.005 (D)
5/19/2017			<0.005	0.0001 (J)	
5/22/2017					
5/23/2017	<0.005				
5/24/2017		0.0001 (J)			

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
7/19/2017					<0.005 (D)
9/15/2017					
9/18/2017					
9/19/2017	0.0001 (J)		0.0002 (J)	<0.005	<0.005 (D)
9/20/2017					
9/21/2017		<0.005			
9/22/2017					
3/12/2018					
3/13/2018	<0.005		<0.005	<0.005	<0.005
3/14/2018		<0.005			
9/6/2018					
9/7/2018	<0.005				<0.005
9/10/2018					
9/11/2018		<0.005	<0.005	<0.005	
3/7/2019					
3/8/2019			<0.005	0.00035 (X)	<0.005
3/11/2019	<0.005				
3/12/2019		<0.005			
9/4/2019					<0.005
9/5/2019	<0.005		9.5E-05 (X)	6E-05 (X)	
9/6/2019		6.8E-05 (X)			
9/9/2019					
9/10/2019					

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.000172 (J)								
9/16/2014				2.69E-05 (J)					
9/17/2014					2.97E-05 (J)	3.5E-05 (J)	4.15E-05 (J)		
9/18/2014								5.34E-05 (J)	<0.0002
10/3/2014	<0.0002								
10/4/2014				<0.0002	<0.0002	<0.0002	<0.0002		
10/5/2014								<0.0002	<0.0002
10/20/2014	<0.0002								
10/21/2014				3.18E-05 (J)	5.02E-05 (J)	5.35E-05 (J)	5.89E-05 (J)		
10/22/2014								4.88E-05 (J)	2.57E-05 (J)
10/23/2014									
11/5/2014							7.28E-05 (J)	2.85E-05 (J)	<0.0002
11/10/2014	3.84E-05 (J)								
11/11/2014				<0.0002	3.66E-05 (J)	4.64E-05 (J)			
3/2/2015	<0.0001								
3/3/2015				<0.0001	<0.0001	<0.0001	<0.0001		
3/4/2015								<0.0001	<0.0001
3/17/2015	<0.0002								
3/18/2015				<0.0002	<0.0002	<0.0002			
3/19/2015							<0.0002	<0.0002	<0.0002
3/20/2015									
4/5/2015	<0.0002								
4/6/2015				<0.0002	<0.0002				
4/7/2015						<0.0002	<0.0002	<0.0002	
4/8/2015									<0.0002
4/9/2015									
4/21/2015	2.39E-05 (J)								
4/23/2015				<0.0002	<0.0002	<0.0002			
4/24/2015							<0.0002	<0.0002	<0.0002
5/8/2015		<0.0002							
5/9/2015			<0.0002						
5/17/2015		<0.0002							
5/18/2015			<0.0002						
5/25/2015		<0.0002							
5/26/2015			<0.0002						
6/8/2015		<0.0002							
6/9/2015			<0.0002						
6/17/2015			<0.0002						
6/18/2015		<0.0002							
6/24/2015		<0.0002							
6/25/2015			<0.0002						
6/30/2015		<0.0002							
7/1/2015			<0.0002						
7/6/2015		<0.0002							
7/7/2015			<0.0002						
7/28/2015	5.2E-05 (J)								
7/29/2015				<0.0002	<0.0002	<0.0002	<0.0002		
7/30/2015								<0.0002	<0.0002
8/12/2015		<0.0002							
8/13/2015			<0.0002						
3/1/2016	<0.0005								
3/2/2016		<0.0005							

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
7/19/2017									
9/15/2017	<0.0005								
9/18/2017			<0.0005						
9/19/2017		<0.0005						<0.0005	<0.0005
9/20/2017							<0.0005		
9/21/2017				<0.0005		<0.0005			
9/22/2017					<0.0005				
3/12/2018	<0.0005		<0.0005						
3/13/2018		<0.0005							
3/14/2018				<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
9/6/2018	<0.0005								
9/7/2018			<0.0005	<0.0005		<0.0005			
9/10/2018							<0.0005	<0.0005	<0.0005
9/11/2018		<0.0005			<0.0005				
3/7/2019	<0.0005		<0.0005						
3/8/2019									
3/11/2019				<0.0005					<0.0005
3/12/2019		<0.0005			<0.0005	<0.0005	<0.0005	<0.0005	
9/4/2019	<0.0005								
9/5/2019		<0.0005	<0.0005						
9/6/2019						<0.0005		<0.0005	<0.0005
9/9/2019				<0.0005			<0.0005		
9/10/2019					<0.0005				

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			2.81E-05 (J)	3.13E-05 (J)	
9/17/2014					
9/18/2014	2.54E-05 (J)	2.82E-05 (J)			
10/3/2014					
10/4/2014			<0.0002	<0.0002	
10/5/2014	<0.0002	<0.0002			
10/20/2014					
10/21/2014					
10/22/2014	2.83E-05 (J)	<0.0002			
10/23/2014			<0.0002	4.6E-05 (J)	
11/5/2014	0.0002	4.83E-05 (J)			
11/10/2014			5.15E-05 (J)	2.5E-05 (J)	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.0001	<0.0001	<0.0001	<0.0001	
3/17/2015					
3/18/2015					
3/19/2015	<0.0002				
3/20/2015		<0.0002	<0.0002	<0.0002	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.0002	<0.0002	<0.0002		
4/9/2015				<0.0002	
4/21/2015					
4/23/2015		<0.0002	<0.0002	<0.0002	
4/24/2015	<0.0002				
5/8/2015					<0.0002
5/9/2015					
5/17/2015					0.000101 (J)
5/18/2015					
5/25/2015					4.88E-05 (J)
5/26/2015					
6/8/2015					<0.0002
6/9/2015					
6/17/2015					
6/18/2015					4.1E-05 (J)
6/24/2015					8.41E-05 (J)
6/25/2015					
6/30/2015					<0.0002
7/1/2015					
7/6/2015					<0.0002
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.0002	<0.0002	<0.0002	<0.0002	
8/12/2015					4.91E-05 (J)
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.05		
3/7/2016	<0.05				
3/8/2016				<0.05	
3/9/2016		<0.05			
5/2/2016					
5/3/2016					
5/4/2016				<0.0005	<0.0005 (D)
5/5/2016	<0.0005		<0.0005		
5/6/2016		<0.0005			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					<0.0005 (D)
7/11/2016					
7/12/2016			<0.0005		
7/13/2016					
7/14/2016	<0.0005				
7/15/2016		<0.0005			
7/18/2016				<0.0005	
9/7/2016					
9/8/2016					<0.0005 (D)
9/9/2016					
9/12/2016	<0.0005				
9/13/2016			<0.0005	<0.0005	
9/14/2016		<0.0005			
9/15/2016					
10/25/2016					
10/26/2016					<0.0005 (D)
10/27/2016	<0.0005		<0.0005	<0.0005	
10/31/2016					
11/1/2016		<0.0005			
11/2/2016					
1/5/2017					
1/6/2017					<0.0005 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.0005		<0.0005	<0.0005	
1/25/2017		<0.0005			
3/14/2017					
3/15/2017					<0.0005 (D)
3/16/2017				<0.0005	
3/20/2017	<0.0005		<0.0005		
3/21/2017					
3/22/2017		<0.0005			
5/16/2017					
5/18/2017					<0.0005 (D)
5/19/2017			<0.0005	<0.0005	
5/22/2017					
5/23/2017	<0.0005				
5/24/2017		<0.0005			

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
7/19/2017					<0.0005 (D)
9/15/2017					
9/18/2017					
9/19/2017	<0.0005		<0.0005	<0.0005	<0.0005 (D)
9/20/2017					
9/21/2017		<0.0005			
9/22/2017					
3/12/2018					
3/13/2018	<0.0005		<0.0005	<0.0005	<0.0005
3/14/2018		<0.0005			
9/6/2018					
9/7/2018	<0.0005				<0.0005
9/10/2018					
9/11/2018		<0.0005	<0.0005	<0.0005	
3/7/2019					
3/8/2019			<0.0005	<0.0005	<0.0005
3/11/2019	<0.0005				
3/12/2019		<0.0005			
9/4/2019					<0.0005
9/5/2019	<0.0005		<0.0005	<0.0005	
9/6/2019		<0.0005			
9/9/2019					
9/10/2019					

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.01								
9/16/2014				0.03					
9/17/2014					<0.0025	<0.0025	<0.0025		
9/18/2014								<0.0025	<0.0025
10/3/2014	<0.0025								
10/4/2014				0.029	<0.0025	<0.0025	<0.0025		
10/5/2014								<0.0025	<0.0025
10/20/2014	0.0043								
10/21/2014				0.026	<0.0025	<0.0025	<0.0025		
10/22/2014								<0.0025	0.0013 (J)
10/23/2014									
11/5/2014							<0.0025	<0.0025	0.0013 (J)
11/10/2014	<0.0025								
11/11/2014				0.023	<0.0025	<0.0025			
3/2/2015	<0.0025								
3/3/2015				0.02	<0.0025	<0.0025	<0.0025		
3/4/2015								<0.0025	<0.0025
3/17/2015	<0.0025								
3/18/2015				0.019	<0.0025	<0.0025			
3/19/2015							<0.0025	<0.0025	<0.0025
3/20/2015									
4/5/2015	0.0016 (J)								
4/6/2015				0.02	<0.0025				
4/7/2015						<0.0025	<0.0025	<0.0025	
4/8/2015									0.0014 (J)
4/9/2015									
4/21/2015	0.0033								
4/23/2015				0.019	<0.0025	<0.0025			
4/24/2015							<0.0025	<0.0025	0.0014 (J)
5/8/2015		<0.0025							
5/9/2015			<0.0025						
5/17/2015		<0.0025							
5/18/2015			0.0018 (J)						
5/25/2015		<0.0025							
5/26/2015			<0.0025						
6/8/2015		<0.0025							
6/9/2015			0.0022 (J)						
6/17/2015			<0.0025						
6/18/2015		<0.0025							
6/24/2015		<0.0025							
6/25/2015			<0.0025						
6/30/2015		<0.0025							
7/1/2015			0.0016 (J)						
7/6/2015		<0.0025							
7/7/2015			<0.0025						
7/28/2015	0.0032								
7/29/2015				0.018	<0.0025	<0.0025	<0.0025		
7/30/2015								<0.0025	<0.0025
8/12/2015		<0.005							
8/13/2015			<0.005						
3/1/2016	<0.01								
3/2/2016		<0.01							

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/3/2016			<0.01	0.0111 (D)					
3/4/2016					<0.01				
3/7/2016						<0.01	<0.01		
3/8/2016								<0.01	0.0261
3/9/2016									
7/6/2016	0.0007 (J)								
7/7/2016									
7/11/2016		<0.01	0.0007 (J)						
7/12/2016									
7/13/2016				0.0133		<0.01			
7/14/2016					<0.01		<0.01	<0.01	
7/15/2016									0.0021 (J)
7/18/2016									
3/14/2017	0.0007 (J)								
3/15/2017									
3/16/2017		<0.01	0.0015 (J)						
3/20/2017				0.0111		<0.01			
3/21/2017					<0.01		<0.01 (*)		<0.01 (*)
3/22/2017								<0.01	
9/15/2017	<0.01								
9/18/2017			<0.01						
9/19/2017		<0.01						<0.01	0.0012 (J)
9/20/2017							0.0006 (J)		
9/21/2017				0.0092 (J)		<0.01			
9/22/2017					<0.01				
3/12/2018	<0.01		<0.01						
3/13/2018		<0.01							
3/14/2018				0.0094 (J)	<0.01	<0.01	<0.01	<0.01	0.0014 (J)
9/6/2018	<0.01								
9/7/2018			<0.01	0.0086 (J)		<0.01			
9/10/2018							<0.01	<0.01	0.002 (J)
9/11/2018		<0.01			<0.01				
3/7/2019	<0.01		<0.01						
3/8/2019									
3/11/2019				<0.01					<0.01
3/12/2019		<0.01			<0.01	<0.01	<0.01	<0.01	
9/4/2019	<0.01								
9/5/2019		<0.01	<0.01						
9/6/2019						<0.01		<0.01	0.0028 (X)
9/9/2019				0.0066 (X)			<0.01		
9/10/2019					<0.01				

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.0025	<0.0025	
9/17/2014					
9/18/2014	<0.0025	<0.0025			
10/3/2014					
10/4/2014			<0.0025	<0.0025	
10/5/2014	<0.0025	<0.0025			
10/20/2014					
10/21/2014					
10/22/2014	<0.0025	<0.0025			
10/23/2014			<0.0025	<0.0025	
11/5/2014	<0.0025	<0.0025			
11/10/2014			<0.0025	<0.0025	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.0025	<0.0025	<0.0025	<0.0025	
3/17/2015					
3/18/2015					
3/19/2015	<0.0025				
3/20/2015		<0.0025	<0.0025	<0.0025	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.0025	<0.0025	<0.0025		
4/9/2015				<0.0025	
4/21/2015					
4/23/2015		<0.0025	<0.0025	<0.0025	
4/24/2015	<0.0025				
5/8/2015					<0.0025
5/9/2015					
5/17/2015					0.0016 (J)
5/18/2015					
5/25/2015					<0.0025
5/26/2015					
6/8/2015					<0.0025
6/9/2015					
6/17/2015					
6/18/2015					<0.0025
6/24/2015					<0.0025
6/25/2015					
6/30/2015					<0.0025
7/1/2015					
7/6/2015					<0.0025
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.0025	<0.0025	<0.0025	<0.0025	
8/12/2015					<0.005
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.01		
3/7/2016	<0.01				
3/8/2016				<0.01	
3/9/2016		<0.0005			
7/6/2016					
7/7/2016					0.0008 (JD)
7/11/2016					
7/12/2016			<0.01		
7/13/2016					
7/14/2016	<0.01				
7/15/2016		<0.01			
7/18/2016				<0.01	
3/14/2017					
3/15/2017					<0.01 (D)
3/16/2017				0.0012 (J)	
3/20/2017	<0.01		0.0003 (J)		
3/21/2017					
3/22/2017		<0.01 (*)			
9/15/2017					
9/18/2017					
9/19/2017	0.0011 (J)		<0.01	<0.01	<0.01 (D)
9/20/2017					
9/21/2017		0.0012 (J)			
9/22/2017					
3/12/2018					
3/13/2018	<0.01		<0.01	<0.01	<0.01
3/14/2018		<0.01			
9/6/2018					
9/7/2018	<0.01				<0.01
9/10/2018					
9/11/2018		<0.01	<0.01	<0.01	
3/7/2019					
3/8/2019			<0.01	<0.01	<0.01
3/11/2019	<0.01				
3/12/2019		<0.01			
9/4/2019					<0.01
9/5/2019	0.0011 (X)		<0.01	<0.01	
9/6/2019		0.00086 (X)			
9/9/2019					
9/10/2019					

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	<0.005								
9/16/2014				<0.005					
9/17/2014					<0.005	<0.005	<0.005		
9/18/2014								<0.005	<0.005
10/3/2014	<0.005								
10/4/2014				<0.005	<0.005	<0.005	<0.005		
10/5/2014								<0.005	<0.005
10/20/2014	<0.005								
10/21/2014				<0.005	<0.005	<0.005	<0.005		
10/22/2014								<0.005	<0.005
10/23/2014									
11/5/2014							<0.005	<0.005	<0.005
11/10/2014	<0.005								
11/11/2014				<0.005	<0.005	<0.005			
3/2/2015	<0.005								
3/3/2015				<0.005	<0.005	<0.005	<0.005		
3/4/2015								<0.005	<0.005
3/17/2015	<0.005								
3/18/2015				<0.005	<0.005	<0.005			
3/19/2015							<0.005	<0.005	<0.005
3/20/2015									
4/5/2015	<0.005								
4/6/2015				<0.005	<0.005				
4/7/2015						<0.005	<0.005	<0.005	
4/8/2015									<0.005
4/9/2015									
4/21/2015	<0.005								
4/23/2015				<0.005	<0.005	<0.005			
4/24/2015							<0.005	<0.005	<0.005
5/8/2015		<0.005							
5/9/2015			<0.005						
5/17/2015		<0.005							
5/18/2015			<0.005						
5/25/2015		<0.005							
5/26/2015			<0.005						
6/8/2015		<0.005							
6/9/2015			<0.005						
6/17/2015			<0.005						
6/18/2015		<0.005							
6/24/2015		<0.005							
6/25/2015			<0.005						
6/30/2015		<0.005							
7/1/2015			<0.005						
7/6/2015		<0.005							
7/7/2015			<0.005						
7/28/2015	<0.005								
7/29/2015				<0.005	<0.005	<0.005	<0.005		
7/30/2015								<0.005	<0.005
8/12/2015		<0.005							
8/13/2015			<0.005						
3/1/2016	<0.01								
3/2/2016		<0.01							

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
7/19/2017									
9/15/2017	<0.01								
9/18/2017			<0.01						
9/19/2017		<0.01						<0.01	<0.01
9/20/2017							<0.01		
9/21/2017				<0.01		<0.01			
9/22/2017					<0.01				
3/12/2018	<0.01		<0.01						
3/13/2018		<0.01							
3/14/2018				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9/6/2018	<0.01								
9/7/2018			<0.01	<0.01		<0.01			
9/10/2018							<0.01	<0.01	<0.01
9/11/2018		<0.01			<0.01				
3/7/2019	<0.01		0.0016 (X)						
3/8/2019									
3/11/2019				<0.01					<0.01
3/12/2019		<0.01			<0.01	<0.01	<0.01	<0.01	
9/4/2019	<0.01								
9/5/2019		<0.01	<0.01						
9/6/2019						<0.01		<0.01	<0.01
9/9/2019				<0.01			<0.01		
9/10/2019					<0.01				

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.005	<0.005	
9/17/2014					
9/18/2014	<0.005	<0.005			
10/3/2014					
10/4/2014			<0.005	<0.005	
10/5/2014	<0.005	<0.005			
10/20/2014					
10/21/2014					
10/22/2014	<0.005	<0.005			
10/23/2014			<0.005	<0.005	
11/5/2014	<0.005	<0.005			
11/10/2014			<0.005	<0.005	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.005	<0.005	<0.005	<0.005	
3/17/2015					
3/18/2015					
3/19/2015	<0.005				
3/20/2015		<0.005	<0.005	<0.005	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.005	<0.005	<0.005		
4/9/2015				<0.005	
4/21/2015					
4/23/2015		<0.005	<0.005	<0.005	
4/24/2015	<0.005				
5/8/2015					<0.005
5/9/2015					
5/17/2015					<0.005
5/18/2015					
5/25/2015					<0.005
5/26/2015					
6/8/2015					<0.005
6/9/2015					
6/17/2015					
6/18/2015					<0.005
6/24/2015					<0.005
6/25/2015					
6/30/2015					<0.005
7/1/2015					
7/6/2015					<0.005
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.005	<0.005	<0.005	<0.005	
8/12/2015					<0.005
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

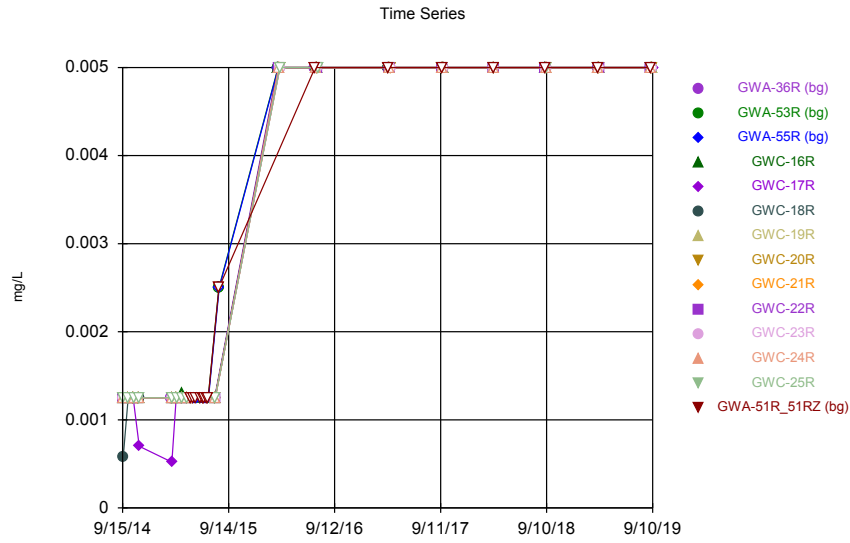
Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.01		
3/7/2016	<0.01				
3/8/2016				<0.01	
3/9/2016		<0.01			
5/2/2016					
5/3/2016					
5/4/2016				<0.01	0.00982 (JD)
5/5/2016	<0.01		<0.01		
5/6/2016		<0.01			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					0.01 (D)
7/11/2016					
7/12/2016			<0.01		
7/13/2016					
7/14/2016	<0.01				
7/15/2016		<0.01			
7/18/2016				<0.01	
9/7/2016					
9/8/2016					0.0046 (JD)
9/9/2016					
9/12/2016	<0.01				
9/13/2016			<0.01	<0.01	
9/14/2016		<0.01			
9/15/2016					
10/25/2016					
10/26/2016					0.0071 (JD)
10/27/2016	<0.01		<0.01	<0.01	
10/31/2016					
11/1/2016		<0.01			
11/2/2016					
1/5/2017					
1/6/2017					0.0099 (JD)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.01		<0.01	<0.01	
1/25/2017		<0.01			
3/14/2017					
3/15/2017					0.0056 (JD)
3/16/2017				<0.01	
3/20/2017	<0.01		<0.01		
3/21/2017					
3/22/2017		<0.01			
5/16/2017					
5/18/2017					0.0064 (JD)
5/19/2017			<0.01	<0.01	
5/22/2017					
5/23/2017	<0.01				
5/24/2017		<0.01			

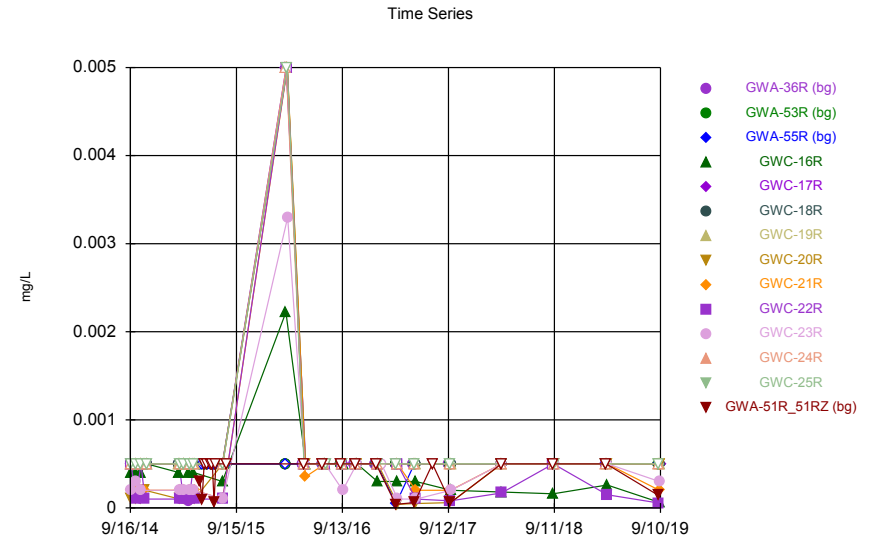
Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

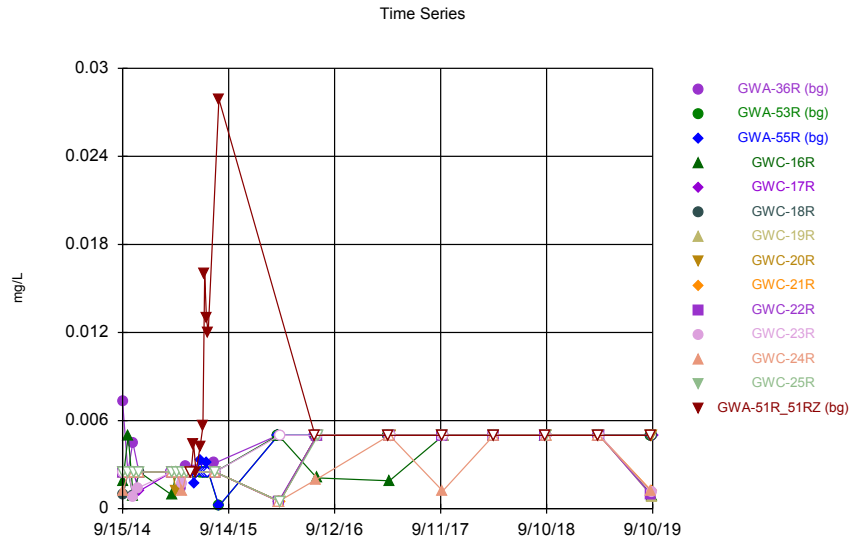
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
7/19/2017					<0.01 (D)
9/15/2017					
9/18/2017					
9/19/2017	<0.01		<0.01	<0.01	0.0029 (JD)
9/20/2017					
9/21/2017		<0.01			
9/22/2017					
3/12/2018					
3/13/2018	<0.01		<0.01	<0.01	0.005 (J)
3/14/2018		<0.01			
9/6/2018					
9/7/2018	<0.01				0.01
9/10/2018					
9/11/2018		<0.01	<0.01	<0.01	
3/7/2019					
3/8/2019			<0.01	<0.01	0.0052 (X)
3/11/2019	<0.01				
3/12/2019		<0.01			
9/4/2019					0.01
9/5/2019	<0.01		<0.01	<0.01	
9/6/2019		<0.01			
9/9/2019					
9/10/2019					



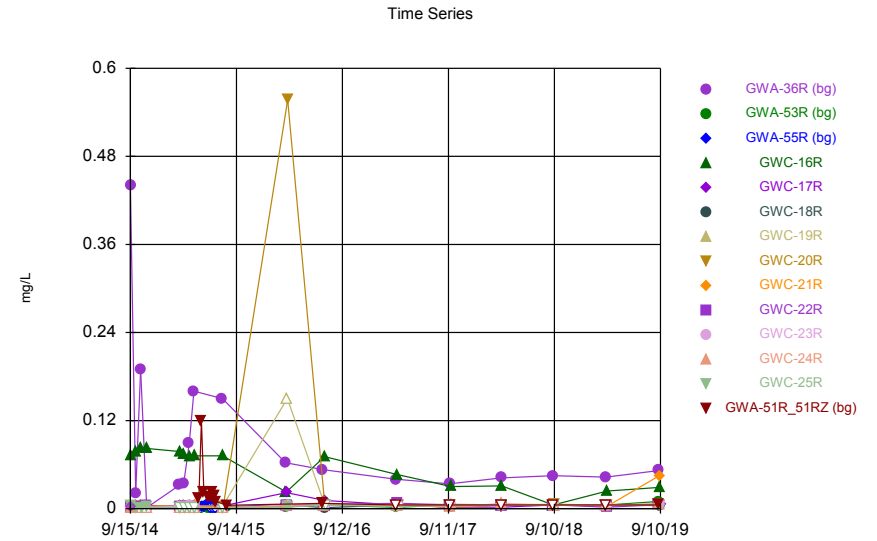
Constituent: Silver Analysis Run 11/7/2019 10:28 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Thallium Analysis Run 11/7/2019 10:28 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 11/7/2019 10:28 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 11/7/2019 10:28 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	<0.0025								
9/16/2014				<0.0025					
9/17/2014					<0.0025	0.00058 (J)	<0.0025		
9/18/2014								<0.0025	<0.0025
10/3/2014	<0.0025								
10/4/2014				<0.0025	<0.0025	<0.0025	<0.0025		
10/5/2014								<0.0025	<0.0025
10/20/2014	<0.0025								
10/21/2014				<0.0025	<0.0025	<0.0025	<0.0025		
10/22/2014								<0.0025	<0.0025
10/23/2014									
11/5/2014							<0.0025	<0.0025	<0.0025
11/10/2014	<0.0025								
11/11/2014				<0.0025	0.0007 (J)	<0.0025			
3/2/2015	<0.0025								
3/3/2015				<0.0025	0.00052 (J)	<0.0025	<0.0025		
3/4/2015								<0.0025	<0.0025
3/17/2015	<0.0025								
3/18/2015				<0.0025	<0.0025	<0.0025			
3/19/2015							<0.0025	<0.0025	<0.0025
3/20/2015									
4/5/2015	<0.0025								
4/6/2015				0.0013 (J)	<0.0025				
4/7/2015						<0.0025	<0.0025	<0.0025	
4/8/2015									<0.0025
4/9/2015									
4/21/2015	<0.0025								
4/23/2015				<0.0025	<0.0025	<0.0025			
4/24/2015							<0.0025	<0.0025	<0.0025
5/8/2015		<0.0025							
5/9/2015			<0.0025						
5/17/2015		<0.0025							
5/18/2015			<0.0025						
5/25/2015		<0.0025							
5/26/2015			<0.0025						
6/8/2015		<0.0025							
6/9/2015			<0.0025						
6/17/2015			<0.0025						
6/18/2015		<0.0025							
6/24/2015		<0.0025							
6/25/2015			<0.0025						
6/30/2015		<0.0025							
7/1/2015			<0.0025						
7/6/2015		<0.0025							
7/7/2015			<0.0025						
7/28/2015	<0.0025								
7/29/2015				<0.0025	<0.0025	<0.0025	<0.0025		
7/30/2015								<0.0025	<0.0025
8/12/2015		<0.005							
8/13/2015			<0.005						
3/1/2016	<0.01								
3/2/2016		<0.01							

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/3/2016			<0.01	<0.01 (D)					
3/4/2016					<0.01				
3/7/2016						<0.01	<0.01		
3/8/2016								<0.01	<0.01
3/9/2016									
7/6/2016	<0.01								
7/7/2016									
7/11/2016		<0.01	<0.01						
7/12/2016									
7/13/2016				<0.01		<0.01			
7/14/2016					<0.01		<0.01	<0.01	
7/15/2016									<0.01
7/18/2016									
3/14/2017	<0.01								
3/15/2017									
3/16/2017		<0.01	<0.01						
3/20/2017				<0.01		<0.01			
3/21/2017					<0.01		<0.01		<0.01
3/22/2017								<0.01	
9/15/2017	<0.01								
9/18/2017			<0.01						
9/19/2017		<0.01						<0.01	<0.01
9/20/2017							<0.01		
9/21/2017				<0.01		<0.01			
9/22/2017					<0.01				
3/12/2018	<0.01		<0.01						
3/13/2018		<0.01							
3/14/2018				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9/6/2018	<0.01								
9/7/2018			<0.01	<0.01		<0.01			
9/10/2018							<0.01	<0.01	<0.01
9/11/2018		<0.01			<0.01				
3/7/2019	<0.01		<0.01						
3/8/2019									
3/11/2019				<0.01					<0.01
3/12/2019		<0.01			<0.01	<0.01	<0.01	<0.01	
9/4/2019	<0.01								
9/5/2019		<0.01	<0.01						
9/6/2019						<0.01		<0.01	<0.01
9/9/2019				<0.01			<0.01		
9/10/2019					<0.01				

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			<0.0025	<0.0025	
9/17/2014					
9/18/2014	<0.0025	<0.0025			
10/3/2014					
10/4/2014			<0.0025	<0.0025	
10/5/2014	<0.0025	<0.0025			
10/20/2014					
10/21/2014					
10/22/2014	<0.0025	<0.0025			
10/23/2014			<0.0025	<0.0025	
11/5/2014	<0.0025	<0.0025			
11/10/2014			<0.0025	<0.0025	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.0025	<0.0025	<0.0025	<0.0025	
3/17/2015					
3/18/2015					
3/19/2015	<0.0025				
3/20/2015		<0.0025	<0.0025	<0.0025	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.0025	<0.0025	<0.0025		
4/9/2015				<0.0025	
4/21/2015					
4/23/2015		<0.0025	<0.0025	<0.0025	
4/24/2015	<0.0025				
5/8/2015					<0.0025
5/9/2015					
5/17/2015					<0.0025
5/18/2015					
5/25/2015					<0.0025
5/26/2015					
6/8/2015					<0.0025
6/9/2015					
6/17/2015					
6/18/2015					<0.0025
6/24/2015					<0.0025
6/25/2015					
6/30/2015					<0.0025
7/1/2015					
7/6/2015					<0.0025
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.0025	<0.0025	<0.0025	<0.0025	
8/12/2015					<0.005
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			<0.01		
3/7/2016	<0.01				
3/8/2016				<0.01	
3/9/2016		<0.01			
7/6/2016					
7/7/2016					<0.01 (D)
7/11/2016					
7/12/2016			<0.01		
7/13/2016					
7/14/2016	<0.01				
7/15/2016		<0.01			
7/18/2016				<0.01	
3/14/2017					
3/15/2017					<0.01 (D)
3/16/2017				<0.01	
3/20/2017	<0.01		<0.01		
3/21/2017					
3/22/2017		<0.01			
9/15/2017					
9/18/2017					
9/19/2017	<0.01		<0.01	<0.01	<0.01 (D)
9/20/2017					
9/21/2017		<0.01			
9/22/2017					
3/12/2018					
3/13/2018	<0.01		<0.01	<0.01	<0.01
3/14/2018		<0.01			
9/6/2018					
9/7/2018	<0.01				<0.01
9/10/2018					
9/11/2018		<0.01	<0.01	<0.01	
3/7/2019					
3/8/2019			<0.01	<0.01	<0.01
3/11/2019	<0.01				
3/12/2019		<0.01			
9/4/2019					<0.01
9/5/2019	<0.01		<0.01	<0.01	
9/6/2019		<0.01			
9/9/2019					
9/10/2019					

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
5/2/2016	<0.001								
5/3/2016		<0.001	<0.001						
5/4/2016									
5/5/2016						<0.001			
5/6/2016									
5/9/2016							<0.001	<0.001	0.000353 (J)
5/10/2016				<0.001	<0.001				
7/6/2016	<0.001								
7/7/2016									
7/11/2016		<0.001	<0.001						
7/12/2016									
7/13/2016				<0.001 (*)		<0.001			
7/14/2016					<0.001 (*)		<0.001	<0.001 (*)	
7/15/2016									<0.001 (*)
7/18/2016									
9/7/2016	<0.001	<0.001							
9/8/2016									
9/9/2016			<0.001						<0.001
9/12/2016						<0.001	<0.001	<0.001	
9/13/2016									
9/14/2016					<0.001				
9/15/2016				<0.001					
10/25/2016	<0.001								
10/26/2016									
10/27/2016		<0.001	<0.001						<0.001
10/31/2016							<0.001	<0.001	
11/1/2016					<0.001	<0.001			
11/2/2016				<0.001					
1/5/2017	<0.001								
1/6/2017		<0.001							
1/9/2017			<0.001						
1/11/2017				0.0003 (J)	<0.001	<0.001	<0.001		
1/12/2017								<0.001	<0.001
1/13/2017									
1/25/2017									
3/14/2017	<0.001								
3/15/2017									
3/16/2017		<0.001	5E-05 (J)						
3/20/2017				0.0003 (J)		<0.001			
3/21/2017					<0.001		<0.001		<0.001 (*)
3/22/2017								4E-05 (J)	
5/16/2017	<0.001								
5/18/2017			<0.001						
5/19/2017		<0.001							
5/22/2017						<0.001	<0.001	5E-05 (J)	
5/23/2017				0.0003 (J)	<0.001				0.0002 (J)
5/24/2017									
7/19/2017									
9/15/2017	<0.001								
9/18/2017			<0.001						
9/19/2017		<0.001						6E-05 (J)	0.0002 (J)
9/20/2017							<0.001		

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/21/2017				0.0002 (J)		<0.001			
9/22/2017					<0.001				
3/12/2018	<0.001		<0.001						
3/13/2018		<0.001							
3/14/2018				0.00018 (J)	<0.001	<0.001	<0.001	<0.001	<0.001
9/6/2018	<0.001								
9/7/2018			<0.001	0.00016 (J)		<0.001			
9/10/2018							<0.001	<0.001	<0.001
9/11/2018		<0.001			<0.001				
3/7/2019	<0.001		<0.001						
3/8/2019									
3/11/2019				0.00026 (X)					<0.001
3/12/2019		<0.001			<0.001	<0.001	<0.001	<0.001	
9/4/2019	<0.001								
9/5/2019		<0.001	<0.001						
9/6/2019						<0.001		<0.001	0.0002 (X)
9/9/2019				6E-05 (X)			<0.001		
9/10/2019					<0.001				

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/16/2014			<0.001	<0.001	
9/17/2014					
9/18/2014	<0.001	0.0002 (J)			
10/3/2014					
10/4/2014			<0.001	<0.001	
10/5/2014	0.0001 (J)	0.0003 (J)			
10/20/2014					
10/21/2014					
10/22/2014	<0.001	0.0002 (J)			
10/23/2014			<0.001	<0.001	
11/5/2014	0.0001 (J)				
11/10/2014			<0.001	<0.001	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	0.0001 (J)	0.0002 (J)	<0.001	<0.001	
3/17/2015					
3/18/2015					
3/19/2015	0.0001 (J)				
3/20/2015		0.0002 (J)	<0.001	<0.001	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	0.0001 (J)	0.0002 (J)	<0.001		
4/9/2015				<0.001	
4/21/2015					
4/23/2015		0.0002 (J)	<0.001	<0.001	
4/24/2015	0.0001 (J)				
5/13/2015					0.0003 (J)
5/20/2015					9E-05 (J)
5/27/2015					<0.001
6/8/2015					<0.001
6/9/2015					
6/17/2015					
6/18/2015					<0.001
6/24/2015					<0.001
6/30/2015					6E-05 (J)
7/1/2015					
7/6/2015					<0.001
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	0.0001 (J)	0.0001 (J)	<0.001	<0.001	
8/12/2015					<0.001
8/13/2015					
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016			<0.01		
3/7/2016	<0.01				
3/8/2016				<0.01	
3/9/2016		0.0033 (J)			

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
5/2/2016					
5/3/2016					
5/4/2016				<0.001	<0.001 (D)
5/5/2016	<0.001		<0.001		
5/6/2016		<0.001			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					<0.001 (D)
7/11/2016					
7/12/2016			<0.001 (*)		
7/13/2016					
7/14/2016	<0.001 (*)				
7/15/2016		<0.001 (*)			
7/18/2016				<0.001	
9/7/2016					
9/8/2016					<0.001 (D)
9/9/2016					
9/12/2016	<0.001				
9/13/2016			<0.001	<0.001	
9/14/2016		0.0002 (J)			
9/15/2016					
10/25/2016					
10/26/2016					<0.001 (D)
10/27/2016	<0.001		<0.001	<0.001	
10/31/2016					
11/1/2016		<0.001			
11/2/2016					
1/5/2017					
1/6/2017					<0.001 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.001		<0.001	<0.001	
1/25/2017		<0.001			
3/14/2017					
3/15/2017					4E-05 (JD)
3/16/2017				<0.001	
3/20/2017	<0.001 (*)		<0.001 (*)		
3/21/2017					
3/22/2017		0.0001 (J)			
5/16/2017					
5/18/2017					6E-05 (JD)
5/19/2017			<0.001	<0.001	
5/22/2017					
5/23/2017	0.0001 (J)				
5/24/2017		0.0001 (J)			
7/19/2017					<0.001 (D)
9/15/2017					
9/18/2017					
9/19/2017	8E-05 (J)		<0.001	<0.001	6E-05 (JD)
9/20/2017					

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/21/2017		0.0002 (J)			
9/22/2017					
3/12/2018					
3/13/2018	0.00017 (J)		<0.001	<0.001	<0.001
3/14/2018		<0.001			
9/6/2018					
9/7/2018	<0.001				<0.001
9/10/2018					
9/11/2018		<0.001	<0.001	<0.001	
3/7/2019					
3/8/2019			<0.001	<0.001	<0.001
3/11/2019	0.00015 (X)				
3/12/2019		<0.001			
9/4/2019					0.00014 (X)
9/5/2019	5.5E-05 (X)		<0.001	<0.001	
9/6/2019		0.0003 (X)			
9/9/2019					
9/10/2019					

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.0073								
9/16/2014				0.0019 (J)					
9/17/2014					<0.005	0.001 (J)	<0.005		
9/18/2014								<0.005	<0.005
10/3/2014	<0.005								
10/4/2014				0.005	<0.005	<0.005	<0.005		
10/5/2014								<0.005	<0.005
10/20/2014	0.0045 (J)								
10/21/2014				0.00089 (J)	<0.005	0.00084 (J)	<0.005		
10/22/2014								<0.005	<0.005
10/23/2014									
11/5/2014							<0.005	<0.005	<0.005
11/10/2014	<0.005								
11/11/2014				<0.005	0.0012 (J)	<0.005			
3/2/2015	<0.005								
3/3/2015				0.00093 (J)	<0.005	<0.005	<0.005		
3/4/2015								<0.005	<0.005
3/17/2015	<0.005								
3/18/2015				<0.005	<0.005	<0.005			
3/19/2015							<0.005	0.0012 (J)	<0.005
3/20/2015									
4/5/2015	0.0014 (J)								
4/6/2015				<0.005	<0.005				
4/7/2015						<0.005	<0.005	<0.005	
4/8/2015									<0.005
4/9/2015									
4/21/2015	0.0029 (J)								
4/23/2015				<0.005	<0.005	<0.005			
4/24/2015							<0.005	<0.005	<0.005
5/8/2015		<0.005							
5/9/2015			<0.005						
5/17/2015		<0.005							
5/18/2015			0.0017 (J)						
5/25/2015		<0.005							
5/26/2015			<0.005						
6/8/2015		<0.005							
6/9/2015			0.0033 (J)						
6/17/2015			<0.005						
6/18/2015		<0.005							
6/24/2015		<0.005							
6/25/2015			<0.005						
6/30/2015		<0.005							
7/1/2015			0.0031 (J)						
7/6/2015		<0.005							
7/7/2015			<0.005						
7/28/2015	0.0031 (J)								
7/29/2015				<0.005	<0.005	<0.005	<0.005		
7/30/2015								<0.005	<0.005
8/12/2015		0.000172 (J)	0.000187 (J)						
3/1/2016	<0.01								
3/2/2016		<0.01							
3/3/2016			<0.01	<0.01 (D)					

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/4/2016					<0.001				
3/7/2016						<0.001	<0.001		
3/8/2016								<0.001	<0.001
3/9/2016									
7/6/2016	<0.01								
7/7/2016									
7/11/2016		<0.01	<0.01						
7/12/2016									
7/13/2016				0.0021 (J)		<0.01			
7/14/2016					<0.01		<0.01	<0.01	
7/15/2016									<0.01
7/18/2016									
3/14/2017	<0.01								
3/15/2017									
3/16/2017		<0.01	<0.01						
3/20/2017				0.0019 (J)		<0.01			
3/21/2017					<0.01		<0.01		<0.01
3/22/2017								<0.01	
9/15/2017	<0.01								
9/18/2017			<0.01						
9/19/2017		<0.01						<0.01	<0.01
9/20/2017							<0.01		
9/21/2017				<0.01		<0.01			
9/22/2017					<0.01				
3/12/2018	<0.01		<0.01						
3/13/2018		<0.01							
3/14/2018				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9/6/2018	<0.01								
9/7/2018			<0.01	<0.01		<0.01			
9/10/2018							<0.01	<0.01	<0.01
9/11/2018		<0.01			<0.01				
3/7/2019	<0.01		<0.01						
3/8/2019									
3/11/2019				<0.01					<0.01
3/12/2019		<0.01			<0.01	<0.01	<0.01	<0.01	
9/4/2019	<0.01								
9/5/2019		<0.01	<0.01						
9/6/2019						<0.01		<0.01	0.0012 (X)
9/9/2019				0.00091 (X)			0.00081 (X)		
9/10/2019					<0.01				

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			0.0012 (J)	<0.005	
9/17/2014					
9/18/2014	<0.005	<0.005			
10/3/2014					
10/4/2014			<0.005	<0.005	
10/5/2014	<0.005	<0.005			
10/20/2014					
10/21/2014					
10/22/2014	<0.005	0.00083 (J)			
10/23/2014			<0.005	<0.005	
11/5/2014	<0.005	0.0014 (J)			
11/10/2014			<0.005	<0.005	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	<0.005	<0.005	<0.005	<0.005	
3/17/2015					
3/18/2015					
3/19/2015	<0.005				
3/20/2015		<0.005	<0.005	<0.005	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	<0.005	0.0017 (J)	0.0012 (J)		
4/9/2015				<0.005	
4/21/2015					
4/23/2015		<0.005	<0.005	<0.005	
4/24/2015	<0.005				
5/8/2015					<0.005
5/9/2015					
5/17/2015					0.0044 (J)
5/18/2015					
5/25/2015					0.0025 (J)
5/26/2015					
6/8/2015					0.0042 (J)
6/9/2015					
6/17/2015					
6/18/2015					0.0056
6/24/2015					0.016
6/25/2015					
6/30/2015					0.013
7/1/2015					
7/6/2015					0.012
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.005	<0.005	<0.005	<0.005	
8/12/2015					0.0279 (J)
3/1/2016					
3/2/2016					
3/3/2016					

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/4/2016			<0.001		
3/7/2016	<0.001				
3/8/2016				<0.001	
3/9/2016		<0.01			
7/6/2016					
7/7/2016					<0.01 (D)
7/11/2016					
7/12/2016			0.002 (J)		
7/13/2016					
7/14/2016	<0.01				
7/15/2016		<0.01			
7/18/2016				<0.01	
3/14/2017					
3/15/2017					<0.01 (D)
3/16/2017				<0.01	
3/20/2017	<0.01		<0.01		
3/21/2017					
3/22/2017		<0.01			
9/15/2017					
9/18/2017					
9/19/2017	<0.01		0.0012 (J)	<0.01	<0.01 (D)
9/20/2017					
9/21/2017		<0.01			
9/22/2017					
3/12/2018					
3/13/2018	<0.01		<0.01	<0.01	<0.01
3/14/2018		<0.01			
9/6/2018					
9/7/2018	<0.01				<0.01
9/10/2018					
9/11/2018		<0.01	<0.01	<0.01	
3/7/2019					
3/8/2019			<0.01	<0.01	<0.01
3/11/2019	<0.01				
3/12/2019		<0.01			
9/4/2019					<0.01
9/5/2019	0.00094 (X)		0.0012 (X)	<0.01	
9/6/2019		0.0011 (X)			
9/9/2019					
9/10/2019					

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
9/15/2014	0.44								
9/16/2014				0.072					
9/17/2014					0.0028 (o)	0.002 (J)	0.0026		
9/18/2014								0.0023 (J)	0.0033
10/3/2014	0.021								
10/4/2014				0.078	0.0038	0.001 (J)	0.0034		
10/5/2014								0.0025	0.0036
10/20/2014	0.19								
10/21/2014				0.083	0.0043	0.00082 (J)	0.0037		
10/22/2014								0.0018 (J)	0.0038
10/23/2014									
11/5/2014							0.0035	0.0019 (J)	0.0046
11/10/2014	0.0014 (J)								
11/11/2014				0.082	0.0041	0.00076 (J)			
3/2/2015	0.032								
3/3/2015				0.078	0.0042	<0.0025	0.0036		
3/4/2015								0.0016 (J)	0.0029
3/17/2015	0.034								
3/18/2015				0.075	0.0046	0.0016 (J)			
3/19/2015							0.0035	0.0025	0.0027
3/20/2015									
4/5/2015	0.089								
4/6/2015				0.071	0.0043				
4/7/2015						<0.0025	0.0039	0.0026	
4/8/2015									0.0039
4/9/2015									
4/21/2015	0.16								
4/23/2015				0.072	0.0047	<0.0025			
4/24/2015							0.0034	0.0017 (J)	0.0035
5/8/2015		0.0022 (J)							
5/9/2015			<0.0025						
5/17/2015		<0.0025							
5/18/2015			0.0033						
5/25/2015		0.0022 (J)							
5/26/2015			0.0022 (J)						
6/8/2015		0.0015 (J)							
6/9/2015			0.0082						
6/17/2015			<0.0025						
6/18/2015		0.0026							
6/24/2015		0.0015 (J)							
6/25/2015			<0.0025						
6/30/2015		0.0015 (J)							
7/1/2015			0.0064						
7/6/2015		<0.0025							
7/7/2015			<0.0025						
7/28/2015	0.15								
7/29/2015				0.072	0.0039	<0.0025	0.0038		
7/30/2015								0.0017 (J)	0.0027
8/12/2015		0.0031 (BJ)							
8/13/2015			0.0028 (BJ)						
3/1/2016	0.0627								
3/2/2016		0.0028 (J)							

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/3/2016			<0.01	0.0227 (D)					
3/4/2016					0.0219 (J)				
3/7/2016						<0.01	<0.3		
3/8/2016								0.557 (J)	0.00273 (J)
3/9/2016									
7/6/2016	0.0532								
7/7/2016									
7/11/2016		<0.01	<0.01						
7/12/2016									
7/13/2016				0.0709		0.0013 (J)			
7/14/2016					0.0111		<0.01	<0.01 (*)	
7/15/2016									<0.01 (*)
7/18/2016									
3/14/2017	0.0401								
3/15/2017									
3/16/2017		0.0018 (J)	0.0054 (J)						
3/20/2017				0.0465		<0.01			
3/21/2017					<0.01 (*)		<0.01 (*)		<0.01 (*)
3/22/2017								<0.01	
9/15/2017	0.0338								
9/18/2017			<0.01						
9/19/2017		<0.01						0.0031 (J)	0.0022 (J)
9/20/2017							0.0062 (J)		
9/21/2017				0.0302		0.0018 (J)			
9/22/2017					0.0023 (J)				
3/12/2018	0.042		<0.01						
3/13/2018		<0.01							
3/14/2018				0.031	0.0021 (J)	<0.01	<0.01	<0.01	0.0049 (J)
9/6/2018	0.045								
9/7/2018			<0.01	<0.01		<0.01			
9/10/2018							<0.01	<0.012	<0.01
9/11/2018		<0.01			<0.01				
3/7/2019	0.043		<0.01						
3/8/2019									
3/11/2019				0.024					0.0034 (X)
3/12/2019		<0.01			0.0038 (X)	<0.01	<0.01	<0.01	
9/4/2019	0.052								
9/5/2019		0.0098 (X)	0.0045 (X)						
9/6/2019						0.0046 (X)		0.0042 (X)	0.045
9/9/2019				0.029			0.0062 (X)		
9/10/2019					0.0055 (X)				

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

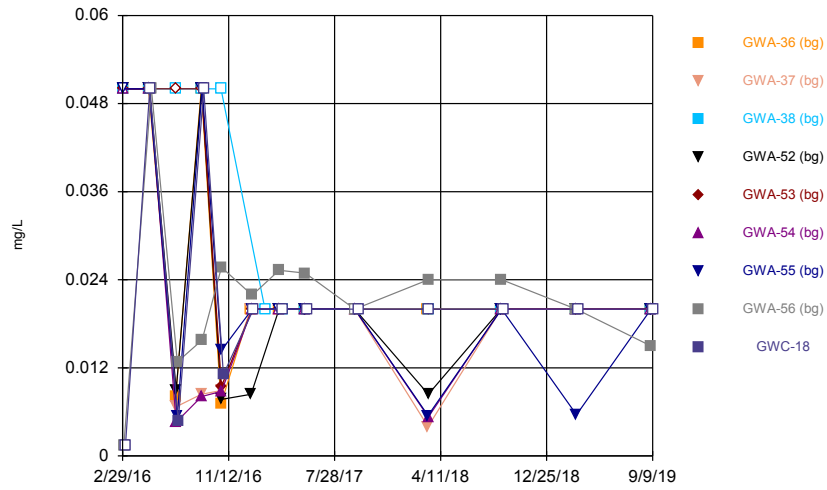
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
9/15/2014					
9/16/2014			0.00054 (J)	0.004	
9/17/2014					
9/18/2014	0.00089 (J)	0.0013 (J)			
10/3/2014					
10/4/2014			0.0008 (J)	0.0011 (J)	
10/5/2014	0.0016 (J)	0.00085 (J)			
10/20/2014					
10/21/2014					
10/22/2014	0.0017 (J)	0.0014 (J)			
10/23/2014			<0.0025	0.0011 (J)	
11/5/2014	0.0038	0.0022 (J)			
11/10/2014			<0.0025	0.0028	
11/11/2014					
3/2/2015					
3/3/2015					
3/4/2015	0.002 (J)	0.0033	<0.0025	<0.0025	
3/17/2015					
3/18/2015					
3/19/2015	0.0025				
3/20/2015		0.002 (J)	<0.0025	<0.0025	
4/5/2015					
4/6/2015					
4/7/2015					
4/8/2015	0.0018 (J)	0.004	0.0016 (J)		
4/9/2015				<0.0025	
4/21/2015					
4/23/2015		0.002 (J)	<0.0025	<0.0025	
4/24/2015	0.0016 (J)				
5/8/2015					0.015
5/9/2015					
5/17/2015					0.12
5/18/2015					
5/25/2015					0.023
5/26/2015					
6/8/2015					0.016
6/9/2015					
6/17/2015					
6/18/2015					0.016
6/24/2015					0.022
6/25/2015					
6/30/2015					0.017
7/1/2015					
7/6/2015					0.01
7/7/2015					
7/28/2015					
7/29/2015					
7/30/2015	<0.0025	<0.0025	<0.0025	<0.0025	
8/12/2015					0.0047 (BJ)
8/13/2015					
3/1/2016					
3/2/2016					

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:31 AM View: cell 3&4 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

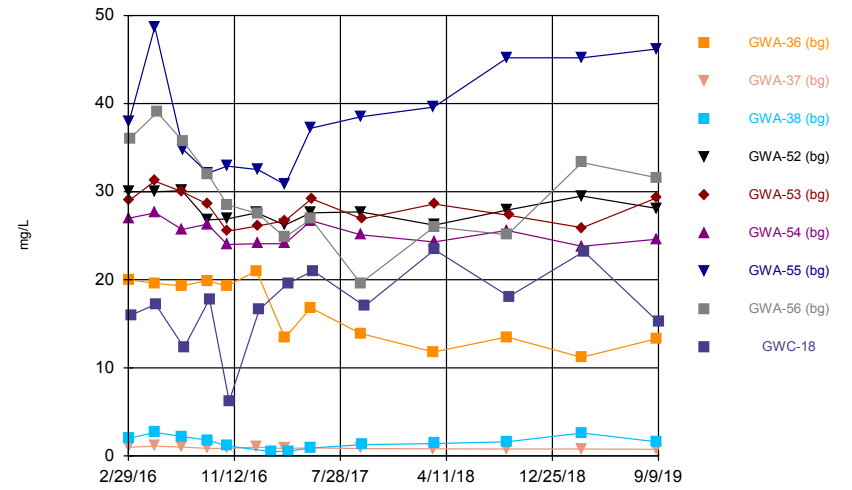
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/3/2016					
3/4/2016			0.00374 (J)		
3/7/2016	<0.01				
3/8/2016				0.00198 (J)	
3/9/2016		<0.01			
7/6/2016					
7/7/2016					0.0073 (JD)
7/11/2016					
7/12/2016			<0.01		
7/13/2016					
7/14/2016	<0.01				
7/15/2016		<0.01 (*)			
7/18/2016				<0.01 (*)	
3/14/2017					
3/15/2017					<0.01 (D)
3/16/2017				0.0026 (J)	
3/20/2017	0.0075 (J)		<0.01		
3/21/2017					
3/22/2017		<0.01 (*)			
9/15/2017					
9/18/2017					
9/19/2017	<0.01		0.0028 (J)	<0.01	<0.01 (D)
9/20/2017					
9/21/2017		0.0034 (J)			
9/22/2017					
3/12/2018					
3/13/2018	<0.01		0.0068 (J)	<0.01	<0.01
3/14/2018		<0.01			
9/6/2018					
9/7/2018	<0.01				<0.01
9/10/2018					
9/11/2018		<0.01	<0.01	<0.01	
3/7/2019					
3/8/2019			<0.01	<0.01	<0.01
3/11/2019	0.0021 (X)				
3/12/2019		<0.01			
9/4/2019					0.0051 (X)
9/5/2019	0.0053 (X)		0.0066 (X)	0.0053 (X)	
9/6/2019		0.0059 (X)			
9/9/2019					
9/10/2019					

Time Series



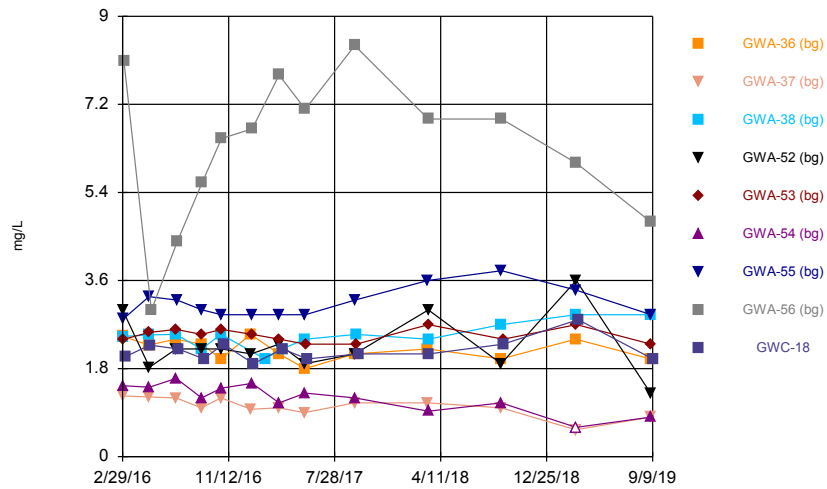
Constituent: Boron Analysis Run 11/7/2019 10:16 AM View: cell 3&4 apIII overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



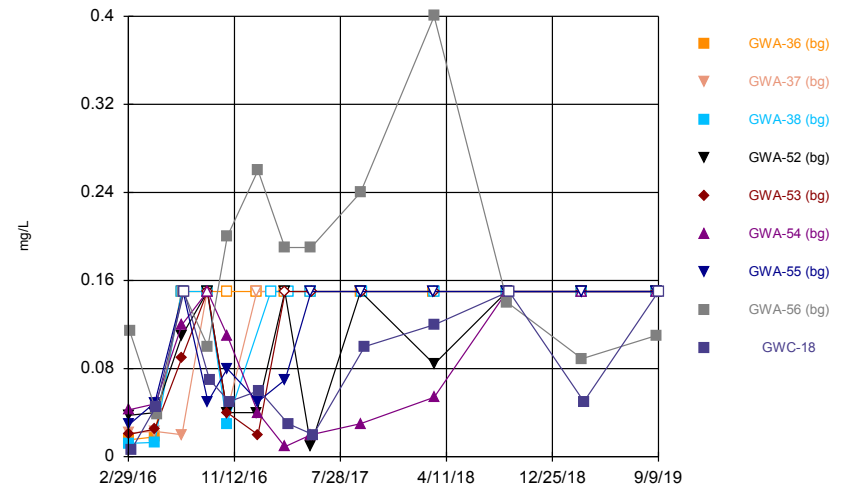
Constituent: Calcium Analysis Run 11/7/2019 10:16 AM View: cell 3&4 apIII overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



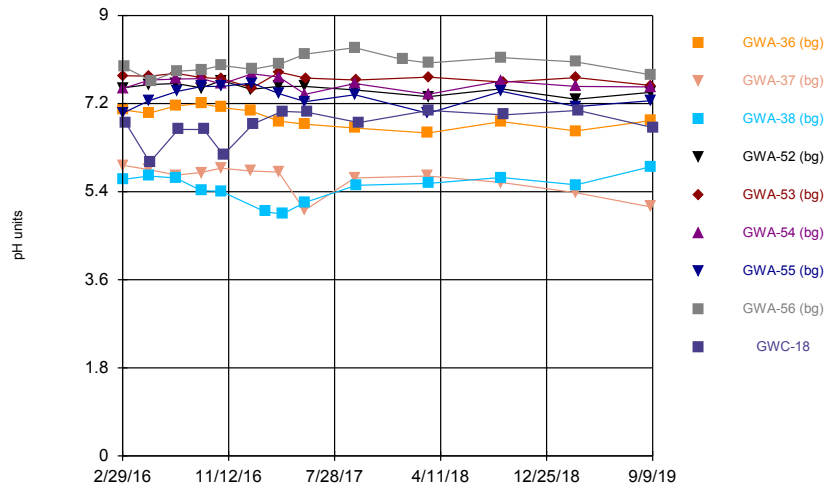
Constituent: Chloride Analysis Run 11/7/2019 10:16 AM View: cell 3&4 apIII overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



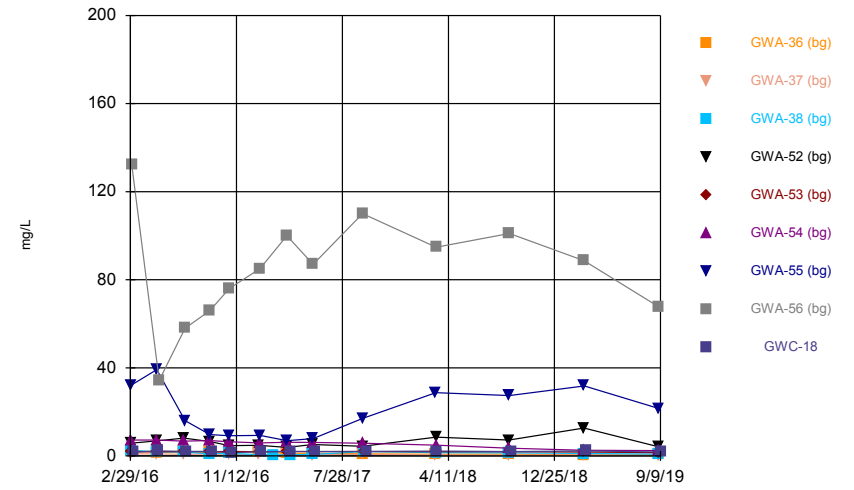
Constituent: Fluoride Analysis Run 11/7/2019 10:16 AM View: cell 3&4 apIII overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



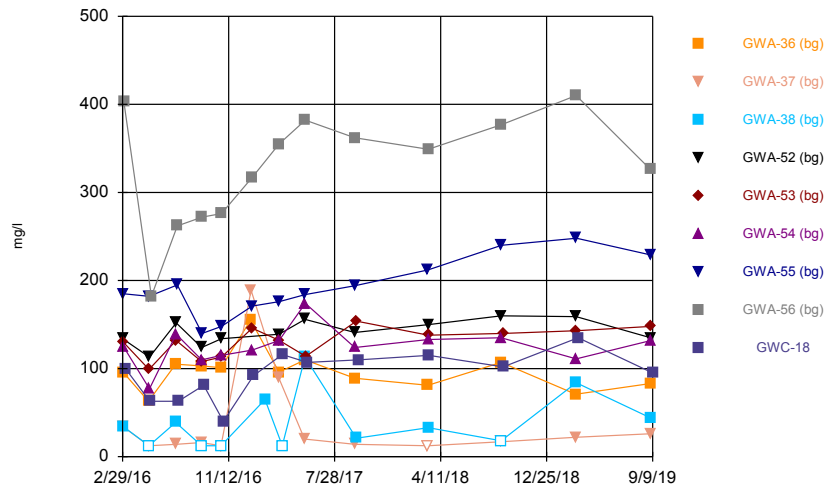
Constituent: pH Analysis Run 11/7/2019 10:16 AM View: cell 3&4 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



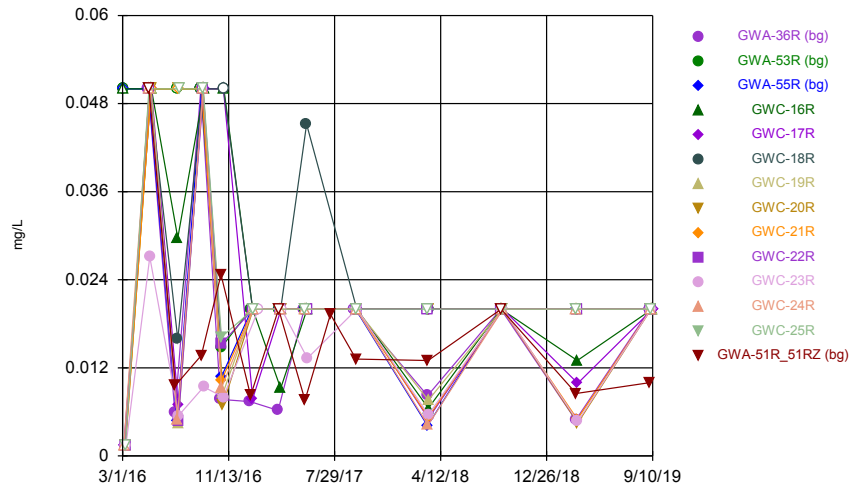
Constituent: Sulfate Analysis Run 11/7/2019 10:16 AM View: cell 3&4 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series

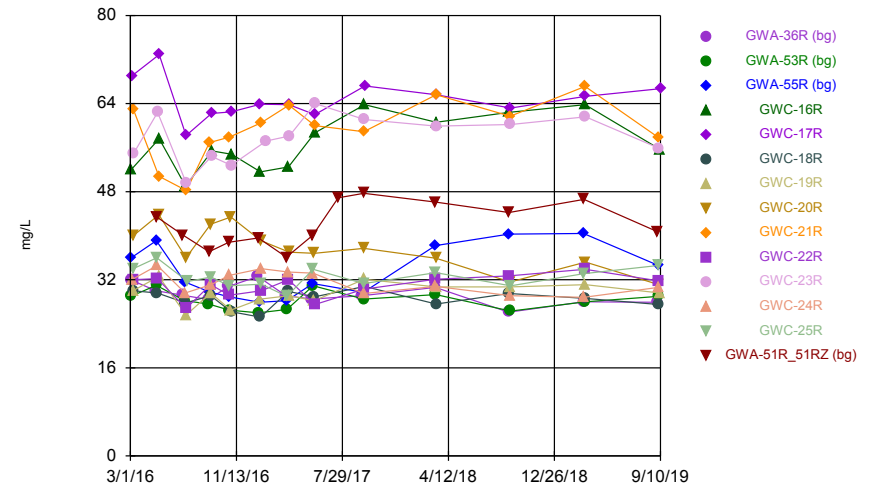


Constituent: Total Dissolved Solids Analysis Run 11/7/2019 10:16 AM View: cell 3&4 appIII overburden
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

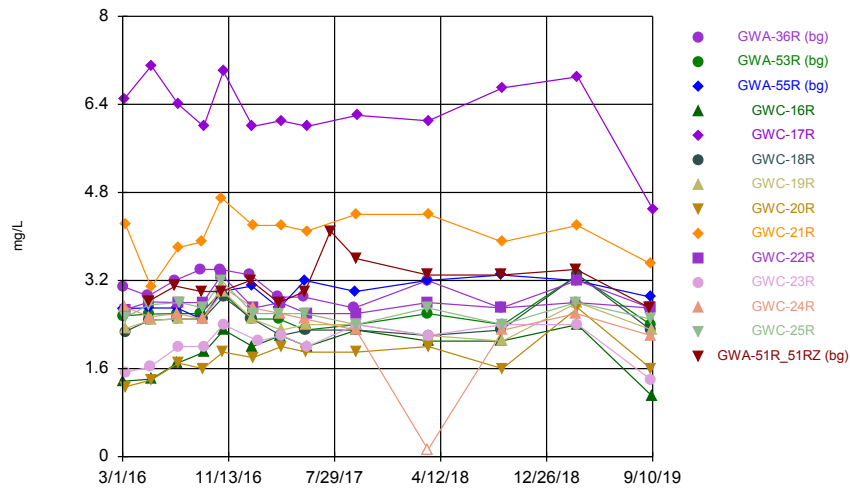
Time Series



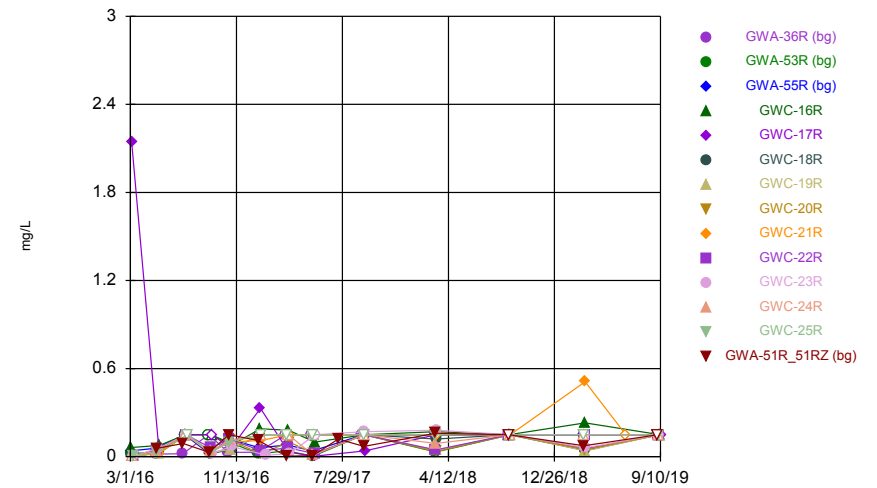
Time Series



Time Series



Time Series



Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appIII bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/1/2016	<0.1								
3/2/2016		<0.1							
3/3/2016			<0.1	<0.1 (D)					
3/4/2016					<0.003				
3/7/2016						<0.003	<0.003		
3/8/2016								<0.003	<0.003
3/9/2016									
5/2/2016	<0.1								
5/3/2016		<0.1	<0.1						
5/4/2016									
5/5/2016						<0.1			
5/6/2016									
5/9/2016							<0.1	<0.1	<0.1
5/10/2016				<0.1	<0.1				
7/6/2016	0.0059 (J)								
7/7/2016									
7/11/2016		<0.1	0.0047 (J)						
7/12/2016									
7/13/2016				0.0297 (J)		0.0159 (J)			
7/14/2016					0.0069 (J)		0.0045 (J)	<0.1	
7/15/2016									<0.1
7/18/2016									
9/7/2016	<0.1	<0.1							
9/8/2016									
9/9/2016			<0.1						<0.1
9/12/2016						<0.1	<0.1	<0.1	
9/13/2016									
9/14/2016					<0.1				
9/15/2016				<0.1					
10/25/2016	0.0077 (J)								
10/26/2016									
10/27/2016		0.0148 (J)	0.0108 (J)						0.0103 (J)
10/31/2016							0.0086 (J)	0.007 (J)	
11/1/2016					<0.1	<0.1			
11/2/2016				<0.1					
1/5/2017	0.0074 (J)								
1/6/2017		<0.04							
1/9/2017			<0.04						
1/11/2017				<0.04	0.0078 (J)	<0.04	<0.04		
1/12/2017								<0.04	<0.04
1/13/2017									
1/25/2017									
3/14/2017	0.0062 (J)								
3/15/2017									
3/16/2017		<0.04	<0.04						
3/20/2017				0.0092 (J)		<0.04			
3/21/2017					<0.04		<0.04		<0.04
3/22/2017								<0.04	
5/16/2017	<0.04								
5/18/2017			<0.04						
5/19/2017		<0.04							
5/22/2017						0.0452	<0.04 (*)	<0.04 (*)	

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
5/23/2017				<0.04 (*)	<0.04				<0.04 (*)
5/24/2017									
7/19/2017									
9/15/2017	<0.04								
9/18/2017			<0.04						
9/19/2017		<0.04						<0.04	<0.04
9/20/2017							<0.04 (*)		
9/21/2017				<0.04		<0.04			
9/22/2017					<0.04				
3/12/2018	0.0082 (J)		0.0041 (J)						
3/13/2018		<0.04							
3/14/2018				0.0065 (J)	0.0051 (J)	<0.04	0.0076 (J)	<0.04	0.0053 (J)
9/6/2018	<0.04								
9/7/2018			<0.04	<0.04		<0.04			
9/10/2018							<0.04	<0.04	<0.04
9/11/2018		<0.04			<0.04				
3/7/2019	0.0049 (X)		<0.04						
3/8/2019									
3/11/2019				0.013 (X)					0.005 (X)
3/12/2019		<0.04			0.0099 (X)	<0.04	<0.04	0.0045 (X)	
9/4/2019	<0.04								
9/5/2019		<0.04	<0.04						
9/6/2019						<0.04		<0.04	<0.04
9/9/2019				<0.04			<0.04		
9/10/2019					<0.04				

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appIII bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016			<0.003		
3/7/2016	<0.003				
3/8/2016				<0.003	
3/9/2016		<0.003			
5/2/2016					
5/3/2016					
5/4/2016				<0.1	<0.1 (D)
5/5/2016	<0.1		<0.1		
5/6/2016		0.0271 (J)			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					0.0096 (JD)
7/11/2016					
7/12/2016			0.005 (J)		
7/13/2016					
7/14/2016	0.0047 (J)				
7/15/2016		0.0055 (J)			
7/18/2016				<0.1	
9/7/2016					
9/8/2016					0.0137 (JD)
9/9/2016					
9/12/2016	<0.1				
9/13/2016			<0.1	<0.1	
9/14/2016		0.0094 (J)			
9/15/2016					
10/25/2016					
10/26/2016					0.0247 (JD)
10/27/2016	0.0153 (J)		0.0093 (J)	0.0162 (J)	
10/31/2016					
11/1/2016		0.008 (J)			
11/2/2016					
1/5/2017					
1/6/2017					0.0082 (JD)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	<0.04		<0.04	<0.04	
1/25/2017		<0.04			
3/14/2017					
3/15/2017					<0.04 (D)
3/16/2017				<0.04	
3/20/2017	<0.04		<0.04		
3/21/2017					
3/22/2017		<0.04			
5/16/2017					
5/18/2017					0.0076 (JD)
5/19/2017			<0.04	<0.04	
5/22/2017					

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
5/23/2017	<0.04				
5/24/2017		0.0133 (J)			
7/19/2017					0.0193 (JD)
9/15/2017					
9/18/2017					
9/19/2017	<0.04		<0.04	<0.04	0.0132 (JD)
9/20/2017					
9/21/2017		<0.04 (*)			
9/22/2017					
3/12/2018					
3/13/2018	<0.04		0.0042 (J)	<0.04	0.013 (J)
3/14/2018		0.0056 (J)			
9/6/2018					
9/7/2018	<0.04				<0.04
9/10/2018					
9/11/2018		<0.04	<0.04	<0.04	
3/7/2019					
3/8/2019			<0.04	<0.04	0.0085 (X)
3/11/2019	<0.04				
3/12/2019		0.0047 (X)			
9/4/2019					0.01 (X)
9/5/2019	<0.04		<0.04	<0.04	
9/6/2019		<0.04			
9/9/2019					
9/10/2019					

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/1/2016	32								
3/2/2016		29							
3/3/2016			36	52 (D)					
3/4/2016					69				
3/7/2016						30	30		
3/8/2016								40	63
3/9/2016									
5/2/2016	30								
5/3/2016		31	39.1						
5/4/2016									
5/5/2016						29.6			
5/6/2016									
5/9/2016							32.6	43.8	50.8
5/10/2016				57.6	72.9				
7/6/2016	29.2								
7/7/2016									
7/11/2016		28.2	31.6						
7/12/2016									
7/13/2016				49		27.8			
7/14/2016					58.2		25.6	36	
7/15/2016									48.2
7/18/2016									
9/7/2016	28.4	27.6							
9/8/2016									
9/9/2016			29.8						56.9
9/12/2016						29.1	29.6	42.1	
9/13/2016									
9/14/2016					62.2				
9/15/2016				55.4					
10/25/2016	30.8								
10/26/2016									
10/27/2016		26.5	28.9						57.9
10/31/2016							26.5	43.4	
11/1/2016					62.5	26.2			
11/2/2016				54.8					
1/5/2017	32.6								
1/6/2017		26							
1/9/2017			27.9						
1/11/2017				51.6	63.9	25.2	28.5		
1/12/2017								39.1	60.5
1/13/2017									
1/25/2017									
3/14/2017	29.1								
3/15/2017									
3/16/2017		26.6	28.2						
3/20/2017				52.5		29.9			
3/21/2017					63.8		29.1		63.7
3/22/2017								37	
5/16/2017	28.5								
5/18/2017			31.3						
5/19/2017		30.9							
5/22/2017						28.9	28.2	36.8	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
5/23/2017				58.7	62				60
5/24/2017									
7/19/2017									
9/15/2017	29.1								
9/18/2017			29.7						
9/19/2017		28.5						37.7	58.9
9/20/2017							32.1		
9/21/2017				63.8		30.8			
9/22/2017					67.2				
3/12/2018	30.6		38.2						
3/13/2018		29.3							
3/14/2018				60.6	65.6	27.6	30.7	35.9	65.6
9/6/2018	26.1								
9/7/2018			40.3	62.4		29.5			
9/10/2018							30.7	31.6	61.7
9/11/2018		26.3			63.2				
3/7/2019	28		40.4						
3/8/2019									
3/11/2019				63.8					67.1
3/12/2019		28			65.3	28.6	31.1	35.2	
9/4/2019	27.9								
9/5/2019		29	34.6						
9/6/2019						27.5		31.1	57.8
9/9/2019				55.7			29.6		
9/10/2019					66.7				

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016			32		
3/7/2016	32				
3/8/2016				34	
3/9/2016		55			
5/2/2016					
5/3/2016					
5/4/2016				36	43.4 (D)
5/5/2016	32.2		34.6		
5/6/2016		62.4			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					40.1 (D)
7/11/2016					
7/12/2016			29.6		
7/13/2016					
7/14/2016	26.8				
7/15/2016		49.5			
7/18/2016				31.7	
9/7/2016					
9/8/2016					37.1 (D)
9/9/2016					
9/12/2016	31.1				
9/13/2016			31.1	32.5	
9/14/2016		54.4			
9/15/2016					
10/25/2016					
10/26/2016					38.8 (D)
10/27/2016	29.2		32.8	30.9	
10/31/2016					
11/1/2016		52.8			
11/2/2016					
1/5/2017					
1/6/2017					39.6 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	30		34	31.2	
1/25/2017		57.2			
3/14/2017					
3/15/2017					36.1 (D)
3/16/2017				29	
3/20/2017	32		33.4		
3/21/2017					
3/22/2017		58.1			
5/16/2017					
5/18/2017					40.1 (D)
5/19/2017			33.2	33.9	
5/22/2017					

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
5/23/2017	27.5				
5/24/2017		64			
7/19/2017					46.9 (D)
9/15/2017					
9/18/2017					
9/19/2017	30.3		29.5	31.3	47.7 (D)
9/20/2017					
9/21/2017		61.1			
9/22/2017					
3/12/2018					
3/13/2018	32.1		30.8	33.3	46.1 (D)
3/14/2018		59.9			
9/6/2018					
9/7/2018	32.7				44.2
9/10/2018					
9/11/2018		60.2	29.1	30.9	
3/7/2019					
3/8/2019			28.8	33.1	46.6
3/11/2019	33.9				
3/12/2019		61.6			
9/4/2019					40.7
9/5/2019	31.8		30.6	34.6	
9/6/2019		55.9			
9/9/2019					
9/10/2019					

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/1/2016	3.096								
3/2/2016		2.556							
3/3/2016			2.6912	1.3707 (D)					
3/4/2016					6.4905				
3/7/2016						2.2698	2.3254		
3/8/2016								1.2699	4.2184
3/9/2016									
5/2/2016	2.92								
5/3/2016		2.59	2.7						
5/4/2016									
5/5/2016						2.48			
5/6/2016									
5/9/2016							2.48	1.39	3.08
5/10/2016				1.41	7.1				
7/6/2016	3.2								
7/7/2016									
7/11/2016		2.6	2.7						
7/12/2016									
7/13/2016				1.7		2.5			
7/14/2016					6.4		2.5	1.7	
7/15/2016									3.8
7/18/2016									
9/7/2016	3.4	2.6							
9/8/2016									
9/9/2016			2.5						3.9
9/12/2016						2.5	2.5	1.6	
9/13/2016									
9/14/2016					6				
9/15/2016				1.9					
10/25/2016	3.4								
10/26/2016									
10/27/2016		3	3						4.7
10/31/2016							3	1.9	
11/1/2016					7	2.9			
11/2/2016				2.3					
1/5/2017	3.3								
1/6/2017		2.5							
1/9/2017			3.1						
1/11/2017				2	6	2.5	2.5		
1/12/2017								1.8	4.2
1/13/2017									
1/25/2017									
3/14/2017	2.9								
3/15/2017									
3/16/2017		2.5	2.7						
3/20/2017				2.2		2.2			
3/21/2017					6.1		2.3		4.2
3/22/2017								2	
5/16/2017	2.9								
5/18/2017			3.2						
5/19/2017		2.3							
5/22/2017						2.3	2.4	1.9	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
5/23/2017				2	6				4.1
5/24/2017									
7/19/2017									
9/15/2017	2.7								
9/18/2017			3						
9/19/2017		2.4						1.9	4.4
9/20/2017							2.4		
9/21/2017				2.3		2.3			
9/22/2017					6.2				
3/12/2018	3.2		3.2						
3/13/2018		2.6							
3/14/2018				2.1	6.1	2.2	2.2	2	4.4
9/6/2018	2.7								
9/7/2018			3.3	2.1		2.3			
9/10/2018							2.1	1.6	3.9
9/11/2018		2.4			6.7				
3/7/2019	2.8		3.2						
3/8/2019									
3/11/2019				2.4					4.2
3/12/2019		3.3			6.9	3.3	2.8	2.7	
9/4/2019	2.7								
9/5/2019		2.4	2.9						
9/6/2019						2.3		1.6	3.5
9/9/2019				1.1			2.3		
9/10/2019					4.5				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016			2.7291		
3/7/2016	2.6729				
3/8/2016				2.5307	
3/9/2016		1.5349			
5/2/2016					
5/3/2016					
5/4/2016				2.76	2.83 (D)
5/5/2016	2.81		2.54		
5/6/2016		1.63			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					3.1 (D)
7/11/2016					
7/12/2016			2.6		
7/13/2016					
7/14/2016	2.8				
7/15/2016		2			
7/18/2016				2.8	
9/7/2016					
9/8/2016					3 (D)
9/9/2016					
9/12/2016	2.8				
9/13/2016			2.5	2.7	
9/14/2016		2			
9/15/2016					
10/25/2016					
10/26/2016					3 (D)
10/27/2016	3.3		3.1	3.2	
10/31/2016					
11/1/2016		2.4			
11/2/2016					
1/5/2017					
1/6/2017					3.2 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	2.7		2.7	2.6	
1/25/2017		2.1			
3/14/2017					
3/15/2017					2.8 (D)
3/16/2017				2.6	
3/20/2017	2.8		2.6		
3/21/2017					
3/22/2017		2.2			
5/16/2017					
5/18/2017					3 (D)
5/19/2017			2.5	2.6	
5/22/2017					

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
5/23/2017	2.6				
5/24/2017		2			
7/19/2017					4.1 (D)
9/15/2017					
9/18/2017					
9/19/2017	2.6		2.3	2.4	3.6 (D)
9/20/2017					
9/21/2017		2.4			
9/22/2017					
3/12/2018					
3/13/2018	2.8		<0.25	2.7	3.3
3/14/2018		2.2			
9/6/2018					
9/7/2018	2.7				3.3
9/10/2018					
9/11/2018		2.4	2.3	2.4	
3/7/2019					
3/8/2019			2.6	2.8	3.4
3/11/2019	3.2				
3/12/2019		2.4			
9/4/2019					2.7
9/5/2019	2.7		2.2	2.5	
9/6/2019		1.4			
9/9/2019					
9/10/2019					

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/1/2016	0.0172 (J)								
3/2/2016		0.0238 (J)							
3/3/2016			0.0392 (J)	0.06259 (JD)					
3/4/2016					2.1421 (J)				
3/7/2016						0.00232 (J)	<0.01		
3/8/2016								0.00425 (J)	0.00287 (J)
3/9/2016									
5/2/2016	0.018 (J)								
5/3/2016		0.027 (J)	0.058 (J)						
5/4/2016									
5/5/2016						0.025 (J)			
5/6/2016									
5/9/2016							0.0246 (J)	0.0259 (J)	0.0222 (J)
5/10/2016				0.0767 (J)	0.0258 (J)				
7/6/2016	0.02 (J)								
7/7/2016									
7/11/2016		<0.3 (*)	<0.3 (*)						
7/12/2016									
7/13/2016				<0.3		<0.3			
7/14/2016					<0.3		<0.3	<0.3	
7/15/2016									<0.3
7/18/2016									
9/7/2016	<0.3	<0.3							
9/8/2016									
9/9/2016			0.02 (J)						0.03 (J)
9/12/2016						0.02 (J)	0.03 (J)	0.03 (J)	
9/13/2016									
9/14/2016					<0.3				
9/15/2016				<0.3					
10/25/2016	0.03 (J)								
10/26/2016									
10/27/2016		0.1 (J)	0.12 (J)						0.1 (J)
10/31/2016									
11/1/2016					0.06 (J)	0.05 (J)			
11/2/2016				0.08 (J)					
1/5/2017	0.03 (J)								
1/6/2017		0.02 (J)							
1/9/2017			0.06 (J)						
1/11/2017				0.19 (J)	0.33	<0.3	<0.3		
1/12/2017								0.02 (J)	0.11 (J)
1/13/2017									
1/25/2017									
3/14/2017	<0.3								
3/15/2017									
3/16/2017		0.04 (J)	0.08 (J)						
3/20/2017				0.18 (J)		<0.3			
3/21/2017					0.03 (J)		<0.3		<0.3
3/22/2017								0.1 (J)	
5/16/2017	<0.3								
5/18/2017			0.04 (J)						
5/19/2017		0.004 (J)							
5/22/2017						<0.3	<0.3	0.02 (J)	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
5/23/2017				0.1 (J)	0.004 (J)				<0.3
5/24/2017									
7/19/2017									
9/15/2017	<0.3								
9/18/2017			<0.3						
9/19/2017		<0.3						<0.3	<0.3
9/20/2017							<0.3		
9/21/2017				<0.3		<0.3			
9/22/2017					0.04 (J)				
3/12/2018	<0.3		<0.3						
3/13/2018		0.032 (J)							
3/14/2018				0.17 (J)	<0.3	0.12 (J)	0.045 (J)	0.035 (J)	<0.3
9/6/2018	<0.3								
9/7/2018			<0.3	<0.3		<0.3			
9/10/2018							<0.3	<0.3	<0.3
9/11/2018		<0.3			<0.3				
3/7/2019	<0.3		<0.3						
3/8/2019									
3/11/2019				0.23 (X)					0.51
3/12/2019		0.046 (X)			0.056 (X)	0.042 (X)	0.04 (X)	0.048 (X)	
6/18/2019									<0.3
9/4/2019	<0.3								
9/5/2019		<0.3	<0.3						
9/6/2019						<0.3		<0.3	<0.3
9/9/2019				<0.3			<0.3		
9/10/2019					<0.3				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

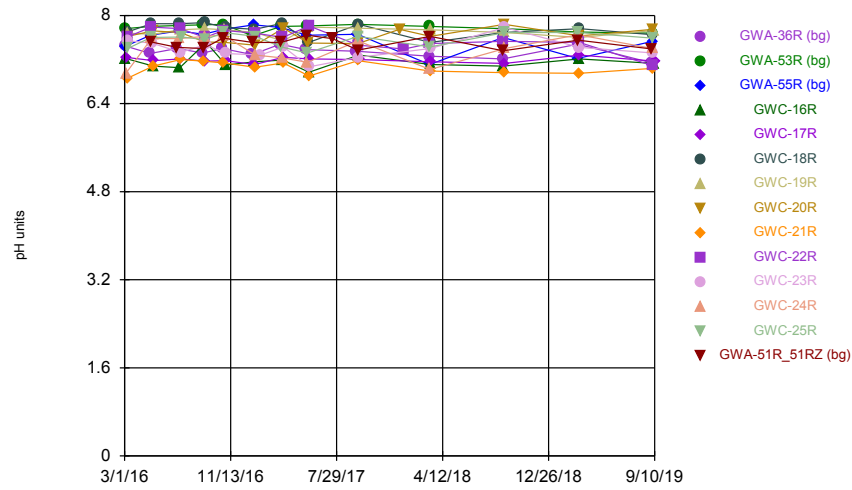
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016			<0.005		
3/7/2016	0.00526 (J)				
3/8/2016				0.00246 (J)	
3/9/2016		<0.01			
5/2/2016					
5/3/2016					
5/4/2016				0.027 (J)	0.057 (JD)
5/5/2016	0.049 (J)		0.039 (J)		
5/6/2016		0.056 (J)			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					0.09 (JD)
7/11/2016					
7/12/2016			<0.3 (*)		
7/13/2016					
7/14/2016	<0.3				
7/15/2016		<0.3			
7/18/2016				<0.3	
9/7/2016					
9/8/2016					0.03 (JD)
9/9/2016					
9/12/2016	0.06 (J)				
9/13/2016			0.04 (J)	0.03 (J)	
9/14/2016		0.02 (J)			
9/15/2016					
10/25/2016					
10/26/2016					0.15 (JD)
10/27/2016	0.12 (J)		0.11 (J)	0.1 (J)	
10/31/2016					
11/1/2016		0.07 (J)			
11/2/2016					
1/5/2017					
1/6/2017					0.11 (JD)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	0.04 (J)		<0.3	<0.3	
1/25/2017		0.01 (J)			
3/14/2017					
3/15/2017					0.004 (JD)
3/16/2017				<0.3	
3/20/2017	0.06 (J)		<0.3		
3/21/2017					
3/22/2017		0.02 (J)			
5/16/2017					
5/18/2017					0.007 (JD)
5/19/2017			0.01 (J)	<0.3	
5/22/2017					

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

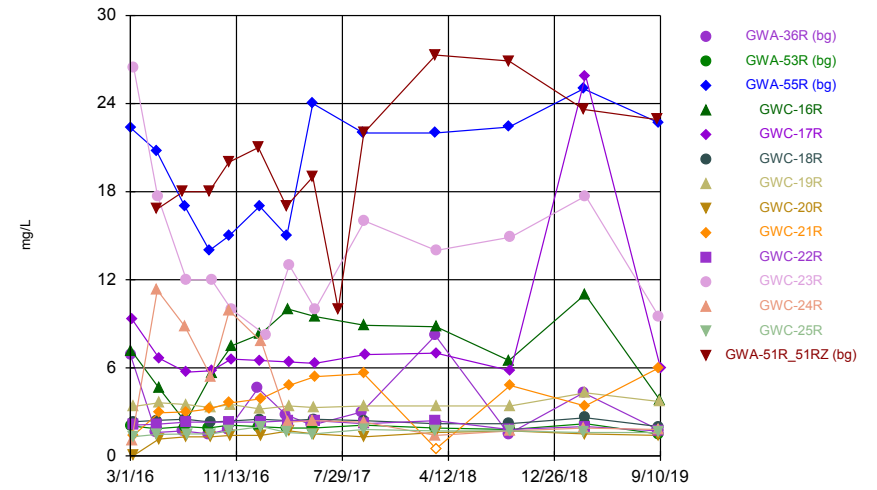
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
5/23/2017	0.02 (J)				
5/24/2017		<0.3			
7/19/2017					0.12 (JD)
9/15/2017					
9/18/2017					
9/19/2017	<0.3		<0.3	<0.3	0.07 (JD)
9/20/2017					
9/21/2017		0.17 (J)			
9/22/2017					
3/12/2018					
3/13/2018	0.046 (J)		0.091 (J)	<0.3	0.16 (J)
3/14/2018		0.18 (J)			
9/6/2018					
9/7/2018	<0.3				<0.3
9/10/2018					
9/11/2018		<0.3	<0.3	<0.3	
3/7/2019					
3/8/2019			<0.3	<0.3	0.075 (X)
3/11/2019	<0.3				
3/12/2019		0.06 (X)			
6/18/2019					
9/4/2019					<0.3
9/5/2019	<0.3		<0.3	<0.3	
9/6/2019		<0.3			
9/9/2019					
9/10/2019					

Time Series



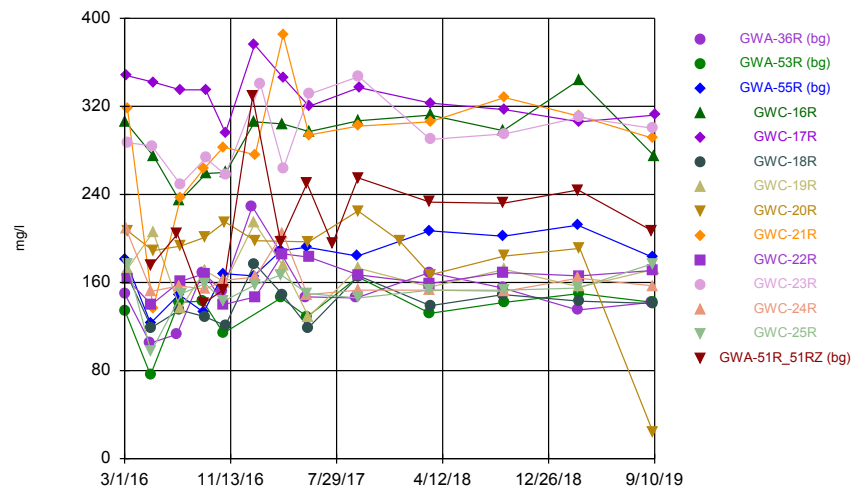
Constituent: pH Analysis Run 11/7/2019 10:24 AM View: cell 3&4 appllI bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



Constituent: Sulfate Analysis Run 11/7/2019 10:24 AM View: cell 3&4 appllI bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/7/2019 10:24 AM View: cell 3&4 appllI bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/1/2016	7.45								
3/2/2016		7.76							
3/3/2016			7.44	7.22 (D)					
3/4/2016					7.24				
3/7/2016						7.7	7.68		
3/8/2016								7.62	6.86
3/9/2016									
5/2/2016	7.31								
5/3/2016		7.8	7.64						
5/4/2016									
5/5/2016						7.85			
5/6/2016									
5/9/2016							7.66	7.72	7.08
5/10/2016				7.08	7.18				
7/6/2016	7.4								
7/7/2016									
7/11/2016		7.82	7.72						
7/12/2016									
7/13/2016				7.05		7.85			
7/14/2016					7.21		7.74	7.69	
7/15/2016									7.2
7/18/2016									
9/7/2016	7.32	7.83							
9/8/2016									
9/9/2016			7.66						7.17
9/12/2016						7.87	7.76	7.52	
9/13/2016					7.17				
9/14/2016									
9/15/2016				7.51					
10/25/2016	7.4								
10/26/2016									
10/27/2016		7.84	7.75						7.14
10/31/2016							7.74	7.51	
11/1/2016					7.18	7.78			
11/2/2016				7.1					
1/5/2017	7.29								
1/6/2017		7.63							
1/9/2017			7.83						
1/11/2017				7.16	7.11	7.75	7.69		
1/12/2017								7.46	7.06
1/13/2017									
1/25/2017									
3/14/2017	7.48								
3/15/2017									
3/16/2017		7.8	7.78						
3/20/2017				7.19		7.86			
3/21/2017					7.24		7.54		7.14
3/22/2017								7.77	
5/16/2017	7.38								
5/18/2017			7.64						
5/19/2017		7.81							
5/22/2017						7.51	7.79	7.5	

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
5/23/2017				6.97	7.21				6.9
5/24/2017									
7/18/2017									
7/19/2017									
9/15/2017	7.35								
9/18/2017			7.66						
9/19/2017		7.84						7.49	7.18
9/20/2017							7.77		
9/21/2017				7.28		7.84			
9/22/2017					7.2				
12/29/2017								7.75 (Y)	
1/9/2018									
3/12/2018	7.26		7.11						
3/13/2018		7.8							
3/14/2018				7.11	7.16	7.51	7.74	7.62	6.99
9/6/2018	7.21								
9/7/2018			7.6	7.08		7.69			
9/10/2018							7.69	7.84	6.96
9/11/2018		7.76			7.13				
3/7/2019	7.48		7.22						
3/8/2019									
3/11/2019				7.21					6.95
3/12/2019		7.7			7.28	7.76	7.6	7.63	
9/4/2019	7.14								
9/5/2019		7.68	7.53						
9/6/2019						7.65		7.75	7.04
9/9/2019				7.13			7.73		
9/10/2019					7.17				

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016			6.95		
3/7/2016	7.61				
3/8/2016				7.4	
3/9/2016		7.54			
5/2/2016					
5/3/2016					
5/4/2016				7.6	7.52 (D)
5/5/2016	7.79		7.58		
5/6/2016		7.5			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					7.42 (D)
7/11/2016					
7/12/2016			7.58		
7/13/2016					
7/14/2016	7.76				
7/15/2016		7.33			
7/18/2016				7.61	
9/7/2016					
9/8/2016					7.4 (D)
9/9/2016					
9/12/2016	7.6				
9/13/2016			7.62	7.56	
9/14/2016		7.47			
9/15/2016					
10/25/2016					
10/26/2016					7.59 (D)
10/27/2016	7.73		7.64	7.69	
10/31/2016					
11/1/2016		7.31			
11/2/2016					
1/5/2017					
1/6/2017					7.51 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	7.68		7.28	7.62	
1/25/2017		7.28			
3/14/2017					
3/15/2017					7.51 (D)
3/16/2017				7.43	
3/20/2017	7.6		7.23		
3/21/2017					
3/22/2017		7.43			
5/16/2017					
5/18/2017					7.64 (D)
5/19/2017			7.15	7.32	
5/22/2017					

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
5/23/2017	7.81				
5/24/2017		7.07			
7/18/2017					7.58
7/19/2017					7.58 (D)
9/15/2017					
9/18/2017					
9/19/2017	7.46		7.54	7.62	7.37 (D)
9/20/2017					
9/21/2017		7.24			
9/22/2017					
12/29/2017					
1/9/2018	7.39 (Y)				
3/12/2018					
3/13/2018	7.49		7.02	7.43	7.62
3/14/2018		7.4			
9/6/2018					
9/7/2018	7.53				7.36
9/10/2018					
9/11/2018		7.78	7.4	7.69	
3/7/2019					
3/8/2019			7.65	7.69	7.55
3/11/2019	7.51				
3/12/2019		7.42			
9/4/2019					7.39
9/5/2019	7.09		7.4	7.59	
9/6/2019		7.32			
9/9/2019					
9/10/2019					

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/1/2016	6.8929								
3/2/2016		2.0407							
3/3/2016			22.316	7.1809 (D)					
3/4/2016					9.3417				
3/7/2016						2.3258	3.3556		
3/8/2016								0.0196 (J)	1.3858
3/9/2016									
5/2/2016	1.6								
5/3/2016		1.86	20.8						
5/4/2016									
5/5/2016						2.42			
5/6/2016									
5/9/2016							3.62	1.15	2.94
5/10/2016				4.6	6.65				
7/6/2016	1.7								
7/7/2016									
7/11/2016		2	17						
7/12/2016									
7/13/2016				2.3		2.5			
7/14/2016					5.7		3.5	1.3	
7/15/2016									3
7/18/2016									
9/7/2016	1.5	1.9							
9/8/2016									
9/9/2016			14						3.2
9/12/2016						2.3	3.3	1.3	
9/13/2016									
9/14/2016					5.8				
9/15/2016				5.6					
10/25/2016	1.8								
10/26/2016									
10/27/2016		2.1	15						3.6
10/31/2016							3.5	1.4	
11/1/2016					6.6				
11/2/2016				7.5					
1/5/2017	4.6								
1/6/2017		2							
1/9/2017			17						
1/11/2017				8.3	6.5	2.5	3.2		
1/12/2017								1.4	3.9
1/13/2017									
1/25/2017									
3/14/2017	2.8								
3/15/2017									
3/16/2017		1.9	15						
3/20/2017				10		2.4			
3/21/2017					6.4		3.4		4.8
3/22/2017								1.7	
5/16/2017	2.1								
5/18/2017			24						
5/19/2017		1.9							
5/22/2017						2.5	3.3	1.5	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
5/23/2017				9.5	6.3				5.4
5/24/2017									
7/19/2017									
9/15/2017	3								
9/18/2017			22						
9/19/2017		2.1						1.3	5.6
9/20/2017							3.4		
9/21/2017				8.9		2.4			
9/22/2017					6.9				
3/12/2018	8.2		22						
3/13/2018		1.9							
3/14/2018				8.8	7	2.2	3.4	1.6	<1
9/6/2018	1.5								
9/7/2018			22.4	6.5		2.2			
9/10/2018							3.4	1.7	4.8
9/11/2018		1.8			5.8				
3/7/2019	4.3		25						
3/8/2019									
3/11/2019				11					3.4
3/12/2019		2.2			25.9	2.6	4.3	1.5	
9/4/2019	1.8								
9/5/2019		1.5	22.7						
9/6/2019						2		1.4	6
9/9/2019				3.8			3.7		
9/10/2019					6				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016			1.0816		
3/7/2016	2.1008				
3/8/2016				1.3157	
3/9/2016		26.4322			
5/2/2016					
5/3/2016					
5/4/2016				1.46	16.8 (D)
5/5/2016	2.16		11.3		
5/6/2016		17.7			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					18 (D)
7/11/2016					
7/12/2016			8.8		
7/13/2016					
7/14/2016	2.3				
7/15/2016		12			
7/18/2016				1.5	
9/7/2016					
9/8/2016					18 (D)
9/9/2016					
9/12/2016					
9/13/2016			5.4	1.5	
9/14/2016		12			
9/15/2016					
10/25/2016					
10/26/2016					20 (D)
10/27/2016	2.3		9.9	1.7	
10/31/2016					
11/1/2016		10			
11/2/2016					
1/5/2017					
1/6/2017					21 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	2.3		7.8	2	
1/25/2017		8.2			
3/14/2017					
3/15/2017					17 (D)
3/16/2017				1.6	
3/20/2017	2.4		2.3		
3/21/2017					
3/22/2017		13			
5/16/2017					
5/18/2017					19 (D)
5/19/2017			2.4	1.5	
5/22/2017					

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 applll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
5/23/2017	2.4				
5/24/2017		10			
7/19/2017					10 (D)
9/15/2017					
9/18/2017					
9/19/2017	2.2		2.3	1.8	22 (D)
9/20/2017					
9/21/2017		16			
9/22/2017					
3/12/2018					
3/13/2018	2.4		1.4	1.7	27.3
3/14/2018		14			
9/6/2018					
9/7/2018	1.8				26.9
9/10/2018					
9/11/2018		14.9	1.7	1.7	
3/7/2019					
3/8/2019			1.9	1.6	23.6
3/11/2019	2				
3/12/2019		17.7			
9/4/2019					22.9
9/5/2019	1.7		1.8	1.6	
9/6/2019		9.5			
9/9/2019					
9/10/2019					

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
3/1/2016	150 (D)								
3/2/2016		134 (D)							
3/3/2016			181 (D)	306 (D)					
3/4/2016					348 (D)				
3/7/2016						167 (D)	172 (D)		
3/8/2016								207 (D)	318 (D)
3/9/2016									
5/2/2016	105 (D)								
5/3/2016		76 (D)	123 (D)						
5/4/2016									
5/5/2016						119 (D)			
5/6/2016									
5/9/2016							206 (D)	189 (D)	136 (D)
5/10/2016				275 (D)	342 (D)				
7/6/2016	113 (D)								
7/7/2016									
7/11/2016		142 (D)	149 (D)						
7/12/2016									
7/13/2016				234 (D)		135 (D)			
7/14/2016					335 (D)		136 (D)	193 (D)	
7/15/2016									237 (D)
7/18/2016									
9/7/2016	169 (D)	143 (D)							
9/8/2016									
9/9/2016			133 (D)						263 (D)
9/12/2016						129 (D)	171 (D)	201 (D)	
9/13/2016									
9/14/2016					335 (D)				
9/15/2016				259 (D)					
10/25/2016	152 (D)								
10/26/2016									
10/27/2016		114 (D)	168 (D)						283 (D)
10/31/2016							160 (D)	215 (D)	
11/1/2016					296 (D)	121 (D)			
11/2/2016				260 (D)					
1/5/2017	229								
1/6/2017									
1/9/2017			166						
1/11/2017				306	376	177	214		
1/12/2017								198	276
1/13/2017									
1/25/2017									
3/14/2017	188								
3/15/2017									
3/16/2017		146	189						
3/20/2017				304		149			
3/21/2017					346		175 (J)		385
3/22/2017									
5/16/2017	147								
5/18/2017			192						
5/19/2017		129							
5/22/2017						119	129	197	

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)	GWA-53R (bg)	GWA-55R (bg)	GWC-16R	GWC-17R	GWC-18R	GWC-19R	GWC-20R	GWC-21R
5/23/2017				297	320				294
5/24/2017									
7/19/2017									
9/15/2017	146								
9/18/2017			184						
9/19/2017		165						225	302
9/20/2017							173		
9/21/2017				307		166			
9/22/2017					337				
12/29/2017								198 (Y)	
3/12/2018	169		207						
3/13/2018		132							
3/14/2018				312	323	139	156	167	306
9/6/2018	155								
9/7/2018			202	298		149			
9/10/2018							172	184	328
9/11/2018		142			317				
3/7/2019	135		212						
3/8/2019									
3/11/2019				344					311
3/12/2019		150 (X)			306	143 (X)	156 (X)	191 (X)	
9/4/2019	142								
9/5/2019		142	183						
9/6/2019						141		24	291
9/9/2019				275			172		
9/10/2019					312				

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

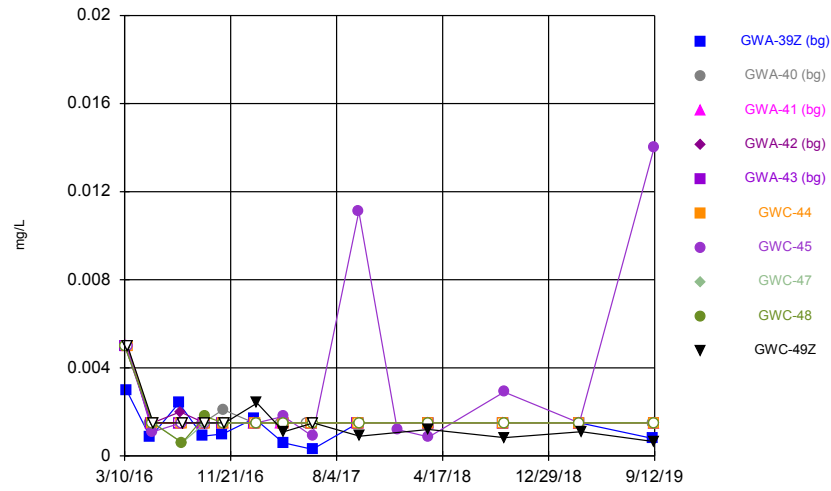
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016			209 (D)		
3/7/2016	163 (D)				
3/8/2016				177 (D)	
3/9/2016		287 (D)			
5/2/2016					
5/3/2016					
5/4/2016				97 (D)	175 (D)
5/5/2016	140 (D)		152 (D)		
5/6/2016		284 (D)			
5/9/2016					
5/10/2016					
7/6/2016					
7/7/2016					204 (D)
7/11/2016					
7/12/2016			157 (D)		
7/13/2016					
7/14/2016	161 (D)				
7/15/2016		249 (D)			
7/18/2016				150 (D)	
9/7/2016					
9/8/2016					141 (D)
9/9/2016					
9/12/2016	168 (D)				
9/13/2016			154 (D)	159 (D)	
9/14/2016		273 (D)			
9/15/2016					
10/25/2016					
10/26/2016					153 (D)
10/27/2016	140 (D)		162 (D)	143 (D)	
10/31/2016					
11/1/2016		258 (D)			
11/2/2016					
1/5/2017					
1/6/2017					329 (D)
1/9/2017					
1/11/2017					
1/12/2017					
1/13/2017	147 (J)		165	158	
1/25/2017		340			
3/14/2017					
3/15/2017					197 (D)
3/16/2017				167	
3/20/2017	186		205 (J)		
3/21/2017					
3/22/2017		264			
5/16/2017					
5/18/2017					250 (D)
5/19/2017			149	150	
5/22/2017					

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:25 AM View: cell 3&4 appll bedrock
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

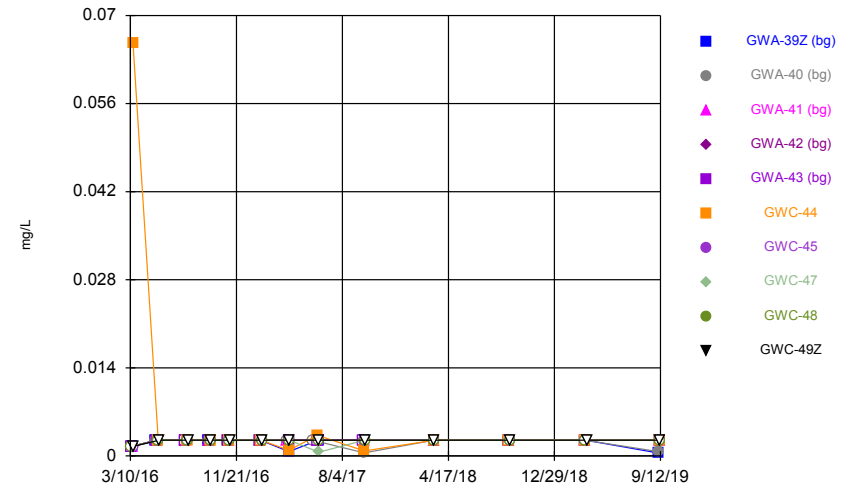
	GWC-22R	GWC-23R	GWC-24R	GWC-25R	GWA-51R_51RZ ...
5/23/2017	183				
5/24/2017		331			
7/19/2017					195 (D)
9/15/2017					
9/18/2017					
9/19/2017	167		153	146	255 (D)
9/20/2017					
9/21/2017		347			
9/22/2017					
12/29/2017					
3/12/2018					
3/13/2018	159		153	153	233
3/14/2018		290			
9/6/2018					
9/7/2018	169				232
9/10/2018					
9/11/2018		295	152	153	
3/7/2019					
3/8/2019			164	155	244
3/11/2019	166				
3/12/2019		310 (X)			
9/4/2019					207
9/5/2019	171		157	177	
9/6/2019		300			
9/9/2019					
9/10/2019					

Time Series



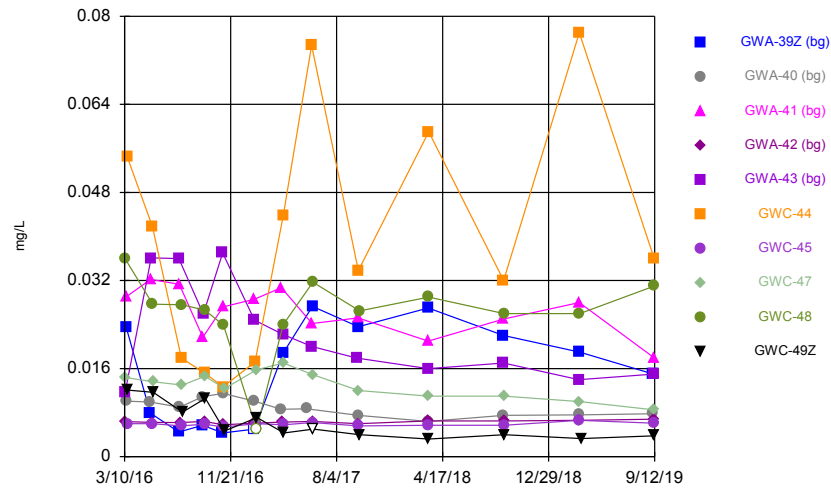
Constituent: Antimony Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



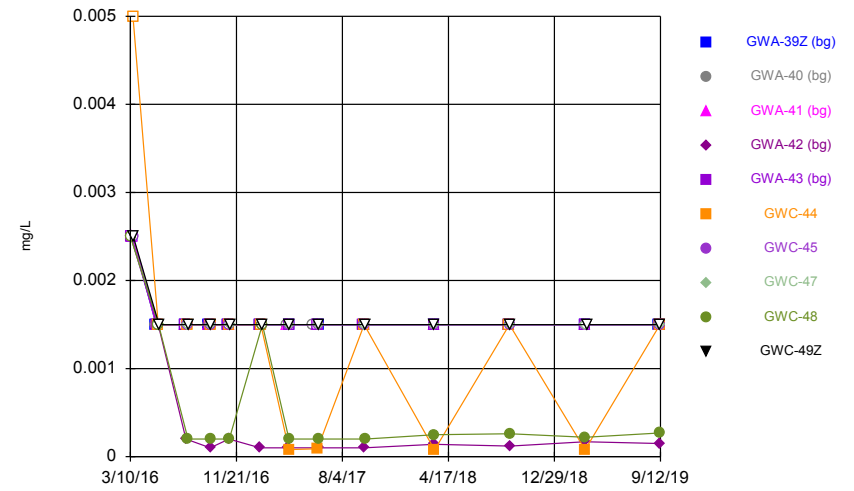
Constituent: Arsenic Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Barium Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Beryllium Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.01	<0.01
3/11/2016				<0.01	<0.01				
3/14/2016	0.003								
3/15/2016		<0.01	<0.01						
3/16/2016						<0.01	<0.01		
3/17/2016									
5/11/2016	0.000839 (J)	<0.003							
5/12/2016			<0.003						
5/13/2016					<0.003				
5/16/2016				<0.003		<0.003	0.00109 (J)		
5/17/2016									<0.003
5/18/2016								<0.003	
7/19/2016	0.0024 (J)				<0.003 (*)				
7/20/2016			<0.003						
7/21/2016		<0.003							
7/22/2016				0.002 (J)					
7/25/2016						<0.003 (*)	<0.003 (*)		
7/27/2016								0.0006 (J)	0.0006 (J)
7/28/2016									
9/15/2016	0.0009 (J)	<0.003	<0.003						
9/16/2016					<0.003				
9/19/2016				<0.003		<0.003	<0.003		
9/20/2016								<0.003	0.0018 (J)
9/21/2016									
11/2/2016	0.001 (J)				<0.003				
11/3/2016		0.0021 (J)	<0.003	<0.003		<0.003			
11/4/2016							<0.003		<0.003
11/7/2016								<0.003	
1/17/2017		<0.003		<0.003					
1/18/2017	0.0017 (J)		<0.003		<0.003				
1/19/2017						<0.003			
1/23/2017							<0.003	<0.003	<0.003
1/24/2017									
3/24/2017		<0.003	<0.003						
3/27/2017				<0.003					
3/28/2017	0.0006 (J)				<0.003	<0.003			<0.003
3/29/2017							0.0018 (J)	<0.003	
3/30/2017									
5/24/2017		<0.003							
6/5/2017						<0.003			
6/6/2017			<0.003		<0.003				
6/7/2017	0.0003 (J)			<0.003			0.0009 (J)		
6/8/2017								<0.003	<0.003 (*)
6/9/2017									
9/22/2017					<0.003				
9/25/2017			<0.003						
9/26/2017	<0.003	<0.003		<0.003		<0.003			
9/27/2017							0.0111	<0.003	
9/29/2017									<0.003
12/29/2017							0.0012 (Y)		
3/14/2018	<0.003	<0.003	<0.003	<0.003	<0.003				
3/15/2018						<0.003	0.00086 (J)	<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.01
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.003
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.003
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.003
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.003 (*)
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	0.0024 (J)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	0.0011 (J)
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.003 (*)
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	0.0009 (J)
12/29/2017	
3/14/2018	
3/15/2018	0.0012 (J)

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

9/12/2018	
9/13/2018	
9/14/2018	0.00083 (J)
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	0.0011 (X)
9/9/2019	
9/10/2019	
9/11/2019	0.00065 (X)
9/12/2019	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.003	<0.003
3/11/2016				<0.003	<0.003				
3/14/2016	<0.003								
3/15/2016		<0.003	<0.003						
3/16/2016						0.0657 (J)	<0.003		
3/17/2016									
5/11/2016	<0.005	<0.005							
5/12/2016			<0.005						
5/13/2016					<0.005				
5/16/2016				<0.005		<0.005	<0.005		
5/17/2016									<0.005
5/18/2016								<0.005	
7/19/2016	<0.005				<0.005				
7/20/2016			<0.005						
7/21/2016		<0.005							
7/22/2016				<0.005					
7/25/2016						<0.005	<0.005		
7/27/2016								<0.005	<0.005
7/28/2016									
9/15/2016	<0.005	<0.005	<0.005						
9/16/2016					<0.005				
9/19/2016				<0.005		<0.005	<0.005		
9/20/2016								<0.005	<0.005
9/21/2016									
11/2/2016	<0.005				<0.005				
11/3/2016		<0.005	<0.005	<0.005		<0.005			
11/4/2016							<0.005		<0.005
11/7/2016								<0.005	
1/17/2017		<0.005	<0.005	<0.005					
1/18/2017	<0.005		<0.005		<0.005				
1/19/2017						<0.005			
1/23/2017							<0.005	<0.005	<0.005
1/24/2017									
3/24/2017		<0.005	<0.005						
3/27/2017				<0.005					
3/28/2017	0.0007 (J)				<0.005	0.0009 (J)			<0.005
3/29/2017							<0.005	<0.005	
3/30/2017									
5/24/2017		<0.005							
6/5/2017						0.0033 (J)			
6/6/2017			<0.005 (*)		<0.005 (*)				
6/7/2017	<0.005			<0.005 (*)			<0.005		
6/8/2017								0.0006 (J)	<0.005
6/9/2017									
9/22/2017					<0.005				
9/25/2017			<0.005						
9/26/2017	<0.005	0.0005 (J)		<0.005		0.0008 (J)			
9/27/2017							<0.005	<0.005	
9/29/2017									<0.005
3/14/2018	<0.005	<0.005	<0.005	<0.005	<0.005				
3/15/2018						<0.005	<0.005	<0.005	<0.005
9/12/2018	<0.005	<0.005	<0.005		<0.005	<0.005			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.003
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.005
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.005
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.005
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.005
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.005
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.005
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.005
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.005
3/14/2018	
3/15/2018	<0.005
9/12/2018	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

9/13/2018	
9/14/2018	<0.005
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.005
9/9/2019	
9/10/2019	
9/11/2019	<0.005
9/12/2019	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								0.0144	0.0361
3/11/2016				0.00639 (J)	0.0116				
3/14/2016	0.0234								
3/15/2016		0.0101	0.0291						
3/16/2016						0.0545	0.00599 (J)		
3/17/2016									
5/11/2016	0.00793 (J)	0.00992 (J)							
5/12/2016			0.0322						
5/13/2016					0.0361				
5/16/2016				0.00622 (J)		0.0418	0.006 (J)		
5/17/2016									0.0277
5/18/2016								0.0136	
7/19/2016	0.0045 (J)				0.036				
7/20/2016			0.0313						
7/21/2016		0.009 (J)							
7/22/2016				0.0062 (J)					
7/25/2016						0.0179	0.0056 (J)		
7/27/2016								0.013	0.0276
7/28/2016									
9/15/2016	0.0057 (J)	0.0109	0.0217						
9/16/2016					0.0259				
9/19/2016				0.0064 (J)		0.0152	0.0059 (J)		
9/20/2016								0.0146	0.0266
9/21/2016									
11/2/2016	0.0043 (J)				0.037				
11/3/2016		0.0115	0.0272	0.0058 (J)		0.0127			
11/4/2016							0.0054 (J)		0.0239
11/7/2016								0.0124	
1/17/2017		0.0101		0.0061 (J)					
1/18/2017	<0.01 (*)		0.0286 (J)		0.0248				
1/19/2017						0.0172			
1/23/2017							0.006 (J)	0.0158	<0.01
1/24/2017									
3/24/2017		0.0086 (J)	0.0307						
3/27/2017				0.0063 (J)					
3/28/2017	0.0188				0.0222	0.0437			0.024
3/29/2017							0.0058 (J)	0.017	
3/30/2017									
5/24/2017		0.0087 (J)							
6/5/2017						0.0747			
6/6/2017			0.0242		0.02				
6/7/2017	0.0273			0.0064 (J)			0.0062 (J)		
6/8/2017								0.0149	0.0317
6/9/2017									
9/22/2017					0.0179				
9/25/2017			0.0252						
9/26/2017	0.0236	0.0075 (J)		0.006 (J)		0.0338			
9/27/2017							0.0056 (J)	0.012	
9/29/2017									0.0265
3/14/2018	0.027	0.0064 (J)	0.021	0.0065 (J)	0.016				
3/15/2018						0.059	0.0057 (J)	0.011	0.029
9/12/2018	0.022	0.0075 (J)	0.025		0.017	0.032			

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
9/13/2018							0.0057 (J)	0.011	0.026
9/14/2018				0.0065 (J)					
3/13/2019		0.0076 (X)			0.014				
3/14/2019			0.028	0.0066 (X)		0.077	0.0066 (X)		
3/15/2019	0.019							0.01	0.026
3/19/2019									
9/9/2019	0.015	0.0078 (X)							
9/10/2019			0.018	0.0068 (X)					
9/11/2019					0.015	0.036	0.0061 (X)		0.031
9/12/2019								0.0085 (X)	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	0.0121
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	0.0117
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	0.0081 (J)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	0.0106
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	0.0047 (J)
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	0.0071 (J)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	0.0043 (J)
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.01 (*)
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	0.004 (J)
3/14/2018	
3/15/2018	0.0032 (J)
9/12/2018	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z
9/13/2018	
9/14/2018	0.004 (J)
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	0.0033 (X)
9/9/2019	
9/10/2019	
9/11/2019	0.0038 (X)
9/12/2019	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.005	<0.005
3/11/2016				<0.005	<0.005				
3/14/2016	<0.005								
3/15/2016		<0.005	<0.005						
3/16/2016						<0.01	<0.005		
3/17/2016									
5/11/2016	<0.003	<0.003							
5/12/2016			<0.003						
5/13/2016					<0.003				
5/16/2016				<0.003		<0.003	<0.003		
5/17/2016									<0.003
5/18/2016								<0.003	
7/19/2016	<0.003				<0.003				
7/20/2016			<0.003						
7/21/2016		<0.003							
7/22/2016				0.0002 (J)					
7/25/2016						<0.003	<0.003		
7/27/2016								<0.003	0.0002 (J)
7/28/2016									
9/15/2016	<0.003	<0.003	<0.003						
9/16/2016					<0.003				
9/19/2016				0.0001 (J)		<0.003	<0.003		
9/20/2016								<0.003	0.0002 (J)
9/21/2016									
11/2/2016	<0.003				<0.003				
11/3/2016		<0.003	<0.003	0.0002 (J)		<0.003			
11/4/2016							<0.003		0.0002 (J)
11/7/2016								<0.003	
1/17/2017		<0.003		0.0001 (J)					
1/18/2017	<0.003		<0.003		<0.003				
1/19/2017						<0.003			
1/23/2017							<0.003	<0.003	<0.003
1/24/2017									
3/24/2017		<0.003	<0.003						
3/27/2017				0.0001 (J)					
3/28/2017	<0.003				<0.003	8E-05 (J)			0.0002 (J)
3/29/2017							<0.003	<0.003	
3/30/2017									
5/24/2017		<0.003							
6/5/2017						9E-05 (J)			
6/6/2017			<0.003		<0.003				
6/7/2017	<0.003			0.0001 (J)			<0.003		
6/8/2017								<0.003	0.0002 (J)
6/9/2017									
9/22/2017					<0.003				
9/25/2017			<0.003						
9/26/2017	<0.003	<0.003		0.0001 (J)		<0.003			
9/27/2017							<0.003	<0.003	
9/29/2017									0.0002 (J)
3/14/2018	<0.003	<0.003	<0.003	0.00014 (J)	<0.003				
3/15/2018						7.7E-05 (J)	<0.003	<0.003	0.00025 (J)
9/12/2018	<0.003	<0.003	<0.003		<0.003	<0.003			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.005
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.003
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.003
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.003
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.003
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.003
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.003
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.003
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.003
3/14/2018	
3/15/2018	<0.003
9/12/2018	

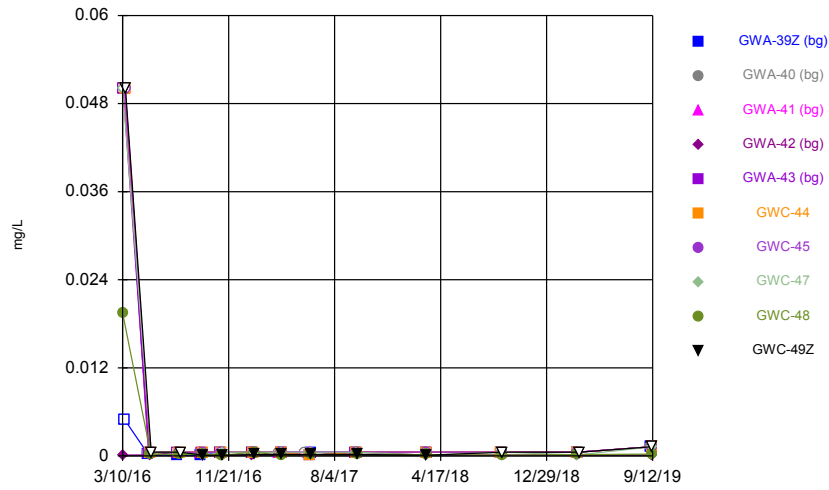
Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

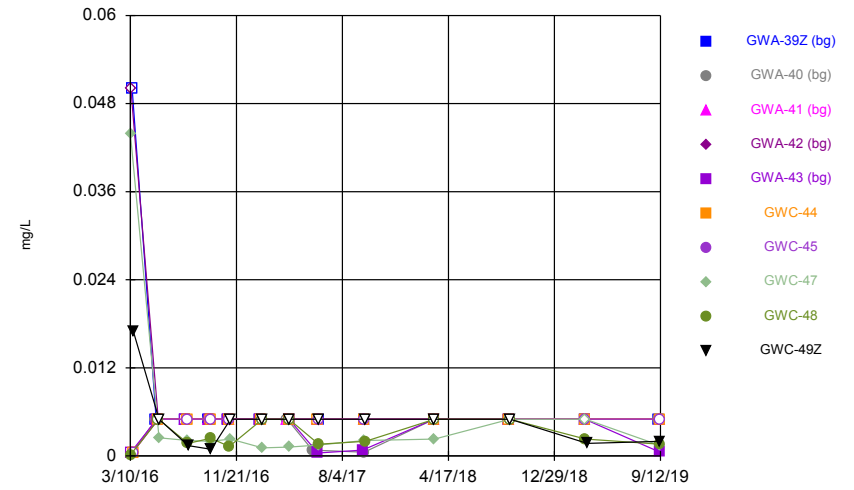
9/13/2018	
9/14/2018	<0.003
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.003
9/9/2019	
9/10/2019	
9/11/2019	<0.003
9/12/2019	

Time Series



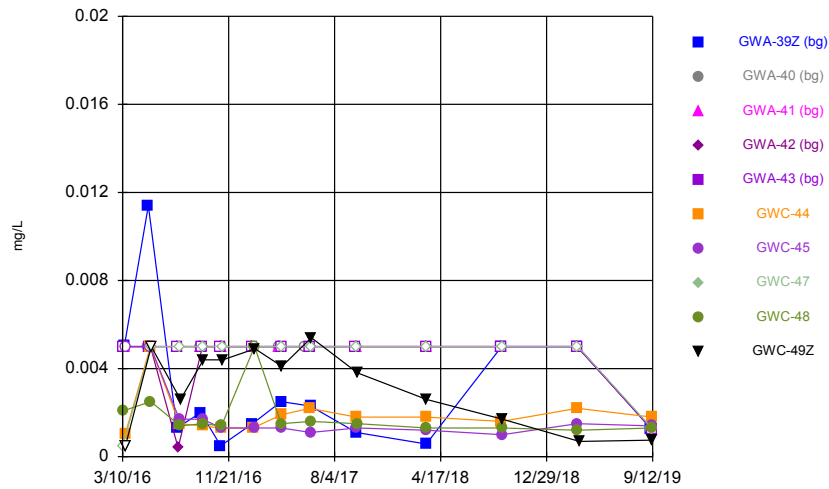
Constituent: Cadmium Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



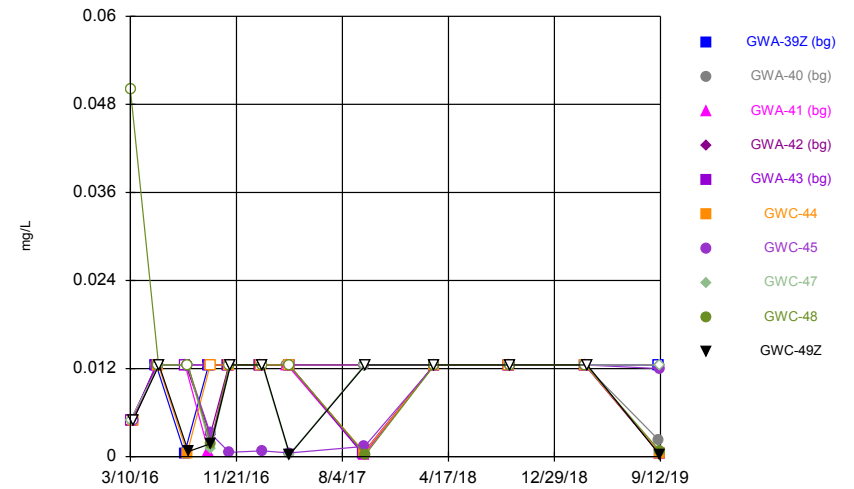
Constituent: Chromium Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Cobalt Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Copper Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.1	0.0195 (J)
3/11/2016				0.000121 (J)	<0.1				
3/14/2016	<0.01								
3/15/2016		<0.1	<0.1						
3/16/2016						<0.1	<0.1		
3/17/2016									
5/11/2016	0.000177 (J)	<0.001							
5/12/2016			<0.001						
5/13/2016					<0.001				
5/16/2016				0.000145 (J)		<0.001	<0.001		
5/17/2016									0.000251 (J)
5/18/2016								<0.001	
7/19/2016	0.0001 (J)				<0.001				
7/20/2016			<0.001						
7/21/2016		<0.001							
7/22/2016				<0.001					
7/25/2016						<0.001	<0.001		
7/27/2016								<0.001	0.0002 (J)
7/28/2016									
9/15/2016	8E-05 (J)	<0.001	<0.001						
9/16/2016					<0.001				
9/19/2016				0.0001 (J)		<0.001	<0.001		
9/20/2016								8E-05 (J)	0.0002 (J)
9/21/2016									
11/2/2016	<0.001				<0.001				
11/3/2016		<0.001	<0.001	8E-05 (J)		<0.001			
11/4/2016							<0.001		0.0001 (J)
11/7/2016								<0.001	
1/17/2017		<0.001		0.0001 (J)					
1/18/2017	<0.001		<0.001		<0.001				
1/19/2017						<0.001			
1/23/2017							<0.001	<0.001	<0.001
1/24/2017									
3/24/2017		<0.001	<0.001						
3/27/2017				0.0002 (J)					
3/28/2017	<0.001				<0.001	<0.001			0.0001 (J)
3/29/2017							<0.001	<0.001	
3/30/2017									
5/24/2017		<0.001							
6/5/2017						8E-05 (J)			
6/6/2017			<0.001		8E-05 (J)				
6/7/2017	<0.001			0.0001 (J)			<0.001		
6/8/2017								<0.001	0.0002 (J)
6/9/2017									
9/22/2017					<0.001				
9/25/2017			<0.001						
9/26/2017	<0.001	<0.001		<0.001		<0.001			
9/27/2017							<0.001	<0.001	
9/29/2017									0.0002 (J)
3/14/2018	<0.001	<0.001	<0.001	0.00011 (J)	<0.001				
3/15/2018						<0.001	<0.001	9.3E-05 (J)	0.00018 (J)
9/12/2018	<0.001	<0.001	<0.001		<0.001	<0.001			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
9/13/2018							<0.001	<0.001	0.00012 (J)
9/14/2018				0.00013 (J)					
3/13/2019		<0.001			<0.001				
3/14/2019			<0.001	0.00013 (X)		<0.001	<0.001		
3/15/2019	<0.001							0.00015 (X)	0.00018 (X)
3/19/2019									
9/9/2019	<0.0025	<0.0025							
9/10/2019			<0.0025	0.00014 (X)					
9/11/2019					<0.0025	<0.0025	<0.0025		0.00024 (X)
9/12/2019								<0.0025	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.1
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.001
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.001
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	9E-05 (J)
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	0.0001 (J)
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	0.0002 (J)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	0.0002 (J)
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	0.0002 (J)
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	0.0002 (J)
3/14/2018	
3/15/2018	0.0001 (J)
9/12/2018	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

9/13/2018	
9/14/2018	<0.001
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.001
9/9/2019	
9/10/2019	
9/11/2019	<0.0025
9/12/2019	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								0.0439 (J)	0.000148 (J)
3/11/2016				<0.1	<0.001				
3/14/2016	<0.1								
3/15/2016		<0.001	<0.001						
3/16/2016						<0.001	<0.001		
3/17/2016									
5/11/2016	<0.01	<0.01							
5/12/2016			<0.01						
5/13/2016					<0.01				
5/16/2016				<0.01		<0.01	<0.01		
5/17/2016									<0.01
5/18/2016								0.00248 (J)	
7/19/2016	<0.01				<0.01				
7/20/2016			<0.01						
7/21/2016		<0.01							
7/22/2016				<0.01					
7/25/2016						<0.01	<0.01		
7/27/2016								0.0021 (J)	0.0017 (J)
7/28/2016									
9/15/2016	<0.01	<0.01	<0.01						
9/16/2016					<0.01				
9/19/2016				<0.01		<0.01	<0.01		
9/20/2016								0.002 (J)	0.0024 (J)
9/21/2016									
11/2/2016	<0.01				<0.01				
11/3/2016		<0.01	<0.01	<0.01		<0.01			
11/4/2016							<0.01		0.0013 (J)
11/7/2016								0.0023 (J)	
1/17/2017		<0.01	<0.01	<0.01					
1/18/2017	<0.01		<0.01		<0.01				
1/19/2017						<0.01			
1/23/2017							<0.01	0.0011 (J)	<0.01
1/24/2017									
3/24/2017		<0.01 (*)	<0.01 (*)						
3/27/2017				<0.01					
3/28/2017	<0.01 (*)				<0.01 (*)	<0.01			<0.01 (*)
3/29/2017							<0.01	0.0012 (J)	
3/30/2017									
5/24/2017		0.0008 (J)							
6/5/2017						<0.01			
6/6/2017			<0.01		0.0004 (J)				
6/7/2017	<0.01			<0.01			<0.01		
6/8/2017								0.0015 (J)	0.0016 (J)
6/9/2017									
9/22/2017					0.0008 (J)				
9/25/2017			<0.01						
9/26/2017	<0.01	0.0005 (J)		<0.01		<0.01			
9/27/2017							<0.01	0.0021 (J)	
9/29/2017									0.002 (J)
3/14/2018	<0.01	<0.01	<0.01	<0.01	<0.01				
3/15/2018						<0.01	<0.01	0.0023 (J)	<0.01
9/12/2018	<0.01	<0.01	<0.01		<0.01	<0.01			

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
9/13/2018							<0.01	<0.01	<0.01
9/14/2018				<0.01					
3/13/2019		<0.01			<0.01				
3/14/2019			<0.01	<0.01		<0.01	<0.01		
3/15/2019	<0.01							<0.01	0.0023 (X)
3/19/2019									
9/9/2019	<0.01	<0.01							
9/10/2019			<0.01	<0.01					
9/11/2019					0.00051 (X)	<0.01	<0.01		0.0016 (X)
9/12/2019								0.0014 (X)	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	0.017 (J)
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.01
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	0.0014 (J)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	0.0009 (J)
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.01
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.01
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.01
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.01
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.01
3/14/2018	
3/15/2018	<0.01
9/12/2018	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z
9/13/2018	
9/14/2018	<0.01
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	0.0017 (X)
9/9/2019	
9/10/2019	
9/11/2019	0.002 (X)
9/12/2019	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.001	0.00207 (J)
3/11/2016				<0.01	<0.01				
3/14/2016	0.00503 (J)								
3/15/2016		<0.01	<0.01						
3/16/2016						0.00101 (J)	<0.01		
3/17/2016									
5/11/2016	0.0114	<0.01							
5/12/2016			<0.01						
5/13/2016					<0.01				
5/16/2016				<0.01		<0.01	<0.01		
5/17/2016									0.0025 (J)
5/18/2016								<0.01	
7/19/2016	0.0013 (J)				<0.01				
7/20/2016			<0.01						
7/21/2016		<0.01							
7/22/2016				0.0004 (J)					
7/25/2016						0.0015 (J)	0.0017 (J)		
7/27/2016								<0.01	0.0014 (J)
7/28/2016									
9/15/2016	0.002 (J)	<0.01	<0.01						
9/16/2016					<0.01				
9/19/2016				<0.01		0.0014 (J)	0.0017 (J)		
9/20/2016								<0.01	0.0015 (J)
9/21/2016									
11/2/2016	0.0005 (J)				<0.01				
11/3/2016		<0.01	<0.01	<0.01		0.0013 (J)			
11/4/2016							0.0013 (J)		0.0014 (J)
11/7/2016								<0.01	
1/17/2017		<0.01		<0.01					
1/18/2017	0.0015 (J)		<0.01		<0.01				
1/19/2017						0.0013 (J)			
1/23/2017							0.0013 (J)	<0.01	<0.01
1/24/2017									
3/24/2017		<0.01	<0.01						
3/27/2017				<0.01					
3/28/2017	0.0025 (J)				<0.01	0.0019 (J)			0.0015 (J)
3/29/2017							0.0013 (J)	<0.01	
3/30/2017									
5/24/2017		<0.01							
6/5/2017						0.0022 (J)			
6/6/2017			<0.01		<0.01				
6/7/2017	0.0023 (J)			<0.01			0.0011 (J)		
6/8/2017								<0.01	0.0016 (J)
6/9/2017									
9/22/2017					<0.01				
9/25/2017			<0.01						
9/26/2017	0.0011 (J)	<0.01		<0.01		0.0018 (J)			
9/27/2017							0.0013 (J)	<0.01	
9/29/2017									0.0015 (J)
3/14/2018	0.00058 (J)	<0.01	<0.01	<0.01	<0.01				
3/15/2018						0.0018 (J)	0.0012 (J)	<0.01	0.0013 (J)
9/12/2018	<0.01	<0.01	<0.01		<0.01	0.0016 (J)			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
9/13/2018							0.001 (J)	<0.01	0.0013 (J)
9/14/2018				<0.01					
3/13/2019		<0.01			<0.01				
3/14/2019			<0.01	<0.01		0.0022 (X)	0.0015 (X)		
3/15/2019	<0.01							<0.01	0.0012 (X)
3/19/2019									
9/9/2019	<0.0025	<0.0025							
9/10/2019			<0.0025	<0.0025					
9/11/2019					<0.0025	0.0018 (X)	0.0014 (X)		0.0013 (X)
9/12/2019								<0.0025	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.001
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.01
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	0.0026 (J)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	0.0044 (J)
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	0.0044 (J)
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	0.0049 (J)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	0.0041 (J)
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	0.0054 (J)
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	0.0038 (J)
3/14/2018	
3/15/2018	0.0026 (J)
9/12/2018	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z
9/13/2018	
9/14/2018	0.0017 (J)
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	0.00069 (X)
9/9/2019	
9/10/2019	
9/11/2019	0.00075 (X)
9/12/2019	

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.01
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.025
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	0.0007 (J)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	0.0018 (J)
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.025
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.025
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	0.0003 (J)
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.025
3/14/2018	
3/15/2018	<0.025
9/12/2018	
9/13/2018	
9/14/2018	<0.025
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.025

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

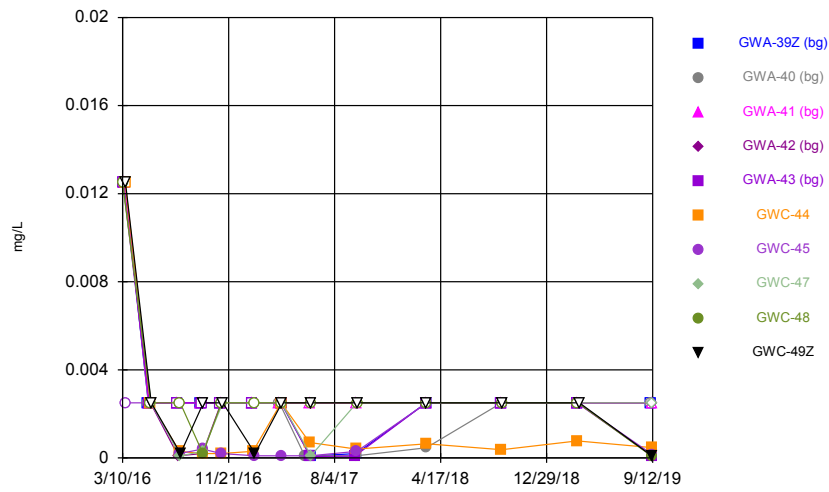
9/9/2019

9/10/2019

9/11/2019 0.00021 (X)

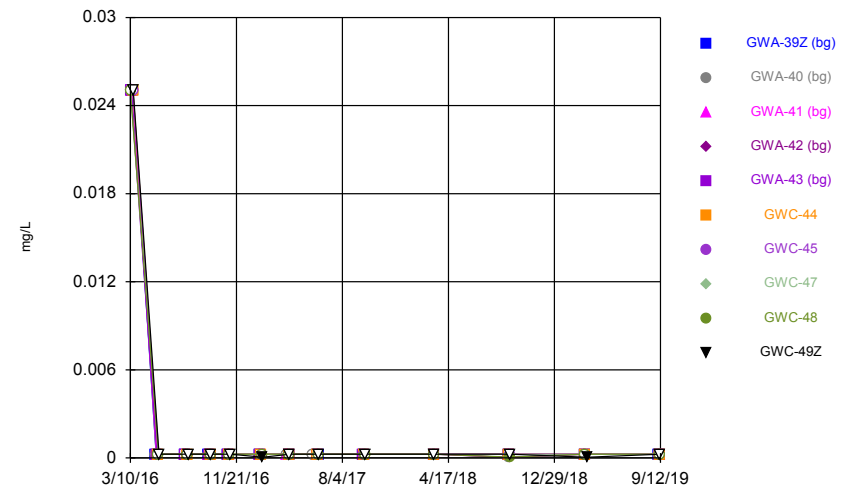
9/12/2019

Time Series



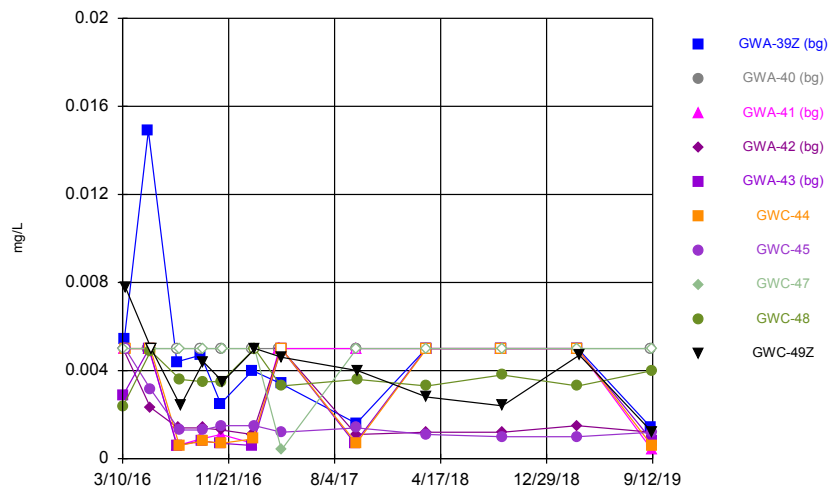
Constituent: Lead Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



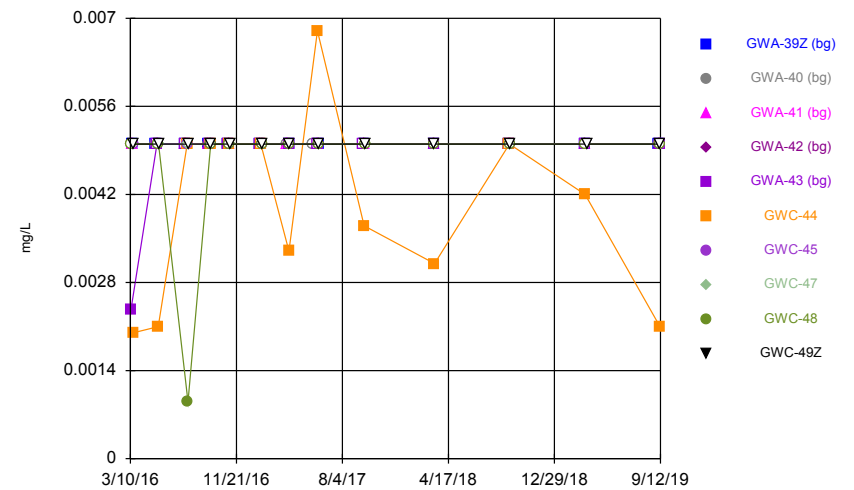
Constituent: Mercury Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Nickel Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Selenium Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.025	<0.025
3/11/2016				<0.025	<0.025				
3/14/2016	<0.025								
3/15/2016		<0.025	<0.025						
3/16/2016						<0.025	<0.005 (U)		
3/17/2016									
5/11/2016	<0.005	<0.005							
5/12/2016			<0.005						
5/13/2016					<0.005				
5/16/2016				<0.005		<0.005	<0.005		
5/17/2016									<0.005
5/18/2016								<0.005	
7/19/2016	<0.005				<0.005				
7/20/2016			<0.005						
7/21/2016		<0.005							
7/22/2016				0.0001 (J)					
7/25/2016						0.0003 (J)	0.0002 (J)		
7/27/2016								9E-05 (J)	<0.005
7/28/2016									
9/15/2016	<0.005	<0.005	<0.005						
9/16/2016					<0.005				
9/19/2016				0.0002 (J)		0.0002 (J)	0.0004 (J)		
9/20/2016								0.0003 (J)	0.0002 (J)
9/21/2016									
11/2/2016	<0.005				<0.005				
11/3/2016		<0.005	<0.005	<0.005		0.0002 (J)			
11/4/2016							0.0002 (J)		<0.005
11/7/2016								<0.005	
1/17/2017		<0.005	<0.005	<0.005					
1/18/2017	<0.005		<0.005		<0.005				
1/19/2017						0.0003 (J)			
1/23/2017							0.0001 (J)	<0.005	<0.005
1/24/2017									
3/24/2017		<0.005 (*)	<0.005						
3/27/2017				<0.005					
3/28/2017	<0.005 (*)				<0.005	<0.005 (*)			<0.005 (*)
3/29/2017							0.0001 (J)	<0.005	
3/30/2017									
5/24/2017		0.0001 (J)							
6/5/2017						0.0007 (J)			
6/6/2017			<0.005		7E-05 (J)				
6/7/2017	8E-05 (J)			<0.005			0.0001 (J)		
6/8/2017								0.0001 (J)	<0.005
6/9/2017									
9/22/2017					8E-05 (J)				
9/25/2017			<0.005						
9/26/2017	0.0002 (J)	0.0001 (J)		<0.005		0.0004 (J)			
9/27/2017							0.0003 (J)	<0.005	
9/29/2017									<0.005
3/14/2018	<0.005	0.00046 (J)	<0.005	<0.005	<0.005				
3/15/2018						0.00064 (J)	<0.005	<0.005	<0.005
9/12/2018	<0.005	<0.005	<0.005		<0.005	0.00037 (J)			

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.025
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.005
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	0.0002 (J)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.005 (*)
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.005
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	0.0002 (J)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.005
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.005
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.005
3/14/2018	
3/15/2018	<0.005
9/12/2018	

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z
9/13/2018	
9/14/2018	<0.005
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.005
9/9/2019	
9/10/2019	
9/11/2019	8.2E-05 (X)
9/12/2019	

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.05	<0.05
3/11/2016				<0.05	<0.05				
3/14/2016	<0.05								
3/15/2016		<0.05	<0.05						
3/16/2016						<0.05	<0.05		
3/17/2016									
5/11/2016	<0.0005	<0.0005							
5/12/2016			<0.0005						
5/13/2016					<0.0005				
5/16/2016				<0.0005		<0.0005	<0.0005		
5/17/2016									<0.0005
5/18/2016								<0.0005	
7/19/2016	<0.0005				<0.0005				
7/20/2016			<0.0005						
7/21/2016		<0.0005							
7/22/2016				<0.0005					
7/25/2016						<0.0005	<0.0005		
7/27/2016								<0.0005	<0.0005
7/28/2016									
9/15/2016	<0.0005	<0.0005	<0.0005						
9/16/2016					<0.0005				
9/19/2016				<0.0005		<0.0005	<0.0005		
9/20/2016								<0.0005	<0.0005
9/21/2016									
11/2/2016	<0.0005				<0.0005				
11/3/2016		<0.0005	<0.0005	<0.0005		<0.0005			
11/4/2016							<0.0005		<0.0005
11/7/2016								<0.0005	
1/17/2017		<0.0005	<0.0005	<0.0005					
1/18/2017	<0.0005		<0.0005		<0.0005				
1/19/2017						<0.0005			
1/23/2017							<0.0005	<0.0005	<0.0005
1/24/2017									
3/24/2017		<0.0005	<0.0005						
3/27/2017				<0.0005					
3/28/2017	<0.0005				<0.0005	<0.0005			<0.0005
3/29/2017							<0.0005 (*)	<0.0005 (*)	
3/30/2017									
5/24/2017		<0.0005							
6/5/2017						<0.0005			
6/6/2017			<0.0005		<0.0005				
6/7/2017	<0.0005			<0.0005			<0.0005		
6/8/2017								<0.0005	<0.0005
6/9/2017									
9/22/2017					<0.0005				
9/25/2017			<0.0005						
9/26/2017	<0.0005	<0.0005		<0.0005		<0.0005			
9/27/2017							<0.0005	<0.0005	
9/29/2017									<0.0005
3/14/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
3/15/2018						<0.0005	<0.0005	<0.0005	<0.0005
9/12/2018	<0.0005	3.8E-05 (J)	<0.0005		<0.0005	<0.0005			

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
9/13/2018							<0.0005	<0.0005	6.2E-05 (J)
9/14/2018				3.8E-05 (J)					
3/13/2019		<0.0005			<0.0005				
3/14/2019			<0.0005	<0.0005		<0.0005	<0.0005		
3/15/2019	<0.0005							<0.0005	<0.0005
3/19/2019									
9/9/2019	<0.0005	<0.0005							
9/10/2019			<0.0005	<0.0005					
9/11/2019					<0.0005	<0.0005	<0.0005		<0.0005
9/12/2019								<0.0005	

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.05
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.0005
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.0005
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.0005
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.0005
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	5E-05 (J)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.0005 (*)
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.0005
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.0005
3/14/2018	
3/15/2018	<0.0005
9/12/2018	

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z
9/13/2018	
9/14/2018	<0.0005
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	4.5E-05 (X)
9/9/2019	
9/10/2019	
9/11/2019	<0.0005
9/12/2019	

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	0.00778 (J)
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.01
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	0.0024 (J)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	0.0044 (J)
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	0.0035 (J)
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	0.005 (J)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	0.0046 (J)
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	0.004 (J)
3/14/2018	
3/15/2018	0.0028 (J)
9/12/2018	
9/13/2018	
9/14/2018	0.0024 (J)
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	0.0047 (X)

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

9/9/2019

9/10/2019

9/11/2019 0.0012 (X)

9/12/2019

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.01	<0.01
3/11/2016				<0.01	0.00236 (J)				
3/14/2016	<0.01								
3/15/2016		<0.01	<0.01						
3/16/2016						0.002 (J)	<0.01		
3/17/2016									
5/11/2016	<0.01	<0.01							
5/12/2016			<0.01						
5/13/2016					<0.01				
5/16/2016				<0.01		0.0021 (J)	<0.01		
5/17/2016									<0.01
5/18/2016								<0.01	
7/19/2016	<0.01				<0.01				
7/20/2016			<0.01						
7/21/2016		<0.01							
7/22/2016				<0.01					
7/25/2016						<0.01	<0.01		
7/27/2016								<0.01	0.0009 (J)
7/28/2016									
9/15/2016	<0.01	<0.01	<0.01						
9/16/2016					<0.01				
9/19/2016				<0.01		<0.01	<0.01		
9/20/2016								<0.01	<0.01
9/21/2016									
11/2/2016	<0.01				<0.01				
11/3/2016		<0.01	<0.01	<0.01		<0.01			
11/4/2016							<0.01		<0.01
11/7/2016								<0.01	
1/17/2017		<0.01	<0.01	<0.01					
1/18/2017	<0.01		<0.01		<0.01				
1/19/2017						<0.01			
1/23/2017							<0.01	<0.01	<0.01
1/24/2017									
3/24/2017		<0.01	<0.01						
3/27/2017				<0.01					
3/28/2017	<0.01				<0.01	0.0033 (J)			<0.01
3/29/2017							<0.01	<0.01	
3/30/2017									
5/24/2017		<0.01							
6/5/2017						0.0068 (J)			
6/6/2017			<0.01		<0.01				
6/7/2017	<0.01			<0.01			<0.01		
6/8/2017								<0.01	<0.01
6/9/2017									
9/22/2017					<0.01				
9/25/2017			<0.01						
9/26/2017	<0.01	<0.01		<0.01		0.0037 (J)			
9/29/2017									<0.01
3/14/2018	<0.01	<0.01	<0.01	<0.01	<0.01				
3/15/2018						0.0031 (J)	<0.01	<0.01	<0.01
9/12/2018	<0.01	<0.01	<0.01		<0.01	<0.01			
9/13/2018							<0.01	<0.01	<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.01
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.01
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.01
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.01
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.01
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.01
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.01
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.01
9/22/2017	
9/25/2017	
9/26/2017	
9/29/2017	<0.01
3/14/2018	
3/15/2018	<0.01
9/12/2018	
9/13/2018	

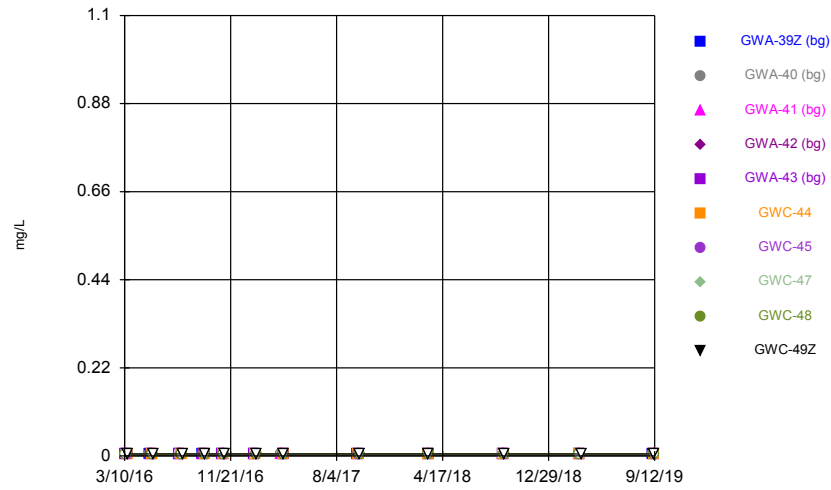
Time Series

Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

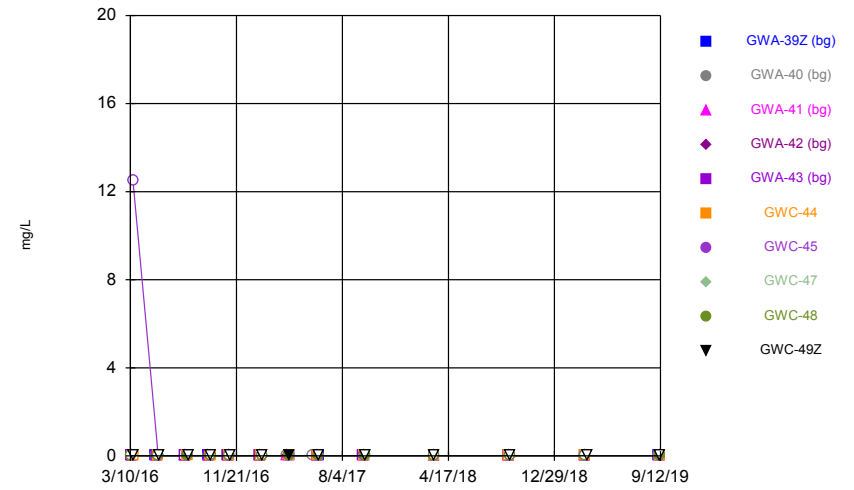
9/14/2018	<0.01
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.01
9/9/2019	
9/10/2019	
9/11/2019	<0.01
9/12/2019	

Time Series



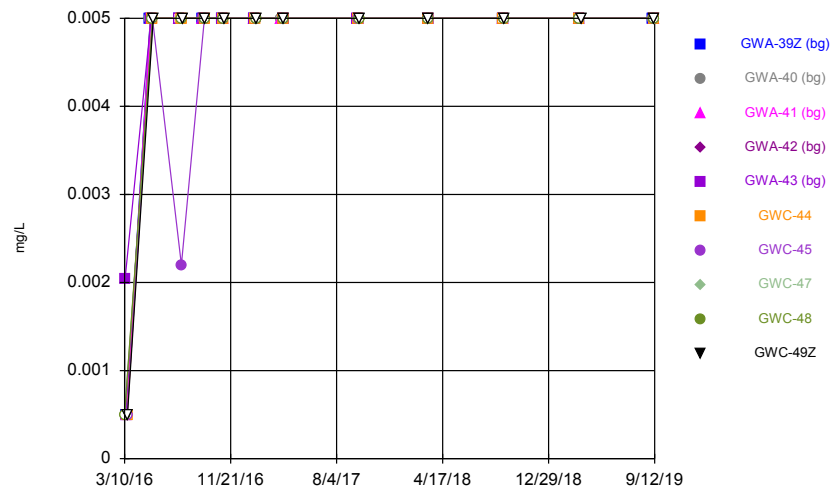
Constituent: Silver Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



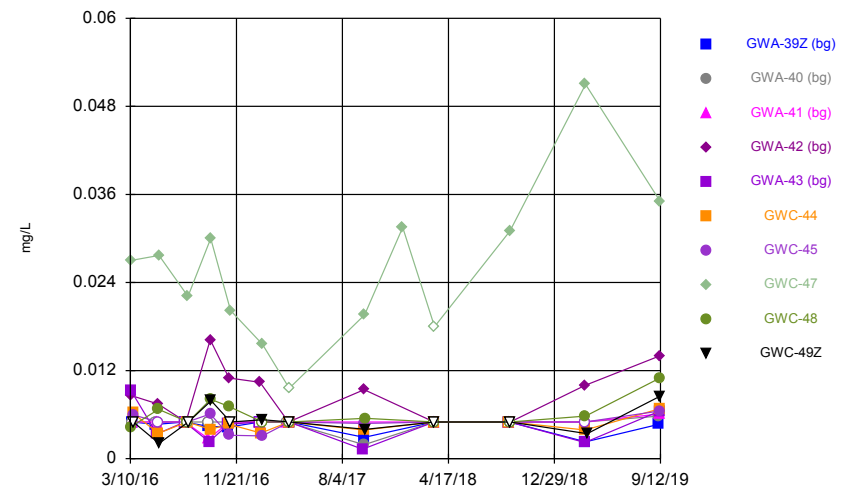
Constituent: Thallium Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Vanadium Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Zinc Analysis Run 11/7/2019 10:36 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.01
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.01
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.01
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.01
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.01
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.01
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.01
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.01
3/14/2018	
3/15/2018	<0.01
9/12/2018	
9/13/2018	
9/14/2018	<0.01
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.01

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

9/9/2019

9/10/2019

9/11/2019 <0.01

9/12/2019

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.01	<0.01
3/11/2016				<0.01	<0.01				
3/14/2016	<0.01								
3/15/2016		<0.01	<0.01						
3/16/2016						<0.001 (U)	<25		
3/17/2016									
5/11/2016	<0.001	<0.001							
5/12/2016			<0.001						
5/13/2016					<0.001				
5/16/2016				<0.001		<0.001	<0.001		
5/17/2016									<0.001
5/18/2016								<0.001	
7/19/2016	<0.001 (*)				<0.001 (*)				
7/20/2016			<0.001						
7/21/2016		<0.001							
7/22/2016				0.0002 (J)					
7/25/2016						<0.001	<0.001		
7/27/2016								9E-05 (J)	9E-05 (J)
7/28/2016									
9/15/2016	<0.001	<0.001	<0.001						
9/16/2016					<0.001				
9/19/2016				<0.001		<0.001	<0.001		
9/20/2016								<0.001	<0.001
9/21/2016									
11/2/2016	<0.001				<0.001				
11/3/2016		<0.001	<0.001	<0.001		<0.001			
11/4/2016							<0.001		<0.001
11/7/2016								<0.001	
1/17/2017		<0.001	<0.001	<0.001					
1/18/2017	<0.001		<0.001		<0.001				
1/19/2017						<0.001			
1/23/2017							<0.001	<0.001	<0.001
1/24/2017									
3/24/2017		<0.001	<0.001						
3/27/2017				<0.001					
3/28/2017	5E-05 (J)				5E-05 (J)	5E-05 (J)			6E-05 (J)
3/29/2017							<0.001	7E-05 (J)	
3/30/2017									
5/24/2017		<0.001							
6/5/2017						5E-05 (J)			
6/6/2017			<0.001		<0.001				
6/7/2017	<0.001			<0.001			<0.001		
6/8/2017								<0.001	8E-05 (J)
6/9/2017									
9/22/2017					<0.001				
9/25/2017			<0.001						
9/26/2017	7E-05 (J)	<0.001		<0.001		<0.001			
9/27/2017							<0.001	6E-05 (J)	
9/29/2017									9E-05 (J)
3/14/2018	<0.001	<0.001	<0.001	<0.001	<0.001				
3/15/2018						<0.001	<0.001	<0.001	<0.001
9/12/2018	<0.001	<0.001	<0.001		<0.001	<0.001			

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.01
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.001
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.001
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.001
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.001
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.001
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	5E-05 (J)
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.001
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.001
3/14/2018	
3/15/2018	<0.001
9/12/2018	

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

9/13/2018	
9/14/2018	<0.001
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.001
9/9/2019	
9/10/2019	
9/11/2019	<0.001
9/12/2019	

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.001
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.01
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.01
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.01
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.01
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.01
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.01
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.01
3/14/2018	
3/15/2018	<0.01
9/12/2018	
9/13/2018	
9/14/2018	<0.01
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.01

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

9/9/2019	
9/10/2019	
9/11/2019	<0.01
9/12/2019	

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								0.027	0.00432 (J)
3/11/2016				0.00862 (J)	0.0093 (J)				
3/14/2016	<0.01								
3/15/2016		<0.01	<0.01						
3/16/2016						0.00622 (J)	0.00599 (J)		
3/17/2016									
5/11/2016	0.00467 (J)	<0.01							
5/12/2016			<0.01						
5/13/2016					0.00336 (J)				
5/16/2016				0.00744 (J)		0.00345 (J)	<0.01		
5/17/2016									0.00672 (J)
5/18/2016								0.0277	
7/19/2016	<0.01 (*)				<0.01 (*)				
7/20/2016			<0.01						
7/21/2016		<0.01 (*)							
7/22/2016				<0.01 (*)					
7/25/2016						<0.01 (*)	<0.01 (*)		
7/27/2016								0.0221	<0.01 (*)
7/28/2016									
9/15/2016	0.0044 (J)	<0.01	0.0027 (J)						
9/16/2016					0.0023 (J)				
9/19/2016				0.0162		0.004 (J)	0.0061 (J)		
9/20/2016								0.03	0.0081 (J)
9/21/2016									
11/2/2016	0.0043 (J)				0.0047 (J)				
11/3/2016		<0.01	<0.01	0.011		0.0047 (J)			
11/4/2016							0.0032 (J)		0.0071 (J)
11/7/2016								0.0202	
1/17/2017		<0.01		0.0104					
1/18/2017	<0.01 (*)		<0.01 (*)		<0.01				
1/19/2017						0.0035 (J)			
1/23/2017							0.0031 (J)	0.0156	<0.01
1/24/2017									
3/24/2017		<0.01 (*)	<0.01 (*)						
3/27/2017				<0.01 (*)					
3/28/2017	<0.01 (*)				<0.01 (*)	<0.01 (*)			<0.01 (*)
3/29/2017							<0.01 (*)	<0.0192 (*)	
3/30/2017									
9/22/2017					0.0013 (J)				
9/25/2017			<0.01						
9/26/2017	0.0029 (J)	0.0019 (J)		0.0094 (J)		0.0039 (J)			
9/27/2017							0.0048 (J)	0.0196	
9/29/2017									0.0055 (J)
12/28/2017								0.0315 (Y)	
3/14/2018	<0.01	<0.01	<0.01	<0.01	<0.01				
3/15/2018						<0.01	<0.01	<0.036	<0.01
9/12/2018	<0.01	<0.01	<0.01		<0.01	<0.01			
9/13/2018							<0.01	0.031	<0.01
9/14/2018				<0.01					
3/13/2019		<0.01			0.0022 (X)				
3/14/2019			<0.01	0.01		0.0039 (X)	<0.01		
3/15/2019	0.0023 (X)							0.051	0.0058 (X)

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

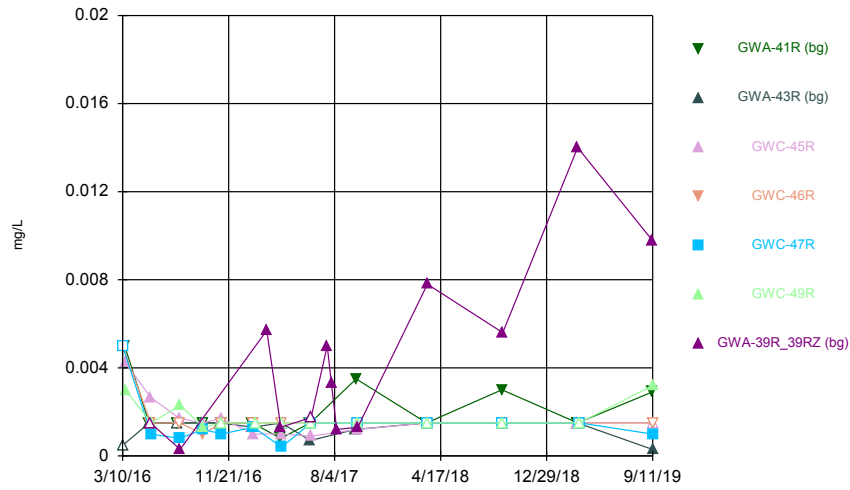
3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.01
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	0.00208 (J)
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.01 (*)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	0.0079 (J)
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.01 (*)
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	0.0053 (J)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.01 (*)
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	0.004 (J)
12/28/2017	
3/14/2018	
3/15/2018	<0.01
9/12/2018	
9/13/2018	
9/14/2018	<0.01
3/13/2019	
3/14/2019	
3/15/2019	

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:37 AM View: cell 9&10 metals overburden
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

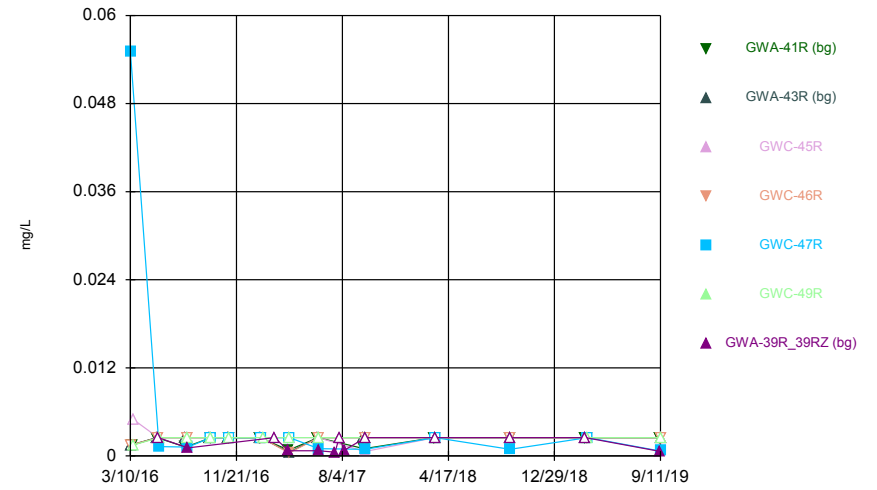
	GWC-49Z
3/19/2019	0.0034 (X)
9/9/2019	
9/10/2019	
9/11/2019	0.0085 (X)
9/12/2019	

Time Series



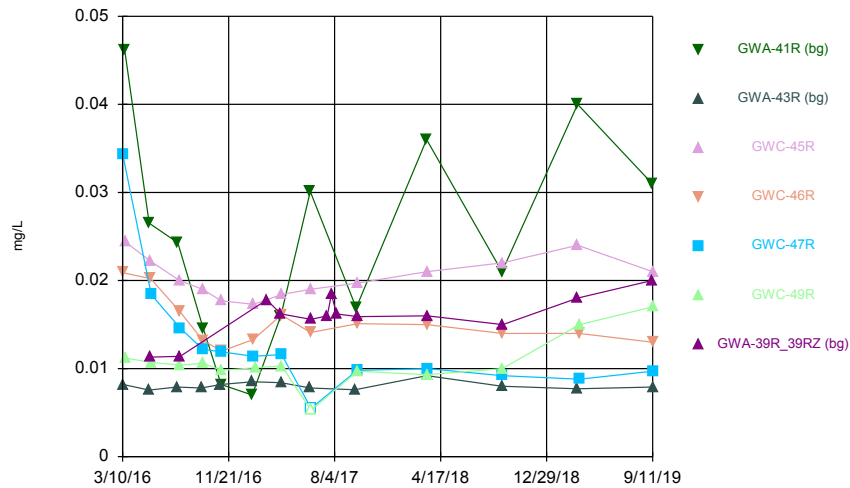
Constituent: Antimony Analysis Run 11/7/2019 10:43 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



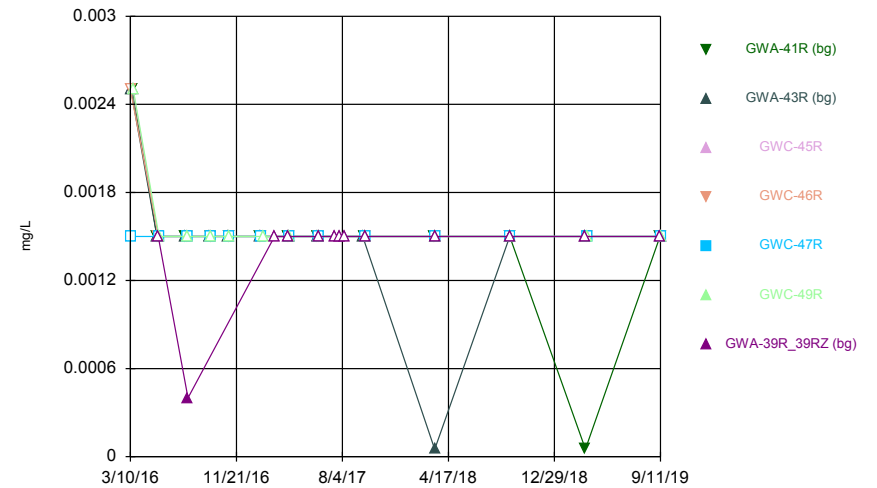
Constituent: Arsenic Analysis Run 11/7/2019 10:43 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Barium Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Beryllium Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.01	<0.01		
3/11/2016		<0.001					
3/15/2016	<0.01						
3/16/2016			0.00426				
3/17/2016						0.003	
5/13/2016	<0.003	<0.003					
5/16/2016			0.00267 (J)				<0.003 (D)
5/17/2016				<0.003			
5/18/2016					0.000987 (J)	<0.003	
7/19/2016		<0.003					
7/21/2016	<0.003 (*)						
7/25/2016			0.0017 (J)				
7/26/2016				<0.003			
7/27/2016					0.0008 (J)	0.0023 (J)	0.0003 (JD)
9/16/2016		<0.003					
9/19/2016			<0.003				
9/20/2016				0.001 (J)	0.0012 (J)		
9/21/2016	<0.003					0.0013 (J)	
11/2/2016		<0.003					
11/3/2016	<0.003		0.0017 (J)				
11/4/2016				<0.003	0.001 (J)	<0.003	
1/17/2017	<0.003						
1/18/2017		0.0013 (J)					
1/20/2017			0.001 (J)	<0.003	0.0013 (J)		
1/24/2017						<0.003	
2/21/2017							0.0057
3/27/2017	0.0008 (J)						0.0013 (JD)
3/28/2017		<0.003		<0.003			
3/29/2017			0.001 (J)		0.0004 (J)	<0.003	
6/6/2017	<0.003	0.0007 (J)					
6/7/2017			0.0009 (J)	<0.003			
6/8/2017					<0.003 (*)	<0.003 (*)	<0.0035 (*)
7/17/2017							0.005 (D)
7/27/2017							0.0033
8/9/2017							0.0012 (J)
9/22/2017		0.0012 (J)					
9/25/2017	0.0035						
9/27/2017			0.0012 (J)		<0.003		
9/29/2017				<0.003		<0.003	0.0013 (JD)
3/14/2018	<0.003						
3/15/2018		<0.003	<0.003	<0.003		<0.003	
3/16/2018					<0.003		0.0078
9/12/2018	0.003	<0.003					
9/13/2018			<0.003	<0.003	<0.003	<0.003	
9/14/2018							0.0056
3/13/2019		<0.003					
3/14/2019	<0.003		<0.003				0.014
3/18/2019				<0.003		<0.003	
3/19/2019					<0.003		
9/10/2019	0.0029 (X)						0.0098
9/11/2019		0.00029 (X)	<0.003	<0.003	0.00099 (X)	0.0032	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.003	0.0551 (J)		
3/11/2016		<0.003					
3/15/2016	<0.003						
3/16/2016			<0.01				
3/17/2016						<0.003	
5/13/2016	<0.005	<0.005					
5/16/2016			<0.005				<0.005 (D)
5/17/2016				<0.005			
5/18/2016					0.00127 (J)	<0.005	
7/19/2016		<0.005					
7/21/2016	0.0012 (J)						
7/25/2016			<0.005				
7/26/2016				<0.005			
7/27/2016					0.0012 (J)	<0.005	0.0011 (JD)
9/16/2016		<0.005					
9/19/2016			<0.005				
9/20/2016				<0.005	<0.005		
9/21/2016	<0.005					<0.005	
11/2/2016		<0.005					
11/3/2016	<0.005		<0.005				
11/4/2016				<0.005	<0.005	<0.005	
1/17/2017	<0.005						
1/18/2017		<0.005					
1/20/2017			<0.005	<0.005	<0.005		
1/24/2017						<0.005	
2/21/2017							<0.005
3/27/2017	0.0008 (J)						0.0007 (JD)
3/28/2017		0.0005 (J)		0.0004 (J)			
3/29/2017			<0.005		<0.005	<0.005	
6/6/2017	<0.005 (*)	<0.005 (*)					
6/7/2017			<0.005 (*)	<0.005 (*)			
6/8/2017					0.001 (J)	<0.005	0.0007 (JD)
7/17/2017							0.0005 (JD)
7/27/2017							<0.005
8/9/2017							0.0008 (J)
9/22/2017		<0.005					
9/25/2017	0.001 (J)						
9/27/2017			0.0006 (J)		0.0009 (J)		
9/29/2017				<0.005		<0.005	<0.005 (D)
3/14/2018	<0.005						
3/15/2018		<0.005	<0.005	<0.005		<0.005	
3/16/2018					<0.005		<0.005
9/12/2018	<0.005	<0.005					
9/13/2018			<0.005	<0.005	0.00091 (J)	<0.005	
9/14/2018							<0.005
3/13/2019		<0.005					
3/14/2019	<0.005		<0.005				<0.005
3/18/2019				<0.005		<0.005	
3/19/2019					<0.005		
9/10/2019	<0.005						0.00062 (X)
9/11/2019		<0.005	<0.005	<0.005	0.00067 (X)	<0.005	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				0.0209	0.0344		
3/11/2016		0.00819 (J)					
3/15/2016	0.0462						
3/16/2016			0.0244				
3/17/2016						0.0112	
5/13/2016	0.0265	0.00756 (J)					
5/16/2016			0.0222				0.0113 (D)
5/17/2016				0.0202			
5/18/2016					0.0184	0.0107	
7/19/2016		0.0079 (J)					
7/21/2016	0.0243						
7/25/2016			0.02				
7/26/2016				0.0165			
7/27/2016					0.0146	0.0104	0.0114 (D)
9/16/2016		0.0078 (J)					
9/19/2016			0.019				
9/20/2016				0.0132	0.0122		
9/21/2016	0.0145					0.0106	
11/2/2016		0.0082 (J)					
11/3/2016	0.0082 (J)		0.0177				
11/4/2016				0.012	0.0119	0.0098 (J)	
1/17/2017	0.007 (J)						
1/18/2017		0.0085 (J)					
1/20/2017			0.0173	0.0133	0.0114		
1/24/2017						0.0101	
2/21/2017							0.0178
3/27/2017	0.016						0.0162 (D)
3/28/2017		0.0084 (J)		0.0161			
3/29/2017			0.0184		0.0116	0.0103	
6/6/2017	0.0301	0.0078 (J)					
6/7/2017			0.019	0.0141			
6/8/2017					<0.011 (*)	<0.0106 (*)	0.0156 (D)
7/17/2017							0.016 (D)
7/27/2017							0.0184
8/9/2017							0.0162
9/22/2017		0.0076 (J)					
9/25/2017	0.0169						
9/27/2017			0.0197		0.0098 (J)		
9/29/2017				0.0151		0.0097 (J)	0.0159 (D)
3/14/2018	0.036						
3/15/2018		0.0092 (J)	0.021	0.015		0.0093 (J)	
3/16/2018					0.01		0.016
9/12/2018	0.021	0.008 (J)					
9/13/2018			0.022	0.014	0.0092 (J)	0.01	
9/14/2018							0.015
3/13/2019		0.0077 (X)					
3/14/2019	0.04		0.024				0.018
3/18/2019				0.014		0.015	
3/19/2019					0.0088 (X)		
9/10/2019	0.031						0.02
9/11/2019		0.0079 (X)	0.021	0.013	0.0097 (X)	0.017	

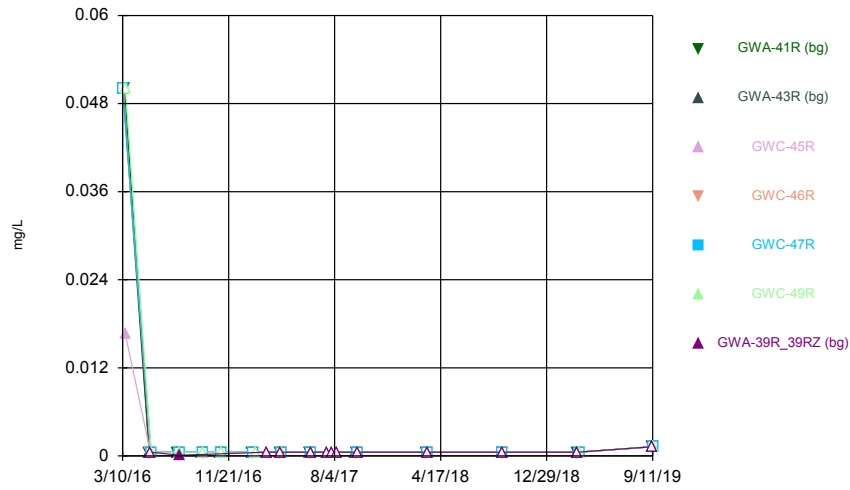
Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

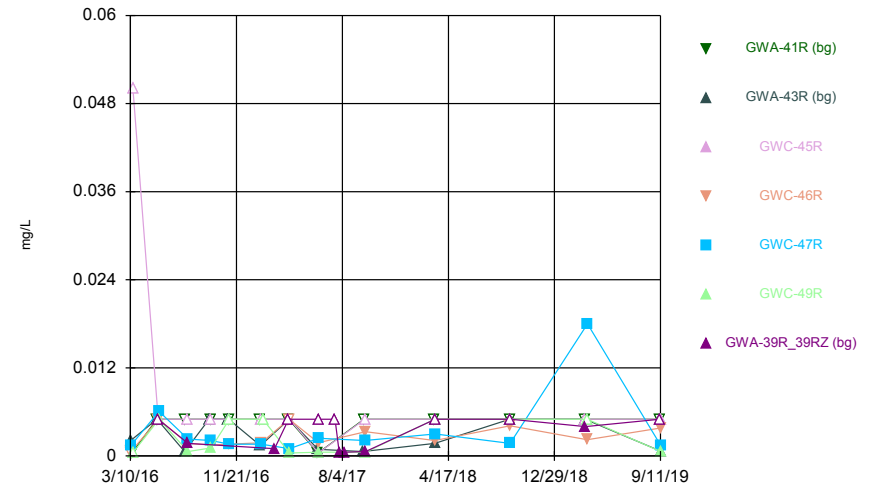
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.005	<0.003		
3/11/2016		<0.005					
3/15/2016	<0.005						
3/16/2016			<0.005				
3/17/2016						<0.005	
5/13/2016	<0.003	<0.003					
5/16/2016			<0.003				<0.003 (D)
5/17/2016				<0.003			
5/18/2016					<0.003	<0.003	
7/19/2016		<0.003					
7/21/2016	<0.003						
7/25/2016			<0.003				
7/26/2016				<0.003			
7/27/2016					<0.003	<0.003	0.0004 (JD)
9/16/2016		<0.003					
9/19/2016			<0.003				
9/20/2016				<0.003	<0.003		
9/21/2016	<0.003					<0.003	
11/2/2016		<0.003					
11/3/2016	<0.003		<0.003				
11/4/2016				<0.003	<0.003	<0.003	
1/17/2017	<0.003						
1/18/2017		<0.003					
1/20/2017			<0.003	<0.003	<0.003		
1/24/2017						<0.003	
2/21/2017							<0.003
3/27/2017	<0.003						<0.003 (D)
3/28/2017		<0.003		<0.003			
3/29/2017			<0.003		<0.003	<0.003	
6/6/2017	<0.003	<0.003					
6/7/2017			<0.003	<0.003			
6/8/2017					<0.003	<0.003	<0.003 (D)
7/17/2017							<0.003 (D)
7/27/2017							<0.003
8/9/2017							<0.003
9/22/2017		<0.003					
9/25/2017	<0.003						
9/27/2017			<0.003		<0.003		
9/29/2017				<0.003		<0.003	<0.003 (D)
3/14/2018	<0.003						
3/15/2018		5.1E-05 (J)	<0.003	<0.003		<0.003	
3/16/2018					<0.003		<0.003
9/12/2018	<0.003	<0.003					
9/13/2018			<0.003	<0.003	<0.003	<0.003	
9/14/2018							<0.003
3/13/2019		<0.003					
3/14/2019	5.2E-05 (X)		<0.003				<0.003
3/18/2019				<0.003		<0.003	
3/19/2019					<0.003		
9/10/2019	<0.003						<0.003
9/11/2019		<0.003	<0.003	<0.003	<0.003	<0.003	

Time Series



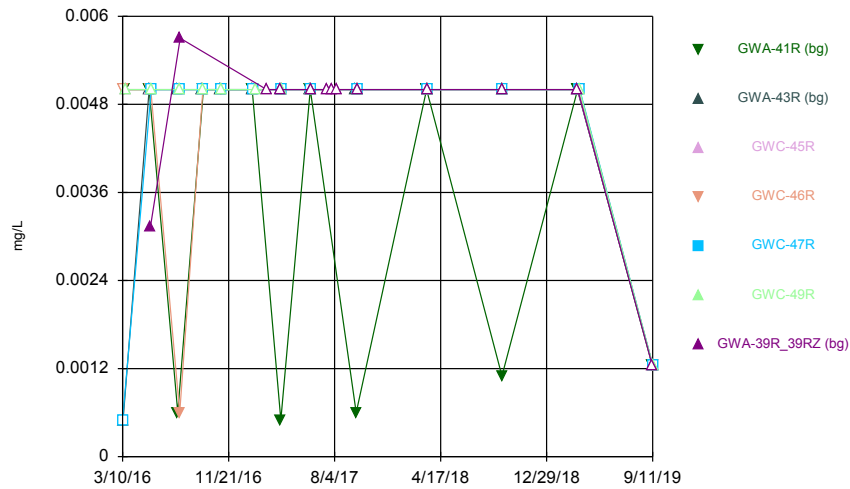
Constituent: Cadmium Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



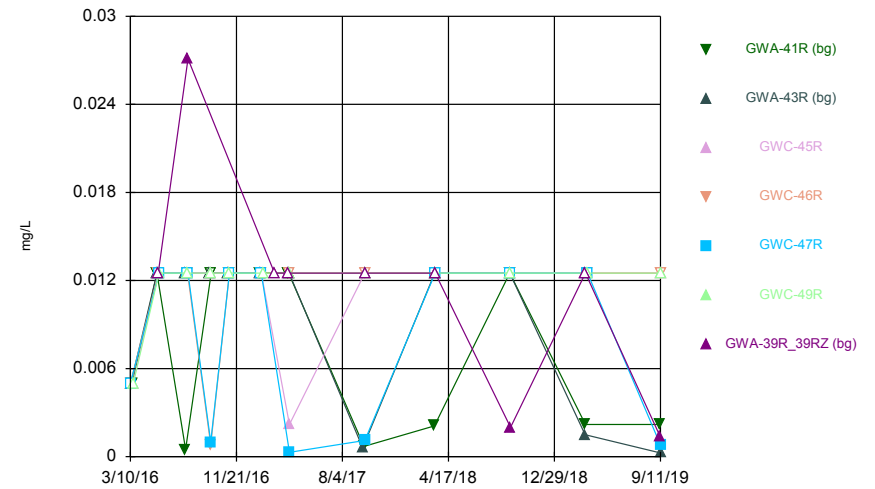
Constituent: Chromium Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Cobalt Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Copper Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.1	<0.1		
3/11/2016		<0.1					
3/15/2016	<0.1						
3/16/2016			0.0167 (J)				
3/17/2016						<0.1	
5/13/2016	<0.001	<0.001					
5/16/2016			<0.001				<0.001 (D)
5/17/2016				<0.001			
5/18/2016					<0.001	<0.001	
7/19/2016		<0.001					
7/21/2016	<0.001						
7/25/2016			<0.001				
7/26/2016				<0.001			
7/27/2016					<0.001	<0.001	0.0001 (JD)
9/16/2016		<0.001					
9/19/2016			<0.001				
9/20/2016				<0.001	<0.001		
9/21/2016	<0.001					<0.001	
11/2/2016		<0.001					
11/3/2016	<0.001		<0.001				
11/4/2016				<0.001	<0.001	<0.001	
1/17/2017	<0.001						
1/18/2017		<0.001					
1/20/2017			<0.001	<0.001	<0.001		
1/24/2017						<0.001	
2/21/2017							<0.001
3/27/2017	<0.001						<0.001 (D)
3/28/2017		<0.001		<0.001			
3/29/2017			<0.001		<0.001	<0.001	
6/6/2017	<0.001	<0.001					
6/7/2017			<0.001	<0.001			
6/8/2017					<0.001	<0.001	<0.001 (D)
7/17/2017							<0.001 (D)
7/27/2017							<0.001
8/9/2017							<0.001
9/22/2017		<0.001					
9/25/2017	<0.001						
9/27/2017			<0.001		<0.001		
9/29/2017				<0.001		<0.001	<0.001 (D)
3/14/2018	<0.001						
3/15/2018		<0.001	<0.001	<0.001		<0.001	
3/16/2018					<0.001		<0.001
9/12/2018	<0.001	<0.001					
9/13/2018			<0.001	<0.001	<0.001	<0.001	
9/14/2018							<0.001
3/13/2019		<0.001					
3/14/2019	<0.001		<0.001				<0.001
3/18/2019				<0.001		<0.001	
3/19/2019					<0.001		
9/10/2019	<0.0025						<0.0025
9/11/2019		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.001	0.00136 (J)		
3/11/2016		0.00212 (J)					
3/15/2016	<0.001						
3/16/2016			<0.1				
3/17/2016						<0.001	
5/13/2016	<0.01	<0.01					
5/16/2016			<0.01				<0.01 (D)
5/17/2016				<0.01			
5/18/2016					0.00606 (J)	<0.01	
7/19/2016		0.0006 (J)					
7/21/2016	<0.01						
7/25/2016			<0.01				
7/26/2016				0.0017 (J)			
7/27/2016					0.0023 (J)	0.0006 (J)	0.0017 (JD)
9/16/2016		<0.01					
9/19/2016			<0.01				
9/20/2016				0.0015 (J)	0.0021 (J)		
9/21/2016	<0.01					0.0011 (J)	
11/2/2016		<0.01					
11/3/2016	<0.01		<0.01				
11/4/2016				0.0016 (J)	0.0016 (J)	<0.01	
1/17/2017	<0.01						
1/18/2017		0.0014 (J)					
1/20/2017			<0.01	0.0018 (J)	0.0016 (J)		
1/24/2017						<0.01	
2/21/2017							0.001 (J)
3/27/2017	<0.01						<0.01 (D)
3/28/2017		<0.01 (*)		<0.01 (*)			
3/29/2017			<0.01		0.001 (J)	0.0004 (J)	
6/6/2017	0.0004 (J)	0.0009 (J)					
6/7/2017			0.0004 (J)	0.0018 (J)			
6/8/2017					0.0024 (J)	0.0005 (J)	<0.01 (D)
7/17/2017							<0.01 (D)
7/27/2017							0.0005 (J)
8/9/2017							0.0005 (J)
9/22/2017		0.0006 (J)					
9/25/2017	<0.01						
9/27/2017			<0.01		0.0021 (J)		
9/29/2017				0.0033 (J)		0.0005 (J)	0.0006 (JD)
3/14/2018	<0.01						
3/15/2018		0.0017 (J)	<0.01	0.0021 (J)		<0.01	
3/16/2018					0.003 (J)		<0.01
9/12/2018	<0.01	<0.01					
9/13/2018			<0.01	0.0041 (J)	0.0017 (J)	<0.01	
9/14/2018							<0.01
3/13/2019		<0.01					
3/14/2019	<0.01		<0.01				0.004 (X)
3/18/2019				0.0022 (X)		<0.01	
3/19/2019					0.018		
9/10/2019	<0.01						<0.01
9/11/2019		0.00066 (X)	<0.01	0.0038 (X)	0.0015 (X)	0.00063 (X)	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

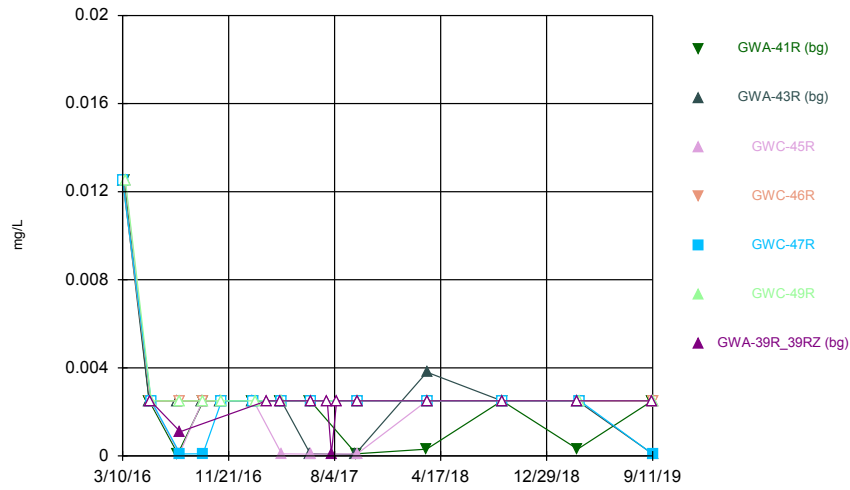
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.01	<0.001		
3/11/2016		<0.001					
3/15/2016	<0.01						
3/16/2016			<0.01				
3/17/2016						<0.01	
5/13/2016	<0.01	<0.01					
5/16/2016			<0.01				0.00313 (JD)
5/17/2016				<0.01			
5/18/2016					<0.01	<0.01	
7/19/2016		<0.01					
7/21/2016	0.0006 (J)						
7/25/2016			<0.01				
7/26/2016				0.0006 (J)			
7/27/2016					<0.01	<0.01	0.0057 (JD)
9/16/2016		<0.01					
9/19/2016			<0.01				
9/20/2016				<0.01	<0.01		
9/21/2016	<0.01					<0.01	
11/2/2016		<0.01					
11/3/2016	<0.01		<0.01				
11/4/2016				<0.01	<0.01	<0.01	
1/17/2017	<0.01						
1/18/2017		<0.01					
1/20/2017			<0.01	<0.01	<0.01		
1/24/2017						<0.01	
2/21/2017							<0.01
3/27/2017	0.0005 (J)						<0.01 (D)
3/28/2017		<0.01		<0.01			
3/29/2017			<0.01		<0.01	<0.01	
6/6/2017	<0.01	<0.01					
6/7/2017			<0.01	<0.01			
6/8/2017					<0.01	<0.01	<0.01 (D)
7/17/2017							<0.01 (D)
7/27/2017							<0.01
8/9/2017							<0.01
9/22/2017		<0.01					
9/25/2017	0.0006 (J)						
9/27/2017			<0.01		<0.01		
9/29/2017				<0.01		<0.01	<0.01 (D)
3/14/2018	<0.01						
3/15/2018		<0.01	<0.01	<0.01		<0.01	
3/16/2018					<0.01		<0.01
9/12/2018	0.0011 (J)	<0.01					
9/13/2018			<0.01	<0.01	<0.01	<0.01	
9/14/2018							<0.01
3/13/2019		<0.01					
3/14/2019	<0.01		<0.01				<0.01
3/18/2019				<0.01		<0.01	
3/19/2019					<0.01		
9/10/2019	<0.0025						<0.0025
9/11/2019		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	

Time Series

Constituent: Copper (mg/L) Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

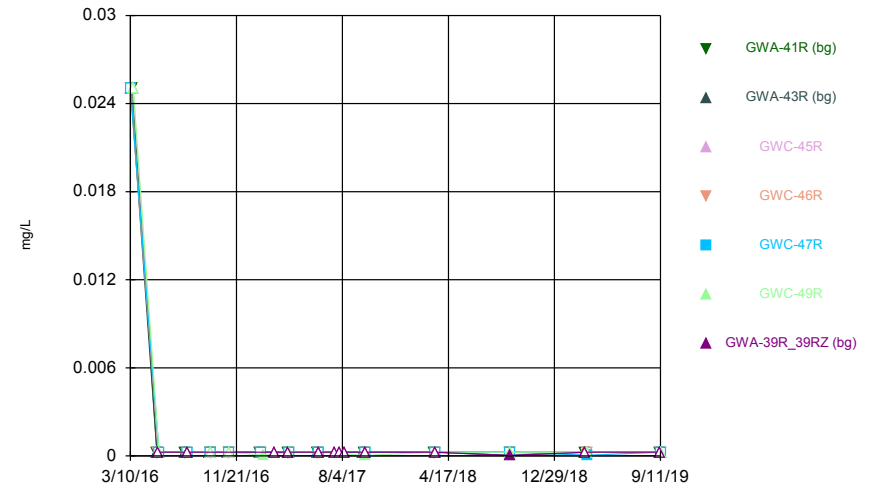
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.01	<0.01		
3/11/2016		<0.01					
3/15/2016	<0.01						
3/16/2016			<0.01				
3/17/2016						<0.01	
5/13/2016	<0.025	<0.025					
5/16/2016			<0.025				<0.025 (D)
5/17/2016				<0.025			
5/18/2016					<0.025	<0.025	
7/19/2016		<0.025					
7/21/2016	0.0005 (J)						
7/25/2016			<0.025				
7/26/2016				<0.025			
7/27/2016					<0.025	<0.025	0.0271 (D)
9/16/2016		<0.025					
9/19/2016			<0.025				
9/20/2016				0.0008 (J)	0.001 (J)		
9/21/2016	<0.025					<0.025	
11/2/2016		<0.025					
11/3/2016	<0.025		<0.025				
11/4/2016				<0.025	<0.025	<0.025	
1/17/2017	<0.025						
1/18/2017		<0.025					
1/20/2017			<0.025	<0.025	<0.025		
1/24/2017						<0.025	
2/21/2017							<0.025
3/27/2017	<0.025						<0.025 (D)
3/28/2017		<0.025 (*)		<0.025			
3/29/2017			0.0022 (J)		0.0003 (J)	<0.025	
9/22/2017		0.0006 (J)					
9/25/2017	0.0007 (J)						
9/27/2017			<0.025		0.0011 (J)		
9/29/2017				<0.025		<0.025	<0.025 (D)
3/14/2018	0.0021 (J)						
3/15/2018		<0.025	<0.025	<0.025		<0.025	
3/16/2018					<0.025		<0.025
9/12/2018	<0.025	<0.025					
9/13/2018			<0.025	<0.025	<0.025	<0.025	
9/14/2018							0.002 (J)
3/13/2019		0.0015 (X)					
3/14/2019	0.0022 (X)		<0.025				<0.025
3/18/2019				<0.025		<0.025	
3/19/2019					<0.025		
9/10/2019	0.0022 (X)						0.0014 (X)
9/11/2019		0.00026 (X)	<0.025	<0.025	0.0008 (X)	<0.025	

Time Series



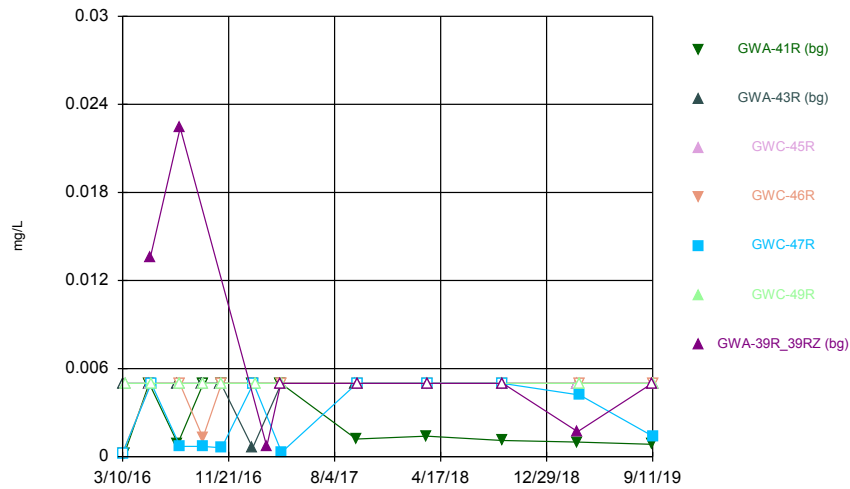
Constituent: Lead Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



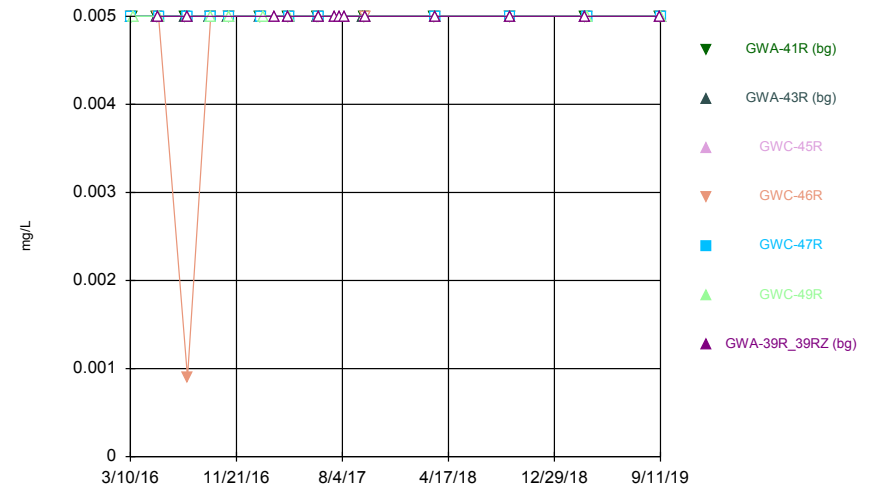
Constituent: Mercury Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Nickel Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Selenium Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Lead (mg/L) Analysis Run 11/7/2019 10:45 AM View: cell 9&10 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.025	<0.025		
3/11/2016		<0.025					
3/15/2016	<0.025						
3/16/2016			<0.025				
3/17/2016						<0.025	
5/13/2016	<0.005	<0.005					
5/16/2016			<0.005				<0.005 (D)
5/17/2016				<0.005			
5/18/2016					<0.005	<0.005	
7/19/2016		<0.005					
7/21/2016	0.0001 (J)						
7/25/2016			0.0001 (J)				
7/26/2016				<0.005			
7/27/2016					9E-05 (J)	<0.005	0.0011 (JD)
9/16/2016		<0.005					
9/19/2016			<0.005				
9/20/2016				<0.005	0.0001 (J)		
9/21/2016	<0.005					<0.005	
11/2/2016		<0.005					
11/3/2016	<0.005		<0.005				
11/4/2016				<0.005	<0.005	<0.005	
1/17/2017	<0.005						
1/18/2017		<0.005					
1/20/2017			<0.005	<0.005	<0.005		
1/24/2017						<0.005	
2/21/2017							<0.005
3/27/2017	<0.005						<0.005 (D)
3/28/2017		<0.005		<0.005			
3/29/2017			0.0001 (J)		<0.005	<0.005	
6/6/2017	<0.005	0.0001 (J)					
6/7/2017			8E-05 (J)	<0.005			
6/8/2017					<0.005	<0.005	<0.005 (D)
7/17/2017							<0.005 (D)
7/27/2017							0.0001 (J)
8/9/2017							<0.005
9/22/2017		7E-05 (J)					
9/25/2017	0.0001 (J)						
9/27/2017			9E-05 (J)		<0.005		
9/29/2017				<0.005		<0.005	<0.005 (D)
3/14/2018	0.00031 (J)						
3/15/2018		0.0038 (J)	<0.005	<0.005		<0.005	
3/16/2018					<0.005		<0.005
9/12/2018	<0.005	<0.005					
9/13/2018			<0.005	<0.005	<0.005	<0.005	
9/14/2018							<0.005
3/13/2019		<0.005					
3/14/2019	0.00031 (X)		<0.005				<0.005
3/18/2019				<0.005		<0.005	
3/19/2019					<0.005		
9/10/2019	<0.005						<0.005
9/11/2019		9.2E-05 (X)	<0.005	<0.005	8.5E-05 (X)	<0.005	

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/7/2019 10:45 AM View: cell 9&10 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.05	<0.05		
3/11/2016		<0.05					
3/15/2016	<0.05						
3/16/2016			<0.05				
3/17/2016						<0.05	
5/13/2016	<0.0005	<0.0005					
5/16/2016			<0.0005				<0.0005 (D)
5/17/2016				<0.0005			
5/18/2016					<0.0005	<0.0005	
7/19/2016		<0.0005					
7/21/2016	<0.0005						
7/25/2016			<0.0005				
7/26/2016				<0.0005			
7/27/2016					<0.0005	<0.0005	<0.0005 (D)
9/16/2016		<0.0005					
9/19/2016			<0.0005				
9/20/2016				<0.0005	<0.0005		
9/21/2016	<0.0005					<0.0005	
11/2/2016		<0.0005					
11/3/2016	<0.0005		<0.0005				
11/4/2016				<0.0005	<0.0005	<0.0005	
1/17/2017	<0.0005						
1/18/2017		<0.0005					
1/20/2017			<0.0005	<0.0005	<0.0005		
1/24/2017						5E-05 (J)	
2/21/2017							<0.0005
3/27/2017	<0.0005						<0.0005 (D)
3/28/2017		<0.0005		<0.0005			
3/29/2017			<0.0005 (*)		<0.0005 (*)	<0.0005 (*)	
6/6/2017	<0.0005	<0.0005					
6/7/2017			<0.0005	<0.0005			
6/8/2017					<0.0005	<0.0005	<0.0005 (D)
7/17/2017							<0.0005 (D)
7/27/2017							<0.0005
8/9/2017							<0.0005
9/22/2017		<0.0005					
9/25/2017	<0.0005						
9/27/2017			<0.0005		<0.0005		
9/29/2017				<0.0005		4E-05 (J)	<0.0005 (D)
3/14/2018	<0.0005						
3/15/2018		<0.0005	<0.0005	<0.0005		<0.0005	
3/16/2018					<0.0005		<0.0005
9/12/2018	<0.0005	3.9E-05 (J)					
9/13/2018			<0.0005	<0.0005	<0.0005	<0.0005	
9/14/2018							4.1E-05 (J)
3/13/2019		<0.0005					
3/14/2019	<0.0005		<0.0005				<0.0005
3/18/2019				<0.0005		<0.0005	
3/19/2019					5E-05 (X)		
9/10/2019	<0.0005						<0.0005
9/11/2019		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	

Time Series

Constituent: Nickel (mg/L) Analysis Run 11/7/2019 10:45 AM View: cell 9&10 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

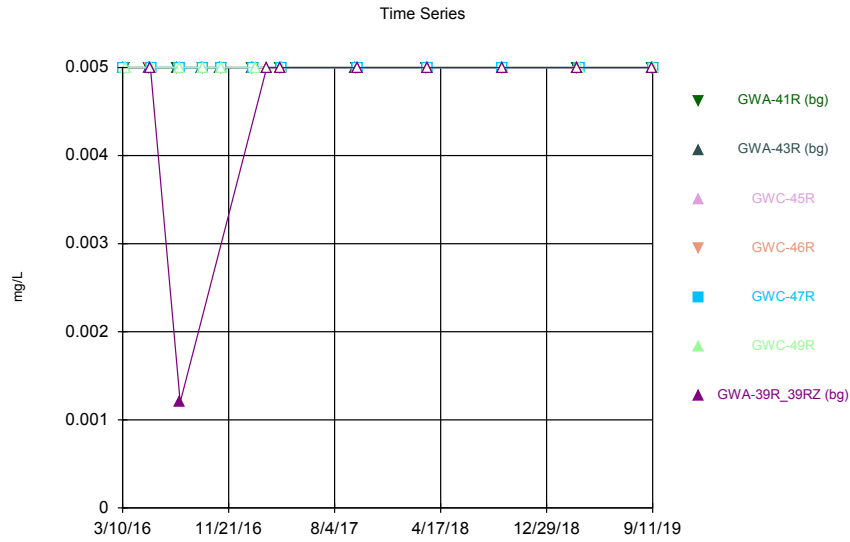
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.0005	<0.0005		
3/11/2016		<0.01					
3/15/2016	<0.0005						
3/16/2016			<0.01				
3/17/2016						<0.01	
5/13/2016	<0.01	<0.01					
5/16/2016			<0.01				0.0136 (D)
5/17/2016				<0.01			
5/18/2016					<0.01	<0.01	
7/19/2016		<0.01					
7/21/2016	0.0009 (J)						
7/25/2016			<0.01				
7/26/2016				<0.01			
7/27/2016					0.0007 (J)	<0.01	0.0224 (D)
9/16/2016		<0.01					
9/19/2016			<0.01				
9/20/2016				0.0013 (J)	0.0007 (J)		
9/21/2016	<0.01					<0.01	
11/2/2016		<0.01					
11/3/2016	<0.01		<0.01				
11/4/2016				<0.01	0.0006 (J)	<0.01	
1/17/2017	<0.01						
1/18/2017		0.0006 (J)					
1/20/2017			<0.01	<0.01	<0.01		
1/24/2017						<0.01	
2/21/2017							0.0007 (J)
3/27/2017	<0.01 (*)						<0.01 (D)
3/28/2017		<0.01 (*)		<0.01			
3/29/2017			<0.01		0.0003 (J)	<0.01	
9/22/2017		<0.01					
9/25/2017	0.0012 (J)						
9/27/2017			<0.01		<0.01		
9/29/2017				<0.01		<0.01	<0.01 (D)
3/14/2018	0.0014 (J)						
3/15/2018		<0.01	<0.01	<0.01		<0.01	
3/16/2018					<0.01		<0.01
9/12/2018	0.0011 (J)	<0.01					
9/13/2018			<0.01	<0.01	<0.01	<0.01	
9/14/2018							<0.01
3/13/2019		<0.01					
3/14/2019	0.001 (X)		<0.01				0.0017 (X)
3/18/2019				<0.01		<0.01	
3/19/2019					0.0042 (X)		
9/10/2019	0.00084 (X)						<0.01
9/11/2019		<0.01	<0.01	<0.01	0.0014 (X)	<0.01	

Time Series

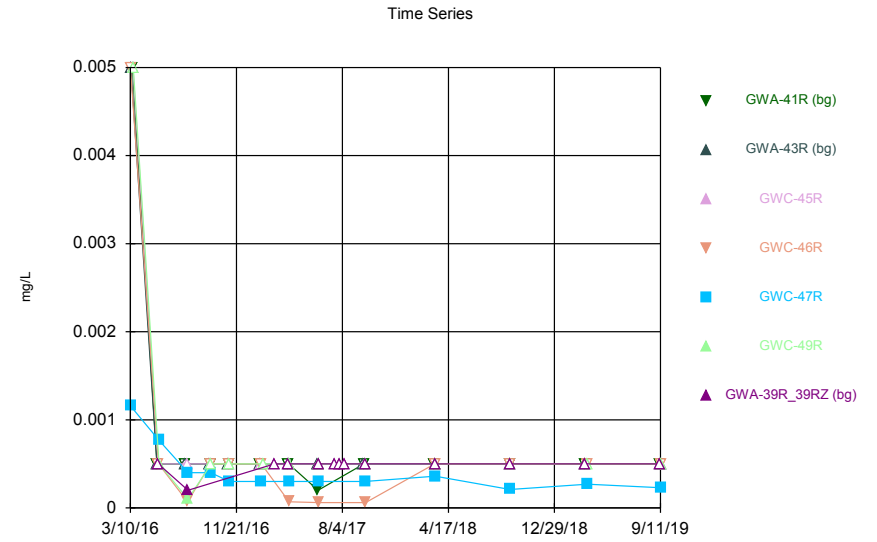
Constituent: Selenium (mg/L) Analysis Run 11/7/2019 10:45 AM View: cell 9&10 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

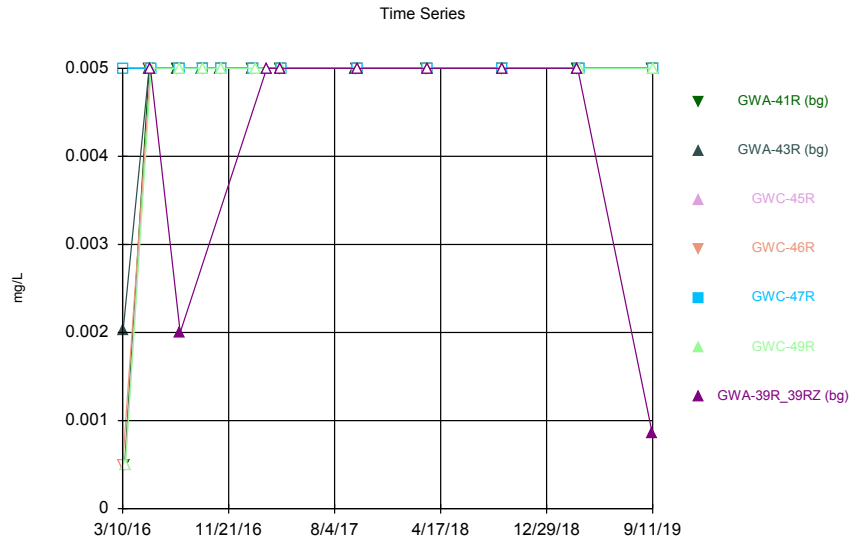
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.01	<0.01		
3/11/2016		<0.01					
3/15/2016	<0.01						
3/16/2016			<0.01				
3/17/2016						<0.01	
5/13/2016	<0.01	<0.01					
5/16/2016			<0.01				<0.01 (D)
5/17/2016				<0.01			
5/18/2016					<0.01	<0.01	
7/19/2016		<0.01					
7/21/2016	<0.01						
7/25/2016			<0.01				
7/26/2016				0.0009 (J)			
7/27/2016					<0.01	<0.01	<0.01 (D)
9/16/2016		<0.01					
9/19/2016			<0.01				
9/20/2016				<0.01	<0.01		
9/21/2016	<0.01					<0.01	
11/2/2016		<0.01					
11/3/2016	<0.01		<0.01				
11/4/2016				<0.01	<0.01	<0.01	
1/17/2017	<0.01						
1/18/2017		<0.01					
1/20/2017			<0.01	<0.01	<0.01		
1/24/2017						<0.01	
2/21/2017							<0.01
3/27/2017	<0.01						<0.01 (D)
3/28/2017		<0.01		<0.01			
3/29/2017			<0.01		<0.01	<0.01	
6/6/2017	<0.01	<0.01					
6/7/2017			<0.01	<0.01			
6/8/2017					<0.01	<0.01	<0.01 (D)
7/17/2017							<0.01 (D)
7/27/2017							<0.01
8/9/2017							<0.01
9/22/2017		<0.01					
9/25/2017	<0.01						
9/29/2017				<0.01		<0.01	<0.01 (D)
3/14/2018	<0.01						
3/15/2018		<0.01	<0.01	<0.01		<0.01	
3/16/2018					<0.01		<0.01
9/12/2018	<0.01	<0.01					
9/13/2018			<0.01	<0.01	<0.01	<0.01	
9/14/2018							<0.01
3/13/2019		<0.01					
3/14/2019	<0.01		<0.01				<0.01
3/18/2019				<0.01		<0.01	
3/19/2019					<0.01		
9/10/2019	<0.01						<0.01
9/11/2019		<0.01	<0.01	<0.01	<0.01	<0.01	



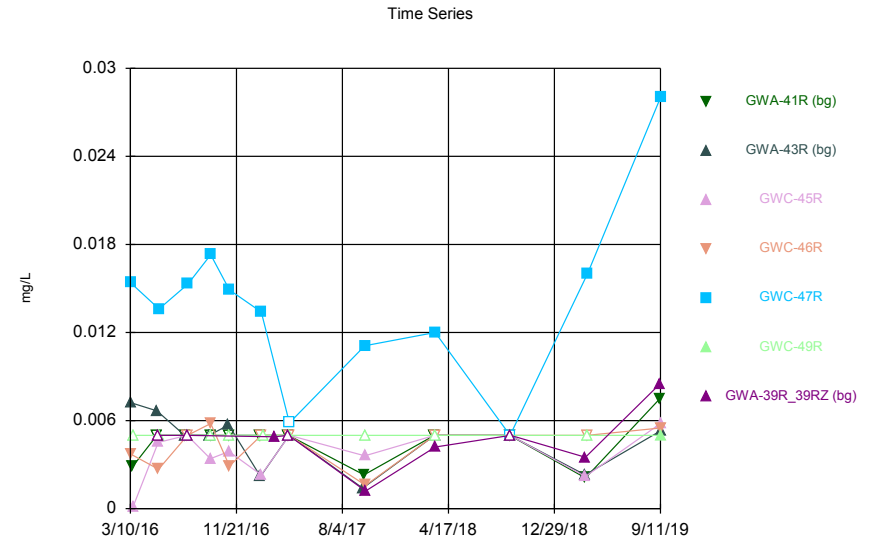
Constituent: Silver Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Thallium Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Vanadium Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Zinc Analysis Run 11/7/2019 10:44 AM View: cell 9&10 metals bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Silver (mg/L) Analysis Run 11/7/2019 10:45 AM View: cell 9&10 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.01	<0.01		
3/11/2016		<0.01					
3/15/2016	<0.01						
3/16/2016			<0.01				
3/17/2016						<0.01	
5/13/2016	<0.01	<0.01					
5/16/2016			<0.01				<0.01 (D)
5/17/2016				<0.01			
5/18/2016					<0.01	<0.01	
7/19/2016		<0.01					
7/21/2016	<0.01						
7/25/2016			<0.01				
7/26/2016				<0.01			
7/27/2016					<0.01	<0.01	0.0012 (JD)
9/16/2016		<0.01					
9/19/2016			<0.01				
9/20/2016				<0.01	<0.01		
9/21/2016	<0.01					<0.01	
11/2/2016		<0.01					
11/3/2016	<0.01		<0.01				
11/4/2016				<0.01	<0.01	<0.01	
1/17/2017	<0.01						
1/18/2017		<0.01					
1/20/2017			<0.01	<0.01	<0.01		
1/24/2017						<0.01	
2/21/2017							<0.01
3/27/2017	<0.01						<0.01 (D)
3/28/2017		<0.01		<0.01			
3/29/2017			<0.01		<0.01	<0.01	
9/22/2017		<0.01					
9/25/2017	<0.01						
9/27/2017			<0.01		<0.01		
9/29/2017				<0.01		<0.01	<0.01 (D)
3/14/2018	<0.01						
3/15/2018		<0.01	<0.01	<0.01		<0.01	
3/16/2018					<0.01		<0.01
9/12/2018	<0.01	<0.01					
9/13/2018			<0.01	<0.01	<0.01	<0.01	
9/14/2018							<0.01
3/13/2019		<0.01					
3/14/2019	<0.01		<0.01				<0.01
3/18/2019				<0.01		<0.01	
3/19/2019					<0.01		
9/10/2019	<0.01						<0.01
9/11/2019		<0.01	<0.01	<0.01	<0.01	<0.01	

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/7/2019 10:45 AM View: cell 9&10 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.01	0.00116		
3/11/2016		<0.01					
3/15/2016	<0.01						
3/16/2016			<0.01				
3/17/2016						<0.01	
5/13/2016	<0.001	<0.001					
5/16/2016			<0.001				<0.001 (D)
5/17/2016				<0.001			
5/18/2016					0.000768 (J)	<0.001	
7/19/2016		<0.001					
7/21/2016	<0.001						
7/25/2016			<0.001				
7/26/2016				7E-05 (J)			
7/27/2016					0.0004 (J)	0.0001 (J)	0.0002 (JD)
9/16/2016		<0.001					
9/19/2016			<0.001				
9/20/2016				<0.001	0.0004 (J)		
9/21/2016	<0.001					<0.001	
11/2/2016		<0.001					
11/3/2016	<0.001		<0.001				
11/4/2016				<0.001	0.0003 (J)	<0.001	
1/17/2017	<0.001						
1/18/2017		<0.001					
1/20/2017			<0.001	<0.001	0.0003 (J)		
1/24/2017						<0.001	
2/21/2017							<0.001
3/27/2017	<0.001						<0.001 (D)
3/28/2017		<0.001		7E-05 (J)			
3/29/2017			<0.001		0.0003 (J)	<0.001	
6/6/2017	0.0002 (J)	<0.001					
6/7/2017			<0.001	6E-05 (J)			
6/8/2017					0.0003 (J)	<0.001	<0.001 (D)
7/17/2017							<0.001 (D)
7/27/2017							<0.001
8/9/2017							<0.001
9/22/2017		<0.001					
9/25/2017	<0.001						
9/27/2017			<0.001		0.0003 (J)		
9/29/2017				6E-05 (J)		<0.001	<0.001 (D)
3/14/2018	<0.001						
3/15/2018		<0.001	<0.001	<0.001		<0.001	
3/16/2018					0.00036 (J)		<0.001
9/12/2018	<0.001	<0.001					
9/13/2018			<0.001	<0.001	0.00021 (J)	<0.001	
9/14/2018							<0.001
3/13/2019		<0.001					
3/14/2019	<0.001		<0.001				<0.001
3/18/2019				<0.001		<0.001	
3/19/2019					0.00027 (X)		
9/10/2019	<0.001						<0.001
9/11/2019		<0.001	<0.001	<0.001	0.00023 (X)	<0.001	

Time Series

Constituent: Vanadium (mg/L) Analysis Run 11/7/2019 10:45 AM View: cell 9&10 metals bedrock

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

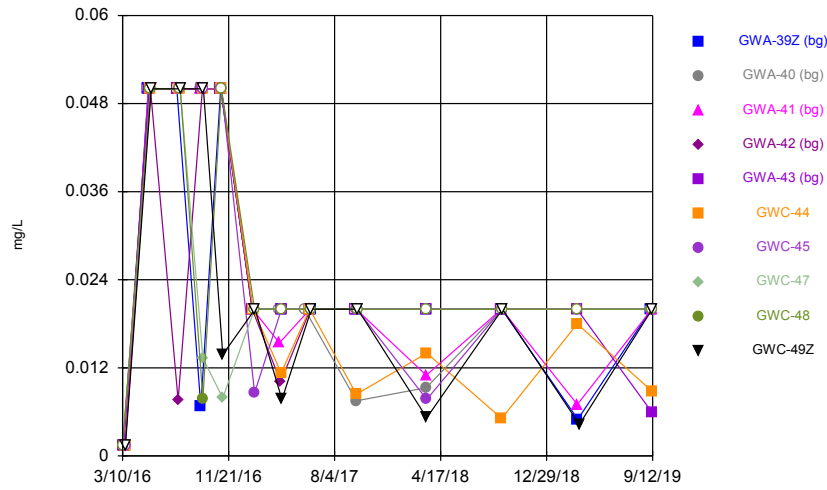
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.001	<0.01		
3/11/2016		0.00202 (J)					
3/15/2016	<0.001						
3/16/2016			<0.001				
3/17/2016						<0.001	
5/13/2016	<0.01	<0.01					
5/16/2016			<0.01				<0.01 (D)
5/17/2016				<0.01			
5/18/2016					<0.01	<0.01	
7/19/2016		<0.01					
7/21/2016	<0.01						
7/25/2016			<0.01				
7/26/2016				<0.01			
7/27/2016					<0.01	<0.01	0.002 (JD)
9/16/2016		<0.01					
9/19/2016			<0.01				
9/20/2016				<0.01	<0.01		
9/21/2016	<0.01					<0.01	
11/2/2016		<0.01					
11/3/2016	<0.01		<0.01				
11/4/2016				<0.01	<0.01	<0.01	
1/17/2017	<0.01						
1/18/2017		<0.01					
1/20/2017			<0.01	<0.01	<0.01		
1/24/2017						<0.01	
2/21/2017							<0.01
3/27/2017	<0.01						<0.01 (D)
3/28/2017		<0.01		<0.01			
3/29/2017			<0.01		<0.01	<0.01	
9/22/2017		<0.01					
9/25/2017	<0.01						
9/27/2017			<0.01		<0.01		
9/29/2017				<0.01		<0.01	<0.01 (D)
3/14/2018	<0.01						
3/15/2018		<0.01	<0.01	<0.01		<0.01	
3/16/2018					<0.01		<0.01
9/12/2018	<0.01	<0.01					
9/13/2018			<0.01	<0.01	<0.01	<0.01	
9/14/2018							<0.01
3/13/2019		<0.01					
3/14/2019	<0.01		<0.01				<0.01
3/18/2019				<0.01		<0.01	
3/19/2019					<0.01		
9/10/2019	<0.01						0.00086 (X)
9/11/2019		<0.01	<0.01	<0.01	<0.01	<0.01	

Time Series

Constituent: Zinc (mg/L) Analysis Run 11/7/2019 10:45 AM View: cell 9&10 metals bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

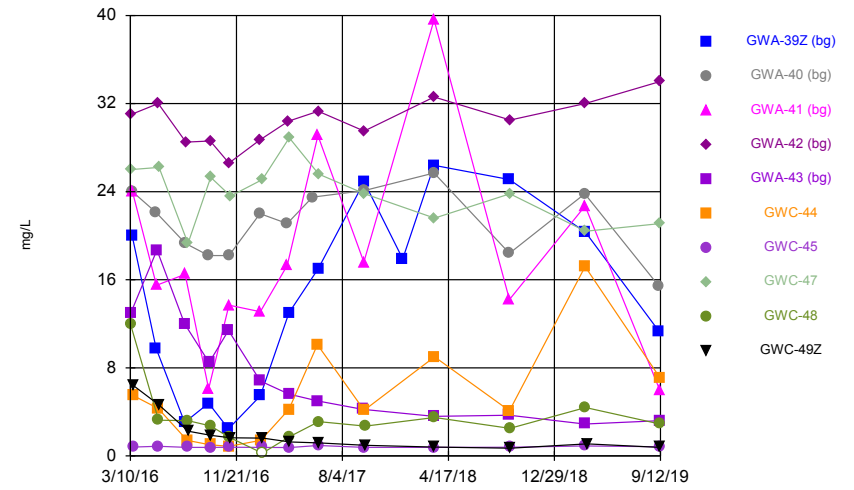
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				0.00373 (J)	0.0154		
3/11/2016		0.00722 (J)					
3/15/2016	0.00286 (J)						
3/16/2016			0.000113 (J)				
3/17/2016						<0.01	
5/13/2016	<0.01	0.00666 (J)					
5/16/2016			0.00452 (J)				<0.01 (D)
5/17/2016				0.00268 (J)			
5/18/2016					0.0136	<0.01	
7/19/2016		<0.01 (*)					
7/21/2016	<0.01 (*)						
7/25/2016			<0.01 (*)				
7/26/2016				<0.01 (*)			
7/27/2016					0.0153	<0.01 (*)	<0.01 (*)
9/16/2016		<0.01					
9/19/2016			0.0034 (J)				
9/20/2016				0.0058 (J)	0.0173		
9/21/2016	<0.01					<0.01	
11/2/2016		0.0057 (J)					
11/3/2016	<0.01		0.0039 (J)				
11/4/2016				0.0029 (J)	0.0149	<0.01	
1/17/2017	<0.01						
1/18/2017		0.0022 (J)					
1/20/2017			0.0023 (J)	<0.01	0.0134		
1/24/2017						<0.01	
2/21/2017							0.0049 (J)
3/27/2017	<0.01 (*)						<0.01 (*)
3/28/2017		<0.01		<0.01 (*)			
3/29/2017			<0.01 (*)		<0.0117 (*)	<0.01 (*)	
9/22/2017		0.0014 (J)					
9/25/2017	0.0023 (J)						
9/27/2017			0.0036 (J)		0.0111		
9/29/2017				0.0016 (J)		<0.01	0.0012 (JD)
3/14/2018	<0.01						
3/15/2018		<0.01	<0.01	<0.01		<0.01	
3/16/2018					0.012		0.0042 (J)
9/12/2018	<0.01	<0.01					
9/13/2018			<0.01	<0.01	<0.01	<0.01	
9/14/2018							<0.01
3/13/2019		0.0023 (X)					
3/14/2019	0.0021 (X)		0.0022 (X)				0.0035 (X)
3/18/2019				<0.01		<0.01	
3/19/2019					0.016		
9/10/2019	0.0075 (X)						0.0085 (X)
9/11/2019		0.0053 (X)	0.0058 (X)	0.0055 (X)	0.028	0.005 (X)	

Time Series



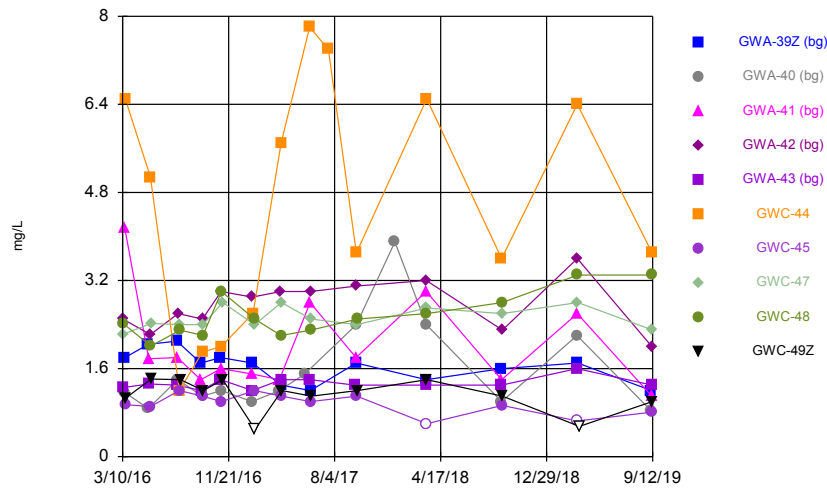
Constituent: Boron Analysis Run 11/7/2019 10:33 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



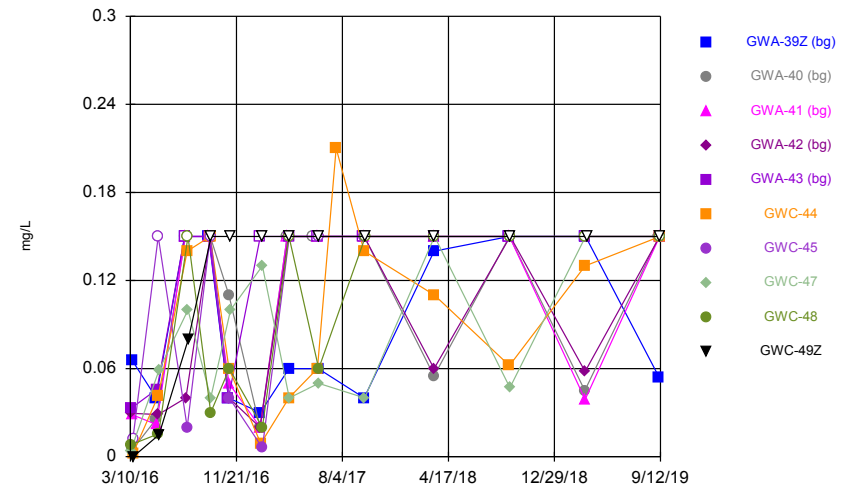
Constituent: Calcium Analysis Run 11/7/2019 10:33 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Chloride Analysis Run 11/7/2019 10:33 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Fluoride Analysis Run 11/7/2019 10:33 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								<0.003	<0.003
3/11/2016				<0.003	<0.003				
3/14/2016	<0.003								
3/15/2016		<0.003	<0.003						
3/16/2016						<0.003	<0.003		
3/17/2016									
5/11/2016	<0.1	<0.1							
5/12/2016			<0.1						
5/13/2016					<0.1				
5/16/2016				<0.1		<0.1	<0.1		
5/17/2016									<0.1
5/18/2016								<0.1	
7/19/2016	<0.1 (*)				<0.1 (*)				
7/20/2016			<0.1						
7/21/2016		<0.1							
7/22/2016				0.0076 (J)					
7/25/2016						<0.1	<0.1		
7/27/2016								<0.1 (*)	<0.1 (*)
7/28/2016									
9/15/2016	0.0067 (J)	<0.1	<0.1						
9/16/2016					<0.1				
9/19/2016				<0.1		<0.1	<0.1		
9/20/2016								0.0133 (J)	0.0078 (J)
9/21/2016									
11/2/2016	<0.1				<0.1				
11/3/2016		<0.1 (*)	<0.1	<0.1		<0.1			
11/4/2016							<0.1		<0.1
11/7/2016								0.0079 (J)	
1/17/2017		<0.04		<0.04					
1/18/2017	<0.04		<0.04		<0.04				
1/19/2017						<0.04			
1/23/2017							0.0086 (J)	<0.04	<0.04
1/24/2017									
3/24/2017		<0.04	0.0154 (J)						
3/27/2017				0.0101 (J)					
3/28/2017	<0.04				<0.04	0.0113 (J)			<0.04
3/29/2017							<0.04	<0.04	
3/30/2017									
5/24/2017		<0.04							
6/5/2017						<0.04 (*)			
6/6/2017			<0.04		<0.04 (*)				
6/7/2017	<0.04 (*)			<0.04 (*)			<0.04 (*)		
6/8/2017								<0.04	<0.04
6/9/2017									
9/22/2017					<0.04				
9/25/2017			<0.04						
9/26/2017	<0.04	0.0075 (J)		<0.04		0.0084 (J)			
9/27/2017							<0.04	<0.04	
9/29/2017									<0.04
3/14/2018	<0.04	0.0093 (J)	0.011 (J)	<0.04	<0.04				
3/15/2018						0.014 (J)	0.0077 (J)	<0.04	<0.04
9/12/2018	<0.04	<0.04	<0.04		<0.04	0.0051 (J)			

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	<0.003
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	<0.1
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	<0.1 (*)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.1 (*)
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	0.0138 (J)
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.04
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	0.0077 (J)
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.04
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.04
3/14/2018	
3/15/2018	0.0052 (J)
9/12/2018	

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z
9/13/2018	
9/14/2018	<0.04
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	0.0043 (X)
9/9/2019	
9/10/2019	
9/11/2019	<0.04
9/12/2019	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								26	12
3/11/2016				31	13				
3/14/2016	20								
3/15/2016		24	24						
3/16/2016						5.5	0.8		
3/17/2016									
5/11/2016	9.76	22.1							
5/12/2016			15.5						
5/13/2016					18.7				
5/16/2016				32		4.3	0.877		
5/17/2016									3.25
5/18/2016								26.2	
7/19/2016	3.04				12				
7/20/2016			16.5						
7/21/2016		19.3							
7/22/2016				28.5					
7/25/2016						1.41	0.781		
7/27/2016								19.3	3.2
7/28/2016									
9/15/2016	4.78	18.2	6.1						
9/16/2016					8.48				
9/19/2016				28.6		1.01	0.775		
9/20/2016								25.3	2.72
9/21/2016									
11/2/2016	2.46				11.4				
11/3/2016		18.2	13.7	26.6		0.884			
11/4/2016							0.792		1.69
11/7/2016								23.6	
1/17/2017		22		28.7					
1/18/2017	5.46		13.1		6.81				
1/19/2017						1.41			
1/23/2017							0.782	25.1	<0.5
1/24/2017									
3/24/2017		21.1	17.3						
3/27/2017				30.4					
3/28/2017	13				5.61	4.23			1.72
3/29/2017							0.756	28.9	
3/30/2017									
5/24/2017		23.5							
6/5/2017						10.1			
6/6/2017			29.1		4.99				
6/7/2017	17			31.3			0.944		
6/8/2017								25.6	3.11
6/9/2017									
9/22/2017					4.24				
9/25/2017			17.6						
9/26/2017	24.9	24.1		29.5		4.14			
9/27/2017							0.773	23.8	
9/29/2017									2.71
12/28/2017	17.9 (Y)								
3/14/2018	26.4	25.7	39.6	32.6	3.6				
3/15/2018						9	0.77	21.6 (J)	3.5

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	6.4
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	4.63
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	2.25
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	1.86
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	1.65
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	1.62
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	1.27
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	1.18
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	0.967
12/28/2017	
3/14/2018	
3/15/2018	0.81

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

9/12/2018	
9/13/2018	
9/14/2018	0.7
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	1.1
9/9/2019	
9/10/2019	
9/11/2019	0.78
9/12/2019	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								2.2206	2.4266
3/11/2016				2.4984	1.2562				
3/14/2016	1.795								
3/15/2016		1.1671	4.1666						
3/16/2016						6.505	0.9445		
3/17/2016									
5/11/2016	2.04	0.8763							
5/12/2016			1.78						
5/13/2016					1.32				
5/16/2016				2.22		5.08	0.9104		
5/17/2016									2.01
5/18/2016								2.42	
7/19/2016	2.1				1.3				
7/20/2016			1.8						
7/21/2016		1.4							
7/22/2016				2.6					
7/25/2016						1.2	1.2		
7/27/2016								2.4	2.3
7/28/2016									
9/15/2016	1.7		1.4						
9/16/2016					1.2				
9/19/2016		1.1		2.5		1.9	1.1		
9/20/2016								2.4	2.2
9/21/2016									
11/2/2016	1.8				1.4				
11/3/2016		1.2	1.6	3		2			
11/4/2016							1		3
11/7/2016								2.8	
1/17/2017		1		2.9					
1/18/2017	1.7		1.5		1.2				
1/19/2017						2.6			
1/23/2017							1.2	2.4	2.5
1/24/2017									
3/24/2017		1.2	1.4						
3/27/2017				3					
3/28/2017	1.3				1.4	5.7			2.2
3/29/2017							1.1	2.8	
3/30/2017									
5/24/2017		1.5							
6/5/2017						7.8			
6/6/2017			2.8		1.4				
6/7/2017	1.2			3			1		
6/8/2017								2.5	2.3
6/9/2017									
7/20/2017						7.4			
9/22/2017					1.3				
9/25/2017			1.8						
9/26/2017	1.7	2.4		3.1		3.7			
9/27/2017							1.1	2.4	
9/29/2017									2.5
12/28/2017		3.9 (Y)							
3/14/2018	1.4	2.4	3	3.2	1.3				

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	1.0624
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	1.41
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	1.4
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	1.2
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	1.4
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.99 (*)
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	1.2
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	1.1
7/20/2017	
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	1.2
12/28/2017	
3/14/2018	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/15/2018	1.4
9/12/2018	
9/13/2018	
9/14/2018	1.1
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<1.1
9/9/2019	
9/10/2019	
9/11/2019	1
9/12/2019	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								0.00337 (J)	0.00797 (J)
3/11/2016				0.0296 (J)	0.0329 (J)				
3/14/2016	0.0657 (J)								
3/15/2016		<0.01	0.0285 (J)						
3/16/2016						0.00218 (J)	<0.025		
3/17/2016									
5/11/2016	0.0401 (J)	0.0255 (J)							
5/12/2016			0.022 (J)						
5/13/2016					0.0459 (J)				
5/16/2016				0.0287 (J)		0.0415 (J)	<0.3		
5/17/2016									0.0156 (J)
5/18/2016								0.059 (J)	
7/19/2016	<0.3				<0.3				
7/20/2016			<0.3						
7/21/2016		<0.3							
7/22/2016				0.04 (J)					
7/25/2016						0.14 (J)	0.02 (J)		
7/27/2016								0.1 (J)	<0.3
7/28/2016									
9/15/2016	<0.3		<0.3						
9/16/2016					<0.3				
9/19/2016		<0.3		<0.3		<0.3	<0.3		
9/20/2016								0.04 (J)	0.03 (J)
9/21/2016									
11/2/2016	0.04 (J)				0.04 (J)				
11/3/2016		0.11 (J)	0.05 (J)	0.04 (J)		0.06 (J)			
11/4/2016							0.04 (J)		0.06 (J)
11/7/2016								0.1 (J)	
1/17/2017		0.02 (J)		0.02 (J)					
1/18/2017	0.03 (J)		0.02 (J)		<0.3				
1/19/2017						0.009 (J)			
1/23/2017							0.006 (J)	0.13 (J)	0.02 (J)
1/24/2017									
3/24/2017		<0.3	<0.3						
3/27/2017				<0.3					
3/28/2017	0.06 (J)				<0.3	0.04 (J)			<0.3
3/29/2017							<0.3	0.04 (J)	
3/30/2017									
5/24/2017		<0.3							
6/5/2017						0.06 (J)			
6/6/2017			<0.3		<0.3				
6/7/2017	0.06 (J)			<0.3			<0.3		
6/8/2017								0.05 (J)	0.06 (J)
6/9/2017									
7/20/2017						0.21 (J)			
9/22/2017					<0.3				
9/25/2017			<0.3						
9/26/2017	0.04 (J)	<0.3		<0.3		0.14 (J)			
9/27/2017							<0.3	0.04 (J)	
9/29/2017									<0.3
3/14/2018	0.14 (J)	0.055 (J)	<0.3	0.06 (J)	<0.3				
3/15/2018						0.11 (J)	<0.3	<0.3	<0.3

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	0 (J)
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	0.015 (J)
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	0.08 (J)
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<0.3
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	<0.3
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	<0.3
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<0.3
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	<0.3
7/20/2017	
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	<0.3
3/14/2018	
3/15/2018	<0.3

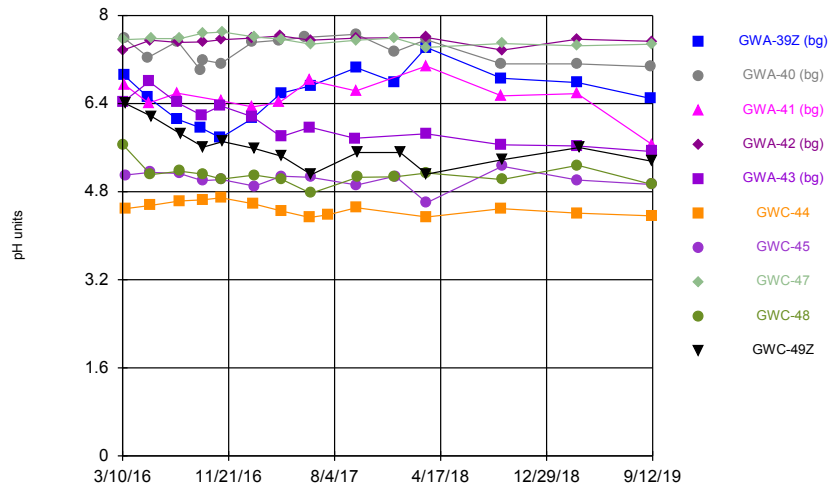
Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

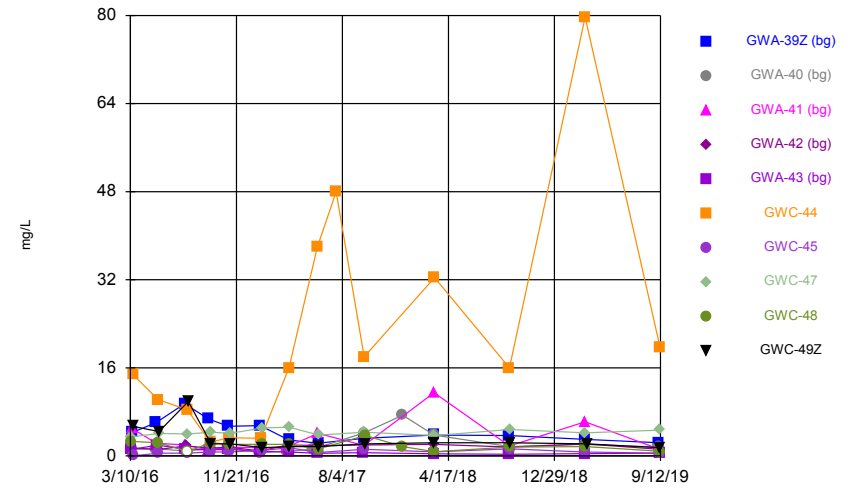
9/12/2018	
9/13/2018	
9/14/2018	<0.3
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	<0.3
9/9/2019	
9/10/2019	
9/11/2019	<0.3
9/12/2019	

Time Series



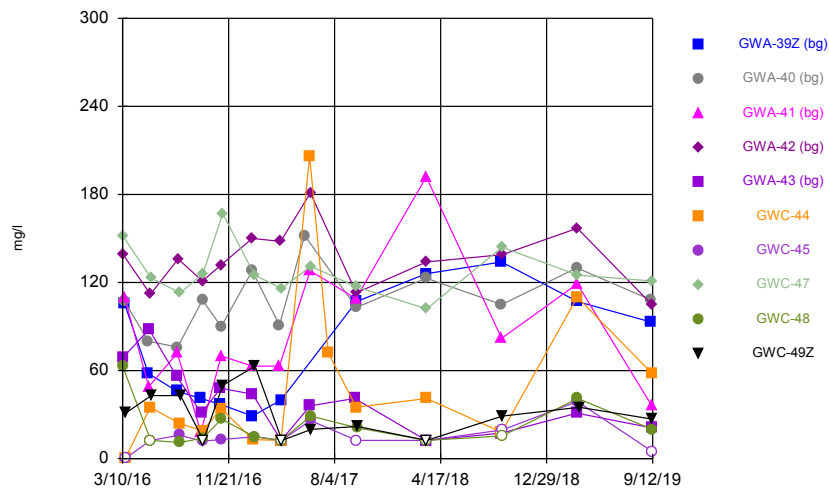
Constituent: pH Analysis Run 11/7/2019 10:33 AM View: cell 9&10 overburden app III
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Sulfate Analysis Run 11/7/2019 10:33 AM View: cell 9&10 overburden app III
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								7.56	5.66
3/11/2016				7.37	6.43				
3/14/2016	6.91								
3/15/2016		7.58	6.74						
3/16/2016						4.49	5.1		
3/17/2016									
5/11/2016	6.51	7.24							
5/12/2016			6.41						
5/13/2016					6.8				
5/16/2016				7.55		4.55	5.15		
5/17/2016									5.11
5/18/2016								7.58	
7/19/2016	6.12				6.42				
7/20/2016			6.59						
7/21/2016		7.53							
7/22/2016				7.51					
7/25/2016						4.63	5.13		
7/27/2016								7.58	5.17
7/28/2016									
9/15/2016	5.96	7							
9/16/2016					6.19				
9/19/2016		7.19		7.52		4.65	5		
9/20/2016								7.68	5.12
9/21/2016									
11/2/2016	5.78				6.36				
11/3/2016		7.13	6.45	7.56		4.69			
11/4/2016							5.02		5.03
11/7/2016								7.7	
1/17/2017		7.51		7.59					
1/18/2017	6.13		6.34		6.16				
1/19/2017						4.58			
1/23/2017							4.9	7.61	5.1
1/24/2017									
3/24/2017		7.55	6.42						
3/27/2017				7.63					
3/28/2017	6.59				5.8	4.45			5.03
3/29/2017							5.08	7.57	
3/30/2017									
5/24/2017		7.6							
6/5/2017						4.33			
6/6/2017			6.82		5.97				
6/7/2017	6.72			7.55			5.06		
6/8/2017								7.48	4.77
6/9/2017									
7/20/2017						4.38			
9/22/2017					5.77				
9/25/2017			6.63						
9/26/2017	7.05	7.66		7.59		4.51			
9/27/2017							4.92	7.55	
9/29/2017									5.06
12/28/2017	6.79 (Y)	7.34 (Y)						7.59 (Y)	5.07 (Y)
12/29/2017							5.08 (Y)		

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	6.4
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	6.17
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	5.85
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	5.61
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	5.71
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	5.58
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	5.44
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	5.11
7/20/2017	
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	5.51
12/28/2017	
12/29/2017	

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z
1/10/2018	5.51 (Y)
3/14/2018	
3/15/2018	5.12
9/12/2018	
9/13/2018	
9/14/2018	5.38
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	5.6
9/9/2019	
9/10/2019	
9/11/2019	5.35
9/12/2019	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								3.4409	2.6569
3/11/2016				1.4538	1.1313				
3/14/2016	4.2598								
3/15/2016		1.2104	4.9347						
3/16/2016						14.7828	0.00424 (J)		
3/17/2016									
5/11/2016	6.05	1.28							
5/12/2016			2.3						
5/13/2016					1.96				
5/16/2016				1.18		10.2	0.5151 (J)		
5/17/2016									2.39
5/18/2016								4.09	
7/19/2016	9.5				1.3				
7/20/2016			2						
7/21/2016		0.91 (J)							
7/22/2016				1.8					
7/25/2016						8.4	<1 (*)		
7/27/2016								4	<1.6 (*)
7/28/2016									
9/15/2016	6.7		1.1						
9/16/2016					1.1				
9/19/2016		1.3		1.4		2.5	0.72 (J)		
9/20/2016								4.3	2.4
9/21/2016									
11/2/2016	5.4				1.2				
11/3/2016		1.5	1.6	1.6		3.3			
11/4/2016							0.75 (J)		2.1
11/7/2016								4.1	
1/17/2017		<1.2 (*)		<1.8 (*)					
1/18/2017	5.5		1.5		0.84 (J)				
1/19/2017						3.2			
1/23/2017							0.99 (J)	5.1	2.1
1/24/2017									
3/24/2017		0.86 (J)	1.6						
3/27/2017				2					
3/28/2017	2.9				0.7 (J)	16 (J)			2.1
3/29/2017							1.5	5.2	
3/30/2017									
5/24/2017		1.2							
6/5/2017						38			
6/6/2017			4.1		0.47 (J)				
6/7/2017	2.3			1.9			0.63 (J)		
6/8/2017								3.8	1.3
6/9/2017									
7/20/2017						48			
9/22/2017					0.59 (J)				
9/25/2017			1.9						
9/26/2017	3.2	4.2		2		18			
9/27/2017							1.2	4.3	
9/29/2017									3.7
12/28/2017		7.4 (Y)							1.7 (Y)
3/14/2018	3.8	3.8	11.5	2.1	0.39 (J)				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	5.3658
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	4.44
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	9.9
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	2.2
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	2.2
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	1.5
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	1.7
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	1.7
7/20/2017	
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	2.2
12/28/2017	
3/14/2018	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/15/2018	2.4
9/12/2018	
9/13/2018	
9/14/2018	2.4
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	2.2
9/9/2019	
9/10/2019	
9/11/2019	1.5
9/12/2019	

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-42 (bg)	GWA-43 (bg)	GWC-44	GWC-45	GWC-47	GWC-48
3/10/2016								152	63
3/11/2016				139	69				
3/14/2016	106								
3/15/2016		107	110						
3/16/2016						<0.01	<0.01		
3/17/2016									
5/11/2016	58	80							
5/12/2016			49						
5/13/2016					88				
5/16/2016				112		35	<25		
5/17/2016									<25
5/18/2016								123	
7/19/2016	46				56				
7/20/2016			72						
7/21/2016		76							
7/22/2016				136					
7/25/2016						24 (J)	16 (J)		
7/27/2016								113	11 (J)
7/28/2016									
9/15/2016	41		18 (J)						
9/16/2016					31				
9/19/2016		108		121		19 (J)	12 (J)		
9/20/2016								126	14 (J)
9/21/2016									
11/2/2016	37				48				
11/3/2016		90	70	132		34			
11/4/2016							13 (J)		27
11/7/2016								167	
1/17/2017		128		150					
1/18/2017	29		63		44				
1/19/2017						13 (J)			
1/23/2017							15 (J)	125	15 (J)
1/24/2017									
3/24/2017		91	63						
3/27/2017				148					
3/28/2017	40				<25	<25			<25
3/29/2017							<25	116	
3/30/2017									
5/24/2017		152							
6/5/2017						206			
6/6/2017			128		36				
6/7/2017				181			26		
6/8/2017								131	29
6/9/2017									
7/20/2017						72			
9/22/2017					41				
9/25/2017			109						
9/26/2017	107	103		113		35			
9/27/2017							<25	117	
9/29/2017									21 (J)
3/14/2018	126	123	192	134	<25				
3/15/2018						41	<25	102	<25

Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

3/10/2016	
3/11/2016	
3/14/2016	
3/15/2016	
3/16/2016	
3/17/2016	31
5/11/2016	
5/12/2016	
5/13/2016	
5/16/2016	
5/17/2016	
5/18/2016	43
7/19/2016	
7/20/2016	
7/21/2016	
7/22/2016	
7/25/2016	
7/27/2016	
7/28/2016	43
9/15/2016	
9/16/2016	
9/19/2016	
9/20/2016	
9/21/2016	<25
11/2/2016	
11/3/2016	
11/4/2016	
11/7/2016	50
1/17/2017	
1/18/2017	
1/19/2017	
1/23/2017	
1/24/2017	63
3/24/2017	
3/27/2017	
3/28/2017	
3/29/2017	
3/30/2017	<25
5/24/2017	
6/5/2017	
6/6/2017	
6/7/2017	
6/8/2017	
6/9/2017	20 (J)
7/20/2017	
9/22/2017	
9/25/2017	
9/26/2017	
9/27/2017	
9/29/2017	22 (J)
3/14/2018	
3/15/2018	<25

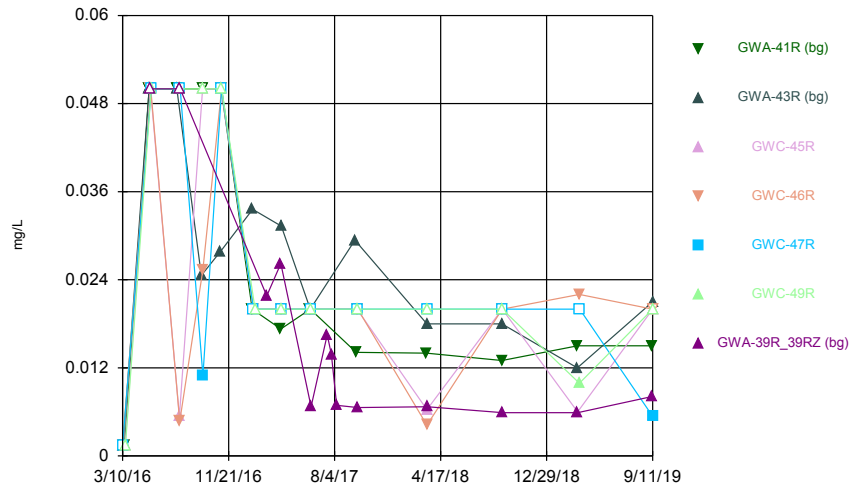
Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:34 AM View: cell 9&10 overburden app III
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

GWC-49Z

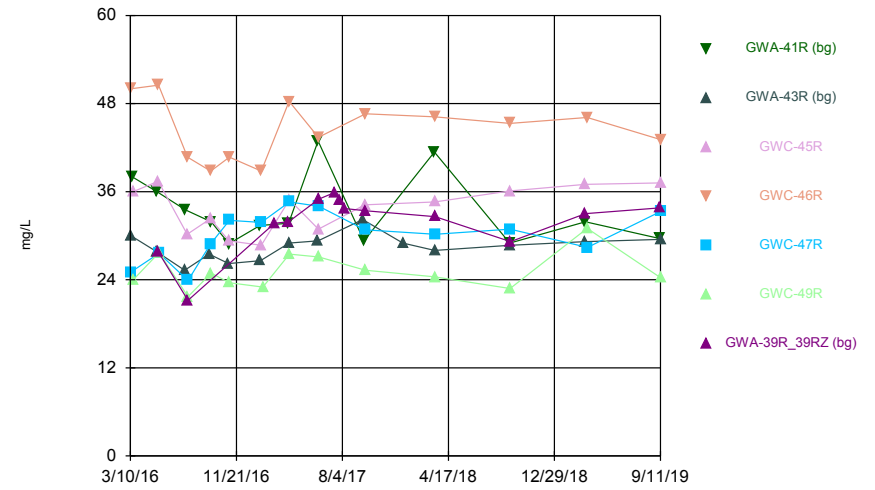
9/12/2018	
9/13/2018	
9/14/2018	29
3/13/2019	
3/14/2019	
3/15/2019	
3/19/2019	35
9/9/2019	
9/10/2019	
9/11/2019	27
9/12/2019	

Time Series



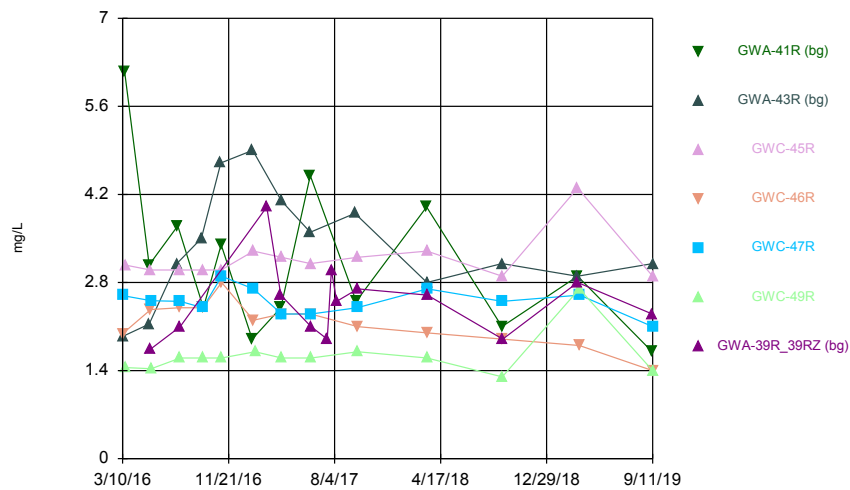
Constituent: Boron Analysis Run 11/7/2019 10:39 AM View: cell 9&10 appllI bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



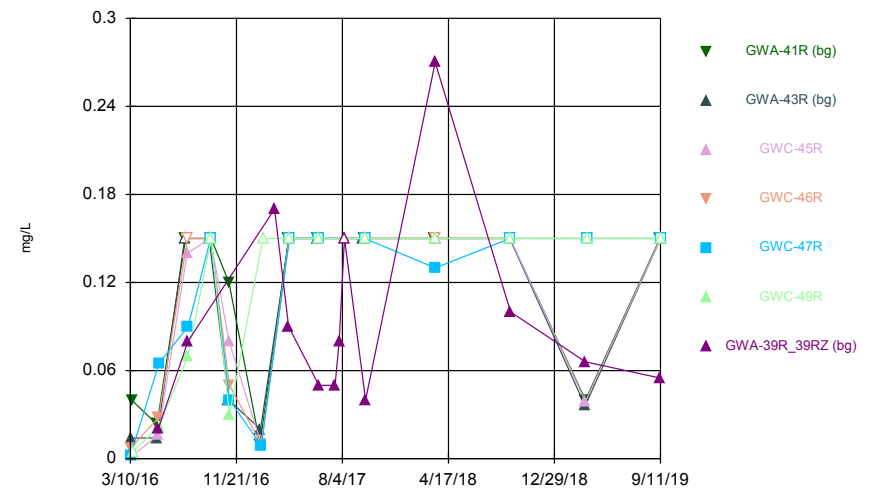
Constituent: Calcium Analysis Run 11/7/2019 10:39 AM View: cell 9&10 appllI bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Chloride Analysis Run 11/7/2019 10:39 AM View: cell 9&10 appllI bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Fluoride Analysis Run 11/7/2019 10:39 AM View: cell 9&10 appllI bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: Boron (mg/L) Analysis Run 11/7/2019 10:40 AM View: cell 9&10 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				<0.003	<0.003		
3/11/2016		<0.003					
3/15/2016	<0.003						
3/16/2016			<0.003				
3/17/2016						<0.003	
5/13/2016	<0.1	<0.1					
5/16/2016			<0.1				<0.1 (D)
5/17/2016				<0.1			
5/18/2016					<0.1	<0.1	
7/19/2016		<0.1 (*)					
7/21/2016	<0.1 (*)						
7/25/2016			0.0054 (J)				
7/26/2016				0.0047 (J)			
7/27/2016					<0.1	<0.1 (*)	<0.1 (*)
9/16/2016		0.0246 (J)					
9/19/2016			<0.1				
9/20/2016				0.0254 (J)	0.0109 (J)		
9/21/2016	<0.1 (*)					<0.1 (*)	
11/2/2016		0.0279 (J)					
11/3/2016	<0.1		<0.1				
11/4/2016				<0.1	<0.1	<0.1	
1/17/2017	<0.04						
1/18/2017		0.0336 (J)					
1/20/2017			<0.04	<0.04	<0.04		
1/24/2017						<0.04	
2/21/2017							0.0218 (JD)
3/27/2017	0.0173 (J)						0.0262 (JD)
3/28/2017		0.0313 (J)		<0.04			
3/29/2017			<0.04		<0.04	<0.04	
6/6/2017	<0.04 (*)	<0.04 (*)					
6/7/2017			<0.04 (*)	<0.04 (*)			
6/8/2017					<0.04	<0.04	0.0067 (JD)
7/17/2017							0.0165 (JD)
7/27/2017							0.0138 (JD)
8/9/2017							0.0069 (JD)
9/22/2017		0.0294 (J)					
9/25/2017	0.0141 (J)						
9/27/2017			<0.04		<0.04		
9/29/2017				<0.04		<0.04	0.0066 (JD)
3/14/2018	0.014 (J)						
3/15/2018		0.018 (J)	0.0063 (J)	0.0042 (J)		<0.04	
3/16/2018					<0.04		0.0067 (J)
9/12/2018	0.013 (J)	0.018 (J)					
9/13/2018			<0.04	<0.04	<0.04	<0.04	
9/14/2018							0.0059 (J)
3/13/2019		0.012 (X)					
3/14/2019	0.015 (X)		0.006 (X)				0.0059 (X)
3/18/2019				0.022 (X)		0.0099 (X)	
3/19/2019					<0.04		
9/10/2019	0.015 (X)						0.0081 (X)
9/11/2019		0.021 (X)	<0.04	<0.04	0.0054 (X)	<0.04	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/7/2019 10:40 AM View: cell 9&10 appllI bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				50	25		
3/11/2016		30					
3/15/2016	38						
3/16/2016			36				
3/17/2016						24	
5/13/2016	36	27.8					
5/16/2016			37.4				27.8 (D)
5/17/2016				50.5			
5/18/2016					27.6	27.7	
7/19/2016		25.3					
7/21/2016	33.5						
7/25/2016			30.2				
7/26/2016				40.7			
7/27/2016					23.9	21.7	21.2 (D)
9/16/2016		27.5					
9/19/2016			32.3				
9/20/2016				38.8	28.9		
9/21/2016	31.9					24.9	
11/2/2016		26.2					
11/3/2016	28.9		29.3				
11/4/2016				40.7	32.1	23.6	
1/17/2017	31.4						
1/18/2017		26.6					
1/20/2017			28.7	38.8	31.8		
1/24/2017						23	
2/21/2017							31.7 (D)
3/27/2017	31.7						31.9 (D)
3/28/2017		29		48.3			
3/29/2017			34.9		34.6	27.5	
6/6/2017	42.9	29.3					
6/7/2017			30.9	43.4			
6/8/2017					34	27.1	35 (D)
7/17/2017							35.9 (D)
7/27/2017							34.9 (D)
8/9/2017							33.7 (D)
9/22/2017		32.2					
9/25/2017	29.3						
9/27/2017			34.2		30.8		
9/29/2017				46.6		25.3	33.4 (D)
12/28/2017		29 (Y)					
3/14/2018	41.4						
3/15/2018		28	34.6	46.2		24.4 (J)	
3/16/2018					30.2		32.6
9/12/2018	29	28.7					
9/13/2018			36.1	45.3	30.9	22.8 (J)	
9/14/2018							29.2
3/13/2019		29.2					
3/14/2019	31.9		37				33
3/18/2019				46.1		31	
3/19/2019					28.4		
9/10/2019	29.6						33.8
9/11/2019		29.5	37.2	43.1	33.3	24.3	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/7/2019 10:40 AM View: cell 9&10 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

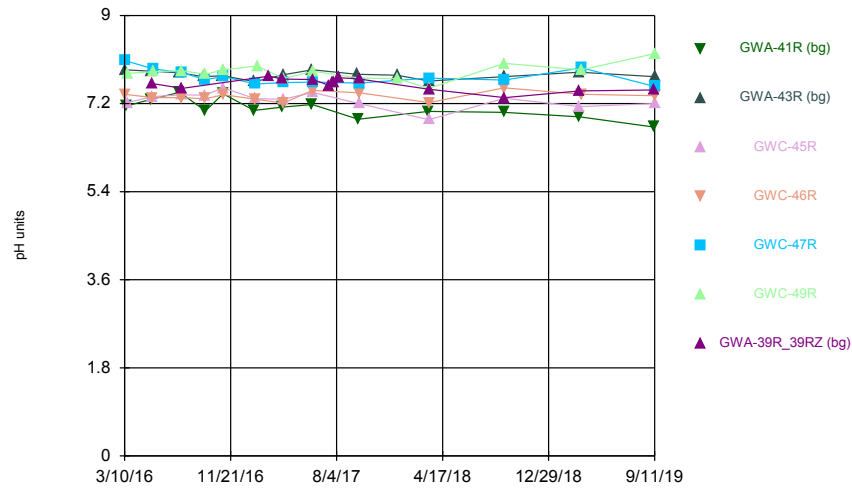
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				1.9859	2.5934		
3/11/2016		1.9467					
3/15/2016	6.1465						
3/16/2016			3.0774				
3/17/2016						1.4476	
5/13/2016	3.08	2.14					
5/16/2016			3				1.74 (D)
5/17/2016				2.37			
5/18/2016					2.51	1.43	
7/19/2016		3.1					
7/21/2016	3.7						
7/25/2016			3				
7/26/2016				2.4			
7/27/2016					2.5	1.6	2.1 (D)
9/16/2016		3.5					
9/19/2016			3				
9/20/2016				2.4	2.4		
9/21/2016	2.4					1.6	
11/2/2016		4.7					
11/3/2016	3.4		3				
11/4/2016				2.8	2.9	1.6	
1/17/2017	1.9						
1/18/2017		4.9					
1/20/2017			3.3	2.2	2.7		
1/24/2017						1.7	
2/21/2017							4 (D)
3/27/2017	2.4						2.6 (D)
3/28/2017		4.1		2.3			
3/29/2017			3.2		2.3	1.6	
6/6/2017	4.5	3.6					
6/7/2017			3.1	2.3			
6/8/2017					2.3	1.6	2.1 (D)
7/17/2017							1.9 (D)
7/27/2017							3 (D)
8/9/2017							2.5 (D)
9/22/2017		3.9					
9/25/2017	2.5						
9/27/2017			3.2		2.4		
9/29/2017				2.1		1.7	2.7 (D)
3/14/2018	4 (J)						
3/15/2018		2.8	3.3	2		1.6	
3/16/2018					2.7		2.6
9/12/2018	2.1	3.1					
9/13/2018			2.9	1.9	2.5	1.3	
9/14/2018							1.9
3/13/2019		2.9					
3/14/2019	2.9		4.3				2.8
3/18/2019				1.8		2.7	
3/19/2019					2.6		
9/10/2019	1.7						2.3
9/11/2019		3.1	2.9	1.4	2.1	1.4	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/7/2019 10:40 AM View: cell 9&10 appllI bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

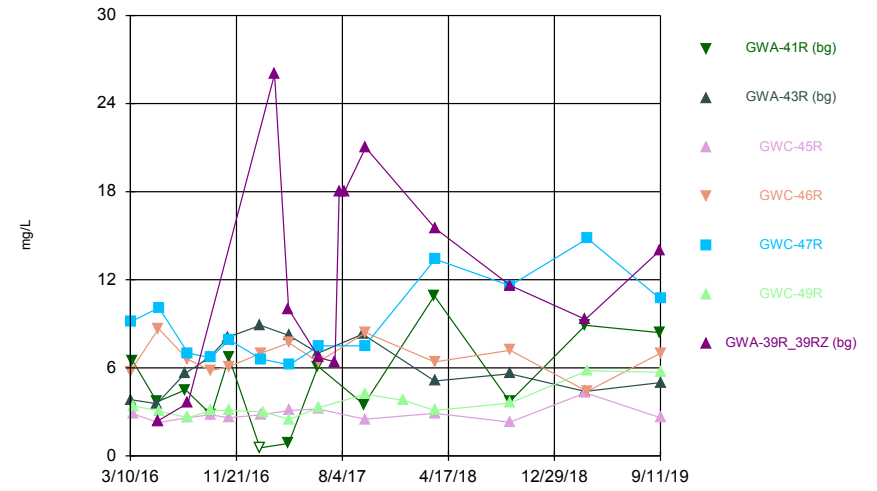
	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				0.00697 (J)	0.00202 (J)		
3/11/2016		0.0141 (J)					
3/15/2016	0.0394 (J)						
3/16/2016			0.00244 (J)				
3/17/2016						<0.01	
5/13/2016	0.0234 (J)	0.0141 (J)					
5/16/2016			0.0161 (J)				0.0202 (JD)
5/17/2016				0.0281 (J)			
5/18/2016					0.065 (J)	0.022 (J)	
7/19/2016		<0.3					
7/21/2016	<0.3						
7/25/2016			0.14 (J)				
7/26/2016				<0.3			
7/27/2016					0.09 (J)	0.07 (J)	0.08 (JD)
9/16/2016		<0.3					
9/19/2016			<0.3				
9/20/2016				<0.3	<0.3		
9/21/2016	<0.3					<0.3	
11/2/2016		0.04 (J)					
11/3/2016	0.12 (J)		0.08 (J)				
11/4/2016				0.05 (J)	0.04 (J)	0.03 (J)	
1/17/2017	0.01 (J)						
1/18/2017		0.02 (J)					
1/20/2017			0.01 (J)	0.01 (J)	0.009 (J)		
1/24/2017						<0.3	
2/21/2017							0.17 (JD)
3/27/2017	<0.3						0.09 (JD)
3/28/2017		<0.3		<0.3			
3/29/2017			<0.3		<0.3	<0.3	
6/6/2017	<0.3	<0.3					
6/7/2017			<0.3	<0.3			
6/8/2017					<0.3 (*)	<0.3 (*)	0.05 (JD)
7/17/2017							0.05 (JD)
7/27/2017							0.08 (JD)
8/9/2017							<0.3 (*)
9/22/2017		<0.3					
9/25/2017	<0.3						
9/27/2017			<0.3		<0.3		
9/29/2017				<0.3		<0.3	0.04 (JD)
3/14/2018	<0.3						
3/15/2018		<0.3	<0.3	<0.3		<0.3	
3/16/2018					0.13 (J)		0.27 (JD)
9/12/2018	<0.3	<0.3					
9/13/2018			<0.3	<0.3	<0.3	<0.3	
9/14/2018							0.1 (J)
3/13/2019		0.036 (X)					
3/14/2019	0.04 (X)		0.039 (X)				0.066 (X)
3/18/2019				<0.3		<0.3	
3/19/2019					<0.3		
9/10/2019	<0.3						0.055 (X)
9/11/2019		<0.3	<0.3	<0.3	<0.3	<0.3	

Time Series



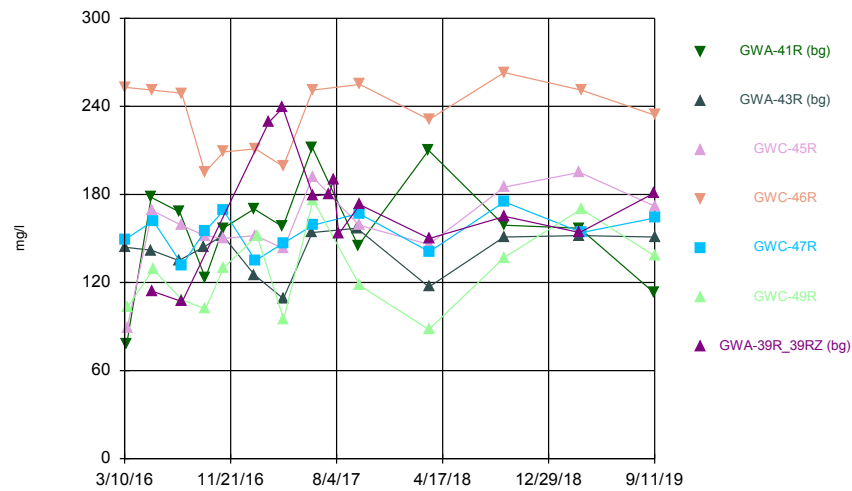
Constituent: pH Analysis Run 11/7/2019 10:39 AM View: cell 9&10 apIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Sulfate Analysis Run 11/7/2019 10:39 AM View: cell 9&10 apIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/7/2019 10:39 AM View: cell 9&10 apIII bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:40 AM View: cell 9&10 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				7.39	8.08		
3/11/2016		7.89					
3/15/2016	7.15						
3/16/2016			7.22				
3/17/2016						7.82	
5/13/2016	7.29	7.86					
5/16/2016			7.34				7.61 (D)
5/17/2016				7.32			
5/18/2016					7.91	7.85	
7/19/2016		7.83					
7/21/2016	7.43						
7/25/2016			7.38				
7/26/2016				7.32			
7/27/2016					7.83	7.87	7.51 (D)
9/16/2016		7.75					
9/19/2016			7.37				
9/20/2016				7.3	7.69		
9/21/2016	7.05					7.8	
11/2/2016		7.77					
11/3/2016	7.4		7.52				
11/4/2016				7.38	7.75	7.89	
1/17/2017	7.06						
1/18/2017		7.65					
1/20/2017			7.3	7.29	7.6		
1/24/2017						7.97	
2/21/2017							7.76 (D)
3/27/2017	7.13						7.7 (D)
3/28/2017		7.79		7.21			
3/29/2017			7.29		7.63	7.71	
6/6/2017	7.18	7.89					
6/7/2017			7.43	7.47			
6/8/2017					7.64	7.86	7.69 (D)
7/17/2017							7.57 (D)
7/26/2017							7.63
7/27/2017							7.63
8/8/2017							7.73
8/9/2017							7.73
9/22/2017		7.8					
9/25/2017	6.88						
9/27/2017			7.2		7.62		
9/29/2017				7.42		7.72	7.7 (D)
12/28/2017		7.78 (Y)				7.71 (Y)	
3/14/2018	7.04						
3/15/2018		7.66	6.87	7.22		7.51	
3/16/2018					7.72		7.49
9/12/2018	7.02	7.75					
9/13/2018			7.31	7.52	7.68	8.02	
9/14/2018							7.32
3/13/2019		7.84					
3/14/2019	6.93		7.14				7.46
3/18/2019				7.39		7.89	
3/19/2019					7.93		

Time Series

Constituent: pH (pH units) Analysis Run 11/7/2019 10:40 AM View: cell 9&10 applll bedrock
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
9/10/2019	6.72						7.48
9/11/2019		7.75	7.2	7.36	7.55	8.22	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/7/2019 10:40 AM View: cell 9&10 appll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				5.7554	9.1279		
3/11/2016		3.8282					
3/15/2016	6.4987						
3/16/2016			2.8721				
3/17/2016						3.4197	
5/13/2016	3.68	3.56					
5/16/2016			2.27				2.4 (D)
5/17/2016				8.67			
5/18/2016					10.1	3.06	
7/19/2016		5.6					
7/21/2016	4.5						
7/25/2016			2.6				
7/26/2016				6.6			
7/27/2016					7	2.6	3.6 (D)
9/16/2016		6.7					
9/19/2016			2.8				
9/20/2016				5.8	6.7		
9/21/2016	2.8					3.1	
11/2/2016		8.1					
11/3/2016	6.7		2.6				
11/4/2016				6.1	7.9	3.1	
1/17/2017	<1.1 (*)						
1/18/2017		8.9					
1/20/2017			2.8	7	6.6		
1/24/2017						3	
2/21/2017							26 (D)
3/27/2017	0.85 (J)						10 (D)
3/28/2017		8.2		7.7			
3/29/2017			3.1		6.2	2.5	
6/6/2017	6.1	7					
6/7/2017			3.2	6.4			
6/8/2017					7.5	3.3	6.7 (D)
7/17/2017							6.4 (D)
7/27/2017							18 (D)
8/9/2017							18 (D)
9/22/2017		8.3					
9/25/2017	3.5						
9/27/2017			2.5		7.5		
9/29/2017				8.4		4.2	21 (D)
12/28/2017						3.8 (Y)	
3/14/2018	10.9 (J)						
3/15/2018		5.1	2.9	6.4		3.1	
3/16/2018					13.4		15.5
9/12/2018	3.7	5.6					
9/13/2018			2.3	7.2	11.6	3.6	
9/14/2018							11.6
3/13/2019		4.4					
3/14/2019	8.9		4.3				9.3
3/18/2019				4.4		5.8	
3/19/2019					14.8		
9/10/2019	8.4						14
9/11/2019		5	2.6	7	10.7	5.7	

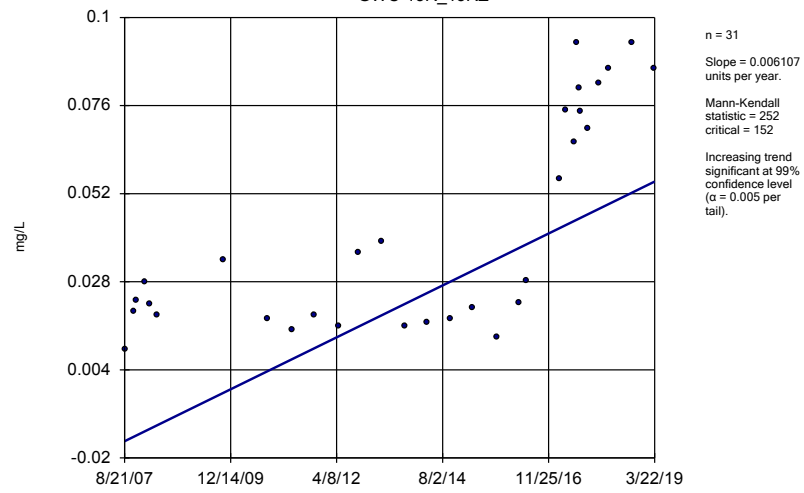
Time Series

Constituent: Total Dissolved Solids (mg/l) Analysis Run 11/7/2019 10:40 AM View: cell 9&10 applll bedrock
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-43R (bg)	GWC-45R	GWC-46R	GWC-47R	GWC-49R	GWA-39R_39RZ ...
3/10/2016				253	149		
3/11/2016		144					
3/15/2016	78						
3/16/2016			89				
3/17/2016						103	
5/13/2016	178	142					
5/16/2016			169				114 (D)
5/17/2016				251			
5/18/2016					162	129	
7/19/2016		135					
7/21/2016	168						
7/25/2016			159				
7/26/2016				249			
7/27/2016					132	108	107 (D)
9/16/2016		144					
9/19/2016			152				
9/20/2016				195	155		
9/21/2016	123					102	
11/2/2016		152					
11/3/2016	157		150				
11/4/2016				209	169	130	
1/17/2017	170						
1/18/2017		125					
1/20/2017			152	211	135		
1/24/2017						152	
2/21/2017							229 (D)
3/27/2017	158						239 (D)
3/28/2017		109		199			
3/29/2017			143		147	95	
6/6/2017	212	154					
6/7/2017			192	251			
6/8/2017					159	176	179 (D)
7/17/2017							180 (D)
7/27/2017							190 (D)
8/9/2017							153 (D)
9/22/2017		157					
9/25/2017	145						
9/27/2017			159		167		
9/29/2017				255		118	173 (D)
3/14/2018	210						
3/15/2018		117	146	231		88	
3/16/2018					141		150
9/12/2018	159	151					
9/13/2018			185	263	175	137	
9/14/2018							165
3/13/2019		152					
3/14/2019	157		195				154
3/18/2019				251		170	
3/19/2019					154		
9/10/2019	113						181
9/11/2019		151	172	234	164	138	

APPENDIX C
STATISTICAL RESULTS

Sen's Slope Estimator
GWC-13R_13RZ



Constituent: Barium Analysis Run 8/22/2019 2:36 PM View: 13 barium
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/22/2019 2:37 PM View: 13 barium

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-13R_13RZ

8/21/2007	0.0095
11/1/2007	0.02
11/19/2007	0.023
1/31/2008	0.028
3/5/2008	0.022
5/7/2008	0.019
12/12/2008	0.19 (O)
4/29/2009	0.14 (O)
10/21/2009	0.034
4/28/2010	0.11 (O)
10/6/2010	0.018
4/20/2011	0.015
10/12/2011	0.019
4/25/2012	0.0158
10/2/2012	0.036
4/2/2013	0.039
10/8/2013	0.016
4/1/2014	0.017
10/1/2014	0.018
3/31/2015	0.021
10/14/2015	0.013
4/4/2016	0.0222
6/1/2016	0.0283
2/22/2017	0.0561
4/11/2017	0.0748
6/16/2017	0.0661
7/12/2017	0.0932
7/28/2017	0.0808
8/10/2017	0.0743
10/6/2017	0.0699
12/28/2017	0.082 (Y)
3/23/2018	0.086
9/20/2018	0.093
3/22/2019	0.086

Intrawell Prediction Limit Summary Table – Metals Cells 1 & 2 OB Significant Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 9:14 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Zinc (mg/L)	GWC-13	0.02	n/a	3/23/2019	0.021	Yes	23	26.09	No	0.000...	Param 1 of 3

Intrawell Prediction Limit Summary Table – Metals Cells 1 & 2 OB All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 9:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GWA-3	0.0068	n/a	n/a	1 future	n/a	32	68.75	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-50	0.0025	n/a	3/19/2019	0.0015ND	No	26	92.31	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-10	0.0030	n/a	3/22/2019	0.0015ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-11	0.0025	n/a	n/a	1 future	n/a	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-12	0.0030	n/a	3/23/2019	0.0015ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-13	0.0030	n/a	3/23/2019	0.0015ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-14_14Z	0.0050	n/a	3/22/2019	0.0015ND	No	32	87.5	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-15_15Z	0.053	n/a	3/22/2019	0.0015ND	No	32	81.25	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-5	0.028	n/a	3/20/2019	0.0015ND	No	32	93.75	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-6	0.0035	n/a	3/21/2019	0.0015ND	No	32	93.75	n/a	0.000...	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-7Z	0.0015	n/a	3/21/2019	0.0015ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-8Z	0.0030	n/a	5/6/2019	0.0015ND	No	15	100	n/a	0.001313	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-9	0.0025	n/a	3/21/2019	0.0015ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-3	0.0050	n/a	3/20/2019	0.0025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-50	0.0050	n/a	3/19/2019	0.0025ND	No	26	100	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-10	0.015	n/a	3/22/2019	0.0025ND	No	32	87.5	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-11	0.0025	n/a	3/23/2019	0.0025ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-12	0.012	n/a	3/23/2019	0.0055	No	31	29.03	No	0.000...	Param 1 of 3
Arsenic (mg/L)	GWC-13	0.0096	n/a	n/a	1 future	n/a	32	78.13	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-14_14Z	0.014	n/a	3/22/2019	0.0025ND	No	32	84.38	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-15_15Z	0.0077	n/a	3/22/2019	0.0025ND	No	32	75	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-5	0.0025	n/a	3/20/2019	0.0025ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-6	0.014	n/a	3/21/2019	0.0025ND	No	32	90.63	n/a	0.000...	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-7Z	0.0049	n/a	n/a	1 future	n/a	11	18.18	No	0.000...	Param 1 of 3
Arsenic (mg/L)	GWC-8Z	0.0025	n/a	n/a	1 future	n/a	15	93.33	n/a	0.001313	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-9	0.024	n/a	3/21/2019	0.0025ND	No	32	90.63	n/a	0.000...	NP (NDs) 1 of 3
Barium (mg/L)	GWA-3	0.021	n/a	n/a	1 future	n/a	32	3.125	n/a	0.000...	NP (normality) 1 of 3
Barium (mg/L)	GWA-50	0.098	n/a	3/19/2019	0.012	No	26	3.846	n/a	0.000...	NP (normality) 1 of 3
Barium (mg/L)	GWC-10	0.12	n/a	3/22/2019	0.024	No	32	0	n/a	0.000...	NP (normality) 1 of 3
Barium (mg/L)	GWC-11	0.12	n/a	n/a	1 future	n/a	32	3.125	n/a	0.000...	NP (normality) 1 of 3
Barium (mg/L)	GWC-12	0.13	n/a	3/23/2019	0.024	No	32	0	n/a	0.000...	NP (normality) 1 of 3
Barium (mg/L)	GWC-13	0.072	n/a	3/23/2019	0.023	No	32	0	ln(x)	0.000...	Param 1 of 3
Barium (mg/L)	GWC-14_14Z	0.096	n/a	3/22/2019	0.014	No	32	6.25	ln(x)	0.000...	Param 1 of 3
Barium (mg/L)	GWC-15_15Z	0.032	n/a	3/22/2019	0.014	No	32	3.125	ln(x)	0.000...	Param 1 of 3
Barium (mg/L)	GWC-5	0.13	n/a	3/20/2019	0.018	No	32	0	n/a	0.000...	NP (normality) 1 of 3
Barium (mg/L)	GWC-6	0.11	n/a	n/a	1 future	n/a	32	3.125	n/a	0.000...	NP (normality) 1 of 3
Barium (mg/L)	GWC-7Z	0.04	n/a	3/21/2019	0.03	No	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWC-8Z	0.053	n/a	5/6/2019	0.017	No	15	0	sqrt(x)	0.000...	Param 1 of 3
Barium (mg/L)	GWC-9	0.16	n/a	3/21/2019	0.042	No	32	0	n/a	0.000...	NP (normality) 1 of 3
Beryllium (mg/L)	GWA-3	0.0030	n/a	3/20/2019	0.0015ND	No	14	100	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWA-50	0.0030	n/a	3/19/2019	0.0015ND	No	14	100	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-10	0.0015	n/a	n/a	1 future	n/a	14	71.43	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-11	0.0030	n/a	n/a	1 future	n/a	14	100	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-12	0.0030	n/a	3/23/2019	0.0015ND	No	14	100	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-13	0.0015	n/a	n/a	1 future	n/a	14	57.14	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-14_14Z	0.0015	n/a	n/a	1 future	n/a	14	78.57	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-15_15Z	0.0030	n/a	3/22/2019	0.0015ND	No	14	100	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-5	0.0015	n/a	n/a	1 future	n/a	14	14.29	ln(x)	0.000...	Param 1 of 3
Beryllium (mg/L)	GWC-6	0.0015	n/a	3/21/2019	0.0015ND	No	14	78.57	n/a	0.0016	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-7Z	0.0030	n/a	3/21/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3

Intrawell Prediction Limit Summary Table – Metals Cells 1 & 2 OB All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 9:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Beryllium (mg/L)	GWC-8Z	0.0015	n/a	n/a	1 future	n/a	15	93.33	n/a	0.001313	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-9	0.0015	n/a	n/a	1 future	n/a	14	35.71	n/a	0.0016	NP (normality) 1 of 3
Cadmium (mg/L)	GWA-3	0.0010	n/a	3/20/2019	0.0005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWA-50	0.00065	n/a	3/19/2019	0.0005ND	No	26	96.15	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-10	0.0010	n/a	3/22/2019	0.0005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-11	0.0010	n/a	3/23/2019	0.0005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-12	0.00065	n/a	n/a	1 future	n/a	32	68.75	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-13	0.0010	n/a	3/23/2019	0.0005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-14_14Z	0.00065	n/a	3/22/2019	0.0005ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-15_15Z	0.0010	n/a	3/22/2019	0.0005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-5	0.0010	n/a	3/20/2019	0.0005ND	No	32	78.13	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-6	0.00065	n/a	3/21/2019	0.0005ND	No	32	93.75	n/a	0.000...	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-7Z	0.00050	n/a	3/21/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-8Z	0.00065	n/a	5/6/2019	0.0005ND	No	15	86.67	n/a	0.001313	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-9	0.0010	n/a	3/21/2019	0.0005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-3	0.17	n/a	3/20/2019	0.005ND	No	32	78.13	n/a	0.000...	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-50	0.0050	n/a	3/19/2019	0.005ND	No	26	88.46	n/a	0.000...	NP (NDs) 1 of 3
Chromium (mg/L)	GWC-10	0.042	n/a	3/22/2019	0.005ND	No	32	46.88	n/a	0.000...	NP (xform) 1 of 3
Chromium (mg/L)	GWC-11	0.025	n/a	3/23/2019	0.005ND	No	32	28.13	n/a	0.000...	NP (normality) 1 of 3
Chromium (mg/L)	GWC-12	0.039	n/a	3/23/2019	0.005ND	No	32	71.88	n/a	0.000...	NP (NDs) 1 of 3
Chromium (mg/L)	GWC-13	0.02	n/a	n/a	1 future	n/a	32	0	ln(x)	0.000...	Param 1 of 3
Chromium (mg/L)	GWC-14_14Z	0.083	n/a	3/22/2019	0.005ND	No	32	25	n/a	0.000...	NP (xform) 1 of 3
Chromium (mg/L)	GWC-15_15Z	0.085	n/a	3/22/2019	0.005ND	No	32	46.88	n/a	0.000...	NP (normality) 1 of 3
Chromium (mg/L)	GWC-5	0.032	n/a	3/20/2019	0.005ND	No	32	53.13	n/a	0.000...	NP (NDs) 1 of 3
Chromium (mg/L)	GWC-6	0.064	n/a	n/a	1 future	n/a	32	31.25	n/a	0.000...	NP (xform) 1 of 3
Chromium (mg/L)	GWC-7Z	0.010	n/a	3/21/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWC-8Z	0.048	n/a	n/a	1 future	n/a	15	40	n/a	0.001313	NP (xform) 1 of 3
Chromium (mg/L)	GWC-9	0.078	n/a	3/21/2019	0.005ND	No	32	75	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWA-3	0.0057	n/a	3/20/2019	0.005ND	No	32	37.5	n/a	0.000...	NP (normality) 1 of 3
Cobalt (mg/L)	GWA-50	0.010	n/a	3/19/2019	0.005ND	No	26	100	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-10	0.013	n/a	n/a	1 future	n/a	32	65.63	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-11	0.016	n/a	3/23/2019	0.005ND	No	32	78.13	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-12	0.98	n/a	n/a	1 future	n/a	32	9.375	n/a	0.000...	NP (normality) 1 of 3
Cobalt (mg/L)	GWC-13	0.011	n/a	3/23/2019	0.005ND	No	32	87.5	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-14_14Z	0.011	n/a	3/22/2019	0.005ND	No	32	78.13	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-15_15Z	0.069	n/a	3/22/2019	0.005ND	No	32	90.63	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-5	0.0073	n/a	3/20/2019	0.005ND	No	32	53.13	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-6	0.0050	n/a	3/21/2019	0.005ND	No	32	87.5	n/a	0.000...	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-7Z	0.0050	n/a	n/a	1 future	n/a	11	9.091	n/a	0.002806	NP (normality) 1 of 3
Cobalt (mg/L)	GWC-8Z	0.0050	n/a	5/6/2019	0.005ND	No	15	80	n/a	0.001313	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-9	0.13	n/a	3/21/2019	0.005ND	No	32	68.75	n/a	0.000...	NP (NDs) 1 of 3
Copper (mg/L)	GWA-3	0.051	n/a	3/20/2019	0.026	No	27	0	No	0.000...	Param 1 of 3
Copper (mg/L)	GWA-50	0.018	n/a	n/a	1 future	n/a	21	19.05	sqrt(x)	0.000...	Param 1 of 3
Copper (mg/L)	GWC-10	0.013	n/a	3/22/2019	0.0125ND	No	27	74.07	n/a	0.000256	NP (NDs) 1 of 3
Copper (mg/L)	GWC-11	0.013	n/a	3/23/2019	0.0125ND	No	27	85.19	n/a	0.000256	NP (NDs) 1 of 3
Copper (mg/L)	GWC-12	0.013	n/a	3/23/2019	0.0125ND	No	27	70.37	n/a	0.000256	NP (NDs) 1 of 3
Copper (mg/L)	GWC-13	0.013	n/a	3/23/2019	0.0125ND	No	27	85.19	n/a	0.000256	NP (NDs) 1 of 3
Copper (mg/L)	GWC-14_14Z	0.013	n/a	3/22/2019	0.0125ND	No	27	66.67	n/a	0.000256	NP (NDs) 1 of 3
Copper (mg/L)	GWC-15_15Z	0.021	n/a	3/22/2019	0.0125ND	No	26	69.23	n/a	0.000...	NP (NDs) 1 of 3
Copper (mg/L)	GWC-5	0.056	n/a	n/a	1 future	n/a	26	0	No	0.000...	Param 1 of 3

Intrawell Prediction Limit Summary Table – Metals Cells 1 & 2 OB All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 9:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Copper (mg/L)	GWC-6	0.013	n/a	n/a	1 future	n/a	27	59.26	n/a	0.000256	NP (NDs) 1 of 3
Copper (mg/L)	GWC-7Z	0.013	n/a	3/21/2019	0.0125ND	No	5	60	n/a	0.01896	NP (NDs) 1 of 3
Copper (mg/L)	GWC-8Z	0.013	n/a	5/6/2019	0.0125ND	No	10	70	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-9	0.013	n/a	3/21/2019	0.0125ND	No	27	66.67	n/a	0.000256	NP (NDs) 1 of 3
Lead (mg/L)	GWA-3	0.0050	n/a	3/20/2019	0.0025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWA-50	0.0065	n/a	3/19/2019	0.0025ND	No	26	92.31	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-10	0.0050	n/a	3/22/2019	0.0025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-11	0.0065	n/a	3/23/2019	0.0025ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-12	0.0050	n/a	3/23/2019	0.0025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-13	0.0065	n/a	3/23/2019	0.0025ND	No	32	84.38	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-14_14Z	0.0065	n/a	3/22/2019	0.0025ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-15_15Z	0.0050	n/a	3/22/2019	0.0025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-5	0.0050	n/a	3/20/2019	0.0025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-6	0.0065	n/a	3/21/2019	0.0025ND	No	32	93.75	n/a	0.000...	NP (NDs) 1 of 3
Lead (mg/L)	GWC-7Z	0.0025	n/a	3/21/2019	0.0025ND	No	11	45.45	n/a	0.002806	NP (normality) 1 of 3
Lead (mg/L)	GWC-8Z	0.0065	n/a	n/a	1 future	n/a	15	46.67	n/a	0.001313	NP (normality) 1 of 3
Lead (mg/L)	GWC-9	0.0065	n/a	3/21/2019	0.0025ND	No	32	78.13	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-3	0.00050	n/a	3/20/2019	0.00025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-50	0.00030	n/a	3/19/2019	0.00025ND	No	26	96.15	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-10	0.00050	n/a	3/22/2019	0.00025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-11	0.00030	n/a	3/23/2019	0.00025ND	No	32	93.75	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-12	0.00030	n/a	3/23/2019	0.00025ND	No	32	93.75	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-13	0.00030	n/a	3/23/2019	0.00025ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-14_14Z	0.00050	n/a	3/22/2019	0.00025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-15_15Z	0.00030	n/a	3/22/2019	0.00025ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-5	0.00030	n/a	3/20/2019	0.00025ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-6	0.00030	n/a	3/21/2019	0.00025ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-7Z	0.00050	n/a	3/21/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-8Z	0.00050	n/a	5/6/2019	0.00025ND	No	16	100	n/a	0.001026	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-9	0.00050	n/a	3/21/2019	0.00025ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Nickel (mg/L)	GWA-3	0.14	n/a	3/20/2019	0.01	No	27	0	n/a	0.000256	NP (normality) 1 of 3
Nickel (mg/L)	GWA-50	0.0050	n/a	3/19/2019	0.005ND	No	21	47.62	n/a	0.000511	NP (normality) 1 of 3
Nickel (mg/L)	GWC-10	0.032	n/a	n/a	1 future	n/a	27	51.85	n/a	0.000256	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-11	0.0087	n/a	3/23/2019	0.005ND	No	27	85.19	n/a	0.000256	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-12	0.029	n/a	n/a	1 future	n/a	27	48.15	n/a	0.000256	NP (normality) 1 of 3
Nickel (mg/L)	GWC-13	0.015	n/a	3/23/2019	0.005ND	No	27	74.07	n/a	0.000256	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-14_14Z	0.011	n/a	3/22/2019	0.005ND	No	27	62.96	n/a	0.000256	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-15_15Z	0.019	n/a	3/22/2019	0.005ND	No	26	80.77	n/a	0.000...	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-5	0.046	n/a	n/a	1 future	n/a	27	0	No	0.000...	Param 1 of 3
Nickel (mg/L)	GWC-6	0.046	n/a	3/21/2019	0.005ND	No	27	44.44	n/a	0.000256	NP (xform) 1 of 3
Nickel (mg/L)	GWC-7Z	0.0037	n/a	n/a	1 future	n/a	5	40	No	0.000...	Param 1 of 3
Nickel (mg/L)	GWC-8Z	0.0050	n/a	5/6/2019	0.005ND	No	10	60	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-9	0.057	n/a	n/a	1 future	n/a	27	37.04	n/a	0.000256	NP (normality) 1 of 3
Selenium (mg/L)	GWA-3	0.010	n/a	3/20/2019	0.005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-50	0.010	n/a	3/19/2019	0.005ND	No	26	100	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-10	0.010	n/a	3/22/2019	0.005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-11	0.010	n/a	3/23/2019	0.005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-12	0.010	n/a	3/23/2019	0.005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-13	0.0074	n/a	3/23/2019	0.005ND	No	32	62.5	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-14_14Z	0.010	n/a	3/22/2019	0.005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3

Intrawell Prediction Limit Summary Table – Metals Cells 1 & 2 OB All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 9:14 AM

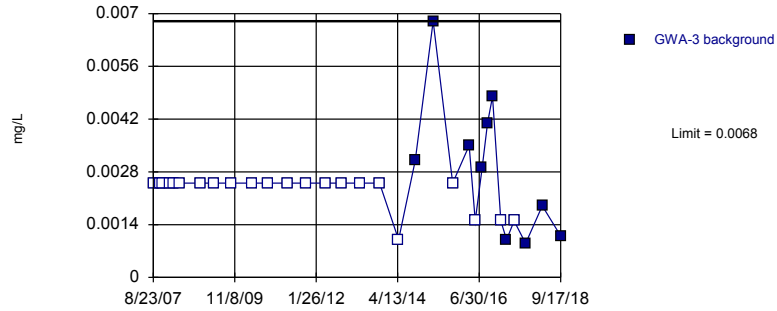
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	GWC-15_15Z	0.010	n/a	3/22/2019	0.005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-5	0.015	n/a	3/20/2019	0.005ND	No	32	87.5	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-6	0.010	n/a	3/21/2019	0.005ND	No	32	100	n/a	0.000...	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-7Z	0.010	n/a	3/21/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-8Z	0.010	n/a	5/6/2019	0.005ND	No	15	100	n/a	0.001313	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-9	0.0065	n/a	3/21/2019	0.005ND	No	32	96.88	n/a	0.000...	NP (NDs) 1 of 3
Silver (mg/L)	GWA-3	0.010	n/a	3/20/2019	0.005ND	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Silver (mg/L)	GWA-50	0.0050	n/a	3/19/2019	0.005ND	No	21	80.95	n/a	0.000511	NP (NDs) 1 of 3
Silver (mg/L)	GWC-10	0.010	n/a	3/22/2019	0.005ND	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Silver (mg/L)	GWC-11	0.010	n/a	3/23/2019	0.005ND	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Silver (mg/L)	GWC-12	0.0050	n/a	3/23/2019	0.005ND	No	27	96.3	n/a	0.000256	NP (NDs) 1 of 3
Silver (mg/L)	GWC-13	0.010	n/a	3/23/2019	0.005ND	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Silver (mg/L)	GWC-14_14Z	0.010	n/a	3/22/2019	0.005ND	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Silver (mg/L)	GWC-15_15Z	0.010	n/a	3/22/2019	0.005ND	No	26	100	n/a	0.000...	NP (NDs) 1 of 3
Silver (mg/L)	GWC-5	0.010	n/a	3/20/2019	0.005ND	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Silver (mg/L)	GWC-6	0.010	n/a	3/21/2019	0.005ND	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Silver (mg/L)	GWC-7Z	0.010	n/a	3/21/2019	0.005ND	No	5	100	n/a	0.01896	NP (NDs) 1 of 3
Silver (mg/L)	GWC-8Z	0.010	n/a	5/6/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-9	0.010	n/a	3/21/2019	0.005ND	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-3	0.0010	n/a	3/20/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-50	0.0010	n/a	3/19/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-10	0.0010	n/a	3/22/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-11	0.0010	n/a	3/23/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-12	0.0010	n/a	3/23/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-13	0.0010	n/a	3/23/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-14_14Z	0.0010	n/a	3/22/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-15_15Z	0.0097	n/a	3/22/2019	0.0005ND	No	12	75	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-5	0.0010	n/a	3/20/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-6	0.00050	n/a	3/21/2019	0.0005ND	No	12	91.67	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-7Z	0.0010	n/a	3/21/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-8Z	0.00050	n/a	5/6/2019	0.0005ND	No	12	83.33	n/a	0.002173	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-9	0.0010	n/a	3/21/2019	0.0005ND	No	12	100	n/a	0.002173	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-3	0.0050	n/a	3/20/2019	0.005ND	No	27	92.59	n/a	0.000256	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-50	0.010	n/a	3/19/2019	0.005ND	No	21	100	n/a	0.000511	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-10	0.0082	n/a	3/22/2019	0.005ND	No	27	85.19	n/a	0.000256	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-11	0.0050	n/a	3/23/2019	0.005ND	No	27	88.89	n/a	0.000256	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-12	0.0082	n/a	3/23/2019	0.005ND	No	27	74.07	n/a	0.000256	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-13	0.020	n/a	3/23/2019	0.005ND	No	27	51.85	n/a	0.000256	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-14_14Z	0.012	n/a	3/22/2019	0.005ND	No	27	66.67	n/a	0.000256	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-15_15Z	0.025	n/a	3/22/2019	0.005ND	No	26	34.62	sqrt(x)	0.000...	Param 1 of 3
Vanadium (mg/L)	GWC-5	0.0050	n/a	3/20/2019	0.005ND	No	27	88.89	n/a	0.000256	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-6	0.0070	n/a	3/21/2019	0.005ND	No	27	66.67	n/a	0.000256	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-7Z	0.010	n/a	3/21/2019	0.005ND	No	5	100	n/a	0.01896	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-8Z	0.0050	n/a	5/6/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-9	0.0065	n/a	3/21/2019	0.005ND	No	27	81.48	n/a	0.000256	NP (NDs) 1 of 3
Zinc (mg/L)	GWA-3	0.12	n/a	3/20/2019	0.028	No	27	3.704	sqrt(x)	0.000...	Param 1 of 3
Zinc (mg/L)	GWA-50	0.048	n/a	3/19/2019	0.005ND	No	21	23.81	n/a	0.000511	NP (normality) 1 of 3
Zinc (mg/L)	GWC-10	0.057	n/a	3/22/2019	0.005ND	No	27	29.63	n/a	0.000256	NP (xform) 1 of 3
Zinc (mg/L)	GWC-11	0.015	n/a	3/23/2019	0.005ND	No	27	62.96	n/a	0.000256	NP (NDs) 1 of 3
Zinc (mg/L)	GWC-12	0.059	n/a	3/23/2019	0.012	No	27	14.81	ln(x)	0.000...	Param 1 of 3

Intrawell Prediction Limit Summary Table – Metals Cells 1 & 2 OB All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 9:14 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Zinc (mg/L)	GWC-13	0.02	n/a	3/23/2019	0.021	Yes	23	26.09	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-14_14Z	0.11	n/a	3/22/2019	0.005ND	No	27	22.22	n/a	0.000256	NP (normality) 1 of 3
Zinc (mg/L)	GWC-15_15Z	0.065	n/a	3/22/2019	0.005ND	No	26	38.46	n/a	0.000...	NP (normality) 1 of 3
Zinc (mg/L)	GWC-5	0.15	n/a	3/20/2019	0.032	No	27	3.704	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-6	0.055	n/a	3/21/2019	0.005ND	No	27	29.63	n/a	0.000256	NP (normality) 1 of 3
Zinc (mg/L)	GWC-7Z	0.010	n/a	3/21/2019	0.005ND	No	5	100	n/a	0.01896	NP (NDs) 1 of 3
Zinc (mg/L)	GWC-8Z	0.0057	n/a	n/a	1 future	n/a	10	50	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-9	0.077	n/a	n/a	1 future	n/a	27	14.81	n/a	0.000256	NP (normality) 1 of 3

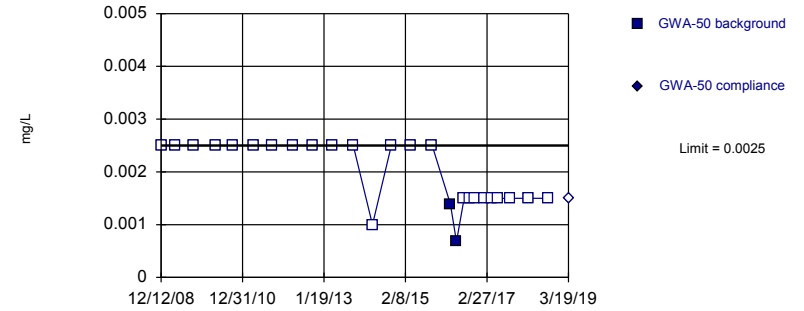
Prediction Limit
Intrawell Non-parametric, GWA-3 (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/28/2019 8:59 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

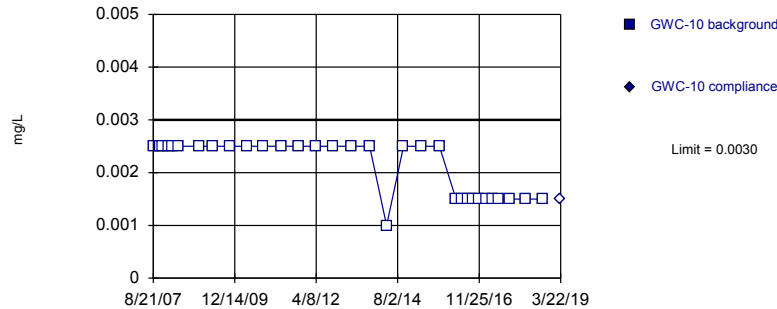
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 8:59 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

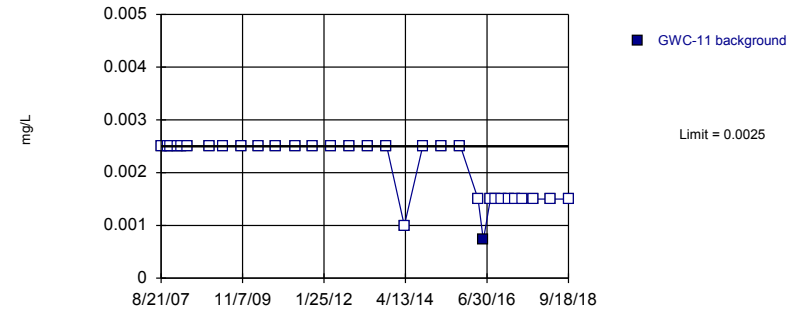
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-11



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3
8/23/2007	<0.005
11/2/2007	<0.005
11/18/2007	<0.005
1/31/2008	<0.005
3/11/2008	<0.005
5/14/2008	<0.005
12/5/2008	<0.005
4/15/2009	<0.005
10/8/2009	<0.005
4/28/2010	<0.005
10/6/2010	<0.005
4/21/2011	<0.005
10/13/2011	<0.005
5/1/2012	<0.005
10/9/2012	<0.005
4/11/2013	<0.005
10/16/2013	<0.005
4/23/2014	<0.002
10/4/2014	0.0031 (J)
3/31/2015	0.0068
10/12/2015	<0.005
3/23/2016	0.0035
5/23/2016	<0.003
7/29/2016	0.0029 (J)
9/22/2016	0.0041
11/10/2016	0.0048 (J)
1/31/2017	<0.003
3/30/2017	0.001 (J)
6/12/2017	<0.003 (*)
10/4/2017	0.0009 (J)
3/19/2018	0.0019 (J)
9/17/2018	0.0011 (J)
3/20/2019	0.0019 (X)

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.005	
4/23/2009	<0.005	
10/6/2009	<0.005	
4/27/2010	<0.005	
9/30/2010	<0.005	
4/14/2011	<0.005	
10/5/2011	<0.005	
4/11/2012	<0.005	
10/2/2012	<0.005	
4/9/2013	<0.005	
10/15/2013	<0.005	
4/10/2014	<0.002	
10/1/2014	<0.005	
3/30/2015	<0.005	
10/11/2015	<0.005	
3/28/2016	0.00139 (J)	
5/23/2016	0.000677 (J)	
8/1/2016	<0.003 (*)	
9/26/2016	<0.003	
11/10/2016	<0.003 (*)	
1/30/2017	<0.003	
4/7/2017	<0.003	
6/12/2017	<0.003 (*)	
10/2/2017	<0.003	
3/16/2018	<0.003	
9/17/2018	<0.003	
3/19/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	<0.005	
11/1/2007	<0.005	
11/20/2007	<0.005	
1/30/2008	<0.005	
3/6/2008	<0.005	
5/12/2008	<0.005	
12/13/2008	<0.005	
4/29/2009	<0.005	
10/20/2009	<0.005	
4/26/2010	<0.005	
9/29/2010	<0.005	
4/13/2011	<0.005	
10/5/2011	<0.005	
4/4/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.002	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	<0.005	
3/31/2016	<0.003	
5/26/2016	<0.003	
8/5/2016	<0.003	
9/28/2016	<0.003	
11/22/2016	<0.003	
2/7/2017	<0.003	
4/10/2017	<0.003	
6/14/2017	<0.003 (*)	
10/4/2017	<0.003	
3/20/2018	<0.003	
9/18/2018	<0.003	
3/22/2019		<0.003

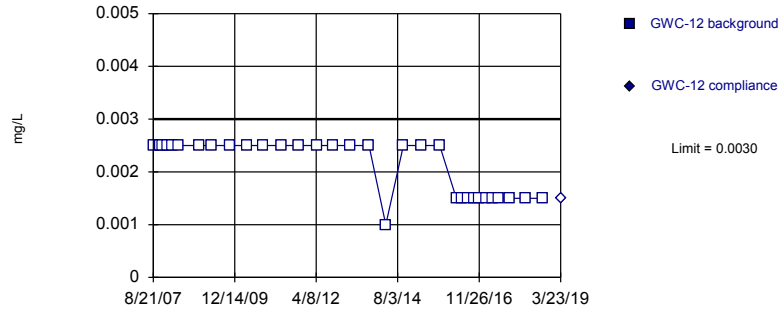
Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11
8/21/2007	<0.005
11/1/2007	<0.005
11/18/2007	<0.005
1/30/2008	<0.005
3/5/2008	<0.005
5/7/2008	<0.005
12/14/2008	<0.005
4/29/2009	<0.005
10/22/2009	<0.005
4/21/2010	<0.005
9/28/2010	<0.005
4/12/2011	<0.005
10/4/2011	<0.005
4/3/2012	<0.005
10/3/2012	<0.005
4/3/2013	<0.005
10/9/2013	<0.005
4/2/2014	<0.002
10/2/2014	<0.005
4/1/2015	<0.005
10/11/2015	<0.005
4/4/2016	<0.003
5/26/2016	0.000722 (J)
8/3/2016	<0.003 (*)
9/28/2016	<0.003
11/22/2016	<0.003
2/8/2017	<0.003
4/10/2017	<0.003
6/15/2017	<0.003 (*)
10/4/2017	<0.003
3/21/2018	<0.003
9/18/2018	<0.003
3/23/2019	0.00094 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

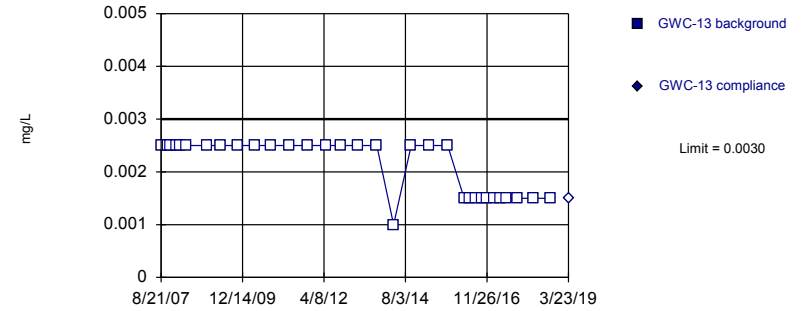


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

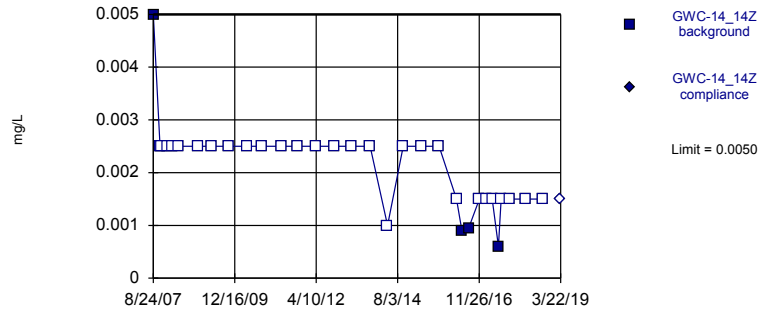


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

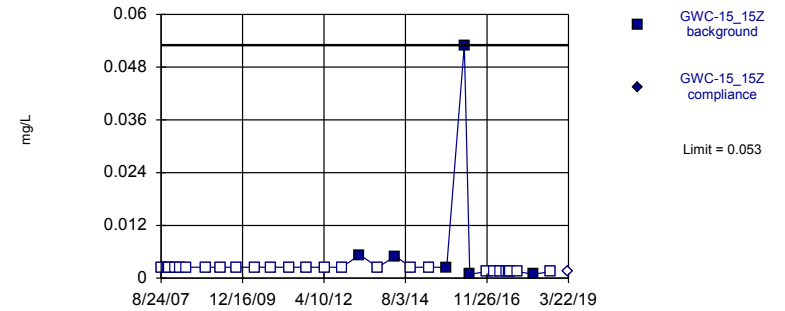


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	<0.005	
11/1/2007	<0.005	
11/19/2007	<0.005	
1/16/2008	<0.005	
3/5/2008	<0.005	
5/13/2008	<0.005	
12/13/2008	<0.005	
4/16/2009	<0.005	
10/21/2009	<0.005	
4/27/2010	<0.005	
10/5/2010	<0.005	
4/19/2011	<0.005	
10/12/2011	<0.005	
4/24/2012	<0.005	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/9/2013	<0.005	
4/1/2014	<0.002	
10/2/2014	<0.005	
4/1/2015	<0.005	
10/14/2015	<0.005	
4/4/2016	<0.003	
5/27/2016	<0.003	
8/3/2016	<0.003 (*)	
9/30/2016	<0.003	
11/22/2016	<0.003	
2/13/2017	<0.003	
4/11/2017	<0.003	
6/14/2017	<0.003	
10/4/2017	<0.003	
3/22/2018	<0.003	
9/18/2018	<0.003	
3/23/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	<0.005	
11/1/2007	<0.005	
11/19/2007	<0.005	
1/31/2008	<0.005	
3/5/2008	<0.005	
5/12/2008	<0.005	
12/13/2008	<0.005	
4/28/2009	<0.005	
10/21/2009	<0.005	
4/28/2010	<0.005	
10/5/2010	<0.005	
4/19/2011	<0.005	
10/18/2011	<0.005	
4/25/2012	<0.005	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/8/2013	<0.005	
4/1/2014	<0.002	
10/1/2014	<0.005	
4/1/2015	<0.005	
10/15/2015	<0.005	
4/4/2016	<0.003	
5/31/2016	<0.003	
8/4/2016	<0.003 (*)	
9/29/2016	<0.003 (*)	
11/28/2016	<0.003	
2/9/2017	<0.003	
4/12/2017	<0.003	
6/16/2017	<0.003 (*)	
10/9/2017	<0.003	
3/21/2018	<0.003	
9/19/2018	<0.003	
3/23/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	0.005	
11/2/2007	<0.005	
11/17/2007	<0.005	
1/15/2008	<0.005	
3/5/2008	<0.005	
5/7/2008	<0.005	
12/2/2008	<0.005	
4/16/2009	<0.005	
10/20/2009	<0.005	
4/20/2010	<0.005	
9/29/2010	<0.005	
4/12/2011	<0.005	
10/4/2011	<0.005	
4/4/2012	<0.005	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.002	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/7/2015	<0.005	
4/5/2016	<0.003	
6/1/2016	0.000895 (J)	
8/9/2016	0.00095 (JD)	
11/28/2016	<0.003	
2/9/2017	<0.003	
4/11/2017	<0.003	
6/14/2017	0.0006 (J)	
7/12/2017	<0.003	
10/5/2017	<0.003	
3/22/2018	<0.003	
9/19/2018	<0.003	
3/22/2019		<0.003

Prediction Limit

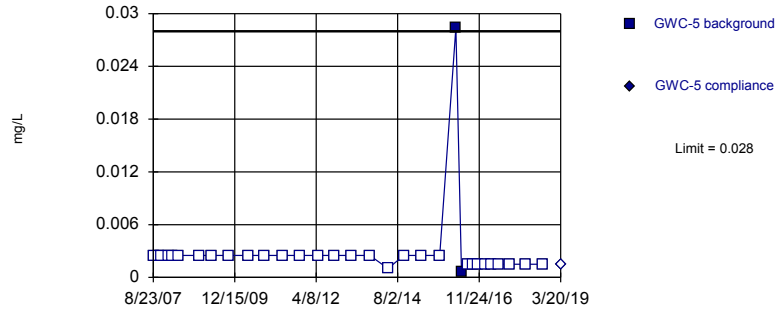
Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.005	
11/2/2007	<0.005	
11/18/2007	<0.005	
1/15/2008	<0.005	
3/10/2008	<0.005	
5/13/2008	<0.005	
12/2/2008	<0.005	
4/28/2009	<0.005	
10/20/2009	<0.005	
4/27/2010	<0.005	
10/5/2010	<0.005	
4/19/2011	<0.005	
10/12/2011	<0.005	
4/25/2012	<0.005	
10/10/2012	<0.005	
4/16/2013	0.0053	
10/22/2013	<0.005	
4/21/2014	0.005 (J)	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/6/2015	0.0025 (J)	
4/5/2016	0.053 (J)	
5/31/2016	0.00088 (J)	
11/23/2016	<0.003	
2/10/2017	<0.003	
4/11/2017	<0.003	
6/15/2017	<0.003 (*)	
7/12/2017	<0.003	
7/26/2017	<0.003	
10/6/2017	<0.003	
3/23/2018	0.00089 (J)	
9/19/2018	<0.003	
3/22/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

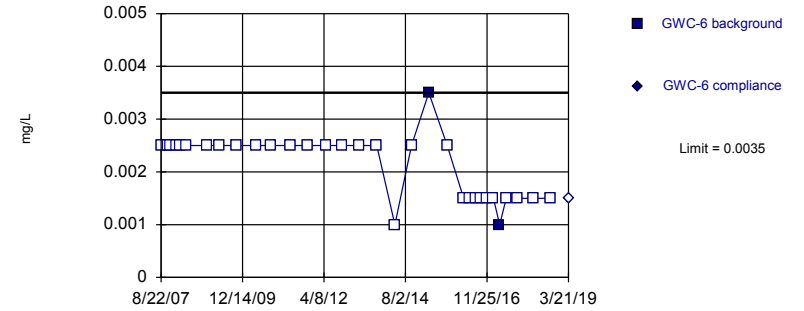


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

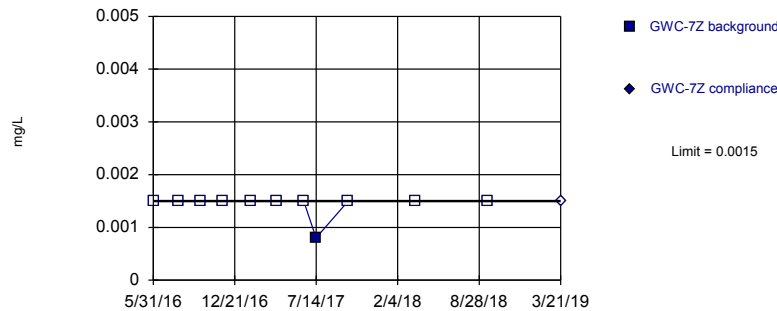


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

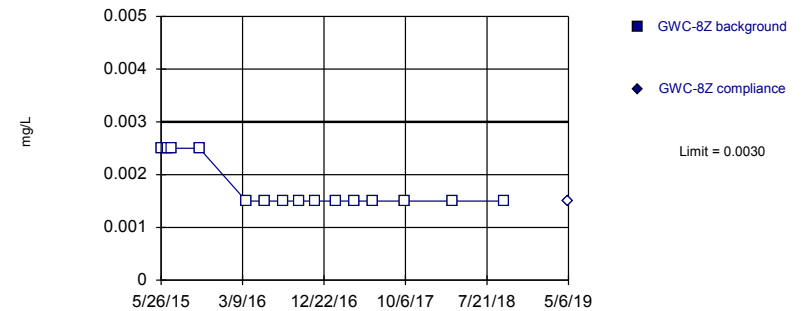


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	<0.005	
10/25/2007	<0.005	
11/19/2007	<0.005	
1/23/2008	<0.005	
3/11/2008	<0.005	
5/12/2008	<0.005	
12/11/2008	<0.005	
4/15/2009	<0.005	
10/9/2009	<0.005	
5/4/2010	<0.005	
10/12/2010	<0.005	
4/28/2011	<0.005	
10/19/2011	<0.005	
5/2/2012	<0.005	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/23/2014	<0.002	
10/3/2014	<0.005	
3/31/2015	<0.005	
10/12/2015	<0.005	
3/28/2016	0.0284 (J)	
5/25/2016	0.000686 (J)	
8/1/2016	<0.003 (*)	
9/27/2016	<0.003	
11/11/2016	<0.003	
1/31/2017	<0.003	
4/3/2017	<0.003	
6/12/2017	<0.003	
10/3/2017	<0.003	
3/19/2018	<0.003	
9/17/2018	<0.003	
3/20/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.005	
10/25/2007	<0.005	
11/20/2007	<0.005	
1/23/2008	<0.005	
3/11/2008	<0.005	
5/14/2008	<0.005	
12/11/2008	<0.005	
4/23/2009	<0.005	
10/9/2009	<0.005	
5/4/2010	<0.005	
10/11/2010	<0.005	
4/26/2011	<0.005	
10/18/2011	<0.005	
5/2/2012	<0.005	
10/8/2012	<0.005	
4/10/2013	<0.005	
10/8/2013	<0.005	
4/14/2014	<0.002	
10/3/2014	<0.005	
4/1/2015	0.0035 (J)	
10/9/2015	<0.005	
3/29/2016	<0.003	
5/24/2016	<0.003	
8/1/2016	<0.003	
9/26/2016	<0.003	
11/18/2016	<0.003	
2/1/2017	<0.003 (*)	
4/6/2017	0.001 (J)	
6/13/2017	<0.003 (*)	
10/3/2017	<0.003	
3/19/2018	<0.003	
9/17/2018	<0.003	
3/21/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	<0.003	
8/2/2016	<0.003	
9/27/2016	<0.003	
11/21/2016	<0.003	
2/1/2017	<0.003	
4/6/2017	<0.003	
6/13/2017	<0.003 (*)	
7/14/2017	0.0008 (J)	
10/3/2017	<0.003	
3/20/2018	<0.003	
9/18/2018	<0.003	
3/21/2019		<0.003

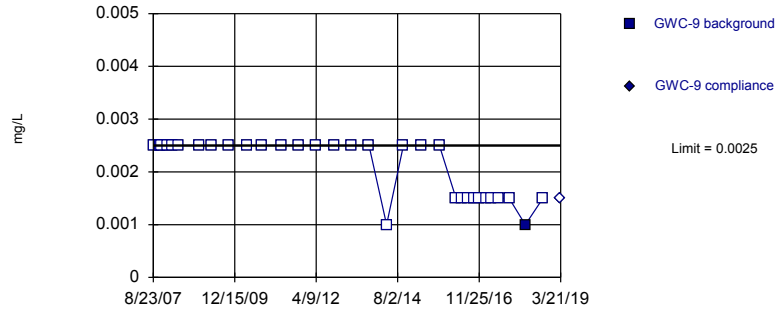
Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	<0.005	
6/18/2015	<0.005 (D)	
7/2/2015	<0.005	
10/8/2015	<0.005	
3/22/2016	<0.003	
5/25/2016	<0.003	
8/2/2016	<0.003	
9/26/2016	<0.003	
11/21/2016	<0.003	
2/3/2017	<0.003	
4/7/2017	<0.003	
6/13/2017	<0.003 (*)	
10/3/2017	<0.003	
3/20/2018	<0.003	
9/18/2018	<0.003	
5/6/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

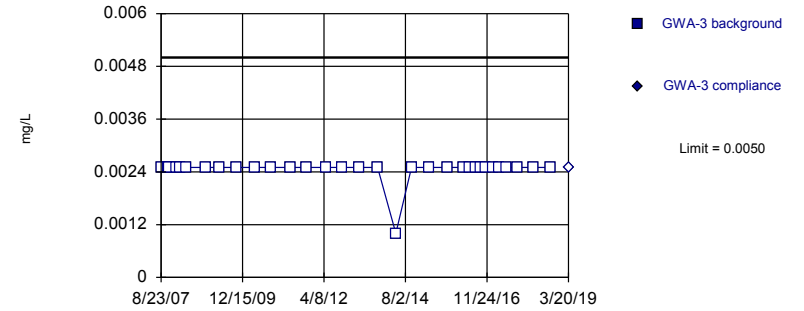


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

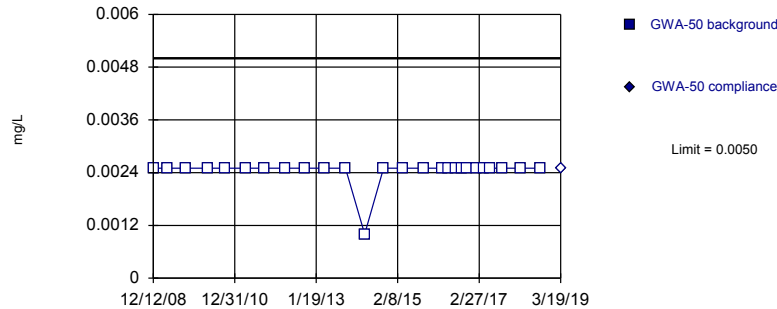


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

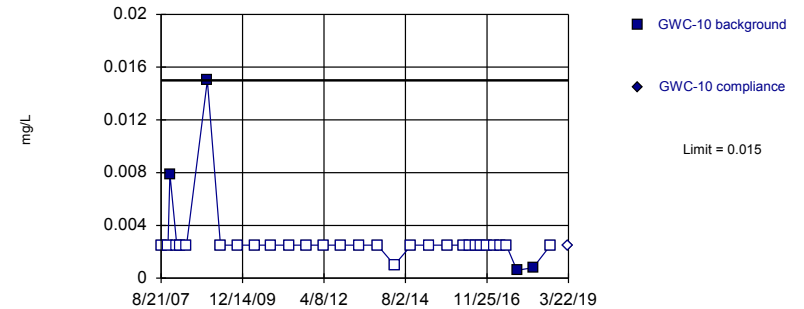


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.005	
11/1/2007	<0.005	
11/19/2007	<0.005	
1/15/2008	<0.005	
3/6/2008	<0.005	
5/13/2008	<0.005	
12/12/2008	<0.005	
4/16/2009	<0.005	
10/13/2009	<0.005	
4/21/2010	<0.005	
9/29/2010	<0.005	
4/13/2011	<0.005	
10/5/2011	<0.005	
4/4/2012	<0.005	
10/8/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/9/2014	<0.002	
9/30/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	<0.005 (D)	
3/30/2016	<0.003	
5/26/2016	<0.003	
8/5/2016	<0.003 (*)	
9/28/2016	<0.003	
11/21/2016	<0.003	
2/6/2017	<0.003	
4/6/2017	<0.003	
6/13/2017	<0.003	
10/3/2017	<0.003	
3/20/2018	0.001 (J)	
9/18/2018	<0.003 (D)	
3/21/2019		<0.003

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	<0.005	
11/2/2007	<0.005	
11/18/2007	<0.005	
1/31/2008	<0.005	
3/11/2008	<0.005	
5/14/2008	<0.005	
12/5/2008	<0.005	
4/15/2009	<0.005	
10/8/2009	<0.005	
4/28/2010	<0.005	
10/6/2010	<0.005	
4/21/2011	<0.005	
10/13/2011	<0.005	
5/1/2012	<0.005	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/23/2014	<0.002	
10/4/2014	<0.005	
3/31/2015	<0.005	
10/12/2015	<0.005	
3/23/2016	<0.005	
5/23/2016	<0.005	
7/29/2016	<0.005	
9/22/2016	<0.005	
11/10/2016	<0.005	
1/31/2017	<0.005	
3/30/2017	<0.005	
6/12/2017	<0.005	
10/4/2017	<0.005	
3/19/2018	<0.005	
9/17/2018	<0.005	
3/20/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.005	
4/23/2009	<0.005	
10/6/2009	<0.005	
4/27/2010	<0.005	
9/30/2010	<0.005	
4/14/2011	<0.005	
10/5/2011	<0.005	
4/11/2012	<0.005	
10/2/2012	<0.005	
4/9/2013	<0.005	
10/15/2013	<0.005	
4/10/2014	<0.002	
10/1/2014	<0.005	
3/30/2015	<0.005	
10/11/2015	<0.005	
3/28/2016	<0.005	
5/23/2016	<0.005	
8/1/2016	<0.005	
9/26/2016	<0.005	
11/10/2016	<0.005	
1/30/2017	<0.005	
4/7/2017	<0.005	
6/12/2017	<0.005	
10/2/2017	<0.005	
3/16/2018	<0.005	
9/17/2018	<0.005	
3/19/2019		<0.005

Prediction Limit

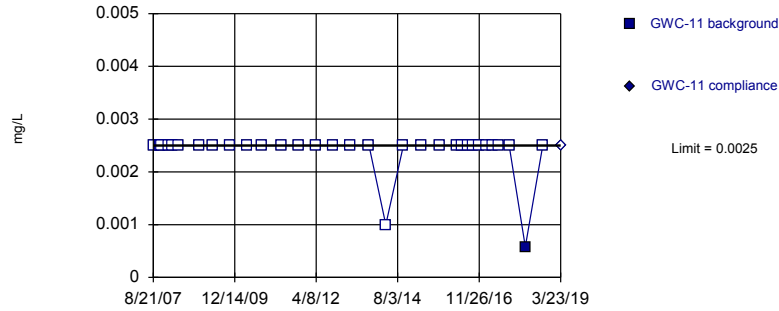
Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:14 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	<0.005	
11/1/2007	<0.005	
11/20/2007	0.0079	
1/30/2008	<0.005	
3/6/2008	<0.005	
5/12/2008	<0.005	
12/13/2008	0.015	
4/29/2009	<0.005	
10/20/2009	<0.005	
4/26/2010	<0.005	
9/29/2010	<0.005	
4/13/2011	<0.005	
10/5/2011	<0.005	
4/4/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.002	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	<0.005	
3/31/2016	<0.005	
5/26/2016	<0.005	
8/5/2016	<0.005	
9/28/2016	<0.005	
11/22/2016	<0.005	
2/7/2017	<0.005	
4/10/2017	<0.005	
6/14/2017	<0.005	
10/4/2017	0.0006 (J)	
3/20/2018	0.00079 (J)	
9/18/2018	<0.005	
3/22/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

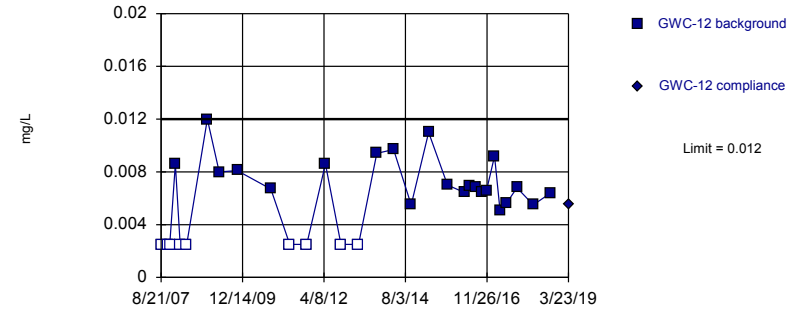


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

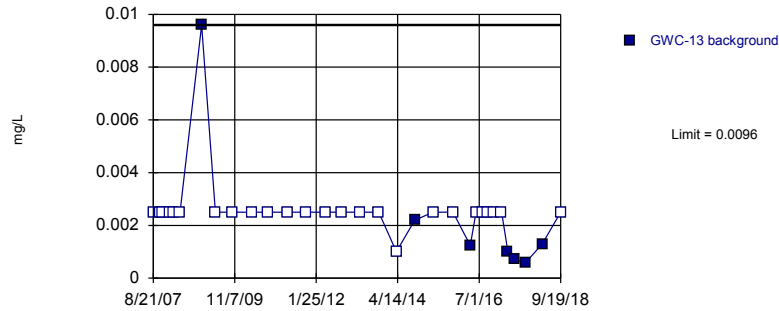
Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.00537, Std. Dev.=0.003813, n=31, 29.03% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.907, critical = 0.902. Kappa = 1.701 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Arsenic Analysis Run 8/28/2019 9:00 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-13

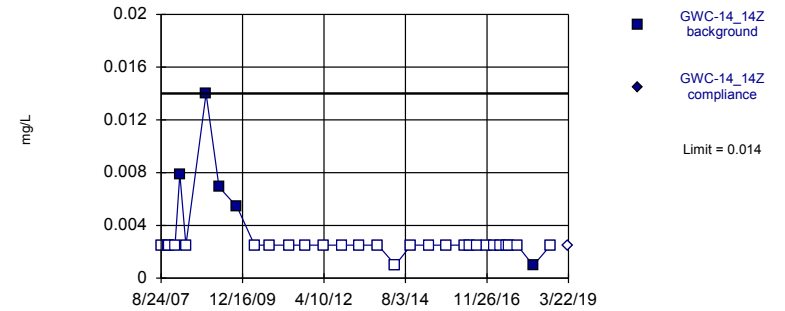


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Arsenic Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 84.38% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.005	
11/1/2007	<0.005	
11/18/2007	<0.005	
1/30/2008	<0.005	
3/5/2008	<0.005	
5/7/2008	<0.005	
12/14/2008	<0.005	
4/29/2009	<0.005	
10/22/2009	<0.005	
4/21/2010	<0.005	
9/28/2010	<0.005	
4/12/2011	<0.005	
10/4/2011	<0.005	
4/3/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/9/2013	<0.005	
4/2/2014	<0.002	
10/2/2014	<0.005	
4/1/2015	<0.005	
10/11/2015	<0.005	
4/4/2016	<0.005	
5/26/2016	<0.005	
8/3/2016	<0.005	
9/28/2016	<0.005	
11/22/2016	<0.005	
2/8/2017	<0.005	
4/10/2017	<0.005	
6/15/2017	<0.005	
10/4/2017	<0.005	
3/21/2018	0.00058 (J)	
9/18/2018	<0.005	
3/23/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	<0.005	
11/1/2007	<0.005	
11/19/2007	<0.005	
1/16/2008	0.0086	
3/5/2008	<0.005	
5/13/2008	<0.005	
12/13/2008	0.012	
4/16/2009	0.008	
10/21/2009	0.0081	
10/5/2010	0.0067	
4/19/2011	<0.005	
10/12/2011	<0.005	
4/24/2012	0.0086	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/9/2013	0.0094	
4/1/2014	0.0097	
10/2/2014	0.0055	
4/1/2015	0.011	
10/14/2015	0.007	
4/4/2016	0.00645	
5/27/2016	0.00692	
8/3/2016	0.0068	
9/30/2016	0.0065	
11/22/2016	0.0066	
2/13/2017	0.0092	
4/11/2017	0.0051	
6/14/2017	0.0056	
10/4/2017	0.0068	
3/22/2018	0.0055	
9/18/2018	0.0064	
3/23/2019		0.0055

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13
8/21/2007	<0.005
11/1/2007	<0.005
11/19/2007	<0.005
1/31/2008	<0.005
3/5/2008	<0.005
5/12/2008	<0.005
12/13/2008	0.0096
4/28/2009	<0.005
10/21/2009	<0.005
4/28/2010	<0.005
10/5/2010	<0.005
4/19/2011	<0.005
10/18/2011	<0.005
4/25/2012	<0.005
10/2/2012	<0.005
4/2/2013	<0.005
10/8/2013	<0.005
4/1/2014	<0.002
10/1/2014	0.0022 (J)
4/1/2015	<0.005
10/15/2015	<0.005
4/4/2016	0.00124 (J)
5/31/2016	<0.005
8/4/2016	<0.005
9/29/2016	<0.005
11/28/2016	<0.005
2/9/2017	<0.005
4/12/2017	0.001 (J)
6/16/2017	0.0007 (J)
10/9/2017	0.0006 (J)
3/21/2018	0.0013 (J)
9/19/2018	<0.005
3/23/2019	0.00067 (X)

Prediction Limit

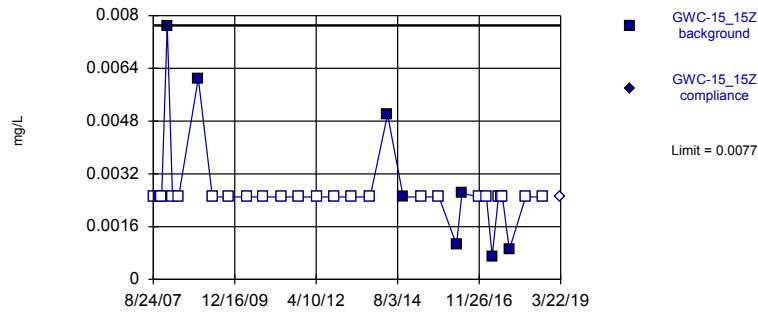
Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	<0.005	
11/2/2007	<0.005	
11/17/2007	<0.005	
1/15/2008	<0.005	
3/5/2008	0.0079	
5/7/2008	<0.005	
12/2/2008	0.014	
4/16/2009	0.0069	
10/20/2009	0.0054	
4/20/2010	<0.005	
9/29/2010	<0.005	
4/12/2011	<0.005	
10/4/2011	<0.005	
4/4/2012	<0.005	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.002	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/7/2015	<0.005	
4/5/2016	<0.005	
6/1/2016	<0.005	
8/9/2016	<0.005	
11/28/2016	<0.005	
2/9/2017	<0.005	
4/11/2017	<0.005	
6/14/2017	<0.005	
7/12/2017	<0.005	
10/5/2017	<0.005	
3/22/2018	0.00096 (J)	
9/19/2018	<0.005	
3/22/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

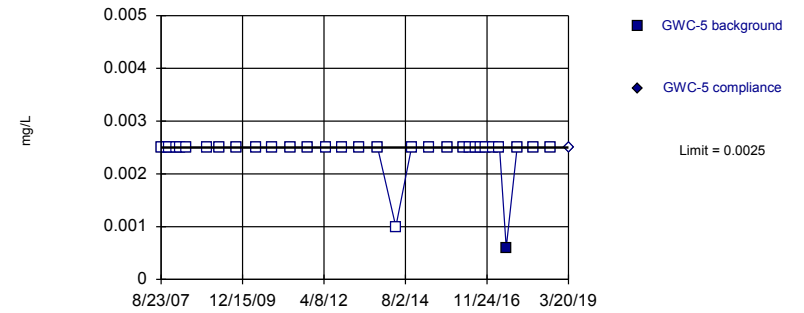


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

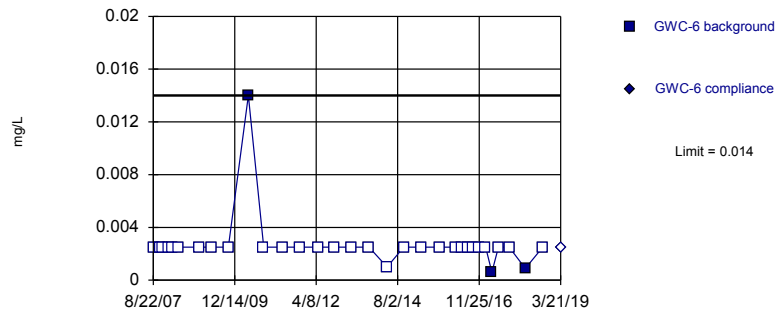


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

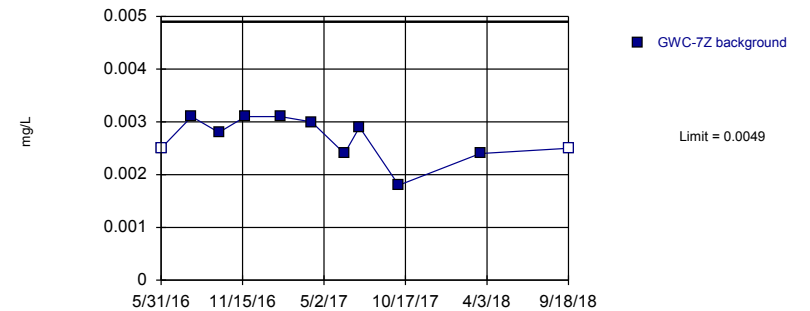


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric, GWC-7Z



Background Data Summary (after Aitchison's Adjustment): Mean=0.002236, Std. Dev.=0.001176, n=11, 18.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8778, critical = 0.792. Kappa = 2.236 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Arsenic Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.005	
11/2/2007	<0.005	
11/18/2007	<0.005	
1/15/2008	0.0077	
3/10/2008	<0.005	
5/13/2008	<0.005	
12/2/2008	0.0061	
4/28/2009	<0.005	
10/20/2009	<0.005	
4/27/2010	<0.005	
10/5/2010	<0.005	
4/19/2011	<0.005	
10/12/2011	<0.005	
4/25/2012	<0.005	
10/10/2012	<0.005	
4/16/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	0.005 (J)	
9/30/2014	0.0025 (J)	
4/3/2015	<0.005	
10/6/2015	<0.005	
4/5/2016	0.00105 (J)	
5/31/2016	0.00261 (J)	
11/23/2016	<0.005	
2/10/2017	<0.005	
4/11/2017	0.0007 (J)	
6/15/2017	<0.005	
7/12/2017	<0.005	
7/26/2017	<0.005	
10/6/2017	0.0009 (J)	
3/23/2018	<0.005	
9/19/2018	<0.005	
3/22/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	<0.005	
10/25/2007	<0.005	
11/19/2007	<0.005	
1/23/2008	<0.005	
3/11/2008	<0.005	
5/12/2008	<0.005	
12/11/2008	<0.005	
4/15/2009	<0.005	
10/9/2009	<0.005	
5/4/2010	<0.005	
10/12/2010	<0.005	
4/28/2011	<0.005	
10/19/2011	<0.005	
5/2/2012	<0.005	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/23/2014	<0.002	
10/3/2014	<0.005	
3/31/2015	<0.005	
10/12/2015	<0.005	
3/28/2016	<0.005	
5/25/2016	<0.005	
8/1/2016	<0.005	
9/27/2016	<0.005	
11/11/2016	<0.005	
1/31/2017	<0.005	
4/3/2017	<0.005	
6/12/2017	0.0006 (J)	
10/3/2017	<0.005	
3/19/2018	<0.005	
9/17/2018	<0.005	
3/20/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

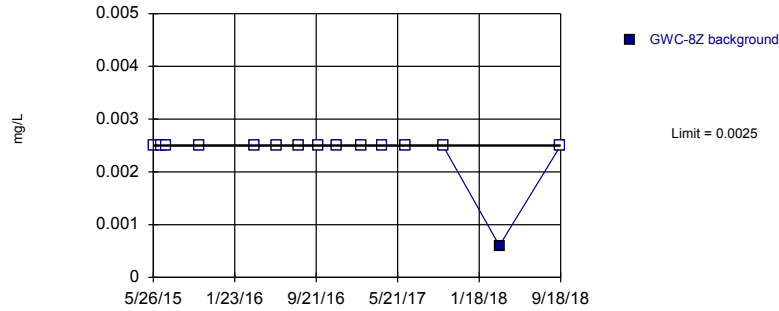
	GWC-6	GWC-6
8/22/2007	<0.005	
10/25/2007	<0.005	
11/20/2007	<0.005	
1/23/2008	<0.005	
3/11/2008	<0.005	
5/14/2008	<0.005	
12/11/2008	<0.005	
4/23/2009	<0.005	
10/9/2009	<0.005	
5/4/2010	0.014	
10/11/2010	<0.005	
4/26/2011	<0.005	
10/18/2011	<0.005	
5/2/2012	<0.005	
10/8/2012	<0.005	
4/10/2013	<0.005	
10/8/2013	<0.005	
4/14/2014	<0.002	
10/3/2014	<0.005	
4/1/2015	<0.005	
10/9/2015	<0.005	
3/29/2016	<0.005	
5/24/2016	<0.005	
8/1/2016	<0.005	
9/26/2016	<0.005	
11/18/2016	<0.005	
2/1/2017	<0.005	
4/6/2017	0.0006 (J)	
6/13/2017	<0.005	
10/3/2017	<0.005	
3/19/2018	0.00089 (J)	
9/17/2018	<0.005	
3/21/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z
5/31/2016	<0.005
8/2/2016	0.0031 (J)
9/27/2016	0.0028 (J)
11/21/2016	0.0031 (J)
2/1/2017	0.0031 (J)
4/6/2017	0.003 (J)
6/13/2017	0.0024 (J)
7/14/2017	0.0029 (J)
10/3/2017	0.0018 (J)
3/20/2018	0.0024 (J)
9/18/2018	<0.005
3/21/2019	0.00077 (X)

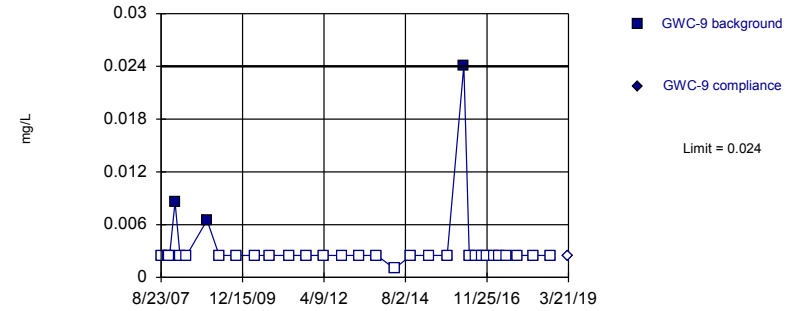
Prediction Limit
Intrawell Non-parametric, GWC-8Z



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3). Assumes 1 future value.

Constituent: Arsenic Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

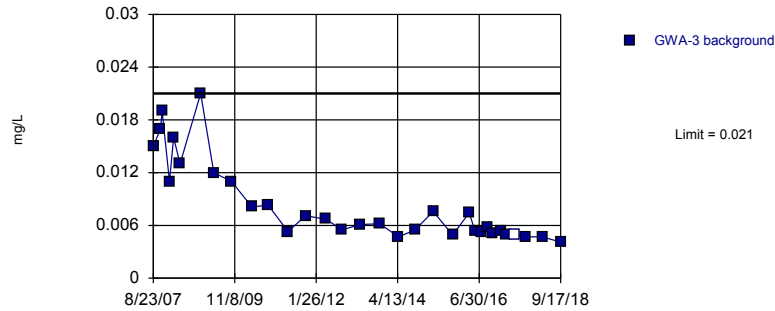
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

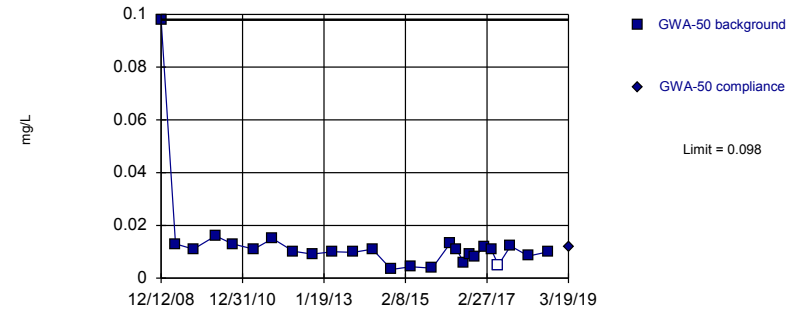
Prediction Limit
Intrawell Non-parametric, GWA-3 (bg)



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 3.125% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Barium Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. 3.846% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Barium Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z
5/26/2015	<0.005
6/18/2015	<0.005 (D)
7/2/2015	<0.005
10/8/2015	<0.005
3/22/2016	<0.005
5/25/2016	<0.005
8/2/2016	<0.005
9/26/2016	<0.005
11/21/2016	<0.005
2/3/2017	<0.005
4/7/2017	<0.005
6/13/2017	<0.005
10/3/2017	<0.005
3/20/2018	0.0006 (J)
9/18/2018	<0.005
5/6/2019	0.00063 (X)

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.005	
11/1/2007	<0.005	
11/19/2007	<0.005	
1/15/2008	0.0086	
3/6/2008	<0.005	
5/13/2008	<0.005	
12/12/2008	0.0065	
4/16/2009	<0.005	
10/13/2009	<0.005	
4/21/2010	<0.005	
9/29/2010	<0.005	
4/13/2011	<0.005	
10/5/2011	<0.005	
4/4/2012	<0.005	
10/8/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/9/2014	<0.002	
9/30/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	<0.005 (D)	
3/30/2016	0.0241 (J)	
5/26/2016	<0.005	
8/5/2016	<0.005	
9/28/2016	<0.005	
11/21/2016	<0.005	
2/6/2017	<0.005	
4/6/2017	<0.005	
6/13/2017	<0.005	
10/3/2017	<0.005	
3/20/2018	<0.005	
9/18/2018	<0.005 (D)	
3/21/2019		<0.005

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3
8/23/2007	0.015
11/2/2007	0.017
11/18/2007	0.019
1/31/2008	0.011
3/11/2008	0.016
5/14/2008	0.013
12/5/2008	0.021
4/15/2009	0.012
10/8/2009	0.011
4/28/2010	0.0081
10/6/2010	0.0083
4/21/2011	0.0053
10/13/2011	0.0071
5/1/2012	0.0067
10/9/2012	0.0055
4/11/2013	0.0061
10/16/2013	0.0062
4/23/2014	0.0047
10/4/2014	0.0055
3/31/2015	0.0076
10/12/2015	0.0049
3/23/2016	0.00742 (J)
5/23/2016	0.00532 (J)
7/29/2016	0.0053 (J)
9/22/2016	0.0058 (J)
11/10/2016	0.0051 (J)
1/31/2017	0.0054 (J)
3/30/2017	0.0049 (J)
6/12/2017	<0.01 (*)
10/4/2017	0.0047 (J)
3/19/2018	0.0047 (J)
9/17/2018	0.0041 (J)
3/20/2019	0.0042 (X)

Prediction Limit

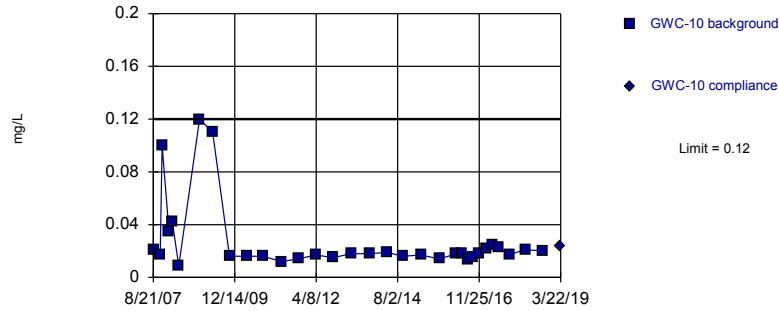
Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	0.098	
4/23/2009	0.013	
10/6/2009	0.011	
4/27/2010	0.016	
9/30/2010	0.013	
4/14/2011	0.011	
10/5/2011	0.015	
4/11/2012	0.0102	
10/2/2012	0.0091	
4/9/2013	0.01	
10/15/2013	0.0098	
4/10/2014	0.011	
10/1/2014	0.0033	
3/30/2015	0.0043	
10/11/2015	0.0038	
3/28/2016	0.0133	
5/23/2016	0.0109	
8/1/2016	0.0058 (J)	
9/26/2016	0.0092 (J)	
11/10/2016	0.0083 (J)	
1/30/2017	0.0117	
4/7/2017	0.0109	
6/12/2017	<0.01 (*)	
10/2/2017	0.0122	
3/16/2018	0.0084 (J)	
9/17/2018	0.01	
3/19/2019		0.012

Within Limit

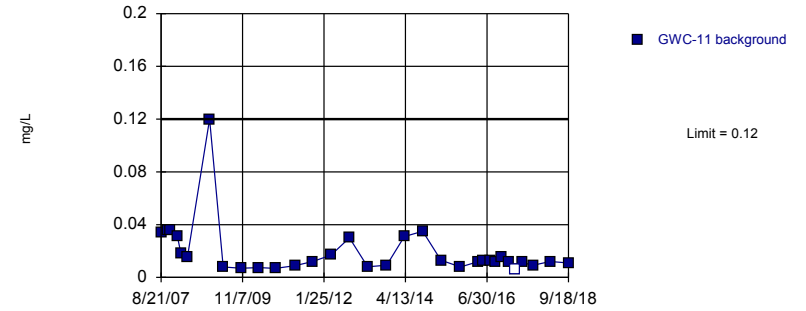
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Barium Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-11

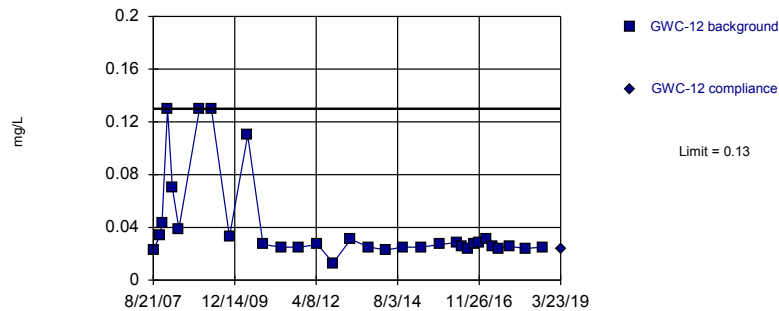


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 3.125% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Barium Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Barium Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.55, Std. Dev.=0.5405, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.904. Kappa = 1.694 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	0.021	
11/1/2007	0.017	
11/20/2007	0.1	
1/30/2008	0.035	
3/6/2008	0.042	
5/12/2008	0.0087	
12/13/2008	0.12	
4/29/2009	0.11	
10/20/2009	0.016	
4/26/2010	0.016	
9/29/2010	0.016	
4/13/2011	0.012	
10/5/2011	0.014	
4/4/2012	0.017	
10/3/2012	0.015	
4/3/2013	0.018	
10/15/2013	0.018	
4/9/2014	0.019	
10/2/2014	0.016	
4/2/2015	0.017	
10/10/2015	0.014	
3/31/2016	0.0179	
5/26/2016	0.0186	
8/5/2016	0.0138	
9/28/2016	0.0153	
11/22/2016	0.0184 (J)	
2/7/2017	0.0215	
4/10/2017	0.0247	
6/14/2017	0.0227	
10/4/2017	0.0172	
3/20/2018	0.021	
9/18/2018	0.02	
3/22/2019		0.024

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11
8/21/2007	0.034
11/1/2007	0.036
11/18/2007	0.036
1/30/2008	0.031 (J)
3/5/2008	0.018
5/7/2008	0.015
12/14/2008	0.12
4/29/2009	0.0079
10/22/2009	0.007
4/21/2010	0.0074
9/28/2010	0.0068
4/12/2011	0.0089
10/4/2011	0.012
4/3/2012	0.0169
10/3/2012	0.03
4/3/2013	0.008
10/9/2013	0.0093
4/2/2014	0.031
10/2/2014	0.035
4/1/2015	0.013
10/11/2015	0.0079
4/4/2016	0.0119
5/26/2016	0.0127
8/3/2016	0.0121
9/28/2016	0.0112
11/22/2016	0.0155 (J)
2/8/2017	0.0115
4/10/2017	<0.0117 (*)
6/15/2017	0.0112
10/4/2017	0.0093 (J)
3/21/2018	0.012
9/18/2018	0.011
3/23/2019	0.0081 (X)

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	0.023	
11/1/2007	0.034	
11/19/2007	0.043	
1/16/2008	0.13	
3/5/2008	0.07	
5/13/2008	0.039	
12/13/2008	0.13	
4/16/2009	0.13	
10/21/2009	0.033	
4/27/2010	0.11	
10/5/2010	0.027	
4/19/2011	0.025	
10/12/2011	0.025	
4/24/2012	0.027	
10/2/2012	0.013	
4/2/2013	0.031	
10/9/2013	0.025	
4/1/2014	0.023	
10/2/2014	0.025	
4/1/2015	0.025	
10/14/2015	0.027	
4/4/2016	0.0285	
5/27/2016	0.0257	
8/3/2016	0.0237	
9/30/2016	0.0279	
11/22/2016	0.0286 (J)	
2/13/2017	0.0313	
4/11/2017	0.0254	
6/14/2017	0.0241	
10/4/2017	0.0256	
3/22/2018	0.024	
9/18/2018	0.025	
3/23/2019		0.024

Prediction Limit

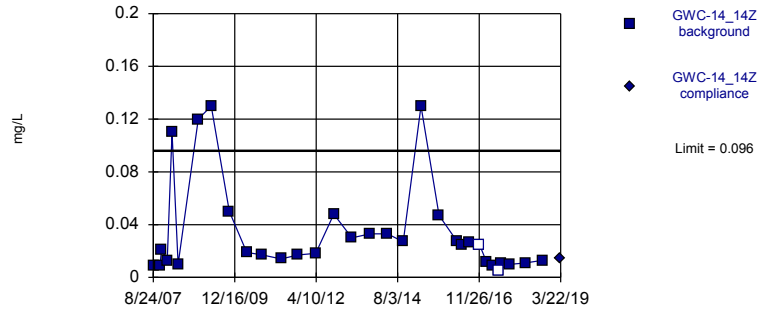
Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	0.065	
11/1/2007	0.019	
11/19/2007	0.015	
1/31/2008	0.022	
3/5/2008	0.012	
5/12/2008	0.014	
12/13/2008	0.11	
4/28/2009	0.12	
10/21/2009	0.023	
4/28/2010	0.019	
10/5/2010	0.018	
4/19/2011	0.019	
10/18/2011	0.025	
4/25/2012	0.024	
10/2/2012	0.019	
4/2/2013	0.021	
10/8/2013	0.027	
4/1/2014	0.023	
10/1/2014	0.014	
4/1/2015	0.027	
10/15/2015	0.033	
4/4/2016	0.027	
5/31/2016	0.0283	
8/4/2016	0.0358	
9/29/2016	0.0437	
11/28/2016	0.0419 (J)	
2/9/2017	0.0472	
4/12/2017	0.0383	
6/16/2017	0.0457	
10/9/2017	0.0406	
3/21/2018	0.032	
9/19/2018	0.034	
3/23/2019		0.023

Within Limit

Prediction Limit
Intrawell Parametric

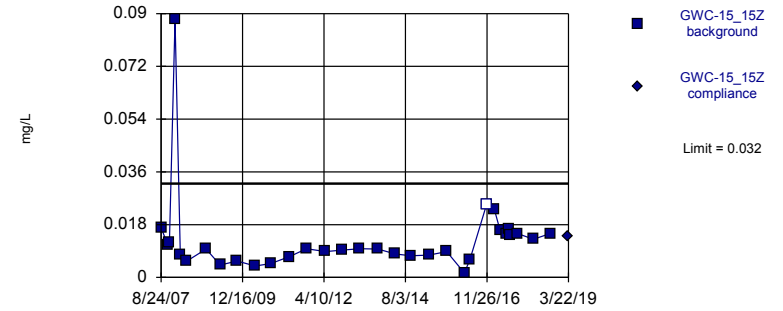


Background Data Summary (based on natural log transformation): Mean=-3.787, Std. Dev.=0.8527, n=32, 6.25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9323, critical = 0.904. Kappa = 1.694 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/28/2019 9:01 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

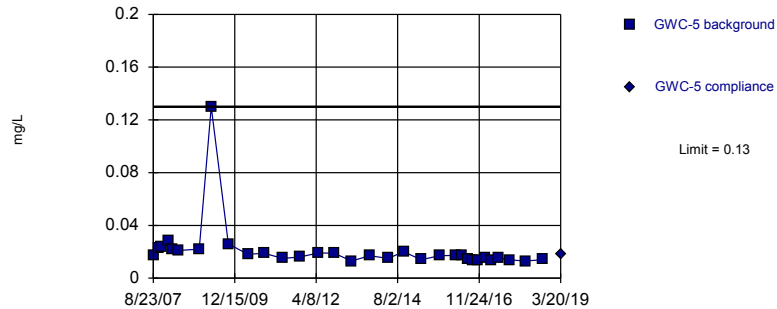


Background Data Summary (based on natural log transformation): Mean=-4.618, Std. Dev.=0.6941, n=32, 3.125% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9484, critical = 0.904. Kappa = 1.694 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

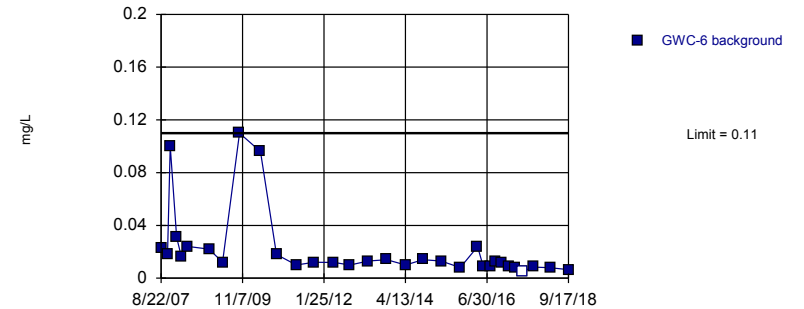


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Barium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-6



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 3.125% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Barium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	0.0089	
11/2/2007	0.0091	
11/17/2007	0.021	
1/15/2008	0.013	
3/5/2008	0.11	
5/7/2008	0.01	
12/2/2008	0.12	
4/16/2009	0.13	
10/20/2009	0.05	
4/20/2010	0.019	
9/29/2010	0.017	
4/12/2011	0.014	
10/4/2011	0.017	
4/4/2012	0.0182	
10/10/2012	0.048	
4/15/2013	0.03	
10/22/2013	0.033	
4/21/2014	0.033	
9/30/2014	0.027	
4/3/2015	0.13	
10/7/2015	0.047	
4/5/2016	0.0279	
6/1/2016	0.0249	
8/9/2016	0.0268	
11/28/2016	<0.05 (*)	
2/9/2017	0.0119	
4/11/2017	0.0084 (D)	
6/14/2017	<0.01 (*)	
7/12/2017	0.0105	
10/5/2017	0.0099 (J)	
3/22/2018	0.011	
9/19/2018	0.013	
3/22/2019		0.014

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	0.017	
11/2/2007	0.011	
11/18/2007	0.012 (J)	
1/15/2008	0.088	
3/10/2008	0.0077	
5/13/2008	0.0055	
12/2/2008	0.0097	
4/28/2009	0.0042	
10/20/2009	0.0056	
4/27/2010	0.0039	
10/5/2010	0.0047	
4/19/2011	0.0071	
10/12/2011	0.0098	
4/25/2012	0.0088	
10/10/2012	0.0093	
4/16/2013	0.0098	
10/22/2013	0.0097	
4/21/2014	0.008	
9/30/2014	0.0074	
4/3/2015	0.0076	
10/6/2015	0.0088	
4/5/2016	0.00153 (J)	
5/31/2016	0.00589 (J)	
11/23/2016	<0.05 (*)	
2/10/2017	0.0233	
4/11/2017	0.0162	
6/15/2017	0.0148	
7/12/2017	0.0166	
7/26/2017	0.0146	
10/6/2017	0.015	
3/23/2018	0.013	
9/19/2018	0.015	
3/22/2019		0.014

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	0.017	
10/25/2007	0.023	
11/19/2007	0.024	
1/23/2008	0.028	
3/11/2008	0.022	
5/12/2008	0.021	
12/11/2008	0.022	
4/15/2009	0.13	
10/9/2009	0.026	
5/4/2010	0.018	
10/12/2010	0.019	
4/28/2011	0.015	
10/19/2011	0.016	
5/2/2012	0.0191	
10/9/2012	0.019	
4/11/2013	0.013	
10/16/2013	0.017	
4/23/2014	0.015	
10/3/2014	0.02	
3/31/2015	0.014	
10/12/2015	0.017	
3/28/2016	0.0173	
5/25/2016	0.0175	
8/1/2016	0.0145	
9/27/2016	0.0139	
11/11/2016	0.0135	
1/31/2017	0.0153	
4/3/2017	0.0135	
6/12/2017	0.0154	
10/3/2017	0.0138	
3/19/2018	0.013	
9/17/2018	0.014	
3/20/2019		0.018

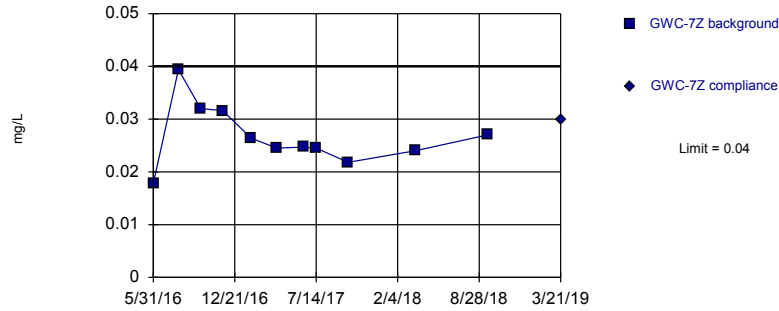
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6
8/22/2007	0.023
10/25/2007	0.018
11/20/2007	0.1
1/23/2008	0.031
3/11/2008	0.016
5/14/2008	0.024
12/11/2008	0.022
4/23/2009	0.012
10/9/2009	0.11
5/4/2010	0.096
10/11/2010	0.018
4/26/2011	0.01
10/18/2011	0.012
5/2/2012	0.0119
10/8/2012	0.01
4/10/2013	0.013
10/8/2013	0.014
4/14/2014	0.01
10/3/2014	0.014
4/1/2015	0.013
10/9/2015	0.008
3/29/2016	0.0239 (J)
5/24/2016	0.00902 (J)
8/1/2016	0.0091 (J)
9/26/2016	0.0124
11/18/2016	0.0117
2/1/2017	0.0086 (J)
4/6/2017	0.0083 (J)
6/13/2017	<0.01 (*)
10/3/2017	0.0084 (J)
3/19/2018	0.0079 (J)
9/17/2018	0.0065 (J)
3/21/2019	0.0074 (X)

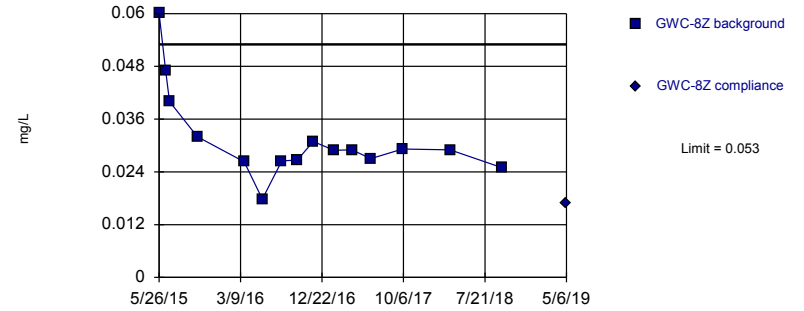
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.0267, Std. Dev.=0.005812, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9261, critical = 0.792. Kappa = 2.236 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

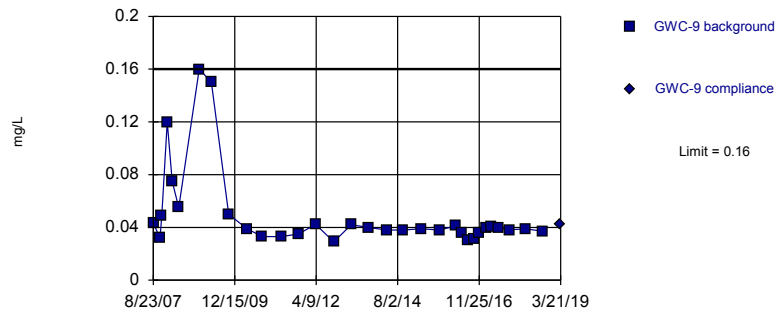
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1761, Std. Dev.=0.02662, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8449, critical = 0.835. Kappa = 1.993 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

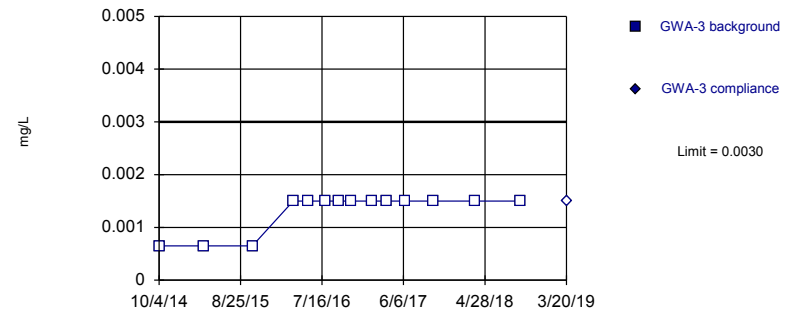
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Barium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	0.0178	
8/2/2016	0.0394	
9/27/2016	0.032	
11/21/2016	0.0316 (J)	
2/1/2017	0.0264	
4/6/2017	0.0245	
6/13/2017	0.0247	
7/14/2017	0.0245	
10/3/2017	0.0218	
3/20/2018	0.024	
9/18/2018	0.027	
3/21/2019		0.03

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	0.06	
6/18/2015	0.047 (D)	
7/2/2015	0.04	
10/8/2015	0.032	
3/22/2016	0.0263	
5/25/2016	0.0178	
8/2/2016	0.0265	
9/26/2016	0.0267	
11/21/2016	0.0309 (J)	
2/3/2017	0.0289	
4/7/2017	0.029	
6/13/2017	0.027	
10/3/2017	0.0292	
3/20/2018	0.029	
9/18/2018	0.025	
5/6/2019		0.017

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	0.043	
11/1/2007	0.032	
11/19/2007	0.049 (J)	
1/15/2008	0.12	
3/6/2008	0.075	
5/13/2008	0.055	
12/12/2008	0.16	
4/16/2009	0.15	
10/13/2009	0.05	
4/21/2010	0.039	
9/29/2010	0.033	
4/13/2011	0.033	
10/5/2011	0.035	
4/4/2012	0.0422	
10/8/2012	0.029	
4/8/2013	0.042	
10/9/2013	0.04	
4/9/2014	0.038	
9/30/2014	0.038	
4/2/2015	0.039	
10/10/2015	0.038 (D)	
3/30/2016	0.0412	
5/26/2016	0.0357	
8/5/2016	0.03	
9/28/2016	0.0308	
11/21/2016	0.0356 (J)	
2/6/2017	0.0391	
4/6/2017	0.0402	
6/13/2017	0.0394	
10/3/2017	0.0381	
3/20/2018	0.039	
9/18/2018	0.037	
3/21/2019		0.042

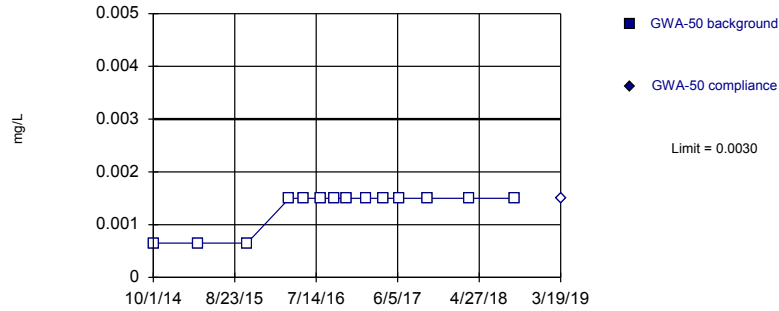
Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
10/4/2014	<0.0013	
3/31/2015	<0.0013	
10/12/2015	<0.0013	
3/23/2016	<0.003	
5/23/2016	<0.003	
7/29/2016	<0.003	
9/22/2016	<0.003	
11/10/2016	<0.003	
1/31/2017	<0.003	
3/30/2017	<0.003	
6/12/2017	<0.003	
10/4/2017	<0.003	
3/19/2018	<0.003	
9/17/2018	<0.003	
3/20/2019		<0.003

Within Limit

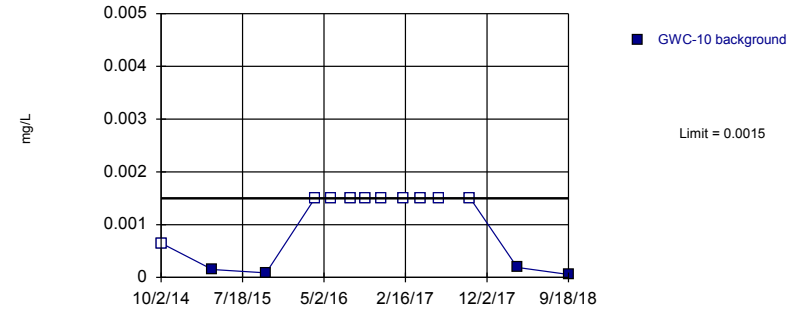
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

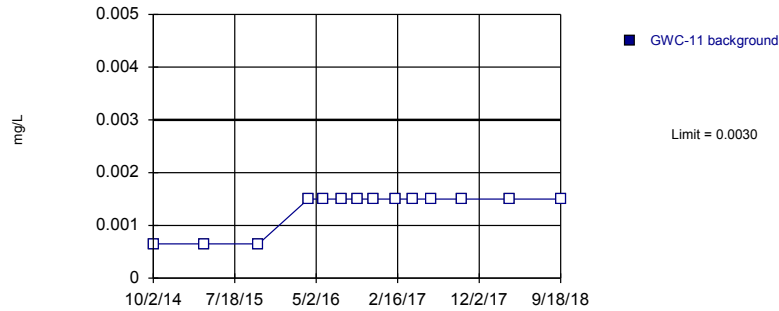
Prediction Limit
Intrawell Non-parametric, GWC-10



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-11

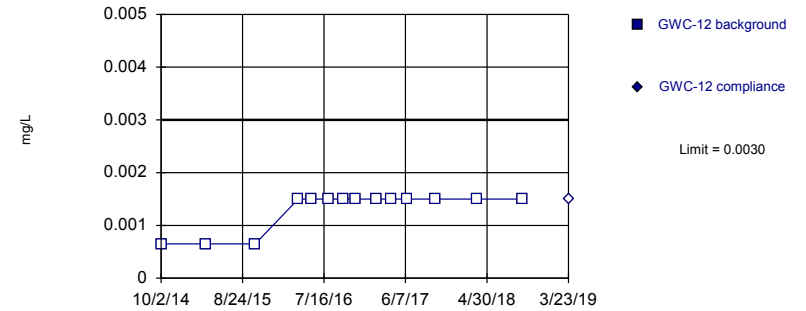


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
10/1/2014	<0.0013	
3/30/2015	<0.0013	
10/11/2015	<0.0013	
3/28/2016	<0.003	
5/23/2016	<0.003	
8/1/2016	<0.003	
9/26/2016	<0.003	
11/10/2016	<0.003	
1/30/2017	<0.003	
4/7/2017	<0.003	
6/12/2017	<0.003	
10/2/2017	<0.003	
3/16/2018	<0.003	
9/17/2018	<0.003	
3/19/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10
10/2/2014	<0.0013
4/2/2015	0.00015 (J)
10/10/2015	8.5E-05 (J)
3/31/2016	<0.003
5/26/2016	<0.003
8/5/2016	<0.003
9/28/2016	<0.003
11/22/2016	<0.003
2/7/2017	<0.003
4/10/2017	<0.003
6/14/2017	<0.003
10/4/2017	<0.003
3/20/2018	0.00019 (J)
9/18/2018	5.4E-05 (J)
3/22/2019	0.00018 (X)

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

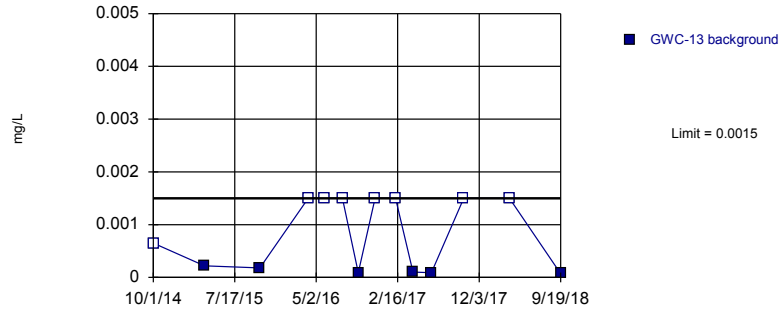
	GWC-11
10/2/2014	<0.0013
4/1/2015	<0.0013
10/11/2015	<0.0013
4/4/2016	<0.003
5/26/2016	<0.003
8/3/2016	<0.003
9/28/2016	<0.003
11/22/2016	<0.003
2/8/2017	<0.003
4/10/2017	<0.003
6/15/2017	<0.003
10/4/2017	<0.003
3/21/2018	<0.003
9/18/2018	<0.003
3/23/2019	5.7E-05 (X)

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
10/2/2014	<0.0013	
4/1/2015	<0.0013	
10/14/2015	<0.0013	
4/4/2016	<0.003	
5/27/2016	<0.003	
8/3/2016	<0.003	
9/30/2016	<0.003	
11/22/2016	<0.003	
2/13/2017	<0.003	
4/11/2017	<0.003	
6/14/2017	<0.003	
10/4/2017	<0.003	
3/22/2018	<0.003	
9/18/2018	<0.003	
3/23/2019		<0.003

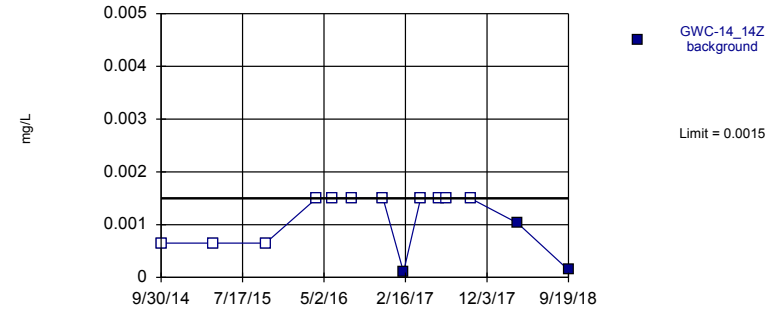
Prediction Limit
Intrawell Non-parametric, GWC-13



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-14_14Z

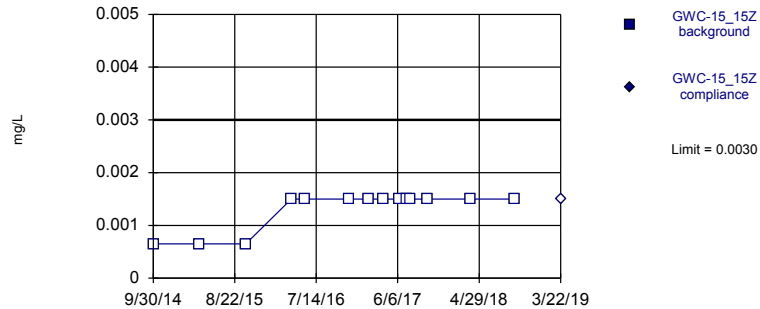


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

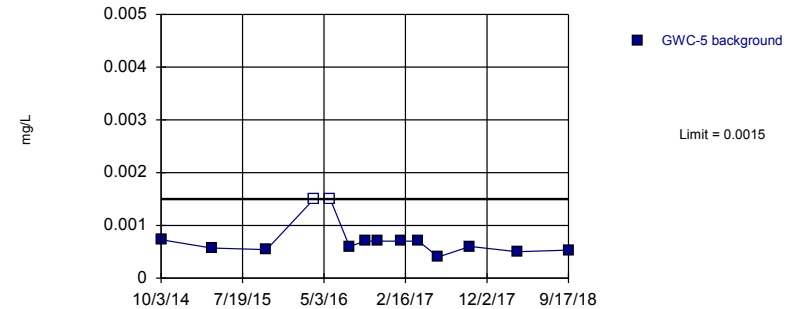
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Parametric, GWC-5



Background Data Summary (based on natural log transformation): Mean=-7.292, Std. Dev.=0.3735, n=14, 14.29% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8266, critical = 0.825. Kappa = 2.043 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13
10/1/2014	<0.0013
4/1/2015	0.00022 (J)
10/15/2015	0.00018 (J)
4/4/2016	<0.003
5/31/2016	<0.003
8/4/2016	<0.003
9/29/2016	9E-05 (J)
11/28/2016	<0.003
2/9/2017	<0.003
4/12/2017	0.0001 (J)
6/16/2017	9E-05 (J)
10/9/2017	<0.003
3/21/2018	<0.003
9/19/2018	7E-05 (J)
3/23/2019	6.1E-05 (X)

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z
9/30/2014	<0.0013
4/3/2015	<0.0013
10/7/2015	<0.0013
4/5/2016	<0.003
6/1/2016	<0.003
8/9/2016	<0.003
11/28/2016	<0.003
2/9/2017	0.0001 (J)
4/11/2017	<0.003
6/14/2017	<0.003
7/12/2017	<0.003
10/5/2017	<0.003
3/22/2018	0.00103 (D)
9/19/2018	0.00014 (J)
3/22/2019	9.4E-05 (X)

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/6/2015	<0.0013	
4/5/2016	<0.003	
5/31/2016	<0.003	
11/23/2016	<0.003	
2/10/2017	<0.003	
4/11/2017	<0.003	
6/15/2017	<0.003	
7/12/2017	<0.003	
7/26/2017	<0.003	
10/6/2017	<0.003	
3/23/2018	<0.003	
9/19/2018	<0.003	
3/22/2019		<0.003

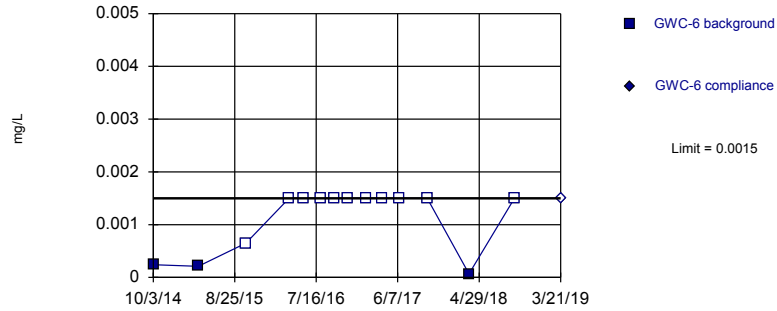
Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5
10/3/2014	0.00073 (J)
3/31/2015	0.00057 (J)
10/12/2015	0.00054 (J)
3/28/2016	<0.003
5/25/2016	<0.003
8/1/2016	0.0006 (J)
9/27/2016	0.0007 (J)
11/11/2016	0.0007 (J)
1/31/2017	0.0007 (J)
4/3/2017	0.0007 (J)
6/12/2017	0.0004 (J)
10/3/2017	0.0006 (J)
3/19/2018	0.0005 (J)
9/17/2018	0.00053 (J)
3/20/2019	0.00046 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

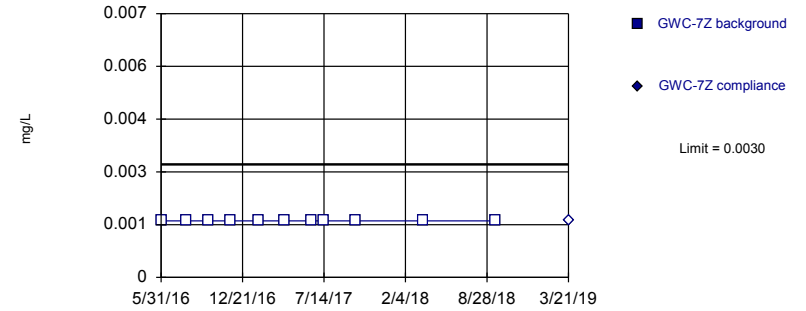


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

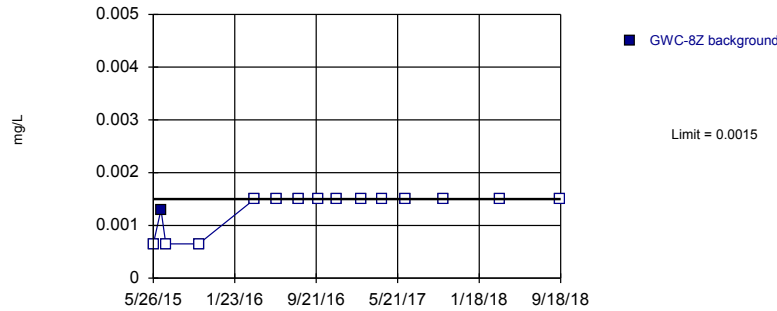
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

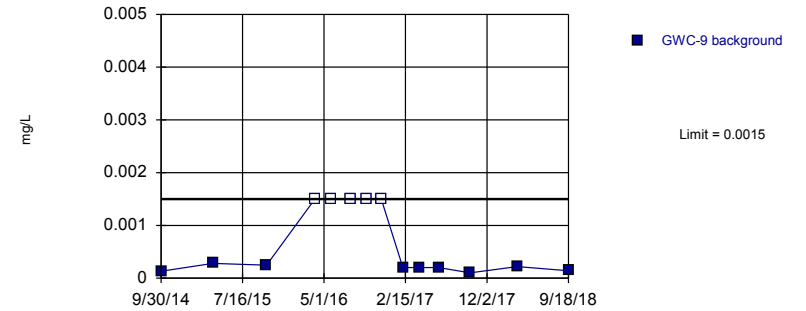
Prediction Limit
Intrawell Non-parametric, GWC-8Z



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-9



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 35.71% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
10/3/2014	0.00024 (J)	
4/1/2015	0.00021 (J)	
10/9/2015	<0.0013	
3/29/2016	<0.003	
5/24/2016	<0.003	
8/1/2016	<0.003	
9/26/2016	<0.003	
11/18/2016	<0.003	
2/1/2017	<0.003	
4/6/2017	<0.003	
6/13/2017	<0.003	
10/3/2017	<0.003	
3/19/2018	6.6E-05 (J)	
9/17/2018	<0.003	
3/21/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	<0.003	
8/2/2016	<0.003	
9/27/2016	<0.003	
11/21/2016	<0.003	
2/1/2017	<0.003	
4/6/2017	<0.003	
6/13/2017	<0.003	
7/14/2017	<0.003	
10/3/2017	<0.003	
3/20/2018	<0.003	
9/18/2018	<0.003	
3/21/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z
5/26/2015	<0.0013
6/18/2015	0.0013 (D)
7/2/2015	<0.0013
10/8/2015	<0.0013
3/22/2016	<0.003
5/25/2016	<0.003
8/2/2016	<0.003
9/26/2016	<0.003
11/21/2016	<0.003
2/3/2017	<0.003
4/7/2017	<0.003
6/13/2017	<0.003
10/3/2017	<0.003
3/20/2018	<0.003
9/18/2018	<0.003
5/6/2019	0.0001 (X)

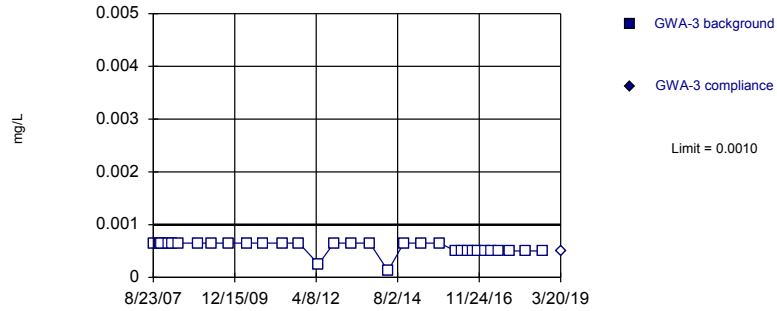
Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9
9/30/2014	0.00013 (J)
4/2/2015	0.00028 (J)
10/10/2015	0.000245 (JD)
3/30/2016	<0.003
5/26/2016	<0.003
8/5/2016	<0.003
9/28/2016	<0.003
11/21/2016	<0.003
2/6/2017	0.0002 (J)
4/6/2017	0.0002 (J)
6/13/2017	0.0002 (J)
10/3/2017	0.0001 (J)
3/20/2018	0.00022 (J)
9/18/2018	0.00014 (JD)
3/21/2019	0.00015 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

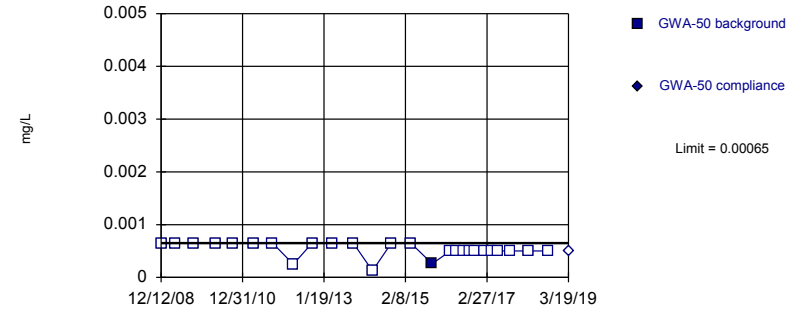


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:02 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

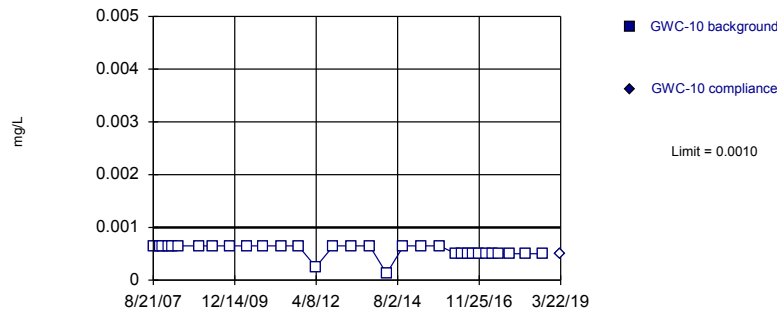


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

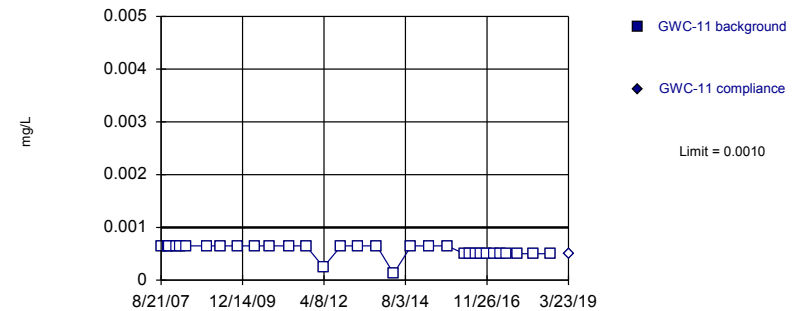


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	<0.0013	
11/2/2007	<0.0013	
11/18/2007	<0.0013	
1/31/2008	<0.0013	
3/11/2008	<0.0013	
5/14/2008	<0.0013	
12/5/2008	<0.0013	
4/15/2009	<0.0013	
10/8/2009	<0.0013	
4/28/2010	<0.0013	
10/6/2010	<0.0013	
4/21/2011	<0.0013	
10/13/2011	<0.0013	
5/1/2012	<0.0005	
10/9/2012	<0.0013	
4/11/2013	<0.0013	
10/16/2013	<0.0013	
4/23/2014	<0.00025	
10/4/2014	<0.0013	
3/31/2015	<0.0013	
10/12/2015	<0.0013	
3/23/2016	<0.001	
5/23/2016	<0.001	
7/29/2016	<0.001	
9/22/2016	<0.001	
11/10/2016	<0.001	
1/31/2017	<0.001	
3/30/2017	<0.001	
6/12/2017	<0.001	
10/4/2017	<0.001	
3/19/2018	<0.001	
9/17/2018	<0.001	
3/20/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.0013	
4/23/2009	<0.0013	
10/6/2009	<0.0013	
4/27/2010	<0.0013	
9/30/2010	<0.0013	
4/14/2011	<0.0013	
10/5/2011	<0.0013	
4/11/2012	<0.0005	
10/2/2012	<0.0013	
4/9/2013	<0.0013	
10/15/2013	<0.0013	
4/10/2014	<0.00025	
10/1/2014	<0.0013	
3/30/2015	<0.0013	
10/11/2015	0.00026 (J)	
3/28/2016	<0.001	
5/23/2016	<0.001	
8/1/2016	<0.001	
9/26/2016	<0.001	
11/10/2016	<0.001	
1/30/2017	<0.001	
4/7/2017	<0.001	
6/12/2017	<0.001	
10/2/2017	<0.001	
3/16/2018	<0.001	
9/17/2018	<0.001	
3/19/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

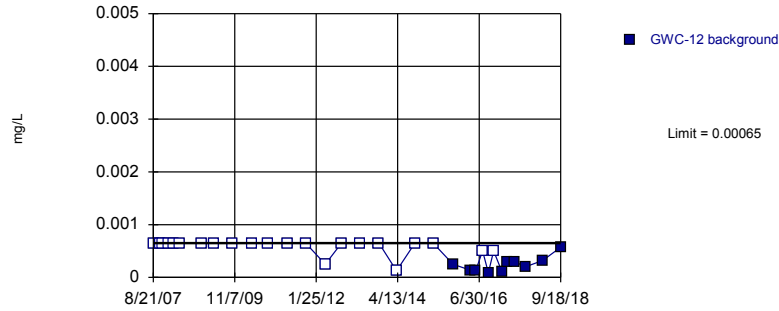
	GWC-10	GWC-10
8/21/2007	<0.0013	
11/1/2007	<0.0013	
11/20/2007	<0.0013	
1/30/2008	<0.0013	
3/6/2008	<0.0013	
5/12/2008	<0.0013	
12/13/2008	<0.0013	
4/29/2009	<0.0013	
10/20/2009	<0.0013	
4/26/2010	<0.0013	
9/29/2010	<0.0013	
4/13/2011	<0.0013	
10/5/2011	<0.0013	
4/4/2012	<0.0005	
10/3/2012	<0.0013	
4/3/2013	<0.0013	
10/15/2013	<0.0013	
4/9/2014	<0.00025	
10/2/2014	<0.0013	
4/2/2015	<0.0013	
10/10/2015	<0.0013	
3/31/2016	<0.001	
5/26/2016	<0.001	
8/5/2016	<0.001	
9/28/2016	<0.001	
11/22/2016	<0.001	
2/7/2017	<0.001	
4/10/2017	<0.001	
6/14/2017	<0.001	
10/4/2017	<0.001	
3/20/2018	<0.001	
9/18/2018	<0.001	
3/22/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.0013	
11/1/2007	<0.0013	
11/18/2007	<0.0013	
1/30/2008	<0.0013	
3/5/2008	<0.0013	
5/7/2008	<0.0013	
12/14/2008	<0.0013	
4/29/2009	<0.0013	
10/22/2009	<0.0013	
4/21/2010	<0.0013	
9/28/2010	<0.0013	
4/12/2011	<0.0013	
10/4/2011	<0.0013	
4/3/2012	<0.0005	
10/3/2012	<0.0013	
4/3/2013	<0.0013	
10/9/2013	<0.0013	
4/2/2014	<0.00025	
10/2/2014	<0.0013	
4/1/2015	<0.0013	
10/11/2015	<0.0013	
4/4/2016	<0.001	
5/26/2016	<0.001	
8/3/2016	<0.001	
9/28/2016	<0.001	
11/22/2016	<0.001	
2/8/2017	<0.001	
4/10/2017	<0.001	
6/15/2017	<0.001	
10/4/2017	<0.001	
3/21/2018	<0.001	
9/18/2018	<0.001	
3/23/2019		<0.001

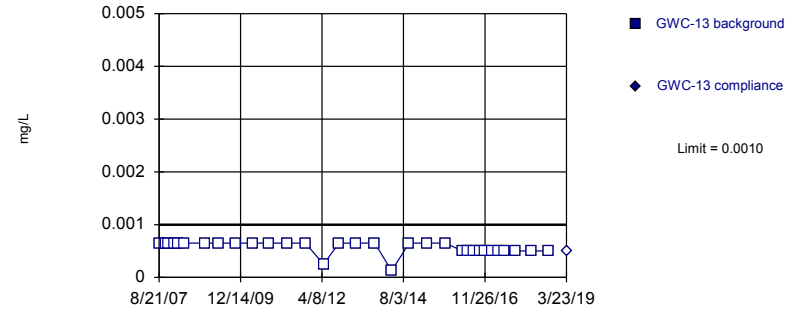
Prediction Limit
Intrawell Non-parametric, GWC-12



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

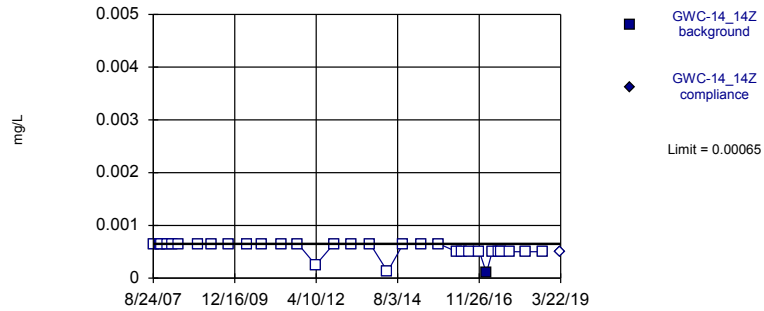
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

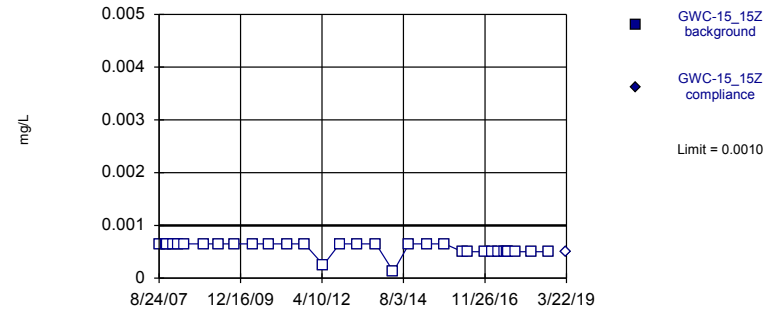
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12
8/21/2007	<0.0013
11/1/2007	<0.0013
11/19/2007	<0.0013
1/16/2008	<0.0013
3/5/2008	<0.0013
5/13/2008	<0.0013
12/13/2008	<0.0013
4/16/2009	<0.0013
10/21/2009	<0.0013
4/27/2010	<0.0013
10/5/2010	<0.0013
4/19/2011	<0.0013
10/12/2011	<0.0013
4/24/2012	<0.0005
10/2/2012	<0.0013
4/2/2013	<0.0013
10/9/2013	<0.0013
4/1/2014	<0.00025
10/2/2014	<0.0013
4/1/2015	<0.0013
10/14/2015	0.00025 (J)
4/4/2016	0.000136 (J)
5/27/2016	0.000131 (J)
8/3/2016	<0.001
9/30/2016	9E-05 (J)
11/22/2016	<0.001
2/13/2017	0.0001 (J)
4/11/2017	0.0003 (J)
6/14/2017	0.0003 (J)
10/4/2017	0.0002 (J)
3/22/2018	0.00032 (J)
9/18/2018	0.00057 (J)
3/23/2019	0.00035 (X)

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	<0.0013	
11/1/2007	<0.0013	
11/19/2007	<0.0013	
1/31/2008	<0.0013	
3/5/2008	<0.0013	
5/12/2008	<0.0013	
12/13/2008	<0.0013	
4/28/2009	<0.0013	
10/21/2009	<0.0013	
4/28/2010	<0.0013	
10/5/2010	<0.0013	
4/19/2011	<0.0013	
10/18/2011	<0.0013	
4/25/2012	<0.0005	
10/2/2012	<0.0013	
4/2/2013	<0.0013	
10/8/2013	<0.0013	
4/1/2014	<0.00025	
10/1/2014	<0.0013	
4/1/2015	<0.0013	
10/15/2015	<0.0013	
4/4/2016	<0.001	
5/31/2016	<0.001	
8/4/2016	<0.001	
9/29/2016	<0.001	
11/28/2016	<0.001	
2/9/2017	<0.001	
4/12/2017	<0.001	
6/16/2017	<0.001	
10/9/2017	<0.001	
3/21/2018	<0.001	
9/19/2018	<0.001	
3/23/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	<0.0013	
11/2/2007	<0.0013	
11/17/2007	<0.0013	
1/15/2008	<0.0013	
3/5/2008	<0.0013	
5/7/2008	<0.0013	
12/2/2008	<0.0013	
4/16/2009	<0.0013	
10/20/2009	<0.0013	
4/20/2010	<0.0013	
9/29/2010	<0.0013	
4/12/2011	<0.0013	
10/4/2011	<0.0013	
4/4/2012	<0.0005	
10/10/2012	<0.0013	
4/15/2013	<0.0013	
10/22/2013	<0.0013	
4/21/2014	<0.00025	
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/7/2015	<0.0013	
4/5/2016	<0.001	
6/1/2016	<0.001	
8/9/2016	<0.001	
11/28/2016	<0.001	
2/9/2017	0.0001 (J)	
4/11/2017	<0.001	
6/14/2017	<0.001	
7/12/2017	<0.001	
10/5/2017	<0.001	
3/22/2018	<0.001	
9/19/2018	<0.001	
3/22/2019		<0.001

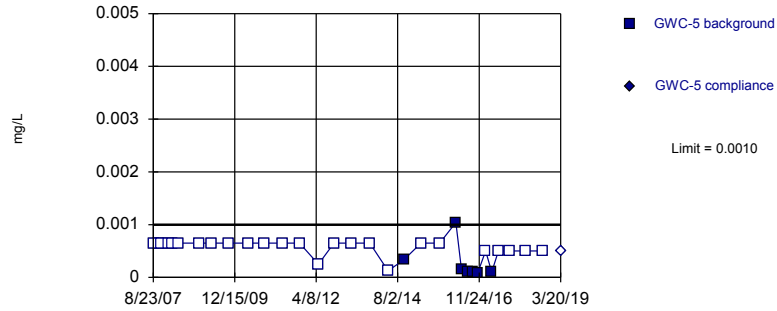
Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.0013	
11/2/2007	<0.0013	
11/18/2007	<0.0013	
1/15/2008	<0.0013	
3/10/2008	<0.0013	
5/13/2008	<0.0013	
12/2/2008	<0.0013	
4/28/2009	<0.0013	
10/20/2009	<0.0013	
4/27/2010	<0.0013	
10/5/2010	<0.0013	
4/19/2011	<0.0013	
10/12/2011	<0.0013	
4/25/2012	<0.0005	
10/10/2012	<0.0013	
4/16/2013	<0.0013	
10/22/2013	<0.0013	
4/21/2014	<0.00025	
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/6/2015	<0.0013	
4/5/2016	<0.001	
5/31/2016	<0.001	
11/23/2016	<0.001	
2/10/2017	<0.001	
4/11/2017	<0.001	
6/15/2017	<0.001	
7/12/2017	<0.001	
7/26/2017	<0.001	
10/6/2017	<0.001	
3/23/2018	<0.001	
9/19/2018	<0.001	
3/22/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

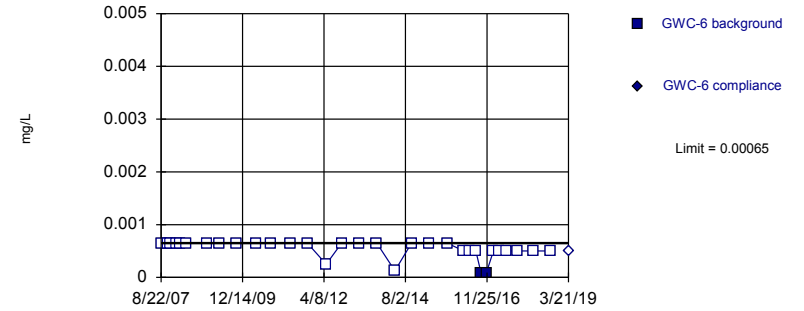


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

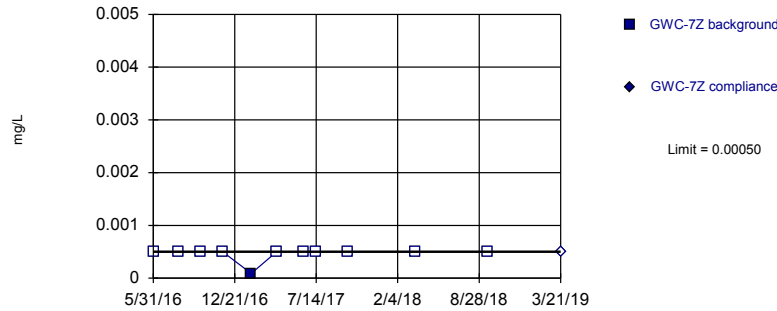


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

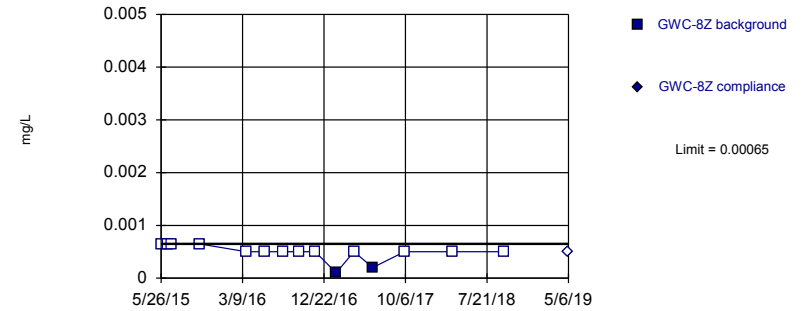


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	<0.0013	
10/25/2007	<0.0013	
11/19/2007	<0.0013	
1/23/2008	<0.0013	
3/11/2008	<0.0013	
5/12/2008	<0.0013	
12/11/2008	<0.0013	
4/15/2009	<0.0013	
10/9/2009	<0.0013	
5/4/2010	<0.0013	
10/12/2010	<0.0013	
4/28/2011	<0.0013	
10/19/2011	<0.0013	
5/2/2012	<0.0005	
10/9/2012	<0.0013	
4/11/2013	<0.0013	
10/16/2013	<0.0013	
4/23/2014	<0.00025	
10/3/2014	0.00033 (J)	
3/31/2015	<0.0013	
10/12/2015	<0.0013	
3/28/2016	0.00104 (J)	
5/25/2016	0.000148 (J)	
8/1/2016	0.0001 (J)	
9/27/2016	0.0001 (J)	
11/11/2016	9E-05 (J)	
1/31/2017	<0.001	
4/3/2017	0.0001 (J)	
6/12/2017	<0.001	
10/3/2017	<0.001	
3/19/2018	<0.001	
9/17/2018	<0.001	
3/20/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.0013	
10/25/2007	<0.0013	
11/20/2007	<0.0013	
1/23/2008	<0.0013	
3/11/2008	<0.0013	
5/14/2008	<0.0013	
12/11/2008	<0.0013	
4/23/2009	<0.0013	
10/9/2009	<0.0013	
5/4/2010	<0.0013	
10/11/2010	<0.0013	
4/26/2011	<0.0013	
10/18/2011	<0.0013	
5/2/2012	<0.0005	
10/8/2012	<0.0013	
4/10/2013	<0.0013	
10/8/2013	<0.0013	
4/14/2014	<0.00025	
10/3/2014	<0.0013	
4/1/2015	<0.0013	
10/9/2015	<0.0013	
3/29/2016	<0.001	
5/24/2016	<0.001	
8/1/2016	<0.001	
9/26/2016	8E-05 (J)	
11/18/2016	8E-05 (J)	
2/1/2017	<0.001	
4/6/2017	<0.001	
6/13/2017	<0.001	
10/3/2017	<0.001	
3/19/2018	<0.001	
9/17/2018	<0.001	
3/21/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	<0.001	
8/2/2016	<0.001	
9/27/2016	<0.001	
11/21/2016	<0.001	
2/1/2017	9E-05 (J)	
4/6/2017	<0.001	
6/13/2017	<0.001	
7/14/2017	<0.001	
10/3/2017	<0.001	
3/20/2018	<0.001	
9/18/2018	<0.001	
3/21/2019		<0.001

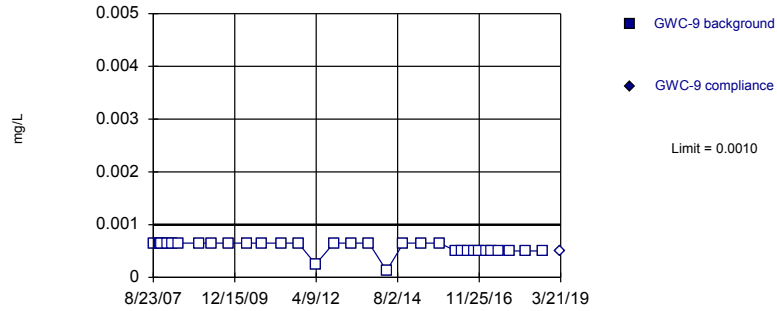
Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	<0.0013	
6/18/2015	<0.0013 (D)	
7/2/2015	<0.0013	
10/8/2015	<0.0013	
3/22/2016	<0.001	
5/25/2016	<0.001	
8/2/2016	<0.001	
9/26/2016	<0.001	
11/21/2016	<0.001	
2/3/2017	0.0001 (J)	
4/7/2017	<0.001	
6/13/2017	0.0002 (J)	
10/3/2017	<0.001	
3/20/2018	<0.001	
9/18/2018	<0.001	
5/6/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

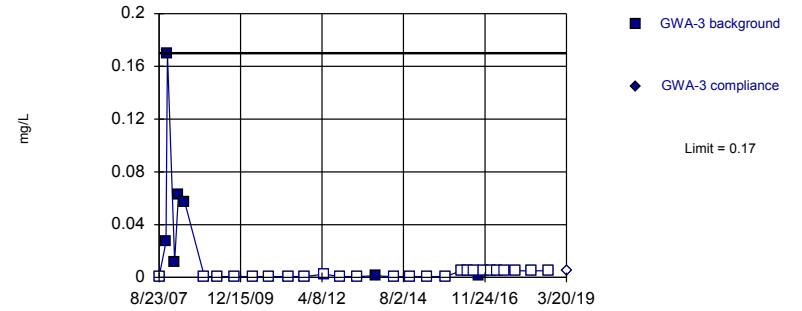


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

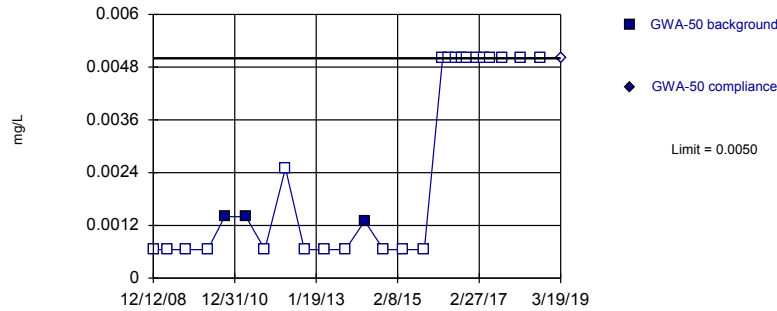


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

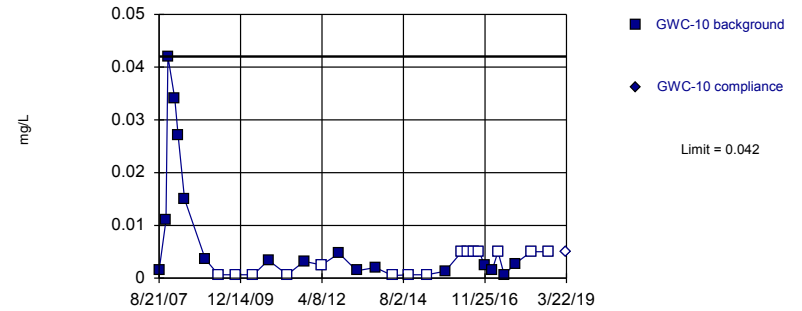


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 88.46% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used after natural log transformation resulted in a parametric limit of 7.665, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 32 background values. 46.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.0013	
11/1/2007	<0.0013	
11/19/2007	<0.0013	
1/15/2008	<0.0013	
3/6/2008	<0.0013	
5/13/2008	<0.0013	
12/12/2008	<0.0013	
4/16/2009	<0.0013	
10/13/2009	<0.0013	
4/21/2010	<0.0013	
9/29/2010	<0.0013	
4/13/2011	<0.0013	
10/5/2011	<0.0013	
4/4/2012	<0.0005	
10/8/2012	<0.0013	
4/8/2013	<0.0013	
10/9/2013	<0.0013	
4/9/2014	<0.00025	
9/30/2014	<0.0013	
4/2/2015	<0.0013	
10/10/2015	<0.0013 (D)	
3/30/2016	<0.001	
5/26/2016	<0.001	
8/5/2016	<0.001	
9/28/2016	<0.001	
11/21/2016	<0.001	
2/6/2017	<0.001	
4/6/2017	<0.001	
6/13/2017	<0.001	
10/3/2017	<0.001	
3/20/2018	<0.001	
9/18/2018	<0.001 (D)	
3/21/2019		<0.001

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	<0.0013	
11/2/2007	0.027	
11/18/2007	0.17	
1/31/2008	0.012	
3/11/2008	0.063	
5/14/2008	0.057	
12/5/2008	<0.0013	
4/15/2009	<0.0013	
10/8/2009	<0.0013	
4/28/2010	<0.0013	
10/6/2010	<0.0013	
4/21/2011	<0.0013	
10/13/2011	<0.0013	
5/1/2012	<0.005	
10/9/2012	<0.0013	
4/11/2013	<0.0013	
10/16/2013	0.0013	
4/23/2014	<0.001	
10/4/2014	<0.0013	
3/31/2015	<0.0013	
10/12/2015	<0.0013	
3/23/2016	<0.01	
5/23/2016	<0.01	
7/29/2016	<0.01	
9/22/2016	0.0013 (J)	
11/10/2016	<0.01	
1/31/2017	<0.01	
3/30/2017	<0.01	
6/12/2017	<0.01	
10/4/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.0013	
4/23/2009	<0.0013	
10/6/2009	<0.0013	
4/27/2010	<0.0013	
9/30/2010	0.0014	
4/14/2011	0.0014	
10/5/2011	<0.0013	
4/11/2012	<0.005	
10/2/2012	<0.0013	
4/9/2013	<0.0013	
10/15/2013	<0.0013	
4/10/2014	0.0013 (J)	
10/1/2014	<0.0013	
3/30/2015	<0.0013	
10/11/2015	<0.0013	
3/28/2016	<0.01	
5/23/2016	<0.01	
8/1/2016	<0.01 (*)	
9/26/2016	<0.01	
11/10/2016	<0.01	
1/30/2017	<0.01	
4/7/2017	<0.01	
6/12/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01	
3/19/2019		<0.01

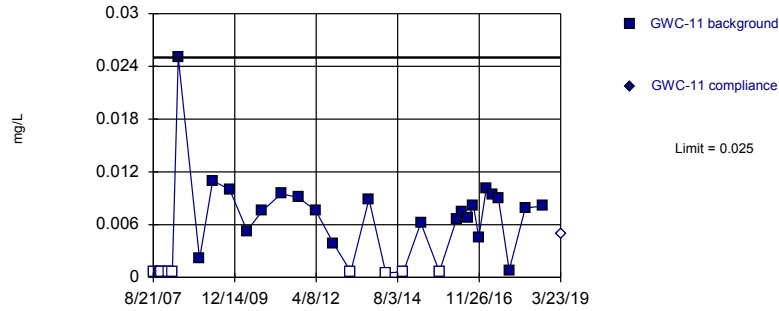
Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	0.0015	
11/1/2007	0.011	
11/20/2007	0.042	
1/30/2008	0.034	
3/6/2008	0.027	
5/12/2008	0.015	
12/13/2008	0.0036	
4/29/2009	<0.0013	
10/20/2009	<0.0013	
4/26/2010	<0.0013	
9/29/2010	0.0034	
4/13/2011	<0.0013	
10/5/2011	0.0032	
4/4/2012	<0.005	
10/3/2012	0.0047	
4/3/2013	0.0014	
10/15/2013	0.002	
4/9/2014	<0.001	
10/2/2014	<0.0013	
4/2/2015	<0.0013	
10/10/2015	0.0013	
3/31/2016	<0.01	
5/26/2016	<0.01	
8/5/2016	<0.01 (*)	
9/28/2016	<0.01	
11/22/2016	0.0024 (J)	
2/7/2017	0.0015 (J)	
4/10/2017	<0.01 (*)	
6/14/2017	0.0006 (J)	
10/4/2017	0.0027 (J)	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

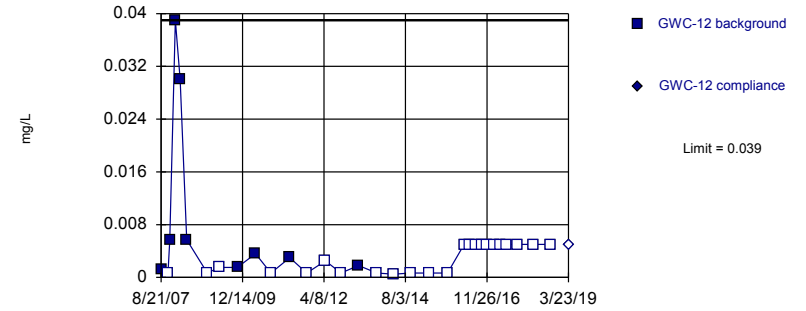


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 28.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:03 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

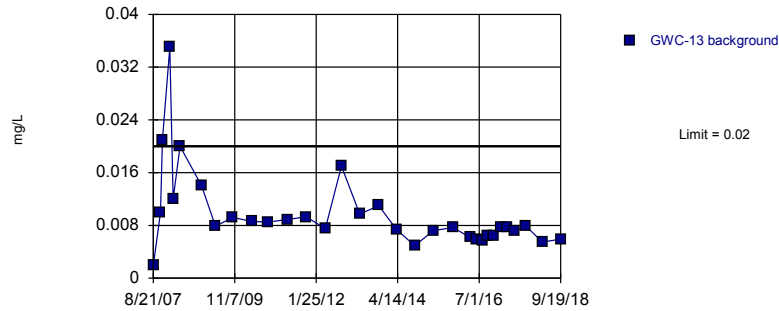
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 71.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Parametric, GWC-13

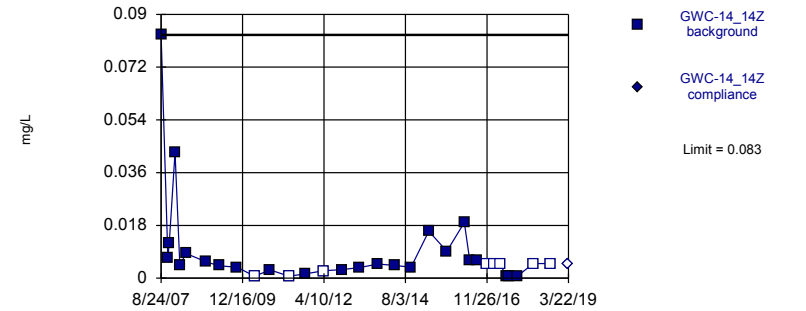


Background Data Summary (based on natural log transformation): Mean=-4.769, Std. Dev.=0.511, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9189, critical = 0.904. Kappa = 1.694 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used after natural log transformation resulted in a parametric limit of 1.425, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 32 background values. 25% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.0013	
11/1/2007	<0.0013	
11/18/2007	<0.0013	
1/30/2008	<0.0013	
3/5/2008	<0.0013	
5/7/2008	0.025	
12/14/2008	0.0021	
4/29/2009	0.011	
10/22/2009	0.01	
4/21/2010	0.0053	
9/28/2010	0.0076	
4/12/2011	0.0095	
10/4/2011	0.0091	
4/3/2012	0.0076	
10/3/2012	0.0039	
4/3/2013	<0.0013	
10/9/2013	0.0089	
4/2/2014	<0.001	
10/2/2014	<0.0013	
4/1/2015	0.0062	
10/11/2015	<0.0013	
4/4/2016	0.00656 (J)	
5/26/2016	0.00752 (J)	
8/3/2016	0.0067 (J)	
9/28/2016	0.0082 (J)	
11/22/2016	0.0045 (J)	
2/8/2017	0.0101	
4/10/2017	0.0094 (J)	
6/15/2017	0.009 (J)	
10/4/2017	0.0008 (J)	
3/21/2018	0.0079 (J)	
9/18/2018	0.0081 (J)	
3/23/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	0.0013	
11/1/2007	<0.0013	
11/19/2007	0.0056	
1/16/2008	0.039	
3/5/2008	0.03	
5/13/2008	0.0057	
12/13/2008	<0.0013	
4/16/2009	<0.003	
10/21/2009	0.0015	
4/27/2010	0.0036	
10/5/2010	<0.0013	
4/19/2011	0.003	
10/12/2011	<0.0013	
4/24/2012	<0.005	
10/2/2012	<0.0013	
4/2/2013	0.0018	
10/9/2013	<0.0013	
4/1/2014	<0.001	
10/2/2014	<0.0013	
4/1/2015	<0.0013	
10/14/2015	<0.0013	
4/4/2016	<0.01	
5/27/2016	<0.01	
8/3/2016	<0.01	
9/30/2016	<0.01	
11/22/2016	<0.01	
2/13/2017	<0.01	
4/11/2017	<0.01	
6/14/2017	<0.01	
10/4/2017	<0.01	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13
8/21/2007	0.0019
11/1/2007	0.01
11/19/2007	0.021
1/31/2008	0.035
3/5/2008	0.012
5/12/2008	0.02
12/13/2008	0.014
4/28/2009	0.0079
10/21/2009	0.0092
4/28/2010	0.0086
10/5/2010	0.0085
4/19/2011	0.0089
10/18/2011	0.0093
4/25/2012	0.0075
10/2/2012	0.017
4/2/2013	0.0097
10/8/2013	0.011
4/1/2014	0.0074
10/1/2014	0.0049
4/1/2015	0.0072
10/15/2015	0.0077
4/4/2016	0.00615 (J)
5/31/2016	0.00588 (J)
8/4/2016	0.0056 (J)
9/29/2016	0.0065 (J)
11/28/2016	0.0064 (J)
2/9/2017	0.0078 (J)
4/12/2017	0.0077 (J)
6/16/2017	0.0072 (J)
10/9/2017	0.0079 (J)
3/21/2018	0.0055 (J)
9/19/2018	0.0059 (J)
3/23/2019	0.0058 (X)

Prediction Limit

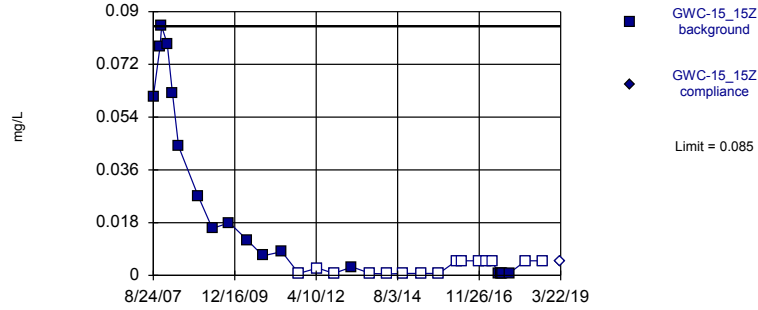
Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	0.083	
11/2/2007	0.0071	
11/17/2007	0.012	
1/15/2008	0.043	
3/5/2008	0.0044	
5/7/2008	0.0084	
12/2/2008	0.0056	
4/16/2009	0.0042	
10/20/2009	0.0037	
4/20/2010	<0.0013	
9/29/2010	0.0028	
4/12/2011	<0.0013	
10/4/2011	0.0015	
4/4/2012	<0.005	
10/10/2012	0.0029	
4/15/2013	0.0036	
10/22/2013	0.0048	
4/21/2014	0.0043	
9/30/2014	0.0037	
4/3/2015	0.016	
10/7/2015	0.0092	
4/5/2016	0.019 (J)	
6/1/2016	0.006 (J)	
8/9/2016	0.0061 (JD)	
11/28/2016	<0.01	
2/9/2017	<0.01	
4/11/2017	<0.01 (*)	
6/14/2017	0.0006 (J)	
7/12/2017	0.0005 (J)	
10/5/2017	0.0006 (J)	
3/22/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

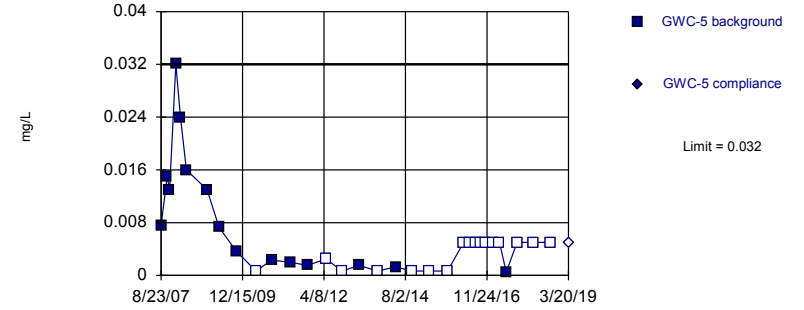


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 46.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

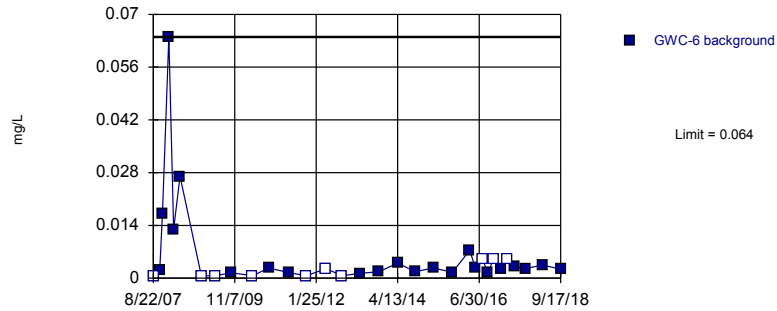
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 53.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-6

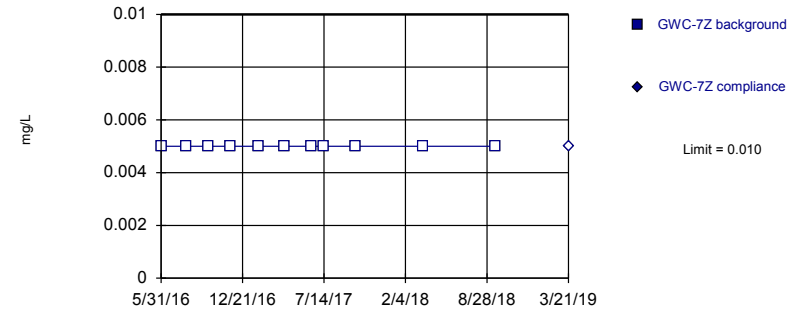


Non-parametric test used after natural log transformation resulted in a parametric limit of 2.353, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 32 background values. 31.25% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	0.061	
11/2/2007	0.078	
11/18/2007	0.085	
1/15/2008	0.079	
3/10/2008	0.062	
5/13/2008	0.044	
12/2/2008	0.027	
4/28/2009	0.016	
10/20/2009	0.018	
4/27/2010	0.012	
10/5/2010	0.0067	
4/19/2011	0.0081	
10/12/2011	<0.0013	
4/25/2012	<0.005	
10/10/2012	<0.0013	
4/16/2013	0.0029	
10/22/2013	<0.0013	
4/21/2014	<0.001	
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/6/2015	<0.0013	
4/5/2016	<0.01	
5/31/2016	<0.01	
11/23/2016	<0.01	
2/10/2017	<0.01	
4/11/2017	<0.01 (*)	
6/15/2017	0.0005 (J)	
7/12/2017	0.0008 (J)	
7/26/2017	0.0006 (J)	
10/6/2017	0.0008 (J)	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	0.0076	
10/25/2007	0.015	
11/19/2007	0.013	
1/23/2008	0.032	
3/11/2008	0.024	
5/12/2008	0.016	
12/11/2008	0.013	
4/15/2009	0.0073	
10/9/2009	0.0037	
5/4/2010	<0.0013	
10/12/2010	0.0023	
4/28/2011	0.002	
10/19/2011	0.0015	
5/2/2012	<0.005	
10/9/2012	<0.0013	
4/11/2013	0.0015	
10/16/2013	<0.0013	
4/23/2014	0.0013 (J)	
10/3/2014	<0.0013	
3/31/2015	<0.0013	
10/12/2015	<0.0013	
3/28/2016	<0.01	
5/25/2016	<0.01	
8/1/2016	<0.01	
9/27/2016	<0.01	
11/11/2016	<0.01 (*)	
1/31/2017	<0.01	
4/3/2017	<0.01	
6/12/2017	0.0005 (J)	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

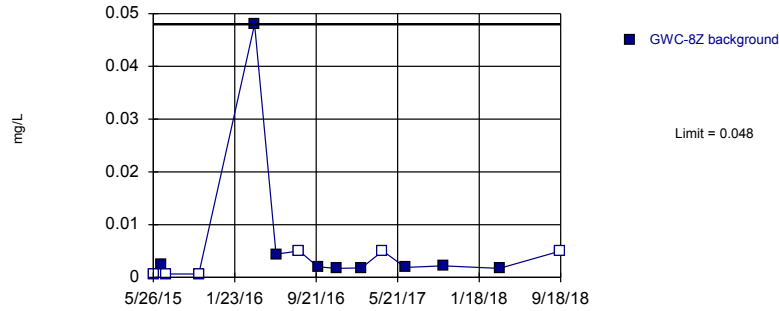
	GWC-6
8/22/2007	<0.0013
10/25/2007	0.002
11/20/2007	0.017
1/23/2008	0.064
3/11/2008	0.013
5/14/2008	0.027
12/11/2008	<0.0013
4/23/2009	<0.0013
10/9/2009	0.0014
5/4/2010	<0.0013
10/11/2010	0.0027
4/26/2011	0.0015
10/18/2011	<0.0013
5/2/2012	<0.005
10/8/2012	<0.0013
4/10/2013	0.0013
10/8/2013	0.0017
4/14/2014	0.004
10/3/2014	0.0017
4/1/2015	0.0027
10/9/2015	0.0016
3/29/2016	0.00738 (J)
5/24/2016	0.00263 (J)
8/1/2016	<0.01 (*)
9/26/2016	0.0014 (J)
11/18/2016	<0.01 (*)
2/1/2017	0.0024 (J)
4/6/2017	<0.01 (*)
6/13/2017	0.0031 (J)
10/3/2017	0.0025 (J)
3/19/2018	0.0035 (J)
9/17/2018	0.0024 (J)
3/21/2019	0.0029 (X)

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	<0.01	
8/2/2016	<0.01	
9/27/2016	<0.01	
11/21/2016	<0.01	
2/1/2017	<0.01	
4/6/2017	<0.01 (*)	
6/13/2017	<0.01	
7/14/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

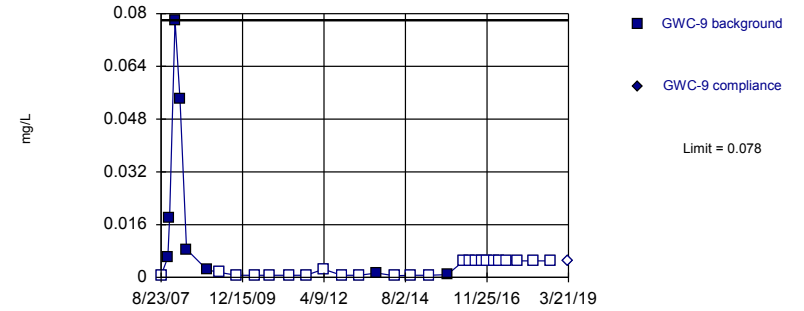
Prediction Limit
Intrawell Non-parametric, GWC-8Z



Non-parametric test used after natural log transformation resulted in a parametric limit of 13.45, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3). Assumes 1 future value.

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

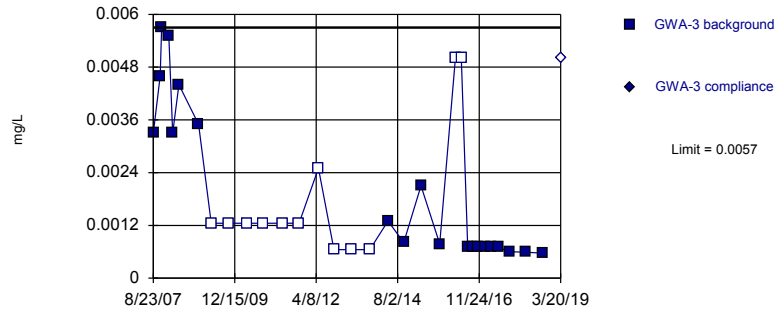
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

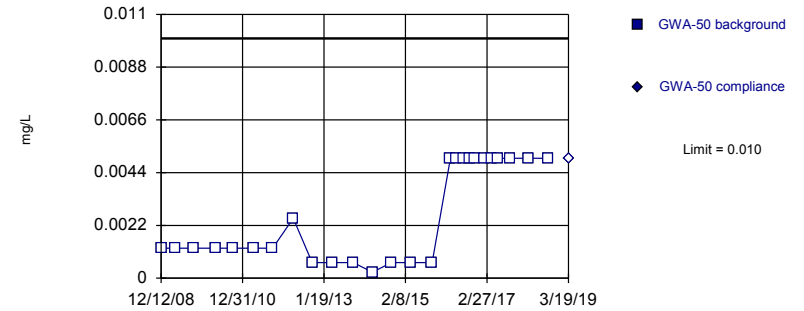
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 37.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z
5/26/2015	<0.0013
6/18/2015	0.0024 (D)
7/2/2015	<0.0013
10/8/2015	<0.0013
3/22/2016	0.048 (J)
5/25/2016	0.00441 (J)
8/2/2016	<0.01 (*)
9/26/2016	0.002 (J)
11/21/2016	0.0017 (J)
2/3/2017	0.0018 (J)
4/7/2017	<0.01 (*)
6/13/2017	0.0019 (J)
10/3/2017	0.0022 (J)
3/20/2018	0.0017 (J)
9/18/2018	<0.01
5/6/2019	0.0048 (X)

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.0013	
11/1/2007	0.0061	
11/19/2007	0.018 (J)	
1/15/2008	0.078	
3/6/2008	0.054	
5/13/2008	0.0085	
12/12/2008	0.0023	
4/16/2009	<0.003	
10/13/2009	<0.0013	
4/21/2010	<0.0013	
9/29/2010	<0.0013	
4/13/2011	<0.0013	
10/5/2011	<0.0013	
4/4/2012	<0.005	
10/8/2012	<0.0013	
4/8/2013	<0.0013	
10/9/2013	0.0013	
4/9/2014	<0.001	
9/30/2014	<0.0013	
4/2/2015	<0.0013	
10/10/2015	0.000825 (D)	
3/30/2016	<0.01	
5/26/2016	<0.01	
8/5/2016	<0.01 (*)	
9/28/2016	<0.01	
11/21/2016	<0.01	
2/6/2017	<0.01	
4/6/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01 (D)	
3/21/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	0.0033	
11/2/2007	0.0046	
11/18/2007	0.0057	
1/31/2008	0.0055	
3/11/2008	0.0033	
5/14/2008	0.0044	
12/5/2008	0.0035	
4/15/2009	<0.0025	
10/8/2009	<0.0025	
4/28/2010	<0.0025	
10/6/2010	<0.0025	
4/21/2011	<0.0025	
10/13/2011	<0.0025	
5/1/2012	<0.005	
10/9/2012	<0.0013	
4/11/2013	<0.0013	
10/16/2013	<0.0013	
4/23/2014	0.0013 (J)	
10/4/2014	0.00081 (J)	
3/31/2015	0.0021	
10/12/2015	0.00078 (J)	
3/23/2016	<0.01	
5/23/2016	<0.01	
7/29/2016	0.0007 (J)	
9/22/2016	0.0007 (J)	
11/10/2016	0.0007 (J)	
1/31/2017	0.0007 (J)	
3/30/2017	0.0007 (J)	
6/12/2017	0.0007 (J)	
10/4/2017	0.0006 (J)	
3/19/2018	0.00059 (J)	
9/17/2018	0.00057 (J)	
3/20/2019		<0.01

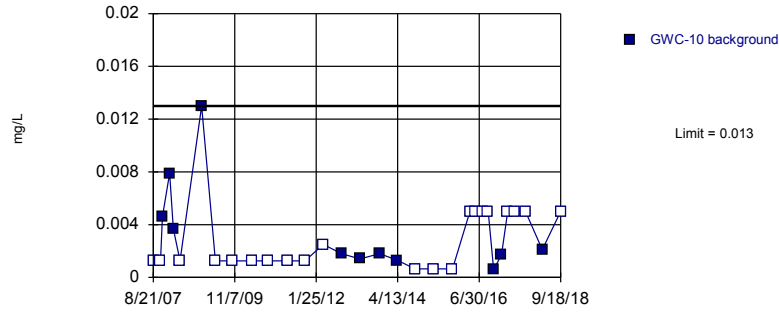
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.0025	
4/23/2009	<0.0025	
10/6/2009	<0.0025	
4/27/2010	<0.0025	
9/30/2010	<0.0025	
4/14/2011	<0.0025	
10/5/2011	<0.0025	
4/11/2012	<0.005	
10/2/2012	<0.0013	
4/9/2013	<0.0013	
10/15/2013	<0.0013	
4/10/2014	<0.0005	
10/1/2014	<0.0013	
3/30/2015	<0.0013	
10/11/2015	<0.0013	
3/28/2016	<0.01	
5/23/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/10/2016	<0.01	
1/30/2017	<0.01	
4/7/2017	<0.01	
6/12/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01	
3/19/2019		<0.01

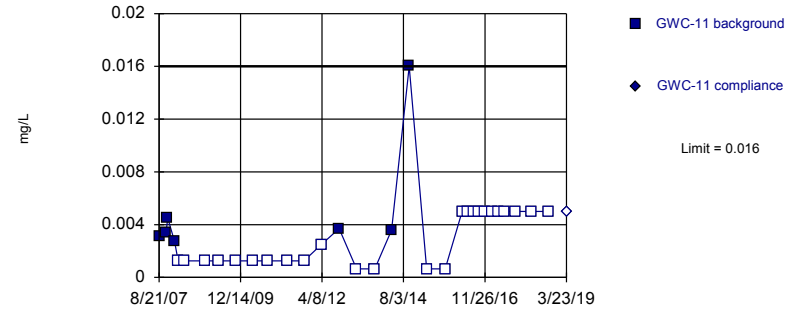
Prediction Limit
Intrawell Non-parametric, GWC-10



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 65.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

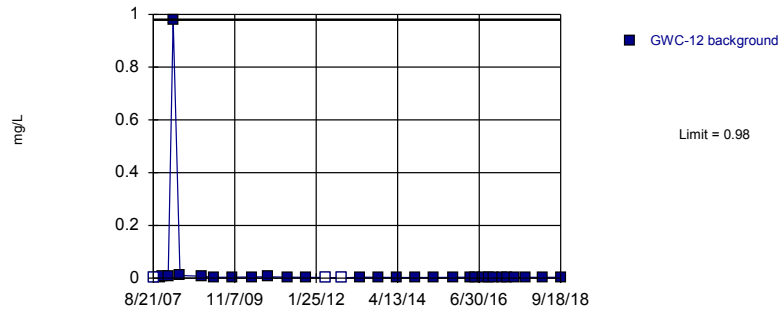
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

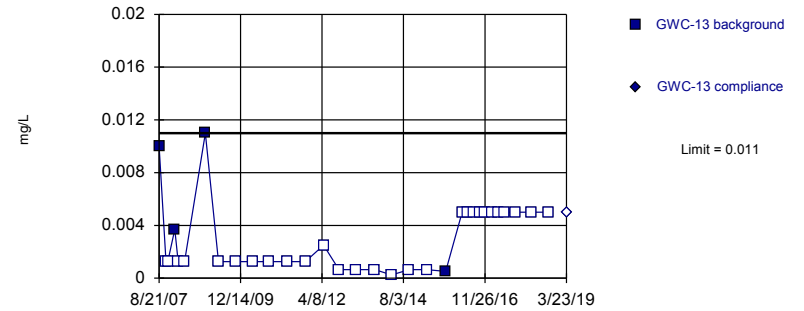
Prediction Limit
Intrawell Non-parametric, GWC-12



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 9.375% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3). Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10
8/21/2007	<0.0025
11/1/2007	<0.0025
11/20/2007	0.0046
1/30/2008	0.0079
3/6/2008	0.0037
5/12/2008	<0.0025
12/13/2008	0.013
4/29/2009	<0.0025
10/20/2009	<0.0025
4/26/2010	<0.0025
9/29/2010	<0.0025
4/13/2011	<0.0025
10/5/2011	<0.0025
4/4/2012	<0.005
10/3/2012	0.0018
4/3/2013	0.0014
10/15/2013	0.0018
4/9/2014	0.0013 (J)
10/2/2014	<0.0013
4/2/2015	<0.0013
10/10/2015	<0.0013
3/31/2016	<0.01
5/26/2016	<0.01
8/5/2016	<0.01
9/28/2016	<0.01
11/22/2016	0.0006 (J)
2/7/2017	0.0017 (J)
4/10/2017	<0.01
6/14/2017	<0.01
10/4/2017	<0.01
3/20/2018	0.0021 (J)
9/18/2018	<0.01
3/22/2019	0.0011 (X)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	0.0031	
11/1/2007	0.0034	
11/18/2007	0.0045	
1/30/2008	0.0027	
3/5/2008	<0.0025	
5/7/2008	<0.0025	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/3/2012	0.0037	
4/3/2013	<0.0013	
10/9/2013	<0.0013	
4/2/2014	0.0036	
10/2/2014	0.016	
4/1/2015	<0.0013	
10/11/2015	<0.0013	
4/4/2016	<0.01	
5/26/2016	<0.01	
8/3/2016	<0.01	
9/28/2016	<0.01	
11/22/2016	<0.01	
2/8/2017	<0.01	
4/10/2017	<0.01	
6/15/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12
8/21/2007	<0.0025
11/1/2007	0.0041
11/19/2007	0.0055
1/16/2008	0.008
3/5/2008	0.98
5/13/2008	0.01
12/13/2008	0.0073
4/16/2009	0.0033
10/21/2009	0.0039
4/27/2010	0.0044
10/5/2010	0.005
4/19/2011	0.0039
10/12/2011	0.0032
4/24/2012	<0.005
10/2/2012	<0.0013
4/2/2013	0.0038
10/9/2013	0.003
4/1/2014	0.0027
10/2/2014	0.0027
4/1/2015	0.0028
10/14/2015	0.003
4/4/2016	0.00351 (J)
5/27/2016	0.00332 (J)
8/3/2016	0.003 (J)
9/30/2016	0.0035 (J)
11/22/2016	0.0027 (J)
2/13/2017	0.003 (J)
4/11/2017	0.0031 (J)
6/14/2017	0.0031 (J)
10/4/2017	0.0032 (J)
3/22/2018	0.0033 (J)
9/18/2018	0.0031 (J)
3/23/2019	0.0032 (X)

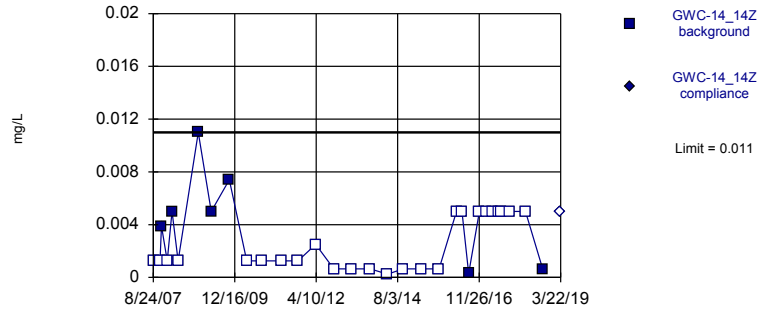
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	0.01	
11/1/2007	<0.0025	
11/19/2007	<0.0025	
1/31/2008	0.0037	
3/5/2008	<0.0025	
5/12/2008	<0.0025	
12/13/2008	0.011	
4/28/2009	<0.0025	
10/21/2009	<0.0025	
4/28/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/18/2011	<0.0025	
4/25/2012	<0.005	
10/2/2012	<0.0013	
4/2/2013	<0.0013	
10/8/2013	<0.0013	
4/1/2014	<0.0005	
10/1/2014	<0.0013	
4/1/2015	<0.0013	
10/15/2015	0.00051 (J)	
4/4/2016	<0.01	
5/31/2016	<0.01	
8/4/2016	<0.01	
9/29/2016	<0.01	
11/28/2016	<0.01	
2/9/2017	<0.01	
4/12/2017	<0.01	
6/16/2017	<0.01	
10/9/2017	<0.01	
3/21/2018	<0.01	
9/19/2018	<0.01	
3/23/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

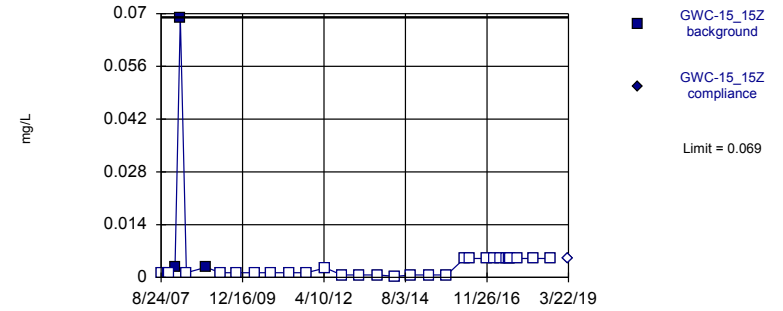


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:04 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

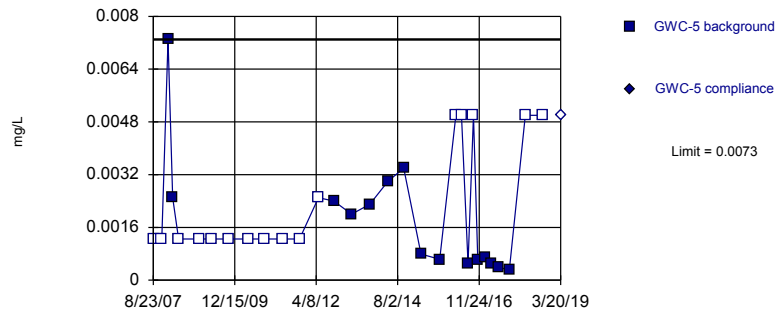


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

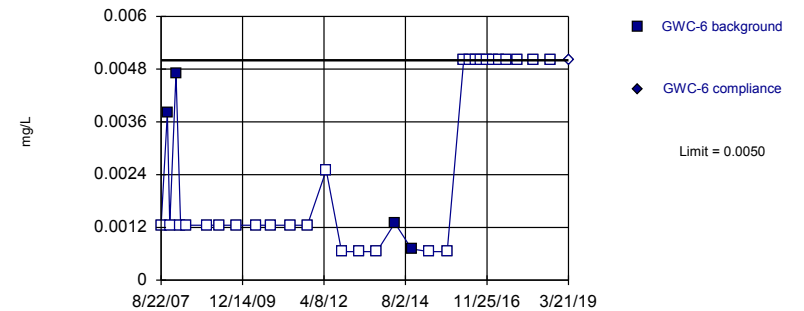


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 53.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	<0.0025	
11/2/2007	<0.0025	
11/17/2007	0.0039	
1/15/2008	<0.0025	
3/5/2008	0.005	
5/7/2008	<0.0025	
12/2/2008	0.011	
4/16/2009	0.005	
10/20/2009	0.0074	
4/20/2010	<0.0025	
9/29/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/4/2012	<0.005	
10/10/2012	<0.0013	
4/15/2013	<0.0013	
10/22/2013	<0.0013	
4/21/2014	<0.0005	
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/7/2015	<0.0013	
4/5/2016	<0.01	
6/1/2016	<0.01	
8/9/2016	0.0003 (J)	
11/28/2016	<0.01	
2/9/2017	<0.01	
4/11/2017	<0.01	
6/14/2017	<0.01	
7/12/2017	<0.01	
10/5/2017	<0.01	
3/22/2018	<0.01	
9/19/2018	0.00058 (J)	
3/22/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.0025	
11/2/2007	<0.0025	
11/18/2007	<0.0025	
1/15/2008	0.0029	
3/10/2008	0.069	
5/13/2008	<0.0025	
12/2/2008	0.0027	
4/28/2009	<0.0025	
10/20/2009	<0.0025	
4/27/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/12/2011	<0.0025	
4/25/2012	<0.005	
10/10/2012	<0.0013	
4/16/2013	<0.0013	
10/22/2013	<0.0013	
4/21/2014	<0.0005	
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/6/2015	<0.0013	
4/5/2016	<0.01	
5/31/2016	<0.01	
11/23/2016	<0.01	
2/10/2017	<0.01	
4/11/2017	<0.01	
6/15/2017	<0.01	
7/12/2017	<0.01	
7/26/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

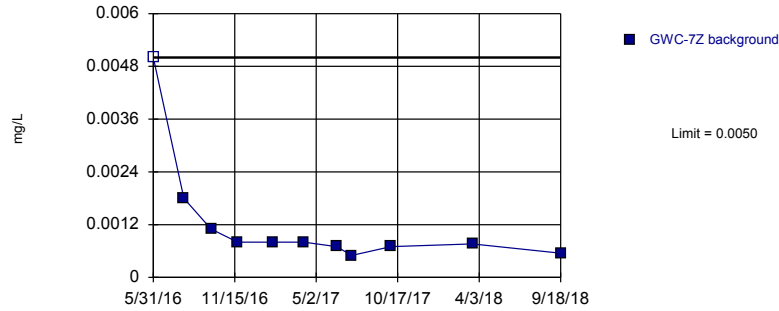
	GWC-5	GWC-5
8/23/2007	<0.0025	
10/25/2007	<0.0025	
11/19/2007	<0.0025	
1/23/2008	0.0073	
3/11/2008	0.0025	
5/12/2008	<0.0025	
12/11/2008	<0.0025	
4/15/2009	<0.0025	
10/9/2009	<0.0025	
5/4/2010	<0.0025	
10/12/2010	<0.0025	
4/28/2011	<0.0025	
10/19/2011	<0.0025	
5/2/2012	<0.005	
10/9/2012	0.0024	
4/11/2013	0.002	
10/16/2013	0.0023	
4/23/2014	0.003	
10/3/2014	0.0034	
3/31/2015	0.00079 (J)	
10/12/2015	0.00063 (J)	
3/28/2016	<0.01	
5/25/2016	<0.01	
8/1/2016	0.0005 (J)	
9/27/2016	<0.01	
11/11/2016	0.0006 (J)	
1/31/2017	0.0007 (J)	
4/3/2017	0.0005 (J)	
6/12/2017	0.0004 (J)	
10/3/2017	0.0003 (J)	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.0025	
10/25/2007	0.0038	
11/20/2007	<0.0025	
1/23/2008	0.0047	
3/11/2008	<0.0025	
5/14/2008	<0.0025	
12/11/2008	<0.0025	
4/23/2009	<0.0025	
10/9/2009	<0.0025	
5/4/2010	<0.0025	
10/11/2010	<0.0025	
4/26/2011	<0.0025	
10/18/2011	<0.0025	
5/2/2012	<0.005	
10/8/2012	<0.0013	
4/10/2013	<0.0013	
10/8/2013	<0.0013	
4/14/2014	0.0013 (J)	
10/3/2014	0.00071 (J)	
4/1/2015	<0.0013	
10/9/2015	<0.0013	
3/29/2016	<0.01	
5/24/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/18/2016	<0.01	
2/1/2017	<0.01	
4/6/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

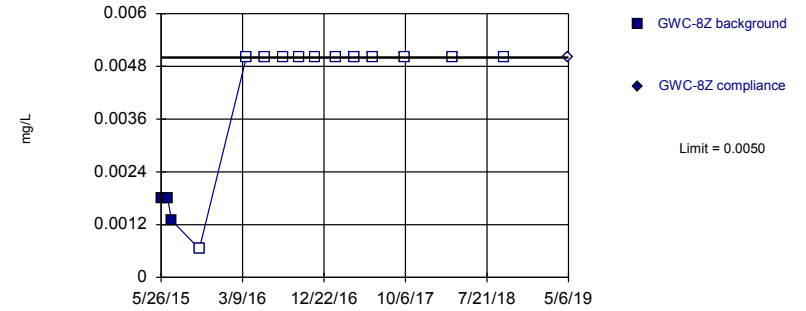
Prediction Limit
Intrawell Non-parametric, GWC-7Z



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 9.091% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

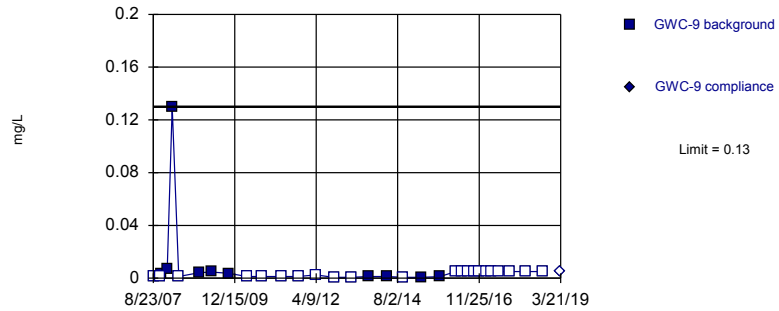
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

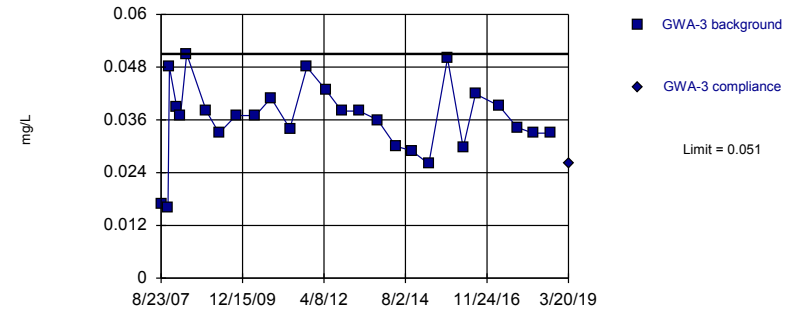
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.03618, Std. Dev.=0.008473, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9476, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z
5/31/2016	<0.01
8/2/2016	0.0018 (J)
9/27/2016	0.0011 (J)
11/21/2016	0.0008 (J)
2/1/2017	0.0008 (J)
4/6/2017	0.0008 (J)
6/13/2017	0.0007 (J)
7/14/2017	0.0005 (J)
10/3/2017	0.0007 (J)
3/20/2018	0.00076 (J)
9/18/2018	0.00055 (J)
3/21/2019	0.00059 (X)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	0.0018	
6/18/2015	0.0018 (D)	
7/2/2015	0.0013	
10/8/2015	<0.0013	
3/22/2016	<0.01	
5/25/2016	<0.01	
8/2/2016	<0.01	
9/26/2016	<0.01	
11/21/2016	<0.01	
2/3/2017	<0.01	
4/7/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
5/6/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

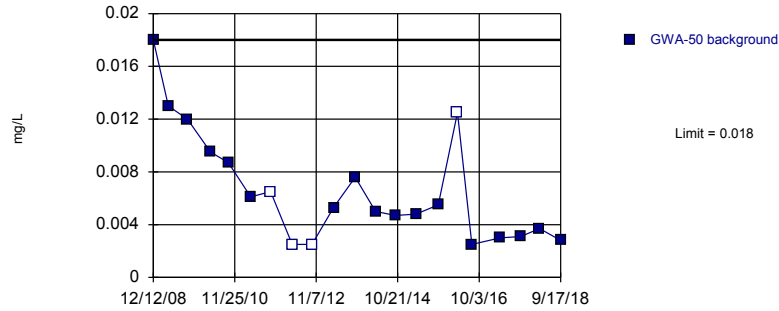
	GWC-9	GWC-9
8/23/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	0.0034	
1/15/2008	0.0067	
3/6/2008	0.13	
5/13/2008	<0.0025	
12/12/2008	0.0042	
4/16/2009	0.0047	
10/13/2009	0.0037	
4/21/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/4/2012	<0.005	
10/8/2012	<0.0013	
4/8/2013	<0.0013	
10/9/2013	0.0013	
4/9/2014	0.0013 (J)	
9/30/2014	<0.0013	
4/2/2015	0.00064 (J)	
10/10/2015	0.001175 (D)	
3/30/2016	<0.01	
5/26/2016	<0.01	
8/5/2016	<0.01	
9/28/2016	<0.01	
11/21/2016	<0.01	
2/6/2017	<0.01	
4/6/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01 (D)	
3/21/2019		<0.01

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	0.017	
11/2/2007	0.016	
11/18/2007	0.048	
1/31/2008	0.039	
3/11/2008	0.037	
5/14/2008	0.051	
12/5/2008	0.038	
4/15/2009	0.033	
10/8/2009	0.037	
4/28/2010	0.037	
10/6/2010	0.041	
4/21/2011	0.034	
10/13/2011	0.048	
5/1/2012	0.0427	
10/9/2012	0.038	
4/11/2013	0.038	
10/16/2013	0.036	
4/23/2014	0.03	
10/4/2014	0.029	
3/31/2015	0.026	
10/12/2015	0.05	
3/23/2016	0.0297	
7/29/2016	0.0419	
3/30/2017	0.0392	
10/4/2017	0.0343	
3/19/2018	0.033	
9/17/2018	0.033	
3/20/2019		0.026

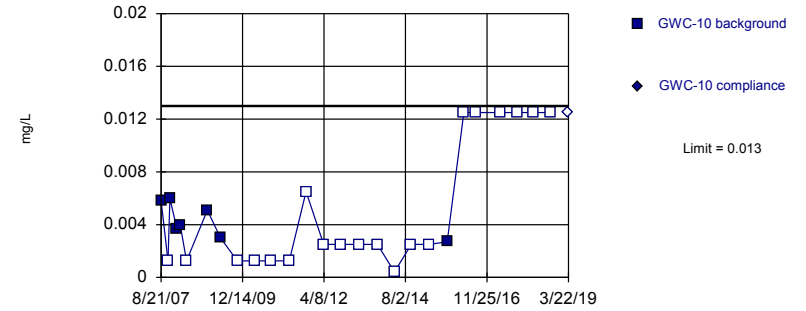
Prediction Limit
Intrawell Parametric, GWA-50 (bg)



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.06397, Std. Dev.=0.03831, n=21, 19.05% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9198, critical = 0.873. Kappa = 1.82 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

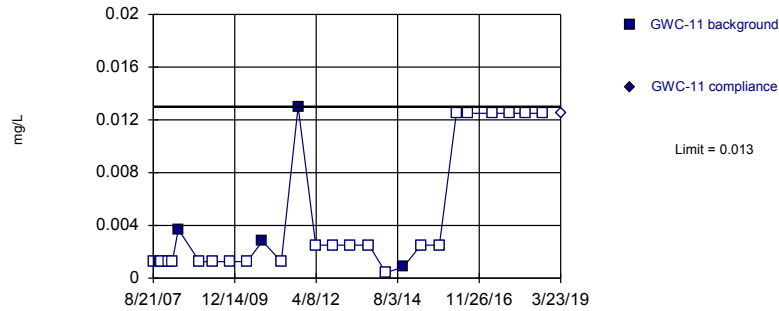
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

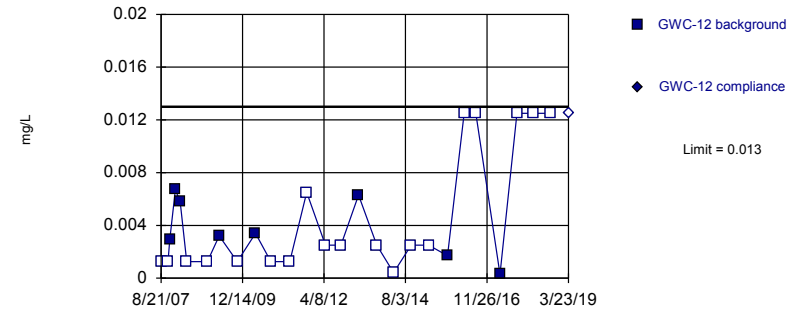
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 70.37% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50
12/12/2008	0.018
4/23/2009	0.013
10/6/2009	0.012
4/27/2010	0.0095
9/30/2010	0.0087
4/14/2011	0.0061
10/5/2011	<0.013
4/11/2012	<0.005
10/2/2012	<0.005
4/9/2013	0.0053
10/15/2013	0.0076
4/10/2014	0.005
10/1/2014	0.0047 (J)
3/30/2015	0.0048 (J)
10/11/2015	0.0055
3/28/2016	<0.025
8/1/2016	0.0025 (J)
4/7/2017	0.003 (J)
10/2/2017	0.0031 (J)
3/16/2018	0.0037 (J)
9/17/2018	0.0028 (J)
3/19/2019	0.0023 (X)

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	0.0058	
11/1/2007	<0.0025	
11/20/2007	0.006	
1/30/2008	0.0037	
3/6/2008	0.004	
5/12/2008	<0.0025	
12/13/2008	0.0051	
4/29/2009	0.003	
10/20/2009	<0.0025	
4/26/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.013	
4/4/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.000825	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	0.0027 (J)	
3/31/2016	<0.025	
8/5/2016	<0.025	
4/10/2017	<0.025	
10/4/2017	<0.025	
3/20/2018	<0.025	
9/18/2018	<0.025	
3/22/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	0.0037	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	0.0028	
4/12/2011	<0.0025	
10/4/2011	0.013	
4/3/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/9/2013	<0.005	
4/2/2014	<0.000825	
10/2/2014	0.00084 (J)	
4/1/2015	<0.005	
10/11/2015	<0.005	
4/4/2016	<0.025	
8/3/2016	<0.025	
4/10/2017	<0.025	
10/4/2017	<0.025	
3/21/2018	<0.025	
9/18/2018	<0.025	
3/23/2019		<0.025

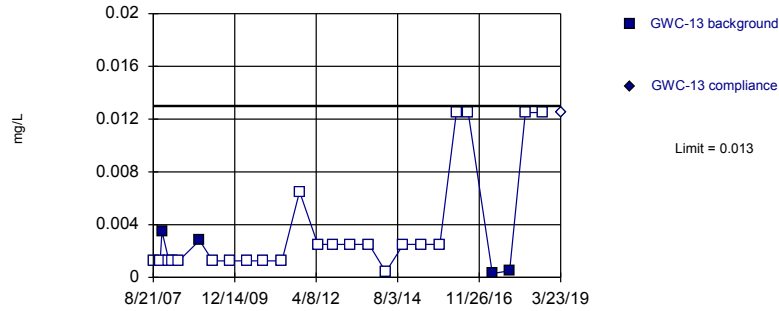
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	0.0029	
1/16/2008	0.0067	
3/5/2008	0.0058	
5/13/2008	<0.0025	
12/13/2008	<0.0025	
4/16/2009	0.0032	
10/21/2009	<0.0025	
4/27/2010	0.0034	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/12/2011	<0.013	
4/24/2012	<0.005	
10/2/2012	<0.005	
4/2/2013	0.0063	
10/9/2013	<0.005	
4/1/2014	<0.000825	
10/2/2014	<0.005	
4/1/2015	<0.005	
10/14/2015	0.0017 (J)	
4/4/2016	<0.025	
8/3/2016	<0.025	
4/11/2017	0.0003 (J)	
10/4/2017	<0.025	
3/22/2018	<0.025	
9/18/2018	<0.025	
3/23/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

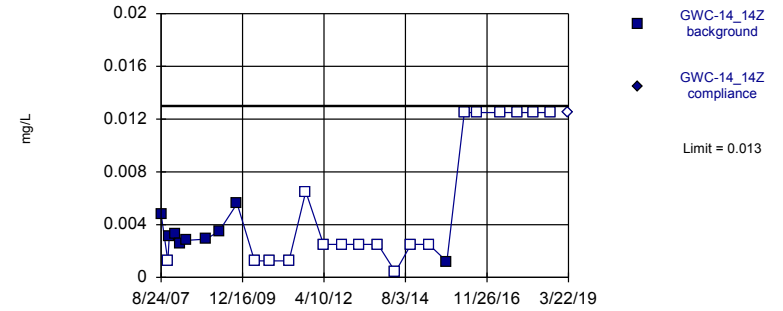


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

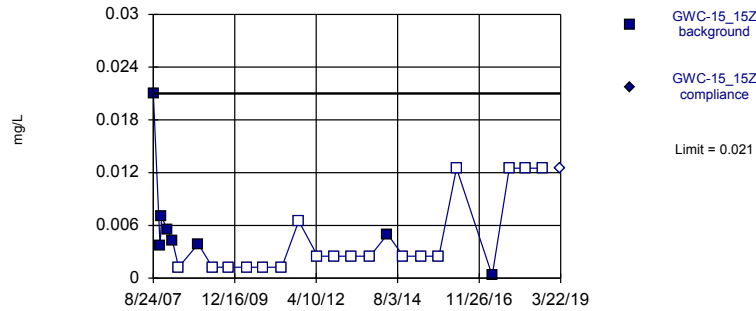


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

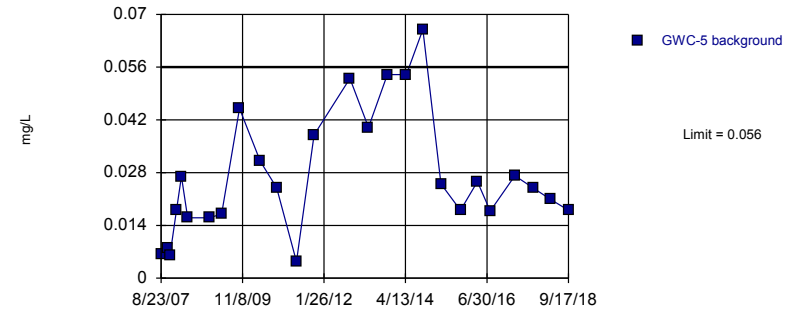
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Parametric, GWC-5



Background Data Summary: Mean=0.02693, Std. Dev.=0.01643, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9164, critical = 0.891. Kappa = 1.748 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	0.0035	
1/31/2008	<0.0025	
3/5/2008	<0.0025	
5/12/2008	<0.0025	
12/13/2008	0.0028	
4/28/2009	<0.0025	
10/21/2009	<0.0025	
4/28/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/18/2011	<0.013	
4/25/2012	<0.005	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/8/2013	<0.005	
4/1/2014	<0.000825	
10/1/2014	<0.005	
4/1/2015	<0.005	
10/15/2015	<0.005	
4/4/2016	<0.025	
8/4/2016	<0.025	
4/12/2017	0.0003 (J)	
10/9/2017	0.0005 (J)	
3/21/2018	<0.025	
9/19/2018	<0.025	
3/23/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	0.0048 (J)	
11/2/2007	<0.0025	
11/17/2007	0.0031	
1/15/2008	0.0033	
3/5/2008	0.0026	
5/7/2008	0.0028	
12/2/2008	0.0029	
4/16/2009	0.0035	
10/20/2009	0.0056	
4/20/2010	<0.0025	
9/29/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.013	
4/4/2012	<0.005	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.000825	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/7/2015	0.0012 (J)	
4/5/2016	<0.025	
8/9/2016	<0.025	
4/11/2017	<0.025	
10/5/2017	<0.025	
3/22/2018	<0.025	
9/19/2018	<0.025	
3/22/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

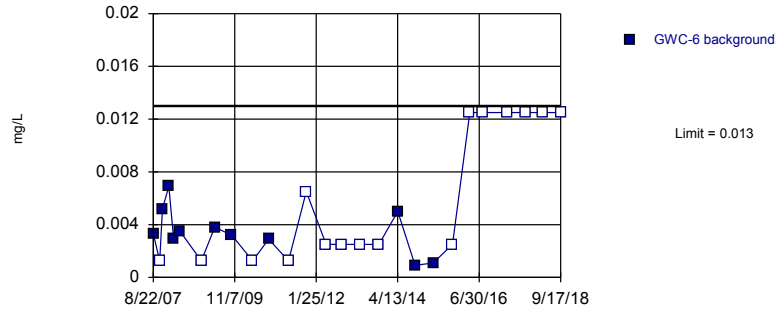
	GWC-15_15Z	GWC-15_15Z
8/24/2007	0.021	
11/2/2007	0.0037	
11/18/2007	0.007 (J)	
1/15/2008	0.0055	
3/10/2008	0.0042	
5/13/2008	<0.0025	
12/2/2008	0.0039	
4/28/2009	<0.0025	
10/20/2009	<0.0025	
4/27/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/12/2011	<0.013	
4/25/2012	<0.005	
10/10/2012	<0.005	
4/16/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	0.005 (J)	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/6/2015	<0.005	
4/5/2016	<0.025	
4/11/2017	0.0003 (J)	
10/6/2017	<0.025	
3/23/2018	<0.025	
9/19/2018	<0.025	
3/22/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5
8/23/2007	0.0064
10/25/2007	0.0081
11/19/2007	0.0059
1/23/2008	0.018
3/11/2008	0.027
5/12/2008	0.016
12/11/2008	0.016
4/15/2009	0.017
10/9/2009	0.045
5/4/2010	0.031
10/12/2010	0.024
4/28/2011	0.0044
10/19/2011	0.038
5/2/2012	0.0865 (O)
10/9/2012	0.053
4/11/2013	0.04
10/16/2013	0.054
4/23/2014	0.054
10/3/2014	0.066
3/31/2015	0.025
10/12/2015	0.018
3/28/2016	0.0256
8/1/2016	0.0178 (J)
4/3/2017	0.0272
10/3/2017	0.0239 (J)
3/19/2018	0.021 (J)
9/17/2018	0.018 (J)
3/20/2019	0.023 (X)

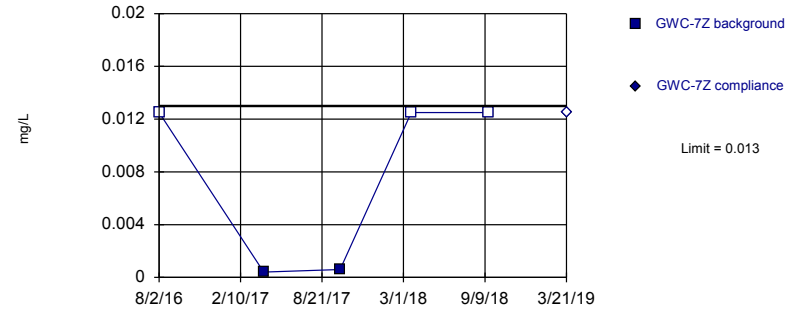
Prediction Limit
 Intrawell Non-parametric, GWC-6



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 59.26% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3). Assumes 1 future value.

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

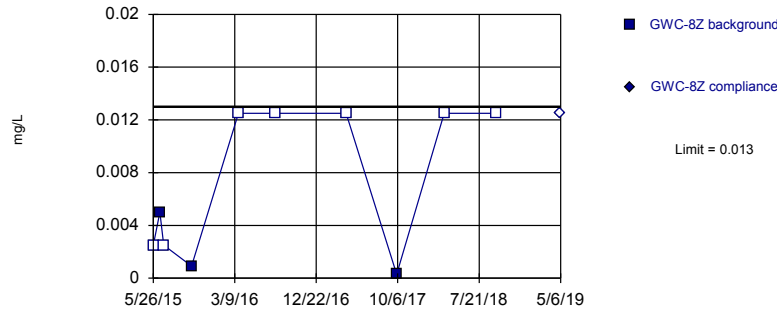
Within Limit
 Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 60% NDs. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:05 AM View: 1&2 overburden metals 1of3
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

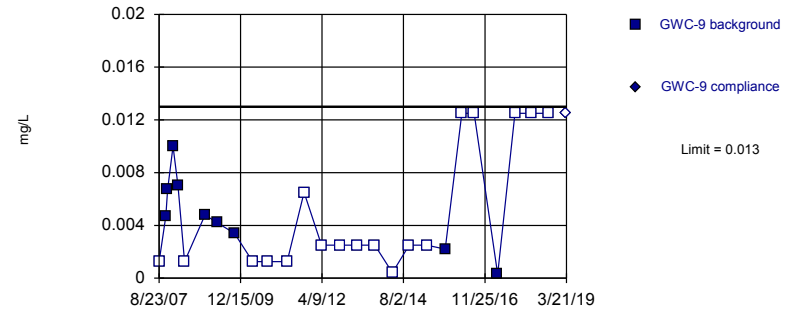
Within Limit
 Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
 Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6
8/22/2007	0.0033
10/25/2007	<0.0025
11/20/2007	0.0052
1/23/2008	0.0069
3/11/2008	0.0029
5/14/2008	0.0035
12/11/2008	<0.0025
4/23/2009	0.0038
10/9/2009	0.0032
5/4/2010	<0.0025
10/11/2010	0.0029
4/26/2011	<0.0025
10/18/2011	<0.013
5/2/2012	<0.005
10/8/2012	<0.005
4/10/2013	<0.005
10/8/2013	<0.005
4/14/2014	0.005 (J)
10/3/2014	0.00091 (J)
4/1/2015	0.0011 (J)
10/9/2015	<0.005
3/29/2016	<0.025
8/1/2016	<0.025
4/6/2017	<0.025
10/3/2017	<0.025
3/19/2018	<0.025
9/17/2018	<0.025
3/21/2019	0.0018 (X)

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
8/2/2016	<0.025	
4/6/2017	0.0004 (J)	
10/3/2017	0.0006 (J)	
3/20/2018	<0.025	
9/18/2018	<0.025	
3/21/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	<0.005	
6/18/2015	0.005 (D)	
7/2/2015	<0.005	
10/8/2015	0.00091 (J)	
3/22/2016	<0.025	
8/2/2016	<0.025	
4/7/2017	<0.025	
10/3/2017	0.0003 (J)	
3/20/2018	<0.025	
9/18/2018	<0.025	
5/6/2019		<0.025

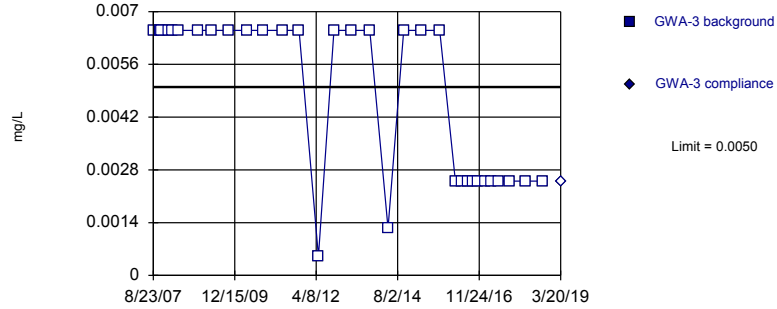
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.0025	
11/1/2007	0.0047	
11/19/2007	0.0067 (J)	
1/15/2008	0.01	
3/6/2008	0.007	
5/13/2008	<0.0025	
12/12/2008	0.0048	
4/16/2009	0.0042	
10/13/2009	0.0034	
4/21/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.013	
4/4/2012	<0.005	
10/8/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/9/2014	<0.000825	
9/30/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	0.0022 (D)	
3/30/2016	<0.025	
8/5/2016	<0.025	
4/6/2017	0.0003 (J)	
10/3/2017	<0.025	
3/20/2018	<0.025	
9/18/2018	<0.025 (D)	
3/21/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

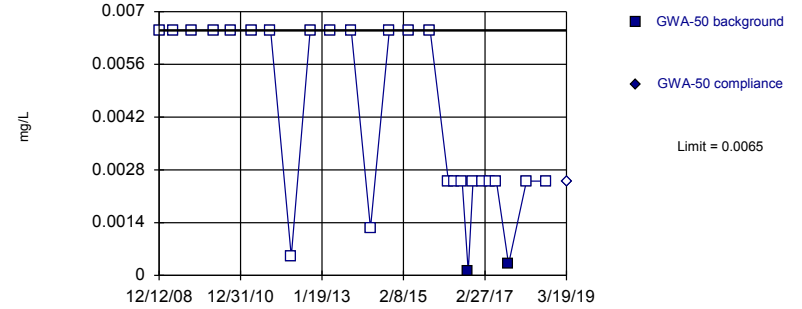


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

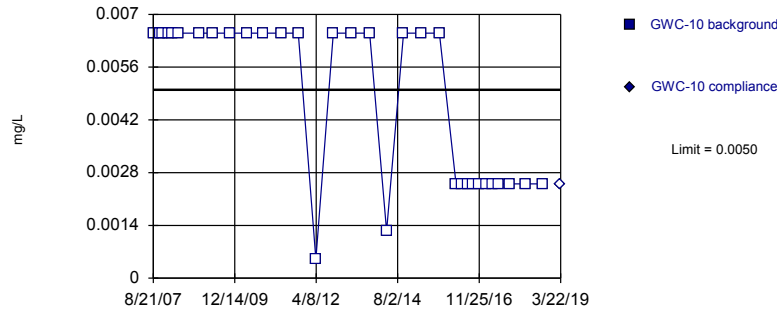


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

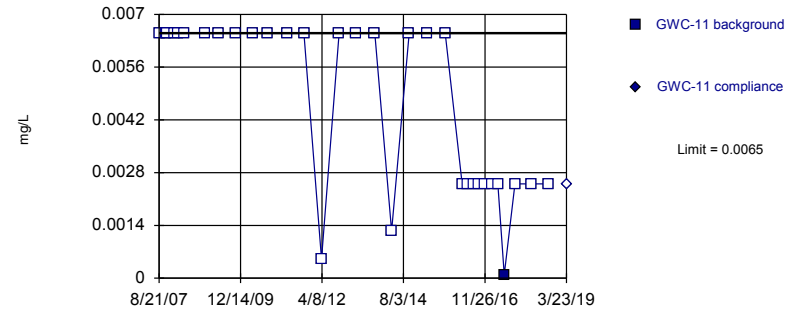


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	<0.013	
11/2/2007	<0.013	
11/18/2007	<0.013	
1/31/2008	<0.013	
3/11/2008	<0.013	
5/14/2008	<0.013	
12/5/2008	<0.013	
4/15/2009	<0.013	
10/8/2009	<0.013	
4/28/2010	<0.013	
10/6/2010	<0.013	
4/21/2011	<0.013	
10/13/2011	<0.013	
5/1/2012	<0.001	
10/9/2012	<0.013	
4/11/2013	<0.013	
10/16/2013	<0.013	
4/23/2014	<0.0025	
10/4/2014	<0.013	
3/31/2015	<0.013	
10/12/2015	<0.013	
3/23/2016	<0.005	
5/23/2016	<0.005	
7/29/2016	<0.005	
9/22/2016	<0.005 (*)	
11/10/2016	<0.005	
1/31/2017	<0.005	
3/30/2017	<0.005	
6/12/2017	<0.005	
10/4/2017	<0.005	
3/19/2018	<0.005	
9/17/2018	<0.005	
3/20/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.013	
4/23/2009	<0.013	
10/6/2009	<0.013	
4/27/2010	<0.013	
9/30/2010	<0.013	
4/14/2011	<0.013	
10/5/2011	<0.013	
4/11/2012	<0.001	
10/2/2012	<0.013	
4/9/2013	<0.013	
10/15/2013	<0.013	
4/10/2014	<0.0025	
10/1/2014	<0.013	
3/30/2015	<0.013	
10/11/2015	<0.013	
3/28/2016	<0.005	
5/23/2016	<0.005	
8/1/2016	<0.005	
9/26/2016	0.0001 (J)	
11/10/2016	<0.005	
1/30/2017	<0.005	
4/7/2017	<0.005	
6/12/2017	<0.005	
10/2/2017	0.0003 (J)	
3/16/2018	<0.005	
9/17/2018	<0.005	
3/19/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	<0.013	
11/1/2007	<0.013	
11/20/2007	<0.013	
1/30/2008	<0.013	
3/6/2008	<0.013	
5/12/2008	<0.013	
12/13/2008	<0.013	
4/29/2009	<0.013	
10/20/2009	<0.013	
4/26/2010	<0.013	
9/29/2010	<0.013	
4/13/2011	<0.013	
10/5/2011	<0.013	
4/4/2012	<0.001	
10/3/2012	<0.013	
4/3/2013	<0.013	
10/15/2013	<0.013	
4/9/2014	<0.0025	
10/2/2014	<0.013	
4/2/2015	<0.013	
10/10/2015	<0.013	
3/31/2016	<0.005	
5/26/2016	<0.005	
8/5/2016	<0.005	
9/28/2016	<0.005	
11/22/2016	<0.005	
2/7/2017	<0.005	
4/10/2017	<0.005	
6/14/2017	<0.005	
10/4/2017	<0.005	
3/20/2018	<0.005	
9/18/2018	<0.005	
3/22/2019		<0.005

Prediction Limit

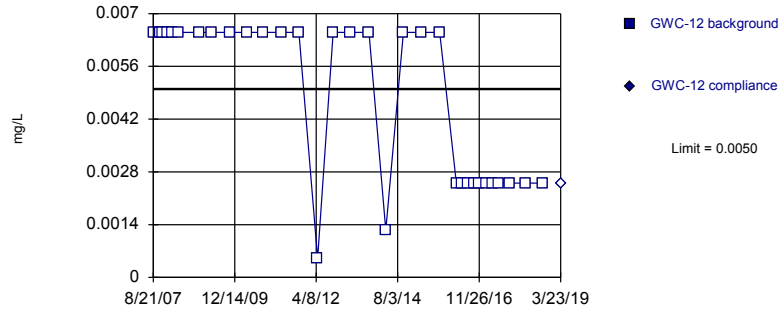
Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.013	
11/1/2007	<0.013	
11/18/2007	<0.013	
1/30/2008	<0.013	
3/5/2008	<0.013	
5/7/2008	<0.013	
12/14/2008	<0.013	
4/29/2009	<0.013	
10/22/2009	<0.013	
4/21/2010	<0.013	
9/28/2010	<0.013	
4/12/2011	<0.013	
10/4/2011	<0.013	
4/3/2012	<0.001	
10/3/2012	<0.013	
4/3/2013	<0.013	
10/9/2013	<0.013	
4/2/2014	<0.0025	
10/2/2014	<0.013	
4/1/2015	<0.013	
10/11/2015	<0.013	
4/4/2016	<0.005	
5/26/2016	<0.005	
8/3/2016	<0.005	
9/28/2016	<0.005	
11/22/2016	<0.005	
2/8/2017	<0.005	
4/10/2017	<0.005	
6/15/2017	9E-05 (J)	
10/4/2017	<0.005	
3/21/2018	<0.005	
9/18/2018	<0.005	
3/23/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

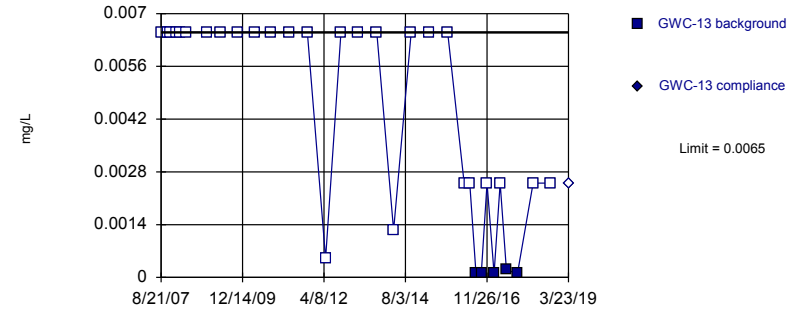


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

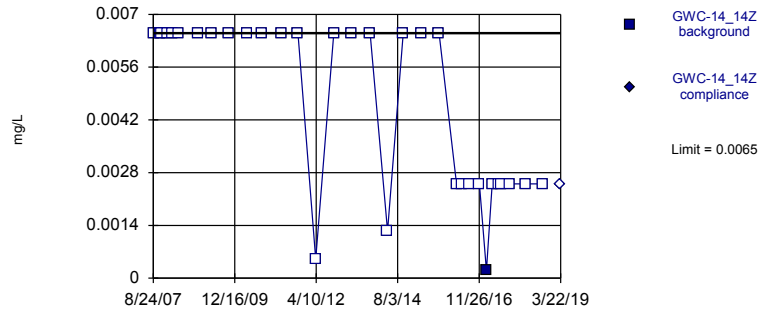


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 84.38% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

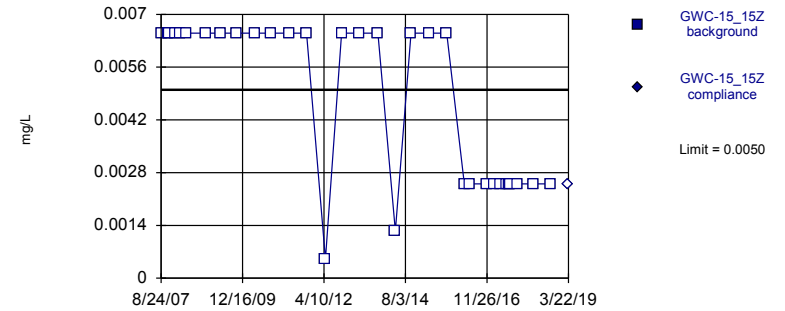


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	<0.013	
11/1/2007	<0.013	
11/19/2007	<0.013	
1/16/2008	<0.013	
3/5/2008	<0.013	
5/13/2008	<0.013	
12/13/2008	<0.013	
4/16/2009	<0.013	
10/21/2009	<0.013	
4/27/2010	<0.013	
10/5/2010	<0.013	
4/19/2011	<0.013	
10/12/2011	<0.013	
4/24/2012	<0.001	
10/2/2012	<0.013	
4/2/2013	<0.013	
10/9/2013	<0.013	
4/1/2014	<0.0025	
10/2/2014	<0.013	
4/1/2015	<0.013	
10/14/2015	<0.013	
4/4/2016	<0.005	
5/27/2016	<0.005	
8/3/2016	<0.005	
9/30/2016	<0.005	
11/22/2016	<0.005	
2/13/2017	<0.005	
4/11/2017	<0.005 (*)	
6/14/2017	<0.005	
10/4/2017	<0.005	
3/22/2018	<0.005	
9/18/2018	<0.005	
3/23/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	<0.013	
11/1/2007	<0.013	
11/19/2007	<0.013	
1/31/2008	<0.013	
3/5/2008	<0.013	
5/12/2008	<0.013	
12/13/2008	<0.013	
4/28/2009	<0.013	
10/21/2009	<0.013	
4/28/2010	<0.013	
10/5/2010	<0.013	
4/19/2011	<0.013	
10/18/2011	<0.013	
4/25/2012	<0.001	
10/2/2012	<0.013	
4/2/2013	<0.013	
10/8/2013	<0.013	
4/1/2014	<0.0025	
10/1/2014	<0.013	
4/1/2015	<0.013	
10/15/2015	<0.013	
4/4/2016	<0.005	
5/31/2016	<0.005	
8/4/2016	0.0001 (J)	
9/29/2016	0.0001 (J)	
11/28/2016	<0.005	
2/9/2017	0.0001 (J)	
4/12/2017	<0.005 (*)	
6/16/2017	0.0002 (J)	
10/9/2017	0.0001 (J)	
3/21/2018	<0.005	
9/19/2018	<0.005	
3/23/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	<0.013	
11/2/2007	<0.013	
11/17/2007	<0.013	
1/15/2008	<0.013	
3/5/2008	<0.013	
5/7/2008	<0.013	
12/2/2008	<0.013	
4/16/2009	<0.013	
10/20/2009	<0.013	
4/20/2010	<0.013	
9/29/2010	<0.013	
4/12/2011	<0.013	
10/4/2011	<0.013	
4/4/2012	<0.001	
10/10/2012	<0.013	
4/15/2013	<0.013	
10/22/2013	<0.013	
4/21/2014	<0.0025	
9/30/2014	<0.013	
4/3/2015	<0.013	
10/7/2015	<0.013	
4/5/2016	<0.005	
6/1/2016	<0.005	
8/9/2016	<0.005	
11/28/2016	<0.005	
2/9/2017	0.0002 (J)	
4/11/2017	<0.005	
6/14/2017	<0.005	
7/12/2017	<0.005	
10/5/2017	<0.005	
3/22/2018	<0.005	
9/19/2018	<0.005	
3/22/2019		<0.005

Prediction Limit

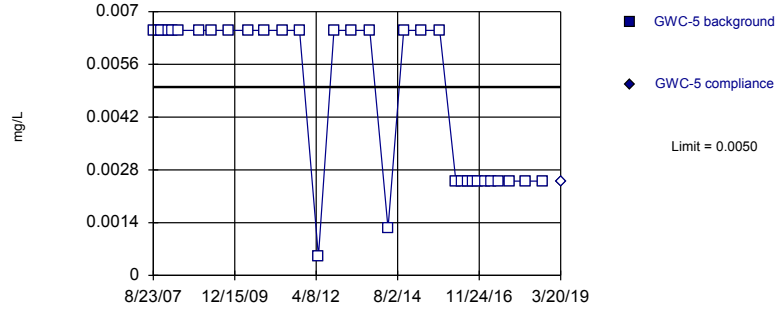
Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.013	
11/2/2007	<0.013	
11/18/2007	<0.013	
1/15/2008	<0.013	
3/10/2008	<0.013	
5/13/2008	<0.013	
12/2/2008	<0.013	
4/28/2009	<0.013	
10/20/2009	<0.013	
4/27/2010	<0.013	
10/5/2010	<0.013	
4/19/2011	<0.013	
10/12/2011	<0.013	
4/25/2012	<0.001	
10/10/2012	<0.013	
4/16/2013	<0.013	
10/22/2013	<0.013	
4/21/2014	<0.0025	
9/30/2014	<0.013	
4/3/2015	<0.013	
10/6/2015	<0.013	
4/5/2016	<0.005	
5/31/2016	<0.005	
11/23/2016	<0.005	
2/10/2017	<0.005	
4/11/2017	<0.005 (*)	
6/15/2017	<0.005	
7/12/2017	<0.005	
7/26/2017	<0.005	
10/6/2017	<0.005	
3/23/2018	<0.005	
9/19/2018	<0.005	
3/22/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

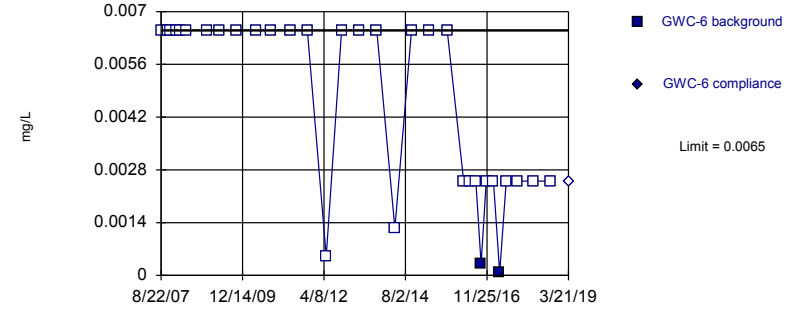


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

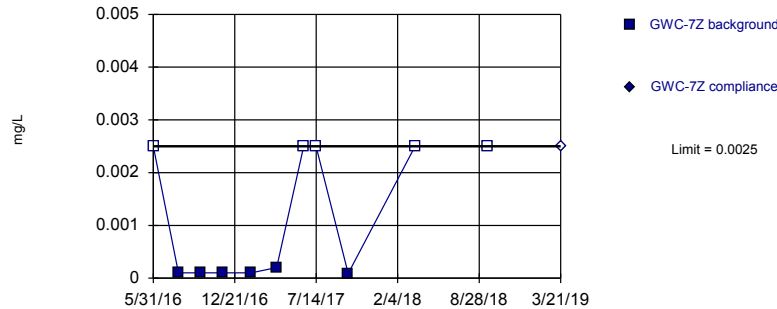


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

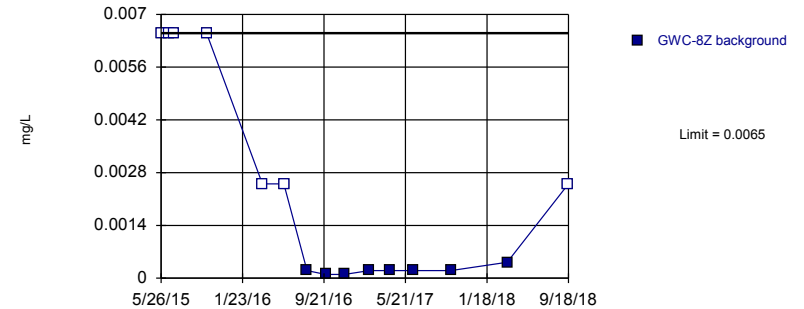


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-8Z



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 46.67% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3). Assumes 1 future value.

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	<0.013	
10/25/2007	<0.013	
11/19/2007	<0.013	
1/23/2008	<0.013	
3/11/2008	<0.013	
5/12/2008	<0.013	
12/11/2008	<0.013	
4/15/2009	<0.013	
10/9/2009	<0.013	
5/4/2010	<0.013	
10/12/2010	<0.013	
4/28/2011	<0.013	
10/19/2011	<0.013	
5/2/2012	<0.001	
10/9/2012	<0.013	
4/11/2013	<0.013	
10/16/2013	<0.013	
4/23/2014	<0.0025	
10/3/2014	<0.013	
3/31/2015	<0.013	
10/12/2015	<0.013	
3/28/2016	<0.005	
5/25/2016	<0.005	
8/1/2016	<0.005	
9/27/2016	<0.005	
11/11/2016	<0.005	
1/31/2017	<0.005	
4/3/2017	<0.005	
6/12/2017	<0.005	
10/3/2017	<0.005	
3/19/2018	<0.005	
9/17/2018	<0.005	
3/20/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.013	
10/25/2007	<0.013	
11/20/2007	<0.013	
1/23/2008	<0.013	
3/11/2008	<0.013	
5/14/2008	<0.013	
12/11/2008	<0.013	
4/23/2009	<0.013	
10/9/2009	<0.013	
5/4/2010	<0.013	
10/11/2010	<0.013	
4/26/2011	<0.013	
10/18/2011	<0.013	
5/2/2012	<0.001	
10/8/2012	<0.013	
4/10/2013	<0.013	
10/8/2013	<0.013	
4/14/2014	<0.0025	
10/3/2014	<0.013	
4/1/2015	<0.013	
10/9/2015	<0.013	
3/29/2016	<0.005	
5/24/2016	<0.005	
8/1/2016	<0.005	
9/26/2016	0.0003 (J)	
11/18/2016	<0.005	
2/1/2017	<0.005	
4/6/2017	7E-05 (J)	
6/13/2017	<0.005	
10/3/2017	<0.005	
3/19/2018	<0.005	
9/17/2018	<0.005	
3/21/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	<0.005	
8/2/2016	0.0001 (J)	
9/27/2016	0.0001 (J)	
11/21/2016	0.0001 (J)	
2/1/2017	0.0001 (J)	
4/6/2017	0.0002 (J)	
6/13/2017	<0.005	
7/14/2017	<0.005	
10/3/2017	9E-05 (J)	
3/20/2018	<0.005	
9/18/2018	<0.005	
3/21/2019		<0.005

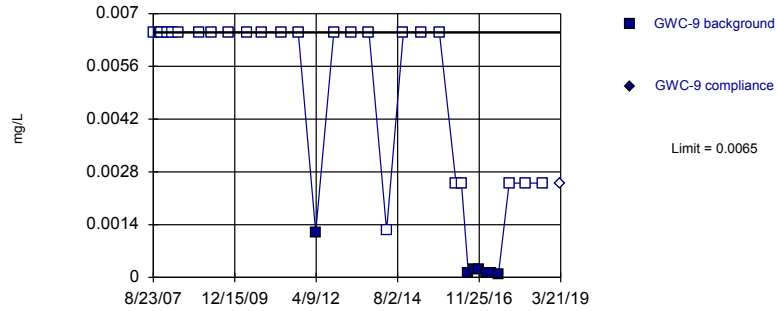
Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z
5/26/2015	<0.013
6/18/2015	<0.013 (D)
7/2/2015	<0.013
10/8/2015	<0.013
3/22/2016	<0.005
5/25/2016	<0.005
8/2/2016	0.0002 (J)
9/26/2016	0.0001 (J)
11/21/2016	0.0001 (J)
2/3/2017	0.0002 (J)
4/7/2017	0.0002 (J)
6/13/2017	0.0002 (J)
10/3/2017	0.0002 (J)
3/20/2018	0.00042 (J)
9/18/2018	<0.005
5/6/2019	0.00032 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

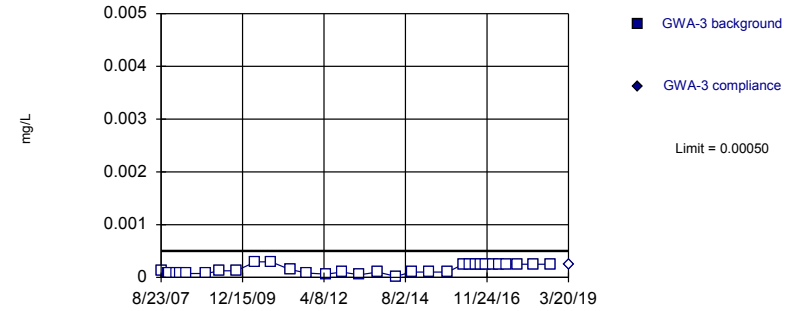


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

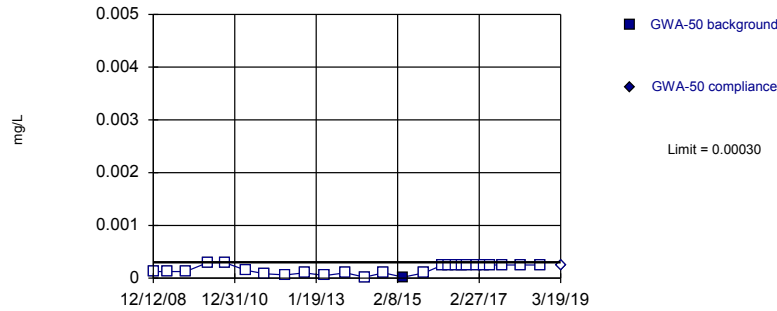


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:06 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

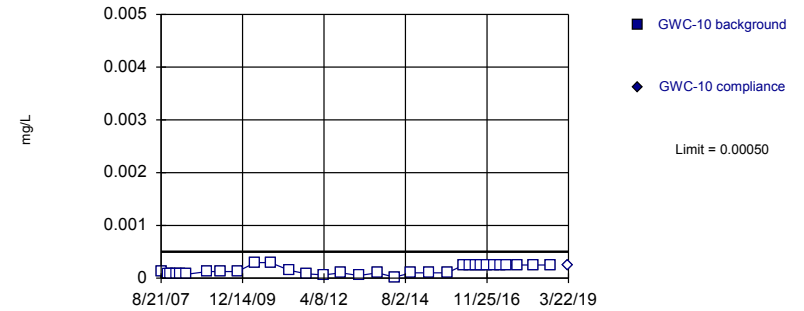


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.013	
11/1/2007	<0.013	
11/19/2007	<0.013	
1/15/2008	<0.013	
3/6/2008	<0.013	
5/13/2008	<0.013	
12/12/2008	<0.013	
4/16/2009	<0.013	
10/13/2009	<0.013	
4/21/2010	<0.013	
9/29/2010	<0.013	
4/13/2011	<0.013	
10/5/2011	<0.013	
4/4/2012	0.0012	
10/8/2012	<0.013	
4/8/2013	<0.013	
10/9/2013	<0.013	
4/9/2014	<0.0025	
9/30/2014	<0.013	
4/2/2015	<0.013	
10/10/2015	<0.013 (D)	
3/30/2016	<0.005	
5/26/2016	<0.005	
8/5/2016	0.0001 (J)	
9/28/2016	0.0002 (J)	
11/21/2016	0.0002 (J)	
2/6/2017	0.0001 (J)	
4/6/2017	0.0001 (J)	
6/13/2017	8E-05 (J)	
10/3/2017	<0.005	
3/20/2018	<0.005	
9/18/2018	<0.005 (D)	
3/21/2019		<0.005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	<0.000254	
11/2/2007	<0.000145	
11/18/2007	<0.000145	
1/31/2008	<0.000145	
3/11/2008	<0.000145	
5/14/2008	<0.000145	
12/5/2008	<0.000145	
4/15/2009	<0.00025	
10/8/2009	<0.00025	
4/28/2010	<0.000591	
10/6/2010	<0.000591	
4/21/2011	<0.000299	
10/13/2011	<0.000168	
5/1/2012	<0.000123	
10/9/2012	<0.0002	
4/11/2013	<0.0001	
10/16/2013	<0.0002	
4/23/2014	<4.02E-05	
10/4/2014	<0.0002	
3/31/2015	<0.0002	
10/12/2015	<0.0002	
3/23/2016	<0.0005	
5/23/2016	<0.0005	
7/29/2016	<0.0005	
9/22/2016	<0.0005	
11/10/2016	<0.0005	
1/31/2017	<0.0005 (*)	
3/30/2017	<0.0005	
6/12/2017	<0.0005	
10/4/2017	<0.0005	
3/19/2018	<0.0005	
9/17/2018	<0.0005	
3/20/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.00025	
4/23/2009	<0.00025	
10/6/2009	<0.00025	
4/27/2010	<0.000591	
9/30/2010	<0.000591	
4/14/2011	<0.000299	
10/5/2011	<0.000168	
4/11/2012	<0.000123	
10/2/2012	<0.0002	
4/9/2013	<0.0001	
10/15/2013	<0.0002	
4/10/2014	<4.02E-05	
10/1/2014	<0.0002	
3/30/2015	2.02E-05 (J)	
10/11/2015	<0.0002	
3/28/2016	<0.0005	
5/23/2016	<0.0005	
8/1/2016	<0.0005	
9/26/2016	<0.0005	
11/10/2016	<0.0005	
1/30/2017	<0.0005	
4/7/2017	<0.0005 (*)	
6/12/2017	<0.0005 (*)	
10/2/2017	<0.0005	
3/16/2018	<0.0005	
9/17/2018	<0.0005	
3/19/2019		<0.0005

Prediction Limit

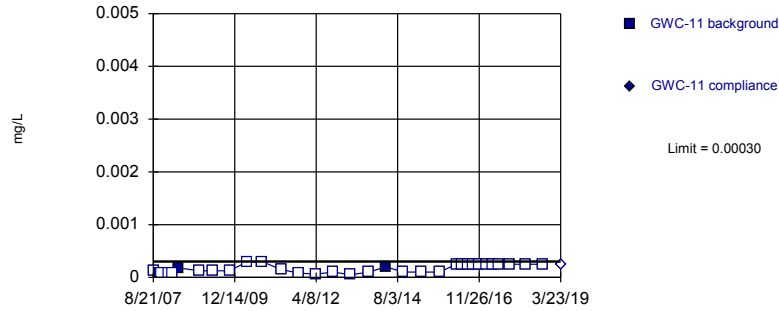
Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	<0.000254	
11/1/2007	<0.000145	
11/20/2007	<0.000145	
1/30/2008	<0.000145	
3/6/2008	<0.000145	
5/12/2008	<0.000145	
12/13/2008	<0.00025	
4/29/2009	<0.00025	
10/20/2009	<0.00025	
4/26/2010	<0.000591	
9/29/2010	<0.000591	
4/13/2011	<0.000299	
10/5/2011	<0.000168	
4/4/2012	<0.000123	
10/3/2012	<0.0002	
4/3/2013	<0.0001	
10/15/2013	<0.0002	
4/9/2014	<4.02E-05	
10/2/2014	<0.0002	
4/2/2015	<0.0002	
10/10/2015	<0.0002	
3/31/2016	<0.0005	
5/26/2016	<0.0005	
8/5/2016	<0.0005	
9/28/2016	<0.0005	
11/22/2016	<0.0005	
2/7/2017	<0.0005	
4/10/2017	<0.0005	
6/14/2017	<0.0005 (*)	
10/4/2017	<0.0005	
3/20/2018	<0.0005	
9/18/2018	<0.0005	
3/22/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

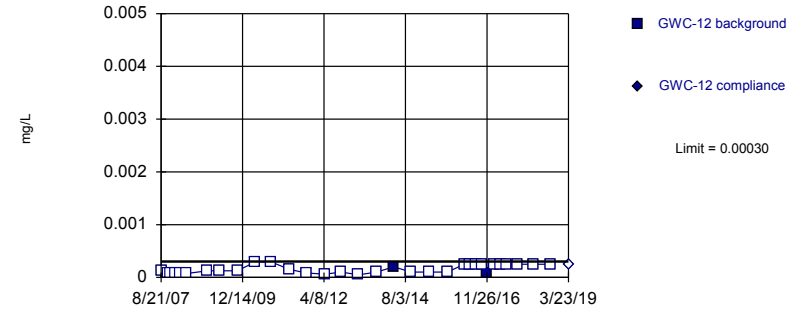


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

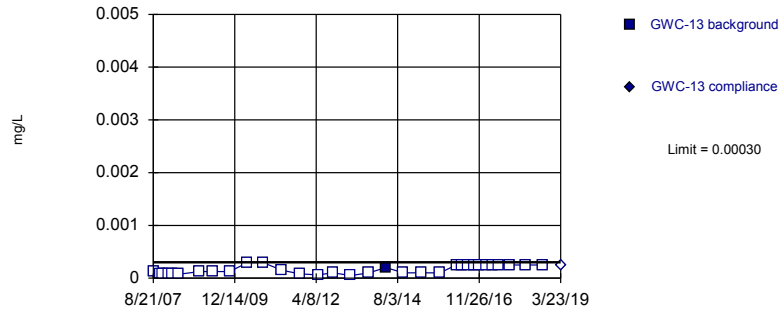


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

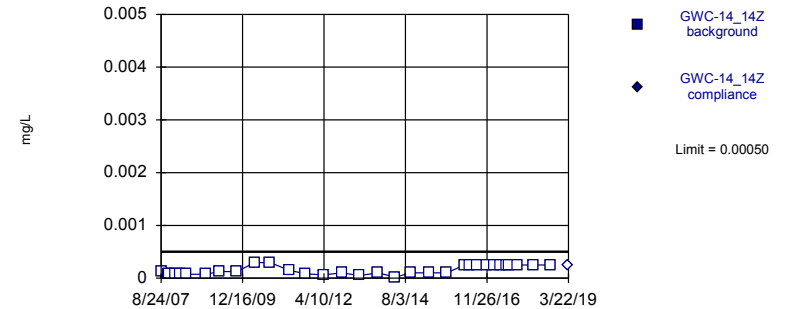


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.000254	
11/1/2007	<0.000145	
11/18/2007	<0.000145	
1/30/2008	<0.000145	
3/5/2008	<0.000145	
5/7/2008	0.000181	
12/14/2008	<0.00025	
4/29/2009	<0.00025	
10/22/2009	<0.00025	
4/21/2010	<0.000591	
9/28/2010	<0.000591	
4/12/2011	<0.000299	
10/4/2011	<0.000168	
4/3/2012	<0.000123	
10/3/2012	<0.0002	
4/3/2013	<0.0001	
10/9/2013	<0.0002	
4/2/2014	0.0002 (J)	
10/2/2014	<0.0002	
4/1/2015	<0.0002	
10/11/2015	<0.0002	
4/4/2016	<0.0005	
5/26/2016	<0.0005	
8/3/2016	<0.0005	
9/28/2016	<0.0005	
11/22/2016	<0.0005	
2/8/2017	<0.0005	
4/10/2017	<0.0005	
6/15/2017	<0.0005 (*)	
10/4/2017	<0.0005	
3/21/2018	<0.0005	
9/18/2018	<0.0005	
3/23/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	<0.000254	
11/1/2007	<0.000145	
11/19/2007	<0.000145	
1/16/2008	<0.000145	
3/5/2008	<0.000145	
5/13/2008	<0.000145	
12/13/2008	<0.00025	
4/16/2009	<0.00025	
10/21/2009	<0.00025	
4/27/2010	<0.000591	
10/5/2010	<0.000591	
4/19/2011	<0.000299	
10/12/2011	<0.000168	
4/24/2012	<0.000123	
10/2/2012	<0.0002	
4/2/2013	<0.0001	
10/9/2013	<0.0002	
4/1/2014	0.0002 (J)	
10/2/2014	<0.0002	
4/1/2015	<0.0002	
10/14/2015	<0.0002	
4/4/2016	<0.0005	
5/27/2016	<0.0005	
8/3/2016	<0.0005	
9/30/2016	<0.0005	
11/22/2016	8E-05 (J)	
2/13/2017	<0.0005	
4/11/2017	<0.0005	
6/14/2017	<0.0005 (*)	
10/4/2017	<0.0005	
3/22/2018	<0.0005	
9/18/2018	<0.0005	
3/23/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	<0.000254	
11/1/2007	<0.000145	
11/19/2007	<0.000145	
1/31/2008	<0.000145	
3/5/2008	<0.000145	
5/12/2008	<0.000145	
12/13/2008	<0.00025	
4/28/2009	<0.00025	
10/21/2009	<0.00025	
4/28/2010	<0.000591	
10/5/2010	<0.000591	
4/19/2011	<0.000299	
10/18/2011	<0.000168	
4/25/2012	<0.000123	
10/2/2012	<0.0002	
4/2/2013	<0.0001	
10/8/2013	<0.0002	
4/1/2014	0.0002 (J)	
10/1/2014	<0.0002	
4/1/2015	<0.0002	
10/15/2015	<0.0002	
4/4/2016	<0.0005	
5/31/2016	<0.0005	
8/4/2016	<0.0005	
9/29/2016	<0.0005	
11/28/2016	<0.0005	
2/9/2017	<0.0005	
4/12/2017	<0.0005	
6/16/2017	<0.0005 (*)	
10/9/2017	<0.0005	
3/21/2018	<0.0005	
9/19/2018	<0.0005	
3/23/2019		<0.0005

Prediction Limit

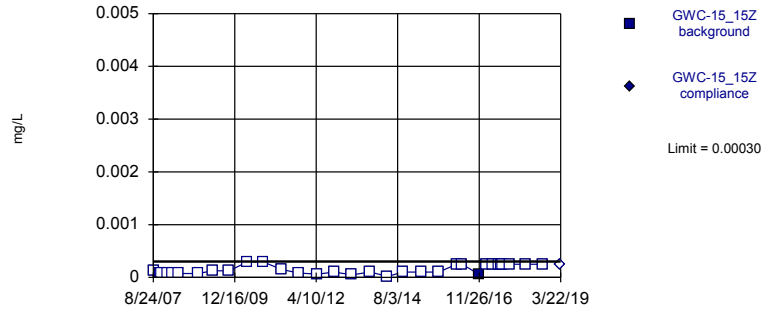
Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	<0.000254	
11/2/2007	<0.000145	
11/17/2007	<0.000145	
1/15/2008	<0.000145	
3/5/2008	<0.000145	
5/7/2008	<0.000145	
12/2/2008	<0.000145	
4/16/2009	<0.00025	
10/20/2009	<0.00025	
4/20/2010	<0.000591	
9/29/2010	<0.000591	
4/12/2011	<0.000299	
10/4/2011	<0.000168	
4/4/2012	<0.000123	
10/10/2012	<0.0002	
4/15/2013	<0.0001	
10/22/2013	<0.0002	
4/21/2014	<4.02E-05	
9/30/2014	<0.0002	
4/3/2015	<0.0002	
10/7/2015	<0.0002	
4/5/2016	<0.0005	
6/1/2016	<0.0005	
8/9/2016	<0.0005	
11/28/2016	<0.0005	
2/9/2017	<0.0005	
4/11/2017	<0.0005	
6/14/2017	<0.0005 (*)	
7/12/2017	<0.0005	
10/5/2017	<0.0005	
3/22/2018	<0.0005	
9/19/2018	<0.0005	
3/22/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

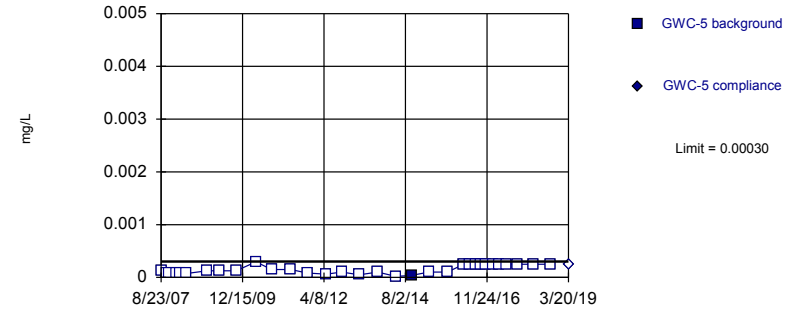


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

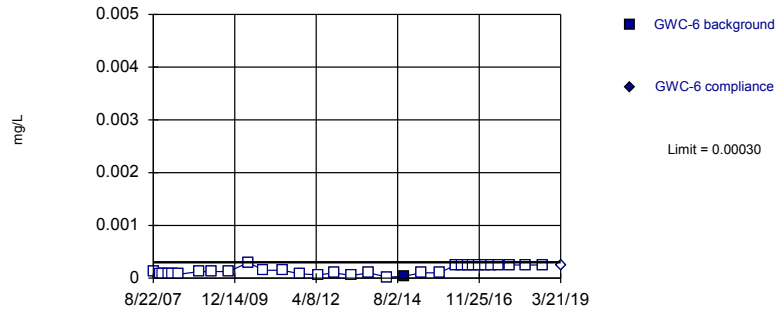


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

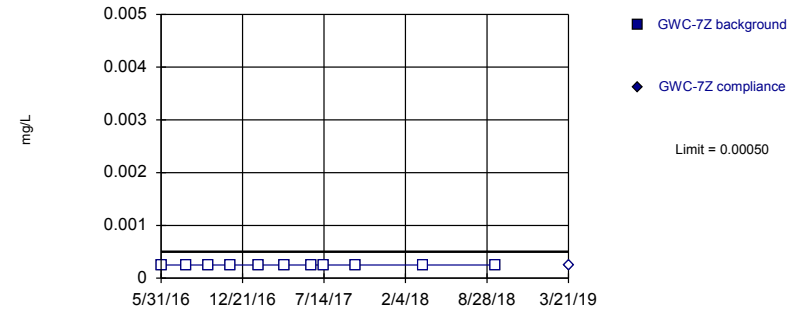


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.000254	
11/2/2007	<0.000145	
11/18/2007	<0.000145	
1/15/2008	<0.000145	
3/10/2008	<0.000145	
5/13/2008	<0.000145	
12/2/2008	<0.000145	
4/28/2009	<0.00025	
10/20/2009	<0.00025	
4/27/2010	<0.000591	
10/5/2010	<0.000591	
4/19/2011	<0.000299	
10/12/2011	<0.000168	
4/25/2012	<0.000123	
10/10/2012	<0.0002	
4/16/2013	<0.0001	
10/22/2013	<0.0002	
4/21/2014	<4.02E-05	
9/30/2014	<0.0002	
4/3/2015	<0.0002	
10/6/2015	<0.0002	
4/5/2016	<0.0005	
5/31/2016	<0.0005	
11/23/2016	6E-05 (J)	
2/10/2017	<0.0005	
4/11/2017	<0.0005	
6/15/2017	<0.0005 (*)	
7/12/2017	<0.0005	
7/26/2017	<0.0005	
10/6/2017	<0.0005	
3/23/2018	<0.0005	
9/19/2018	<0.0005	
3/22/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	<0.000254	
10/25/2007	<0.000145	
11/19/2007	<0.000145	
1/23/2008	<0.000145	
3/11/2008	<0.000145	
5/12/2008	<0.000145	
12/11/2008	<0.00025	
4/15/2009	<0.00025	
10/9/2009	<0.00025	
5/4/2010	<0.000591	
10/12/2010	<0.000299	
4/28/2011	<0.000299	
10/19/2011	<0.000168	
5/2/2012	<0.000123	
10/9/2012	<0.0002	
4/11/2013	<0.0001	
10/16/2013	<0.0002	
4/23/2014	<4.02E-05	
10/3/2014	3.71E-05 (J)	
3/31/2015	<0.0002	
10/12/2015	<0.0002	
3/28/2016	<0.0005	
5/25/2016	<0.0005	
8/1/2016	<0.0005	
9/27/2016	<0.0005	
11/11/2016	<0.0005	
1/31/2017	<0.0005 (*)	
4/3/2017	<0.0005	
6/12/2017	<0.0005	
10/3/2017	<0.0005	
3/19/2018	<0.0005	
9/17/2018	<0.0005	
3/20/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.000254	
10/25/2007	<0.000145	
11/20/2007	<0.000145	
1/23/2008	<0.000145	
3/11/2008	<0.000145	
5/14/2008	<0.000145	
12/11/2008	<0.00025	
4/23/2009	<0.00025	
10/9/2009	<0.00025	
5/4/2010	<0.000591	
10/11/2010	<0.000299	
4/26/2011	<0.000299	
10/18/2011	<0.000168	
5/2/2012	<0.000123	
10/8/2012	<0.0002	
4/10/2013	<0.0001	
10/8/2013	<0.0002	
4/14/2014	<4.02E-05	
10/3/2014	3.29E-05 (J)	
4/1/2015	<0.0002	
10/9/2015	<0.0002	
3/29/2016	<0.0005	
5/24/2016	<0.0005	
8/1/2016	<0.0005	
9/26/2016	<0.0005	
11/18/2016	<0.0005	
2/1/2017	<0.0005 (*)	
4/6/2017	<0.0005	
6/13/2017	<0.0005 (*)	
10/3/2017	<0.0005	
3/19/2018	<0.0005	
9/17/2018	<0.0005	
3/21/2019		<0.0005

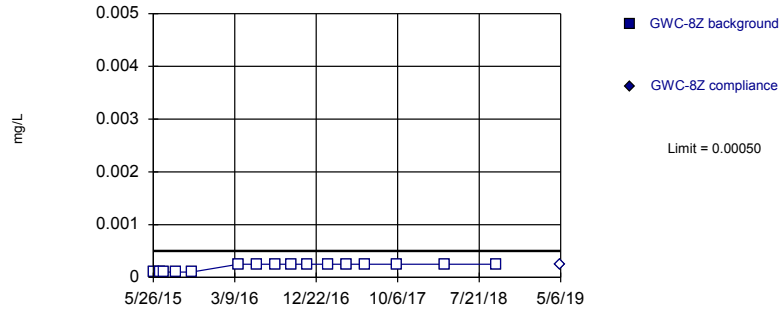
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	<0.0005	
8/2/2016	<0.0005	
9/27/2016	<0.0005	
11/21/2016	<0.0005	
2/1/2017	<0.0005	
4/6/2017	<0.0005	
6/13/2017	<0.0005 (*)	
7/14/2017	<0.0005	
10/3/2017	<0.0005	
3/20/2018	<0.0005	
9/18/2018	<0.0005	
3/21/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

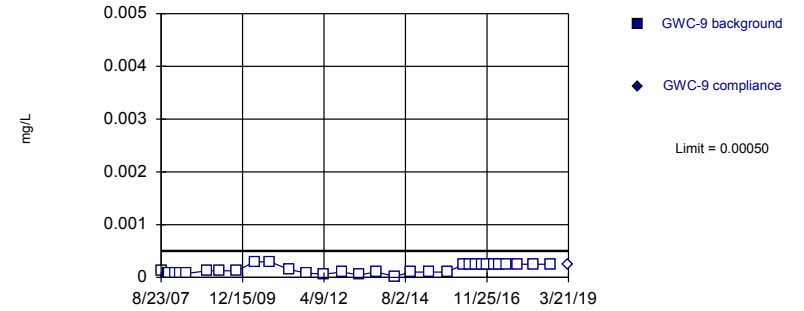


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 16) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002051. Individual comparison alpha = 0.001026 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

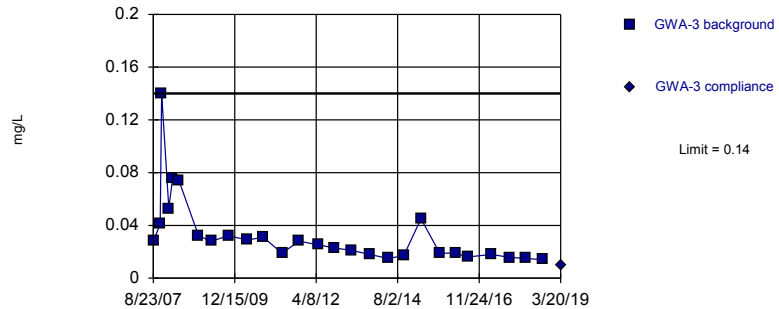


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

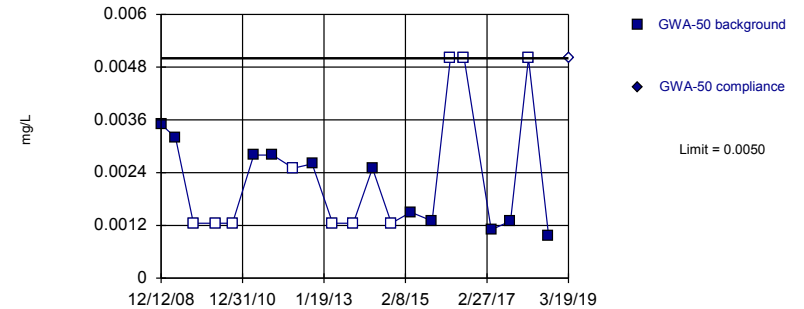


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 47.62% NDs. Well-constituent pair annual alpha = 0.001022. Individual comparison alpha = 0.000511 (1 of 3).

Constituent: Nickel Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	<0.0002	
6/18/2015	<0.0002 (D)	
7/2/2015	<0.0002	
8/14/2015	<0.0002 (D)	
10/8/2015	<0.0002	
3/22/2016	<0.0005	
5/25/2016	<0.0005	
8/2/2016	<0.0005	
9/26/2016	<0.0005	
11/21/2016	<0.0005	
2/3/2017	<0.0005	
4/7/2017	<0.0005 (*)	
6/13/2017	<0.0005 (*)	
10/3/2017	<0.0005	
3/20/2018	<0.0005	
9/18/2018	<0.0005	
5/6/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.000254	
11/1/2007	<0.000145	
11/19/2007	<0.000145	
1/15/2008	<0.000145	
3/6/2008	<0.000145	
5/13/2008	<0.000145	
12/12/2008	<0.00025	
4/16/2009	<0.00025	
10/13/2009	<0.00025	
4/21/2010	<0.000591	
9/29/2010	<0.000591	
4/13/2011	<0.000299	
10/5/2011	<0.000168	
4/4/2012	<0.000123	
10/8/2012	<0.0002	
4/8/2013	<0.0001	
10/9/2013	<0.0002	
4/9/2014	<4.02E-05	
9/30/2014	<0.0002	
4/2/2015	<0.0002	
10/10/2015	<0.0002 (D)	
3/30/2016	<0.0005	
5/26/2016	<0.0005	
8/5/2016	<0.0005	
9/28/2016	<0.0005	
11/21/2016	<0.0005	
2/6/2017	<0.0005	
4/6/2017	<0.0005	
6/13/2017	<0.0005 (*)	
10/3/2017	<0.0005	
3/20/2018	<0.0005	
9/18/2018	<0.0005 (D)	
3/21/2019		<0.0005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

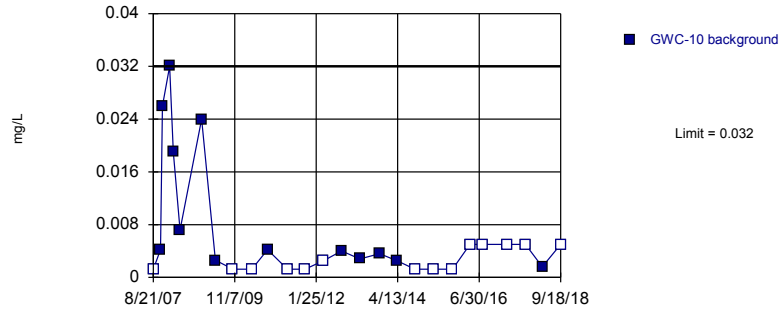
	GWA-3	GWA-3
8/23/2007	0.028	
11/2/2007	0.041	
11/18/2007	0.14	
1/31/2008	0.053	
3/11/2008	0.076	
5/14/2008	0.074	
12/5/2008	0.032	
4/15/2009	0.028	
10/8/2009	0.032	
4/28/2010	0.029	
10/6/2010	0.031	
4/21/2011	0.019	
10/13/2011	0.028	
5/1/2012	0.0253	
10/9/2012	0.023	
4/11/2013	0.021	
10/16/2013	0.018	
4/23/2014	0.015	
10/4/2014	0.017	
3/31/2015	0.045	
10/12/2015	0.019	
3/23/2016	0.019	
7/29/2016	0.0161	
3/30/2017	0.018	
10/4/2017	0.0158	
3/19/2018	0.015	
9/17/2018	0.014	
3/20/2019		0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	0.0035	
4/23/2009	0.0032	
10/6/2009	<0.0025	
4/27/2010	<0.0025	
9/30/2010	<0.0025	
4/14/2011	0.0028	
10/5/2011	0.0028	
4/11/2012	<0.005	
10/2/2012	0.0026	
4/9/2013	<0.0025	
10/15/2013	<0.0025	
4/10/2014	0.0025 (J)	
10/1/2014	<0.0025	
3/30/2015	0.0015 (J)	
10/11/2015	0.0013 (J)	
3/28/2016	<0.01	
8/1/2016	<0.01 (*)	
4/7/2017	0.0011 (J)	
10/2/2017	0.0013 (J)	
3/16/2018	<0.01	
9/17/2018	0.00096 (J)	
3/19/2019		<0.01

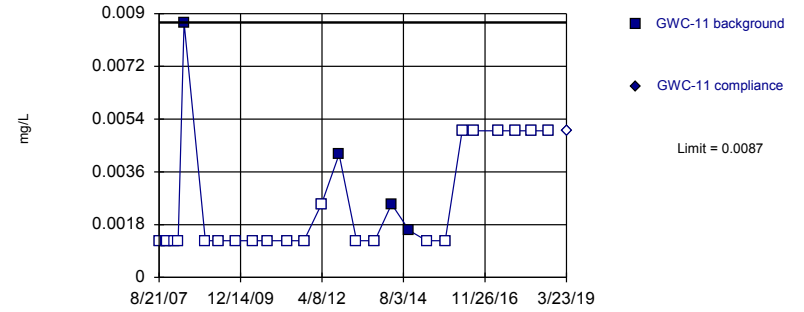
Prediction Limit
Intrawell Non-parametric, GWC-10



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 51.85% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

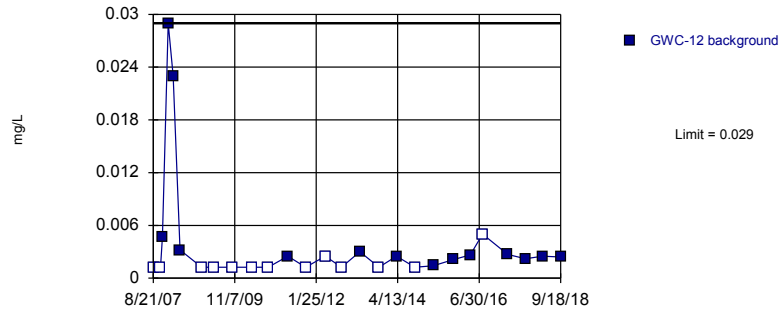
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 8/28/2019 9:07 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

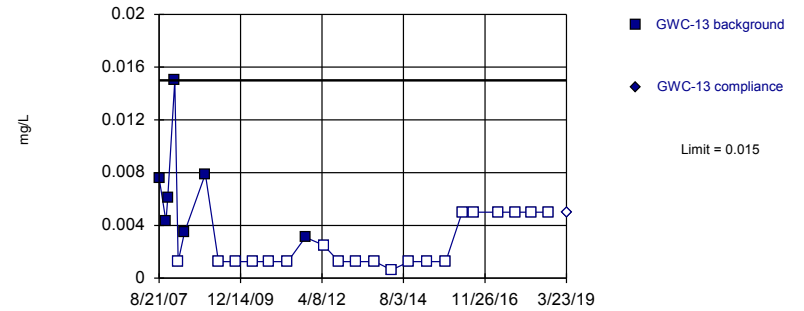
Prediction Limit
Intrawell Non-parametric, GWC-12



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 48.15% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10
8/21/2007	<0.0025
11/1/2007	0.0042
11/20/2007	0.026
1/30/2008	0.032
3/6/2008	0.019
5/12/2008	0.0072
12/13/2008	0.024
4/29/2009	0.0026
10/20/2009	<0.0025
4/26/2010	<0.0025
9/29/2010	0.0042
4/13/2011	<0.0025
10/5/2011	<0.0025
4/4/2012	<0.005
10/3/2012	0.004
4/3/2013	0.0028
10/15/2013	0.0036
4/9/2014	0.0025 (J)
10/2/2014	<0.0025
4/2/2015	<0.0025
10/10/2015	<0.0025
3/31/2016	<0.01
8/5/2016	<0.01 (*)
4/10/2017	<0.01 (*)
10/4/2017	<0.01
3/20/2018	0.0016 (J)
9/18/2018	<0.01
3/22/2019	0.0022 (X)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	0.0087	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/3/2012	0.0042	
4/3/2013	<0.0025	
10/9/2013	<0.0025	
4/2/2014	0.0025 (J)	
10/2/2014	0.0016 (J)	
4/1/2015	<0.0025	
10/11/2015	<0.0025	
4/4/2016	<0.01	
8/3/2016	<0.01	
4/10/2017	<0.01 (*)	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12
8/21/2007	<0.0025
11/1/2007	<0.0025
11/19/2007	0.0047
1/16/2008	0.029
3/5/2008	0.023
5/13/2008	0.0032
12/13/2008	<0.0025
4/16/2009	<0.0025
10/21/2009	<0.0025
4/27/2010	<0.0025
10/5/2010	<0.0025
4/19/2011	0.0025
10/12/2011	<0.0025
4/24/2012	<0.005
10/2/2012	<0.0025
4/2/2013	0.003
10/9/2013	<0.0025
4/1/2014	0.0025 (J)
10/2/2014	<0.0025
4/1/2015	0.0014 (J)
10/14/2015	0.0021 (J)
4/4/2016	0.00264 (J)
8/3/2016	<0.01 (*)
4/11/2017	0.0027 (J)
10/4/2017	0.0022 (J)
3/22/2018	0.0025 (J)
9/18/2018	0.0024 (J)
3/23/2019	0.0026 (X)

Prediction Limit

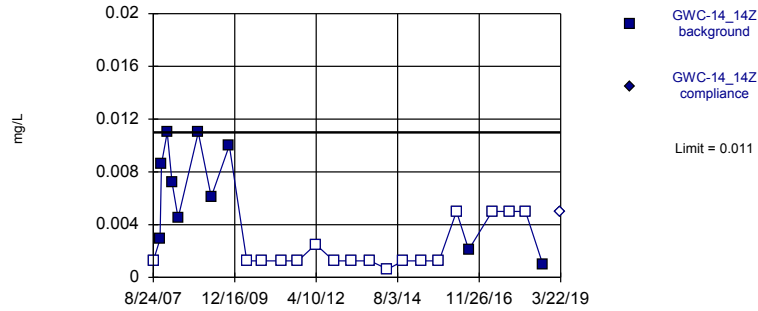
Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	0.0076	
11/1/2007	0.0043	
11/19/2007	0.0061	
1/31/2008	0.015	
3/5/2008	<0.0025	
5/12/2008	0.0035	
12/13/2008	0.0079	
4/28/2009	<0.0025	
10/21/2009	<0.0025	
4/28/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/18/2011	0.0031	
4/25/2012	<0.005	
10/2/2012	<0.0025	
4/2/2013	<0.0025	
10/8/2013	<0.0025	
4/1/2014	<0.00125	
10/1/2014	<0.0025	
4/1/2015	<0.0025	
10/15/2015	<0.0025	
4/4/2016	<0.01	
8/4/2016	<0.01	
4/12/2017	<0.01 (*)	
10/9/2017	<0.01	
3/21/2018	<0.01	
9/19/2018	<0.01	
3/23/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

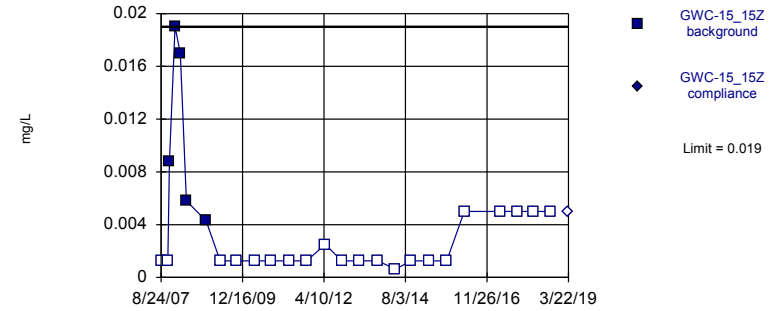


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 62.96% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

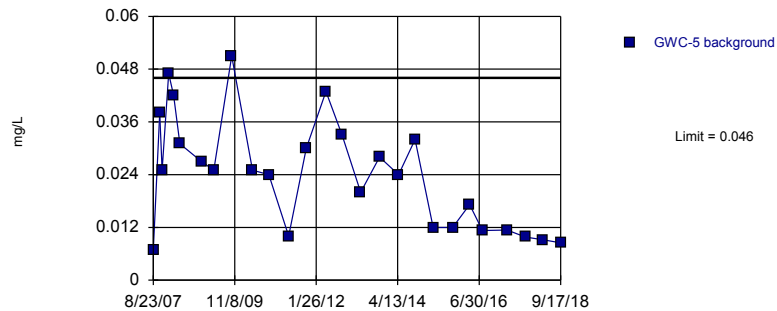
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 80.77% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Parametric, GWC-5

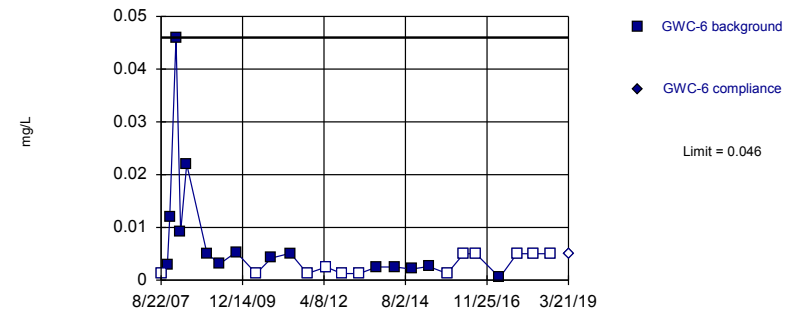


Background Data Summary: Mean=0.02419, Std. Dev.=0.01273, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9337, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used after natural log transformation resulted in a parametric limit of 6.954, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 27 background values. 44.44% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	<0.0025	
11/2/2007	0.0029	
11/17/2007	0.0086	
1/15/2008	0.011	
3/5/2008	0.0072	
5/7/2008	0.0045	
12/2/2008	0.011	
4/16/2009	0.0061	
10/20/2009	0.01	
4/20/2010	<0.0025	
9/29/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/4/2012	<0.005	
10/10/2012	<0.0025	
4/15/2013	<0.0025	
10/22/2013	<0.0025	
4/21/2014	<0.00125	
9/30/2014	<0.0025	
4/3/2015	<0.0025	
10/7/2015	<0.0025	
4/5/2016	<0.01	
8/9/2016	0.0021 (J)	
4/11/2017	<0.01	
10/5/2017	<0.01	
3/22/2018	<0.01	
9/19/2018	0.00096 (J)	
3/22/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.0025	
11/2/2007	<0.0025	
11/18/2007	0.0088 (J)	
1/15/2008	0.019	
3/10/2008	0.017	
5/13/2008	0.0058	
12/2/2008	0.0043	
4/28/2009	<0.0025	
10/20/2009	<0.0025	
4/27/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/12/2011	<0.0025	
4/25/2012	<0.005	
10/10/2012	<0.0025	
4/16/2013	<0.0025	
10/22/2013	<0.0025	
4/21/2014	<0.00125	
9/30/2014	<0.0025	
4/3/2015	<0.0025	
10/6/2015	<0.0025	
4/5/2016	<0.01	
4/11/2017	<0.01 (*)	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

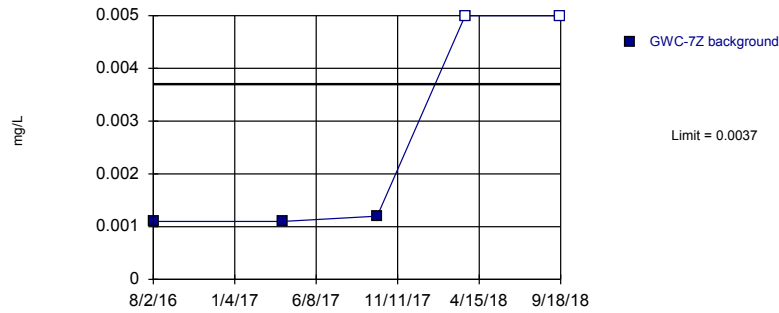
	GWC-5
8/23/2007	0.0069
10/25/2007	0.038
11/19/2007	0.025
1/23/2008	0.047
3/11/2008	0.042
5/12/2008	0.031
12/11/2008	0.027
4/15/2009	0.025
10/9/2009	0.051
5/4/2010	0.025
10/12/2010	0.024
4/28/2011	0.01
10/19/2011	0.03
5/2/2012	0.0429
10/9/2012	0.033
4/11/2013	0.02
10/16/2013	0.028
4/23/2014	0.024
10/3/2014	0.032
3/31/2015	0.012
10/12/2015	0.012
3/28/2016	0.0172
8/1/2016	0.0113
4/3/2017	0.0114
10/3/2017	0.0098 (J)
3/19/2018	0.0092 (J)
9/17/2018	0.0085 (J)
3/20/2019	0.008 (X)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.0025	
10/25/2007	0.0028	
11/20/2007	0.012	
1/23/2008	0.046	
3/11/2008	0.0091	
5/14/2008	0.022	
12/11/2008	0.005	
4/23/2009	0.0031	
10/9/2009	0.0053	
5/4/2010	<0.0025	
10/11/2010	0.0042	
4/26/2011	0.0051	
10/18/2011	<0.0025	
5/2/2012	<0.005	
10/8/2012	<0.0025	
4/10/2013	<0.0025	
10/8/2013	0.0025	
4/14/2014	0.0025 (J)	
10/3/2014	0.0021 (J)	
4/1/2015	0.0026	
10/9/2015	<0.0025	
3/29/2016	<0.01	
8/1/2016	<0.01	
4/6/2017	0.0005 (J)	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

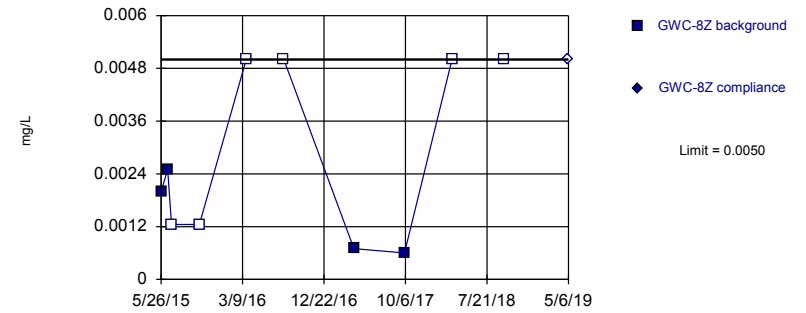
Prediction Limit
Intrawell Parametric, GWC-7Z



Background Data Summary (after Aitchison's Adjustment): Mean=0.00068, Std. Dev.=0.0006221, n=5, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.6955, critical = 0.686. Kappa = 4.875 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

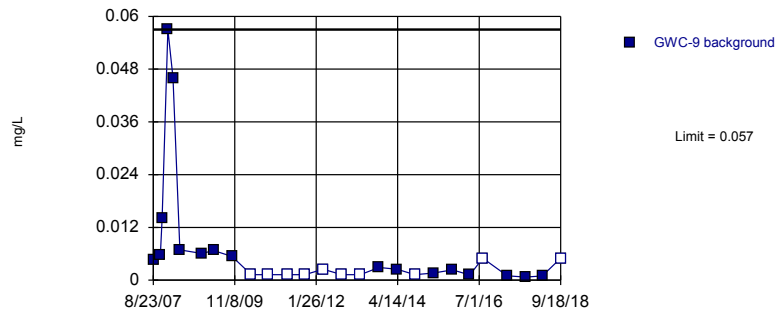
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

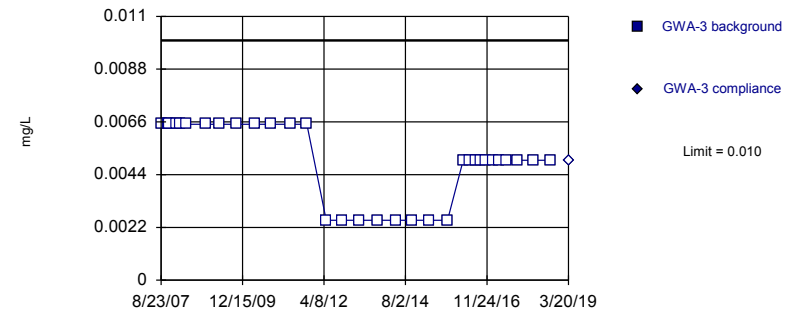
Prediction Limit
Intrawell Non-parametric, GWC-9



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 37.04% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z
8/2/2016	0.0011 (J)
4/6/2017	0.0011 (J)
10/3/2017	0.0012 (J)
3/20/2018	<0.01
9/18/2018	<0.01
3/21/2019	0.00099 (X)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	0.002 (J)	
6/18/2015	0.0025 (D)	
7/2/2015	<0.0025	
10/8/2015	<0.0025	
3/22/2016	<0.01	
8/2/2016	<0.01 (*)	
4/7/2017	0.0007 (J)	
10/3/2017	0.0006 (J)	
3/20/2018	<0.01	
9/18/2018	<0.01	
5/6/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9
8/23/2007	0.0046
11/1/2007	0.0057
11/19/2007	0.014 (J)
1/15/2008	0.057
3/6/2008	0.046
5/13/2008	0.0069
12/12/2008	0.0061
4/16/2009	0.0067 (J)
10/13/2009	0.0054
4/21/2010	<0.0025
9/29/2010	<0.0025
4/13/2011	<0.0025
10/5/2011	<0.0025
4/4/2012	<0.005
10/8/2012	<0.0025
4/8/2013	<0.0025
10/9/2013	0.0029
4/9/2014	0.0025 (J)
9/30/2014	<0.0025
4/2/2015	0.0016 (J)
10/10/2015	0.002325 (D)
3/30/2016	0.00116 (J)
8/5/2016	<0.01
4/6/2017	0.001 (J)
10/3/2017	0.0007 (J)
3/20/2018	0.00097 (J)
9/18/2018	<0.01 (D)
3/21/2019	0.001 (X)

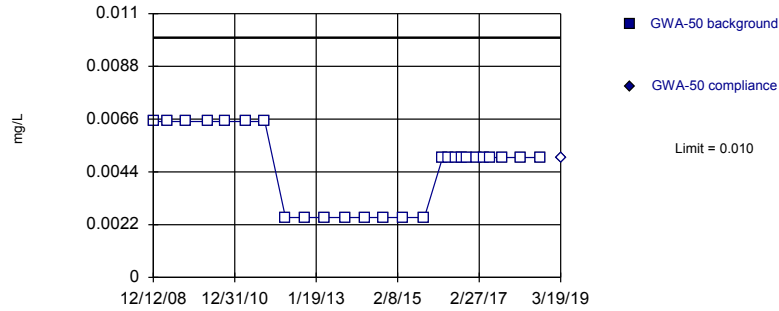
Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	<0.013	
11/2/2007	<0.013	
11/18/2007	<0.013	
1/31/2008	<0.013	
3/11/2008	<0.013	
5/14/2008	<0.013	
12/5/2008	<0.013	
4/15/2009	<0.013	
10/8/2009	<0.013	
4/28/2010	<0.013	
10/6/2010	<0.013	
4/21/2011	<0.013	
10/13/2011	<0.013	
5/1/2012	<0.005	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/23/2014	<0.005	
10/4/2014	<0.005	
3/31/2015	<0.005	
10/12/2015	<0.005	
3/23/2016	<0.01	
5/23/2016	<0.01	
7/29/2016	<0.01	
9/22/2016	<0.01	
11/10/2016	<0.01	
1/31/2017	<0.01	
3/30/2017	<0.01	
6/12/2017	<0.01	
10/4/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

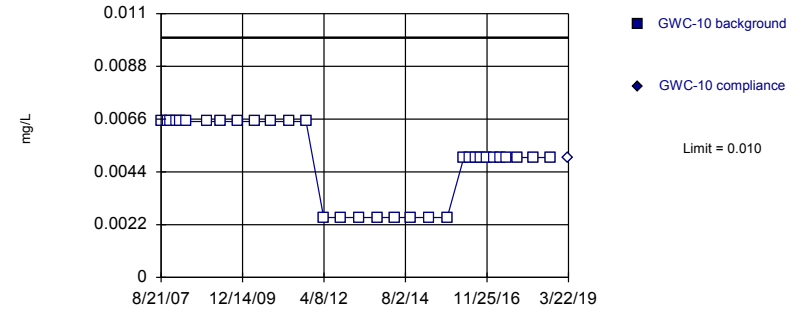


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

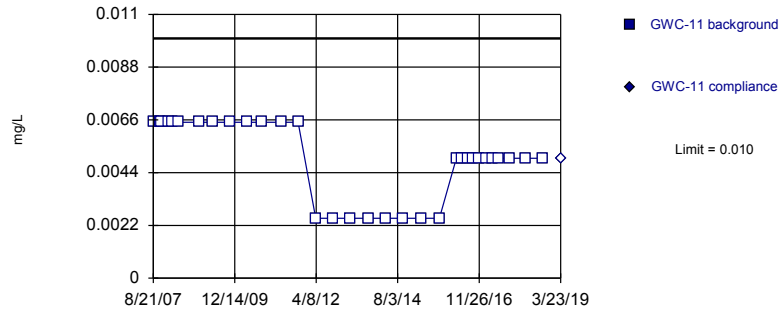


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

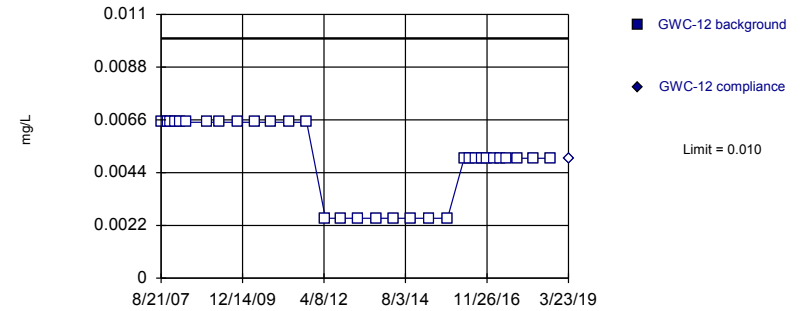


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.013	
4/23/2009	<0.013	
10/6/2009	<0.013	
4/27/2010	<0.013	
9/30/2010	<0.013	
4/14/2011	<0.013	
10/5/2011	<0.013	
4/11/2012	<0.005	
10/2/2012	<0.005	
4/9/2013	<0.005	
10/15/2013	<0.005	
4/10/2014	<0.005	
10/1/2014	<0.005	
3/30/2015	<0.005	
10/11/2015	<0.005	
3/28/2016	<0.01	
5/23/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/10/2016	<0.01	
1/30/2017	<0.01	
4/7/2017	<0.01	
6/12/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	<0.013	
11/1/2007	<0.013	
11/20/2007	<0.013	
1/30/2008	<0.013	
3/6/2008	<0.013	
5/12/2008	<0.013	
12/13/2008	<0.013	
4/29/2009	<0.013	
10/20/2009	<0.013	
4/26/2010	<0.013	
9/29/2010	<0.013	
4/13/2011	<0.013	
10/5/2011	<0.013	
4/4/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.005	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	<0.005	
3/31/2016	<0.01	
5/26/2016	<0.01	
8/5/2016	<0.01	
9/28/2016	<0.01	
11/22/2016	<0.01	
2/7/2017	<0.01	
4/10/2017	<0.01	
6/14/2017	<0.01	
10/4/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.013	
11/1/2007	<0.013	
11/18/2007	<0.013	
1/30/2008	<0.013	
3/5/2008	<0.013	
5/7/2008	<0.013	
12/14/2008	<0.013	
4/29/2009	<0.013	
10/22/2009	<0.013	
4/21/2010	<0.013	
9/28/2010	<0.013	
4/12/2011	<0.013	
10/4/2011	<0.013	
4/3/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/9/2013	<0.005	
4/2/2014	<0.005	
10/2/2014	<0.005	
4/1/2015	<0.005	
10/11/2015	<0.005	
4/4/2016	<0.01	
5/26/2016	<0.01	
8/3/2016	<0.01	
9/28/2016	<0.01	
11/22/2016	<0.01	
2/8/2017	<0.01	
4/10/2017	<0.01	
6/15/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

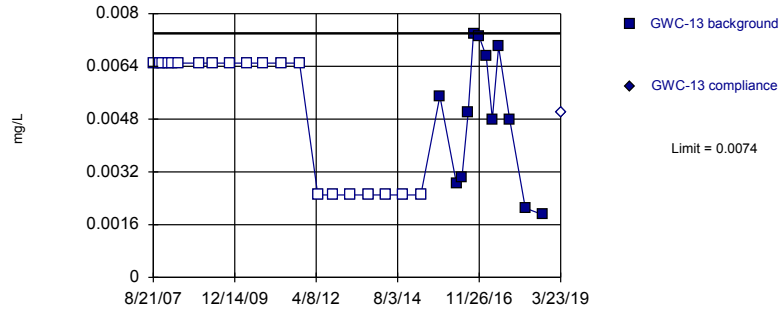
Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	<0.013	
11/1/2007	<0.013	
11/19/2007	<0.013	
1/16/2008	<0.013	
3/5/2008	<0.013	
5/13/2008	<0.013	
12/13/2008	<0.013	
4/16/2009	<0.013	
10/21/2009	<0.013	
4/27/2010	<0.013	
10/5/2010	<0.013	
4/19/2011	<0.013	
10/12/2011	<0.013	
4/24/2012	<0.005	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/9/2013	<0.005	
4/1/2014	<0.005	
10/2/2014	<0.005	
4/1/2015	<0.005	
10/14/2015	<0.005	
4/4/2016	<0.01	
5/27/2016	<0.01	
8/3/2016	<0.01	
9/30/2016	<0.01	
11/22/2016	<0.01	
2/13/2017	<0.01	
4/11/2017	<0.01	
6/14/2017	<0.01	
10/4/2017	<0.01	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

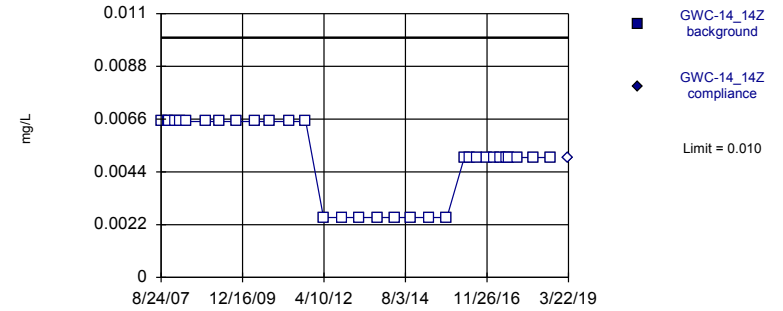


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

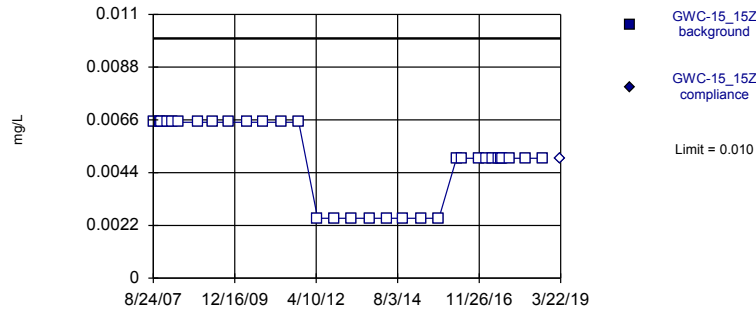


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

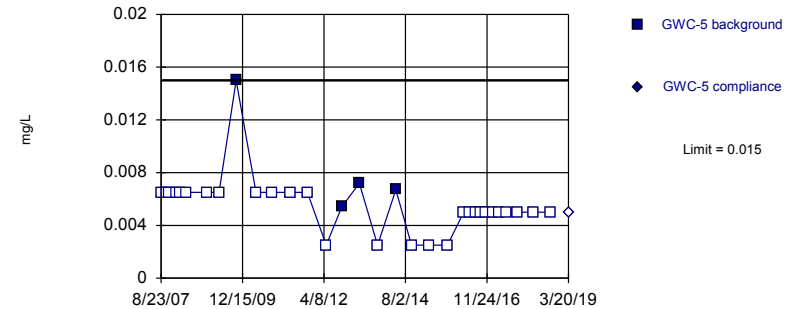


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:08 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	<0.013	
11/1/2007	<0.013	
11/19/2007	<0.013	
1/31/2008	<0.013	
3/5/2008	<0.013	
5/12/2008	<0.013	
12/13/2008	<0.013	
4/28/2009	<0.013	
10/21/2009	<0.013	
4/28/2010	<0.013	
10/5/2010	<0.013	
4/19/2011	<0.013	
10/18/2011	<0.013	
4/25/2012	<0.005	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/8/2013	<0.005	
4/1/2014	<0.005	
10/1/2014	<0.005	
4/1/2015	<0.005	
10/15/2015	0.0055	
4/4/2016	0.00286 (J)	
5/31/2016	0.00303 (J)	
8/4/2016	0.005 (J)	
9/29/2016	0.0074 (J)	
11/28/2016	0.0073 (J)	
2/9/2017	0.0067 (J)	
4/12/2017	0.0048 (J)	
6/16/2017	0.007 (J)	
10/9/2017	0.0048 (J)	
3/21/2018	0.0021 (J)	
9/19/2018	0.0019 (J)	
3/23/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	<0.013	
11/2/2007	<0.013	
11/17/2007	<0.013	
1/15/2008	<0.013	
3/5/2008	<0.013	
5/7/2008	<0.013	
12/2/2008	<0.013	
4/16/2009	<0.013	
10/20/2009	<0.013	
4/20/2010	<0.013	
9/29/2010	<0.013	
4/12/2011	<0.013	
10/4/2011	<0.013	
4/4/2012	<0.005	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.005	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/7/2015	<0.005	
4/5/2016	<0.01	
6/1/2016	<0.01	
8/9/2016	<0.01	
11/28/2016	<0.01	
2/9/2017	<0.01	
4/11/2017	<0.01	
6/14/2017	<0.01	
7/12/2017	<0.01	
10/5/2017	<0.01	
3/22/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.013	
11/2/2007	<0.013	
11/18/2007	<0.013	
1/15/2008	<0.013	
3/10/2008	<0.013	
5/13/2008	<0.013	
12/2/2008	<0.013	
4/28/2009	<0.013	
10/20/2009	<0.013	
4/27/2010	<0.013	
10/5/2010	<0.013	
4/19/2011	<0.013	
10/12/2011	<0.013	
4/25/2012	<0.005	
10/10/2012	<0.005	
4/16/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.005	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/6/2015	<0.005	
4/5/2016	<0.01	
5/31/2016	<0.01	
11/23/2016	<0.01	
2/10/2017	<0.01	
4/11/2017	<0.01	
6/15/2017	<0.01	
7/12/2017	<0.01	
7/26/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

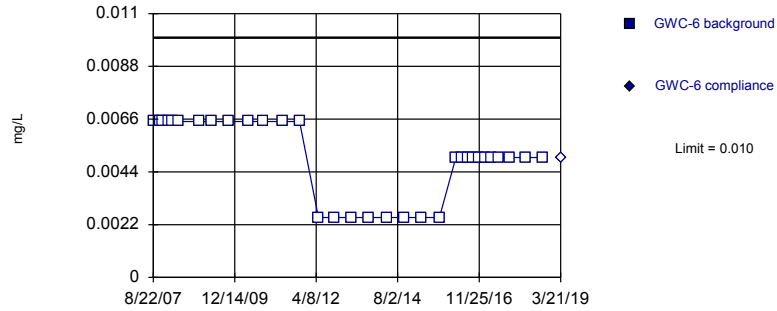
Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	<0.013	
10/25/2007	<0.013	
11/19/2007	<0.013	
1/23/2008	<0.013	
3/11/2008	<0.013	
5/12/2008	<0.013	
12/11/2008	<0.013	
4/15/2009	<0.013	
10/9/2009	0.015	
5/4/2010	<0.013	
10/12/2010	<0.013	
4/28/2011	<0.013	
10/19/2011	<0.013	
5/2/2012	<0.005	
10/9/2012	0.0054	
4/11/2013	0.0072	
10/16/2013	<0.005	
4/23/2014	0.0067	
10/3/2014	<0.005	
3/31/2015	<0.005	
10/12/2015	<0.005	
3/28/2016	<0.01	
5/25/2016	<0.01	
8/1/2016	<0.01	
9/27/2016	<0.01	
11/11/2016	<0.01	
1/31/2017	<0.01	
4/3/2017	<0.01	
6/12/2017	<0.01	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

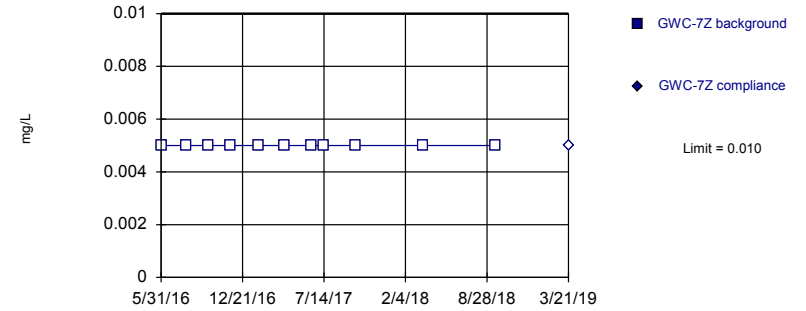


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

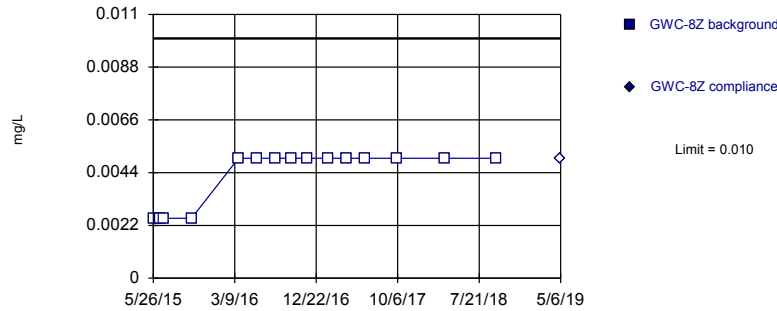


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

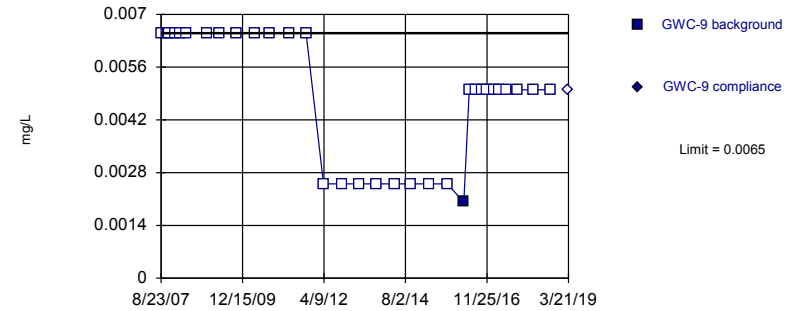


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.013	
10/25/2007	<0.013	
11/20/2007	<0.013	
1/23/2008	<0.013	
3/11/2008	<0.013	
5/14/2008	<0.013	
12/11/2008	<0.013	
4/23/2009	<0.013	
10/9/2009	<0.013	
5/4/2010	<0.013	
10/11/2010	<0.013	
4/26/2011	<0.013	
10/18/2011	<0.013	
5/2/2012	<0.005	
10/8/2012	<0.005	
4/10/2013	<0.005	
10/8/2013	<0.005	
4/14/2014	<0.005	
10/3/2014	<0.005	
4/1/2015	<0.005	
10/9/2015	<0.005	
3/29/2016	<0.01	
5/24/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/18/2016	<0.01	
2/1/2017	<0.01	
4/6/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	<0.01	
8/2/2016	<0.01	
9/27/2016	<0.01	
11/21/2016	<0.01	
2/1/2017	<0.01	
4/6/2017	<0.01	
6/13/2017	<0.01	
7/14/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	<0.005	
6/18/2015	<0.005 (D)	
7/2/2015	<0.005	
10/8/2015	<0.005	
3/22/2016	<0.01	
5/25/2016	<0.01	
8/2/2016	<0.01	
9/26/2016	<0.01	
11/21/2016	<0.01	
2/3/2017	<0.01	
4/7/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
5/6/2019		<0.01

Prediction Limit

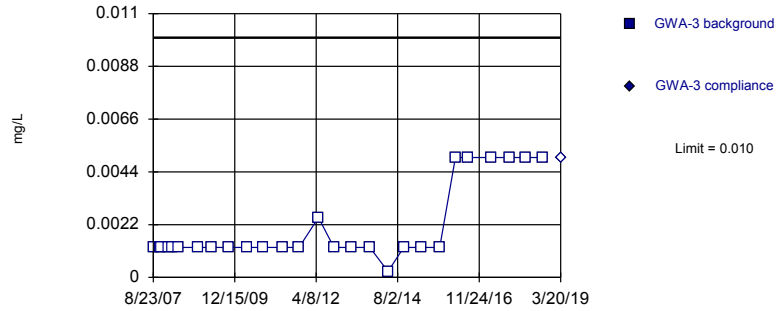
Constituent: Selenium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.013	
11/1/2007	<0.013	
11/19/2007	<0.013	
1/15/2008	<0.013	
3/6/2008	<0.013	
5/13/2008	<0.013	
12/12/2008	<0.013	
4/16/2009	<0.013	
10/13/2009	<0.013	
4/21/2010	<0.013	
9/29/2010	<0.013	
4/13/2011	<0.013	
10/5/2011	<0.013	
4/4/2012	<0.005	
10/8/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/9/2014	<0.005	
9/30/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	<0.005 (D)	
3/30/2016	0.00202 (J)	
5/26/2016	<0.01	
8/5/2016	<0.01	
9/28/2016	<0.01	
11/21/2016	<0.01	
2/6/2017	<0.01	
4/6/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01 (D)	
3/21/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

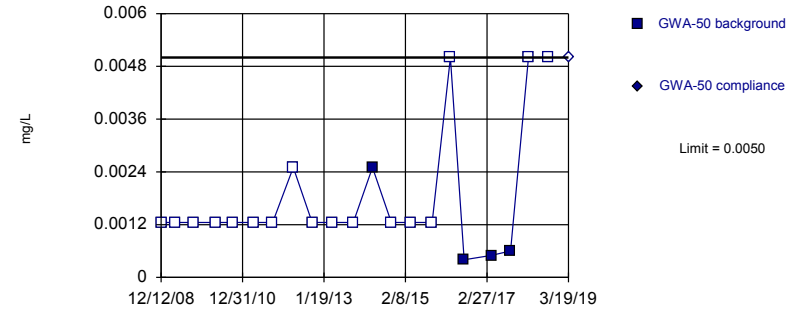


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

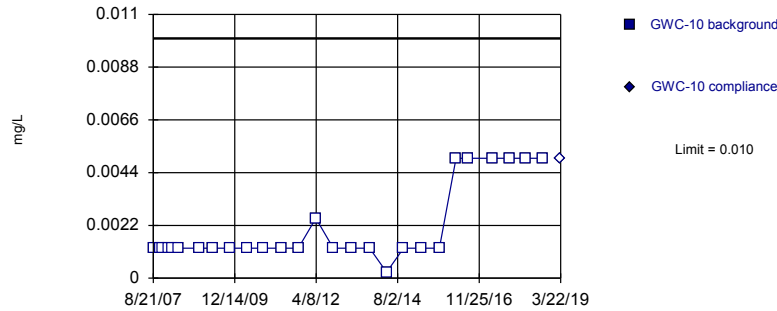


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.001022. Individual comparison alpha = 0.000511 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

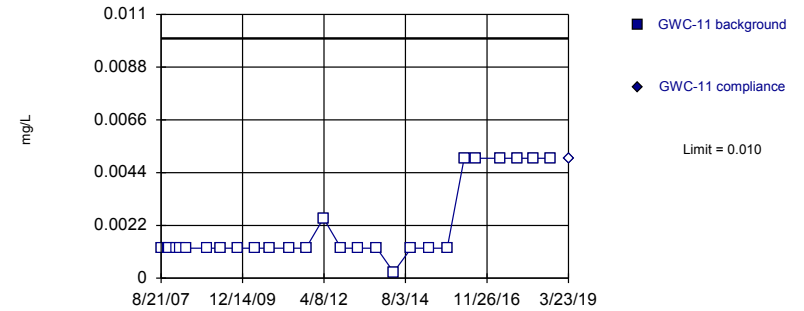


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	<0.0025	
11/2/2007	<0.0025	
11/18/2007	<0.0025	
1/31/2008	<0.0025	
3/11/2008	<0.0025	
5/14/2008	<0.0025	
12/5/2008	<0.0025	
4/15/2009	<0.0025	
10/8/2009	<0.0025	
4/28/2010	<0.0025	
10/6/2010	<0.0025	
4/21/2011	<0.0025	
10/13/2011	<0.0025	
5/1/2012	<0.005	
10/9/2012	<0.0025	
4/11/2013	<0.0025	
10/16/2013	<0.0025	
4/23/2014	<0.0005	
10/4/2014	<0.0025	
3/31/2015	<0.0025	
10/12/2015	<0.0025	
3/23/2016	<0.01	
7/29/2016	<0.01	
3/30/2017	<0.01	
10/4/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.0025	
4/23/2009	<0.0025	
10/6/2009	<0.0025	
4/27/2010	<0.0025	
9/30/2010	<0.0025	
4/14/2011	<0.0025	
10/5/2011	<0.0025	
4/11/2012	<0.005	
10/2/2012	<0.0025	
4/9/2013	<0.0025	
10/15/2013	<0.0025	
4/10/2014	0.0025 (J)	
10/1/2014	<0.0025	
3/30/2015	<0.0025	
10/11/2015	<0.0025	
3/28/2016	<0.01	
8/1/2016	0.0004 (J)	
4/7/2017	0.0005 (J)	
10/2/2017	0.0006 (J)	
3/16/2018	<0.01	
9/17/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/20/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	<0.0025	
5/12/2008	<0.0025	
12/13/2008	<0.0025	
4/29/2009	<0.0025	
10/20/2009	<0.0025	
4/26/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/4/2012	<0.005	
10/3/2012	<0.0025	
4/3/2013	<0.0025	
10/15/2013	<0.0025	
4/9/2014	<0.0005	
10/2/2014	<0.0025	
4/2/2015	<0.0025	
10/10/2015	<0.0025	
3/31/2016	<0.01	
8/5/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

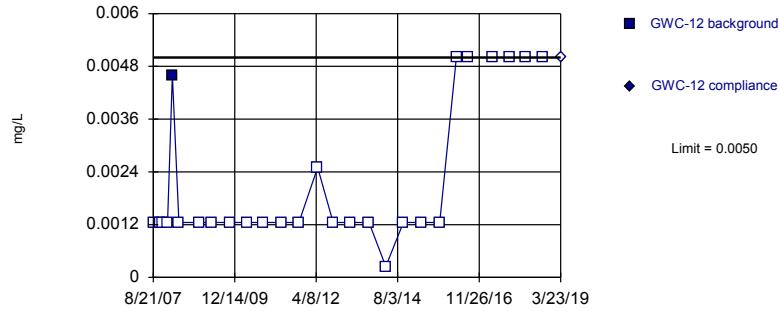
Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	<0.0025	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/3/2012	<0.0025	
4/3/2013	<0.0025	
10/9/2013	<0.0025	
4/2/2014	<0.0005	
10/2/2014	<0.0025	
4/1/2015	<0.0025	
10/11/2015	<0.0025	
4/4/2016	<0.01	
8/3/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

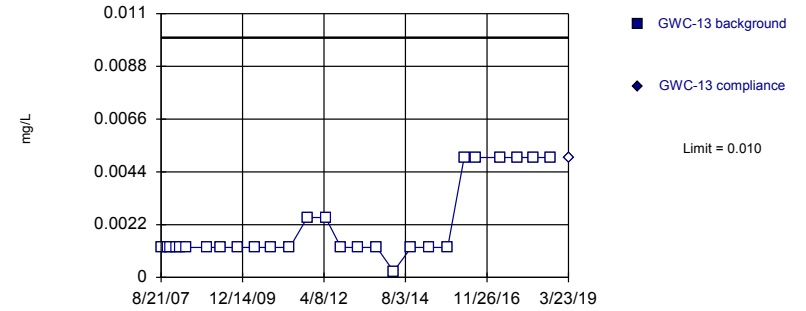


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 96.3% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

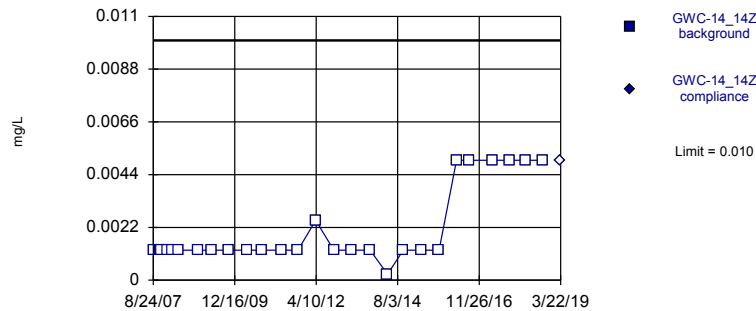


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

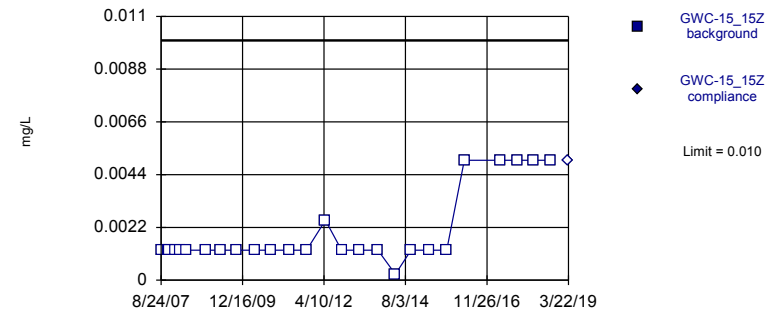


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	<0.0025	
1/16/2008	<0.0025	
3/5/2008	0.0046	
5/13/2008	<0.0025	
12/13/2008	<0.0025	
4/16/2009	<0.0025	
10/21/2009	<0.0025	
4/27/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/12/2011	<0.0025	
4/24/2012	<0.005	
10/2/2012	<0.0025	
4/2/2013	<0.0025	
10/9/2013	<0.0025	
4/1/2014	<0.0005	
10/2/2014	<0.0025	
4/1/2015	<0.0025	
10/14/2015	<0.0025	
4/4/2016	<0.01	
8/3/2016	<0.01	
4/11/2017	<0.01	
10/4/2017	<0.01	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	<0.0025	
1/31/2008	<0.0025	
3/5/2008	<0.0025	
5/12/2008	<0.0025	
12/13/2008	<0.0025	
4/28/2009	<0.0025	
10/21/2009	<0.0025	
4/28/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/18/2011	<0.005	
4/25/2012	<0.005	
10/2/2012	<0.0025	
4/2/2013	<0.0025	
10/8/2013	<0.0025	
4/1/2014	<0.0005	
10/1/2014	<0.0025	
4/1/2015	<0.0025	
10/15/2015	<0.0025	
4/4/2016	<0.01	
8/4/2016	<0.01	
4/12/2017	<0.01	
10/9/2017	<0.01	
3/21/2018	<0.01	
9/19/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	<0.0025	
11/2/2007	<0.0025	
11/17/2007	<0.0025	
1/15/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	<0.0025	
12/2/2008	<0.0025	
4/16/2009	<0.0025	
10/20/2009	<0.0025	
4/20/2010	<0.0025	
9/29/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/4/2012	<0.005	
10/10/2012	<0.0025	
4/15/2013	<0.0025	
10/22/2013	<0.0025	
4/21/2014	<0.0005	
9/30/2014	<0.0025	
4/3/2015	<0.0025	
10/7/2015	<0.0025	
4/5/2016	<0.01	
8/9/2016	<0.01	
4/11/2017	<0.01	
10/5/2017	<0.01	
3/22/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

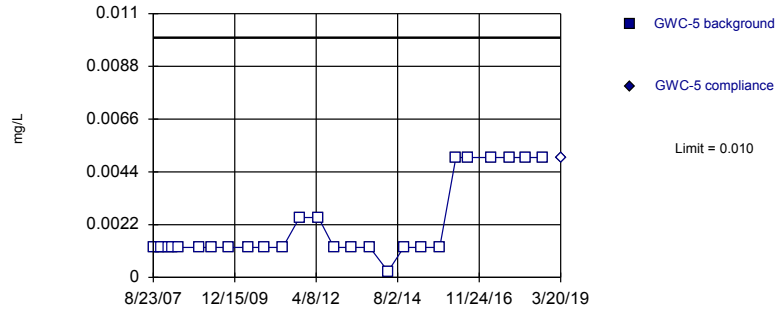
Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	<0.0025	
11/2/2007	<0.0025	
11/18/2007	<0.0025	
1/15/2008	<0.0025	
3/10/2008	<0.0025	
5/13/2008	<0.0025	
12/2/2008	<0.0025	
4/28/2009	<0.0025	
10/20/2009	<0.0025	
4/27/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	<0.0025	
10/12/2011	<0.0025	
4/25/2012	<0.005	
10/10/2012	<0.0025	
4/16/2013	<0.0025	
10/22/2013	<0.0025	
4/21/2014	<0.0005	
9/30/2014	<0.0025	
4/3/2015	<0.0025	
10/6/2015	<0.0025	
4/5/2016	<0.01	
4/11/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

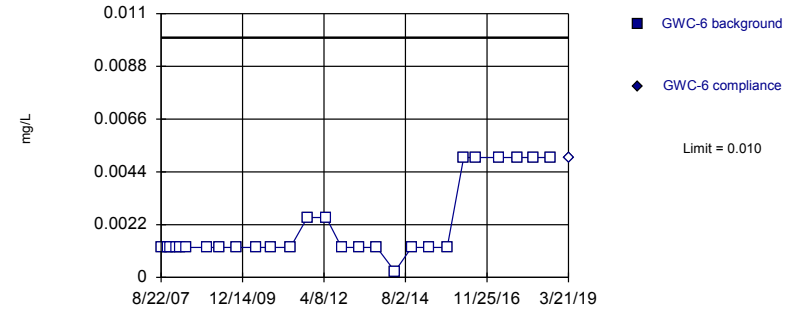


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

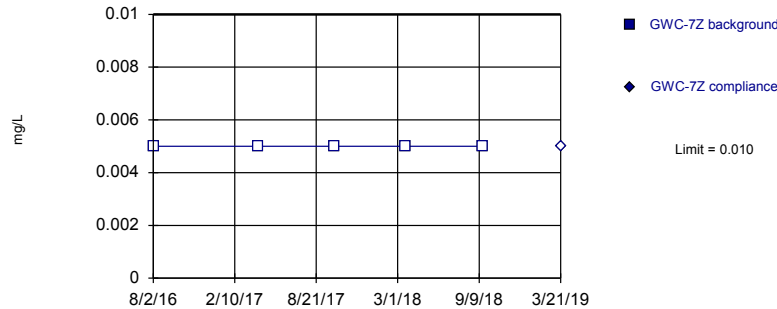


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

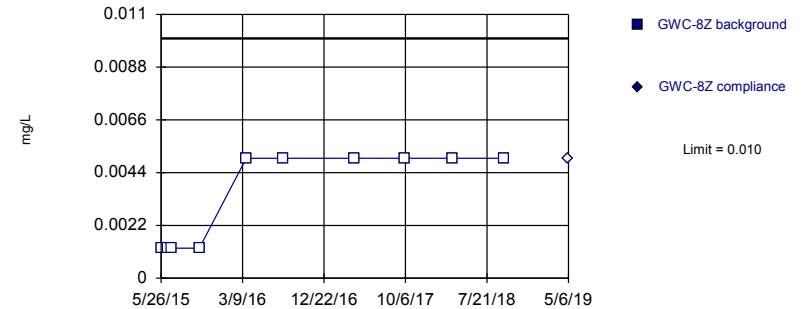


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	<0.0025	
10/25/2007	<0.0025	
11/19/2007	<0.0025	
1/23/2008	<0.0025	
3/11/2008	<0.0025	
5/12/2008	<0.0025	
12/11/2008	<0.0025	
4/15/2009	<0.0025	
10/9/2009	<0.0025	
5/4/2010	<0.0025	
10/12/2010	<0.0025	
4/28/2011	<0.0025	
10/19/2011	<0.005	
5/2/2012	<0.005	
10/9/2012	<0.0025	
4/11/2013	<0.0025	
10/16/2013	<0.0025	
4/23/2014	<0.0005	
10/3/2014	<0.0025	
3/31/2015	<0.0025	
10/12/2015	<0.0025	
3/28/2016	<0.01	
8/1/2016	<0.01	
4/3/2017	<0.01	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.0025	
10/25/2007	<0.0025	
11/20/2007	<0.0025	
1/23/2008	<0.0025	
3/11/2008	<0.0025	
5/14/2008	<0.0025	
12/11/2008	<0.0025	
4/23/2009	<0.0025	
10/9/2009	<0.0025	
5/4/2010	<0.0025	
10/11/2010	<0.0025	
4/26/2011	<0.0025	
10/18/2011	<0.005	
5/2/2012	<0.005	
10/8/2012	<0.0025	
4/10/2013	<0.0025	
10/8/2013	<0.0025	
4/14/2014	<0.0005	
10/3/2014	<0.0025	
4/1/2015	<0.0025	
10/9/2015	<0.0025	
3/29/2016	<0.01	
8/1/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
8/2/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

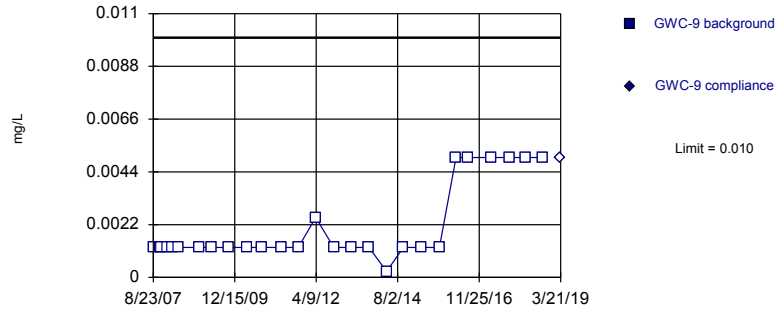
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	<0.0025	
6/18/2015	<0.0025 (D)	
7/2/2015	<0.0025	
10/8/2015	<0.0025	
3/22/2016	<0.01	
8/2/2016	<0.01	
4/7/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
5/6/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

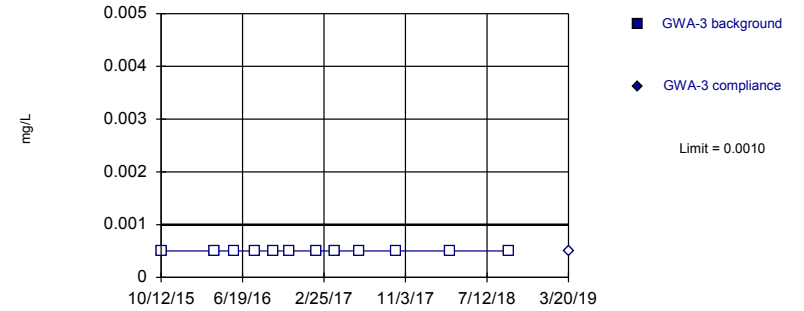


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 8/28/2019 9:09 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

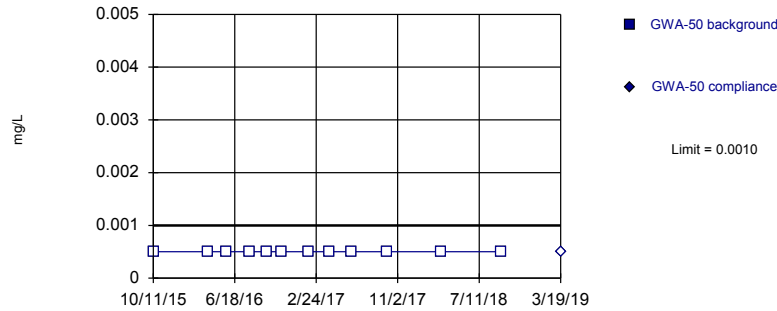


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

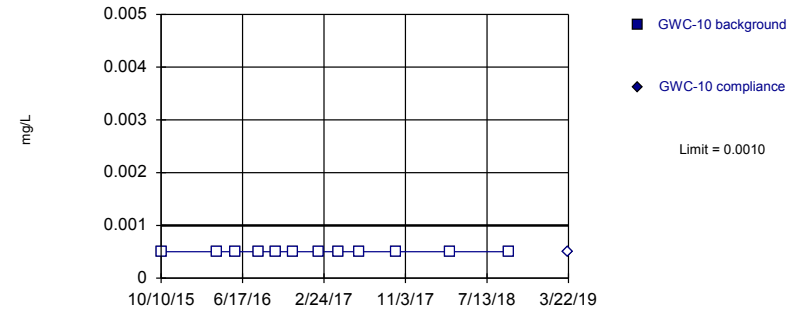


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	<0.0025	
1/15/2008	<0.0025	
3/6/2008	<0.0025	
5/13/2008	<0.0025	
12/12/2008	<0.0025	
4/16/2009	<0.0025	
10/13/2009	<0.0025	
4/21/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/4/2012	<0.005	
10/8/2012	<0.0025	
4/8/2013	<0.0025	
10/9/2013	<0.0025	
4/9/2014	<0.0005	
9/30/2014	<0.0025	
4/2/2015	<0.0025	
10/10/2015	<0.0025 (D)	
3/30/2016	<0.01	
8/5/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01 (D)	
3/21/2019		<0.01

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
10/12/2015	<0.001	
3/23/2016	<0.001	
5/23/2016	<0.001	
7/29/2016	<0.001	
9/22/2016	<0.001	
11/10/2016	<0.001	
1/31/2017	<0.001	
3/30/2017	<0.001	
6/12/2017	<0.001	
10/4/2017	<0.001	
3/19/2018	<0.001	
9/17/2018	<0.001	
3/20/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
10/11/2015	<0.001	
3/28/2016	<0.001	
5/23/2016	<0.001	
8/1/2016	<0.001	
9/26/2016	<0.001	
11/10/2016	<0.001	
1/30/2017	<0.001	
4/7/2017	<0.001	
6/12/2017	<0.001	
10/2/2017	<0.001	
3/16/2018	<0.001	
9/17/2018	<0.001	
3/19/2019		<0.001

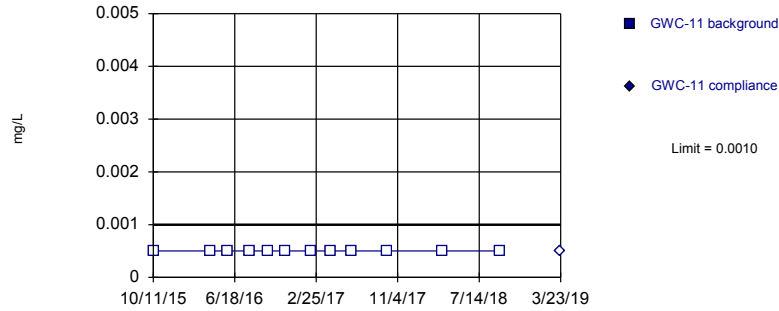
Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
10/10/2015	<0.001	
3/31/2016	<0.001	
5/26/2016	<0.001	
8/5/2016	<0.001	
9/28/2016	<0.001	
11/22/2016	<0.001	
2/7/2017	<0.001	
4/10/2017	<0.001	
6/14/2017	<0.001	
10/4/2017	<0.001	
3/20/2018	<0.001	
9/18/2018	<0.001	
3/22/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

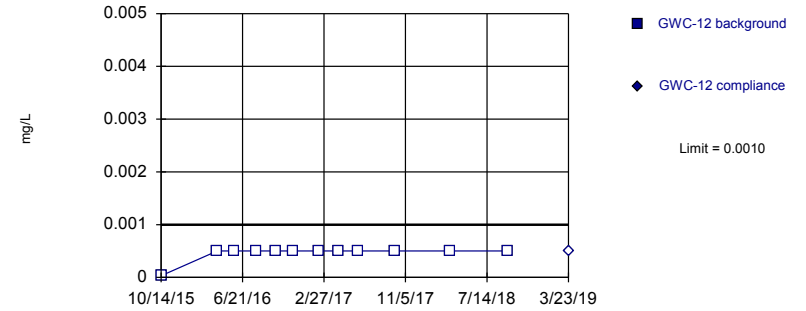


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

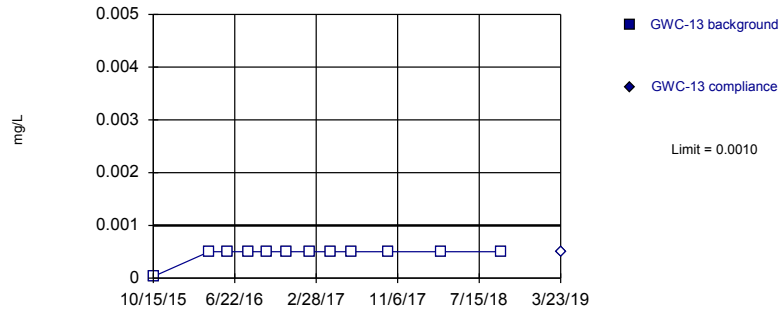


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

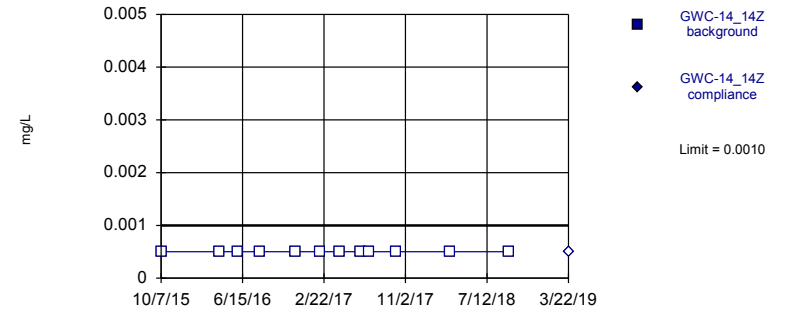


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
10/11/2015	<0.001	
4/4/2016	<0.001	
5/26/2016	<0.001	
8/3/2016	<0.001	
9/28/2016	<0.001	
11/22/2016	<0.001	
2/8/2017	<0.001	
4/10/2017	<0.001	
6/15/2017	<0.001	
10/4/2017	<0.001	
3/21/2018	<0.001	
9/18/2018	<0.001	
3/23/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
10/14/2015	<6E-05	
4/4/2016	<0.001	
5/27/2016	<0.001	
8/3/2016	<0.001	
9/30/2016	<0.001	
11/22/2016	<0.001	
2/13/2017	<0.001	
4/11/2017	<0.001	
6/14/2017	<0.001	
10/4/2017	<0.001	
3/22/2018	<0.001	
9/18/2018	<0.001	
3/23/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
10/15/2015	<6E-05	
4/4/2016	<0.001	
5/31/2016	<0.001	
8/4/2016	<0.001	
9/29/2016	<0.001	
11/28/2016	<0.001	
2/9/2017	<0.001	
4/12/2017	<0.001	
6/16/2017	<0.001	
10/9/2017	<0.001	
3/21/2018	<0.001	
9/19/2018	<0.001	
3/23/2019		<0.001

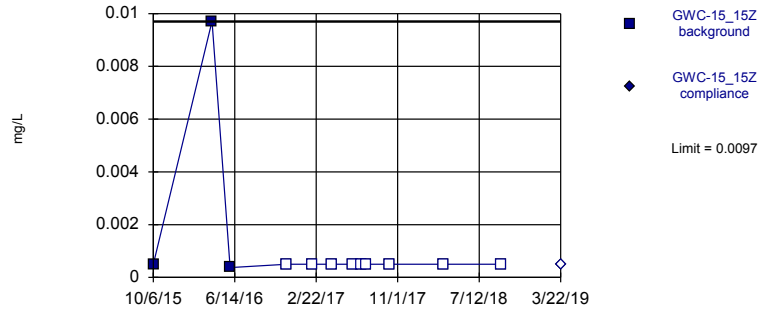
Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
10/7/2015	<0.001 (D)	
4/5/2016	<0.001	
6/1/2016	<0.001	
8/9/2016	<0.001	
11/28/2016	<0.001	
2/9/2017	<0.001	
4/11/2017	<0.001	
6/14/2017	<0.001	
7/12/2017	<0.001	
10/5/2017	<0.001	
3/22/2018	<0.001	
9/19/2018	<0.001	
3/22/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

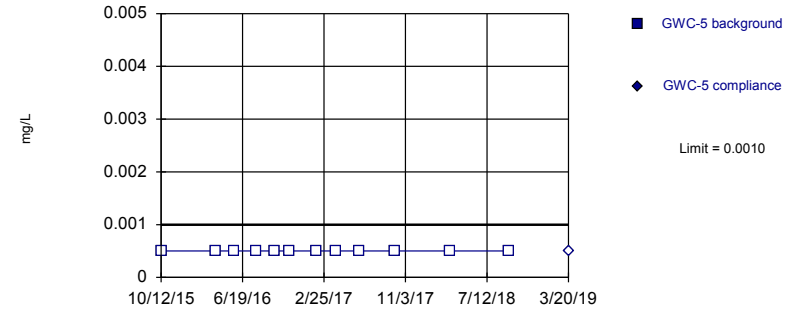


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 75% NDs. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

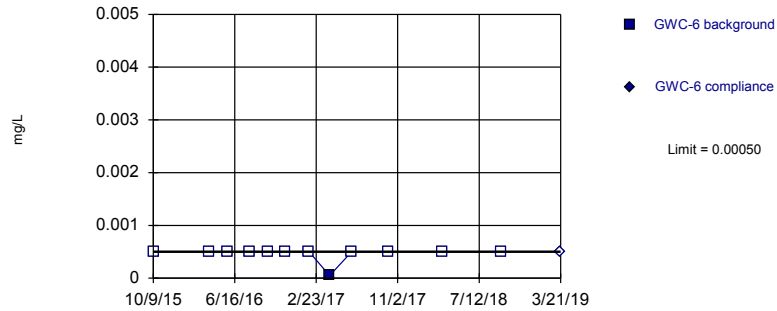


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

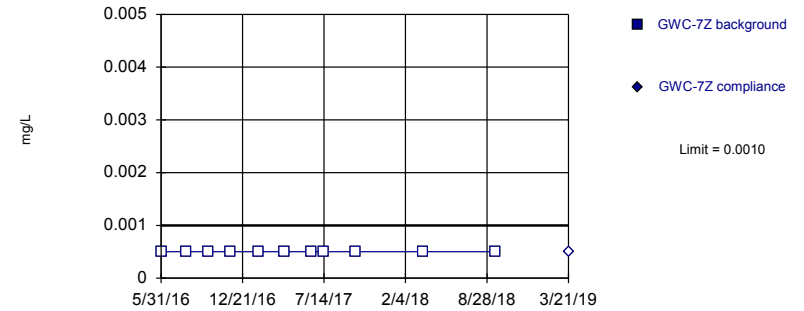


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
10/6/2015	0.0005 (D)	
4/5/2016	0.00971 (J)	
5/31/2016	0.000373 (J)	
11/23/2016	<0.001	
2/10/2017	<0.001	
4/11/2017	<0.001	
6/15/2017	<0.001	
7/12/2017	<0.001	
7/26/2017	<0.001	
10/6/2017	<0.001	
3/23/2018	<0.001	
9/19/2018	<0.001	
3/22/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
10/12/2015	<0.001	
3/28/2016	<0.001	
5/25/2016	<0.001	
8/1/2016	<0.001	
9/27/2016	<0.001	
11/11/2016	<0.001	
1/31/2017	<0.001	
4/3/2017	<0.001	
6/12/2017	<0.001	
10/3/2017	<0.001	
3/19/2018	<0.001	
9/17/2018	<0.001	
3/20/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
10/9/2015	<0.001	
3/29/2016	<0.001	
5/24/2016	<0.001	
8/1/2016	<0.001	
9/26/2016	<0.001	
11/18/2016	<0.001	
2/1/2017	<0.001	
4/6/2017	5E-05 (J)	
6/13/2017	<0.001	
10/3/2017	<0.001	
3/19/2018	<0.001	
9/17/2018	<0.001	
3/21/2019		<0.001

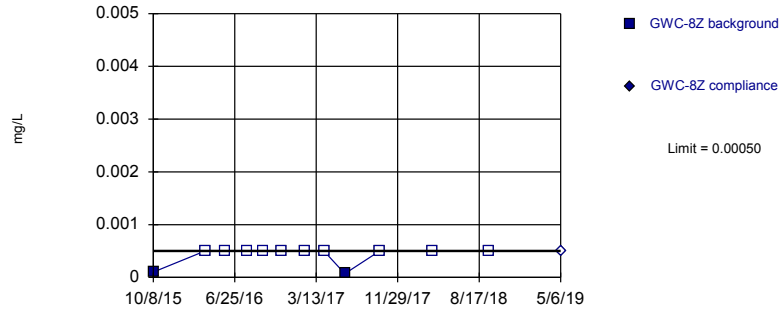
Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	<0.001	
8/2/2016	<0.001	
9/27/2016	<0.001	
11/21/2016	<0.001	
2/1/2017	<0.001	
4/6/2017	<0.001	
6/13/2017	<0.001	
7/14/2017	<0.001	
10/3/2017	<0.001	
3/20/2018	<0.001	
9/18/2018	<0.001	
3/21/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

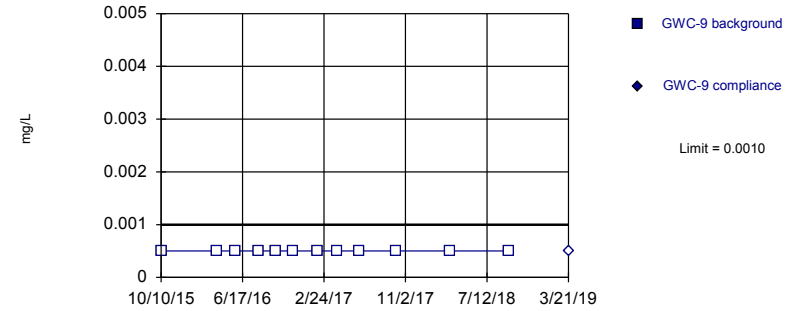


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

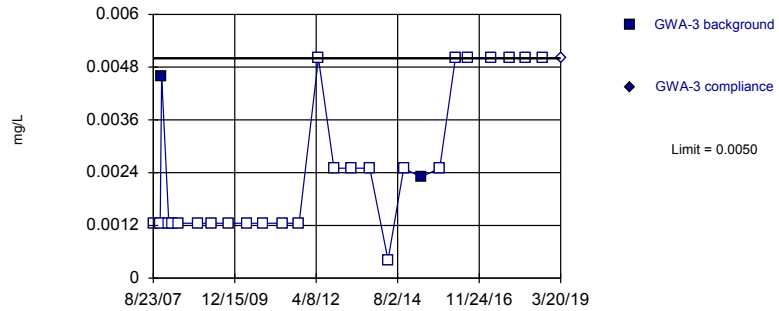


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

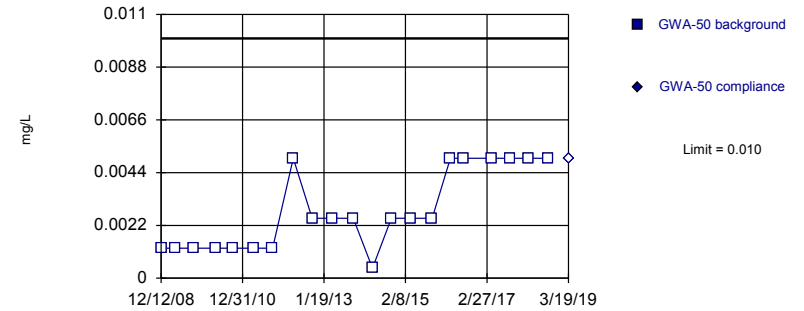


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 92.59% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 21) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.001022. Individual comparison alpha = 0.000511 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
10/8/2015	0.0001 (D)	
3/22/2016	<0.001	
5/25/2016	<0.001	
8/2/2016	<0.001	
9/26/2016	<0.001	
11/21/2016	<0.001	
2/3/2017	<0.001	
4/7/2017	<0.001	
6/13/2017	7E-05 (J)	
10/3/2017	<0.001	
3/20/2018	<0.001	
9/18/2018	<0.001	
5/6/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
10/10/2015	<0.001	
3/30/2016	<0.001	
5/26/2016	<0.001	
8/5/2016	<0.001	
9/28/2016	<0.001	
11/21/2016	<0.001	
2/6/2017	<0.001	
4/6/2017	<0.001	
6/13/2017	<0.001	
10/3/2017	<0.001	
3/20/2018	<0.001	
9/18/2018	<0.001 (D)	
3/21/2019		<0.001

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	<0.0025	
11/2/2007	<0.0025	
11/18/2007	0.0046	
1/31/2008	<0.0025	
3/11/2008	<0.0025	
5/14/2008	<0.0025	
12/5/2008	<0.0025	
4/15/2009	<0.0025	
10/8/2009	<0.0025	
4/28/2010	<0.0025	
10/6/2010	<0.0025	
4/21/2011	<0.0025	
10/13/2011	<0.0025	
5/1/2012	<0.01	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/23/2014	<0.000825	
10/4/2014	<0.005	
3/31/2015	0.0023 (J)	
10/12/2015	<0.005	
3/23/2016	<0.01	
7/29/2016	<0.01	
3/30/2017	<0.01	
10/4/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

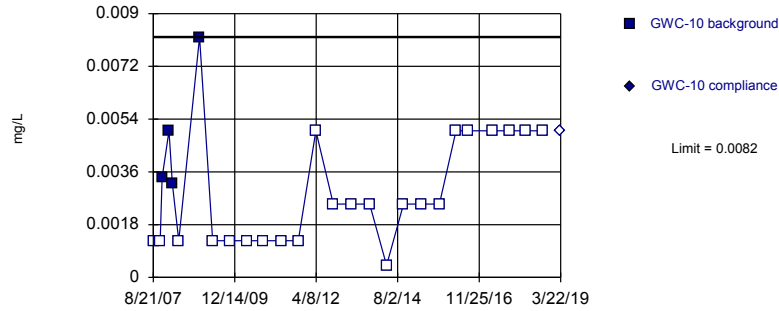
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	<0.0025	
4/23/2009	<0.0025	
10/6/2009	<0.0025	
4/27/2010	<0.0025	
9/30/2010	<0.0025	
4/14/2011	<0.0025	
10/5/2011	<0.0025	
4/11/2012	<0.01	
10/2/2012	<0.005	
4/9/2013	<0.005	
10/15/2013	<0.005	
4/10/2014	<0.000825	
10/1/2014	<0.005	
3/30/2015	<0.005	
10/11/2015	<0.005	
3/28/2016	<0.01	
8/1/2016	<0.01	
4/7/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01	
3/19/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

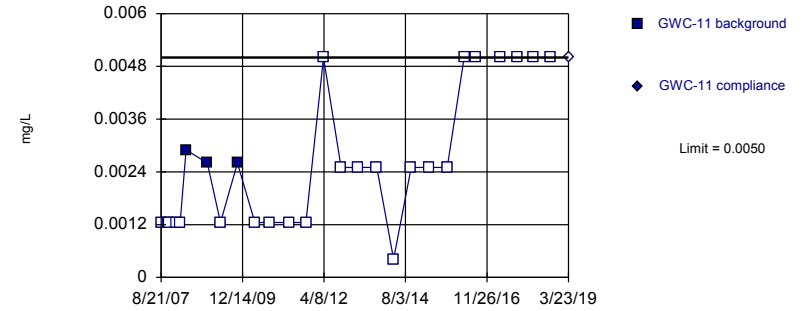


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

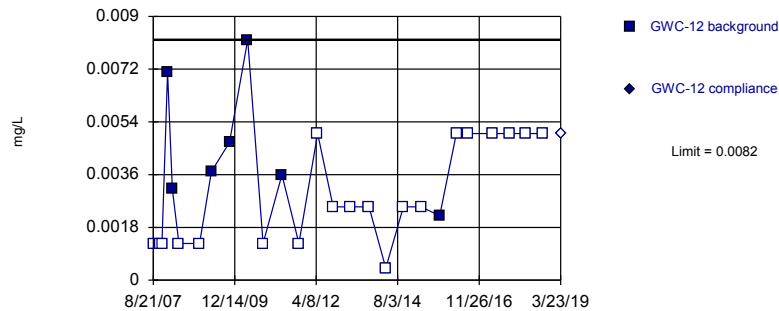


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

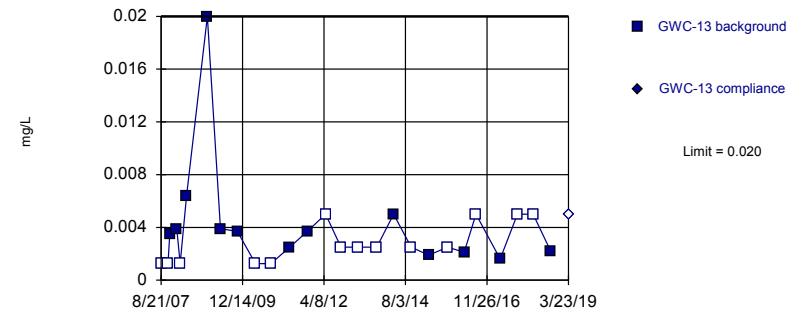


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 51.85% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/20/2007	0.0034	
1/30/2008	0.005	
3/6/2008	0.0032	
5/12/2008	<0.0025	
12/13/2008	0.0082	
4/29/2009	<0.0025	
10/20/2009	<0.0025	
4/26/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/4/2012	<0.01	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.000825	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	<0.005	
3/31/2016	<0.01	
8/5/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	0.0029	
12/14/2008	0.0026	
4/29/2009	<0.0025	
10/22/2009	0.0026	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.01	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/9/2013	<0.005	
4/2/2014	<0.000825	
10/2/2014	<0.005	
4/1/2015	<0.005	
10/11/2015	<0.005	
4/4/2016	<0.01	
8/3/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	<0.0025	
1/16/2008	0.0071	
3/5/2008	0.0031	
5/13/2008	<0.0025	
12/13/2008	<0.0025	
4/16/2009	0.0037	
10/21/2009	0.0047	
4/27/2010	0.0082	
10/5/2010	<0.0025	
4/19/2011	0.0036	
10/12/2011	<0.0025	
4/24/2012	<0.01	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/9/2013	<0.005	
4/1/2014	<0.000825	
10/2/2014	<0.005	
4/1/2015	<0.005	
10/14/2015	0.0022 (J)	
4/4/2016	<0.01	
8/3/2016	<0.01	
4/11/2017	<0.01	
10/4/2017	<0.01	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

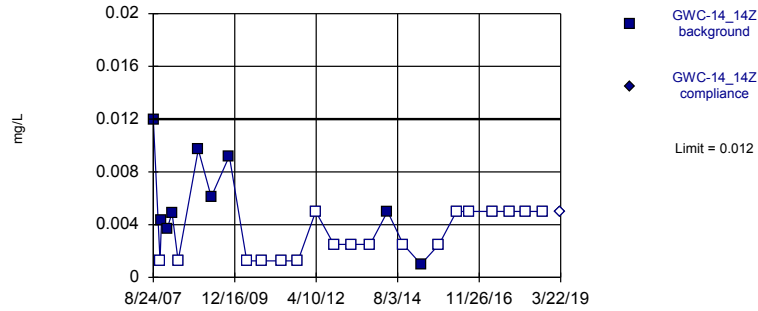
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	0.0035	
1/31/2008	0.0039	
3/5/2008	<0.0025	
5/12/2008	0.0064	
12/13/2008	0.02	
4/28/2009	0.0039	
10/21/2009	0.0037	
4/28/2010	<0.0025	
10/5/2010	<0.0025	
4/19/2011	0.0025	
10/18/2011	0.0037	
4/25/2012	<0.01	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/8/2013	<0.005	
4/1/2014	0.005 (J)	
10/1/2014	<0.005	
4/1/2015	0.0019 (J)	
10/15/2015	<0.005	
4/4/2016	0.00211 (J)	
8/4/2016	<0.01	
4/12/2017	0.0016 (J)	
10/9/2017	<0.01	
3/21/2018	<0.01	
9/19/2018	0.0022 (J)	
3/23/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

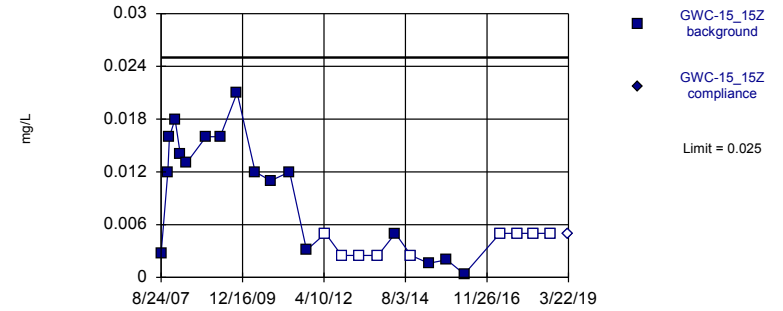


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

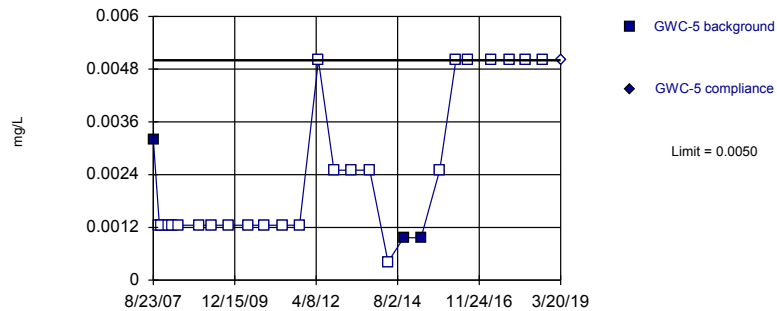


Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.06179, Std. Dev.=0.05532, n=26, 34.62% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9196, critical = 0.891. Kappa = 1.748 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

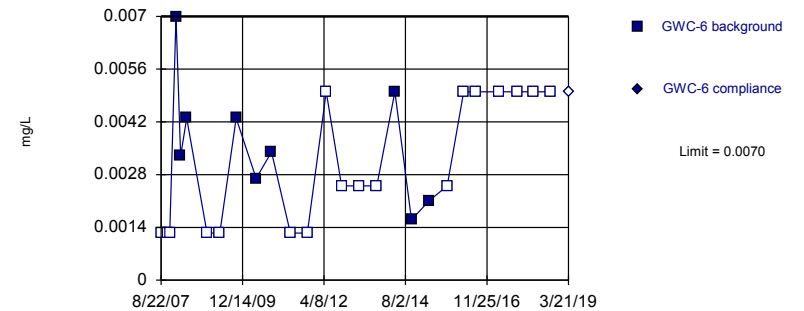


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:10 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	0.012	
11/2/2007	<0.0025	
11/17/2007	0.0043	
1/15/2008	0.0037	
3/5/2008	0.0049	
5/7/2008	<0.0025	
12/2/2008	0.0097	
4/16/2009	0.0061	
10/20/2009	0.0092	
4/20/2010	<0.0025	
9/29/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/4/2012	<0.01	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	0.005 (J)	
9/30/2014	<0.005	
4/3/2015	0.001 (J)	
10/7/2015	<0.005	
4/5/2016	<0.01	
8/9/2016	<0.01	
4/11/2017	<0.01	
10/5/2017	<0.01	
3/22/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	0.0027	
11/2/2007	0.012	
11/18/2007	0.016 (J)	
1/15/2008	0.018	
3/10/2008	0.014	
5/13/2008	0.013	
12/2/2008	0.016	
4/28/2009	0.016	
10/20/2009	0.021	
4/27/2010	0.012	
10/5/2010	0.011	
4/19/2011	0.012	
10/12/2011	0.0031	
4/25/2012	<0.01	
10/10/2012	<0.005	
4/16/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	0.005 (J)	
9/30/2014	<0.005	
4/3/2015	0.0016 (J)	
10/6/2015	0.002 (J)	
4/5/2016	0.00036 (J)	
4/11/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	0.0032	
10/25/2007	<0.0025	
11/19/2007	<0.0025	
1/23/2008	<0.0025	
3/11/2008	<0.0025	
5/12/2008	<0.0025	
12/11/2008	<0.0025	
4/15/2009	<0.0025	
10/9/2009	<0.0025	
5/4/2010	<0.0025	
10/12/2010	<0.0025	
4/28/2011	<0.0025	
10/19/2011	<0.0025	
5/2/2012	<0.01	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/23/2014	<0.000825	
10/3/2014	0.00097 (J)	
3/31/2015	0.00096 (J)	
10/12/2015	<0.005	
3/28/2016	<0.01	
8/1/2016	<0.01	
4/3/2017	<0.01	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/20/2019		<0.01

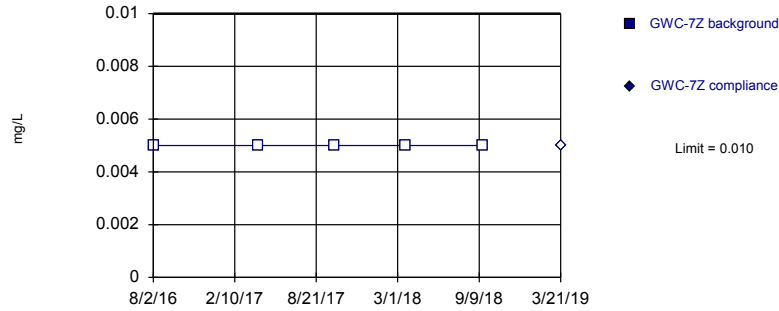
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	<0.0025	
10/25/2007	<0.0025	
11/20/2007	<0.0025	
1/23/2008	0.007	
3/11/2008	0.0033	
5/14/2008	0.0043	
12/11/2008	<0.0025	
4/23/2009	<0.0025	
10/9/2009	0.0043	
5/4/2010	0.0027	
10/11/2010	0.0034	
4/26/2011	<0.0025	
10/18/2011	<0.0025	
5/2/2012	<0.01	
10/8/2012	<0.005	
4/10/2013	<0.005	
10/8/2013	<0.005	
4/14/2014	0.005 (J)	
10/3/2014	0.0016 (J)	
4/1/2015	0.0021 (J)	
10/9/2015	<0.005	
3/29/2016	<0.01	
8/1/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

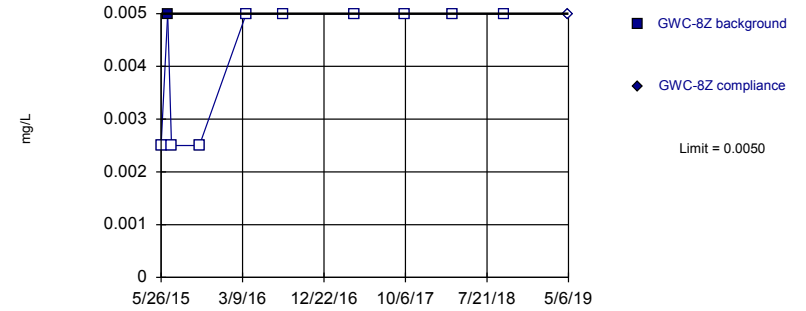


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

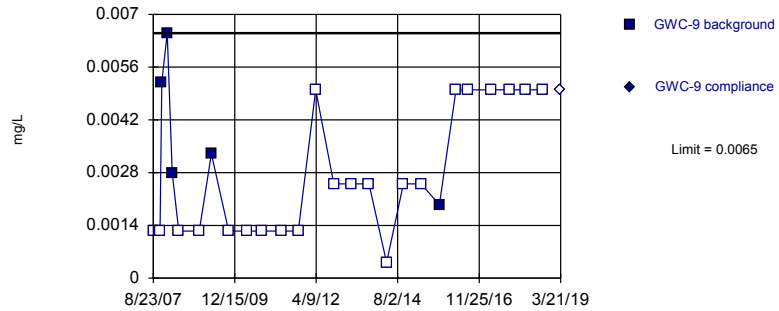


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

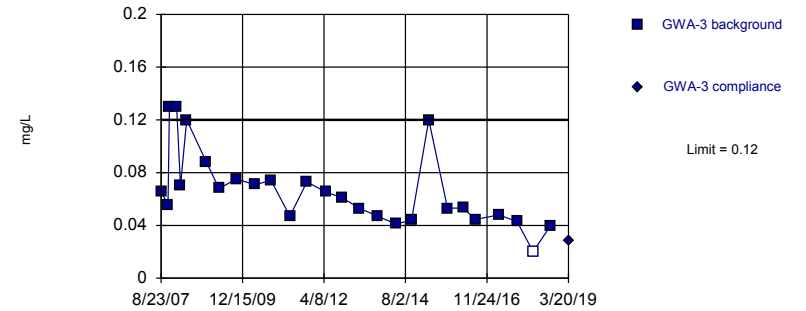


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.2529, Std. Dev.=0.05307, n=27, 3.704% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9211, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
8/2/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
5/26/2015	<0.005	
6/18/2015	0.005 (D)	
7/2/2015	<0.005	
10/8/2015	<0.005	
3/22/2016	<0.01	
8/2/2016	<0.01	
4/7/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
5/6/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
8/23/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	0.0052	
1/15/2008	0.0065	
3/6/2008	0.0028	
5/13/2008	<0.0025	
12/12/2008	<0.0025	
4/16/2009	0.0033	
10/13/2009	<0.0025	
4/21/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/4/2012	<0.01	
10/8/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/9/2014	<0.000825	
9/30/2014	<0.005	
4/2/2015	<0.005	
10/10/2015	0.00195 (D)	
3/30/2016	<0.01	
8/5/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01 (D)	
3/21/2019		<0.01

Prediction Limit

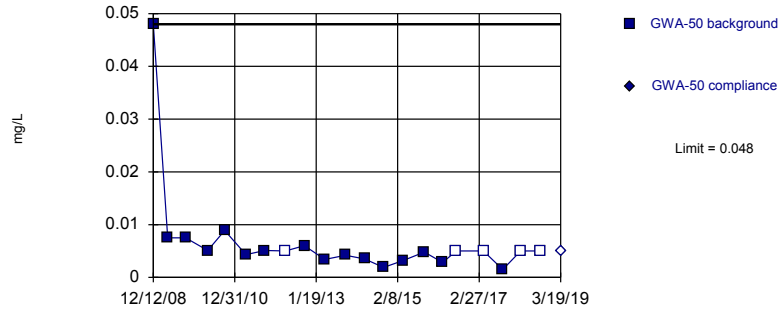
Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3	GWA-3
8/23/2007	0.066	
11/2/2007	0.055	
11/18/2007	0.13	
1/31/2008	0.13	
3/11/2008	0.07	
5/14/2008	0.12	
12/5/2008	0.088	
4/15/2009	0.068	
10/8/2009	0.075	
4/28/2010	0.071	
10/6/2010	0.074	
4/21/2011	0.047	
10/13/2011	0.073	
5/1/2012	0.0652	
10/9/2012	0.061	
4/11/2013	0.053	
10/16/2013	0.047	
4/23/2014	0.041	
10/4/2014	0.044 (V)	
3/31/2015	0.12	
10/12/2015	0.053	
3/23/2016	0.0532	
7/29/2016	0.0446	
3/30/2017	0.0479	
10/4/2017	0.0429	
3/19/2018	<0.04	
9/17/2018	0.04	
3/20/2019		0.028

Within Limit

Prediction Limit
Intrawell Non-parametric

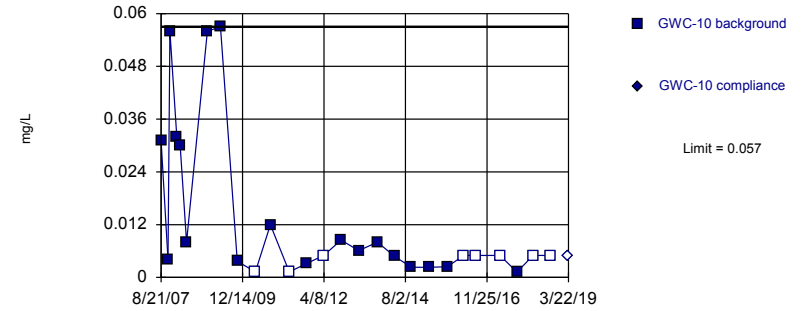


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 23.81% NDs. Well-constituent pair annual alpha = 0.001022. Individual comparison alpha = 0.000511 (1 of 3).

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

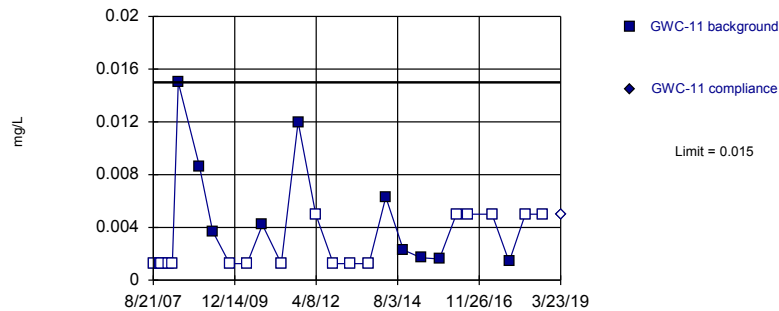


Non-parametric test used after natural log transformation resulted in a parametric limit of 2.44, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 27 background values. 29.63% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

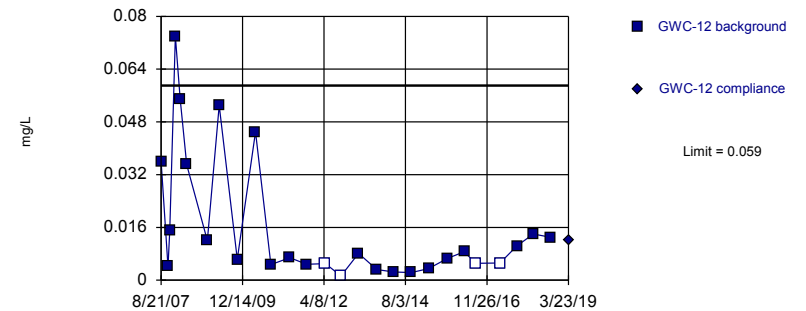


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 62.96% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-4.698, Std. Dev.=1.074, n=27, 14.81% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.947, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50	GWA-50
12/12/2008	0.048 (J)	
4/23/2009	0.0075	
10/6/2009	0.0075	
4/27/2010	0.0051	
9/30/2010	0.0089	
4/14/2011	0.0043	
10/5/2011	0.0051	
4/11/2012	<0.01	
10/2/2012	0.006	
4/9/2013	0.0034	
10/15/2013	0.0042	
4/10/2014	0.0035	
10/1/2014	0.0019 (J)	
3/30/2015	0.0032	
10/11/2015	0.0048	
3/28/2016	0.00282 (J)	
8/1/2016	<0.01 (*)	
4/7/2017	<0.01 (*)	
10/2/2017	0.0015 (J)	
3/16/2018	<0.01	
9/17/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
8/21/2007	0.031	
11/1/2007	0.0041	
11/20/2007	0.056	
1/30/2008	0.032	
3/6/2008	0.03	
5/12/2008	0.008	
12/13/2008	0.056	
4/29/2009	0.057	
10/20/2009	0.0037	
4/26/2010	<0.0025	
9/29/2010	0.012	
4/13/2011	<0.0025	
10/5/2011	0.0031	
4/4/2012	<0.01	
10/3/2012	0.0085	
4/3/2013	0.0061	
10/15/2013	0.008	
4/9/2014	0.0048	
10/2/2014	0.0023 (JV)	
4/2/2015	0.0023 (J)	
10/10/2015	0.0024 (J)	
3/31/2016	<0.01	
8/5/2016	<0.01 (*)	
4/10/2017	<0.01	
10/4/2017	0.0012 (J)	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	0.015	
12/14/2008	0.0086 (J)	
4/29/2009	0.0037	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	0.0042	
4/12/2011	<0.0025	
10/4/2011	0.012	
4/3/2012	<0.01	
10/3/2012	<0.0025	
4/3/2013	<0.0025	
10/9/2013	<0.0025	
4/2/2014	0.0063	
10/2/2014	0.0023 (J)	
4/1/2015	0.0017 (J)	
10/11/2015	0.0016 (J)	
4/4/2016	<0.01	
8/3/2016	<0.01 (*)	
4/10/2017	<0.01	
10/4/2017	0.0014 (J)	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

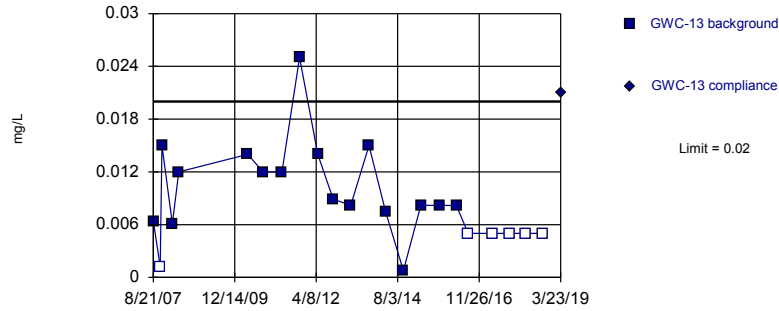
Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
8/21/2007	0.036	
11/1/2007	0.0041	
11/19/2007	0.015	
1/16/2008	0.074	
3/5/2008	0.055	
5/13/2008	0.035	
12/13/2008	0.012 (J)	
4/16/2009	0.053	
10/21/2009	0.0063	
4/27/2010	0.045	
10/5/2010	0.0047	
4/19/2011	0.0068	
10/12/2011	0.0048	
4/24/2012	<0.01	
10/2/2012	<0.0025	
4/2/2013	0.0081	
10/9/2013	0.0032	
4/1/2014	0.0025 (J)	
10/2/2014	0.0023 (J)	
4/1/2015	0.0035	
10/14/2015	0.0066	
4/4/2016	0.00858 (J)	
8/3/2016	<0.0102 (*)	
4/11/2017	<0.0104 (*)	
10/4/2017	0.0104	
3/22/2018	0.014	
9/18/2018	0.013	
3/23/2019		0.012

Exceeds Limit

Prediction Limit
Intrawell Parametric

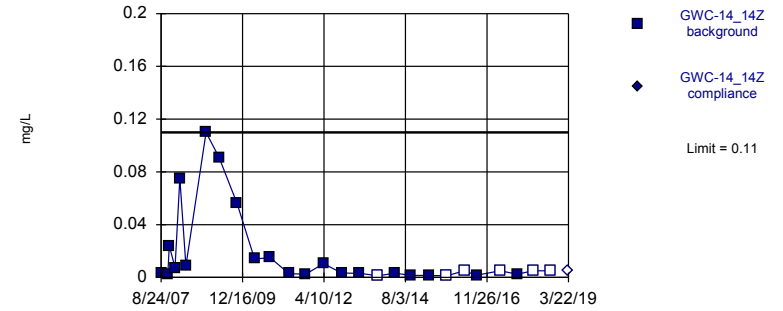


Background Data Summary (after Aitchison's Adjustment): Mean=0.007885, Std. Dev.=0.006573, n=23, 26.09% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9131, critical = 0.881. Kappa = 1.789 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

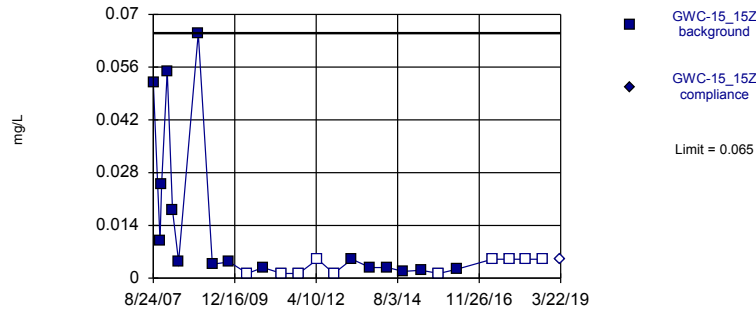


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 22.22% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

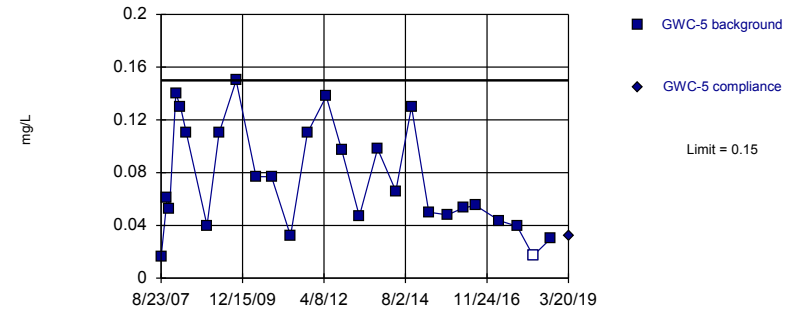


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. 38.46% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.07475, Std. Dev.=0.04045, n=27, 3.704% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9238, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
8/21/2007	0.0064	
11/1/2007	<0.0025	
11/19/2007	0.015	
1/31/2008	0.032 (o)	
3/5/2008	0.0061	
5/12/2008	0.012	
12/13/2008	0.087 (o)	
4/28/2009	0.067 (o)	
10/21/2009	0.025 (o)	
4/28/2010	0.014	
10/5/2010	0.012	
4/19/2011	0.012	
10/18/2011	0.025	
4/25/2012	0.014	
10/2/2012	0.0089	
4/2/2013	0.0082	
10/8/2013	0.015	
4/1/2014	0.0074	
10/1/2014	0.00077 (J)	
4/1/2015	0.0082	
10/15/2015	0.0082	
4/4/2016	0.00818 (J)	
8/4/2016	<0.01 (*)	
4/12/2017	<0.01 (*)	
10/9/2017	<0.01	
3/21/2018	<0.01	
9/19/2018	<0.01	
3/23/2019		0.021

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
8/24/2007	0.0036 (J)	
11/2/2007	0.0026 (J)	
11/17/2007	0.024	
1/15/2008	0.0074	
3/5/2008	0.075	
5/7/2008	0.0088	
12/2/2008	0.11	
4/16/2009	0.091	
10/20/2009	0.056	
4/20/2010	0.014	
9/29/2010	0.015	
4/12/2011	0.0028	
10/4/2011	0.0025	
4/4/2012	0.0105	
10/10/2012	0.0033	
4/15/2013	0.0031	
10/22/2013	<0.0025	
4/21/2014	0.0032	
9/30/2014	0.0015 (J)	
4/3/2015	0.0015 (J)	
10/7/2015	<0.0025	
4/5/2016	<0.01	
8/9/2016	0.0016 (J)	
4/11/2017	<0.01 (*)	
10/5/2017	0.0024 (J)	
3/22/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
8/24/2007	0.052	
11/2/2007	0.01 (J)	
11/18/2007	0.025 (J)	
1/15/2008	0.055	
3/10/2008	0.018	
5/13/2008	0.0044	
12/2/2008	0.065	
4/28/2009	0.0037 (J)	
10/20/2009	0.0043	
4/27/2010	<0.0025	
10/5/2010	0.0028	
4/19/2011	<0.0025	
10/12/2011	<0.0025	
4/25/2012	<0.01	
10/10/2012	<0.0025	
4/16/2013	0.005	
10/22/2013	0.0028	
4/21/2014	0.0028	
9/30/2014	0.0018 (J)	
4/3/2015	0.0021 (J)	
10/6/2015	<0.0025	
4/5/2016	0.00233 (J)	
4/11/2017	<0.01 (*)	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

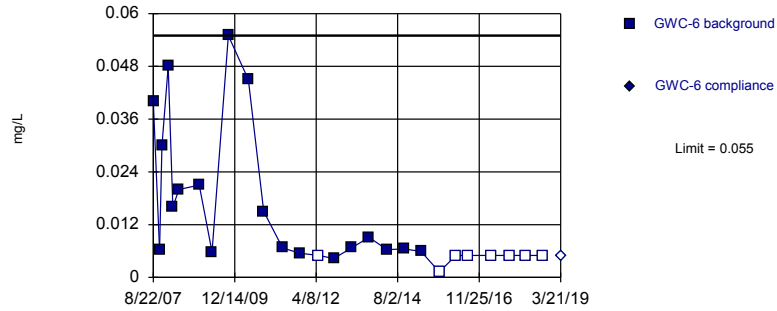
Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
8/23/2007	0.016	
10/25/2007	0.061	
11/19/2007	0.053	
1/23/2008	0.14	
3/11/2008	0.13	
5/12/2008	0.11	
12/11/2008	0.04 (J)	
4/15/2009	0.11	
10/9/2009	0.15	
5/4/2010	0.077	
10/12/2010	0.077	
4/28/2011	0.032	
10/19/2011	0.11	
5/2/2012	0.138	
10/9/2012	0.097	
4/11/2013	0.047	
10/16/2013	0.098	
4/23/2014	0.066	
10/3/2014	0.13 (V)	
3/31/2015	0.05	
10/12/2015	0.048	
3/28/2016	0.0534	
8/1/2016	0.055	
4/3/2017	0.0436	
10/3/2017	0.0393	
3/19/2018	<0.034	
9/17/2018	0.03	
3/20/2019		0.032

Within Limit

Prediction Limit
Intrawell Non-parametric

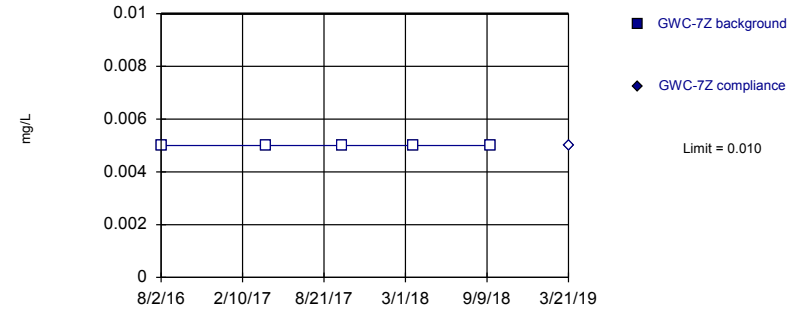


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 29.63% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

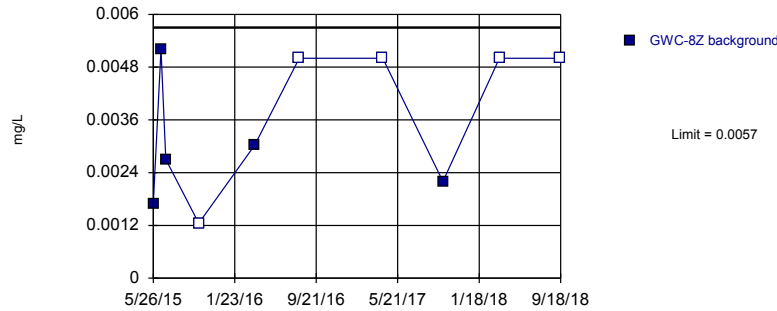
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

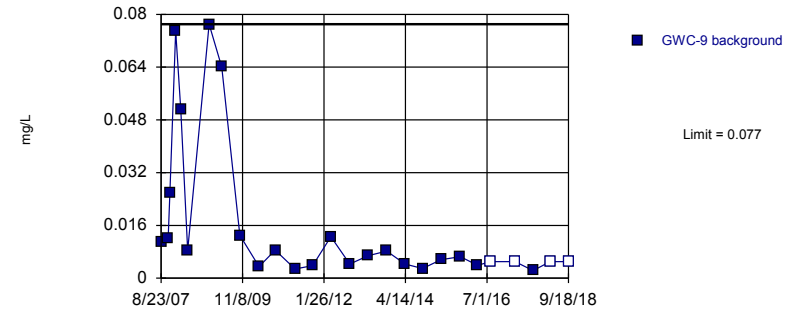
Prediction Limit
Intrawell Parametric, GWC-8Z



Background Data Summary (after Aitchison's Adjustment): Mean=0.001482, Std. Dev.=0.001802, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8217, critical = 0.781. Kappa = 2.329 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-9



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 14.81% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3). Assumes 1 future value.

Constituent: Zinc Analysis Run 8/28/2019 9:11 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
8/22/2007	0.04	
10/25/2007	0.0062	
11/20/2007	0.03	
1/23/2008	0.048	
3/11/2008	0.016	
5/14/2008	0.02	
12/11/2008	0.021 (J)	
4/23/2009	0.0058 (J)	
10/9/2009	0.055	
5/4/2010	0.045	
10/11/2010	0.015	
4/26/2011	0.0067	
10/18/2011	0.0055	
5/2/2012	<0.01	
10/8/2012	0.0043	
4/10/2013	0.0067	
10/8/2013	0.0091	
4/14/2014	0.0063	
10/3/2014	0.0065 (V)	
4/1/2015	0.0059	
10/9/2015	<0.0025	
3/29/2016	<0.01	
8/1/2016	<0.01	
4/6/2017	<0.01 (*)	
10/3/2017	<0.01	
3/19/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
8/2/2016	<0.01 (*)	
4/6/2017	<0.01 (*)	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z
5/26/2015	0.0017 (J)
6/18/2015	0.0052 (D)
7/2/2015	0.0027
10/8/2015	<0.0025
3/22/2016	0.00302 (J)
8/2/2016	<0.01 (*)
4/7/2017	<0.01 (*)
10/3/2017	0.0022 (J)
3/20/2018	<0.01
9/18/2018	<0.01
5/6/2019	0.0024 (X)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 9:15 AM View: 1&2 overburden metals 1of3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9
8/23/2007	0.011
11/1/2007	0.012
11/19/2007	0.026 (J)
1/15/2008	0.075
3/6/2008	0.051
5/13/2008	0.0084
12/12/2008	0.077
4/16/2009	0.064
10/13/2009	0.013
4/21/2010	0.0035
9/29/2010	0.0085
4/13/2011	0.0028
10/5/2011	0.0038
4/4/2012	0.0126
10/8/2012	0.0043
4/8/2013	0.0068
10/9/2013	0.0082
4/9/2014	0.0043
9/30/2014	0.0029
4/2/2015	0.0056
10/10/2015	0.0065 (D)
3/30/2016	0.00388 (J)
8/5/2016	<0.01 (*)
4/6/2017	<0.01 (*)
10/3/2017	0.0023 (J)
3/20/2018	<0.01
9/18/2018	<0.01 (D)
3/21/2019	0.0024 (X)

Intrawell Prediction Limit Summary Table – Significant Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/23/2019, 2:43 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	GWA-4RZ	0.035	n/a	3/21/2019	0.04	Yes	11	0	No	0.000...	Param 1 of 2

Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/23/2019, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GWA-1	0.017	n/a	3/20/2019	0.0015ND	No	32	46.88	n/a	0.001803	NP (normality) 1 of 2
Antimony (mg/L)	GWA-2	0.0030	n/a	3/20/2019	0.0015ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-2R	0.021	n/a	n/a	1 future	n/a	32	53.13	n/a	0.001803	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-50R	0.0030	n/a	3/19/2019	0.0015ND	No	26	100	n/a	0.002667	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-10R	0.0037	n/a	3/22/2019	0.0015ND	No	32	93.75	n/a	0.001803	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-11R	0.0087	n/a	3/23/2019	0.0015ND	No	32	78.13	n/a	0.001803	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-15R	0.011	n/a	3/25/2019	0.0015ND	No	32	53.13	n/a	0.001803	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-6RZ	0.036	n/a	3/21/2019	0.0015ND	No	15	80	n/a	0.007533	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-8RR	0.0025	n/a	3/27/2019	0.0015ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-4RZ	0.0018	n/a	3/21/2019	0.0015ND	No	11	63.64	n/a	0.01276	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-13R_13RZ	0.018	n/a	n/a	1 future	n/a	32	50	n/a	0.001803	NP (normality) 1 of 2
Arsenic (mg/L)	GWA-1	0.0025	n/a	3/20/2019	0.0025ND	No	32	93.75	n/a	0.001803	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-2	0.012	n/a	3/20/2019	0.0025ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-2R	0.0056	n/a	3/19/2019	0.0025ND	No	32	78.13	n/a	0.001803	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-50R	0.012	n/a	3/19/2019	0.0025ND	No	26	96.15	n/a	0.002667	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-10R	0.0050	n/a	3/22/2019	0.0025ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-11R	0.0077	n/a	n/a	1 future	n/a	32	50	n/a	0.001803	NP (normality) 1 of 2
Arsenic (mg/L)	GWC-15R	0.0025	n/a	3/25/2019	0.0025ND	No	32	93.75	n/a	0.001803	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-6RZ	0.0050	n/a	3/21/2019	0.0025ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-8RR	0.0029	n/a	3/27/2019	0.0025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-4RZ	0.0024	n/a	3/21/2019	0.0025ND	No	11	27.27	No	0.000...	Param 1 of 2
Arsenic (mg/L)	GWC-13R_13RZ	0.020	n/a	n/a	1 future	n/a	32	62.5	n/a	0.001803	NP (NDs) 1 of 2
Barium (mg/L)	GWA-1	0.15	n/a	3/20/2019	0.019	No	32	0	n/a	0.001803	NP (normality) 1 of 2
Barium (mg/L)	GWA-2	0.13	n/a	n/a	1 future	n/a	32	0	ln(x)	0.000...	Param 1 of 2
Barium (mg/L)	GWA-2R	0.025	n/a	3/19/2019	0.024	No	30	0	x^(1/3)	0.000...	Param 1 of 2
Barium (mg/L)	GWA-50R	0.022	n/a	3/19/2019	0.013	No	23	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-10R	0.035	n/a	3/22/2019	0.022	No	32	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-11R	0.022	n/a	3/23/2019	0.019	No	32	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-15R	0.051	n/a	3/25/2019	0.021	No	32	0	n/a	0.001803	NP (normality) 1 of 2
Barium (mg/L)	GWC-6RZ	0.019	n/a	n/a	1 future	n/a	15	6.667	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-8RR	0.024	n/a	3/27/2019	0.014	No	20	0	n/a	0.004291	NP (normality) 1 of 2
Barium (mg/L)	GWA-4RZ	0.035	n/a	3/21/2019	0.04	Yes	11	0	No	0.000...	Param 1 of 2
Beryllium (mg/L)	GWA-1	0.0015	n/a	3/20/2019	0.0015ND	No	14	92.86	n/a	0.008612	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-2	0.0030	n/a	3/20/2019	0.0015ND	No	14	100	n/a	0.008612	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-2R	0.0030	n/a	3/19/2019	0.0015ND	No	14	100	n/a	0.008612	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-50R	0.0015	n/a	3/19/2019	0.0015ND	No	14	92.86	n/a	0.008612	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-10R	0.0030	n/a	3/22/2019	0.0015ND	No	14	100	n/a	0.008612	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-11R	0.0030	n/a	3/23/2019	0.0015ND	No	14	100	n/a	0.008612	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-15R	0.0030	n/a	3/25/2019	0.0015ND	No	14	100	n/a	0.008612	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-6RZ	0.0015	n/a	n/a	1 future	n/a	15	80	n/a	0.007533	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-8RR	0.0015	n/a	3/27/2019	0.0015ND	No	14	92.86	n/a	0.008612	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-4RZ	0.0030	n/a	3/21/2019	0.0015ND	No	11	100	n/a	0.01276	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-13R_13RZ	0.0030	n/a	3/22/2019	0.0015ND	No	14	100	n/a	0.008612	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-1	0.00065	n/a	3/20/2019	0.0005ND	No	32	93.75	n/a	0.001803	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-2	0.0010	n/a	3/20/2019	0.0005ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-2R	0.0010	n/a	3/19/2019	0.0005ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-50R	0.0010	n/a	3/19/2019	0.0005ND	No	26	100	n/a	0.002667	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-10R	0.00065	n/a	3/22/2019	0.0005ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-11R	0.00065	n/a	3/23/2019	0.0005ND	No	32	93.75	n/a	0.001803	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-15R	0.027	n/a	3/25/2019	0.0005ND	No	32	84.38	n/a	0.001803	NP (NDs) 1 of 2

Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/23/2019, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Cadmium (mg/L)	GWC-6RZ	0.0010	n/a	3/21/2019	0.0005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-8RR	0.0010	n/a	3/27/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-4RZ	0.0010	n/a	3/21/2019	0.0005ND	No	11	100	n/a	0.01276	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-13R_13RZ	0.0010	n/a	3/22/2019	0.0005ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-1	0.11	n/a	3/20/2019	0.005ND	No	32	65.63	n/a	0.001803	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-2	0.059	n/a	3/20/2019	0.005ND	No	32	59.38	n/a	0.001803	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-2R	0.012	n/a	3/19/2019	0.005ND	No	31	83.87	n/a	0.001905	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-50R	0.0050	n/a	3/19/2019	0.005ND	No	26	61.54	n/a	0.002667	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-10R	0.036	n/a	3/22/2019	0.005ND	No	32	75	n/a	0.001803	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-11R	0.051	n/a	n/a	1 future	n/a	32	3.125	sqrt(x)	0.000...	Param 1 of 2
Chromium (mg/L)	GWC-15R	0.031	n/a	3/25/2019	0.005ND	No	32	62.5	n/a	0.001803	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-6RZ	0.0050	n/a	n/a	1 future	n/a	15	33.33	n/a	0.007533	NP (normality) 1 of 2
Chromium (mg/L)	GWC-8RR	0.023	n/a	n/a	1 future	n/a	20	65	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-4RZ	0.010	n/a	3/21/2019	0.005ND	No	11	100	n/a	0.01276	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-13R_13RZ	0.019	n/a	3/22/2019	0.005ND	No	32	71.88	n/a	0.001803	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-1	0.0050	n/a	n/a	1 future	n/a	32	87.5	n/a	0.001803	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-2	0.013	n/a	3/20/2019	0.005ND	No	32	90.63	n/a	0.001803	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-2R	0.010	n/a	3/19/2019	0.005ND	No	31	100	n/a	0.001905	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-50R	0.0050	n/a	3/19/2019	0.005ND	No	26	76.92	n/a	0.002667	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-10R	0.010	n/a	3/22/2019	0.005ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-11R	0.11	n/a	3/23/2019	0.005ND	No	32	90.63	n/a	0.001803	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-15R	0.0050	n/a	3/25/2019	0.005ND	No	32	93.75	n/a	0.001803	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-6RZ	0.010	n/a	3/21/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-8RR	0.0050	n/a	3/27/2019	0.005ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-4RZ	0.022	n/a	3/21/2019	0.022	No	11	9.091	No	0.000...	Param 1 of 2
Cobalt (mg/L)	GWC-13R_13RZ	0.0079	n/a	3/22/2019	0.005ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2
Copper (mg/L)	GWA-1	0.013	n/a	3/20/2019	0.0125ND	No	27	55.56	n/a	0.002502	NP (NDs) 1 of 2
Copper (mg/L)	GWA-2	0.013	n/a	3/20/2019	0.0125ND	No	27	70.37	n/a	0.002502	NP (NDs) 1 of 2
Copper (mg/L)	GWA-2R	0.013	n/a	3/19/2019	0.0125ND	No	26	69.23	n/a	0.002667	NP (NDs) 1 of 2
Copper (mg/L)	GWA-50R	0.034	n/a	n/a	1 future	n/a	20	5	No	0.000...	Param 1 of 2
Copper (mg/L)	GWC-10R	0.013	n/a	3/22/2019	0.0125ND	No	27	81.48	n/a	0.002502	NP (NDs) 1 of 2
Copper (mg/L)	GWC-11R	0.013	n/a	3/23/2019	0.0125ND	No	26	76.92	n/a	0.002667	NP (NDs) 1 of 2
Copper (mg/L)	GWC-15R	0.013	n/a	3/25/2019	0.0125ND	No	26	73.08	n/a	0.002667	NP (NDs) 1 of 2
Copper (mg/L)	GWC-6RZ	0.025	n/a	3/21/2019	0.0125ND	No	10	100	n/a	0.01476	NP (NDs) 1 of 2
Copper (mg/L)	GWC-8RR	0.013	n/a	3/27/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-4RZ	0.013	n/a	3/21/2019	0.0125ND	No	4	75	n/a	0.06138	NP (NDs) 1 of 2
Copper (mg/L)	GWC-13R_13RZ	0.013	n/a	3/22/2019	0.0125ND	No	26	80.77	n/a	0.002667	NP (NDs) 1 of 2
Lead (mg/L)	GWA-1	0.0065	n/a	3/20/2019	0.0025ND	No	32	81.25	n/a	0.001803	NP (NDs) 1 of 2
Lead (mg/L)	GWA-2	0.0065	n/a	3/20/2019	0.0025ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2
Lead (mg/L)	GWA-2R	0.0050	n/a	3/19/2019	0.0025ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Lead (mg/L)	GWA-50R	0.0065	n/a	3/19/2019	0.0025ND	No	26	96.15	n/a	0.002667	NP (NDs) 1 of 2
Lead (mg/L)	GWC-10R	0.0050	n/a	3/22/2019	0.0025ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Lead (mg/L)	GWC-11R	0.0050	n/a	3/23/2019	0.0025ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Lead (mg/L)	GWC-15R	0.0065	n/a	n/a	1 future	n/a	32	81.25	n/a	0.001803	NP (NDs) 1 of 2
Lead (mg/L)	GWC-6RZ	0.0065	n/a	3/21/2019	0.0025ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Lead (mg/L)	GWC-8RR	0.0065	n/a	3/27/2019	0.0025ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-4RZ	0.0025	n/a	3/21/2019	0.0025ND	No	11	90.91	n/a	0.01276	NP (NDs) 1 of 2
Lead (mg/L)	GWC-13R_13RZ	0.0065	n/a	3/22/2019	0.0025ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-1	0.00050	n/a	3/20/2019	0.00025ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-2	0.00030	n/a	3/20/2019	0.00025ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2

Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/23/2019, 2:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Mercury (mg/L)	GWA-2R	0.00050	n/a	3/19/2019	0.00025ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-50R	0.00050	n/a	3/19/2019	0.00025ND	No	26	100	n/a	0.002667	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-10R	0.00050	n/a	3/22/2019	0.00025ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-11R	0.00050	n/a	3/23/2019	0.00025ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-15R	0.00030	n/a	3/25/2019	0.00025ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-6RZ	0.00050	n/a	3/21/2019	0.00025ND	No	16	100	n/a	0.006456	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-8RR	0.00025	n/a	3/27/2019	0.00025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-4RZ	0.00050	n/a	3/21/2019	0.00025ND	No	11	100	n/a	0.01276	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-13R_13RZ	0.00030	n/a	3/22/2019	0.00025ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-1	0.11	n/a	3/20/2019	0.005ND	No	27	70.37	n/a	0.002502	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-2	0.043	n/a	3/20/2019	0.005ND	No	27	62.96	n/a	0.002502	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-2R	0.054	n/a	3/19/2019	0.005ND	No	27	81.48	n/a	0.002502	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-50R	0.014	n/a	n/a	1 future	n/a	21	4.762	sqrt(x)	0.000...	Param 1 of 2
Nickel (mg/L)	GWC-10R	0.0060	n/a	3/22/2019	0.005ND	No	26	88.46	n/a	0.002667	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-11R	0.0050	n/a	3/23/2019	0.005ND	No	27	92.59	n/a	0.002502	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-15R	0.0056	n/a	n/a	1 future	n/a	24	75	n/a	0.003124	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-6RZ	0.010	n/a	3/21/2019	0.005ND	No	10	100	n/a	0.01476	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-8RR	0.0050	n/a	3/27/2019	0.005ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-4RZ	0.010	n/a	3/21/2019	0.005ND	No	4	100	n/a	0.06138	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-13R_13RZ	0.0050	n/a	3/22/2019	0.005ND	No	25	80	n/a	0.002832	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-1	0.010	n/a	3/20/2019	0.005ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-2	0.0065	n/a	3/20/2019	0.005ND	No	32	90.63	n/a	0.001803	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-2R	0.010	n/a	3/19/2019	0.005ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-50R	0.010	n/a	3/19/2019	0.005ND	No	26	100	n/a	0.002667	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-10R	0.010	n/a	3/22/2019	0.005ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-11R	0.010	n/a	3/23/2019	0.005ND	No	32	100	n/a	0.001803	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-15R	0.0065	n/a	3/25/2019	0.005ND	No	32	96.88	n/a	0.001803	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-6RZ	0.010	n/a	3/21/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-8RR	0.010	n/a	3/27/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-4RZ	0.010	n/a	3/21/2019	0.005ND	No	11	100	n/a	0.01276	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-13R_13RZ	0.0065	n/a	3/22/2019	0.005ND	No	32	87.5	n/a	0.001803	NP (NDs) 1 of 2
Silver (mg/L)	GWA-1	0.010	n/a	3/20/2019	0.005ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Silver (mg/L)	GWA-2	0.010	n/a	3/20/2019	0.005ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Silver (mg/L)	GWA-2R	0.010	n/a	3/19/2019	0.005ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Silver (mg/L)	GWA-50R	0.0085	n/a	n/a	1 future	n/a	21	38.1	sqrt(x)	0.000...	Param 1 of 2
Silver (mg/L)	GWC-10R	0.010	n/a	3/22/2019	0.005ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Silver (mg/L)	GWC-11R	0.010	n/a	3/23/2019	0.005ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Silver (mg/L)	GWC-15R	0.010	n/a	3/25/2019	0.005ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Silver (mg/L)	GWC-6RZ	0.010	n/a	3/21/2019	0.005ND	No	10	100	n/a	0.01476	NP (NDs) 1 of 2
Silver (mg/L)	GWC-8RR	0.010	n/a	3/27/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-4RZ	0.010	n/a	3/21/2019	0.005ND	No	4	100	n/a	0.06138	NP (NDs) 1 of 2
Silver (mg/L)	GWC-13R_13RZ	0.0050	n/a	3/22/2019	0.005ND	No	26	96.15	n/a	0.002667	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-1	0.0010	n/a	3/20/2019	0.0005ND	No	12	100	n/a	0.01077	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-2	0.0010	n/a	3/20/2019	0.0005ND	No	12	100	n/a	0.01077	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-2R	0.00050	n/a	3/19/2019	0.0005ND	No	13	92.31	n/a	0.009692	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-50R	0.0010	n/a	3/19/2019	0.0005ND	No	12	100	n/a	0.01077	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-10R	0.00050	n/a	3/22/2019	0.0005ND	No	12	91.67	n/a	0.01077	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-11R	0.00050	n/a	3/23/2019	0.0005ND	No	12	91.67	n/a	0.01077	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-15R	0.0010	n/a	3/25/2019	0.0005ND	No	12	100	n/a	0.01077	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-6RZ	0.0010	n/a	3/21/2019	0.0005ND	No	12	100	n/a	0.01077	NP (NDs) 1 of 2

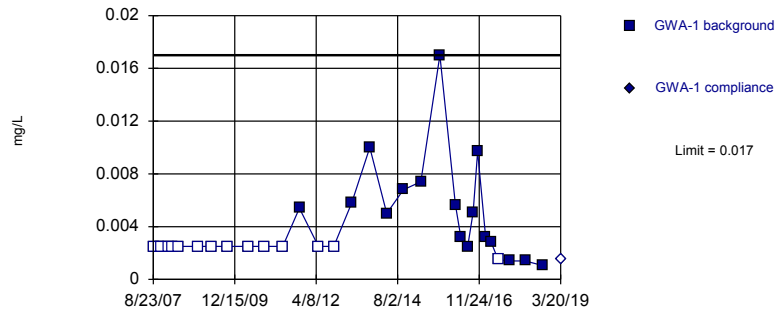
Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/23/2019, 2:43 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Thallium (mg/L)	GWC-8RR	0.0010	n/a	3/27/2019	0.0005ND	No	12	100	n/a	0.01077	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-4RZ	0.0010	n/a	3/21/2019	0.0005ND	No	11	100	n/a	0.01276	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-13R_13RZ	0.00050	n/a	3/22/2019	0.0005ND	No	12	91.67	n/a	0.01077	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-1	0.0099	n/a	3/20/2019	0.005ND	No	27	88.89	n/a	0.002502	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-2	0.016	n/a	3/20/2019	0.005ND	No	27	77.78	n/a	0.002502	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-2R	0.0078	n/a	3/19/2019	0.005ND	No	27	88.89	n/a	0.002502	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-50R	0.0065	n/a	3/19/2019	0.005ND	No	21	66.67	n/a	0.003999	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-10R	0.010	n/a	3/22/2019	0.005ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-11R	0.027	n/a	3/23/2019	0.005ND	No	27	44.44	x^(1/3)	0.000...	Param 1 of 2
Vanadium (mg/L)	GWC-15R	0.010	n/a	3/25/2019	0.005ND	No	27	100	n/a	0.002502	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-6RZ	0.010	n/a	3/21/2019	0.005ND	No	10	100	n/a	0.01476	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-8RR	0.0056	n/a	3/27/2019	0.005ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-4RZ	0.010	n/a	3/21/2019	0.005ND	No	4	100	n/a	0.06138	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-13R_13RZ	0.023	n/a	3/22/2019	0.005ND	No	26	57.69	n/a	0.002667	NP (NDs) 1 of 2
Zinc (mg/L)	GWA-1	0.061	n/a	3/20/2019	0.005ND	No	27	25.93	n/a	0.002502	NP (xform) 1 of 2
Zinc (mg/L)	GWA-2	0.081	n/a	3/20/2019	0.005ND	No	27	44.44	n/a	0.002502	NP (xform) 1 of 2
Zinc (mg/L)	GWA-2R	0.021	n/a	3/19/2019	0.005ND	No	26	46.15	sqrt(x)	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-50R	0.12	n/a	3/19/2019	0.005ND	No	21	19.05	x^(1/3)	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-10R	0.011	n/a	3/22/2019	0.005ND	No	27	40.74	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-11R	0.017	n/a	3/23/2019	0.005ND	No	26	50	n/a	0.002667	NP (normality) 1 of 2
Zinc (mg/L)	GWC-15R	0.011	n/a	n/a	1 future	n/a	25	20	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-6RZ	0.0091	n/a	3/21/2019	0.005ND	No	10	40	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-8RR	0.012	n/a	3/27/2019	0.005ND	No	15	46.67	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-4RZ	0.010	n/a	n/a	1 future	n/a	4	100	n/a	0.06138	NP (NDs) 1 of 2
Zinc (mg/L)	GWC-13R_13RZ	0.01	n/a	n/a	1 future	n/a	23	30.43	No	0.000...	Param 1 of 2

Within Limit

Prediction Limit
Intrawell Non-parametric

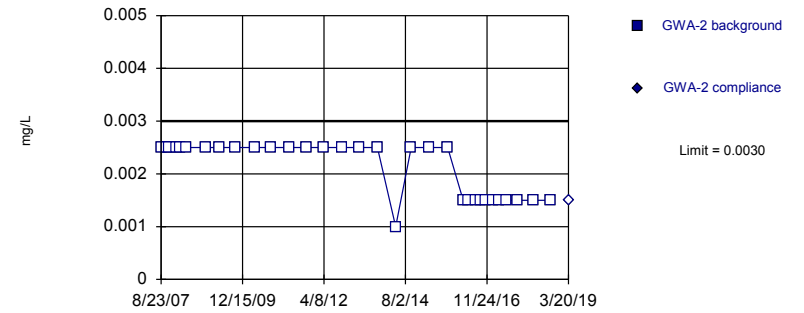


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 46.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

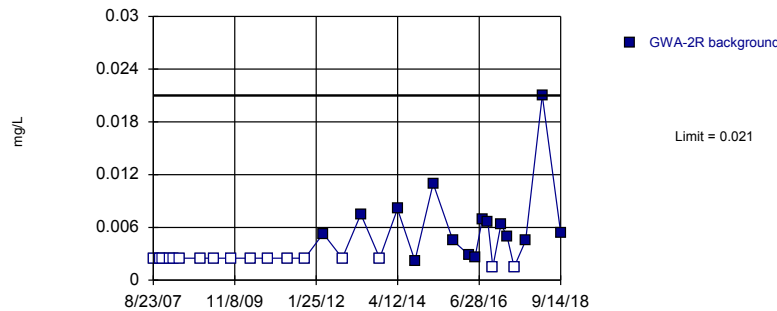


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-2R (bg)

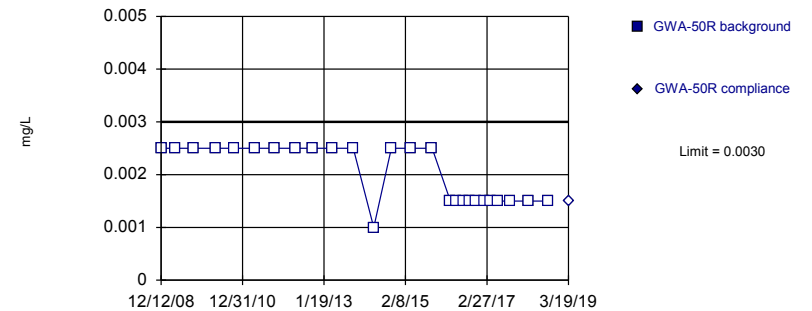


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 53.13% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.005	
10/23/2007	<0.005	
11/18/2007	<0.005	
1/30/2008	<0.005	
3/10/2008	<0.005	
5/13/2008	<0.005	
12/5/2008	<0.005	
4/15/2009	<0.005	
10/7/2009	<0.005	
5/3/2010	<0.005	
10/12/2010	<0.005	
4/27/2011	<0.005	
10/17/2011	0.0054	
5/2/2012	<0.005	
10/8/2012	<0.005	
4/12/2013	0.0058	
10/16/2013	0.01	
4/11/2014	0.005 (J)	
9/30/2014	0.0068	
3/30/2015	0.0074	
10/13/2015	0.017	
3/22/2016	0.00567	
5/19/2016	0.00319	
7/29/2016	0.0025 (J)	
9/23/2016	0.0051	
11/9/2016	0.0097 (J)	
1/30/2017	0.0032	
3/30/2017	0.0028 (J)	
6/9/2017	<0.003 (*)	
10/2/2017	0.0014 (J)	
3/16/2018	0.0014 (J)	
9/17/2018	0.00105 (JD)	
3/20/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.005	
10/24/2007	<0.005	
11/18/2007	<0.005	
1/31/2008	<0.005	
3/11/2008	<0.005	
5/6/2008	<0.005	
12/4/2008	<0.005	
4/21/2009	<0.005	
10/7/2009	<0.005	
4/26/2010	<0.005	
10/4/2010	<0.005	
4/13/2011	<0.005	
10/5/2011	<0.005	
4/11/2012	<0.005	
10/9/2012	<0.005	
4/15/2013	<0.005	
10/15/2013	<0.005	
4/22/2014	<0.002	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/23/2016	<0.003	
5/20/2016	<0.003	
7/29/2016	<0.003	
9/23/2016	<0.003	
11/9/2016	<0.003 (*)	
1/31/2017	<0.003	
3/30/2017	<0.003	
6/12/2017	<0.003 (*)	
10/2/2017	<0.003	
3/19/2018	<0.003	
9/14/2018	<0.003	
3/20/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R
8/23/2007	<0.005
10/24/2007	<0.005
11/18/2007	<0.005
1/31/2008	<0.005
3/10/2008	<0.005
5/13/2008	<0.005
12/4/2008	<0.005
4/21/2009	<0.005
10/8/2009	<0.005
4/21/2010	<0.005
9/28/2010	<0.005
4/12/2011	<0.005
10/4/2011	<0.005
4/3/2012	0.0053
10/9/2012	<0.005
4/11/2013	0.0075
10/16/2013	<0.005
4/10/2014	0.0081
9/30/2014	0.0022 (J)
3/30/2015	0.011
10/13/2015	0.0045 (J)
3/23/2016	0.00281 (J)
5/19/2016	0.00264 (J)
7/29/2016	0.0069
9/22/2016	0.0066
11/10/2016	<0.003 (*)
1/31/2017	0.0064
4/3/2017	0.0049
6/9/2017	<0.003 (*)
10/2/2017	0.0045
3/16/2018	0.021
9/14/2018	0.0054
3/19/2019	0.0019 (X)

Prediction Limit

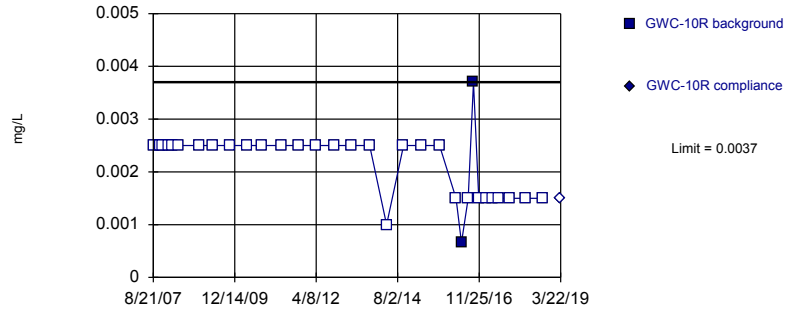
Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	<0.005	
4/23/2009	<0.005	
10/6/2009	<0.005	
5/3/2010	<0.005	
10/11/2010	<0.005	
4/27/2011	<0.005	
10/19/2011	<0.005	
5/1/2012	<0.005	
10/2/2012	<0.005	
4/10/2013	<0.005	
10/16/2013	<0.005	
4/22/2014	<0.002	
10/1/2014	<0.005	
3/30/2015	<0.005	
10/11/2015	<0.005	
3/28/2016	<0.003	
5/25/2016	<0.003	
8/1/2016	<0.003 (*)	
9/26/2016	<0.003	
11/11/2016	<0.003	
1/30/2017	<0.003	
4/3/2017	<0.003	
6/12/2017	<0.003	
10/2/2017	<0.003	
3/16/2018	<0.003	
9/18/2018	<0.003	
3/19/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

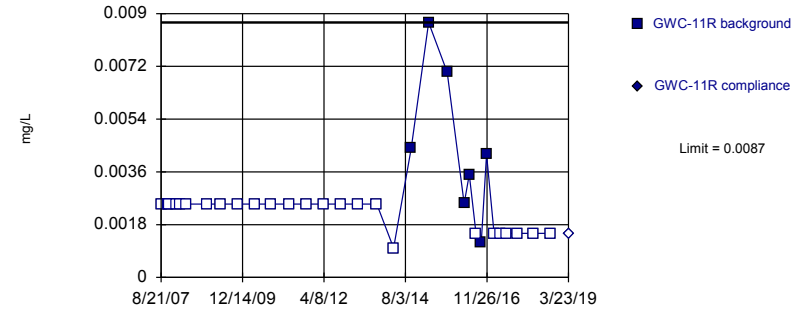


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

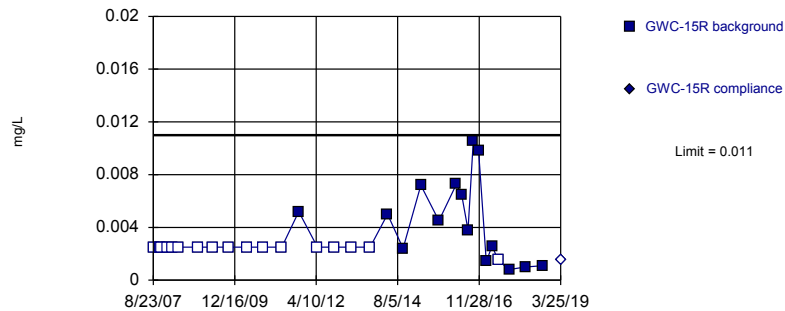


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

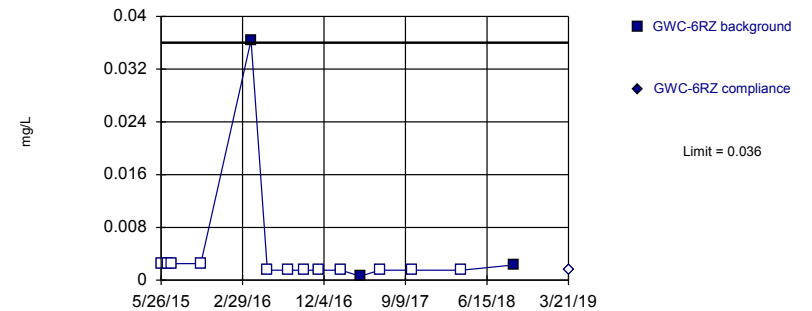


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 53.13% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.005	
11/1/2007	<0.005	
11/20/2007	<0.005	
1/30/2008	<0.005	
3/6/2008	<0.005	
5/8/2008	<0.005	
12/14/2008	<0.005	
4/29/2009	<0.005	
10/21/2009	<0.005	
4/21/2010	<0.005	
9/28/2010	<0.005	
4/12/2011	<0.005	
10/4/2011	<0.005	
4/3/2012	<0.005	
10/8/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.002	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/12/2015	<0.005	
3/31/2016	<0.003	
5/26/2016	0.000659 (J)	
8/3/2016	<0.003 (*)	
9/28/2016	0.0037	
11/22/2016	<0.003	
2/7/2017	<0.003	
4/10/2017	<0.003	
6/14/2017	<0.003 (*)	
10/4/2017	<0.003	
3/21/2018	<0.003	
9/18/2018	<0.003	
3/22/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.005	
11/1/2007	<0.005	
11/18/2007	<0.005	
1/30/2008	<0.005	
3/6/2008	<0.005	
5/7/2008	<0.005	
12/14/2008	<0.005	
4/29/2009	<0.005	
10/22/2009	<0.005	
4/21/2010	<0.005	
9/29/2010	<0.005	
4/13/2011	<0.005	
10/4/2011	<0.005	
4/4/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/9/2013	<0.005	
4/2/2014	<0.002	
10/2/2014	0.0044 (J)	
4/1/2015	0.0087	
10/11/2015	0.007	
4/4/2016	0.00252 (J)	
5/26/2016	0.00351	
8/4/2016	<0.003 (*)	
9/28/2016	0.0012 (J)	
11/22/2016	0.0042	
2/8/2017	<0.003	
4/10/2017	<0.003	
6/15/2017	<0.003	
10/4/2017	<0.003	
3/22/2018	<0.003	
9/18/2018	<0.003	
3/23/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.005	
11/2/2007	<0.005	
11/17/2007	<0.005	
1/15/2008	<0.005	
3/6/2008	<0.005	
5/7/2008	<0.005	
12/2/2008	<0.005	
4/28/2009	<0.005	
10/19/2009	<0.005	
4/27/2010	<0.005	
10/4/2010	<0.005	
4/18/2011	<0.005	
10/12/2011	0.0052	
4/23/2012	<0.005	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	0.005 (J)	
9/30/2014	0.0024 (J)	
4/3/2015	0.0072	
10/7/2015	0.0045 (J)	
4/5/2016	0.00727	
5/31/2016	0.00649	
8/4/2016	0.0038	
9/29/2016	0.0106	
11/23/2016	0.0098	
2/10/2017	0.0014 (J)	
4/12/2017	0.0026 (J)	
6/15/2017	<0.003 (*)	
10/6/2017	0.0008 (J)	
3/23/2018	0.001 (J)	
9/19/2018	0.0011 (J)	
3/25/2019		<0.003

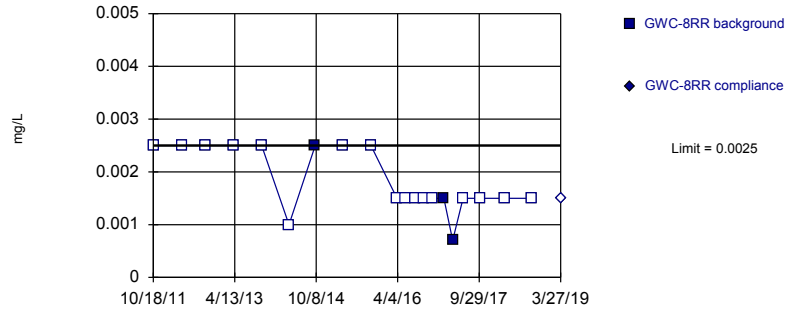
Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.005	
6/18/2015	<0.005 (D)	
7/2/2015	<0.005	
10/9/2015	<0.005	
3/29/2016	0.0364 (J)	
5/24/2016	<0.003	
8/1/2016	<0.003 (*)	
9/26/2016	<0.003	
11/14/2016	<0.003	
2/1/2017	<0.003	
4/6/2017	0.0006 (J)	
6/13/2017	<0.003 (*)	
10/3/2017	<0.003	
3/20/2018	<0.003	
9/17/2018	0.0023 (J)	
3/21/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

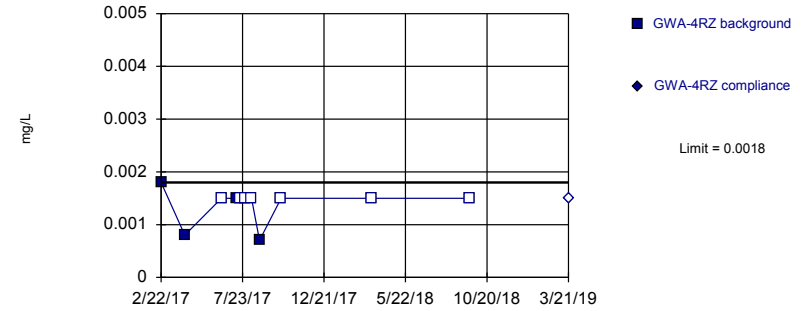


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

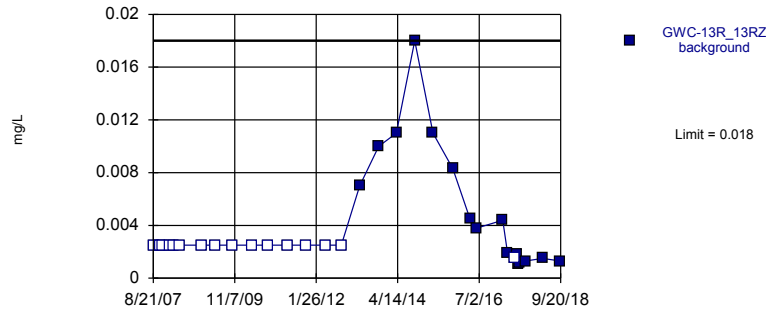
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ

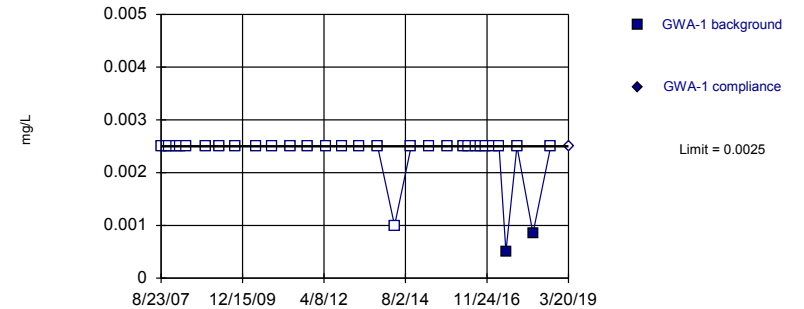


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 50% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.005	
4/30/2012	<0.005	
10/3/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/10/2014	<0.002	
10/2/2014	0.0025 (J)	
4/3/2015	<0.005	
10/8/2015	<0.005	
3/30/2016	<0.003	
5/24/2016	<0.003	
8/2/2016	<0.003 (*)	
9/27/2016	<0.003	
11/22/2016	<0.003	
2/6/2017	0.0015 (J)	
4/6/2017	0.0007 (J)	
6/14/2017	<0.003 (*)	
10/4/2017	<0.003	
3/21/2018	<0.003	
9/18/2018	<0.003	
3/27/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	0.0018 (J)	
4/7/2017	0.0008 (J)	
6/14/2017	<0.003 (*)	
7/12/2017	0.0015 (J)	
7/20/2017	<0.003	
7/28/2017	<0.003	
8/9/2017	<0.003	
8/24/2017	0.0007 (J)	
10/3/2017	<0.003	
3/21/2018	<0.003	
9/18/2018	<0.003	
3/21/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-13R_13RZ

8/21/2007	<0.005
11/1/2007	<0.005
11/19/2007	<0.005
1/31/2008	<0.005
3/5/2008	<0.005
5/7/2008	<0.005
12/12/2008	<0.005
4/29/2009	<0.005
10/21/2009	<0.005
4/28/2010	<0.005
10/6/2010	<0.005
4/20/2011	<0.005
10/12/2011	<0.005
4/25/2012	<0.005
10/2/2012	<0.005
4/2/2013	0.007
10/8/2013	0.01
4/1/2014	0.011
10/1/2014	0.018
3/31/2015	0.011
10/14/2015	0.0083
4/4/2016	0.00447
6/1/2016	0.00377
2/22/2017	0.0044
4/11/2017	0.0019 (J)
6/16/2017	<0.003 (*)
7/12/2017	0.0018 (J)
7/28/2017	0.0011 (J)
8/10/2017	0.0012 (J)
10/6/2017	0.0013 (J)
3/23/2018	0.0015 (J)
9/20/2018	0.0013 (J)
3/22/2019	0.0014 (X)

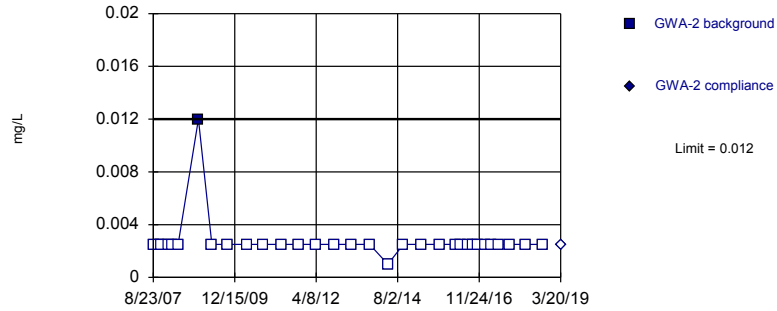
Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.005	
10/23/2007	<0.005	
11/18/2007	<0.005	
1/30/2008	<0.005	
3/10/2008	<0.005	
5/13/2008	<0.005	
12/5/2008	<0.005	
4/15/2009	<0.005	
10/7/2009	<0.005	
5/3/2010	<0.005	
10/12/2010	<0.005	
4/27/2011	<0.005	
10/17/2011	<0.005	
5/2/2012	<0.005	
10/8/2012	<0.005	
4/12/2013	<0.005	
10/16/2013	<0.005	
4/11/2014	<0.002	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/22/2016	<0.005	
5/19/2016	<0.005	
7/29/2016	<0.005	
9/23/2016	<0.005	
11/9/2016	<0.005	
1/30/2017	<0.005	
3/30/2017	<0.005	
6/9/2017	0.0005 (J)	
10/2/2017	<0.005	
3/16/2018	0.00085 (J)	
9/17/2018	<0.005 (D)	
3/20/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

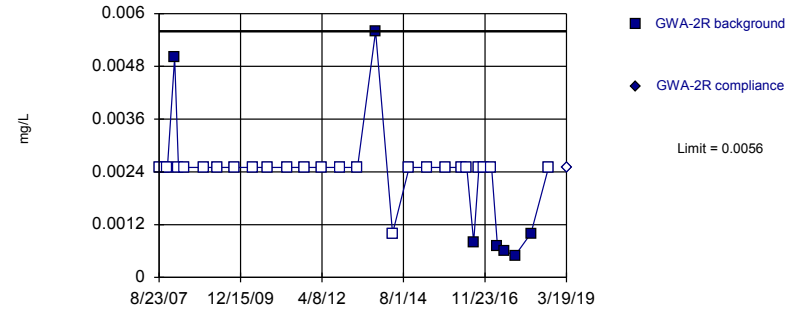


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

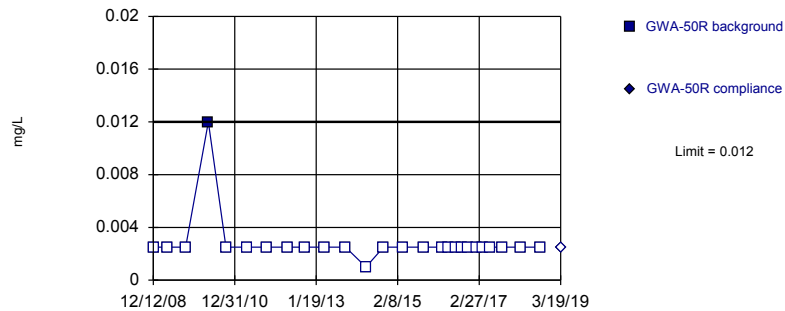


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

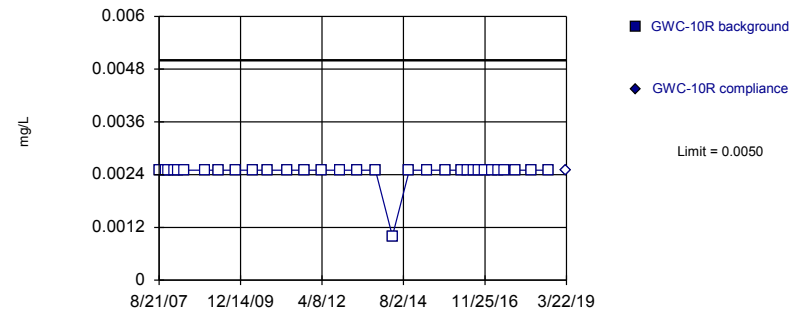


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Arsenic Analysis Run 8/23/2019 1:31 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.005	
10/24/2007	<0.005	
11/18/2007	<0.005	
1/31/2008	<0.005	
3/11/2008	<0.005	
5/6/2008	<0.005	
12/4/2008	0.012	
4/21/2009	<0.005	
10/7/2009	<0.005	
4/26/2010	<0.005	
10/4/2010	<0.005	
4/13/2011	<0.005	
10/5/2011	<0.005	
4/11/2012	<0.005	
10/9/2012	<0.005	
4/15/2013	<0.005	
10/15/2013	<0.005	
4/22/2014	<0.002	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/23/2016	<0.005	
5/20/2016	<0.005	
7/29/2016	<0.005	
9/23/2016	<0.005	
11/9/2016	<0.005	
1/31/2017	<0.005	
3/30/2017	<0.005	
6/12/2017	<0.005	
10/2/2017	<0.005	
3/19/2018	<0.005	
9/14/2018	<0.005	
3/20/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.005	
10/24/2007	<0.005	
11/18/2007	<0.005	
1/31/2008	0.005	
3/10/2008	<0.005	
5/13/2008	<0.005	
12/4/2008	<0.005	
4/21/2009	<0.005	
10/8/2009	<0.005	
4/21/2010	<0.005	
9/28/2010	<0.005	
4/12/2011	<0.005	
10/4/2011	<0.005	
4/3/2012	<0.005	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	0.0056	
4/10/2014	<0.002	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/23/2016	<0.005	
5/19/2016	<0.005	
7/29/2016	0.0008 (J)	
9/22/2016	<0.005	
11/10/2016	<0.005	
1/31/2017	<0.005	
4/3/2017	0.0007 (J)	
6/9/2017	0.0006 (J)	
10/2/2017	0.0005 (J)	
3/16/2018	0.001 (J)	
9/14/2018	<0.005	
3/19/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

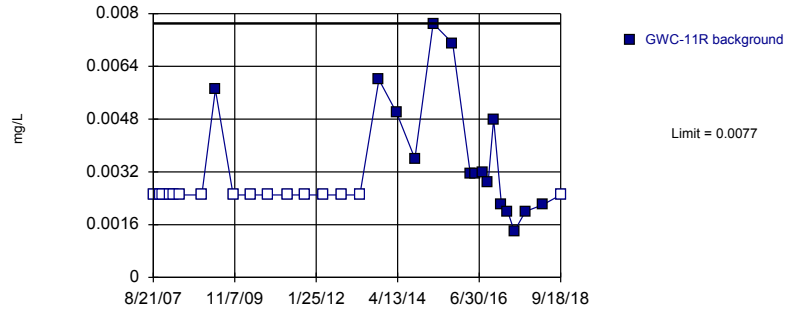
	GWA-50R	GWA-50R
12/12/2008	<0.005	
4/23/2009	<0.005	
10/6/2009	<0.005	
5/3/2010	0.012	
10/11/2010	<0.005	
4/27/2011	<0.005	
10/19/2011	<0.005	
5/1/2012	<0.005	
10/2/2012	<0.005	
4/10/2013	<0.005	
10/16/2013	<0.005	
4/22/2014	<0.002	
10/1/2014	<0.005	
3/30/2015	<0.005	
10/11/2015	<0.005	
3/28/2016	<0.005	
5/25/2016	<0.005	
8/1/2016	<0.005	
9/26/2016	<0.005	
11/11/2016	<0.005	
1/30/2017	<0.005	
4/3/2017	<0.005	
6/12/2017	<0.005	
10/2/2017	<0.005	
3/16/2018	<0.005	
9/18/2018	<0.005	
3/19/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.005	
11/1/2007	<0.005	
11/20/2007	<0.005	
1/30/2008	<0.005	
3/6/2008	<0.005	
5/8/2008	<0.005	
12/14/2008	<0.005	
4/29/2009	<0.005	
10/21/2009	<0.005	
4/21/2010	<0.005	
9/28/2010	<0.005	
4/12/2011	<0.005	
10/4/2011	<0.005	
4/3/2012	<0.005	
10/8/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.002	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/12/2015	<0.005	
3/31/2016	<0.005	
5/26/2016	<0.005	
8/3/2016	<0.005	
9/28/2016	<0.005	
11/22/2016	<0.005	
2/7/2017	<0.005	
4/10/2017	<0.005	
6/14/2017	<0.005	
10/4/2017	<0.005	
3/21/2018	<0.005	
9/18/2018	<0.005	
3/22/2019		<0.005

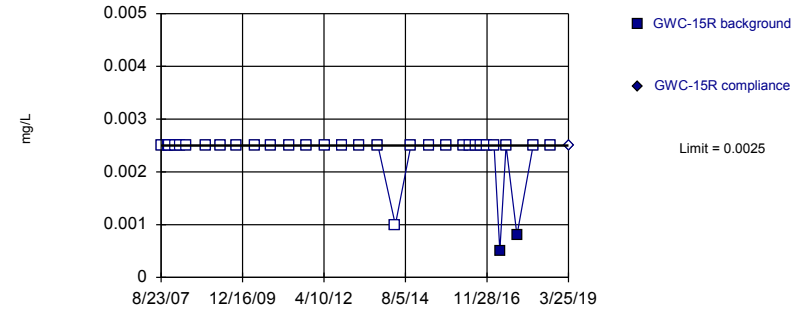
Prediction Limit
Intrawell Non-parametric, GWC-11R



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 50% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Arsenic Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

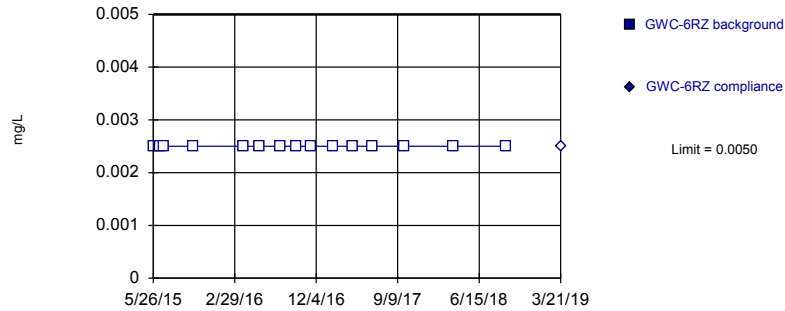
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

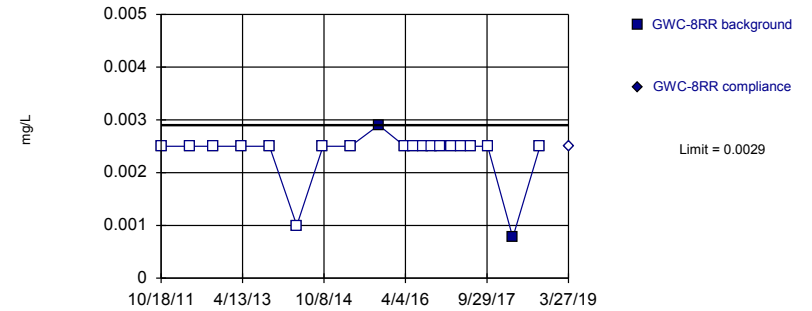
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Arsenic Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R
8/21/2007	<0.005
11/1/2007	<0.005
11/18/2007	<0.005
1/30/2008	<0.005
3/6/2008	<0.005
5/7/2008	<0.005
12/14/2008	<0.005
4/29/2009	0.0057
10/22/2009	<0.005
4/21/2010	<0.005
9/29/2010	<0.005
4/13/2011	<0.005
10/4/2011	<0.005
4/4/2012	<0.005
10/3/2012	<0.005
4/3/2013	<0.005
10/9/2013	0.006
4/2/2014	0.005 (J)
10/2/2014	0.0036 (J)
4/1/2015	0.0077
10/11/2015	0.0071
4/4/2016	0.00315 (J)
5/26/2016	0.00313 (J)
8/4/2016	0.0032 (J)
9/28/2016	0.0029 (J)
11/22/2016	0.0048 (J)
2/8/2017	0.0022 (J)
4/10/2017	0.002 (J)
6/15/2017	0.0014 (J)
10/4/2017	0.002 (J)
3/22/2018	0.0022 (J)
9/18/2018	<0.005
3/23/2019	0.0016 (X)

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.005	
11/2/2007	<0.005	
11/17/2007	<0.005	
1/15/2008	<0.005	
3/6/2008	<0.005	
5/7/2008	<0.005	
12/2/2008	<0.005	
4/28/2009	<0.005	
10/19/2009	<0.005	
4/27/2010	<0.005	
10/4/2010	<0.005	
4/18/2011	<0.005	
10/12/2011	<0.005	
4/23/2012	<0.005	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.002	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/7/2015	<0.005	
4/5/2016	<0.005	
5/31/2016	<0.005	
8/4/2016	<0.005	
9/29/2016	<0.005	
11/23/2016	<0.005	
2/10/2017	<0.005	
4/12/2017	0.0005 (J)	
6/15/2017	<0.005	
10/6/2017	0.0008 (J)	
3/23/2018	<0.005	
9/19/2018	<0.005	
3/25/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.005	
6/18/2015	<0.005 (D)	
7/2/2015	<0.005	
10/9/2015	<0.005	
3/29/2016	<0.005	
5/24/2016	<0.005	
8/1/2016	<0.005	
9/26/2016	<0.005	
11/14/2016	<0.005	
2/1/2017	<0.005	
4/6/2017	<0.005	
6/13/2017	<0.005	
10/3/2017	<0.005	
3/20/2018	<0.005	
9/17/2018	<0.005	
3/21/2019		<0.005

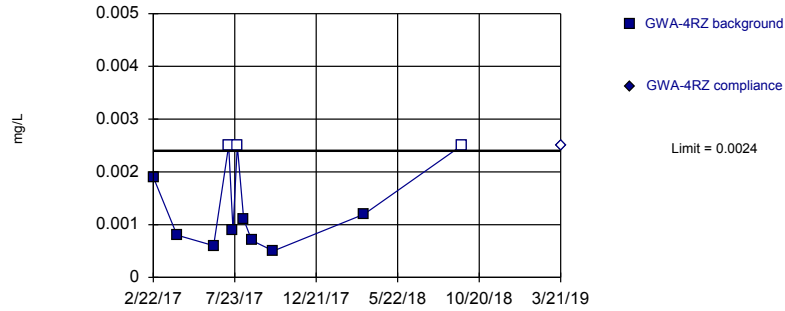
Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.005	
4/30/2012	<0.005	
10/3/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/10/2014	<0.002	
10/2/2014	<0.005	
4/3/2015	<0.005	
10/8/2015	0.0029 (J)	
3/30/2016	<0.005	
5/24/2016	<0.005	
8/2/2016	<0.005	
9/27/2016	<0.005	
11/22/2016	<0.005	
2/6/2017	<0.005	
4/6/2017	<0.005	
6/14/2017	<0.005	
10/4/2017	<0.005	
3/21/2018	0.00077 (J)	
9/18/2018	<0.005	
3/27/2019		<0.005

Within Limit

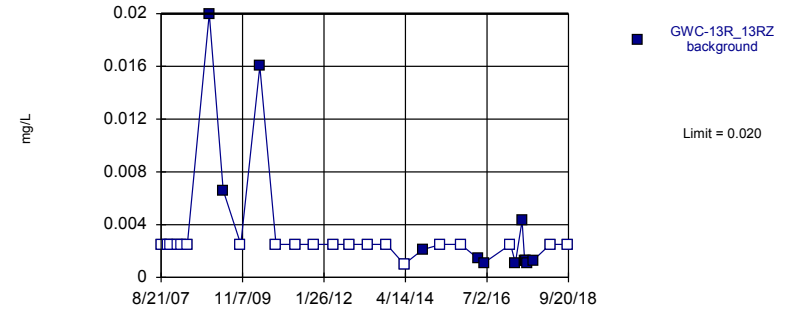
Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.0007, Std. Dev.=0.0005848, n=11, 27.27% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8315, critical = 0.792. Kappa = 2.837 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Arsenic Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ

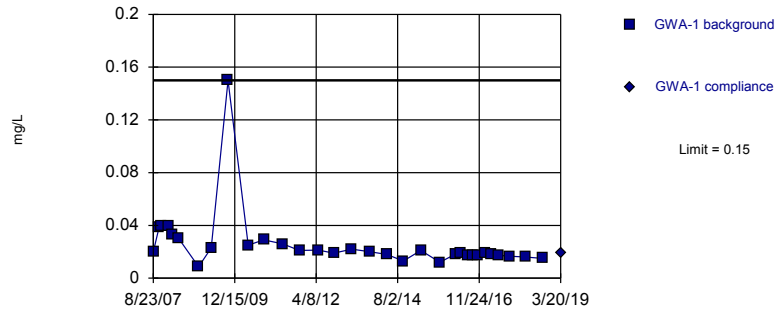


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Arsenic Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

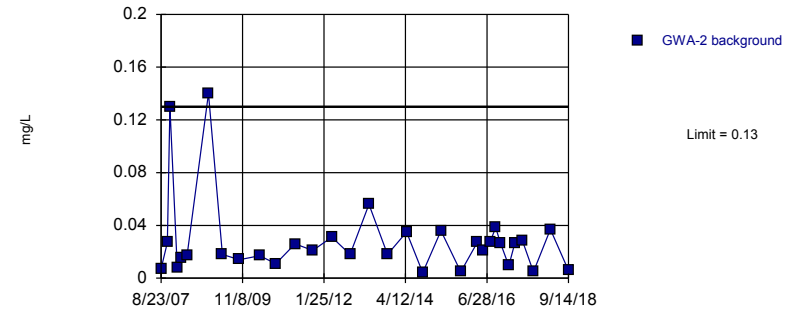
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Parametric, GWA-2 (bg)



Background Data Summary (based on natural log transformation): Mean=-3.924, Std. Dev.=0.84, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9516, critical = 0.904. Kappa = 2.208 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	0.0019 (J)	
4/7/2017	0.0008 (J)	
6/14/2017	0.0006 (J)	
7/12/2017	<0.005	
7/20/2017	0.0009 (J)	
7/28/2017	<0.005	
8/9/2017	0.0011 (J)	
8/24/2017	0.0007 (J)	
10/3/2017	0.0005 (J)	
3/21/2018	0.0012 (J)	
9/18/2018	<0.005	
3/21/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-13R_13RZ

8/21/2007	<0.005
11/1/2007	<0.005
11/19/2007	<0.005
1/31/2008	<0.005
3/5/2008	<0.005
5/7/2008	<0.005
12/12/2008	0.02
4/29/2009	0.0066
10/21/2009	<0.005
4/28/2010	0.016
10/6/2010	<0.005
4/20/2011	<0.005
10/12/2011	<0.005
4/25/2012	<0.005
10/2/2012	<0.005
4/2/2013	<0.005
10/8/2013	<0.005
4/1/2014	<0.002
10/1/2014	0.0021 (J)
3/31/2015	<0.005
10/14/2015	<0.005
4/4/2016	0.00144 (JD)
6/1/2016	0.0011 (JD)
2/22/2017	<0.005
4/11/2017	0.0011 (JD)
6/16/2017	0.0043 (JD)
7/12/2017	0.0013 (JD)
7/28/2017	0.0013 (J)
8/10/2017	0.0011 (J)
10/6/2017	0.0013 (JD)
3/23/2018	<0.005
9/20/2018	<0.005
3/22/2019	0.00097 (X)

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	0.02	
10/23/2007	0.039	
11/18/2007	0.04 (J)	
1/30/2008	0.04	
3/10/2008	0.033	
5/13/2008	0.03	
12/5/2008	0.0087	
4/15/2009	0.023	
10/7/2009	0.15	
5/3/2010	0.025	
10/12/2010	0.029	
4/27/2011	0.026	
10/17/2011	0.021	
5/2/2012	0.0212	
10/8/2012	0.019	
4/12/2013	0.022	
10/16/2013	0.02	
4/11/2014	0.018	
9/30/2014	0.013	
3/30/2015	0.021	
10/13/2015	0.012	
3/22/2016	0.0182	
5/19/2016	0.0193	
7/29/2016	0.0174	
9/23/2016	0.0168	
11/9/2016	0.0171	
1/30/2017	0.019	
3/30/2017	0.0184	
6/9/2017	0.0174	
10/2/2017	0.0167	
3/16/2018	0.016	
9/17/2018	0.015 (D)	
3/20/2019		0.019

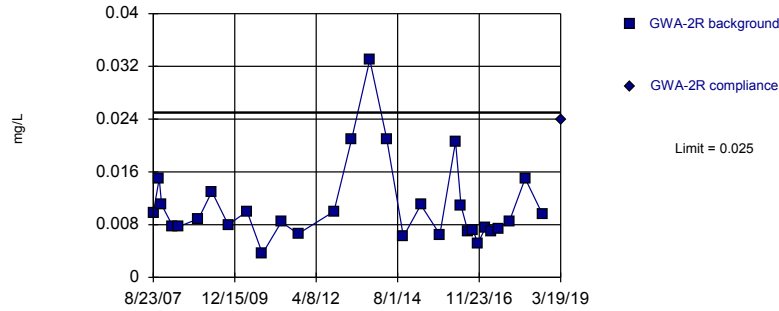
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2
8/23/2007	0.0073
10/24/2007	0.027
11/18/2007	0.13
1/31/2008	0.0077
3/11/2008	0.015
5/6/2008	0.017
12/4/2008	0.14
4/21/2009	0.018
10/7/2009	0.014
4/26/2010	0.017
10/4/2010	0.011
4/13/2011	0.026
10/5/2011	0.021
4/11/2012	0.0311
10/9/2012	0.018
4/15/2013	0.056
10/15/2013	0.018
4/22/2014	0.035
9/30/2014	0.0041
3/30/2015	0.036
10/13/2015	0.0048
3/23/2016	0.0271
5/20/2016	0.0206
7/29/2016	0.0275
9/23/2016	0.0384
11/9/2016	0.0266
1/31/2017	0.0094 (J)
3/30/2017	0.0262
6/12/2017	0.0288
10/2/2017	0.0048 (J)
3/19/2018	0.037
9/14/2018	0.0059 (J)
3/20/2019	0.0072 (X)

Within Limit

Prediction Limit
Intrawell Parametric

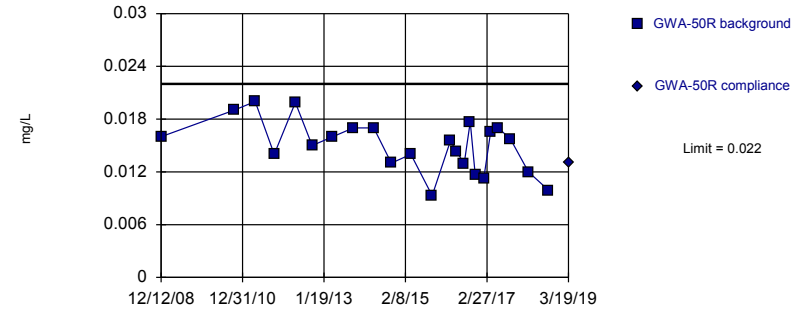


Background Data Summary (based on cube root transformation): Mean=0.2153, Std. Dev.=0.03537, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.904, critical = 0.9. Kappa = 2.223 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.01499, Std. Dev.=0.002959, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9748, critical = 0.881. Kappa = 2.317 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

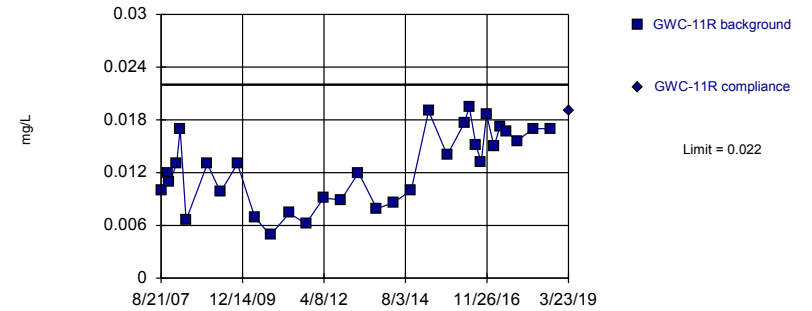


Background Data Summary: Mean=0.02388, Std. Dev.=0.005231, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.904. Kappa = 2.208 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.01259, Std. Dev.=0.004227, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9503, critical = 0.904. Kappa = 2.208 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	0.0098	
10/24/2007	0.015	
11/18/2007	0.011	
1/31/2008	0.13 (O)	
3/10/2008	0.0078	
5/13/2008	0.0077	
12/4/2008	0.0089	
4/21/2009	0.013	
10/8/2009	0.008	
4/21/2010	0.01	
9/28/2010	0.0036	
4/12/2011	0.0084	
10/4/2011	0.0066	
4/3/2012	0.0625 (O)	
10/9/2012	0.01	
4/11/2013	0.021	
10/16/2013	0.033	
4/10/2014	0.021	
9/30/2014	0.0062	
3/30/2015	0.011	
10/13/2015	0.0065	
3/23/2016	0.0206	
5/19/2016	0.0109	
7/29/2016	0.007 (J)	
9/22/2016	0.0071 (J)	
11/10/2016	0.0052 (J)	
1/31/2017	0.0076 (J)	
4/3/2017	0.007 (J)	
6/9/2017	0.0074 (J)	
10/2/2017	0.0085 (J)	
3/16/2018	0.015	
9/14/2018	0.0095 (J)	
3/19/2019		0.024

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	0.016	
4/23/2009	0.14 (O)	
10/6/2009	0.12 (O)	
5/3/2010	0.12 (O)	
10/11/2010	0.019	
4/27/2011	0.02	
10/19/2011	0.014	
5/1/2012	0.0199	
10/2/2012	0.015	
4/10/2013	0.016	
10/16/2013	0.017	
4/22/2014	0.017	
10/1/2014	0.013	
3/30/2015	0.014	
10/11/2015	0.0093	
3/28/2016	0.0155	
5/25/2016	0.0143	
8/1/2016	0.0129	
9/26/2016	0.0177	
11/11/2016	0.0117	
1/30/2017	0.0113	
4/3/2017	0.0166	
6/12/2017	0.017	
10/2/2017	0.0157	
3/16/2018	0.012	
9/18/2018	0.0099 (J)	
3/19/2019		0.013

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	0.027	
11/1/2007	0.024	
11/20/2007	0.022	
1/30/2008	0.033 (J)	
3/6/2008	0.019	
5/8/2008	0.017	
12/14/2008	0.02	
4/29/2009	0.017	
10/21/2009	0.021	
4/21/2010	0.019	
9/28/2010	0.018	
4/12/2011	0.017	
10/4/2011	0.022	
4/3/2012	0.0212	
10/8/2012	0.019	
4/3/2013	0.021	
10/15/2013	0.022	
4/9/2014	0.02	
10/2/2014	0.023	
4/2/2015	0.022	
10/12/2015	0.028	
3/31/2016	0.0273	
5/26/2016	0.0305	
8/3/2016	0.0284	
9/28/2016	0.036	
11/22/2016	0.0341 (J)	
2/7/2017	0.0309	
4/10/2017	0.0235	
6/14/2017	0.0258	
10/4/2017	0.0234	
3/21/2018	0.022	
9/18/2018	0.03	
3/22/2019		0.022

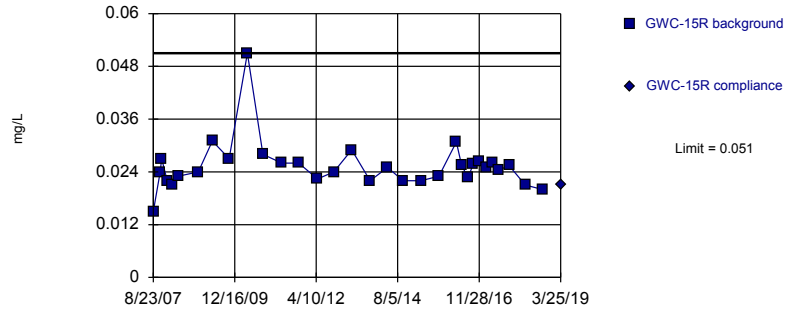
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	0.01	
11/1/2007	0.012	
11/18/2007	0.011	
1/30/2008	0.013	
3/6/2008	0.017	
5/7/2008	0.0066	
12/14/2008	0.013	
4/29/2009	0.0098	
10/22/2009	0.013	
4/21/2010	0.0069	
9/29/2010	0.0049	
4/13/2011	0.0074	
10/4/2011	0.0062	
4/4/2012	0.0091	
10/3/2012	0.0089	
4/3/2013	0.012	
10/9/2013	0.0079	
4/2/2014	0.0086	
10/2/2014	0.01	
4/1/2015	0.019	
10/11/2015	0.014	
4/4/2016	0.0176	
5/26/2016	0.0195	
8/4/2016	0.0151	
9/28/2016	0.0132	
11/22/2016	0.0186 (J)	
2/8/2017	0.015	
4/10/2017	0.0172	
6/15/2017	0.0167	
10/4/2017	0.0156	
3/22/2018	0.017	
9/18/2018	0.017	
3/23/2019		0.019

Within Limit

Prediction Limit
Intrawell Non-parametric

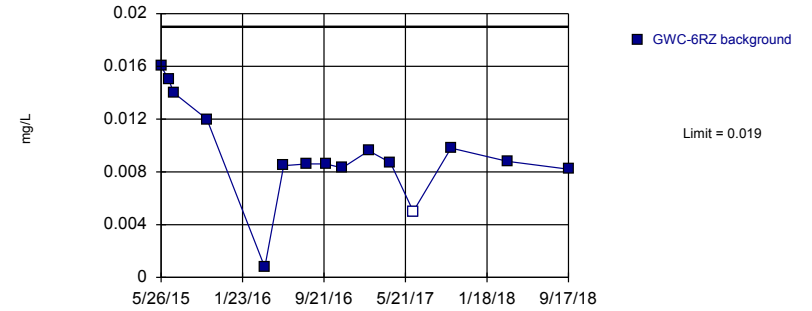


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric, GWC-6RZ

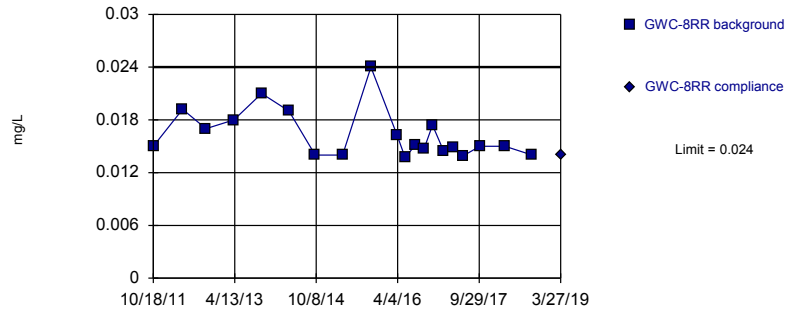


Background Data Summary: Mean=0.009456, Std. Dev.=0.003803, n=15, 6.667% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9092, critical = 0.835. Kappa = 2.555 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

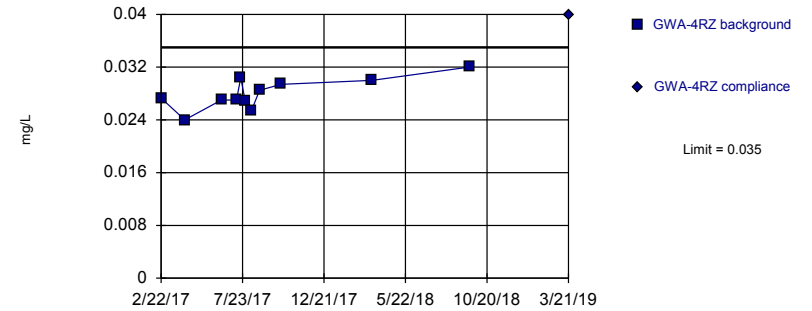


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02799, Std. Dev.=0.002333, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9753, critical = 0.792. Kappa = 2.837 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 8/23/2019 1:32 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	0.015	
11/2/2007	0.024	
11/17/2007	0.027	
1/15/2008	0.022	
3/6/2008	0.021	
5/7/2008	0.023	
12/2/2008	0.024	
4/28/2009	0.031	
10/19/2009	0.027	
4/27/2010	0.051	
10/4/2010	0.028	
4/18/2011	0.026	
10/12/2011	0.026	
4/23/2012	0.0224	
10/10/2012	0.024	
4/15/2013	0.029	
10/22/2013	0.022	
4/21/2014	0.025	
9/30/2014	0.022	
4/3/2015	0.022	
10/7/2015	0.023	
4/5/2016	0.0308	
5/31/2016	0.0255	
8/4/2016	0.0227	
9/29/2016	0.0258	
11/23/2016	0.0263 (J)	
2/10/2017	0.025	
4/12/2017	0.026	
6/15/2017	0.0244	
10/6/2017	0.0254	
3/23/2018	0.021	
9/19/2018	0.02	
3/25/2019		0.021

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ
5/26/2015	0.016
6/18/2015	0.015 (D)
7/2/2015	0.014
10/9/2015	0.012
3/29/2016	0.000768 (J)
5/24/2016	0.00847 (J)
8/1/2016	0.0086 (J)
9/26/2016	0.0086 (J)
11/14/2016	0.0083 (J)
2/1/2017	0.0096 (J)
4/6/2017	0.0087 (J)
6/13/2017	<0.01 (*)
10/3/2017	0.0098 (J)
3/20/2018	0.0088 (J)
9/17/2018	0.0082 (J)
3/21/2019	0.0075 (X)

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	0.015	
4/30/2012	0.0192	
10/3/2012	0.017	
4/8/2013	0.018	
10/9/2013	0.021	
4/10/2014	0.019	
10/2/2014	0.014	
4/3/2015	0.014	
10/8/2015	0.024	
3/30/2016	0.0163	
5/24/2016	0.0137	
8/2/2016	0.0152	
9/27/2016	0.0147	
11/22/2016	0.0174 (J)	
2/6/2017	0.0144	
4/6/2017	0.0149	
6/14/2017	0.0139	
10/4/2017	0.015	
3/21/2018	0.015	
9/18/2018	0.014	
3/27/2019		0.014

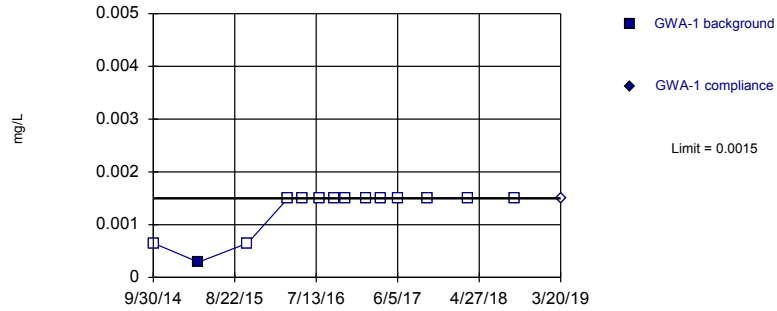
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	0.0273	
4/7/2017	0.024	
6/14/2017	0.027	
7/12/2017	0.027	
7/20/2017	0.0304	
7/28/2017	0.0269	
8/9/2017	0.0254	
8/24/2017	0.0285	
10/3/2017	0.0294	
3/21/2018	0.03	
9/18/2018	0.032	
3/21/2019		0.04

Within Limit

Prediction Limit
Intrawell Non-parametric

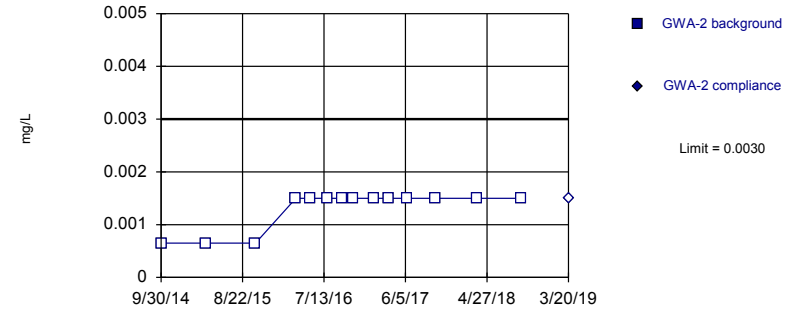


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

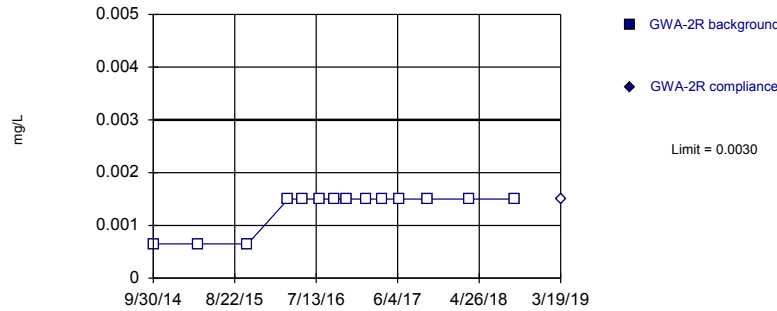


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

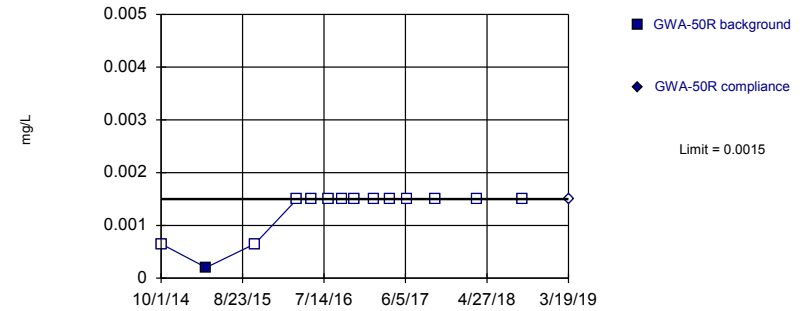


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
9/30/2014	<0.0013	
3/30/2015	0.00029 (J)	
10/13/2015	<0.0013	
3/22/2016	<0.003	
5/19/2016	<0.003	
7/29/2016	<0.003	
9/23/2016	<0.003	
11/9/2016	<0.003 (*)	
1/30/2017	<0.003	
3/30/2017	<0.003	
6/9/2017	<0.003	
10/2/2017	<0.003	
3/16/2018	<0.003	
9/17/2018	<0.003 (D)	
3/20/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
9/30/2014	<0.0013	
3/30/2015	<0.0013	
10/13/2015	<0.0013	
3/23/2016	<0.003	
5/20/2016	<0.003	
7/29/2016	<0.003	
9/23/2016	<0.003	
11/9/2016	<0.003	
1/31/2017	<0.003	
3/30/2017	<0.003	
6/12/2017	<0.003	
10/2/2017	<0.003	
3/19/2018	<0.003	
9/14/2018	<0.003	
3/20/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
9/30/2014	<0.0013	
3/30/2015	<0.0013	
10/13/2015	<0.0013	
3/23/2016	<0.003	
5/19/2016	<0.003	
7/29/2016	<0.003	
9/22/2016	<0.003	
11/10/2016	<0.003	
1/31/2017	<0.003	
4/3/2017	<0.003	
6/9/2017	<0.003	
10/2/2017	<0.003	
3/16/2018	<0.003	
9/14/2018	<0.003	
3/19/2019		<0.003

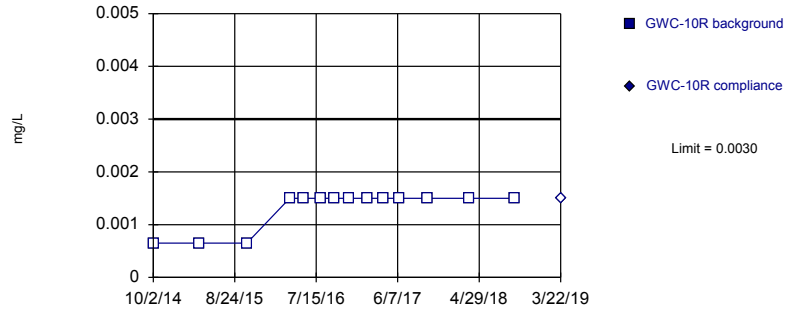
Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
10/1/2014	<0.0013	
3/30/2015	0.0002 (J)	
10/11/2015	<0.0013	
3/28/2016	<0.003	
5/25/2016	<0.003	
8/1/2016	<0.003	
9/26/2016	<0.003	
11/11/2016	<0.003	
1/30/2017	<0.003	
4/3/2017	<0.003	
6/12/2017	<0.003	
10/2/2017	<0.003	
3/16/2018	<0.003	
9/18/2018	<0.003	
3/19/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

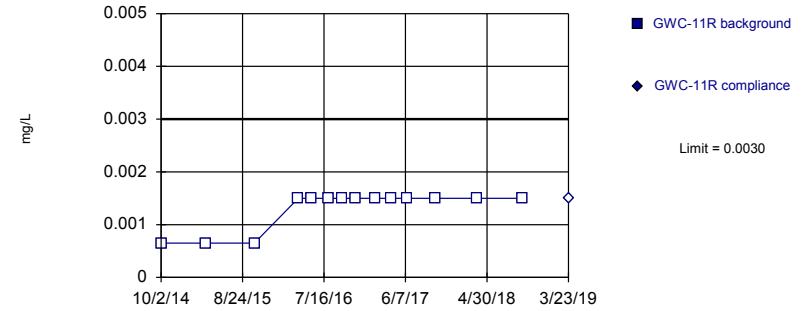


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

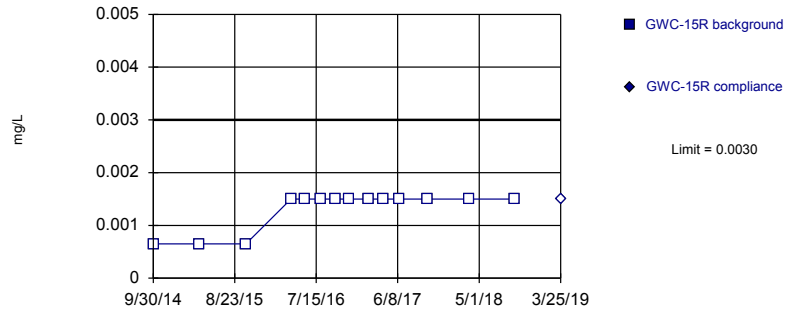


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

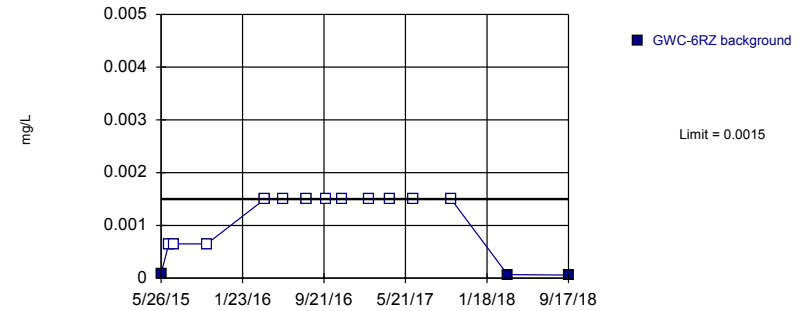


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-6RZ



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
10/2/2014	<0.0013	
4/2/2015	<0.0013	
10/12/2015	<0.0013	
3/31/2016	<0.003	
5/26/2016	<0.003	
8/3/2016	<0.003	
9/28/2016	<0.003	
11/22/2016	<0.003	
2/7/2017	<0.003	
4/10/2017	<0.003	
6/14/2017	<0.003	
10/4/2017	<0.003	
3/21/2018	<0.003	
9/18/2018	<0.003	
3/22/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
10/2/2014	<0.0013	
4/1/2015	<0.0013	
10/11/2015	<0.0013	
4/4/2016	<0.003	
5/26/2016	<0.003	
8/4/2016	<0.003	
9/28/2016	<0.003	
11/22/2016	<0.003	
2/8/2017	<0.003	
4/10/2017	<0.003	
6/15/2017	<0.003	
10/4/2017	<0.003	
3/22/2018	<0.003	
9/18/2018	<0.003	
3/23/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/7/2015	<0.0013	
4/5/2016	<0.003	
5/31/2016	<0.003	
8/4/2016	<0.003	
9/29/2016	<0.003	
11/23/2016	<0.003	
2/10/2017	<0.003	
4/12/2017	<0.003	
6/15/2017	<0.003	
10/6/2017	<0.003	
3/23/2018	<0.003	
9/19/2018	<0.003	
3/25/2019		<0.003

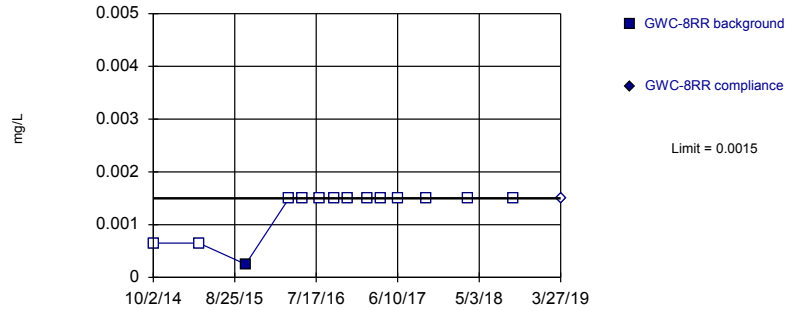
Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ
5/26/2015	8.8E-05 (J)
6/18/2015	<0.0013 (D)
7/2/2015	<0.0013
10/9/2015	<0.0013
3/29/2016	<0.003
5/24/2016	<0.003
8/1/2016	<0.003
9/26/2016	<0.003
11/14/2016	<0.003
2/1/2017	<0.003
4/6/2017	<0.003
6/13/2017	<0.003
10/3/2017	<0.003
3/20/2018	6.8E-05 (J)
9/17/2018	5.8E-05 (J)
3/21/2019	7.6E-05 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

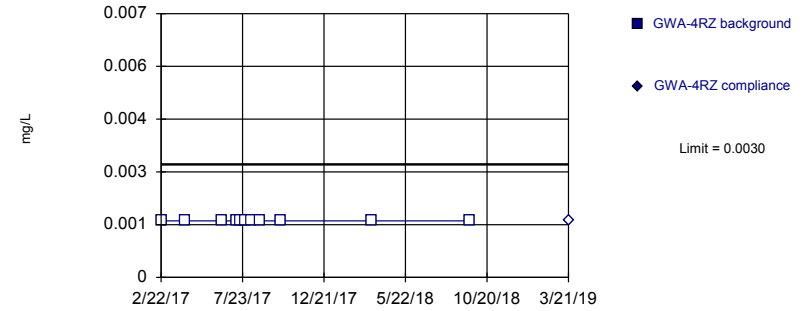


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

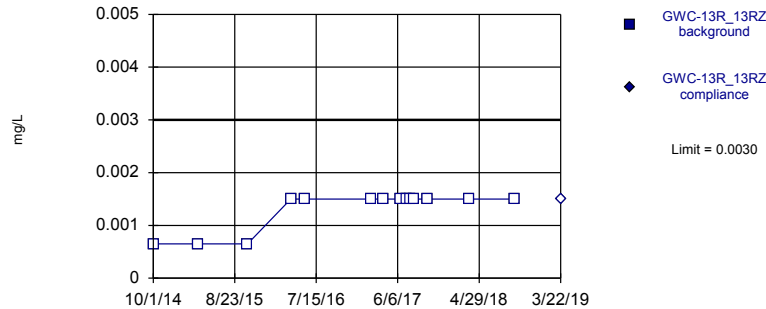


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

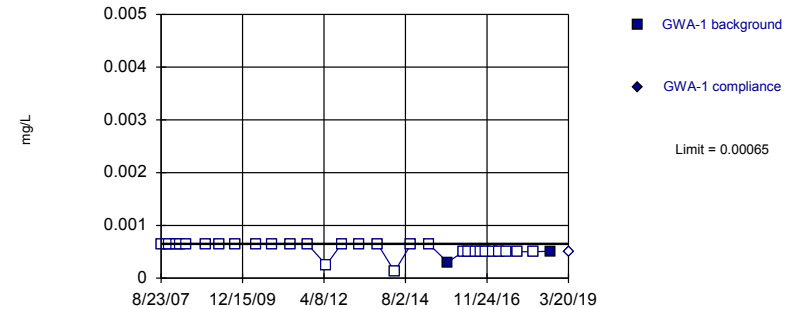


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/2/2014	<0.0013	
4/3/2015	<0.0013	
10/8/2015	0.00025 (J)	
3/30/2016	<0.003	
5/24/2016	<0.003	
8/2/2016	<0.003	
9/27/2016	<0.003	
11/22/2016	<0.003	
2/6/2017	<0.003	
4/6/2017	<0.003	
6/14/2017	<0.003	
10/4/2017	<0.003	
3/21/2018	<0.003	
9/18/2018	<0.003	
3/27/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	<0.003	
4/7/2017	<0.003	
6/14/2017	<0.003	
7/12/2017	<0.003	
7/20/2017	<0.003	
7/28/2017	<0.003	
8/9/2017	<0.003	
8/24/2017	<0.003	
10/3/2017	<0.003	
3/21/2018	<0.003	
9/18/2018	<0.003	
3/21/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
10/1/2014	<0.0013	
3/31/2015	<0.0013	
10/14/2015	<0.0013	
4/4/2016	<0.003 (D)	
6/1/2016	<0.003 (D)	
2/22/2017	<0.003	
4/11/2017	<0.003	
6/16/2017	<0.003	
7/12/2017	<0.003	
7/28/2017	<0.003	
8/10/2017	<0.003	
10/6/2017	<0.003	
3/23/2018	<0.003	
9/20/2018	<0.003	
3/22/2019		<0.003

Prediction Limit

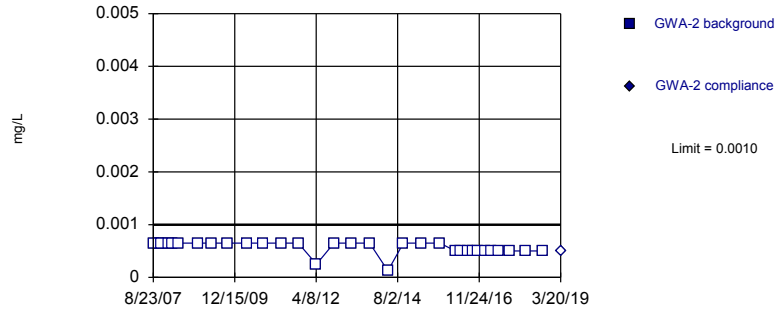
Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.0013	
10/23/2007	<0.0013	
11/18/2007	<0.0013	
1/30/2008	<0.0013	
3/10/2008	<0.0013	
5/13/2008	<0.0013	
12/5/2008	<0.0013	
4/15/2009	<0.0013	
10/7/2009	<0.0013	
5/3/2010	<0.0013	
10/12/2010	<0.0013	
4/27/2011	<0.0013	
10/17/2011	<0.0013	
5/2/2012	<0.0005	
10/8/2012	<0.0013	
4/12/2013	<0.0013	
10/16/2013	<0.0013	
4/11/2014	<0.00025	
9/30/2014	<0.0013	
3/30/2015	<0.0013	
10/13/2015	0.0003 (J)	
3/22/2016	<0.001	
5/19/2016	<0.001	
7/29/2016	<0.001	
9/23/2016	<0.001	
11/9/2016	<0.001	
1/30/2017	<0.001	
3/30/2017	<0.001	
6/9/2017	<0.001	
10/2/2017	<0.001	
3/16/2018	<0.001	
9/17/2018	0.00051 (D)	
3/20/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

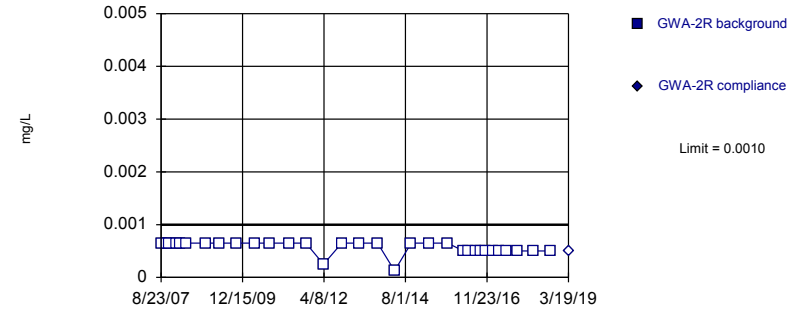


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

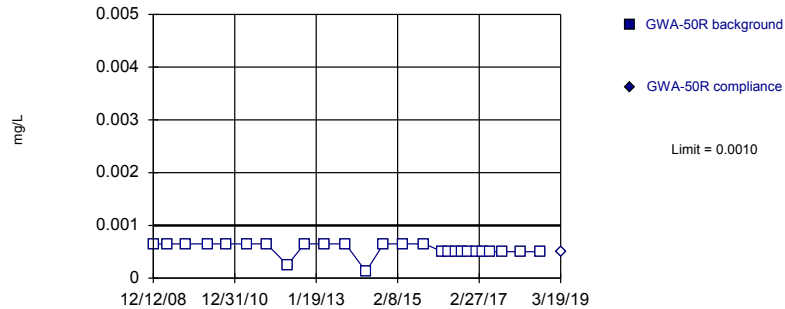


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

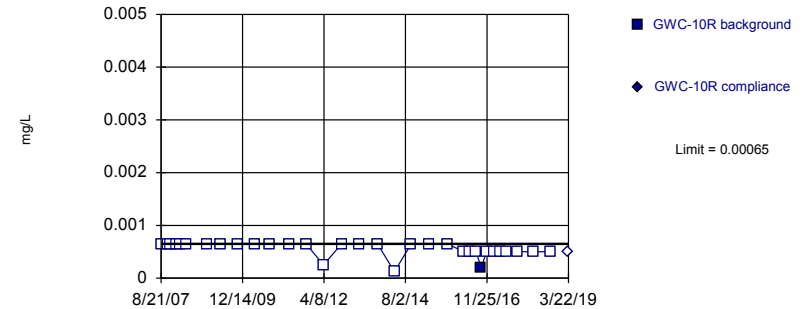


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.0013	
10/24/2007	<0.0013	
11/18/2007	<0.0013	
1/31/2008	<0.0013	
3/11/2008	<0.0013	
5/6/2008	<0.0013	
12/4/2008	<0.0013	
4/21/2009	<0.0013	
10/7/2009	<0.0013	
4/26/2010	<0.0013	
10/4/2010	<0.0013	
4/13/2011	<0.0013	
10/5/2011	<0.0013	
4/11/2012	<0.0005	
10/9/2012	<0.0013	
4/15/2013	<0.0013	
10/15/2013	<0.0013	
4/22/2014	<0.00025	
9/30/2014	<0.0013	
3/30/2015	<0.0013	
10/13/2015	<0.0013	
3/23/2016	<0.001	
5/20/2016	<0.001	
7/29/2016	<0.001	
9/23/2016	<0.001	
11/9/2016	<0.001	
1/31/2017	<0.001	
3/30/2017	<0.001	
6/12/2017	<0.001	
10/2/2017	<0.001	
3/19/2018	<0.001	
9/14/2018	<0.001	
3/20/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.0013	
10/24/2007	<0.0013	
11/18/2007	<0.0013	
1/31/2008	<0.0013	
3/10/2008	<0.0013	
5/13/2008	<0.0013	
12/4/2008	<0.0013	
4/21/2009	<0.0013	
10/8/2009	<0.0013	
4/21/2010	<0.0013	
9/28/2010	<0.0013	
4/12/2011	<0.0013	
10/4/2011	<0.0013	
4/3/2012	<0.0005	
10/9/2012	<0.0013	
4/11/2013	<0.0013	
10/16/2013	<0.0013	
4/10/2014	<0.00025	
9/30/2014	<0.0013	
3/30/2015	<0.0013	
10/13/2015	<0.0013	
3/23/2016	<0.001	
5/19/2016	<0.001	
7/29/2016	<0.001	
9/22/2016	<0.001	
11/10/2016	<0.001	
1/31/2017	<0.001	
4/3/2017	<0.001	
6/9/2017	<0.001	
10/2/2017	<0.001	
3/16/2018	<0.001	
9/14/2018	<0.001	
3/19/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	<0.0013	
4/23/2009	<0.0013	
10/6/2009	<0.0013	
5/3/2010	<0.0013	
10/11/2010	<0.0013	
4/27/2011	<0.0013	
10/19/2011	<0.0013	
5/1/2012	<0.0005	
10/2/2012	<0.0013	
4/10/2013	<0.0013	
10/16/2013	<0.0013	
4/22/2014	<0.00025	
10/1/2014	<0.0013	
3/30/2015	<0.0013	
10/11/2015	<0.0013	
3/28/2016	<0.001	
5/25/2016	<0.001	
8/1/2016	<0.001	
9/26/2016	<0.001	
11/11/2016	<0.001	
1/30/2017	<0.001	
4/3/2017	<0.001	
6/12/2017	<0.001	
10/2/2017	<0.001	
3/16/2018	<0.001	
9/18/2018	<0.001	
3/19/2019		<0.001

Prediction Limit

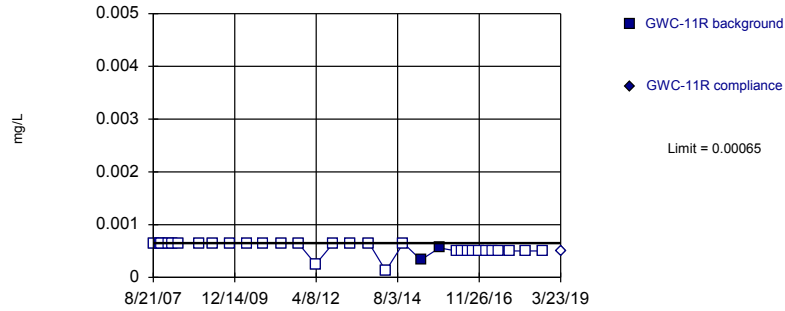
Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.0013	
11/1/2007	<0.0013	
11/20/2007	<0.0013	
1/30/2008	<0.0013	
3/6/2008	<0.0013	
5/8/2008	<0.0013	
12/14/2008	<0.0013	
4/29/2009	<0.0013	
10/21/2009	<0.0013	
4/21/2010	<0.0013	
9/28/2010	<0.0013	
4/12/2011	<0.0013	
10/4/2011	<0.0013	
4/3/2012	<0.0005	
10/8/2012	<0.0013	
4/3/2013	<0.0013	
10/15/2013	<0.0013	
4/9/2014	<0.00025	
10/2/2014	<0.0013	
4/2/2015	<0.0013	
10/12/2015	<0.0013	
3/31/2016	<0.001	
5/26/2016	<0.001	
8/3/2016	<0.001	
9/28/2016	0.0002 (J)	
11/22/2016	<0.001	
2/7/2017	<0.001	
4/10/2017	<0.001	
6/14/2017	<0.001	
10/4/2017	<0.001	
3/21/2018	<0.001	
9/18/2018	<0.001	
3/22/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

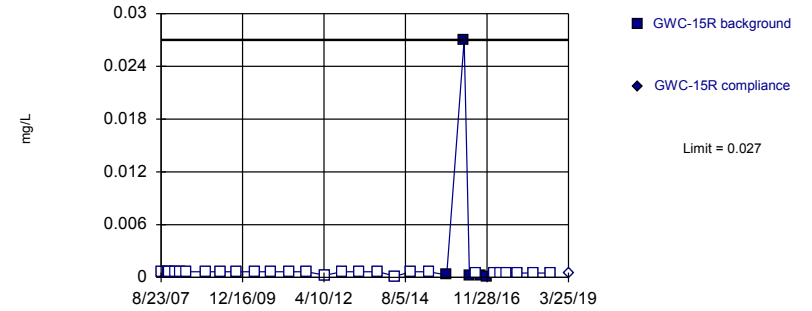


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

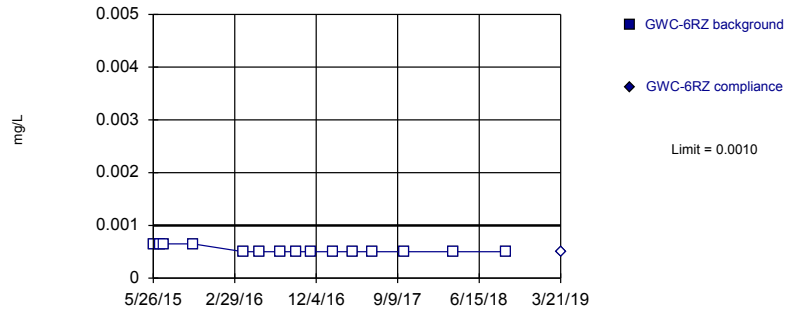


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 84.38% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

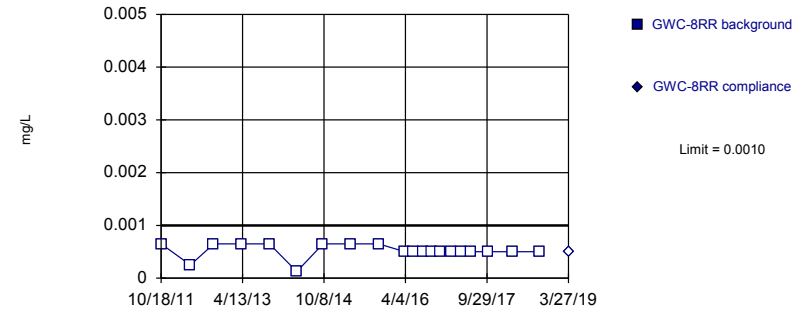


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:33 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.0013	
11/1/2007	<0.0013	
11/18/2007	<0.0013	
1/30/2008	<0.0013	
3/6/2008	<0.0013	
5/7/2008	<0.0013	
12/14/2008	<0.0013	
4/29/2009	<0.0013	
10/22/2009	<0.0013	
4/21/2010	<0.0013	
9/29/2010	<0.0013	
4/13/2011	<0.0013	
10/4/2011	<0.0013	
4/4/2012	<0.0005	
10/3/2012	<0.0013	
4/3/2013	<0.0013	
10/9/2013	<0.0013	
4/2/2014	<0.00025	
10/2/2014	<0.0013	
4/1/2015	0.00033 (J)	
10/11/2015	0.00056 (J)	
4/4/2016	<0.001	
5/26/2016	<0.001	
8/4/2016	<0.001	
9/28/2016	<0.001	
11/22/2016	<0.001	
2/8/2017	<0.001	
4/10/2017	<0.001	
6/15/2017	<0.001	
10/4/2017	<0.001	
3/22/2018	<0.001	
9/18/2018	<0.001	
3/23/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.0013	
11/2/2007	<0.0013	
11/17/2007	<0.0013	
1/15/2008	<0.0013	
3/6/2008	<0.0013	
5/7/2008	<0.0013	
12/2/2008	<0.0013	
4/28/2009	<0.0013	
10/19/2009	<0.0013	
4/27/2010	<0.0013	
10/4/2010	<0.0013	
4/18/2011	<0.0013	
10/12/2011	<0.0013	
4/23/2012	<0.0005	
10/10/2012	<0.0013	
4/15/2013	<0.0013	
10/22/2013	<0.0013	
4/21/2014	<0.00025	
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/7/2015	0.00028 (J)	
4/5/2016	0.027 (J)	
5/31/2016	0.000206 (J)	
8/4/2016	<0.001	
9/29/2016	0.0002 (J)	
11/23/2016	0.0001 (J)	
2/10/2017	<0.001	
4/12/2017	<0.001	
6/15/2017	<0.001	
10/6/2017	<0.001	
3/23/2018	<0.001	
9/19/2018	<0.001	
3/25/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.0013	
6/18/2015	<0.0013 (D)	
7/2/2015	<0.0013	
10/9/2015	<0.0013	
3/29/2016	<0.001	
5/24/2016	<0.001	
8/1/2016	<0.001	
9/26/2016	<0.001	
11/14/2016	<0.001	
2/1/2017	<0.001	
4/6/2017	<0.001	
6/13/2017	<0.001	
10/3/2017	<0.001	
3/20/2018	<0.001	
9/17/2018	<0.001	
3/21/2019		<0.001

Prediction Limit

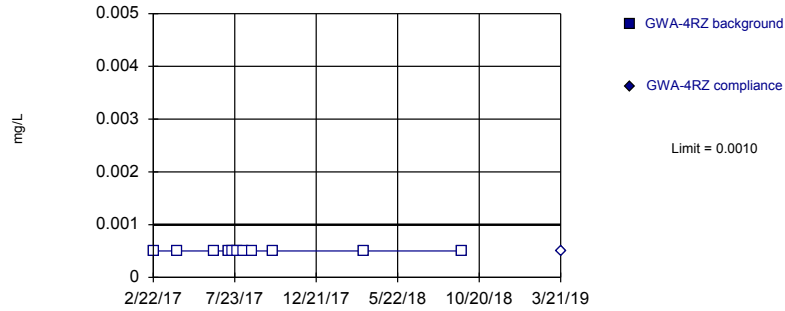
Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.0013	
4/30/2012	<0.0005	
10/3/2012	<0.0013	
4/8/2013	<0.0013	
10/9/2013	<0.0013	
4/10/2014	<0.00025	
10/2/2014	<0.0013	
4/3/2015	<0.0013	
10/8/2015	<0.0013	
3/30/2016	<0.001	
5/24/2016	<0.001	
8/2/2016	<0.001	
9/27/2016	<0.001	
11/22/2016	<0.001	
2/6/2017	<0.001	
4/6/2017	<0.001	
6/14/2017	<0.001	
10/4/2017	<0.001	
3/21/2018	<0.001	
9/18/2018	<0.001	
3/27/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

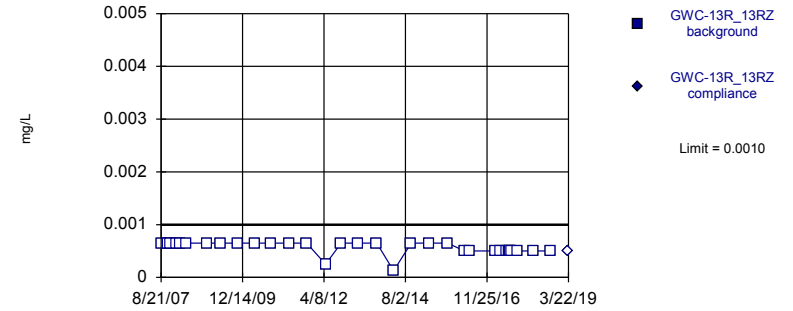


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

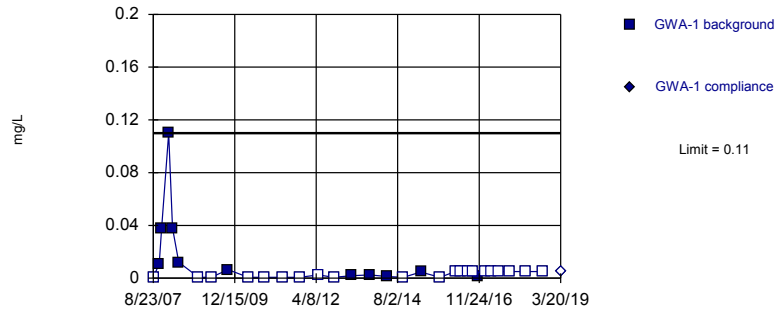


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

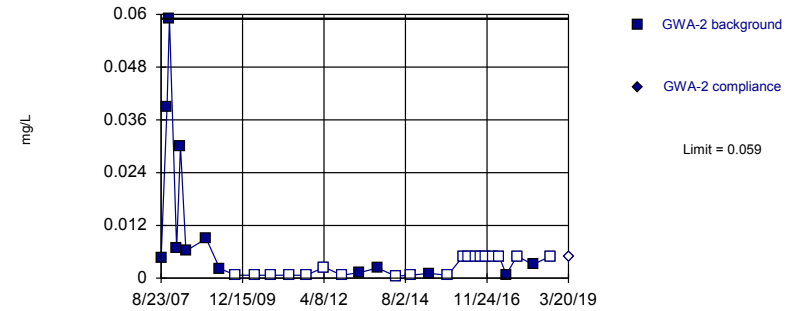


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 65.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 59.38% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	<0.001	
4/7/2017	<0.001	
6/14/2017	<0.001	
7/12/2017	<0.001	
7/20/2017	<0.001	
7/28/2017	<0.001	
8/9/2017	<0.001	
8/24/2017	<0.001	
10/3/2017	<0.001	
3/21/2018	<0.001	
9/18/2018	<0.001	
3/21/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.0013	
11/1/2007	<0.0013	
11/19/2007	<0.0013	
1/31/2008	<0.0013	
3/5/2008	<0.0013	
5/7/2008	<0.0013	
12/12/2008	<0.0013	
4/29/2009	<0.0013	
10/21/2009	<0.0013	
4/28/2010	<0.0013	
10/6/2010	<0.0013	
4/20/2011	<0.0013	
10/12/2011	<0.0013	
4/25/2012	<0.0005	
10/2/2012	<0.0013	
4/2/2013	<0.0013	
10/8/2013	<0.0013	
4/1/2014	<0.00025	
10/1/2014	<0.0013	
3/31/2015	<0.0013	
10/14/2015	<0.0013	
4/4/2016	<0.001	
6/1/2016	<0.001	
2/22/2017	<0.001	
4/11/2017	<0.001	
6/16/2017	<0.001	
7/12/2017	<0.001	
7/28/2017	<0.001	
8/10/2017	<0.001	
10/6/2017	<0.001	
3/23/2018	<0.001	
9/20/2018	<0.001	
3/22/2019		<0.001

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.0013	
10/23/2007	0.011	
11/18/2007	0.038 (J)	
1/30/2008	0.11 (J)	
3/10/2008	0.038	
5/13/2008	0.012	
12/5/2008	<0.0013	
4/15/2009	<0.0013	
10/7/2009	0.0065	
5/3/2010	<0.0013	
10/12/2010	<0.0013	
4/27/2011	<0.0013	
10/17/2011	<0.0013	
5/2/2012	<0.005	
10/8/2012	<0.0013	
4/12/2013	0.0019	
10/16/2013	0.0024	
4/11/2014	0.0013 (J)	
9/30/2014	<0.0013	
3/30/2015	0.0047	
10/13/2015	<0.0013	
3/22/2016	<0.01	
5/19/2016	<0.01	
7/29/2016	<0.01	
9/23/2016	<0.01	
11/9/2016	0.0011 (J)	
1/30/2017	<0.01	
3/30/2017	<0.01	
6/9/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01 (D)	
3/20/2019		<0.01

Prediction Limit

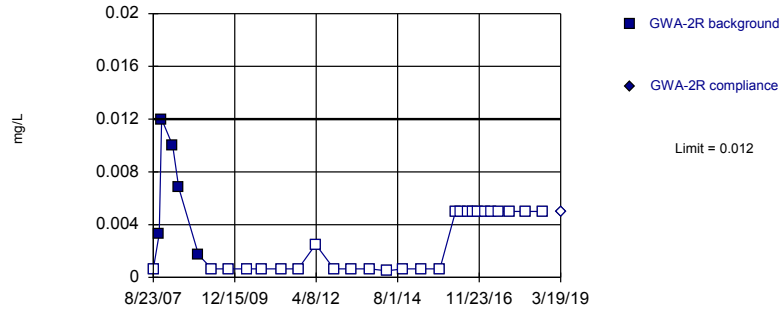
Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	0.0045	
10/24/2007	0.039	
11/18/2007	0.059	
1/31/2008	0.0067	
3/11/2008	0.03	
5/6/2008	0.0062	
12/4/2008	0.009	
4/21/2009	0.0022	
10/7/2009	<0.0013	
4/26/2010	<0.0013	
10/4/2010	<0.0013	
4/13/2011	<0.0013	
10/5/2011	<0.0013	
4/11/2012	<0.005	
10/9/2012	<0.0013	
4/15/2013	0.0013	
10/15/2013	0.0023	
4/22/2014	<0.001	
9/30/2014	<0.0013	
3/30/2015	0.0011 (J)	
10/13/2015	<0.0013	
3/23/2016	<0.01	
5/20/2016	<0.01	
7/29/2016	<0.01 (*)	
9/23/2016	<0.01	
11/9/2016	<0.01	
1/31/2017	<0.01	
3/30/2017	<0.01 (*)	
6/12/2017	0.0008 (J)	
10/2/2017	<0.01	
3/19/2018	0.0031 (J)	
9/14/2018	<0.01	
3/20/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

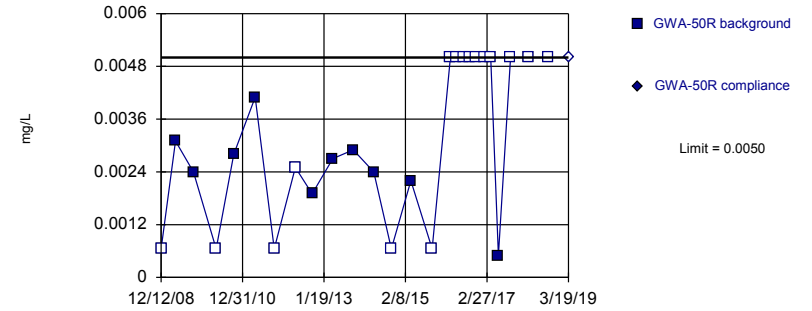


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 83.87% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

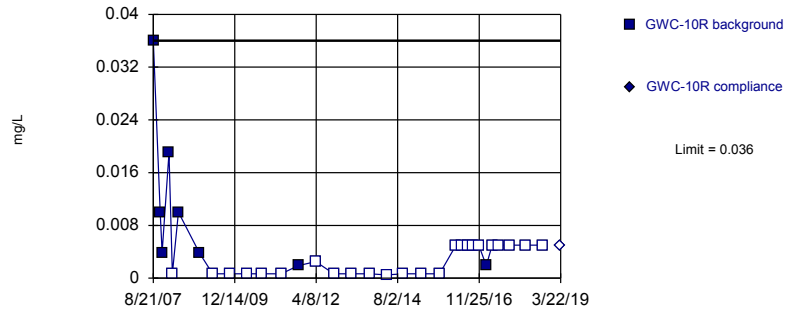


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

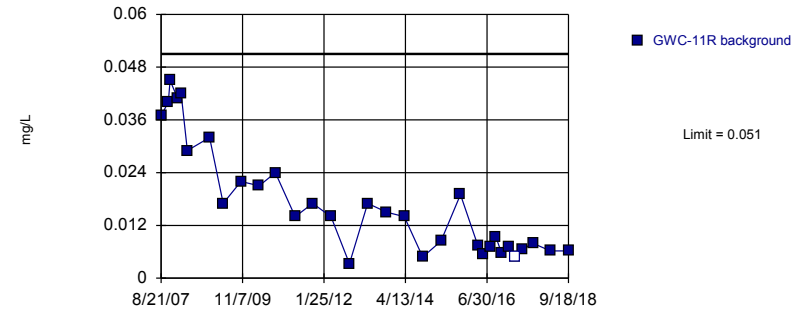


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric, GWC-11R



Background Data Summary (based on square root transformation): Mean=0.1229, Std. Dev.=0.0465, n=32, 3.125% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9087, critical = 0.904. Kappa = 2.208 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.0013	
10/24/2007	0.0033	
11/18/2007	0.012	
1/31/2008	0.052 (O)	
3/10/2008	0.01	
5/13/2008	0.0068	
12/4/2008	0.0017	
4/21/2009	<0.0013	
10/8/2009	<0.0013	
4/21/2010	<0.0013	
9/28/2010	<0.0013	
4/12/2011	<0.0013	
10/4/2011	<0.0013	
4/3/2012	<0.005	
10/9/2012	<0.0013	
4/11/2013	<0.0013	
10/16/2013	<0.0013	
4/10/2014	<0.001	
9/30/2014	<0.0013	
3/30/2015	<0.0013	
10/13/2015	<0.0013	
3/23/2016	<0.01	
5/19/2016	<0.01	
7/29/2016	<0.01 (*)	
9/22/2016	<0.01	
11/10/2016	<0.01	
1/31/2017	<0.01	
4/3/2017	<0.01 (*)	
6/9/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/14/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	<0.0013	
4/23/2009	0.0031	
10/6/2009	0.0024	
5/3/2010	<0.0013	
10/11/2010	0.0028	
4/27/2011	0.0041	
10/19/2011	<0.0013	
5/1/2012	<0.005	
10/2/2012	0.0019	
4/10/2013	0.0027	
10/16/2013	0.0029	
4/22/2014	0.0024	
10/1/2014	<0.0013	
3/30/2015	0.0022	
10/11/2015	<0.0013	
3/28/2016	<0.01	
5/25/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/11/2016	<0.01 (*)	
1/30/2017	<0.01	
4/3/2017	<0.01 (*)	
6/12/2017	0.0005 (J)	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/18/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	0.036	
11/1/2007	0.01	
11/20/2007	0.0039	
1/30/2008	0.019	
3/6/2008	<0.0013	
5/8/2008	0.01	
12/14/2008	0.0038	
4/29/2009	<0.0013	
10/21/2009	<0.0013	
4/21/2010	<0.0013	
9/28/2010	<0.0013	
4/12/2011	<0.0013	
10/4/2011	0.0019	
4/3/2012	<0.005	
10/8/2012	<0.0013	
4/3/2013	<0.0013	
10/15/2013	<0.0013	
4/9/2014	<0.001	
10/2/2014	<0.0013	
4/2/2015	<0.0013	
10/12/2015	<0.0013	
3/31/2016	<0.01	
5/26/2016	<0.01	
8/3/2016	<0.01 (*)	
9/28/2016	<0.01	
11/22/2016	<0.01	
2/7/2017	0.0019 (J)	
4/10/2017	<0.01 (*)	
6/14/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

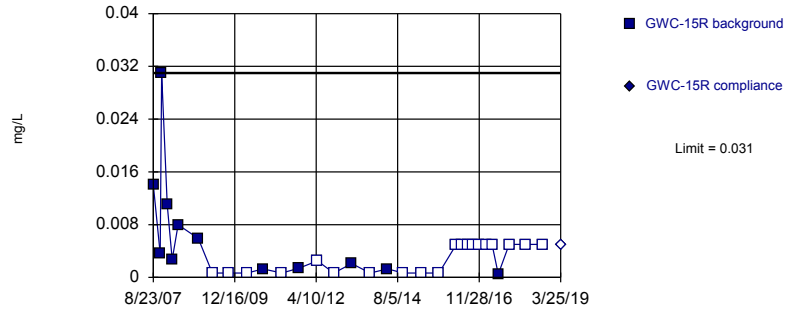
Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R
8/21/2007	0.037
11/1/2007	0.04
11/18/2007	0.045
1/30/2008	0.041
3/6/2008	0.042
5/7/2008	0.029
12/14/2008	0.032
4/29/2009	0.017
10/22/2009	0.022
4/21/2010	0.021
9/29/2010	0.024
4/13/2011	0.014
10/4/2011	0.017
4/4/2012	0.014
10/3/2012	0.0033
4/3/2013	0.017
10/9/2013	0.015
4/2/2014	0.014
10/2/2014	0.0048
4/1/2015	0.0084
10/11/2015	0.019
4/4/2016	0.00728 (J)
5/26/2016	0.00553 (J)
8/4/2016	0.0071 (J)
9/28/2016	0.0093 (J)
11/22/2016	0.0058 (J)
2/8/2017	0.0072 (J)
4/10/2017	<0.01 (*)
6/15/2017	0.0066 (J)
10/4/2017	0.0079 (J)
3/22/2018	0.0062 (J)
9/18/2018	0.0062 (J)
3/23/2019	0.0048 (X)

Within Limit

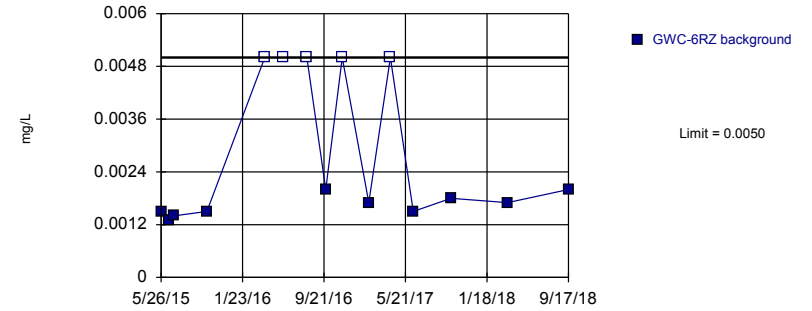
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

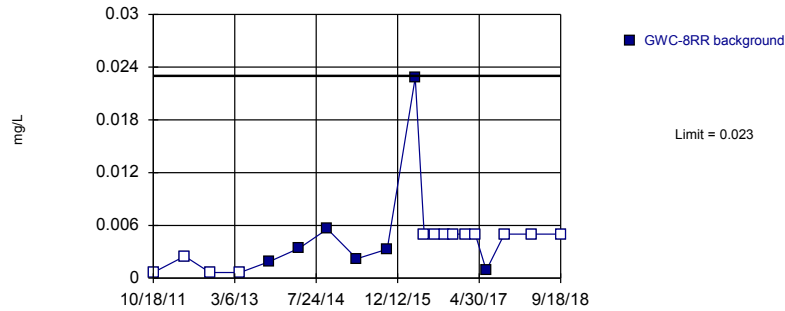
Prediction Limit
Intrawell Non-parametric, GWC-6RZ



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2). Assumes 1 future value.

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-8RR

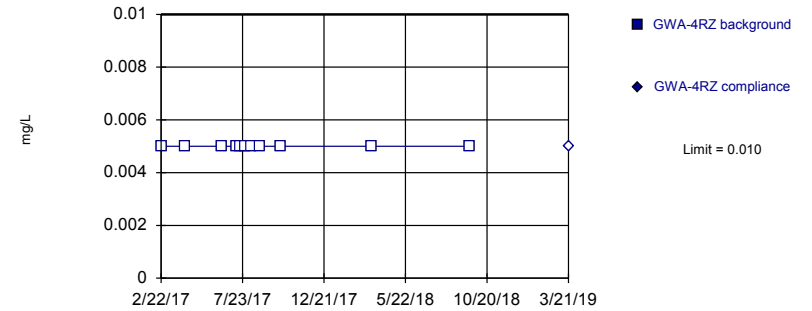


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	0.014	
11/2/2007	0.0036	
11/17/2007	0.031	
1/15/2008	0.011	
3/6/2008	0.0027	
5/7/2008	0.008	
12/2/2008	0.0059	
4/28/2009	<0.0013	
10/19/2009	<0.0013	
4/27/2010	<0.0013	
10/4/2010	0.0013	
4/18/2011	<0.0013	
10/12/2011	0.0014	
4/23/2012	<0.005	
10/10/2012	<0.0013	
4/15/2013	0.0021	
10/22/2013	<0.0013	
4/21/2014	0.0013 (J)	
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/7/2015	<0.0013	
4/5/2016	<0.01	
5/31/2016	<0.01	
8/4/2016	<0.01 (*)	
9/29/2016	<0.01	
11/23/2016	<0.01	
2/10/2017	<0.01	
4/12/2017	<0.01 (*)	
6/15/2017	0.0005 (J)	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/25/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ
5/26/2015	0.0015
6/18/2015	0.0013 (D)
7/2/2015	0.0014
10/9/2015	0.0015
3/29/2016	<0.01
5/24/2016	<0.01
8/1/2016	<0.01 (*)
9/26/2016	0.002 (J)
11/14/2016	<0.01 (*)
2/1/2017	0.0017 (J)
4/6/2017	<0.01 (*)
6/13/2017	0.0015 (J)
10/3/2017	0.0018 (J)
3/20/2018	0.0017 (J)
9/17/2018	0.002 (J)
3/21/2019	0.0025 (X)

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR
10/18/2011	<0.0013
4/30/2012	<0.005
10/3/2012	<0.0013
4/8/2013	<0.0013
10/9/2013	0.0019
4/10/2014	0.0034
10/2/2014	0.0056
4/3/2015	0.0022
10/8/2015	0.0033
3/30/2016	0.0228 (J)
5/24/2016	<0.01
8/2/2016	<0.01 (*)
9/27/2016	<0.01
11/22/2016	<0.01
2/6/2017	<0.01
4/6/2017	<0.01 (*)
6/14/2017	0.0009 (J)
10/4/2017	<0.01
3/21/2018	<0.01
9/18/2018	<0.01
3/27/2019	0.0021 (X)

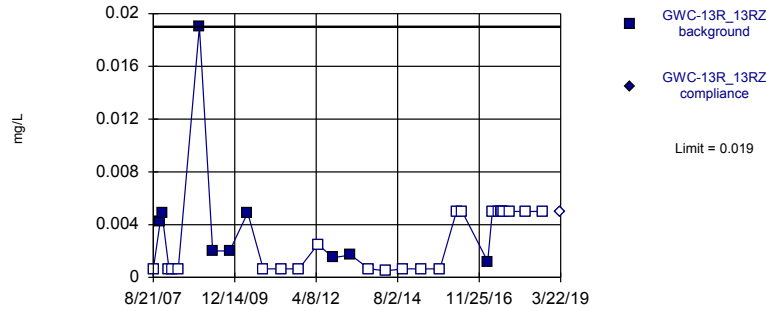
Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	<0.01	
4/7/2017	<0.01	
6/14/2017	<0.01	
7/12/2017	<0.01	
7/20/2017	<0.01	
7/28/2017	<0.01	
8/9/2017	<0.01	
8/24/2017	<0.01	
10/3/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

Within Limit

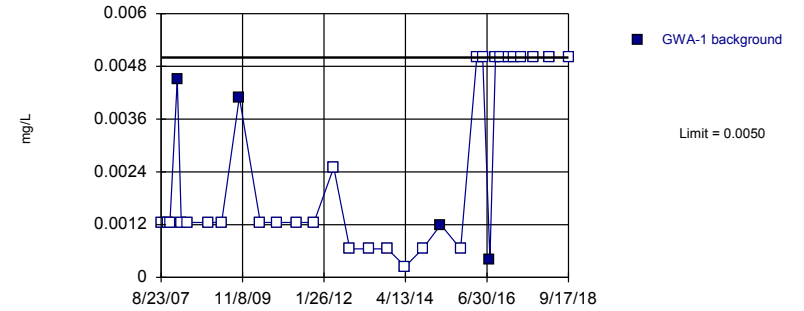
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 71.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Chromium Analysis Run 8/23/2019 1:34 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWA-1 (bg)

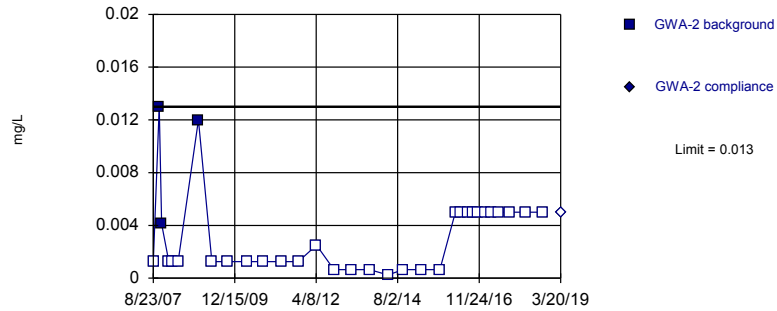


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

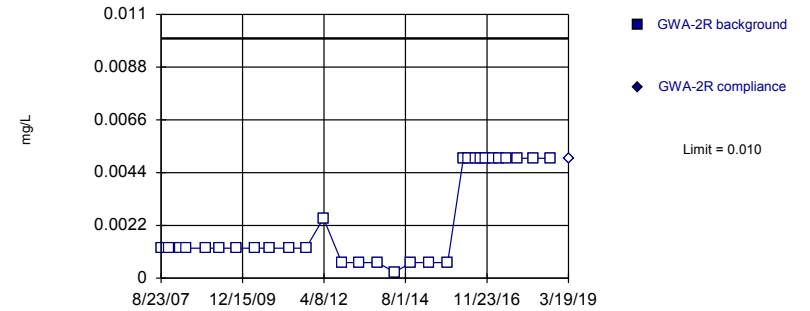


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.0013	
11/1/2007	0.0042	
11/19/2007	0.0049	
1/31/2008	<0.0013	
3/5/2008	<0.0013	
5/7/2008	<0.0013	
12/12/2008	0.019	
4/29/2009	0.002	
10/21/2009	0.002	
4/28/2010	0.0049	
10/6/2010	<0.0013	
4/20/2011	<0.0013	
10/12/2011	<0.0013	
4/25/2012	<0.005	
10/2/2012	0.0015	
4/2/2013	0.0017	
10/8/2013	<0.0013	
4/1/2014	<0.001	
10/1/2014	<0.0013	
3/31/2015	<0.0013	
10/14/2015	<0.0013	
4/4/2016	<0.01 (D)	
6/1/2016	<0.01 (D)	
2/22/2017	0.0012 (J)	
4/11/2017	<0.01 (*)	
6/16/2017	<0.01	
7/12/2017	<0.01	
7/28/2017	<0.01	
8/10/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/20/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1
8/23/2007	<0.0025
10/23/2007	<0.0025
11/18/2007	<0.0025
1/30/2008	0.0045
3/10/2008	<0.0025
5/13/2008	<0.0025
12/5/2008	<0.0025
4/15/2009	<0.0025
10/7/2009	0.0041
5/3/2010	<0.0025
10/12/2010	<0.0025
4/27/2011	<0.0025
10/17/2011	<0.0025
5/2/2012	<0.005
10/8/2012	<0.0013
4/12/2013	<0.0013
10/16/2013	<0.0013
4/11/2014	<0.0005
9/30/2014	<0.0013
3/30/2015	0.0012 (J)
10/13/2015	<0.0013
3/22/2016	<0.01
5/19/2016	<0.01
7/29/2016	0.0004 (J)
9/23/2016	<0.01
11/9/2016	<0.01
1/30/2017	<0.01
3/30/2017	<0.01
6/9/2017	<0.01
10/2/2017	<0.01
3/16/2018	<0.01
9/17/2018	<0.01 (D)
3/20/2019	0.00078 (X)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.0025	
10/24/2007	0.013	
11/18/2007	0.0041	
1/31/2008	<0.0025	
3/11/2008	<0.0025	
5/6/2008	<0.0025	
12/4/2008	0.012	
4/21/2009	<0.0025	
10/7/2009	<0.0025	
4/26/2010	<0.0025	
10/4/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/11/2012	<0.005	
10/9/2012	<0.0013	
4/15/2013	<0.0013	
10/15/2013	<0.0013	
4/22/2014	<0.0005	
9/30/2014	<0.0013	
3/30/2015	<0.0013	
10/13/2015	<0.0013	
3/23/2016	<0.01	
5/20/2016	<0.01	
7/29/2016	<0.01	
9/23/2016	<0.01	
11/9/2016	<0.01	
1/31/2017	<0.01	
3/30/2017	<0.01	
6/12/2017	<0.01	
10/2/2017	<0.01	
3/19/2018	<0.01	
9/14/2018	<0.01	
3/20/2019		<0.01

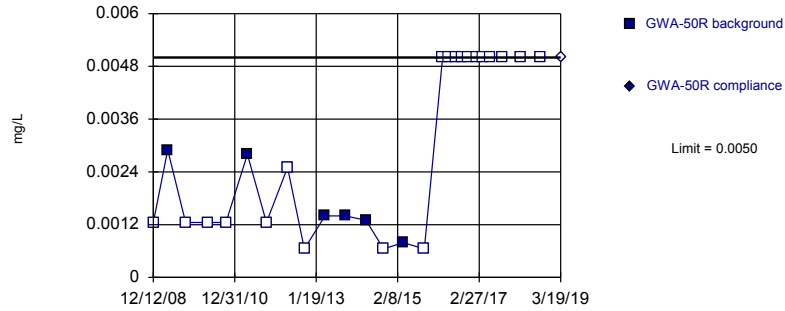
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.0025	
10/24/2007	<0.0025	
11/18/2007	<0.0025	
1/31/2008	0.0083 (O)	
3/10/2008	<0.0025	
5/13/2008	<0.0025	
12/4/2008	<0.0025	
4/21/2009	<0.0025	
10/8/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/9/2012	<0.0013	
4/11/2013	<0.0013	
10/16/2013	<0.0013	
4/10/2014	<0.0005	
9/30/2014	<0.0013	
3/30/2015	<0.0013	
10/13/2015	<0.0013	
3/23/2016	<0.01	
5/19/2016	<0.01	
7/29/2016	<0.01	
9/22/2016	<0.01	
11/10/2016	<0.01	
1/31/2017	<0.01	
4/3/2017	<0.01	
6/9/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/14/2018	<0.01	
3/19/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

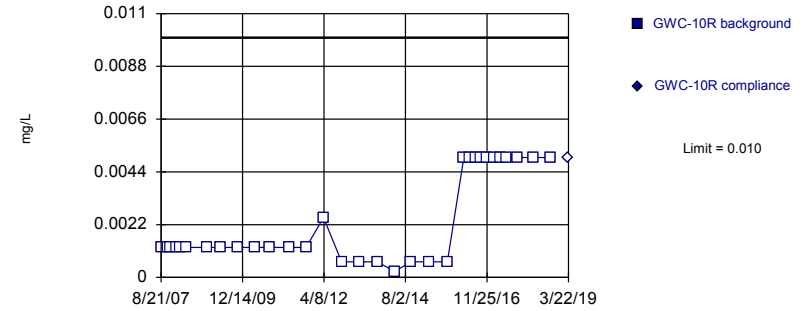


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 76.92% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

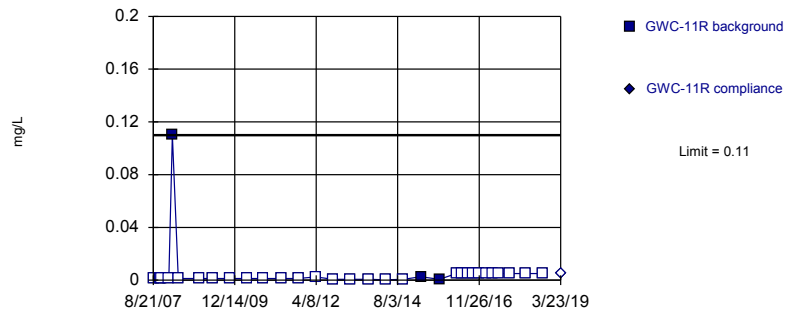


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

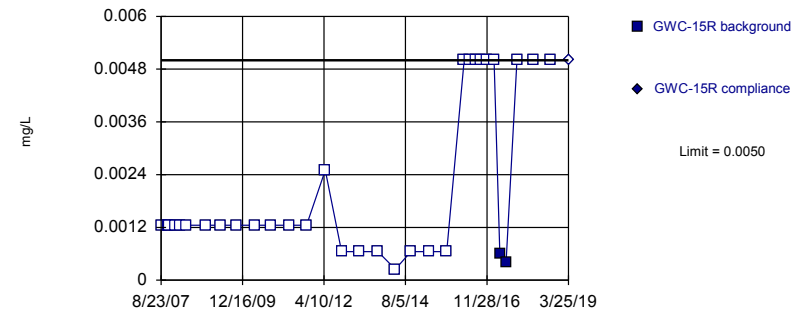


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	<0.0025	
4/23/2009	0.0029	
10/6/2009	<0.0025	
5/3/2010	<0.0025	
10/11/2010	<0.0025	
4/27/2011	0.0028	
10/19/2011	<0.0025	
5/1/2012	<0.005	
10/2/2012	<0.0013	
4/10/2013	0.0014	
10/16/2013	0.0014	
4/22/2014	0.0013	
10/1/2014	<0.0013	
3/30/2015	0.00079 (J)	
10/11/2015	<0.0013	
3/28/2016	<0.01	
5/25/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/11/2016	<0.01	
1/30/2017	<0.01	
4/3/2017	<0.01	
6/12/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/18/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/20/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	<0.0025	
5/8/2008	<0.0025	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/21/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/8/2012	<0.0013	
4/3/2013	<0.0013	
10/15/2013	<0.0013	
4/9/2014	<0.0005	
10/2/2014	<0.0013	
4/2/2015	<0.0013	
10/12/2015	<0.0013	
3/31/2016	<0.01	
5/26/2016	<0.01	
8/3/2016	<0.01	
9/28/2016	<0.01	
11/22/2016	<0.01	
2/7/2017	<0.01	
4/10/2017	<0.01	
6/14/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	0.11	
5/7/2008	<0.0025	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/4/2011	<0.0025	
4/4/2012	<0.005	
10/3/2012	<0.0013	
4/3/2013	<0.0013	
10/9/2013	<0.0013	
4/2/2014	<0.0005	
10/2/2014	<0.0013	
4/1/2015	0.0026	
10/11/2015	0.00065 (J)	
4/4/2016	<0.01	
5/26/2016	<0.01	
8/4/2016	<0.01	
9/28/2016	<0.01	
11/22/2016	<0.01	
2/8/2017	<0.01	
4/10/2017	<0.01	
6/15/2017	<0.01	
10/4/2017	<0.01	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

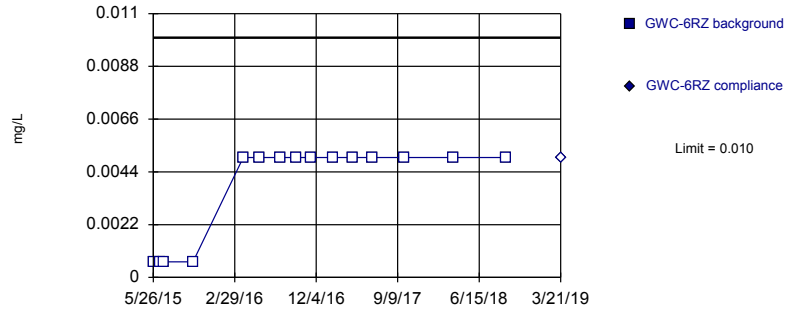
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.0025	
11/2/2007	<0.0025	
11/17/2007	<0.0025	
1/15/2008	<0.0025	
3/6/2008	<0.0025	
5/7/2008	<0.0025	
12/2/2008	<0.0025	
4/28/2009	<0.0025	
10/19/2009	<0.0025	
4/27/2010	<0.0025	
10/4/2010	<0.0025	
4/18/2011	<0.0025	
10/12/2011	<0.0025	
4/23/2012	<0.005	
10/10/2012	<0.0013	
4/15/2013	<0.0013	
10/22/2013	<0.0013	
4/21/2014	<0.0005	
9/30/2014	<0.0013	
4/3/2015	<0.0013	
10/7/2015	<0.0013	
4/5/2016	<0.01	
5/31/2016	<0.01	
8/4/2016	<0.01	
9/29/2016	<0.01	
11/23/2016	<0.01	
2/10/2017	<0.01	
4/12/2017	0.0006 (J)	
6/15/2017	0.0004 (J)	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/25/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

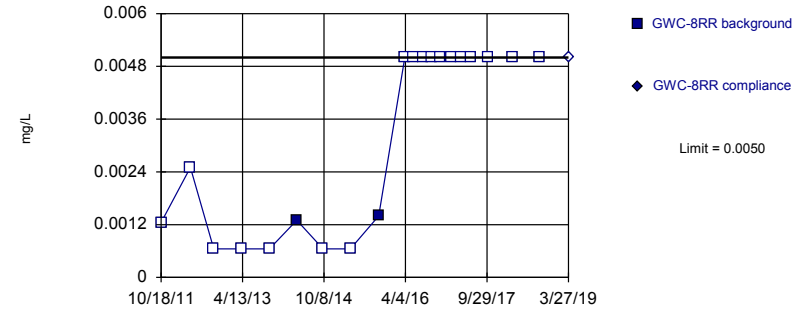


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

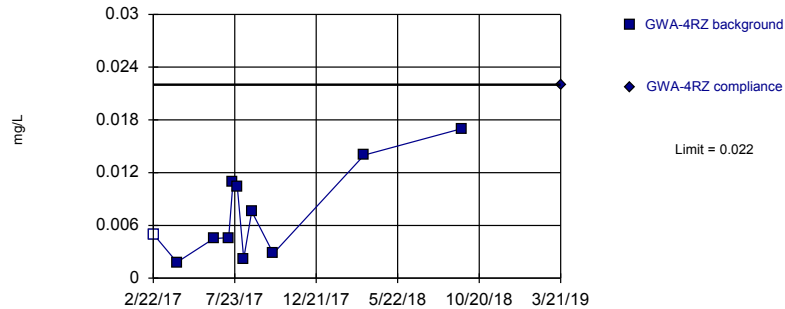


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

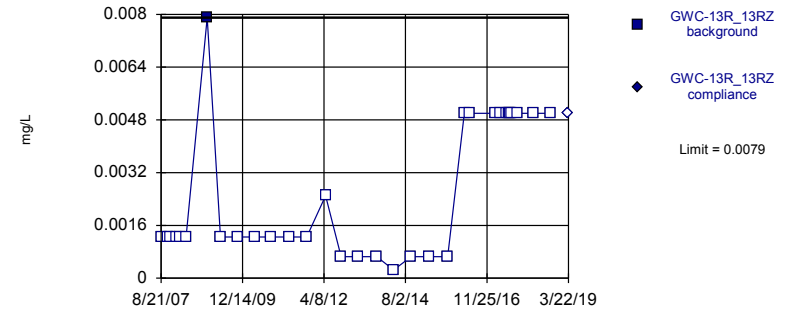


Background Data Summary: Mean=0.007345, Std. Dev.=0.005085, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9063, critical = 0.792. Kappa = 2.837 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.0013	
6/18/2015	<0.0013 (D)	
7/2/2015	<0.0013	
10/9/2015	<0.0013	
3/29/2016	<0.01	
5/24/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/14/2016	<0.01	
2/1/2017	<0.01	
4/6/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.0025	
4/30/2012	<0.005	
10/3/2012	<0.0013	
4/8/2013	<0.0013	
10/9/2013	<0.0013	
4/10/2014	0.0013 (J)	
10/2/2014	<0.0013	
4/3/2015	<0.0013	
10/8/2015	0.0014	
3/30/2016	<0.01	
5/24/2016	<0.01	
8/2/2016	<0.01	
9/27/2016	<0.01	
11/22/2016	<0.01	
2/6/2017	<0.01	
4/6/2017	<0.01	
6/14/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/27/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	<0.01	
4/7/2017	0.0018 (J)	
6/14/2017	0.0045 (J)	
7/12/2017	0.0046 (J)	
7/20/2017	0.0109	
7/28/2017	0.0104	
8/9/2017	0.0022 (J)	
8/24/2017	0.0076 (J)	
10/3/2017	0.0028 (J)	
3/21/2018	0.014	
9/18/2018	0.017	
3/21/2019		0.022

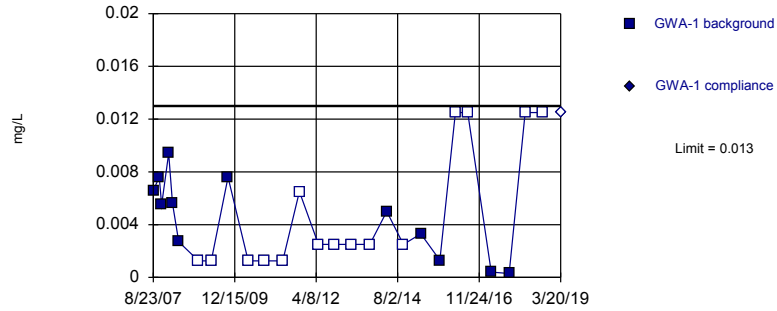
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	<0.0025	
1/31/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	<0.0025	
12/12/2008	0.0079	
4/29/2009	<0.0025	
10/21/2009	<0.0025	
4/28/2010	<0.0025	
10/6/2010	<0.0025	
4/20/2011	<0.0025	
10/12/2011	<0.0025	
4/25/2012	<0.005	
10/2/2012	<0.0013	
4/2/2013	<0.0013	
10/8/2013	<0.0013	
4/1/2014	<0.0005	
10/1/2014	<0.0013	
3/31/2015	<0.0013	
10/14/2015	<0.0013	
4/4/2016	<0.01	
6/1/2016	<0.01	
2/22/2017	<0.01	
4/11/2017	<0.01	
6/16/2017	<0.01	
7/12/2017	<0.01	
7/28/2017	<0.01	
8/10/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/20/2018	<0.01	
3/22/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

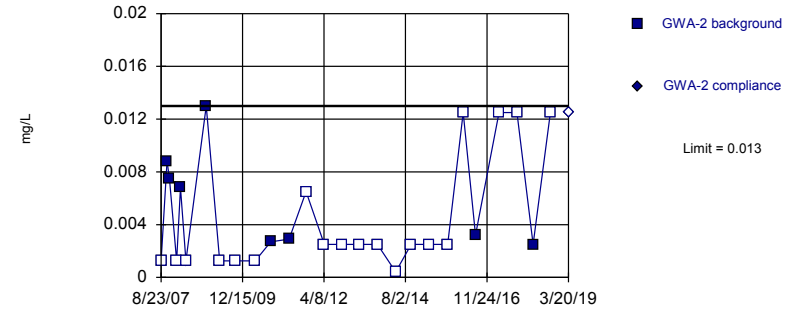


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

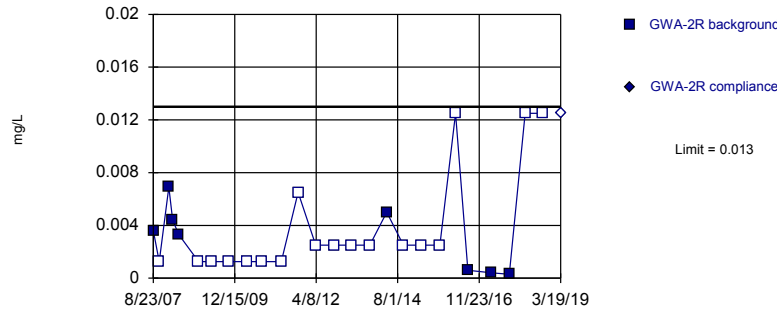


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 70.37% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

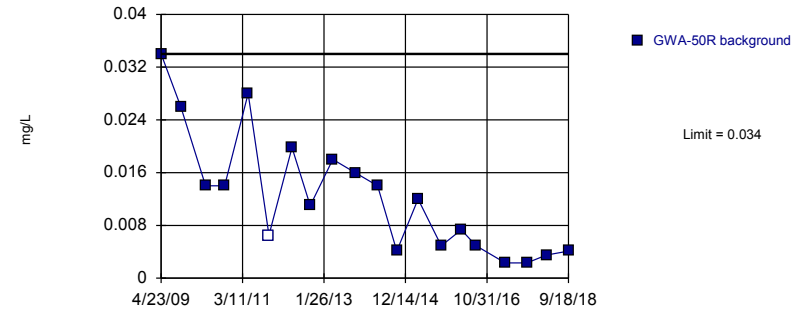


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric, GWA-50R (bg)



Background Data Summary: Mean=0.01234, Std. Dev.=0.00917, n=20, 5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8981, critical = 0.868. Kappa = 2.372 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Copper Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	0.0066	
10/23/2007	0.0076	
11/18/2007	0.0055 (J)	
1/30/2008	0.0094	
3/10/2008	0.0056	
5/13/2008	0.0027	
12/5/2008	<0.0025	
4/15/2009	<0.0025	
10/7/2009	0.0076	
5/3/2010	<0.0025	
10/12/2010	<0.0025	
4/27/2011	<0.0025	
10/17/2011	<0.013	
5/2/2012	<0.005	
10/8/2012	<0.005	
4/12/2013	<0.005	
10/16/2013	<0.005	
4/11/2014	0.005 (J)	
9/30/2014	<0.005	
3/30/2015	0.0033 (J)	
10/13/2015	0.0013 (J)	
3/22/2016	<0.025	
7/29/2016	<0.025	
3/30/2017	0.0004 (J)	
10/2/2017	0.0003 (J)	
3/16/2018	<0.025	
9/17/2018	<0.025 (D)	
3/20/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.0025	
10/24/2007	0.0088	
11/18/2007	0.0075	
1/31/2008	<0.0025	
3/11/2008	0.0068	
5/6/2008	<0.0025	
12/4/2008	0.013	
4/21/2009	<0.0025	
10/7/2009	<0.0025	
4/26/2010	<0.0025	
10/4/2010	0.0027	
4/13/2011	0.0029	
10/5/2011	<0.013	
4/11/2012	<0.005	
10/9/2012	<0.005	
4/15/2013	<0.005	
10/15/2013	<0.005	
4/22/2014	<0.000825	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/23/2016	<0.025	
7/29/2016	0.0032 (J)	
3/30/2017	<0.025	
10/2/2017	<0.025	
3/19/2018	0.0025 (J)	
9/14/2018	<0.025	
3/20/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	0.0036	
10/24/2007	<0.0025	
11/18/2007	0.013 (O)	
1/31/2008	0.0069	
3/10/2008	0.0044	
5/13/2008	0.0033	
12/4/2008	<0.0025	
4/21/2009	<0.0025	
10/8/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.013	
4/3/2012	<0.005	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/10/2014	0.005 (J)	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/23/2016	<0.025	
7/29/2016	0.0006 (J)	
4/3/2017	0.0004 (J)	
10/2/2017	0.0003 (J)	
3/16/2018	<0.025	
9/14/2018	<0.025	
3/19/2019		<0.025

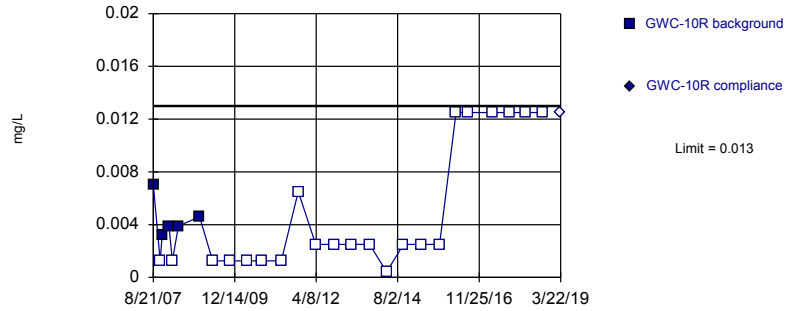
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R
12/12/2008	0.064 (O)
4/23/2009	0.034
10/6/2009	0.026
5/3/2010	0.014
10/11/2010	0.014
4/27/2011	0.028
10/19/2011	<0.013
5/1/2012	0.0198
10/2/2012	0.011
4/10/2013	0.018
10/16/2013	0.016
4/22/2014	0.014
10/1/2014	0.0041 (J)
3/30/2015	0.012
10/11/2015	0.0049 (J)
3/28/2016	0.00734 (J)
8/1/2016	0.0049 (J)
4/3/2017	0.0023 (J)
10/2/2017	0.0023 (J)
3/16/2018	0.0035 (J)
9/18/2018	0.0041 (J)
3/19/2019	0.0029 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

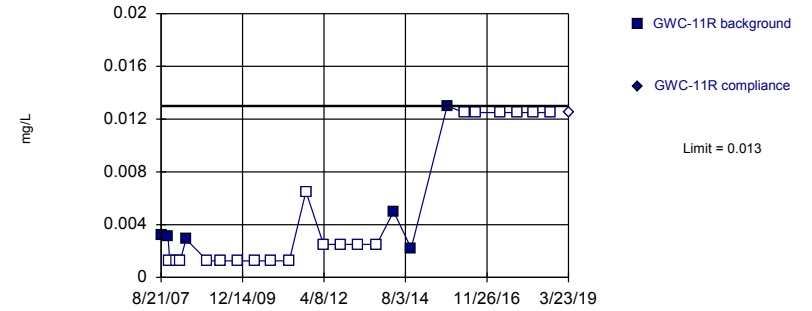


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

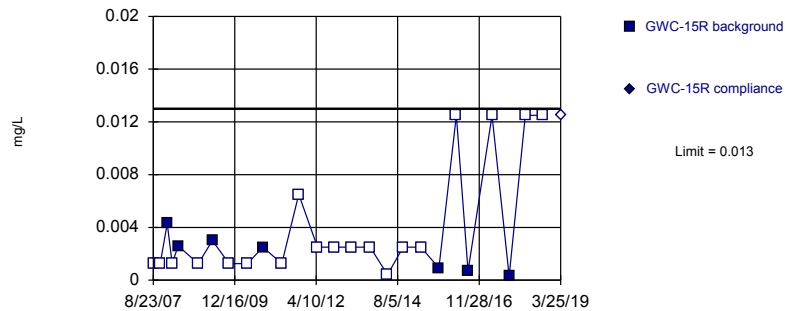


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 76.92% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

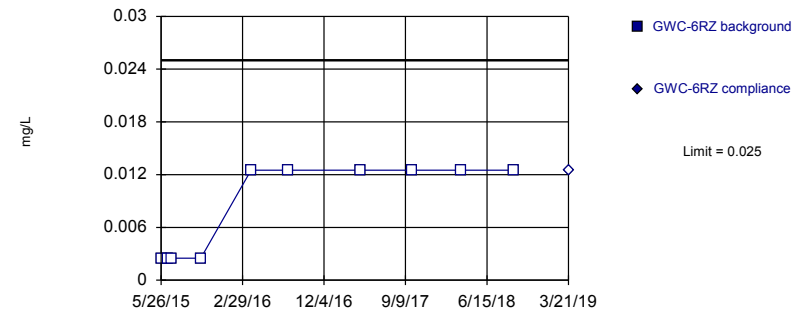


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 73.08% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:35 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0293. Individual comparison alpha = 0.01476 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	0.007	
11/1/2007	<0.0025	
11/20/2007	0.0032	
1/30/2008	0.0039	
3/6/2008	<0.0025	
5/8/2008	0.0039	
12/14/2008	0.0046	
4/29/2009	<0.0025	
10/21/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.013	
4/3/2012	<0.005	
10/8/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.000825	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/12/2015	<0.005	
3/31/2016	<0.025	
8/3/2016	<0.025	
4/10/2017	<0.025	
10/4/2017	<0.025	
3/21/2018	<0.025	
9/18/2018	<0.025	
3/22/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	0.0032	
11/1/2007	0.0031	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	<0.0025	
5/7/2008	0.0029	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/4/2011	<0.013	
4/4/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/9/2013	<0.005	
4/2/2014	0.005 (J)	
10/2/2014	0.0022 (J)	
4/1/2015	0.019 (O)	
10/11/2015	0.013	
4/4/2016	<0.025	
8/4/2016	<0.025	
4/10/2017	<0.025	
10/4/2017	<0.025	
3/22/2018	<0.025	
9/18/2018	<0.025	
3/23/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.0025	
11/2/2007	<0.0025	
11/17/2007	0.02 (O)	
1/15/2008	0.0043	
3/6/2008	<0.0025	
5/7/2008	0.0026	
12/2/2008	<0.0025	
4/28/2009	0.003	
10/19/2009	<0.0025	
4/27/2010	<0.0025	
10/4/2010	0.0025	
4/18/2011	<0.0025	
10/12/2011	<0.013	
4/23/2012	<0.005	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.000825	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/7/2015	0.00093 (J)	
4/5/2016	<0.025	
8/4/2016	0.0007 (J)	
4/12/2017	<0.025	
10/6/2017	0.0003 (J)	
3/23/2018	<0.025	
9/19/2018	<0.025	
3/25/2019		<0.025

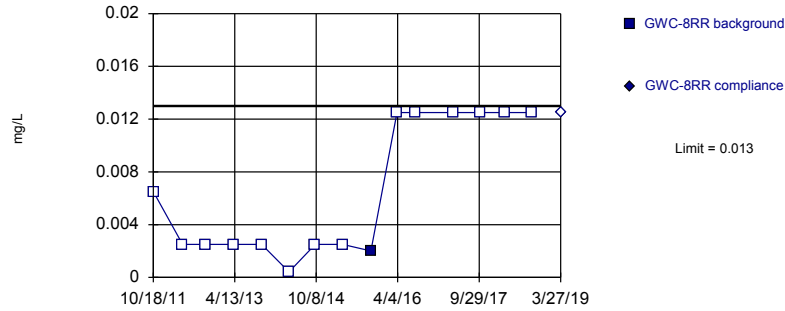
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.005	
6/18/2015	<0.005 (D)	
7/2/2015	<0.005	
10/9/2015	<0.005	
3/29/2016	<0.025	
8/1/2016	<0.025	
4/6/2017	<0.025	
10/3/2017	<0.025	
3/20/2018	<0.025	
9/17/2018	<0.025	
3/21/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

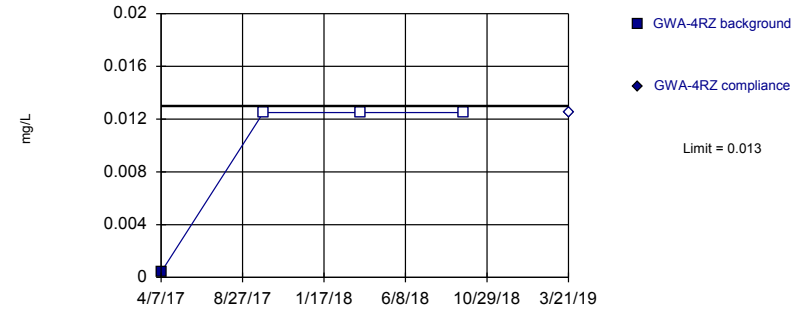


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

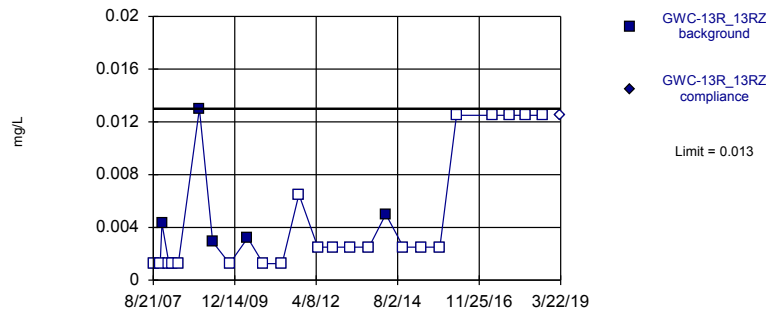


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 4 background values. 75% NDs. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

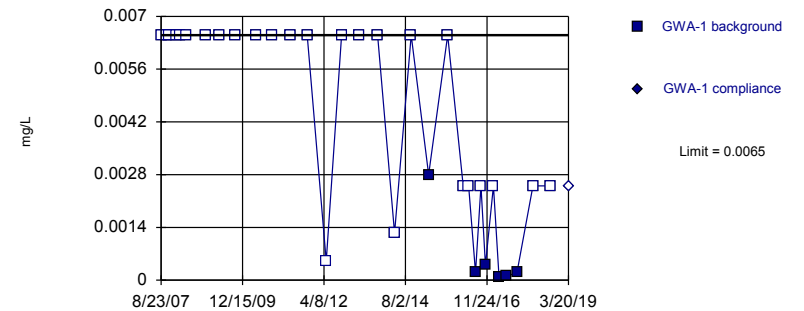


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 80.77% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Copper Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.013	
4/30/2012	<0.005	
10/3/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/10/2014	<0.000825	
10/2/2014	<0.005	
4/3/2015	<0.005	
10/8/2015	0.002 (J)	
3/30/2016	<0.025	
8/2/2016	<0.025	
4/6/2017	<0.025	
10/4/2017	<0.025	
3/21/2018	<0.025	
9/18/2018	<0.025	
3/27/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
4/7/2017	0.0004 (J)	
10/3/2017	<0.025	
3/21/2018	<0.025	
9/18/2018	<0.025	
3/21/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	0.0043	
1/31/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	<0.0025	
12/12/2008	0.013	
4/29/2009	0.0029	
10/21/2009	<0.0025	
4/28/2010	0.0032	
10/6/2010	<0.0025	
4/20/2011	<0.0025	
10/12/2011	<0.013	
4/25/2012	<0.005	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/8/2013	<0.005	
4/1/2014	0.005 (J)	
10/1/2014	<0.005	
3/31/2015	<0.005	
10/14/2015	<0.005	
4/4/2016	<0.025	
4/11/2017	<0.025	
10/6/2017	<0.025	
3/23/2018	<0.025	
9/20/2018	<0.025	
3/22/2019		<0.025

Prediction Limit

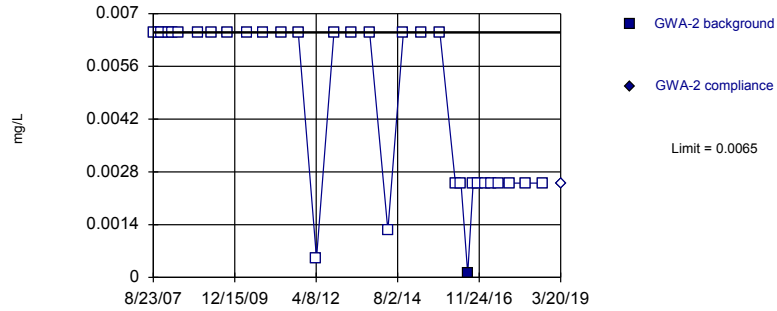
Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.013	
10/23/2007	<0.013	
11/18/2007	<0.013	
1/30/2008	<0.013	
3/10/2008	<0.013	
5/13/2008	<0.013	
12/5/2008	<0.013	
4/15/2009	<0.013	
10/7/2009	<0.013	
5/3/2010	<0.013	
10/12/2010	<0.013	
4/27/2011	<0.013	
10/17/2011	<0.013	
5/2/2012	<0.001	
10/8/2012	<0.013	
4/12/2013	<0.013	
10/16/2013	<0.013	
4/11/2014	<0.0025	
9/30/2014	<0.013	
3/30/2015	0.0028 (J)	
10/13/2015	<0.013	
3/22/2016	<0.005	
5/19/2016	<0.005	
7/29/2016	0.0002 (J)	
9/23/2016	<0.005 (*)	
11/9/2016	0.0004 (J)	
1/30/2017	<0.005 (*)	
3/30/2017	8E-05 (J)	
6/9/2017	0.0001 (J)	
10/2/2017	0.0002 (J)	
3/16/2018	<0.005	
9/17/2018	<0.005 (D)	
3/20/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

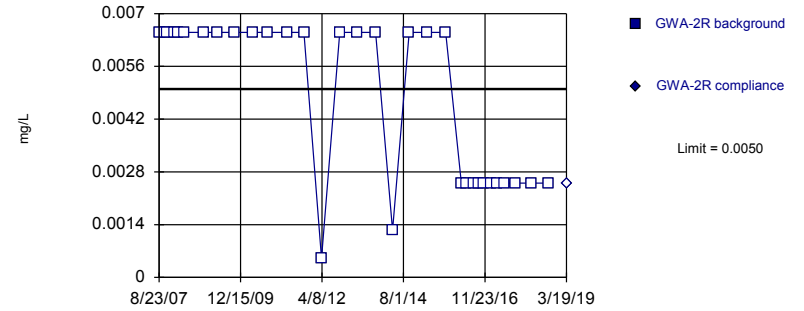


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

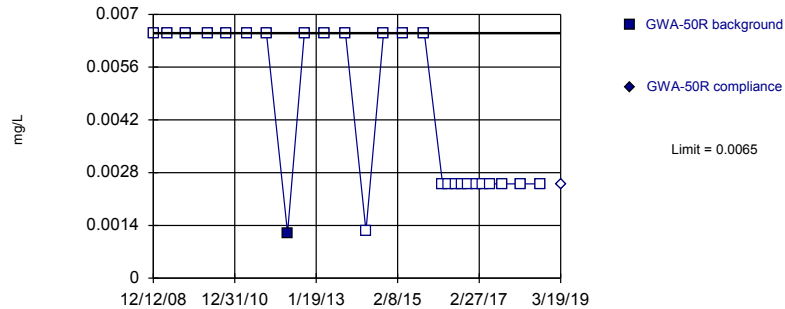


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

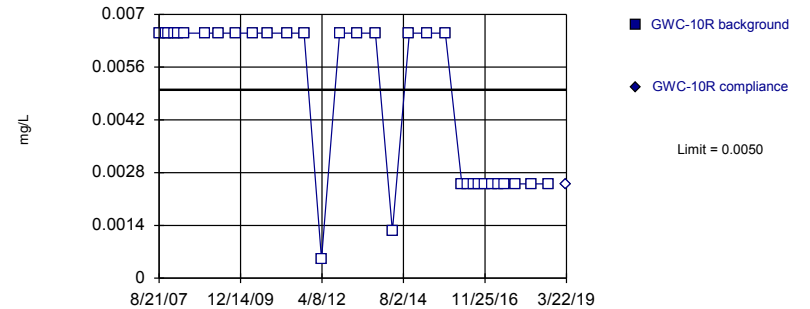


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.013	
10/24/2007	<0.013	
11/18/2007	<0.013	
1/31/2008	<0.013	
3/11/2008	<0.013	
5/6/2008	<0.013	
12/4/2008	<0.013	
4/21/2009	<0.013	
10/7/2009	<0.013	
4/26/2010	<0.013	
10/4/2010	<0.013	
4/13/2011	<0.013	
10/5/2011	<0.013	
4/11/2012	<0.001	
10/9/2012	<0.013	
4/15/2013	<0.013	
10/15/2013	<0.013	
4/22/2014	<0.0025	
9/30/2014	<0.013	
3/30/2015	<0.013	
10/13/2015	<0.013	
3/23/2016	<0.005	
5/20/2016	<0.005	
7/29/2016	0.0001 (J)	
9/23/2016	<0.005	
11/9/2016	<0.005	
1/31/2017	<0.005 (*)	
3/30/2017	<0.005	
6/12/2017	<0.005	
10/2/2017	<0.005	
3/19/2018	<0.005	
9/14/2018	<0.005	
3/20/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.013	
10/24/2007	<0.013	
11/18/2007	<0.013	
1/31/2008	<0.013	
3/10/2008	<0.013	
5/13/2008	<0.013	
12/4/2008	<0.013	
4/21/2009	<0.013	
10/8/2009	<0.013	
4/21/2010	<0.013	
9/28/2010	<0.013	
4/12/2011	<0.013	
10/4/2011	<0.013	
4/3/2012	<0.001	
10/9/2012	<0.013	
4/11/2013	<0.013	
10/16/2013	<0.013	
4/10/2014	<0.0025	
9/30/2014	<0.013	
3/30/2015	<0.013	
10/13/2015	<0.013	
3/23/2016	<0.005	
5/19/2016	<0.005	
7/29/2016	<0.005	
9/22/2016	<0.005	
11/10/2016	<0.005	
1/31/2017	<0.005	
4/3/2017	<0.005	
6/9/2017	<0.005	
10/2/2017	<0.005	
3/16/2018	<0.005	
9/14/2018	<0.005	
3/19/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	<0.013	
4/23/2009	<0.013	
10/6/2009	<0.013	
5/3/2010	<0.013	
10/11/2010	<0.013	
4/27/2011	<0.013	
10/19/2011	<0.013	
5/1/2012	0.0012	
10/2/2012	<0.013	
4/10/2013	<0.013	
10/16/2013	<0.013	
4/22/2014	<0.0025	
10/1/2014	<0.013	
3/30/2015	<0.013	
10/11/2015	<0.013	
3/28/2016	<0.005	
5/25/2016	<0.005	
8/1/2016	<0.005	
9/26/2016	<0.005	
11/11/2016	<0.005	
1/30/2017	<0.005	
4/3/2017	<0.005	
6/12/2017	<0.005	
10/2/2017	<0.005	
3/16/2018	<0.005	
9/18/2018	<0.005	
3/19/2019		<0.005

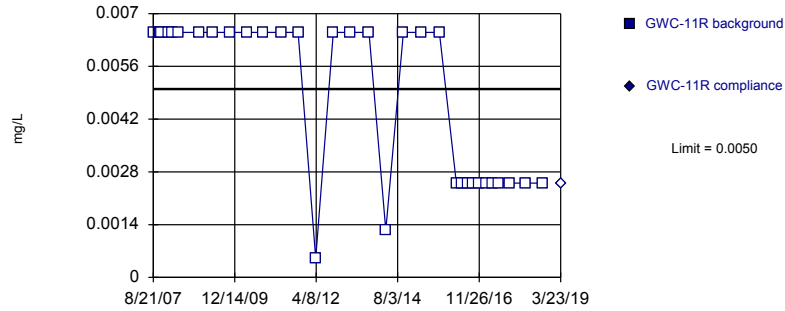
Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.013	
11/1/2007	<0.013	
11/20/2007	<0.013	
1/30/2008	<0.013	
3/6/2008	<0.013	
5/8/2008	<0.013	
12/14/2008	<0.013	
4/29/2009	<0.013	
10/21/2009	<0.013	
4/21/2010	<0.013	
9/28/2010	<0.013	
4/12/2011	<0.013	
10/4/2011	<0.013	
4/3/2012	<0.001	
10/8/2012	<0.013	
4/3/2013	<0.013	
10/15/2013	<0.013	
4/9/2014	<0.0025	
10/2/2014	<0.013	
4/2/2015	<0.013	
10/12/2015	<0.013	
3/31/2016	<0.005	
5/26/2016	<0.005	
8/3/2016	<0.005	
9/28/2016	<0.005	
11/22/2016	<0.005	
2/7/2017	<0.005	
4/10/2017	<0.005	
6/14/2017	<0.005	
10/4/2017	<0.005	
3/21/2018	<0.005	
9/18/2018	<0.005	
3/22/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

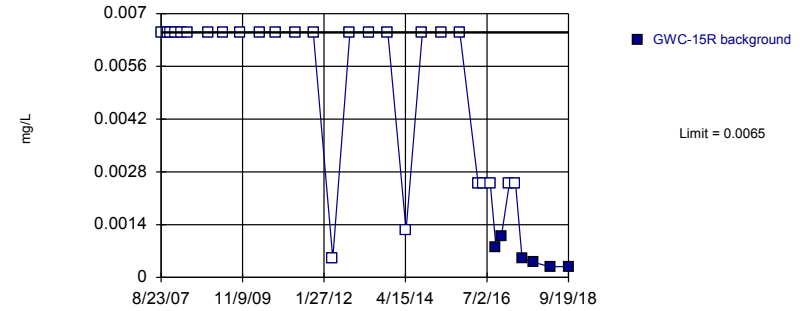


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-15R

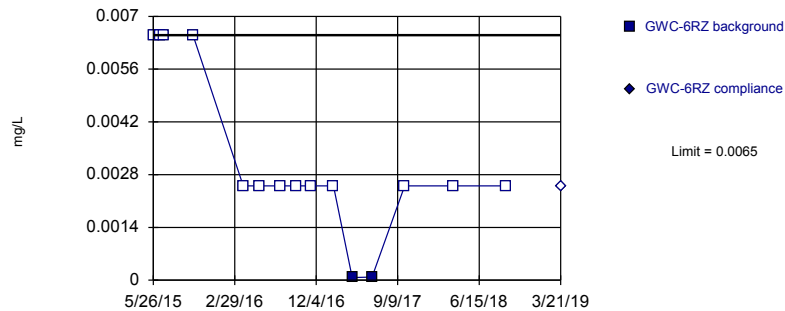


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

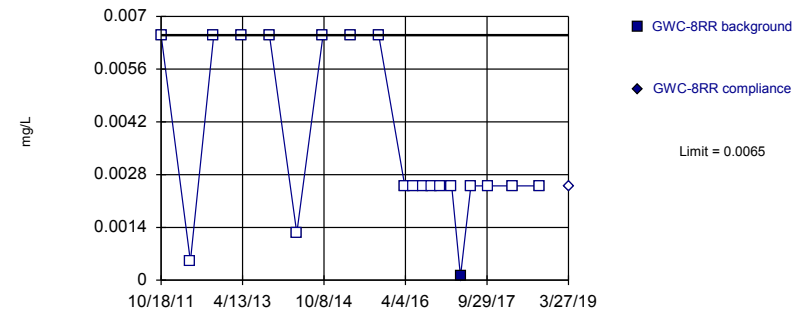


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.013	
11/1/2007	<0.013	
11/18/2007	<0.013	
1/30/2008	<0.013	
3/6/2008	<0.013	
5/7/2008	<0.013	
12/14/2008	<0.013	
4/29/2009	<0.013	
10/22/2009	<0.013	
4/21/2010	<0.013	
9/29/2010	<0.013	
4/13/2011	<0.013	
10/4/2011	<0.013	
4/4/2012	<0.001	
10/3/2012	<0.013	
4/3/2013	<0.013	
10/9/2013	<0.013	
4/2/2014	<0.0025	
10/2/2014	<0.013	
4/1/2015	<0.013	
10/11/2015	<0.013	
4/4/2016	<0.005	
5/26/2016	<0.005	
8/4/2016	<0.005	
9/28/2016	<0.005	
11/22/2016	<0.005	
2/8/2017	<0.005	
4/10/2017	<0.005	
6/15/2017	<0.005	
10/4/2017	<0.005	
3/22/2018	<0.005	
9/18/2018	<0.005	
3/23/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R
8/23/2007	<0.013
11/2/2007	<0.013
11/17/2007	<0.013
1/15/2008	<0.013
3/6/2008	<0.013
5/7/2008	<0.013
12/2/2008	<0.013
4/28/2009	<0.013
10/19/2009	<0.013
4/27/2010	<0.013
10/4/2010	<0.013
4/18/2011	<0.013
10/12/2011	<0.013
4/23/2012	<0.001
10/10/2012	<0.013
4/15/2013	<0.013
10/22/2013	<0.013
4/21/2014	<0.0025
9/30/2014	<0.013
4/3/2015	<0.013
10/7/2015	<0.013
4/5/2016	<0.005
5/31/2016	<0.005
8/4/2016	<0.005
9/29/2016	0.0008 (J)
11/23/2016	0.0011 (J)
2/10/2017	<0.005
4/12/2017	<0.005 (*)
6/15/2017	0.0005 (J)
10/6/2017	0.0004 (J)
3/23/2018	0.00028 (J)
9/19/2018	0.00029 (J)
3/25/2019	0.00047 (X)

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.013	
6/18/2015	<0.013 (D)	
7/2/2015	<0.013	
10/9/2015	<0.013	
3/29/2016	<0.005	
5/24/2016	<0.005	
8/1/2016	<0.005	
9/26/2016	<0.005	
11/14/2016	<0.005	
2/1/2017	<0.005	
4/6/2017	7E-05 (J)	
6/13/2017	8E-05 (J)	
10/3/2017	<0.005	
3/20/2018	<0.005	
9/17/2018	<0.005	
3/21/2019		<0.005

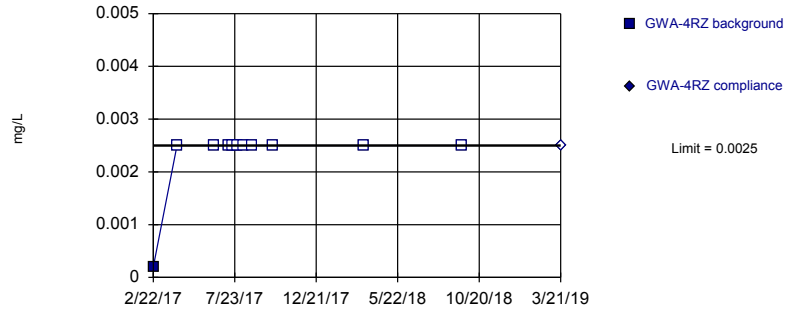
Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.013	
4/30/2012	<0.001	
10/3/2012	<0.013	
4/8/2013	<0.013	
10/9/2013	<0.013	
4/10/2014	<0.0025	
10/2/2014	<0.013	
4/3/2015	<0.013	
10/8/2015	<0.013	
3/30/2016	<0.005	
5/24/2016	<0.005	
8/2/2016	<0.005	
9/27/2016	<0.005	
11/22/2016	<0.005	
2/6/2017	<0.005	
4/6/2017	0.0001 (J)	
6/14/2017	<0.005	
10/4/2017	<0.005	
3/21/2018	<0.005	
9/18/2018	<0.005	
3/27/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

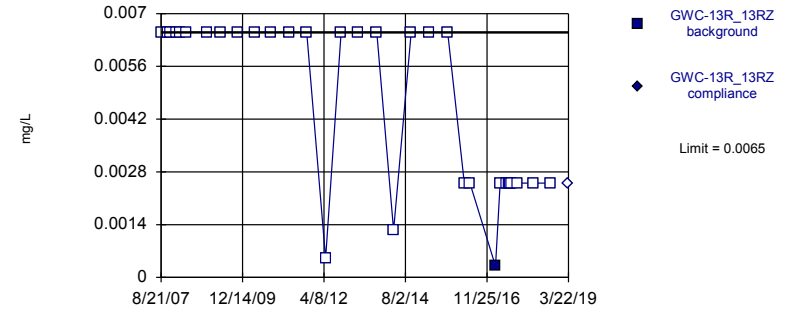


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

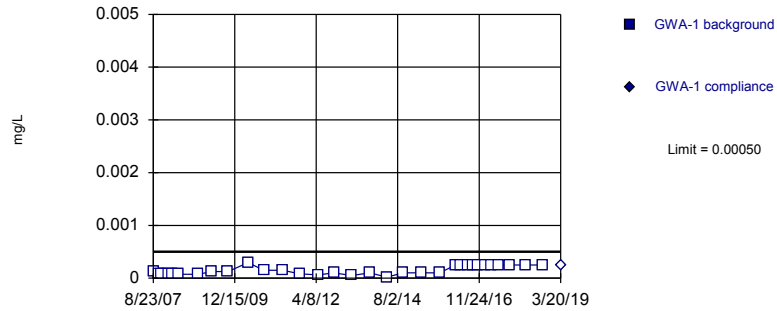


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

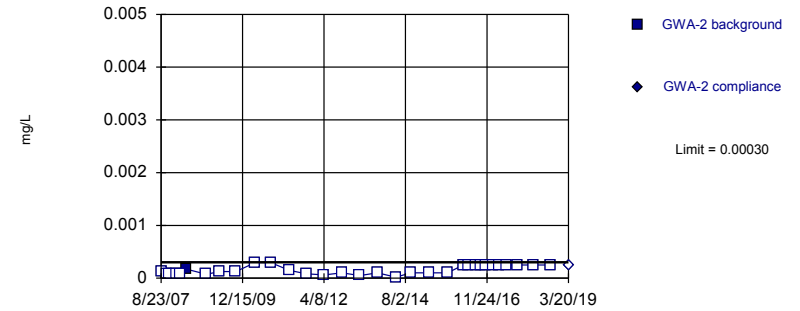


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:36 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	0.0002 (J)	
4/7/2017	<0.005	
6/14/2017	<0.005	
7/12/2017	<0.005	
7/20/2017	<0.005	
7/28/2017	<0.005	
8/9/2017	<0.005	
8/24/2017	<0.005	
10/3/2017	<0.005	
3/21/2018	<0.005	
9/18/2018	<0.005	
3/21/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.013	
11/1/2007	<0.013	
11/19/2007	<0.013	
1/31/2008	<0.013	
3/5/2008	<0.013	
5/7/2008	<0.013	
12/12/2008	<0.013	
4/29/2009	<0.013	
10/21/2009	<0.013	
4/28/2010	<0.013	
10/6/2010	<0.013	
4/20/2011	<0.013	
10/12/2011	<0.013	
4/25/2012	<0.001	
10/2/2012	<0.013	
4/2/2013	<0.013	
10/8/2013	<0.013	
4/1/2014	<0.0025	
10/1/2014	<0.013	
3/31/2015	<0.013	
10/14/2015	<0.013	
4/4/2016	<0.005	
6/1/2016	<0.005	
2/22/2017	0.0003 (J)	
4/11/2017	<0.005	
6/16/2017	<0.005	
7/12/2017	<0.005	
7/28/2017	<0.005	
8/10/2017	<0.005	
10/6/2017	<0.005	
3/23/2018	<0.005	
9/20/2018	<0.005	
3/22/2019		<0.005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.000254	
10/23/2007	<0.000145	
11/18/2007	<0.000145	
1/30/2008	<0.000145	
3/10/2008	<0.000145	
5/13/2008	<0.000145	
12/5/2008	<0.000145	
4/15/2009	<0.00025	
10/7/2009	<0.00025	
5/3/2010	<0.000591	
10/12/2010	<0.000299	
4/27/2011	<0.000299	
10/17/2011	<0.000168	
5/2/2012	<0.000123	
10/8/2012	<0.0002	
4/12/2013	<0.0001	
10/16/2013	<0.0002	
4/11/2014	<4.02E-05	
9/30/2014	<0.0002	
3/30/2015	<0.0002	
10/13/2015	<0.0002	
3/22/2016	<0.0005	
5/19/2016	<0.0005	
7/29/2016	<0.0005	
9/23/2016	<0.0005	
11/9/2016	<0.0005	
1/30/2017	<0.0005	
3/30/2017	<0.0005 (*)	
6/9/2017	<0.0005	
10/2/2017	<0.0005	
3/16/2018	<0.0005	
9/17/2018	<0.0005 (D)	
3/20/2019		<0.0005

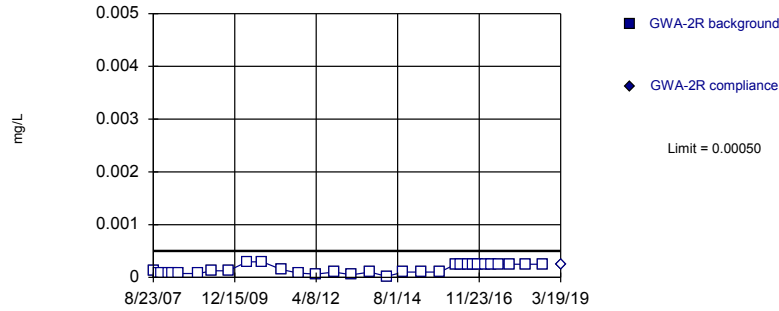
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.000254	
10/24/2007	<0.000145	
11/18/2007	<0.000145	
1/31/2008	<0.000145	
3/11/2008	<0.000145	
5/6/2008	0.000175	
12/4/2008	<0.000145	
4/21/2009	<0.00025	
10/7/2009	<0.00025	
4/26/2010	<0.000591	
10/4/2010	<0.000591	
4/13/2011	<0.000299	
10/5/2011	<0.000168	
4/11/2012	<0.000123	
10/9/2012	<0.0002	
4/15/2013	<0.0001	
10/15/2013	<0.0002	
4/22/2014	<4.02E-05	
9/30/2014	<0.0002	
3/30/2015	<0.0002	
10/13/2015	<0.0002	
3/23/2016	<0.0005	
5/20/2016	<0.0005	
7/29/2016	<0.0005	
9/23/2016	<0.0005	
11/9/2016	<0.0005	
1/31/2017	<0.0005 (*)	
3/30/2017	<0.0005 (*)	
6/12/2017	<0.0005 (*)	
10/2/2017	<0.0005	
3/19/2018	<0.0005	
9/14/2018	<0.0005	
3/20/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

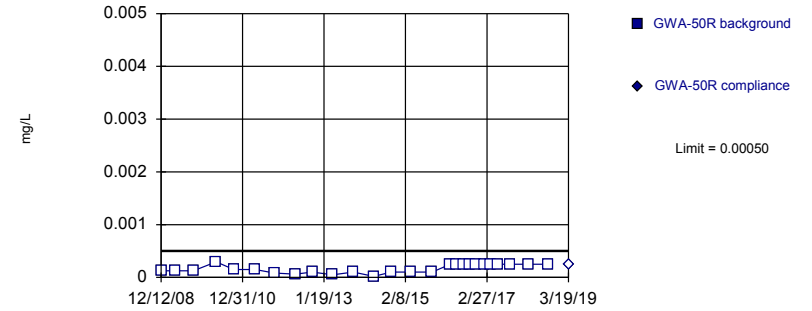


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

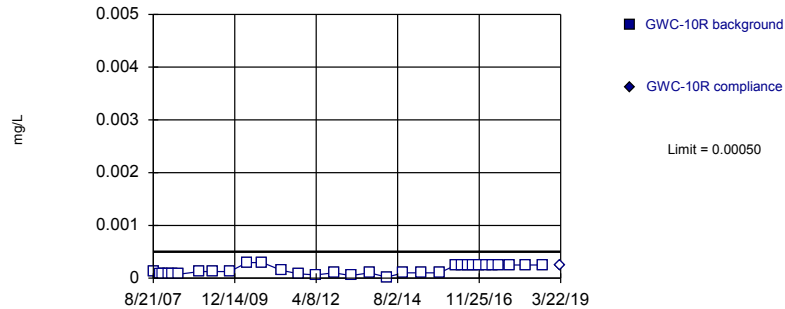


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

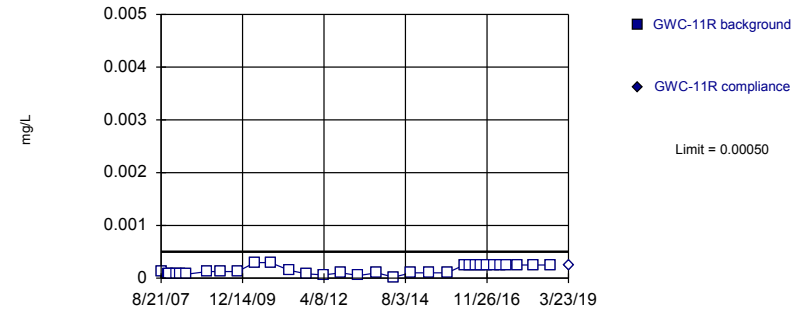


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.000254	
10/24/2007	<0.000145	
11/18/2007	<0.000145	
1/31/2008	<0.000145	
3/10/2008	<0.000145	
5/13/2008	<0.000145	
12/4/2008	<0.000145	
4/21/2009	<0.00025	
10/8/2009	<0.00025	
4/21/2010	<0.000591	
9/28/2010	<0.000591	
4/12/2011	<0.000299	
10/4/2011	<0.000168	
4/3/2012	<0.000123	
10/9/2012	<0.0002	
4/11/2013	<0.0001	
10/16/2013	<0.0002	
4/10/2014	<4.02E-05	
9/30/2014	<0.0002	
3/30/2015	<0.0002	
10/13/2015	<0.0002	
3/23/2016	<0.0005	
5/19/2016	<0.0005	
7/29/2016	<0.0005	
9/22/2016	<0.0005	
11/10/2016	<0.0005	
1/31/2017	<0.0005	
4/3/2017	<0.0005	
6/9/2017	<0.0005	
10/2/2017	<0.0005	
3/16/2018	<0.0005	
9/14/2018	<0.0005	
3/19/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	<0.00025	
4/23/2009	<0.00025	
10/6/2009	<0.00025	
5/3/2010	<0.000591	
10/11/2010	<0.000299	
4/27/2011	<0.000299	
10/19/2011	<0.000168	
5/1/2012	<0.000123	
10/2/2012	<0.0002	
4/10/2013	<0.0001	
10/16/2013	<0.0002	
4/22/2014	<4.02E-05	
10/1/2014	<0.0002	
3/30/2015	<0.0002	
10/11/2015	<0.0002	
3/28/2016	<0.0005	
5/25/2016	<0.0005	
8/1/2016	<0.0005	
9/26/2016	<0.0005	
11/11/2016	<0.0005	
1/30/2017	<0.0005	
4/3/2017	<0.0005	
6/12/2017	<0.0005 (*)	
10/2/2017	<0.0005	
3/16/2018	<0.0005	
9/18/2018	<0.0005	
3/19/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.000254	
11/1/2007	<0.000145	
11/20/2007	<0.000145	
1/30/2008	<0.000145	
3/6/2008	<0.000145	
5/8/2008	<0.000145	
12/14/2008	<0.00025	
4/29/2009	<0.00025	
10/21/2009	<0.00025	
4/21/2010	<0.000591	
9/28/2010	<0.000591	
4/12/2011	<0.000299	
10/4/2011	<0.000168	
4/3/2012	<0.000123	
10/8/2012	<0.0002	
4/3/2013	<0.0001	
10/15/2013	<0.0002	
4/9/2014	<4.02E-05	
10/2/2014	<0.0002	
4/2/2015	<0.0002	
10/12/2015	<0.0002	
3/31/2016	<0.0005	
5/26/2016	<0.0005	
8/3/2016	<0.0005	
9/28/2016	<0.0005	
11/22/2016	<0.0005	
2/7/2017	<0.0005	
4/10/2017	<0.0005	
6/14/2017	<0.0005 (*)	
10/4/2017	<0.0005	
3/21/2018	<0.0005	
9/18/2018	<0.0005	
3/22/2019		<0.0005

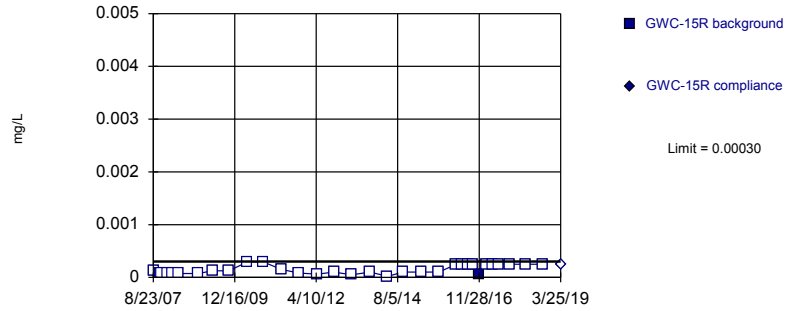
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.000254	
11/1/2007	<0.000145	
11/18/2007	<0.000145	
1/30/2008	<0.000145	
3/6/2008	<0.000145	
5/7/2008	<0.000145	
12/14/2008	<0.00025	
4/29/2009	<0.00025	
10/22/2009	<0.00025	
4/21/2010	<0.000591	
9/29/2010	<0.000591	
4/13/2011	<0.000299	
10/4/2011	<0.000168	
4/4/2012	<0.000123	
10/3/2012	<0.0002	
4/3/2013	<0.0001	
10/9/2013	<0.0002	
4/2/2014	<4.02E-05	
10/2/2014	<0.0002	
4/1/2015	<0.0002	
10/11/2015	<0.0002	
4/4/2016	<0.0005	
5/26/2016	<0.0005	
8/4/2016	<0.0005	
9/28/2016	<0.0005	
11/22/2016	<0.0005	
2/8/2017	<0.0005	
4/10/2017	<0.0005	
6/15/2017	<0.0005 (*)	
10/4/2017	<0.0005	
3/22/2018	<0.0005	
9/18/2018	<0.0005	
3/23/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

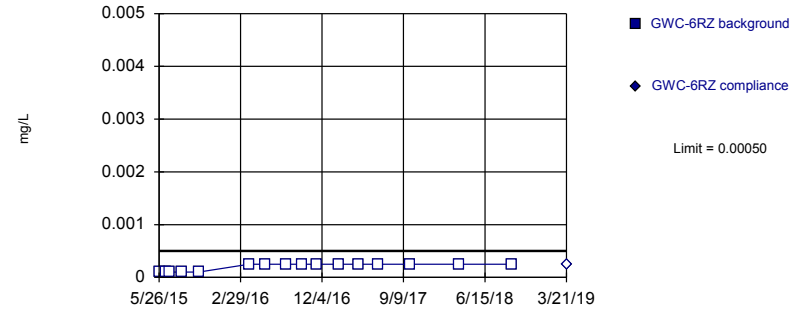


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

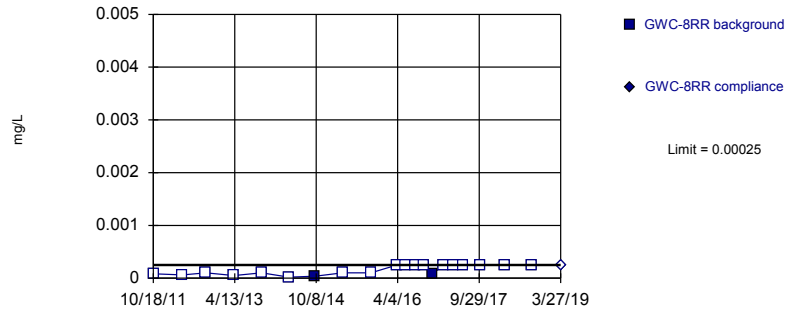


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 16) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

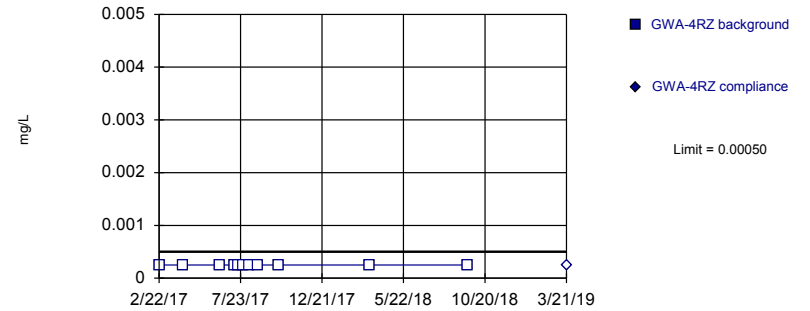


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.000254	
11/2/2007	<0.000145	
11/17/2007	<0.000145	
1/15/2008	<0.000145	
3/6/2008	<0.000145	
5/7/2008	<0.000145	
12/2/2008	<0.000145	
4/28/2009	<0.00025	
10/19/2009	<0.00025	
4/27/2010	<0.000591	
10/4/2010	<0.000591	
4/18/2011	<0.000299	
10/12/2011	<0.000168	
4/23/2012	<0.000123	
10/10/2012	<0.0002	
4/15/2013	<0.0001	
10/22/2013	<0.0002	
4/21/2014	<4.02E-05	
9/30/2014	<0.0002	
4/3/2015	<0.0002	
10/7/2015	<0.0002	
4/5/2016	<0.0005	
5/31/2016	<0.0005	
8/4/2016	<0.0005	
9/29/2016	<0.0005	
11/23/2016	5E-05 (J)	
2/10/2017	<0.0005	
4/12/2017	<0.0005	
6/15/2017	<0.0005 (*)	
10/6/2017	<0.0005	
3/23/2018	<0.0005	
9/19/2018	<0.0005	
3/25/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.0002	
6/18/2015	<0.0002 (D)	
7/2/2015	<0.0002	
8/13/2015	<0.0002 (D)	
10/9/2015	<0.0002	
3/29/2016	<0.0005	
5/24/2016	<0.0005	
8/1/2016	<0.0005	
9/26/2016	<0.0005	
11/14/2016	<0.0005	
2/1/2017	<0.0005 (*)	
4/6/2017	<0.0005	
6/13/2017	<0.0005 (*)	
10/3/2017	<0.0005	
3/20/2018	<0.0005	
9/17/2018	<0.0005	
3/21/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.000168	
4/30/2012	<0.000123	
10/3/2012	<0.0002	
4/8/2013	<0.0001	
10/9/2013	<0.0002	
4/10/2014	<4.02E-05	
10/2/2014	3.83E-05 (J)	
4/3/2015	<0.0002	
10/8/2015	<0.0002	
3/30/2016	<0.0005	
5/24/2016	<0.0005	
8/2/2016	<0.0005	
9/27/2016	<0.0005	
11/22/2016	8E-05 (J)	
2/6/2017	<0.0005	
4/6/2017	<0.0005	
6/14/2017	<0.0005 (*)	
10/4/2017	<0.0005	
3/21/2018	<0.0005	
9/18/2018	<0.0005	
3/27/2019		<0.0005

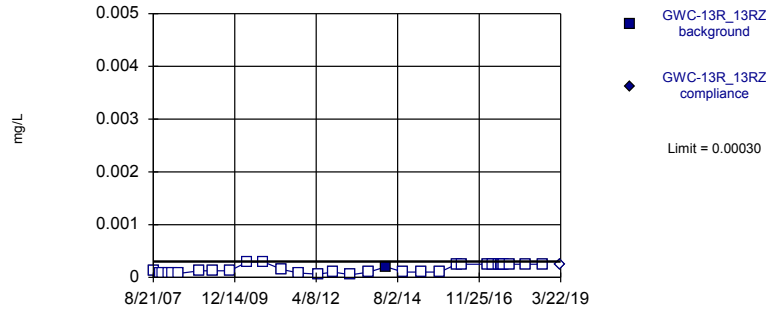
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	<0.0005	
4/7/2017	<0.0005 (*)	
6/14/2017	<0.0005 (*)	
7/12/2017	<0.0005	
7/20/2017	<0.0005	
7/28/2017	<0.0005	
8/9/2017	<0.0005	
8/24/2017	<0.0005	
10/3/2017	<0.0005	
3/21/2018	<0.0005	
9/18/2018	<0.0005	
3/21/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

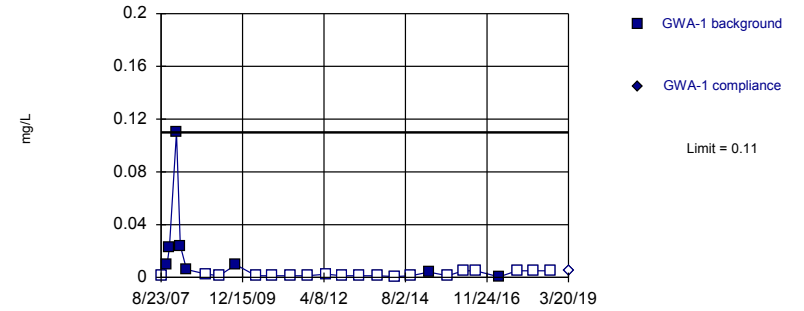


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

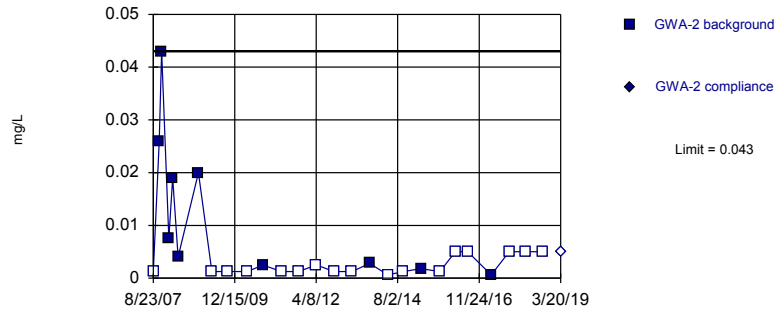


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 70.37% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

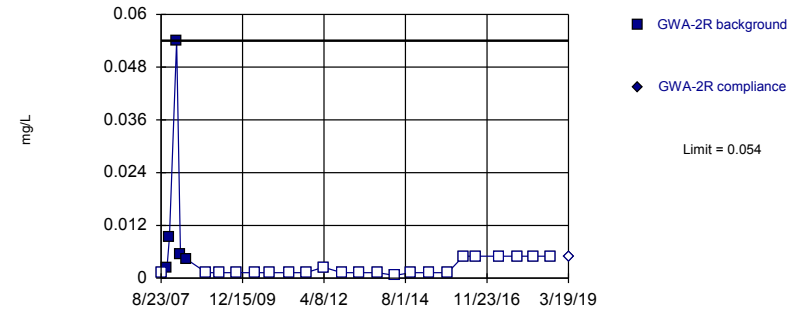


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 62.96% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.000254	
11/1/2007	<0.000145	
11/19/2007	<0.000145	
1/31/2008	<0.000145	
3/5/2008	<0.000145	
5/7/2008	<0.000145	
12/12/2008	<0.00025	
4/29/2009	<0.00025	
10/21/2009	<0.00025	
4/28/2010	<0.000591	
10/6/2010	<0.000591	
4/20/2011	<0.000299	
10/12/2011	<0.000168	
4/25/2012	<0.000123	
10/2/2012	<0.0002	
4/2/2013	<0.0001	
10/8/2013	<0.0002	
4/1/2014	0.0002 (J)	
10/1/2014	<0.0002	
3/31/2015	<0.0002	
10/14/2015	<0.0002	
4/4/2016	<0.0005	
6/1/2016	<0.0005	
2/22/2017	<0.0005	
4/11/2017	<0.0005	
6/16/2017	<0.0005 (*)	
7/12/2017	<0.0005	
7/28/2017	<0.0005	
8/10/2017	<0.0005	
10/6/2017	<0.0005	
3/23/2018	<0.0005	
9/20/2018	<0.0005	
3/22/2019		<0.0005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.0025	
10/23/2007	0.0096	
11/18/2007	0.023	
1/30/2008	0.11	
3/10/2008	0.024	
5/13/2008	0.006	
12/5/2008	<0.005	
4/15/2009	<0.0025	
10/7/2009	0.0096	
5/3/2010	<0.0025	
10/12/2010	<0.0025	
4/27/2011	<0.0025	
10/17/2011	<0.0025	
5/2/2012	<0.005	
10/8/2012	<0.0025	
4/12/2013	<0.0025	
10/16/2013	<0.0025	
4/11/2014	<0.00125	
9/30/2014	<0.0025	
3/30/2015	0.004	
10/13/2015	<0.0025	
3/22/2016	<0.01	
7/29/2016	<0.01 (*)	
3/30/2017	0.0004 (J)	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01 (D)	
3/20/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

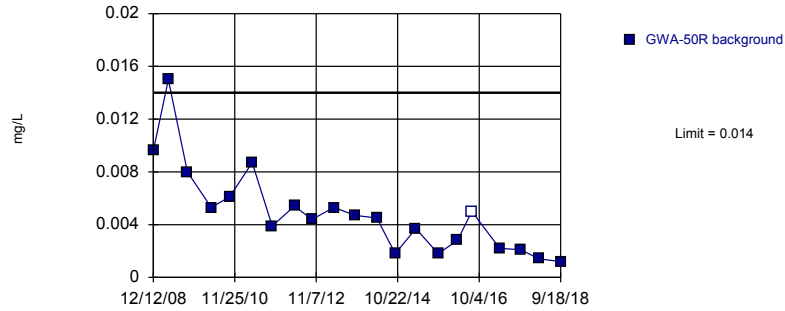
	GWA-2	GWA-2
8/23/2007	<0.0025	
10/24/2007	0.026	
11/18/2007	0.043	
1/31/2008	0.0075	
3/11/2008	0.019	
5/6/2008	0.004	
12/4/2008	0.02	
4/21/2009	<0.0025	
10/7/2009	<0.0025	
4/26/2010	<0.0025	
10/4/2010	0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/11/2012	<0.005	
10/9/2012	<0.0025	
4/15/2013	<0.0025	
10/15/2013	0.0028	
4/22/2014	<0.00125	
9/30/2014	<0.0025	
3/30/2015	0.0018 (J)	
10/13/2015	<0.0025	
3/23/2016	<0.01	
7/29/2016	<0.01 (*)	
3/30/2017	0.0006 (J)	
10/2/2017	<0.01	
3/19/2018	<0.01	
9/14/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.0025	
10/24/2007	0.0025	
11/18/2007	0.0093	
1/31/2008	0.054	
3/10/2008	0.0054	
5/13/2008	0.0043	
12/4/2008	<0.0025	
4/21/2009	<0.0025	
10/8/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/9/2012	<0.0025	
4/11/2013	<0.0025	
10/16/2013	<0.0025	
4/10/2014	<0.00125	
9/30/2014	<0.0025	
3/30/2015	<0.0025	
10/13/2015	<0.0025	
3/23/2016	<0.01	
7/29/2016	<0.01	
4/3/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/14/2018	<0.01	
3/19/2019		<0.01

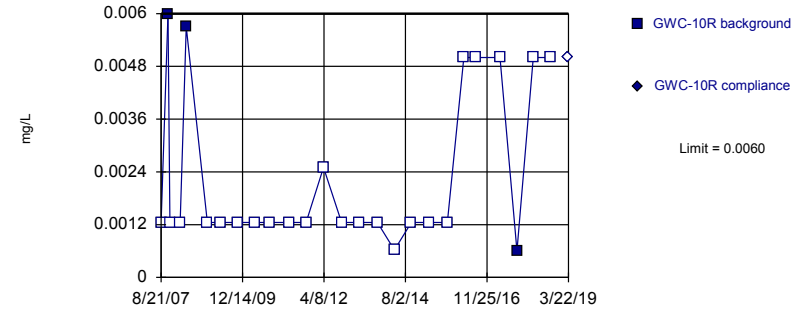
Prediction Limit
Intrawell Parametric, GWA-50R (bg)



Background Data Summary (based on square root transformation): Mean=0.06661, Std. Dev.=0.02204, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9503, critical = 0.873. Kappa = 2.354 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Nickel Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

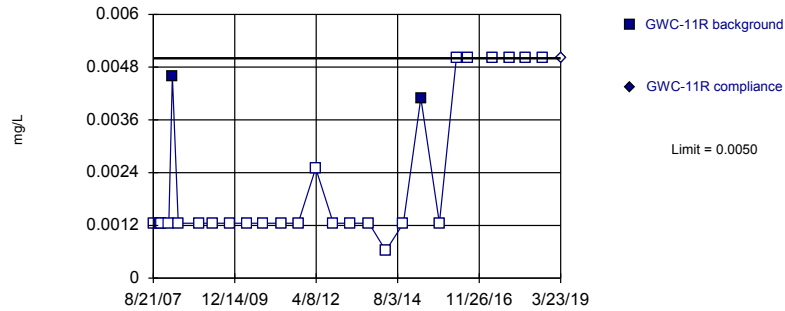
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 88.46% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

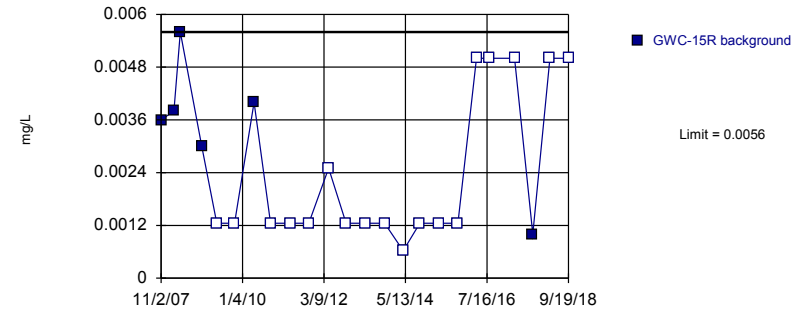
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 92.59% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-15R



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 75% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R
12/12/2008	0.0096
4/23/2009	0.015
10/6/2009	0.008
5/3/2010	0.0053
10/11/2010	0.0061
4/27/2011	0.0087
10/19/2011	0.0039
5/1/2012	0.0054
10/2/2012	0.0044
4/10/2013	0.0053
10/16/2013	0.0047
4/22/2014	0.0045
10/1/2014	0.0018 (J)
3/30/2015	0.0037
10/11/2015	0.0018 (J)
3/28/2016	0.0028 (J)
8/1/2016	<0.01 (*)
4/3/2017	0.0022 (J)
10/2/2017	0.0021 (J)
3/16/2018	0.0014 (J)
9/18/2018	0.0012 (J)
3/19/2019	0.0016 (X)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.0025	
11/1/2007	0.006	
11/20/2007	<0.0025	
1/30/2008	0.029 (O)	
3/6/2008	<0.0025	
5/8/2008	0.0057	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/21/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/8/2012	<0.0025	
4/3/2013	<0.0025	
10/15/2013	<0.0025	
4/9/2014	<0.00125	
10/2/2014	<0.0025	
4/2/2015	<0.0025	
10/12/2015	<0.0025	
3/31/2016	<0.01	
8/3/2016	<0.01 (*)	
4/10/2017	<0.01 (*)	
10/4/2017	0.0006 (J)	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	0.0046	
5/7/2008	<0.0025	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/4/2011	<0.0025	
4/4/2012	<0.005	
10/3/2012	<0.0025	
4/3/2013	<0.0025	
10/9/2013	<0.0025	
4/2/2014	<0.00125	
10/2/2014	<0.0025	
4/1/2015	0.0041	
10/11/2015	<0.0025	
4/4/2016	<0.01	
8/4/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

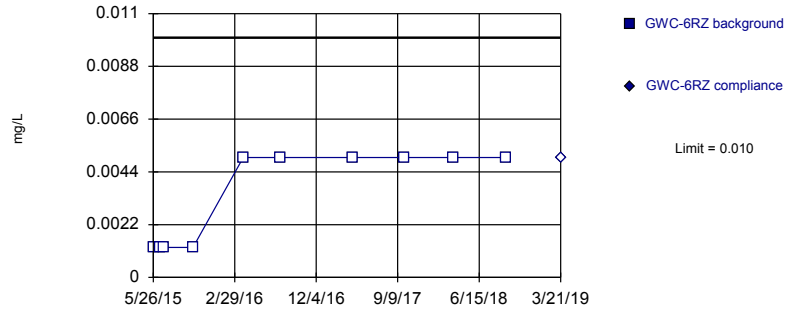
Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R
8/23/2007	0.0089 (O)
11/2/2007	0.0036
11/17/2007	0.014 (O)
1/15/2008	0.0096 (O)
3/6/2008	0.0038
5/7/2008	0.0056
12/2/2008	0.003
4/28/2009	<0.0025
10/19/2009	<0.0025
4/27/2010	0.004
10/4/2010	<0.0025
4/18/2011	<0.0025
10/12/2011	<0.0025
4/23/2012	<0.005
10/10/2012	<0.0025
4/15/2013	<0.0025
10/22/2013	<0.0025
4/21/2014	<0.00125
9/30/2014	<0.0025
4/3/2015	<0.0025
10/7/2015	<0.0025
4/5/2016	<0.01
8/4/2016	<0.01 (*)
4/12/2017	<0.01 (*)
10/6/2017	0.001 (J)
3/23/2018	<0.01
9/19/2018	<0.01
3/25/2019	0.0011 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

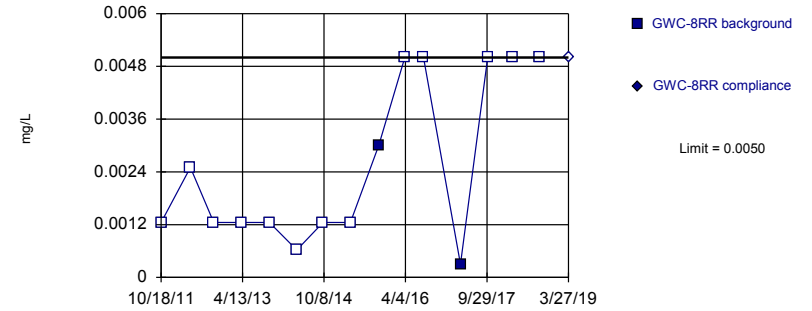


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0293. Individual comparison alpha = 0.01476 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:37 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

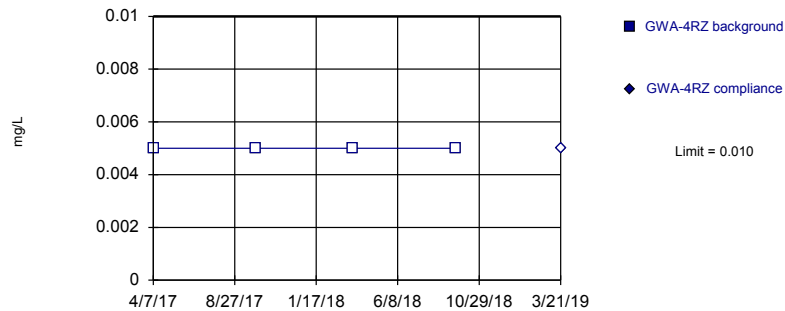


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

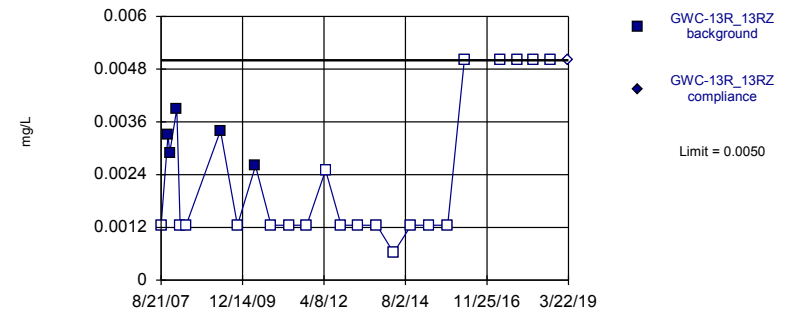


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 80% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

Constituent: Nickel Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.0025	
6/18/2015	<0.0025 (D)	
7/2/2015	<0.0025	
10/9/2015	<0.0025	
3/29/2016	<0.01	
8/1/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.0025	
4/30/2012	<0.005	
10/3/2012	<0.0025	
4/8/2013	<0.0025	
10/9/2013	<0.0025	
4/10/2014	<0.00125	
10/2/2014	<0.0025	
4/3/2015	<0.0025	
10/8/2015	0.003	
3/30/2016	<0.01	
8/2/2016	<0.01	
4/6/2017	0.0003 (J)	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/27/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
4/7/2017	<0.01	
10/3/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

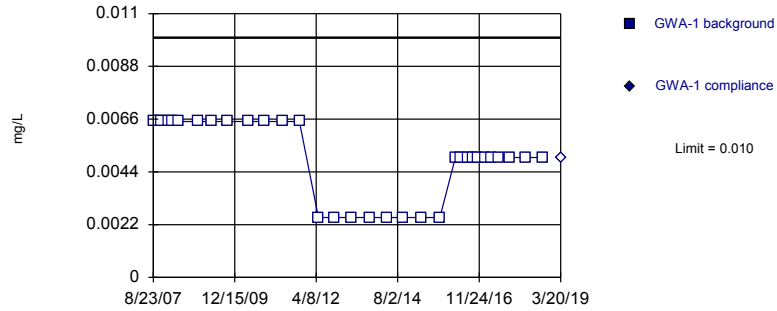
Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.0025	
11/1/2007	0.0033	
11/19/2007	0.0029	
1/31/2008	0.0039	
3/5/2008	<0.0025	
5/7/2008	<0.0025	
12/12/2008	0.022 (O)	
4/29/2009	0.0034	
10/21/2009	<0.0025	
4/28/2010	0.0026	
10/6/2010	<0.0025	
4/20/2011	<0.0025	
10/12/2011	<0.0025	
4/25/2012	<0.005	
10/2/2012	<0.0025	
4/2/2013	<0.0025	
10/8/2013	<0.0025	
4/1/2014	<0.00125	
10/1/2014	<0.0025	
3/31/2015	<0.0025	
10/14/2015	<0.0025	
4/4/2016	<0.01	
4/11/2017	<0.01 (*)	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/20/2018	<0.01	
3/22/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

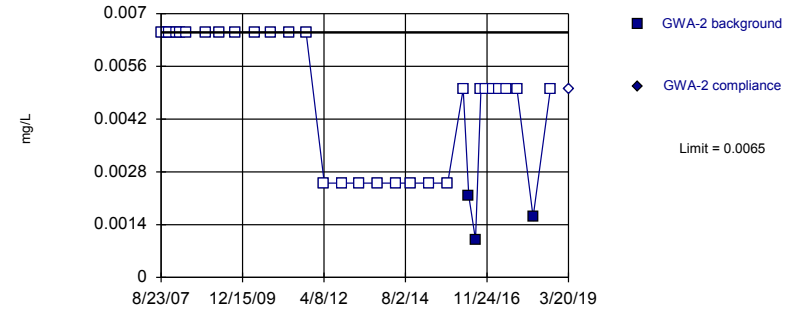


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

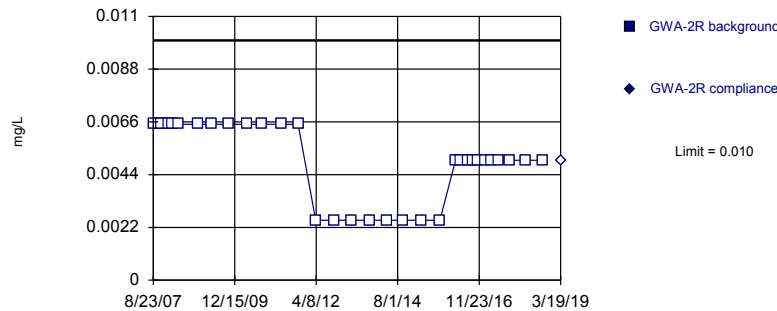


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

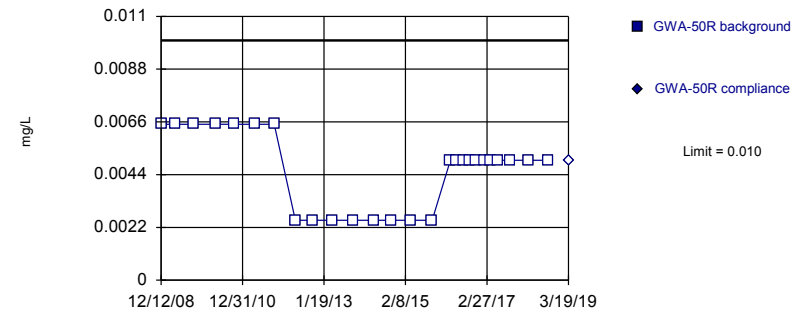


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.013	
10/23/2007	<0.013	
11/18/2007	<0.013	
1/30/2008	<0.013	
3/10/2008	<0.013	
5/13/2008	<0.013	
12/5/2008	<0.013	
4/15/2009	<0.013	
10/7/2009	<0.013	
5/3/2010	<0.013	
10/12/2010	<0.013	
4/27/2011	<0.013	
10/17/2011	<0.013	
5/2/2012	<0.005	
10/8/2012	<0.005	
4/12/2013	<0.005	
10/16/2013	<0.005	
4/11/2014	<0.005	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/22/2016	<0.01	
5/19/2016	<0.01	
7/29/2016	<0.01	
9/23/2016	<0.01	
11/9/2016	<0.01	
1/30/2017	<0.01	
3/30/2017	<0.01	
6/9/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01 (D)	
3/20/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.013	
10/24/2007	<0.013	
11/18/2007	<0.013	
1/31/2008	<0.013	
3/11/2008	<0.013	
5/6/2008	<0.013	
12/4/2008	<0.013	
4/21/2009	<0.013	
10/7/2009	<0.013	
4/26/2010	<0.013	
10/4/2010	<0.013	
4/13/2011	<0.013	
10/5/2011	<0.013	
4/11/2012	<0.005	
10/9/2012	<0.005	
4/15/2013	<0.005	
10/15/2013	<0.005	
4/22/2014	<0.005	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/23/2016	<0.01	
5/20/2016	0.00216 (J)	
7/29/2016	0.001 (J)	
9/23/2016	<0.01	
11/9/2016	<0.01	
1/31/2017	<0.01	
3/30/2017	<0.01	
6/12/2017	<0.01	
10/2/2017	<0.01	
3/19/2018	0.0016 (J)	
9/14/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.013	
10/24/2007	<0.013	
11/18/2007	<0.013	
1/31/2008	<0.013	
3/10/2008	<0.013	
5/13/2008	<0.013	
12/4/2008	<0.013	
4/21/2009	<0.013	
10/8/2009	<0.013	
4/21/2010	<0.013	
9/28/2010	<0.013	
4/12/2011	<0.013	
10/4/2011	<0.013	
4/3/2012	<0.005	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/10/2014	<0.005	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/23/2016	<0.01	
5/19/2016	<0.01	
7/29/2016	<0.01	
9/22/2016	<0.01	
11/10/2016	<0.01	
1/31/2017	<0.01	
4/3/2017	<0.01	
6/9/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/14/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

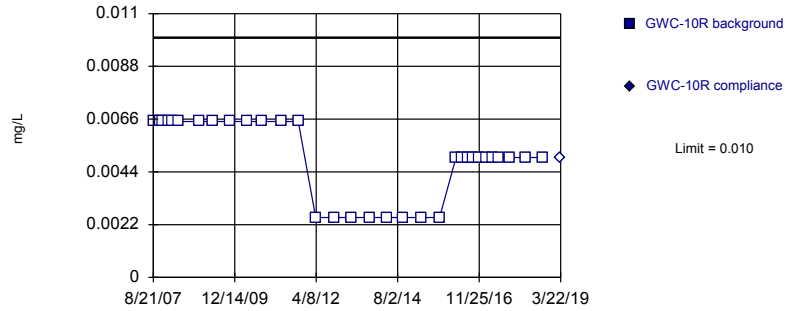
Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	<0.013	
4/23/2009	<0.013	
10/6/2009	<0.013	
5/3/2010	<0.013	
10/11/2010	<0.013	
4/27/2011	<0.013	
10/19/2011	<0.013	
5/1/2012	<0.005	
10/2/2012	<0.005	
4/10/2013	<0.005	
10/16/2013	<0.005	
4/22/2014	<0.005	
10/1/2014	<0.005	
3/30/2015	<0.005	
10/11/2015	<0.005	
3/28/2016	<0.01	
5/25/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/11/2016	<0.01	
1/30/2017	<0.01	
4/3/2017	<0.01	
6/12/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/18/2018	<0.01	
3/19/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

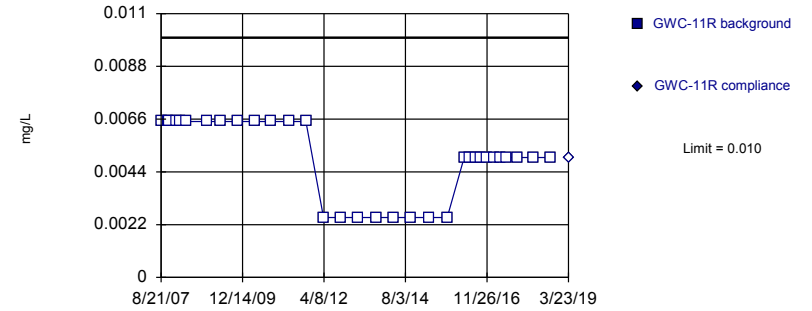


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

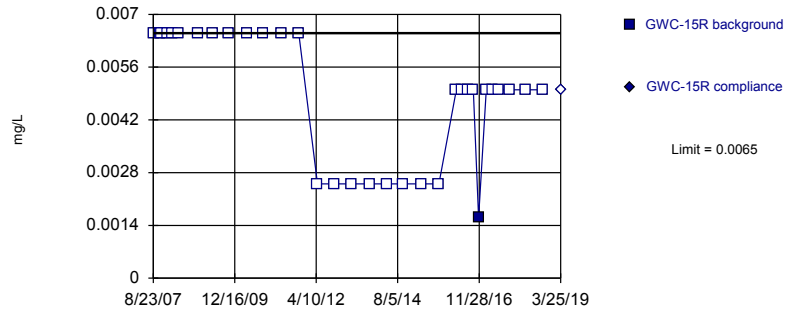


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

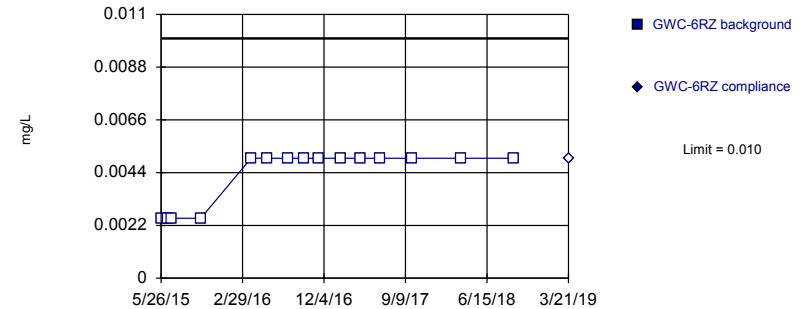


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.013	
11/1/2007	<0.013	
11/20/2007	<0.013	
1/30/2008	<0.013	
3/6/2008	<0.013	
5/8/2008	<0.013	
12/14/2008	<0.013	
4/29/2009	<0.013	
10/21/2009	<0.013	
4/21/2010	<0.013	
9/28/2010	<0.013	
4/12/2011	<0.013	
10/4/2011	<0.013	
4/3/2012	<0.005	
10/8/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.005	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/12/2015	<0.005	
3/31/2016	<0.01	
5/26/2016	<0.01	
8/3/2016	<0.01	
9/28/2016	<0.01	
11/22/2016	<0.01	
2/7/2017	<0.01	
4/10/2017	<0.01	
6/14/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.013	
11/1/2007	<0.013	
11/18/2007	<0.013	
1/30/2008	<0.013	
3/6/2008	<0.013	
5/7/2008	<0.013	
12/14/2008	<0.013	
4/29/2009	<0.013	
10/22/2009	<0.013	
4/21/2010	<0.013	
9/29/2010	<0.013	
4/13/2011	<0.013	
10/4/2011	<0.013	
4/4/2012	<0.005	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/9/2013	<0.005	
4/2/2014	<0.005	
10/2/2014	<0.005	
4/1/2015	<0.005	
10/11/2015	<0.005	
4/4/2016	<0.01	
5/26/2016	<0.01	
8/4/2016	<0.01	
9/28/2016	<0.01	
11/22/2016	<0.01	
2/8/2017	<0.01	
4/10/2017	<0.01	
6/15/2017	<0.01	
10/4/2017	<0.01	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.013	
11/2/2007	<0.013	
11/17/2007	<0.013	
1/15/2008	<0.013	
3/6/2008	<0.013	
5/7/2008	<0.013	
12/2/2008	<0.013	
4/28/2009	<0.013	
10/19/2009	<0.013	
4/27/2010	<0.013	
10/4/2010	<0.013	
4/18/2011	<0.013	
10/12/2011	<0.013	
4/23/2012	<0.005	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.005	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/7/2015	<0.005	
4/5/2016	<0.01	
5/31/2016	<0.01	
8/4/2016	<0.01	
9/29/2016	<0.01	
11/23/2016	0.0016 (J)	
2/10/2017	<0.01	
4/12/2017	<0.01	
6/15/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/25/2019		<0.01

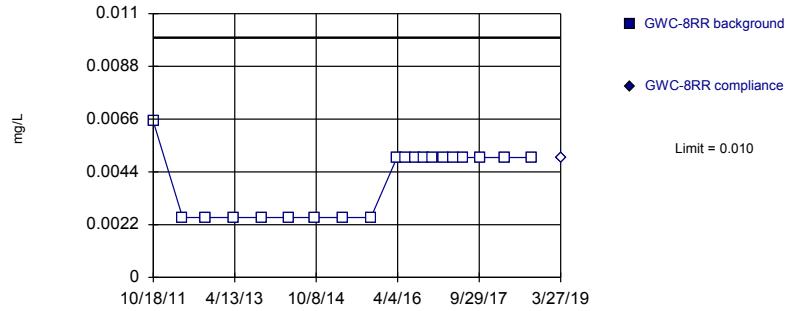
Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.005	
6/18/2015	<0.005 (D)	
7/2/2015	<0.005	
10/9/2015	<0.005	
3/29/2016	<0.01	
5/24/2016	<0.01	
8/1/2016	<0.01	
9/26/2016	<0.01	
11/14/2016	<0.01	
2/1/2017	<0.01	
4/6/2017	<0.01	
6/13/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

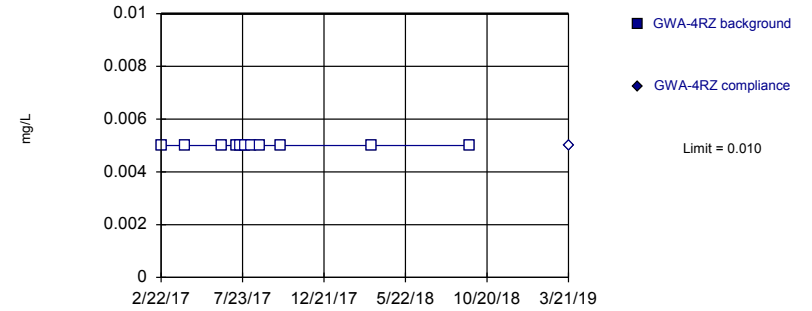


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

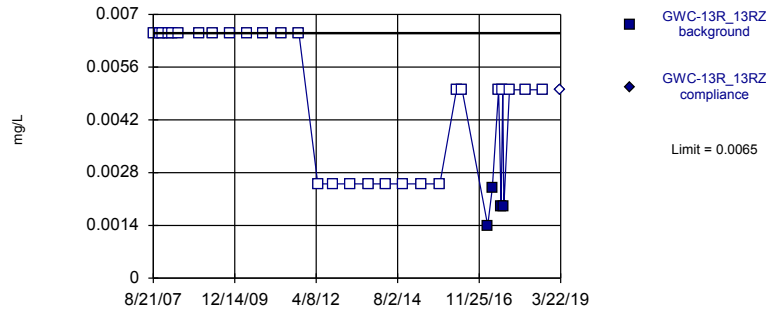


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

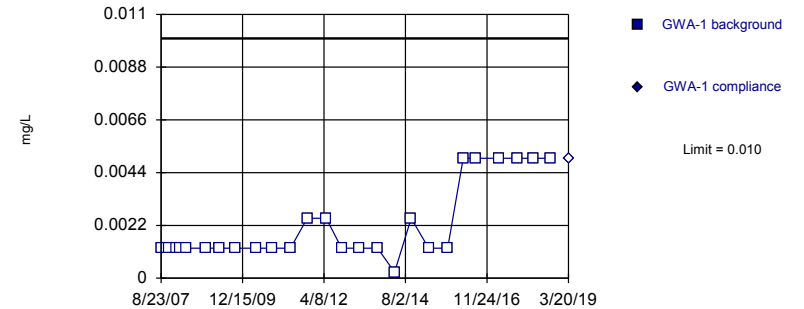


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.013	
4/30/2012	<0.005	
10/3/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/10/2014	<0.005	
10/2/2014	<0.005	
4/3/2015	<0.005	
10/8/2015	<0.005	
3/30/2016	<0.01	
5/24/2016	<0.01	
8/2/2016	<0.01	
9/27/2016	<0.01	
11/22/2016	<0.01	
2/6/2017	<0.01	
4/6/2017	<0.01	
6/14/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/27/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	<0.01	
4/7/2017	<0.01	
6/14/2017	<0.01	
7/12/2017	<0.01	
7/20/2017	<0.01	
7/28/2017	<0.01	
8/9/2017	<0.01	
8/24/2017	<0.01	
10/3/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.013	
11/1/2007	<0.013	
11/19/2007	<0.013	
1/31/2008	<0.013	
3/5/2008	<0.013	
5/7/2008	<0.013	
12/12/2008	<0.013	
4/29/2009	<0.013	
10/21/2009	<0.013	
4/28/2010	<0.013	
10/6/2010	<0.013	
4/20/2011	<0.013	
10/12/2011	<0.013	
4/25/2012	<0.005	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/8/2013	<0.005	
4/1/2014	<0.005	
10/1/2014	<0.005	
3/31/2015	<0.005	
10/14/2015	<0.005	
4/4/2016	<0.01	
6/1/2016	<0.01	
2/22/2017	0.0014 (J)	
4/11/2017	0.0024 (J)	
6/16/2017	<0.01	
7/12/2017	0.0019 (J)	
7/28/2017	<0.01	
8/10/2017	0.0019 (J)	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/20/2018	<0.01	
3/22/2019		<0.01

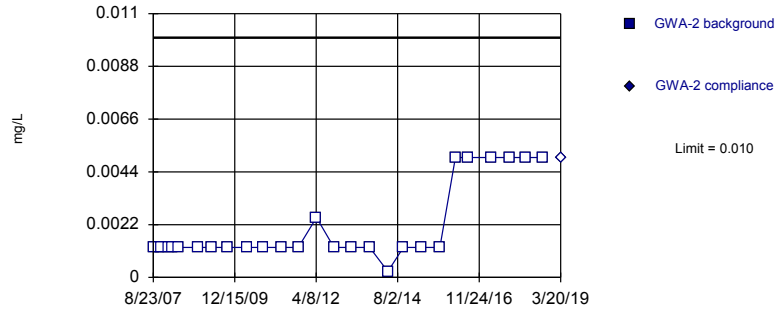
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.0025	
10/23/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/10/2008	<0.0025	
5/13/2008	<0.0025	
12/5/2008	<0.0025	
4/15/2009	<0.0025	
10/7/2009	<0.0025	
5/3/2010	<0.0025	
10/12/2010	<0.0025	
4/27/2011	<0.0025	
10/17/2011	<0.005	
5/2/2012	<0.005	
10/8/2012	<0.0025	
4/12/2013	<0.0025	
10/16/2013	<0.0025	
4/11/2014	<0.0005	
9/30/2014	<0.005	
3/30/2015	<0.0025	
10/13/2015	<0.0025	
3/22/2016	<0.01	
7/29/2016	<0.01	
3/30/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01 (D)	
3/20/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

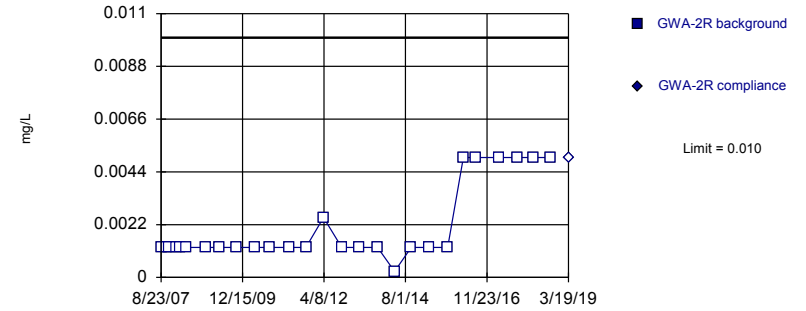


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

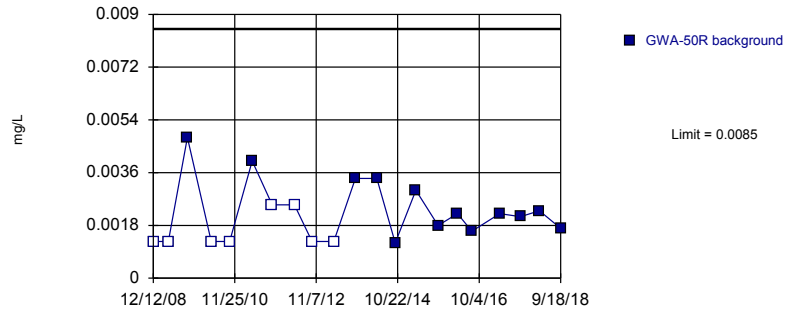
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Parametric, GWA-50R (bg)

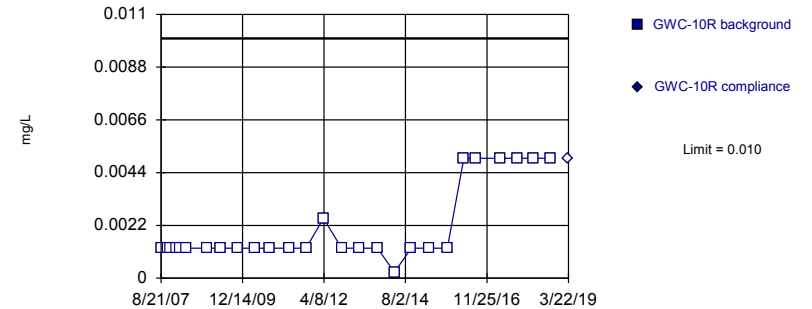


Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.03094, Std. Dev.=0.02607, n=21, 38.1% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.899, critical = 0.873. Kappa = 2.354 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Silver Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:38 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.0025	
10/24/2007	<0.0025	
11/18/2007	<0.0025	
1/31/2008	<0.0025	
3/11/2008	<0.0025	
5/6/2008	<0.0025	
12/4/2008	<0.0025	
4/21/2009	<0.0025	
10/7/2009	<0.0025	
4/26/2010	<0.0025	
10/4/2010	<0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/11/2012	<0.005	
10/9/2012	<0.0025	
4/15/2013	<0.0025	
10/15/2013	<0.0025	
4/22/2014	<0.0005	
9/30/2014	<0.0025	
3/30/2015	<0.0025	
10/13/2015	<0.0025	
3/23/2016	<0.01	
7/29/2016	<0.01	
3/30/2017	<0.01	
10/2/2017	<0.01	
3/19/2018	<0.01	
9/14/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.0025	
10/24/2007	<0.0025	
11/18/2007	<0.0025	
1/31/2008	<0.0025	
3/10/2008	<0.0025	
5/13/2008	<0.0025	
12/4/2008	<0.0025	
4/21/2009	<0.0025	
10/8/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/9/2012	<0.0025	
4/11/2013	<0.0025	
10/16/2013	<0.0025	
4/10/2014	<0.0005	
9/30/2014	<0.0025	
3/30/2015	<0.0025	
10/13/2015	<0.0025	
3/23/2016	<0.01	
7/29/2016	<0.01	
4/3/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/14/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R
12/12/2008	<0.0025
4/23/2009	<0.0025
10/6/2009	0.0048
5/3/2010	<0.0025
10/11/2010	<0.0025
4/27/2011	0.004
10/19/2011	<0.005
5/1/2012	<0.005
10/2/2012	<0.0025
4/10/2013	<0.0025
10/16/2013	0.0034
4/22/2014	0.0034
10/1/2014	0.0012 (J)
3/30/2015	0.003
10/11/2015	0.0018 (J)
3/28/2016	0.0022 (J)
8/1/2016	0.0016 (J)
4/3/2017	0.0022 (J)
10/2/2017	0.0021 (J)
3/16/2018	0.0023 (J)
9/18/2018	0.0017 (J)
3/19/2019	0.0017 (X)

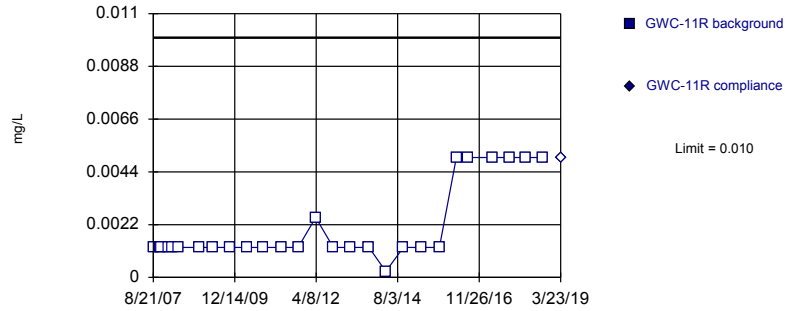
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/20/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	<0.0025	
5/8/2008	<0.0025	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/21/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.005	
10/8/2012	<0.0025	
4/3/2013	<0.0025	
10/15/2013	<0.0025	
4/9/2014	<0.0005	
10/2/2014	<0.0025	
4/2/2015	<0.0025	
10/12/2015	<0.0025	
3/31/2016	<0.01	
8/3/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

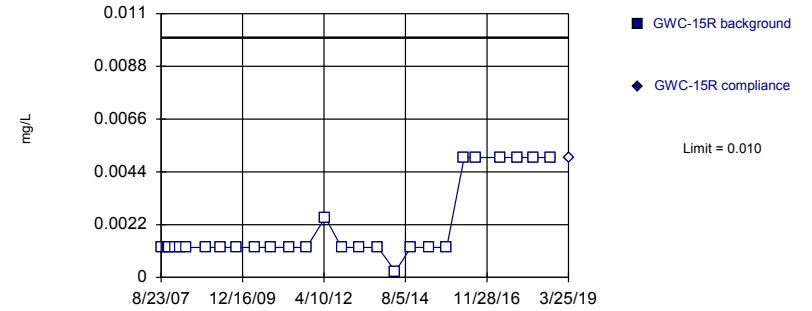


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

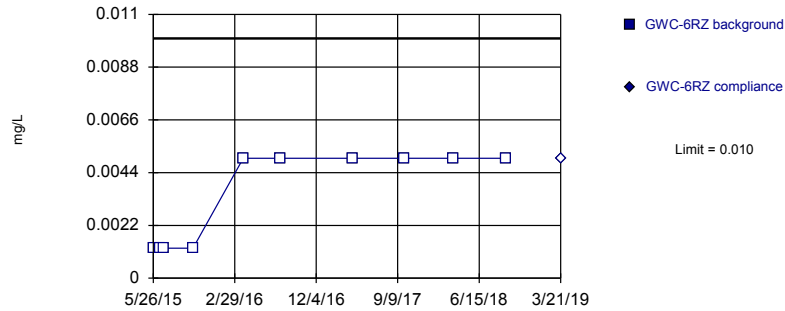


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

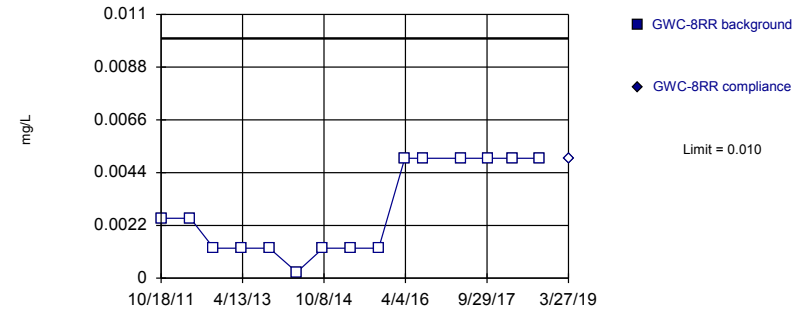


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0293. Individual comparison alpha = 0.01476 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	<0.0025	
5/7/2008	<0.0025	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/22/2009	<0.0025	
4/21/2010	<0.0025	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/4/2011	<0.0025	
4/4/2012	<0.005	
10/3/2012	<0.0025	
4/3/2013	<0.0025	
10/9/2013	<0.0025	
4/2/2014	<0.0005	
10/2/2014	<0.0025	
4/1/2015	<0.0025	
10/11/2015	<0.0025	
4/4/2016	<0.01	
8/4/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.0025	
11/2/2007	<0.0025	
11/17/2007	<0.0025	
1/15/2008	<0.0025	
3/6/2008	<0.0025	
5/7/2008	<0.0025	
12/2/2008	<0.0025	
4/28/2009	<0.0025	
10/19/2009	<0.0025	
4/27/2010	<0.0025	
10/4/2010	<0.0025	
4/18/2011	<0.0025	
10/12/2011	<0.0025	
4/23/2012	<0.005	
10/10/2012	<0.0025	
4/15/2013	<0.0025	
10/22/2013	<0.0025	
4/21/2014	<0.0005	
9/30/2014	<0.0025	
4/3/2015	<0.0025	
10/7/2015	<0.0025	
4/5/2016	<0.01	
8/4/2016	<0.01	
4/12/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/25/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.0025	
6/18/2015	<0.0025 (D)	
7/2/2015	<0.0025	
10/9/2015	<0.0025	
3/29/2016	<0.01	
8/1/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

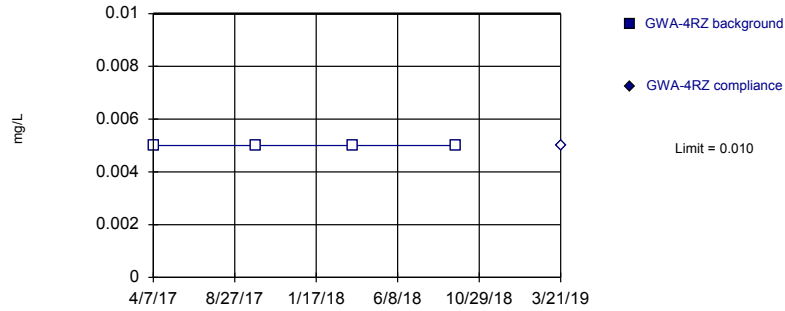
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.005	
4/30/2012	<0.005	
10/3/2012	<0.0025	
4/8/2013	<0.0025	
10/9/2013	<0.0025	
4/10/2014	<0.0005	
10/2/2014	<0.0025	
4/3/2015	<0.0025	
10/8/2015	<0.0025	
3/30/2016	<0.01	
8/2/2016	<0.01	
4/6/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/27/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

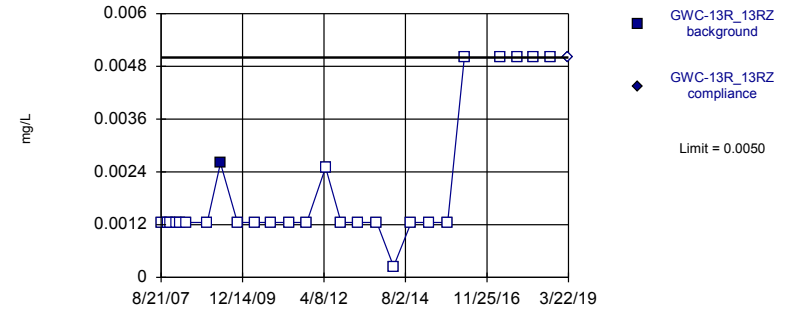


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

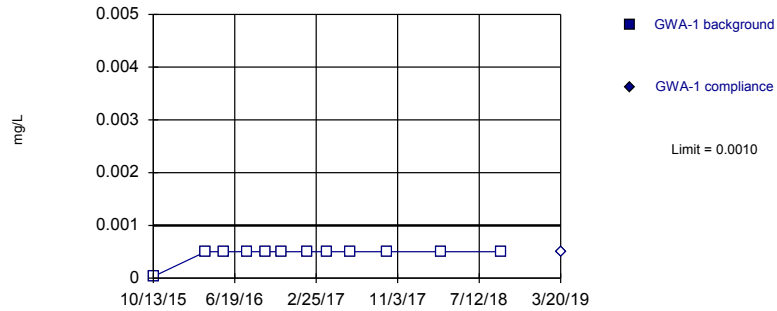


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Silver Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

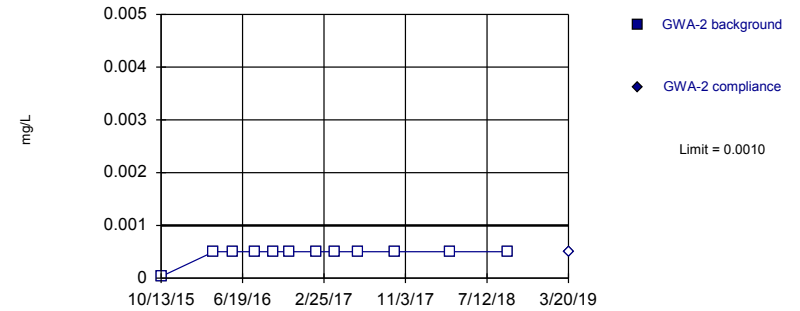


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
4/7/2017	<0.01	
10/3/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/19/2007	<0.0025	
1/31/2008	<0.0025	
3/5/2008	<0.0025	
5/7/2008	<0.0025	
12/12/2008	<0.0025	
4/29/2009	0.0026	
10/21/2009	<0.0025	
4/28/2010	<0.0025	
10/6/2010	<0.0025	
4/20/2011	<0.0025	
10/12/2011	<0.0025	
4/25/2012	<0.005	
10/2/2012	<0.0025	
4/2/2013	<0.0025	
10/8/2013	<0.0025	
4/1/2014	<0.0005	
10/1/2014	<0.0025	
3/31/2015	<0.0025	
10/14/2015	<0.0025	
4/4/2016	<0.01	
4/11/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/20/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
10/13/2015	<6E-05	
3/22/2016	<0.001	
5/19/2016	<0.001	
7/29/2016	<0.001	
9/23/2016	<0.001	
11/9/2016	<0.001	
1/30/2017	<0.001	
3/30/2017	<0.001	
6/9/2017	<0.001	
10/2/2017	<0.001	
3/16/2018	<0.001	
9/17/2018	<0.001 (D)	
3/20/2019		<0.001

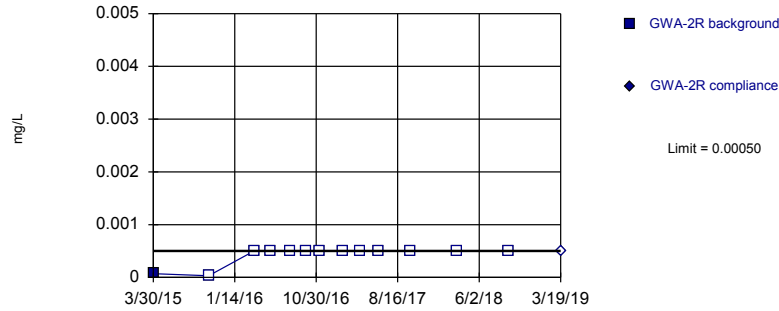
Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
10/13/2015	<6E-05	
3/23/2016	<0.001	
5/20/2016	<0.001	
7/29/2016	<0.001	
9/23/2016	<0.001	
11/9/2016	<0.001	
1/31/2017	<0.001	
3/30/2017	<0.001	
6/12/2017	<0.001	
10/2/2017	<0.001	
3/19/2018	<0.001	
9/14/2018	<0.001	
3/20/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

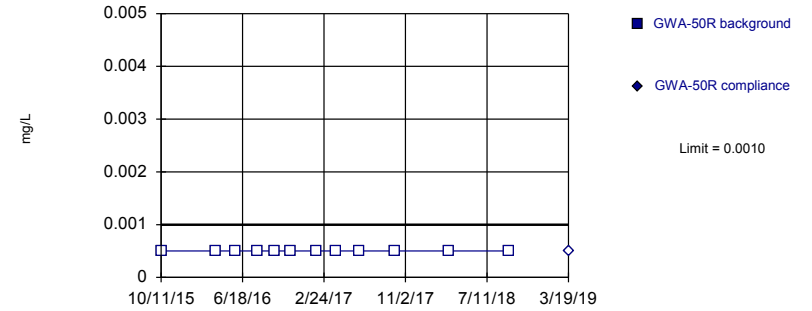


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

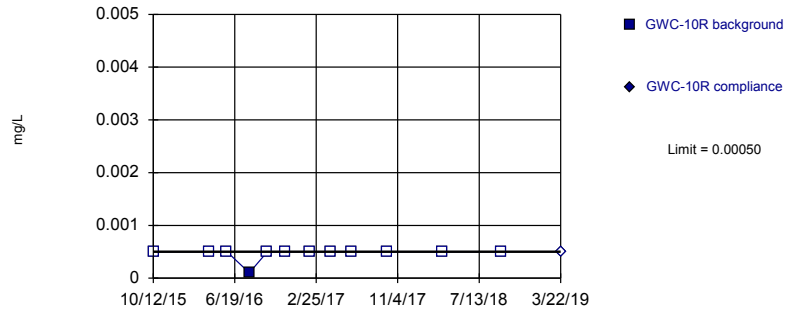


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

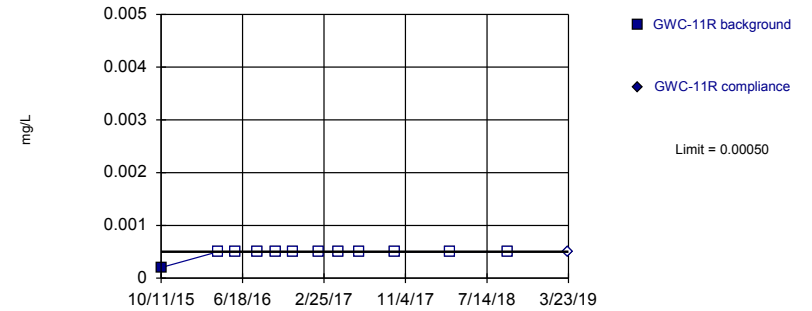


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
3/30/2015	7E-05	
10/13/2015	<6E-05	
3/23/2016	<0.001	
5/19/2016	<0.001	
7/29/2016	<0.001	
9/22/2016	<0.001	
11/10/2016	<0.001	
1/31/2017	<0.001	
4/3/2017	<0.001	
6/9/2017	<0.001	
10/2/2017	<0.001	
3/16/2018	<0.001	
9/14/2018	<0.001	
3/19/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
10/11/2015	<0.001	
3/28/2016	<0.001	
5/25/2016	<0.001	
8/1/2016	<0.001	
9/26/2016	<0.001	
11/11/2016	<0.001	
1/30/2017	<0.001	
4/3/2017	<0.001	
6/12/2017	<0.001	
10/2/2017	<0.001	
3/16/2018	<0.001	
9/18/2018	<0.001	
3/19/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
10/12/2015	<0.001	
3/31/2016	<0.001	
5/26/2016	<0.001	
8/3/2016	0.0001 (J)	
9/28/2016	<0.001	
11/22/2016	<0.001	
2/7/2017	<0.001	
4/10/2017	<0.001	
6/14/2017	<0.001	
10/4/2017	<0.001	
3/21/2018	<0.001	
9/18/2018	<0.001	
3/22/2019		<0.001

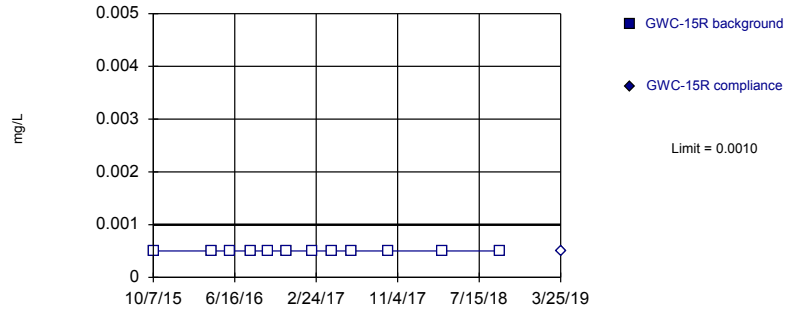
Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
10/11/2015	0.0002	
4/4/2016	<0.001	
5/26/2016	<0.001	
8/4/2016	<0.001	
9/28/2016	<0.001	
11/22/2016	<0.001	
2/8/2017	<0.001	
4/10/2017	<0.001	
6/15/2017	<0.001	
10/4/2017	<0.001	
3/22/2018	<0.001	
9/18/2018	<0.001	
3/23/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

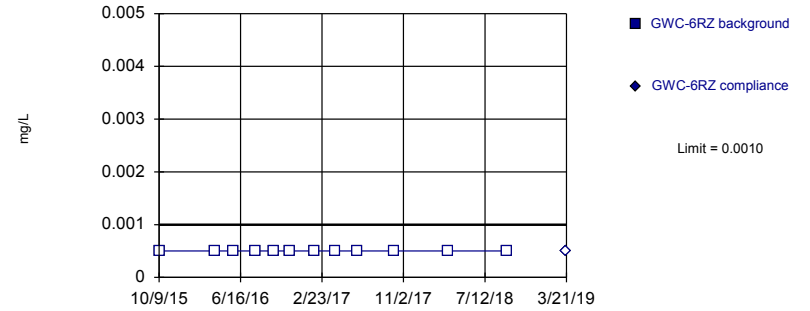


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

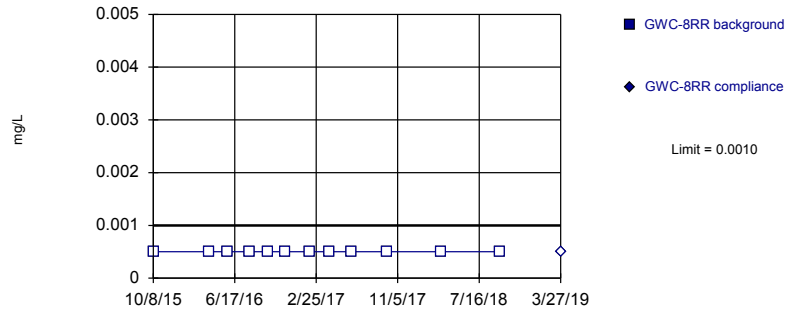


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

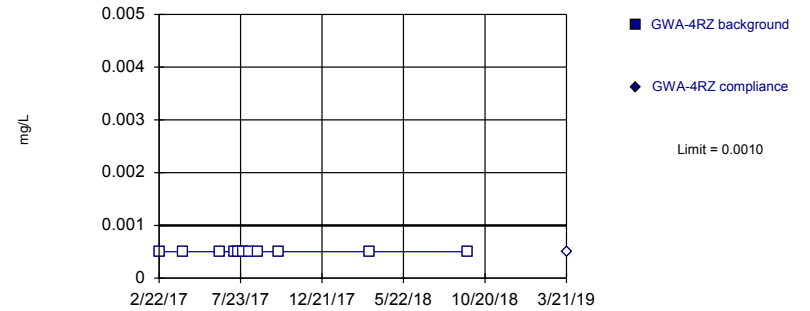


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
10/7/2015	<0.001 (D)	
4/5/2016	<0.001	
5/31/2016	<0.001	
8/4/2016	<0.001	
9/29/2016	<0.001	
11/23/2016	<0.001	
2/10/2017	<0.001	
4/12/2017	<0.001	
6/15/2017	<0.001	
10/6/2017	<0.001	
3/23/2018	<0.001	
9/19/2018	<0.001	
3/25/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
10/9/2015	<0.001	
3/29/2016	<0.001	
5/24/2016	<0.001	
8/1/2016	<0.001	
9/26/2016	<0.001	
11/14/2016	<0.001	
2/1/2017	<0.001	
4/6/2017	<0.001	
6/13/2017	<0.001	
10/3/2017	<0.001	
3/20/2018	<0.001	
9/17/2018	<0.001	
3/21/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/8/2015	<0.001 (D)	
3/30/2016	<0.001	
5/24/2016	<0.001	
8/2/2016	<0.001	
9/27/2016	<0.001	
11/22/2016	<0.001	
2/6/2017	<0.001	
4/6/2017	<0.001	
6/14/2017	<0.001	
10/4/2017	<0.001	
3/21/2018	<0.001	
9/18/2018	<0.001	
3/27/2019		<0.001

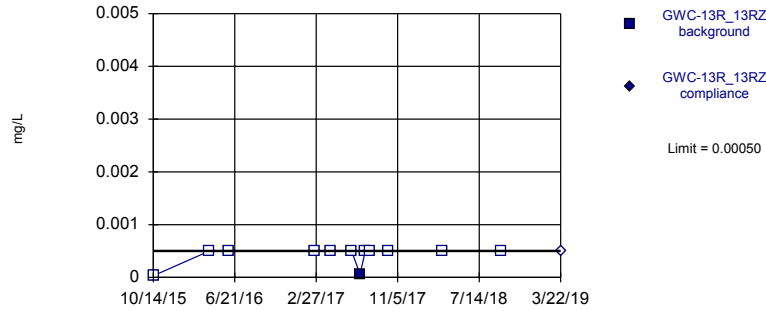
Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
2/22/2017	<0.001	
4/7/2017	<0.001	
6/14/2017	<0.001	
7/12/2017	<0.001	
7/20/2017	<0.001	
7/28/2017	<0.001	
8/9/2017	<0.001	
8/24/2017	<0.001	
10/3/2017	<0.001	
3/21/2018	<0.001	
9/18/2018	<0.001	
3/21/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

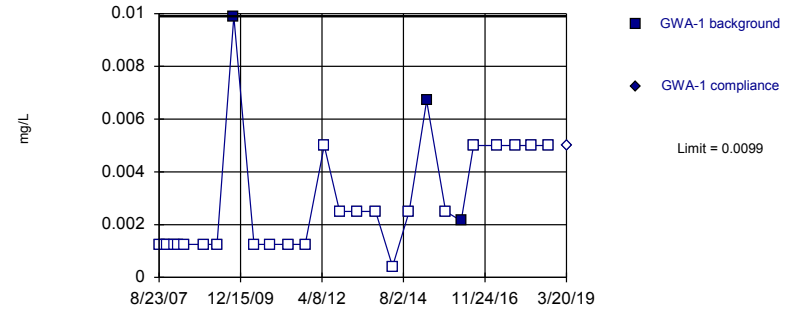


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

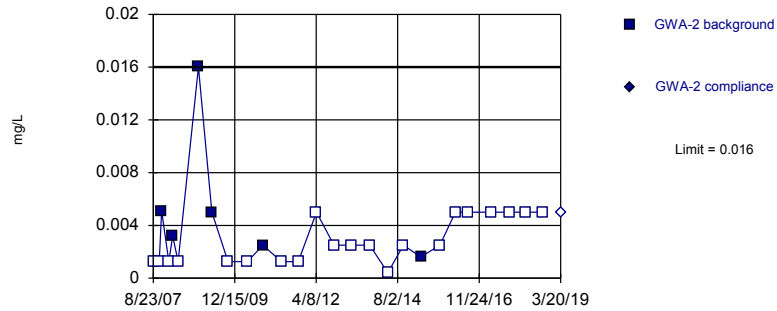


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

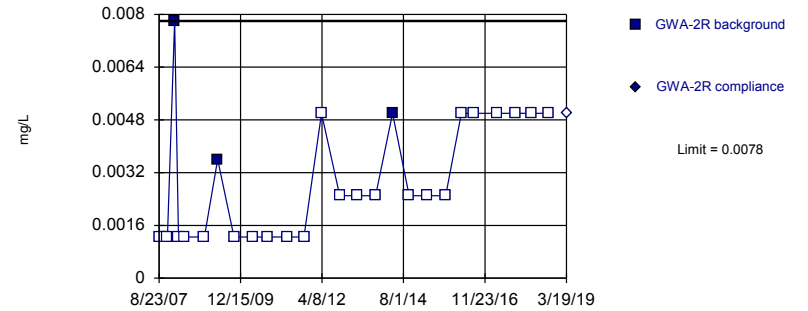


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
10/14/2015	<6E-05	
4/4/2016	<0.001	
6/1/2016	<0.001	
2/22/2017	<0.001	
4/11/2017	<0.001	
6/16/2017	<0.001	
7/12/2017	6E-05 (J)	
7/28/2017	<0.001	
8/10/2017	<0.001	
10/6/2017	<0.001	
3/23/2018	<0.001	
9/20/2018	<0.001	
3/22/2019		<0.001

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	<0.0025	
10/23/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/10/2008	<0.0025	
5/13/2008	<0.0025	
12/5/2008	<0.0025	
4/15/2009	<0.0025	
10/7/2009	0.0099	
5/3/2010	<0.0025	
10/12/2010	<0.0025	
4/27/2011	<0.0025	
10/17/2011	<0.0025	
5/2/2012	<0.01	
10/8/2012	<0.005	
4/12/2013	<0.005	
10/16/2013	<0.005	
4/11/2014	<0.000825	
9/30/2014	<0.005	
3/30/2015	0.0067	
10/13/2015	<0.005	
3/22/2016	0.00214 (J)	
7/29/2016	<0.01	
3/30/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01 (D)	
3/20/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	<0.0025	
10/24/2007	<0.0025	
11/18/2007	0.0051	
1/31/2008	<0.0025	
3/11/2008	0.0032	
5/6/2008	<0.0025	
12/4/2008	0.016	
4/21/2009	0.005	
10/7/2009	<0.0025	
4/26/2010	<0.0025	
10/4/2010	0.0025	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/11/2012	<0.01	
10/9/2012	<0.005	
4/15/2013	<0.005	
10/15/2013	<0.005	
4/22/2014	<0.000825	
9/30/2014	<0.005	
3/30/2015	0.0016 (J)	
10/13/2015	<0.005	
3/23/2016	<0.01	
7/29/2016	<0.01	
3/30/2017	<0.01	
10/2/2017	<0.01	
3/19/2018	<0.01	
9/14/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

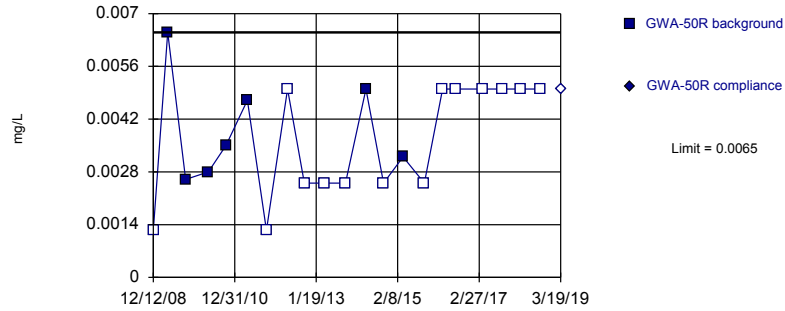
Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	<0.0025	
10/24/2007	<0.0025	
11/18/2007	<0.0025	
1/31/2008	0.0078	
3/10/2008	<0.0025	
5/13/2008	<0.0025	
12/4/2008	<0.0025	
4/21/2009	0.0036	
10/8/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.01	
10/9/2012	<0.005	
4/11/2013	<0.005	
10/16/2013	<0.005	
4/10/2014	0.005 (J)	
9/30/2014	<0.005	
3/30/2015	<0.005	
10/13/2015	<0.005	
3/23/2016	<0.01	
7/29/2016	<0.01	
4/3/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/14/2018	<0.01	
3/19/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

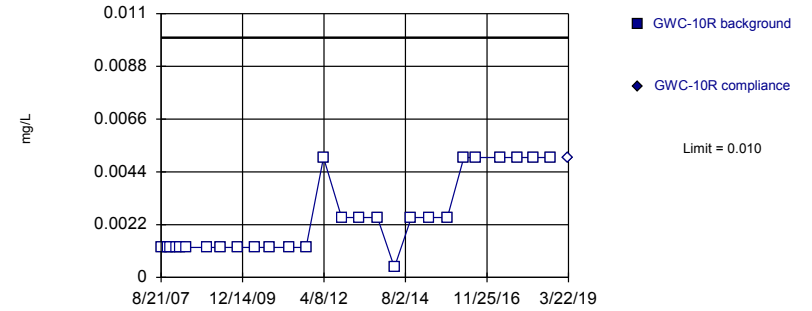


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

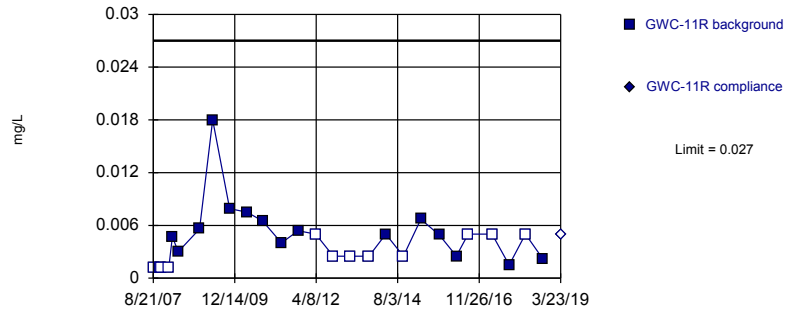


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

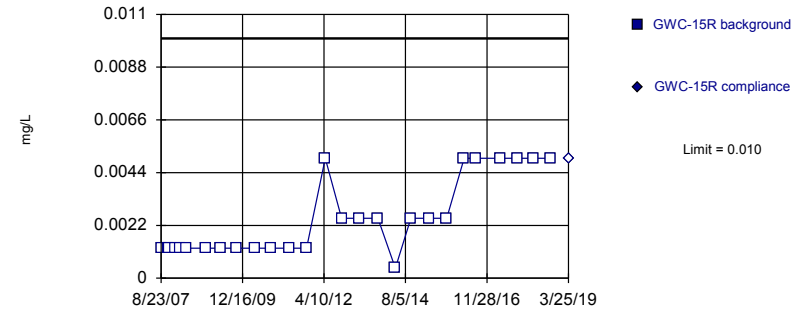


Background Data Summary (based on cube root transformation) (after Aitchison's Adjustment): Mean=0.09544, Std. Dev.=0.09073, n=27, 44.44% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.917, critical = 0.894. Kappa = 2.257 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Vanadium Analysis Run 8/23/2019 1:39 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	<0.0025	
4/23/2009	0.0065	
10/6/2009	0.0026	
5/3/2010	0.0028	
10/11/2010	0.0035	
4/27/2011	0.0047	
10/19/2011	<0.0025	
5/1/2012	<0.01	
10/2/2012	<0.005	
4/10/2013	<0.005	
10/16/2013	<0.005	
4/22/2014	0.005 (J)	
10/1/2014	<0.005	
3/30/2015	0.0032 (J)	
10/11/2015	<0.005	
3/28/2016	<0.01	
8/1/2016	<0.01	
4/3/2017	<0.01	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/18/2018	<0.01	
3/19/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/20/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	<0.0025	
5/8/2008	<0.0025	
12/14/2008	<0.0025	
4/29/2009	<0.0025	
10/21/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	<0.0025	
4/12/2011	<0.0025	
10/4/2011	<0.0025	
4/3/2012	<0.01	
10/8/2012	<0.005	
4/3/2013	<0.005	
10/15/2013	<0.005	
4/9/2014	<0.000825	
10/2/2014	<0.005	
4/2/2015	<0.005	
10/12/2015	<0.005	
3/31/2016	<0.01	
8/3/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	0.0047	
5/7/2008	0.003	
12/14/2008	0.0056	
4/29/2009	0.018	
10/22/2009	0.0079	
4/21/2010	0.0075	
9/29/2010	0.0065	
4/13/2011	0.004	
10/4/2011	0.0054	
4/4/2012	<0.01	
10/3/2012	<0.005	
4/3/2013	<0.005	
10/9/2013	<0.005	
4/2/2014	0.005 (J)	
10/2/2014	<0.005	
4/1/2015	0.0067	
10/11/2015	0.0049 (J)	
4/4/2016	0.00251 (J)	
8/4/2016	<0.01	
4/10/2017	<0.01	
10/4/2017	0.0015 (J)	
3/22/2018	<0.01	
9/18/2018	0.0022 (J)	
3/23/2019		<0.01

Prediction Limit

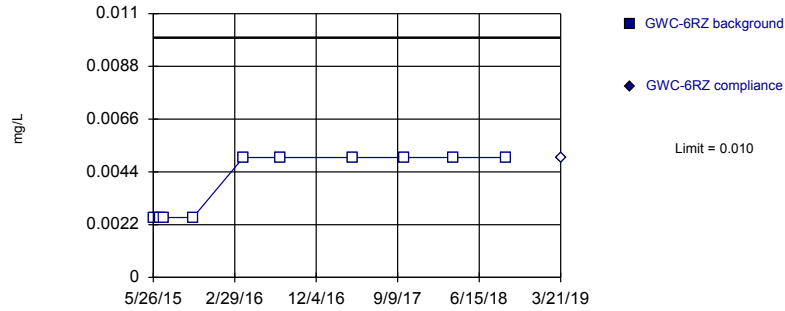
Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
8/23/2007	<0.0025	
11/2/2007	<0.0025	
11/17/2007	<0.0025	
1/15/2008	<0.0025	
3/6/2008	<0.0025	
5/7/2008	<0.0025	
12/2/2008	<0.0025	
4/28/2009	<0.0025	
10/19/2009	<0.0025	
4/27/2010	<0.0025	
10/4/2010	<0.0025	
4/18/2011	<0.0025	
10/12/2011	<0.0025	
4/23/2012	<0.01	
10/10/2012	<0.005	
4/15/2013	<0.005	
10/22/2013	<0.005	
4/21/2014	<0.000825	
9/30/2014	<0.005	
4/3/2015	<0.005	
10/7/2015	<0.005	
4/5/2016	<0.01	
8/4/2016	<0.01	
4/12/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/19/2018	<0.01	
3/25/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

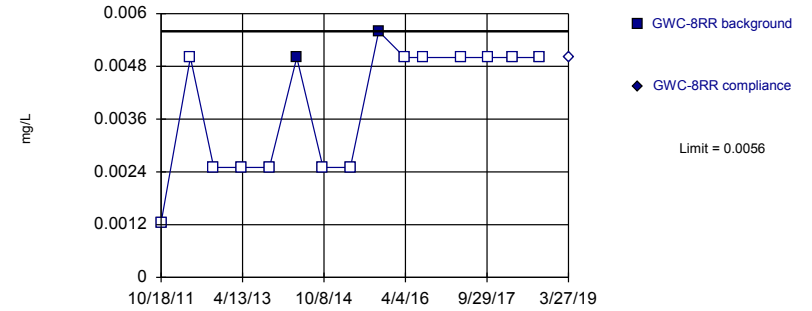


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0293. Individual comparison alpha = 0.01476 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

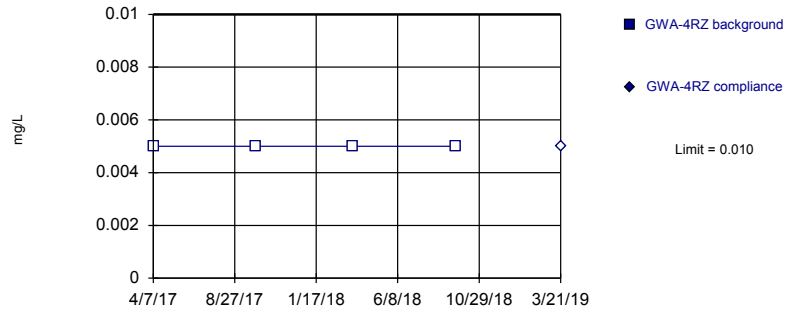


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

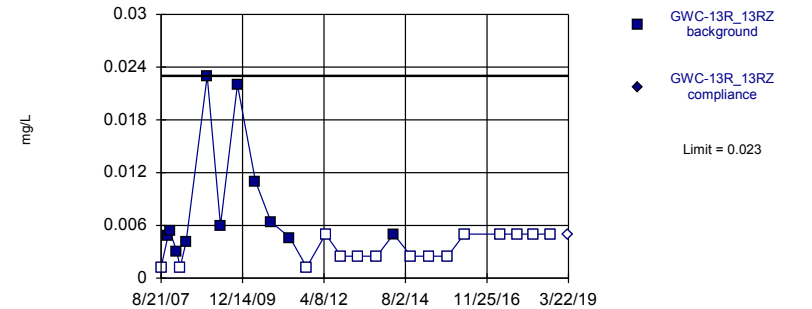


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 57.69% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Vanadium Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	<0.005	
6/18/2015	<0.005 (D)	
7/2/2015	<0.005	
10/9/2015	<0.005	
3/29/2016	<0.01	
8/1/2016	<0.01	
4/6/2017	<0.01	
10/3/2017	<0.01	
3/20/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	<0.0025	
4/30/2012	<0.01	
10/3/2012	<0.005	
4/8/2013	<0.005	
10/9/2013	<0.005	
4/10/2014	0.005 (J)	
10/2/2014	<0.005	
4/3/2015	<0.005	
10/8/2015	0.0056	
3/30/2016	<0.01	
8/2/2016	<0.01	
4/6/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/27/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ	GWA-4RZ
4/7/2017	<0.01	
10/3/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/21/2019		<0.01

Prediction Limit

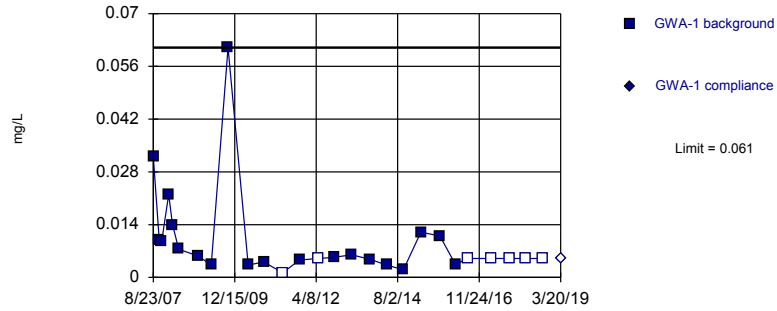
Constituent: Vanadium (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
8/21/2007	<0.0025	
11/1/2007	0.0048	
11/19/2007	0.0054	
1/31/2008	0.003	
3/5/2008	<0.0025	
5/7/2008	0.0041	
12/12/2008	0.023	
4/29/2009	0.006	
10/21/2009	0.022	
4/28/2010	0.011	
10/6/2010	0.0064	
4/20/2011	0.0046	
10/12/2011	<0.0025	
4/25/2012	<0.01	
10/2/2012	<0.005	
4/2/2013	<0.005	
10/8/2013	<0.005	
4/1/2014	0.005 (J)	
10/1/2014	<0.005	
3/31/2015	<0.005	
10/14/2015	<0.005	
4/4/2016	<0.01	
4/11/2017	<0.01	
10/6/2017	<0.01	
3/23/2018	<0.01	
9/20/2018	<0.01	
3/22/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

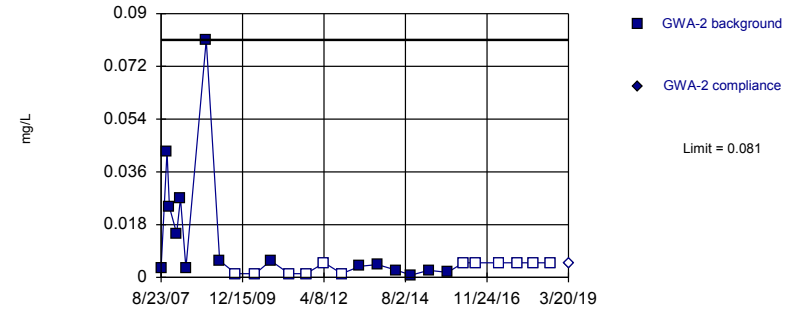


Non-parametric test used after natural log transformation resulted in a parametric limit of 4.865, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 27 background values. 25.93% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

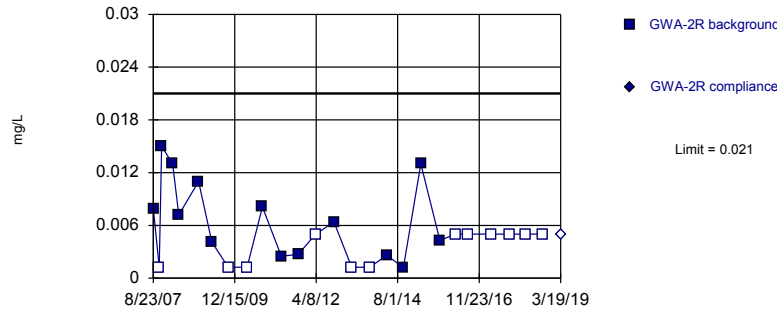


Non-parametric test used after natural log transformation resulted in a parametric limit of 28.7, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 27 background values. 44.44% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

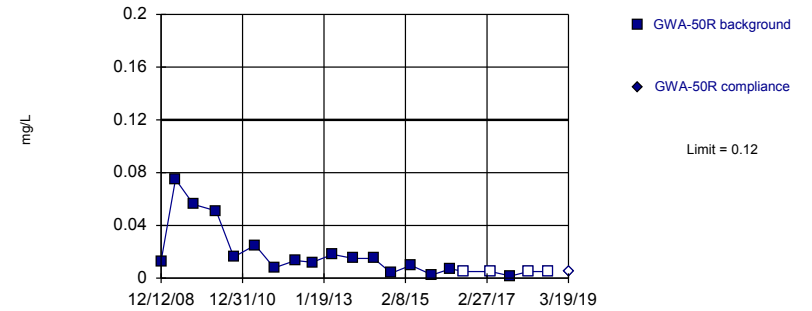


Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.04294, Std. Dev.=0.0452, n=26, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9188, critical = 0.891. Kappa = 2.269 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Aitchison's Adjustment): Mean=0.1994, Std. Dev.=0.1241, n=21, 19.05% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9117, critical = 0.873. Kappa = 2.354 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:43 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1	GWA-1
8/23/2007	0.032	
10/23/2007	0.0099	
11/18/2007	0.0095 (J)	
1/30/2008	0.022	
3/10/2008	0.014	
5/13/2008	0.0075	
12/5/2008	0.0056 (J)	
4/15/2009	0.0033	
10/7/2009	0.061	
5/3/2010	0.0033	
10/12/2010	0.0041	
4/27/2011	<0.0025	
10/17/2011	0.0046	
5/2/2012	<0.01	
10/8/2012	0.0053	
4/12/2013	0.006	
10/16/2013	0.0048	
4/11/2014	0.0033	
9/30/2014	0.002 (J)	
3/30/2015	0.012	
10/13/2015	0.011	
3/22/2016	0.00346 (J)	
7/29/2016	<0.01 (*)	
3/30/2017	<0.01 (*)	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/17/2018	<0.01 (D)	
3/20/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2	GWA-2
8/23/2007	0.0033	
10/24/2007	0.043	
11/18/2007	0.024	
1/31/2008	0.015	
3/11/2008	0.027	
5/6/2008	0.0032	
12/4/2008	0.081	
4/21/2009	0.0057	
10/7/2009	<0.0025	
4/26/2010	<0.0025	
10/4/2010	0.0057	
4/13/2011	<0.0025	
10/5/2011	<0.0025	
4/11/2012	<0.01	
10/9/2012	<0.0025	
4/15/2013	0.0038	
10/15/2013	0.0044	
4/22/2014	0.0025 (J)	
9/30/2014	0.00076 (J)	
3/30/2015	0.0024 (J)	
10/13/2015	0.0017 (J)	
3/23/2016	<0.01	
7/29/2016	<0.01 (*)	
3/30/2017	<0.01 (*)	
10/2/2017	<0.01	
3/19/2018	<0.01	
9/14/2018	<0.01	
3/20/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R	GWA-2R
8/23/2007	0.0079	
10/24/2007	<0.0025	
11/18/2007	0.015	
1/31/2008	0.063 (O)	
3/10/2008	0.013 (J)	
5/13/2008	0.0072	
12/4/2008	0.011 (J)	
4/21/2009	0.0041	
10/8/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	0.0081	
4/12/2011	0.0025	
10/4/2011	0.0027	
4/3/2012	<0.01	
10/9/2012	0.0064	
4/11/2013	<0.0025	
10/16/2013	<0.0025	
4/10/2014	0.0026	
9/30/2014	0.0012 (J)	
3/30/2015	0.013	
10/13/2015	0.0043	
3/23/2016	<0.01	
7/29/2016	<0.01 (*)	
4/3/2017	<0.01 (*)	
10/2/2017	<0.01	
3/16/2018	<0.01	
9/14/2018	<0.01	
3/19/2019		<0.01

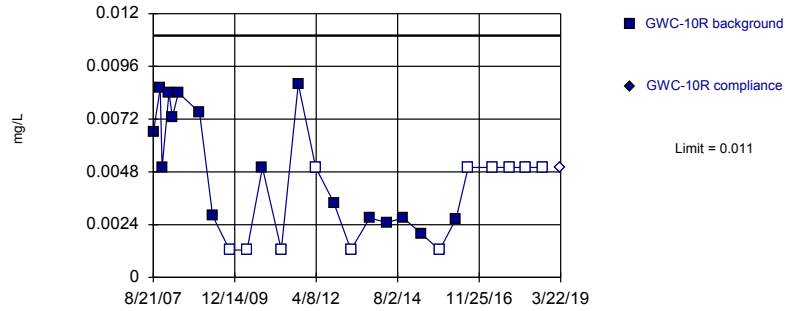
Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R	GWA-50R
12/12/2008	0.013 (J)	
4/23/2009	0.075	
10/6/2009	0.056	
5/3/2010	0.051	
10/11/2010	0.016	
4/27/2011	0.025	
10/19/2011	0.0078	
5/1/2012	0.0134	
10/2/2012	0.012	
4/10/2013	0.018	
10/16/2013	0.015	
4/22/2014	0.015	
10/1/2014	0.0038	
3/30/2015	0.0097	
10/11/2015	0.0024 (J)	
3/28/2016	0.00703 (J)	
8/1/2016	<0.01 (*)	
4/3/2017	<0.01 (*)	
10/2/2017	0.0016 (J)	
3/16/2018	<0.01	
9/18/2018	<0.01	
3/19/2019		<0.01

Within Limit

Prediction Limit
Intrawell Parametric

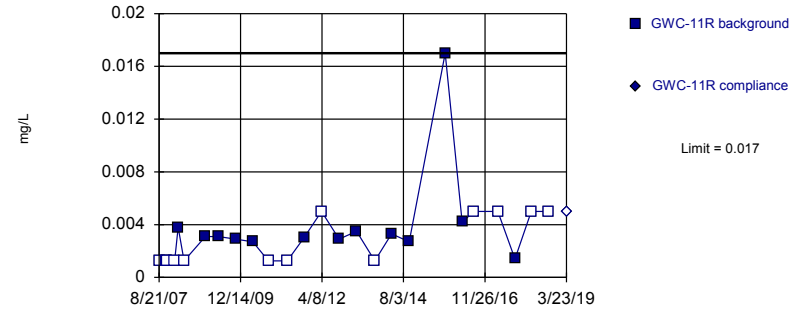


Background Data Summary (after Aitchison's Adjustment): Mean=0.003124, Std. Dev.=0.003301, n=27, 40.74% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9001, critical = 0.894. Kappa = 2.257 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

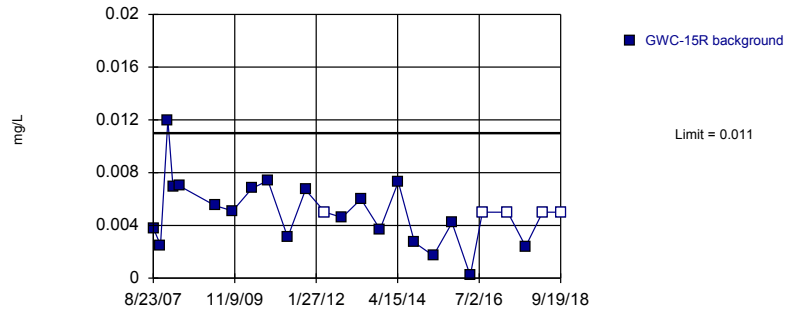
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. 50% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Parametric, GWC-15R

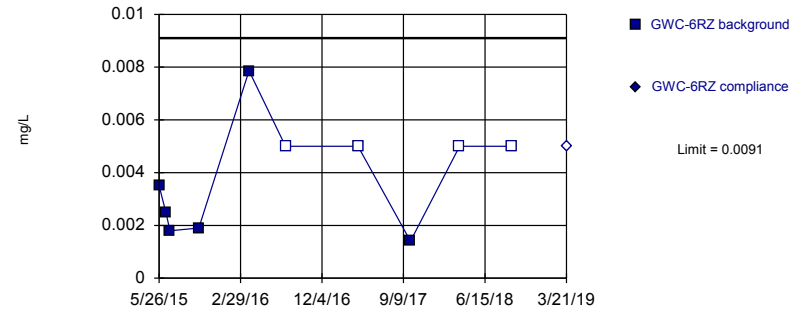


Background Data Summary (after Aitchison's Adjustment): Mean=0.003984, Std. Dev.=0.003123, n=25, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9472, critical = 0.888. Kappa = 2.281 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.001896, Std. Dev.=0.00243, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8988, critical = 0.781. Kappa = 2.945 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
8/21/2007	0.0066	
11/1/2007	0.0086	
11/20/2007	0.005	
1/30/2008	0.0084	
3/6/2008	0.0073	
5/8/2008	0.0084	
12/14/2008	0.0075 (J)	
4/29/2009	0.0028	
10/21/2009	<0.0025	
4/21/2010	<0.0025	
9/28/2010	0.005	
4/12/2011	<0.0025	
10/4/2011	0.0088	
4/3/2012	<0.01	
10/8/2012	0.0034	
4/3/2013	<0.0025	
10/15/2013	0.0027	
4/9/2014	0.0025 (J)	
10/2/2014	0.0027 (V)	
4/2/2015	0.002 (J)	
10/12/2015	<0.0025	
3/31/2016	0.00266 (J)	
8/3/2016	<0.01 (*)	
4/10/2017	<0.01	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/22/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
8/21/2007	<0.0025	
11/1/2007	<0.0025	
11/18/2007	<0.0025	
1/30/2008	<0.0025	
3/6/2008	0.0038	
5/7/2008	<0.0025	
12/14/2008	0.0031 (J)	
4/29/2009	0.0031	
10/22/2009	0.0029	
4/21/2010	0.0027	
9/29/2010	<0.0025	
4/13/2011	<0.0025	
10/4/2011	0.003	
4/4/2012	<0.01	
10/3/2012	0.0029	
4/3/2013	0.0035	
10/9/2013	<0.0025	
4/2/2014	0.0033	
10/2/2014	0.0027	
4/1/2015	0.013 (O)	
10/11/2015	0.017	
4/4/2016	0.00419 (J)	
8/4/2016	<0.01 (*)	
4/10/2017	<0.01	
10/4/2017	0.0014 (J)	
3/22/2018	<0.01	
9/18/2018	<0.01	
3/23/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R
8/23/2007	0.0038
11/2/2007	0.0025
11/17/2007	0.023 (O)
1/15/2008	0.012
3/6/2008	0.0069
5/7/2008	0.007
12/2/2008	0.021 (O)
4/28/2009	0.0055
10/19/2009	0.0051
4/27/2010	0.0068
10/4/2010	0.0074
4/18/2011	0.0031
10/12/2011	0.0067
4/23/2012	<0.01
10/10/2012	0.0046
4/15/2013	0.006
10/22/2013	0.0037
4/21/2014	0.0073
9/30/2014	0.0027
4/3/2015	0.0017 (J)
10/7/2015	0.0042
4/5/2016	0.000194 (J)
8/4/2016	<0.01 (*)
4/12/2017	<0.01 (*)
10/6/2017	0.0024 (J)
3/23/2018	<0.01
9/19/2018	<0.01
3/25/2019	0.0039 (X)

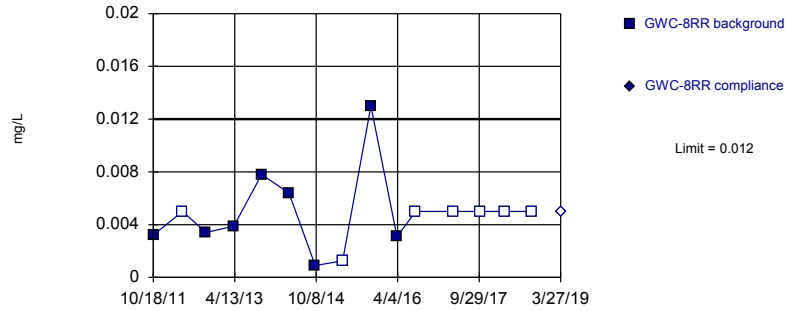
Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
5/26/2015	0.0035	
6/18/2015	0.0025 (D)	
7/2/2015	0.0018 (J)	
10/9/2015	0.0019 (J)	
3/29/2016	0.00786 (J)	
8/1/2016	<0.01	
4/6/2017	<0.01 (*)	
10/3/2017	0.0014 (J)	
3/20/2018	<0.01	
9/17/2018	<0.01	
3/21/2019		<0.01

Within Limit

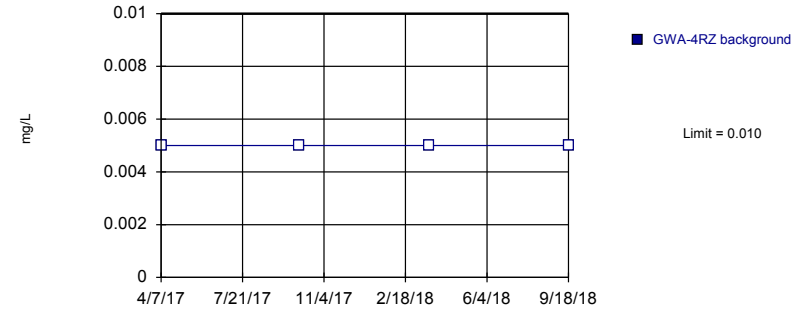
Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.002779, Std. Dev.=0.003801, n=15, 46.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8476, critical = 0.835. Kappa = 2.555 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

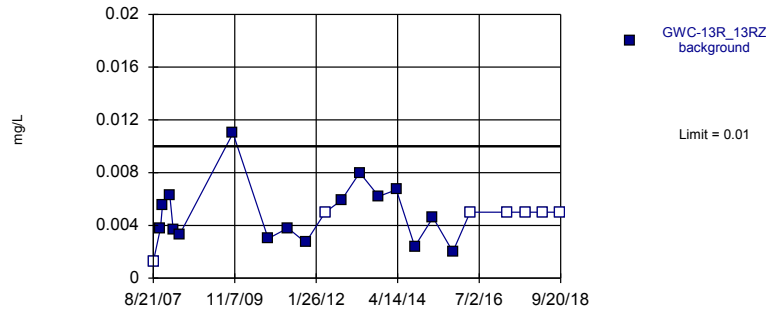
Prediction Limit
Intrawell Non-parametric, GWA-4RZ (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2). Assumes 1 future value.

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Parametric, GWC-13R_13RZ



Background Data Summary (after Aitchison's Adjustment): Mean=0.00343, Std. Dev.=0.003038, n=23, 30.43% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9353, critical = 0.881. Kappa = 2.317 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/23/2019 1:40 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
10/18/2011	0.0032	
4/30/2012	<0.01	
10/3/2012	0.0034	
4/8/2013	0.0039	
10/9/2013	0.0078	
4/10/2014	0.0064	
10/2/2014	0.0009 (JV)	
4/3/2015	<0.0025	
10/8/2015	0.013	
3/30/2016	0.00308 (J)	
8/2/2016	<0.01 (*)	
4/6/2017	<0.01 (*)	
10/4/2017	<0.01	
3/21/2018	<0.01	
9/18/2018	<0.01	
3/27/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ

4/7/2017	<0.01 (*)
10/3/2017	<0.01
3/21/2018	<0.01
9/18/2018	<0.01
3/21/2019	0.0034 (X)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/23/2019 2:44 PM View: 1&2 bedrock 1of2 metals
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-13R_13RZ

8/21/2007	<0.0025
11/1/2007	0.0038
11/19/2007	0.0055
1/31/2008	0.0063
3/5/2008	0.0037
5/7/2008	0.0033
12/12/2008	0.097 (O)
4/29/2009	0.068 (O)
10/21/2009	0.011
4/28/2010	0.048 (O)
10/6/2010	0.003
4/20/2011	0.0038
10/12/2011	0.0027
4/25/2012	<0.01
10/2/2012	0.0059
4/2/2013	0.008
10/8/2013	0.0062
4/1/2014	0.0067
10/1/2014	0.0024 (J)
3/31/2015	0.0046
10/14/2015	0.002 (J)
4/4/2016	<0.01
4/11/2017	<0.01 (*)
10/6/2017	<0.01
3/23/2018	<0.01
9/20/2018	<0.01
3/22/2019	0.0048 (X)

Interwell Prediction Limits AppIII - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 12:52 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Chloride (mg/L)	GWC-13	3	n/a	3/23/2019	3.5	Yes	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-14_14Z	3	n/a	3/22/2019	3.7	Yes	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-13R_13RZ	3	n/a	3/22/2019	7.4	Yes	84	7.143	sqrt(x)	0.000...	Param 1 of 2
pH (pH units)	GWC-15R	7.6	5.2	3/25/2019	7.64	Yes	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-8RR	7.6	5.2	3/27/2019	8.07	Yes	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-8Z	7.6	5.2	5/6/2019	7.98	Yes	85	0	n/a	0.000...	NP (normality) 1 of 2

Interwell Prediction Limits AppIII - All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 12:52 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWC-10	0.050	n/a	3/22/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-10R	0.050	n/a	3/22/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-11	0.050	n/a	3/23/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-11R	0.050	n/a	3/23/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-12	0.050	n/a	3/23/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-13	0.050	n/a	3/23/2019	0.012	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-14_14Z	0.050	n/a	3/22/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-15R	0.050	n/a	3/25/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-15_15Z	0.050	n/a	3/22/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-5	0.050	n/a	3/20/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-6	0.050	n/a	3/21/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-6RZ	0.050	n/a	3/21/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-7Z	0.050	n/a	3/21/2019	0.02ND	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-8RR	0.050	n/a	3/27/2019	0.0078	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-8Z	0.050	n/a	5/6/2019	0.0065	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-9	0.050	n/a	3/21/2019	0.006	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-13R_13RZ	0.050	n/a	3/22/2019	0.013	No	84	76.19	n/a	0.000...	NP (NDs) 1 of 2
Chloride (mg/L)	GWC-10	3	n/a	3/22/2019	2.2	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-10R	3	n/a	3/22/2019	2.8	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-11	3	n/a	3/23/2019	1.2	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-11R	3	n/a	3/23/2019	1.7	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-12	3	n/a	3/23/2019	0.88	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-13	3	n/a	3/23/2019	3.5	Yes	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-14_14Z	3	n/a	3/22/2019	3.7	Yes	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-15R	3	n/a	3/25/2019	1.9	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-15_15Z	3	n/a	3/22/2019	1.2	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-5	3	n/a	3/20/2019	0.465ND	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-6	3	n/a	3/21/2019	0.7ND	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-6RZ	3	n/a	3/21/2019	0.75ND	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-7Z	3	n/a	3/21/2019	0.5ND	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-8RR	3	n/a	3/27/2019	0.9	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-8Z	3	n/a	5/6/2019	1.1	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-9	3	n/a	3/21/2019	2	No	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-13R_13RZ	3	n/a	3/22/2019	7.4	Yes	84	7.143	sqrt(x)	0.000...	Param 1 of 2
Fluoride (mg/L)	GWC-10	1.1	n/a	3/22/2019	0.045	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-10R	1.1	n/a	3/22/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-11	1.1	n/a	3/23/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-11R	1.1	n/a	3/23/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-12	1.1	n/a	3/23/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-13	1.1	n/a	3/23/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-14_14Z	1.1	n/a	3/22/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-15R	1.1	n/a	3/25/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-15_15Z	1.1	n/a	3/22/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-5	1.1	n/a	3/20/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-6	1.1	n/a	3/21/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-6RZ	1.1	n/a	3/21/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-7Z	1.1	n/a	3/21/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-8RR	1.1	n/a	3/27/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-8Z	1.1	n/a	5/6/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-9	1.1	n/a	3/21/2019	0.15ND	No	84	50	n/a	0.000...	NP (normality) 1 of 2

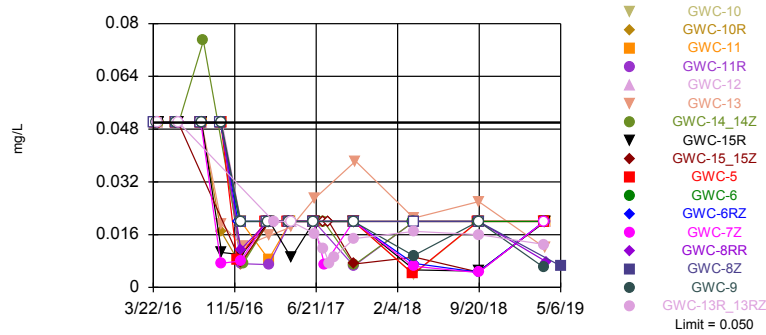
Interwell Prediction Limits AppIII - All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 12:52 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	GWC-13R_13RZ	1.1	n/a	3/22/2019	0.12	No	84	50	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-10	7.6	5.2	3/22/2019	6.23	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-10R	7.6	5.2	3/22/2019	7.34	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-11	7.6	5.2	3/23/2019	6.27	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-11R	7.6	5.2	3/23/2019	7.56	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-12	7.6	5.2	3/23/2019	6.34	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-13	7.6	5.2	3/23/2019	7.27	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-14_14Z	7.6	5.2	3/22/2019	6.27	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-15R	7.6	5.2	3/25/2019	7.64	Yes	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-15_15Z	7.6	5.2	3/22/2019	7.55	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-5	7.6	5.2	3/20/2019	6.29	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-6	7.6	5.2	3/21/2019	7.21	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-6RZ	7.6	5.2	3/21/2019	6.82	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-7Z	7.6	5.2	3/21/2019	7.3	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-8RR	7.6	5.2	3/27/2019	8.07	Yes	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-8Z	7.6	5.2	5/6/2019	7.98	Yes	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-9	7.6	5.2	3/21/2019	5.33	No	85	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-13R_13RZ	7.6	5.2	3/22/2019	7.49	No	85	0	n/a	0.000...	NP (normality) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

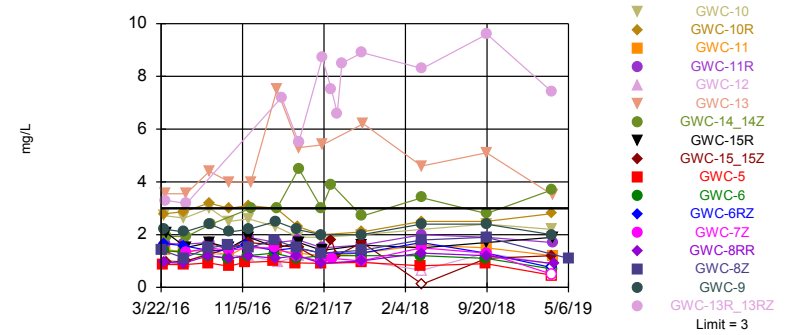


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 84 background values. 76.19% NDs. Annual per-constituent alpha = 0.009151. Individual comparison alpha = 0.0002703 (1 of 2). Comparing 17 points to limit.

Constituent: Boron Analysis Run 8/28/2019 12:51 PM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Exceeds Limit: GWC-13, GWC-14_14Z,
GWC-13R 13RZ

Prediction Limit
Interwell Parametric

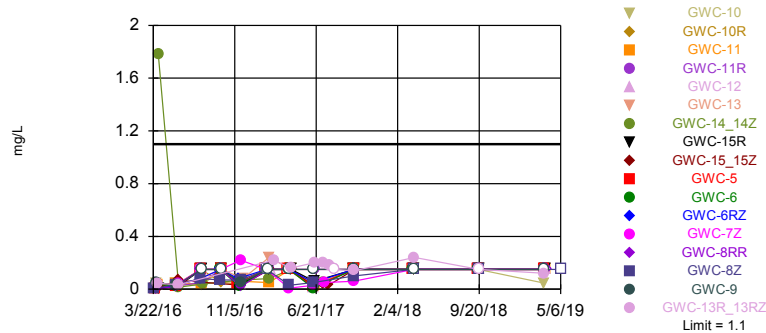


Background Data Summary (based on square root transformation): Mean=1.193, Std. Dev.=0.2613, n=84, 7.143% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9609, critical = 0.96. Kappa = 2.104 (c=7, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0004426. Comparing 17 points to limit.

Constituent: Chloride Analysis Run 8/28/2019 12:51 PM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Interwell Non-parametric

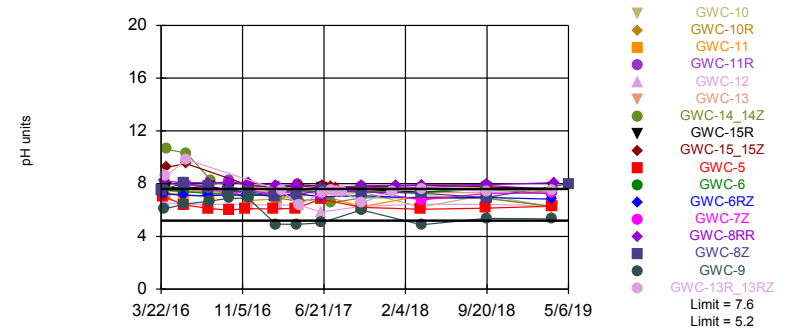


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 84 background values. 50% NDs. Annual per-constituent alpha = 0.009151. Individual comparison alpha = 0.0002703 (1 of 2). Comparing 17 points to limit.

Constituent: Fluoride Analysis Run 8/28/2019 12:51 PM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Exceeds Limits: GWC-15R, GWC-8RR,
GWC-8Z

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 85 background values. Annual per-constituent alpha = 0.0179. Individual comparison alpha = 0.0005287 (1 of 2). Comparing 17 points to limit.

Constituent: pH Analysis Run 8/28/2019 12:51 PM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWC-5	GWA-50 (bg)	GWA-50R (bg)	GWC-6RZ
3/22/2016	<0.1	<0.1							
3/23/2016			<0.1	<0.1	<0.1				
3/28/2016						<0.1	<0.1	<0.1	
3/29/2016									<0.1
3/30/2016									
3/31/2016									
4/4/2016									
4/5/2016									
5/19/2016	<0.1				<0.1				
5/20/2016				<0.1					
5/23/2016			<0.1				<0.1		
5/24/2016									<0.1
5/25/2016		<0.1				<0.1		<0.1	
5/26/2016									
5/27/2016									
5/31/2016									
6/1/2016									
7/29/2016	<0.1 (*)		<0.1 (*)	<0.1 (*)	<0.1 (*)				
8/1/2016						<0.1 (*)	<0.1 (*)	<0.1 (*)	<0.1
8/2/2016		<0.1 (*)							
8/3/2016									
8/4/2016									
8/5/2016									
8/9/2016									
9/22/2016			<0.1		<0.1				
9/23/2016	<0.1 (*)			<0.1 (*)					
9/26/2016		<0.1					<0.1	<0.1	<0.1
9/27/2016						<0.1			
9/28/2016									
9/29/2016									
9/30/2016									
11/9/2016	<0.04 (*)			<0.04 (*)					
11/10/2016			<0.04		<0.04		<0.04 (*)		
11/11/2016						0.0083 (J)		0.0193 (J)	
11/14/2016									<0.04
11/18/2016									
11/21/2016		<0.04							
11/22/2016									
11/23/2016									
11/28/2016									
1/30/2017	<0.04						<0.04	<0.04	
1/31/2017			<0.04	<0.04	<0.04	<0.04			
2/1/2017									<0.04
2/3/2017		<0.04							
2/6/2017									
2/7/2017									
2/8/2017									
2/9/2017									
2/10/2017									
2/13/2017									
2/22/2017									
3/30/2017	0.0065 (J)		<0.04	<0.04					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWC-5	GWA-50 (bg)	GWA-50R (bg)	GWC-6RZ
4/3/2017					<0.04	<0.04		<0.04	
4/6/2017									<0.04
4/7/2017		<0.04					0.008 (J)		
4/10/2017									
4/11/2017									
4/12/2017									
6/9/2017	<0.04				<0.04				
6/12/2017			<0.04	<0.04		<0.04	<0.04	<0.04	
6/13/2017		<0.04							<0.04
6/14/2017									
6/15/2017									
6/16/2017									
7/12/2017									
7/14/2017									
7/20/2017									
7/26/2017									
7/28/2017									
8/9/2017									
8/10/2017									
8/24/2017									
10/2/2017	<0.04			<0.04	<0.04		<0.04	<0.04	
10/3/2017		<0.04				<0.04			<0.04
10/4/2017			<0.04						
10/5/2017									
10/6/2017									
10/9/2017									
3/16/2018	<0.04				0.0077 (J)		<0.04	<0.04	
3/19/2018			0.0057 (J)	0.013 (J)		0.0041 (J)			
3/20/2018		<0.04							0.0073 (J)
3/21/2018									
3/22/2018									
3/23/2018									
9/14/2018				<0.04	<0.04				
9/17/2018	0.00625 (JD)		<0.04			<0.04	<0.04		0.0046 (J)
9/18/2018		<0.04						<0.04	
9/19/2018									
9/20/2018									
3/19/2019					0.014 (X)		<0.04	<0.04	
3/20/2019	0.0042 (X)		<0.04	<0.04		<0.04			
3/21/2019									<0.04
3/22/2019									
3/23/2019									
3/25/2019									
3/27/2019									
5/6/2019		0.0065 (X)							

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-14_14Z	GWC-15R	GWC-15_15Z	GWC-7Z	GWA-4RZ (bg)
3/22/2016						
3/23/2016						
3/28/2016						
3/29/2016						
3/30/2016						
3/31/2016						
4/4/2016	<0.1					
4/5/2016		<0.1	<0.1	<0.1		
5/19/2016						
5/20/2016						
5/23/2016						
5/24/2016						
5/25/2016						
5/26/2016						
5/27/2016						
5/31/2016	<0.1		<0.1	<0.1	<0.1	
6/1/2016		<0.1				
7/29/2016						
8/1/2016						
8/2/2016					<0.1 (*)	
8/3/2016						
8/4/2016	<0.1 (*)		<0.1			
8/5/2016						
8/9/2016		0.0748 (D)				
9/22/2016						
9/23/2016						
9/26/2016						
9/27/2016					0.0073 (J)	
9/28/2016						
9/29/2016	0.0192 (J)		0.0106 (J)			
9/30/2016						
11/9/2016						
11/10/2016						
11/11/2016						
11/14/2016						
11/18/2016						
11/21/2016					0.008 (J)	
11/22/2016						
11/23/2016			0.0099 (J)	0.0076 (J)		
11/28/2016	0.0124 (J)	0.0072 (J)				
1/30/2017						
1/31/2017						
2/1/2017					<0.04	
2/3/2017						
2/6/2017						
2/7/2017						
2/8/2017						
2/9/2017	0.0157 (J)	<0.04				
2/10/2017			<0.04	<0.04		
2/13/2017						
2/22/2017						0.022 (J)
3/30/2017						

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-14_14Z	GWC-15R	GWC-15_15Z	GWC-7Z	GWA-4RZ (bg)
4/3/2017						
4/6/2017					<0.04	
4/7/2017						0.0082 (J)
4/10/2017						
4/11/2017		<0.04		<0.04		
4/12/2017	0.0183 (J)		0.009 (J)			
6/9/2017						
6/12/2017						
6/13/2017					<0.04	
6/14/2017		<0.04				0.008 (J)
6/15/2017			<0.04	<0.04		
6/16/2017	0.0269 (J)					
7/12/2017		<0.04		<0.04		0.0082 (J)
7/14/2017					0.007 (J)	
7/20/2017						0.0091 (J)
7/26/2017				<0.04		
7/28/2017						<0.04
8/9/2017						0.0071 (J)
8/10/2017						
8/24/2017						0.0062 (J)
10/2/2017						
10/3/2017					<0.04	0.006 (J)
10/4/2017						
10/5/2017		0.0068 (J)				
10/6/2017			<0.04	0.0071 (J)		
10/9/2017	0.0383 (J)					
3/16/2018						
3/19/2018						
3/20/2018					0.0064 (J)	
3/21/2018	0.021 (J)					0.0062 (J)
3/22/2018		<0.04				
3/23/2018			0.0053 (J)	0.0092 (J)		
9/14/2018						
9/17/2018						
9/18/2018					0.0045 (J)	0.0096 (J)
9/19/2018	0.026 (J)	<0.04	0.0049 (J)	0.0046 (J)		
9/20/2018						
3/19/2019						
3/20/2019						
3/21/2019					<0.04	0.0066 (X)
3/22/2019		<0.04 (D)		<0.04 (D)		
3/23/2019	0.012 (X)					
3/25/2019			<0.04			
3/27/2019						
5/6/2019						

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWC-5	GWA-50 (bg)	GWA-50R (bg)	GWC-6RZ
3/22/2016	1.5101	1.4231							
3/23/2016			1.6092	2.4904	0.9079				
3/28/2016						0.8659	1.14	0.9204	
3/29/2016									1.6645
3/30/2016									
3/31/2016									
4/4/2016									
4/5/2016									
5/19/2016	1.5				0.9136				
5/20/2016				1.71					
5/23/2016			1.52				1.19		
5/24/2016									1.58
5/25/2016		1.11				0.8639		1.04	
5/26/2016									
5/27/2016									
5/31/2016									
6/1/2016									
7/29/2016	1.7		1.5	2	1.1				
8/1/2016						0.93	1.2	0.85	1.4
8/2/2016		1.5							
8/3/2016									
8/4/2016									
8/5/2016									
8/9/2016									
9/22/2016			1.4		1				
9/23/2016	1.8			1.8					
9/26/2016		1.6					1.1	0.87	1.4
9/27/2016						0.8			
9/28/2016									
9/29/2016									
9/30/2016									
11/9/2016	2			1.6					
11/10/2016			1.6		1.2		1.3		
11/11/2016						0.95		0.99	
11/14/2016									1.6
11/18/2016									
11/21/2016		1.5							
11/22/2016									
11/23/2016									
11/28/2016									
1/30/2017	1.5						1.2	0.95	
1/31/2017			1.6	1.3	1.2	0.99			
2/1/2017									1.4
2/3/2017		1.8							
2/6/2017									
2/7/2017									
2/8/2017									
2/9/2017									
2/10/2017									
2/13/2017									
2/22/2017									
3/30/2017	1.8		1.4	1.6					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWC-5	GWA-50 (bg)	GWA-50R (bg)	GWC-6RZ
4/3/2017					0.99	0.93		0.88	
4/6/2017									1.5
4/7/2017		1.5					1.2		
4/10/2017									
4/11/2017									
4/12/2017									
6/9/2017	1.6				0.87				
6/12/2017			1.4	1.6		0.91	1.1	0.83	
6/13/2017		1.3							1.3
6/14/2017									
6/15/2017									
6/16/2017									
7/12/2017									
7/14/2017									
7/20/2017									
7/26/2017									
7/28/2017									
8/9/2017									
8/10/2017									
8/24/2017									
10/2/2017	1.6			0.94	1		1.2	0.94	
10/3/2017		1.4				0.95			1.3
10/4/2017			1.5						
10/5/2017									
10/6/2017									
10/9/2017									
3/16/2018	1.7				1.6		1.4	<1.1	
3/19/2018			1.5	1.9		0.82			
3/20/2018		1.8							1.7
3/21/2018									
3/22/2018									
3/23/2018									
9/14/2018				0.98	0.92				
9/17/2018	1.55 (D)		1.5			0.9	1.1		1.3
9/18/2018		1.9						1	
9/19/2018									
9/20/2018									
3/19/2019					2		<1.2	<0.88	
3/20/2019	<1.4		<1.5	<0.86		<0.93			
3/21/2019									<1.5
3/22/2019									
3/23/2019									
3/25/2019									
3/27/2019									
5/6/2019		1.1							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-14_14Z	GWC-15R	GWC-15_15Z	GWC-7Z	GWA-4RZ (bg)
3/22/2016						
3/23/2016						
3/28/2016						
3/29/2016						
3/30/2016						
3/31/2016						
4/4/2016	3.55					
4/5/2016		1.93	2.08	0.9439		
5/19/2016						
5/20/2016						
5/23/2016						
5/24/2016						
5/25/2016						
5/26/2016						
5/27/2016						
5/31/2016	3.55		1.51	1	1.33	
6/1/2016		1.93				
7/29/2016						
8/1/2016						
8/2/2016					1.5	
8/3/2016						
8/4/2016	4.4		1.7			
8/5/2016						
8/9/2016		2.4				
9/22/2016						
9/23/2016						
9/26/2016						
9/27/2016					1.4	
9/28/2016						
9/29/2016	4		1.5			
9/30/2016						
11/9/2016						
11/10/2016						
11/11/2016						
11/14/2016						
11/18/2016						
11/21/2016					1.5	
11/22/2016						
11/23/2016			1.9	1.7		
11/28/2016	4	3				
1/30/2017						
1/31/2017						
2/1/2017					1.5	
2/3/2017						
2/6/2017						
2/7/2017						
2/8/2017						
2/9/2017	7.5	3				
2/10/2017			1.5	1.6		
2/13/2017						
2/22/2017						3.7
3/30/2017						

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-14_14Z	GWC-15R	GWC-15_15Z	GWC-7Z	GWA-4RZ (bg)
4/3/2017						
4/6/2017					1.2	
4/7/2017						2.5
4/10/2017						
4/11/2017		4.5		1.5		
4/12/2017	5.3		1.7			
6/9/2017						
6/12/2017						
6/13/2017					0.98	
6/14/2017		3				2.6
6/15/2017			1.4	1		
6/16/2017	5.4					
7/12/2017		3.9		1.8		2.8
7/14/2017					1.1	
7/20/2017						2.3
7/26/2017				1.2		
7/28/2017						2
8/9/2017						1.8
8/10/2017						
8/24/2017						2.9
10/2/2017						
10/3/2017					1	2.8
10/4/2017						
10/5/2017		2.7				
10/6/2017			1.6	1.7		
10/9/2017	6.2					
3/16/2018						
3/19/2018						
3/20/2018					1.5	
3/21/2018	4.6					2.9
3/22/2018		3.4				
3/23/2018			1.5	<0.25		
9/14/2018						
9/17/2018						
9/18/2018					1.3	3.1
9/19/2018	5.1	2.8	1.7	1.1		
9/20/2018						
3/19/2019						
3/20/2019						
3/21/2019					<1	3.6
3/22/2019		3.7 (D)		1.2 (D)		
3/23/2019	3.5					
3/25/2019			1.9			
3/27/2019						
5/6/2019						

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWC-5	GWA-50 (bg)	GWA-50R (bg)	GWC-6RZ
3/22/2016	0.0614 (J)	0.00323 (J)							
3/23/2016			<0.3	0.0477 (J)	0.0826 (J)				
3/28/2016						0.00421 (J)	0.0314 (J)	0.0326 (J)	
3/29/2016									0.00363 (J)
3/30/2016									
3/31/2016									
4/4/2016									
4/5/2016									
5/19/2016	0.064 (J)				0.0409 (J)				
5/20/2016				0.033 (J)					
5/23/2016			<0.3				0.027 (J)		
5/24/2016									0.0286 (J)
5/25/2016		0.0345 (J)				0.0207 (J)		0.0285 (J)	
5/26/2016									
5/27/2016									
5/31/2016									
6/1/2016									
7/29/2016	0.11 (J)		<0.3	0.16 (J)	0.07 (J)				
8/1/2016						<0.3	<0.3	<0.3	0.08 (J)
8/2/2016		0.08 (J)							
8/3/2016									
8/4/2016									
8/5/2016									
8/9/2016									
9/22/2016			<0.3		<0.3				
9/23/2016	0.03 (J)			0.1 (J)					
9/26/2016		0.07 (J)					<0.3	<0.3	<0.3
9/27/2016						<0.3			
9/28/2016									
9/29/2016									
9/30/2016									
11/9/2016	0.1 (J)			0.04 (J)					
11/10/2016			<0.3		0.03 (J)		0.04 (J)		
11/11/2016						0.04 (J)		<0.3	
11/14/2016									0.08 (J)
11/18/2016									
11/21/2016		0.07 (J)							
11/22/2016									
11/23/2016									
11/28/2016									
1/30/2017	<0.3						<0.3	<0.3	
1/31/2017			<0.3	<0.3	<0.3	<0.3			
2/1/2017									<0.3
2/3/2017		<0.3							
2/6/2017									
2/7/2017									
2/8/2017									
2/9/2017									
2/10/2017									
2/13/2017									
2/22/2017									
3/30/2017	0.01 (J)		<0.3	0.02 (J)					

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2 (bg)	GWA-2R (bg)	GWC-5	GWA-50 (bg)	GWA-50R (bg)	GWC-6RZ
4/3/2017					0.02 (J)	<0.3		0.04 (J)	
4/6/2017									<0.3
4/7/2017		0.03 (J)					<0.3		
4/10/2017									
4/11/2017									
4/12/2017									
6/9/2017	0.04 (J)				0.06 (J)				
6/12/2017			<0.3	0.17 (J)		0.02 (J)	0.07 (J)	0.06 (J)	
6/13/2017		0.05 (J)							0.05 (J)
6/14/2017									
6/15/2017									
6/16/2017									
7/12/2017									
7/14/2017									
7/20/2017									
7/26/2017									
7/28/2017									
8/9/2017									
8/10/2017									
8/24/2017									
10/2/2017	0.07 (J)			<0.3	<0.3		<0.3	<0.3	
10/3/2017		0.1 (J)				<0.3			<0.3
10/4/2017			<0.3						
10/5/2017									
10/6/2017									
10/9/2017									
3/16/2018	0.029 (J)				<0.3		<0.3	<0.3	
3/19/2018			<0.3	1.1		<0.3			
3/20/2018		<0.3							<0.3
3/21/2018									
3/22/2018									
3/23/2018									
9/14/2018				<0.3	<0.3				
9/17/2018	<0.3 (D)		<0.3			<0.3	<0.3		<0.3
9/18/2018		<0.3						<0.3	
9/19/2018									
9/20/2018									
3/19/2019					0.056 (X)		<0.3	<0.3	
3/20/2019	<0.3		<0.3	<0.3		<0.3			
3/21/2019									<0.3
3/22/2019									
3/23/2019									
3/25/2019									
3/27/2019									
5/6/2019		<0.3							

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-14_14Z	GWC-15R	GWC-15_15Z	GWC-7Z	GWA-4RZ (bg)
3/22/2016						
3/23/2016						
3/28/2016						
3/29/2016						
3/30/2016						
3/31/2016						
4/4/2016	0.026 (J)					
4/5/2016		1.78243 (J)	0.00288 (J)	0.011 (J)		
5/19/2016						
5/20/2016						
5/23/2016						
5/24/2016						
5/25/2016						
5/26/2016						
5/27/2016						
5/31/2016	0.0234 (J)		0.0233 (J)	0.0669 (J)	0.043 (J)	
6/1/2016		0.0148 (J)				
7/29/2016						
8/1/2016						
8/2/2016					<0.3	
8/3/2016						
8/4/2016	0.09 (J)		<0.3			
8/5/2016						
8/9/2016		0.04 (J)				
9/22/2016						
9/23/2016						
9/26/2016						
9/27/2016					<0.3	
9/28/2016						
9/29/2016	<0.3		<0.3			
9/30/2016						
11/9/2016						
11/10/2016						
11/11/2016						
11/14/2016						
11/18/2016						
11/21/2016					0.22 (J)	
11/22/2016						
11/23/2016			0.04 (J)	0.03 (J)		
11/28/2016	0.08 (J)	0.07 (J)				
1/30/2017						
1/31/2017						
2/1/2017					<0.3	
2/3/2017						
2/6/2017						
2/7/2017						
2/8/2017						
2/9/2017	0.24 (J)	0.08 (J)				
2/10/2017			<0.3	<0.3		
2/13/2017						
2/22/2017						0.3
3/30/2017						

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-14_14Z	GWC-15R	GWC-15_15Z	GWC-7Z	GWA-4RZ (bg)
4/3/2017						
4/6/2017					0.008 (J)	
4/7/2017						0.19 (J)
4/10/2017						
4/11/2017		<0.3		<0.3		
4/12/2017	<0.3		<0.3			
6/9/2017						
6/12/2017						
6/13/2017					0.03 (J)	
6/14/2017		0.01 (J)				0.19 (J)
6/15/2017			0.06 (J)	0.02 (J)		
6/16/2017	0.04 (J)					
7/12/2017		0.05 (J)		0.04 (J)		0.18 (J)
7/14/2017					0.05 (J)	
7/20/2017						0.17 (J)
7/26/2017				0.03 (J)		
7/28/2017						0.13 (J)
8/9/2017						<0.3 (*)
8/10/2017						
8/24/2017						0.16 (J)
10/2/2017						
10/3/2017					0.06 (J)	0.17 (J)
10/4/2017						
10/5/2017		<0.3				
10/6/2017			<0.3	<0.3		
10/9/2017	<0.3					
3/16/2018						
3/19/2018						
3/20/2018					<0.3	
3/21/2018	<0.3					0.24 (J)
3/22/2018		<0.3				
3/23/2018			<0.3	<0.3		
9/14/2018						
9/17/2018						
9/18/2018					<0.3	<0.3
9/19/2018	<0.3	<0.3	<0.3	<0.3		
9/20/2018						
3/19/2019						
3/20/2019						
3/21/2019					<0.3	0.19 (X)
3/22/2019		<0.3 (D)		<0.3 (D)		
3/23/2019	<0.3					
3/25/2019			<0.3			
3/27/2019						
5/6/2019						

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_ApplIII_Interwell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2R (bg)	GWA-2 (bg)	GWA-50R (bg)	GWA-50 (bg)	GWC-5	GWC-6
3/22/2016	7.65	7.53 (D)							
3/23/2016			5.96	7.45	6.7				
3/28/2016						6.45 (D)	6.22	7.04	
3/29/2016									7.54
3/30/2016									
3/31/2016									
4/4/2016									
4/5/2016									
5/19/2016	7.6			7.5					
5/20/2016					6.36				
5/23/2016			5.73				5.86		
5/24/2016									7.39
5/25/2016		8.04				6.96		6.39	
5/26/2016									
5/27/2016									
5/31/2016									
6/1/2016									
7/29/2016	7.58		5.51	7.59	6.75				
8/1/2016						5.64	6.39	6.13	7.26
8/2/2016		7.74							
8/3/2016									
8/4/2016									
8/5/2016									
8/9/2016									
9/22/2016			5.45	7.44					
9/23/2016	7.57				6.62				
9/26/2016		7.4				6.26	5.74		7.19
9/27/2016								5.98	
9/28/2016									
9/29/2016									
9/30/2016									
11/9/2016	7.45				6.42				
11/10/2016			5.51	7.55			5.78		
11/11/2016						5.62		6.11	
11/14/2016									
11/18/2016									7.04
11/21/2016		7.4							
11/22/2016									
11/23/2016									
11/28/2016									
1/30/2017	7.64					5.49	5.88		
1/31/2017			5.42	7.56	5.66			6.08	
2/1/2017									7.34
2/3/2017		7.05							
2/6/2017									
2/7/2017									
2/8/2017									
2/9/2017									
2/10/2017									
2/13/2017									
2/22/2017									
3/30/2017	7.51		5.43		6.33				

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2R (bg)	GWA-2 (bg)	GWA-50R (bg)	GWA-50 (bg)	GWC-5	GWC-6
4/3/2017				7.46		6.32		6.13	
4/6/2017									7.49
4/7/2017		7.14					5.94		
4/10/2017									
4/11/2017									
4/12/2017									
6/9/2017	7.6			7.24					
6/12/2017			5.47		6.6	6.48	5.81	6.83	
6/13/2017		7.52							7.38
6/14/2017									
6/15/2017									
6/16/2017									
7/12/2017									
7/14/2017									
7/20/2017									
7/26/2017									
7/27/2017									
7/28/2017									
8/9/2017									
8/10/2017									
8/24/2017									
10/2/2017	7.55			7.35	5.61	6.41	5.93		
10/3/2017		7.38						6.2	7.39
10/4/2017			5.23						
10/5/2017									
10/6/2017									
10/9/2017									
12/28/2017									
1/9/2018									
3/16/2018	7.58			7.31		5.46	5.64		
3/19/2018			5.4		6.55			6.06	7.32
3/20/2018		7.27							
3/21/2018									
3/22/2018									
3/23/2018									
9/14/2018				7.55	5.81				
9/17/2018	7.53 (D)		5.22				5.82	6.14	7.57
9/18/2018		6.95				5.35			
9/19/2018									
9/20/2018									
3/19/2019				7.2		6.01	5.93		
3/20/2019	7.64		5.22		5.71			6.29	
3/21/2019									7.21
3/22/2019									
3/23/2019									
3/25/2019									
3/27/2019									
5/6/2019		7.98							

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-14_14Z	GWC-15R	GWC-15_15Z	GWC-7Z	GWA-4RZ (bg)
3/22/2016						
3/23/2016						
3/28/2016						
3/29/2016						
3/30/2016						
3/31/2016						
4/4/2016	7.16					
4/5/2016		10.61	7.71	9.23		
5/19/2016						
5/20/2016						
5/23/2016						
5/24/2016						
5/25/2016						
5/26/2016	7.23					
5/27/2016						
5/31/2016			7.66	9.52	7.98	
6/1/2016		10.32				
7/29/2016						
8/1/2016						
8/2/2016					7.64	
8/3/2016	6.96					
8/4/2016			7.8			
8/5/2016						
8/9/2016		8.23				
9/22/2016						
9/23/2016						
9/26/2016						
9/27/2016					7.18	
9/28/2016	7.6					
9/29/2016			7.46			
9/30/2016						
11/9/2016						
11/10/2016						
11/11/2016						
11/14/2016						
11/18/2016						
11/21/2016					7.49	
11/22/2016	6.71					
11/23/2016			7.62	7.88		
11/28/2016		7.29				
1/30/2017						
1/31/2017						
2/1/2017					7.2	
2/3/2017						
2/6/2017						
2/7/2017						
2/8/2017	6.84					
2/9/2017		6.91				
2/10/2017			7.51	7.72		
2/13/2017						
2/22/2017						7.38
3/30/2017						

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 12:52 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-14_14Z	GWC-15R	GWC-15_15Z	GWC-7Z	GWA-4RZ (bg)
4/3/2017						
4/6/2017					7.42	
4/7/2017						7.35
4/10/2017	7.13					
4/11/2017		6.68		7.83		
4/12/2017			7.54			
6/9/2017						
6/12/2017						
6/13/2017					7.25	
6/14/2017		6.84				7.3
6/15/2017	7.1		7.71	7.86		
6/16/2017						
7/12/2017		6.54		7.73		7.39
7/14/2017					7.5	
7/20/2017						7.44
7/26/2017				7.71		
7/27/2017						
7/28/2017						7.5
8/9/2017						7.52
8/10/2017						
8/24/2017						7.5
10/2/2017						
10/3/2017					7.5	7.51
10/4/2017	6.25					
10/5/2017		6.93				
10/6/2017			7.58	7.74		
10/9/2017						
12/28/2017						7.32 (Y)
1/9/2018						
3/16/2018						
3/19/2018						
3/20/2018					6.76	
3/21/2018	7.07					7.3
3/22/2018		6.93				
3/23/2018			7.34	7.89		
9/14/2018						
9/17/2018						
9/18/2018	6.9				7.26	7.26
9/19/2018		6.88	7.66	7.77		
9/20/2018						
3/19/2019						
3/20/2019						
3/21/2019					7.3	7.28
3/22/2019		6.27 (D)		7.55 (D)		
3/23/2019	6.27					
3/25/2019			7.64			
3/27/2019						
5/6/2019						

Intrawell Prediction Limits AppIII - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 12:59 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate (mg/L)	GWC-15R	11	n/a	3/25/2019	11.2	Yes	8	0	No	0.000...	Param 1 of 3

Intrawell Prediction Limits AppIII - All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 12:59 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	GWC-10	43	n/a	3/22/2019	15.4	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-10R	47	n/a	3/22/2019	37.2	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-11	27	n/a	3/23/2019	7.8	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-11R	37	n/a	3/23/2019	28.3	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-12	10	n/a	3/23/2019	7.5	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-13	75	n/a	3/23/2019	29.6	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-14_14Z	48	n/a	3/22/2019	16.7	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-15R	64	n/a	3/25/2019	35.6	No	8	0	sqrt(x)	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-15_15Z	34	n/a	3/22/2019	21.3	No	8	0	x^2	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-5	8.3	n/a	3/20/2019	2.7	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-6	16	n/a	3/21/2019	14.9	No	7	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-6RZ	15	n/a	3/21/2019	8.3	No	7	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-7Z	27	n/a	3/21/2019	25.2	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-8RR	26	n/a	3/27/2019	20.6	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-8Z	27	n/a	5/6/2019	20	No	7	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-9	37	n/a	3/21/2019	4.8	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-13R_13RZ	70	n/a	3/22/2019	40.5	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-10	2.3	n/a	3/22/2019	1.6	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-10R	2.1	n/a	3/22/2019	1.3	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-11	4	n/a	3/23/2019	2.1	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-11R	5	n/a	3/23/2019	2.1	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-12	0.83	n/a	3/23/2019	0.3	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-13	200	n/a	3/23/2019	15.5	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-14_14Z	6.2	n/a	3/22/2019	6.2	No	7	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-15R	11	n/a	3/25/2019	11.2	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-15_15Z	15	n/a	3/22/2019	2.1	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-5	2.3	n/a	3/20/2019	1.3	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-6	4.2	n/a	3/21/2019	2.7	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-6RZ	3.5	n/a	3/21/2019	1.7	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-7Z	2.2	n/a	3/21/2019	1.9	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-8RR	2.1	n/a	3/27/2019	1.5	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-8Z	4.1	n/a	5/6/2019	2.1	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-9	5	n/a	3/21/2019	2.3	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-13R_13RZ	86	n/a	3/22/2019	57.9	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-10	190	n/a	3/22/2019	95	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-10R	220	n/a	3/22/2019	140	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-11	160	n/a	3/23/2019	64	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-11R	170	n/a	3/23/2019	148	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-12	120	n/a	3/23/2019	58	No	8	0	ln(x)	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-13	440	n/a	3/23/2019	135	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-14_14Z	320	n/a	3/22/2019	104	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-15R	260	n/a	3/25/2019	167	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-15_15Z	250	n/a	3/22/2019	116	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-5	140	n/a	3/20/2019	66	No	8	12.5	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-6	180	n/a	3/21/2019	80	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-6RZ	180	n/a	3/21/2019	60	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-7Z	180	n/a	3/21/2019	107	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-8RR	130	n/a	3/27/2019	101	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-8Z	170	n/a	5/6/2019	118	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-9	210	n/a	3/21/2019	39	No	8	0	No	0.000...	Param 1 of 3

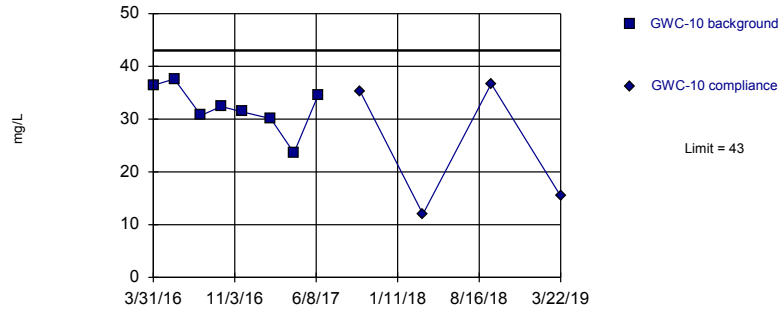
Intrawell Prediction Limits AppIII - All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 12:59 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/l)	GWC-13R_13RZ 440		n/a	3/22/2019	249	No	8	0	No	0.000...	Param 1 of 3

Within Limit

Prediction Limit
Intrawell Parametric

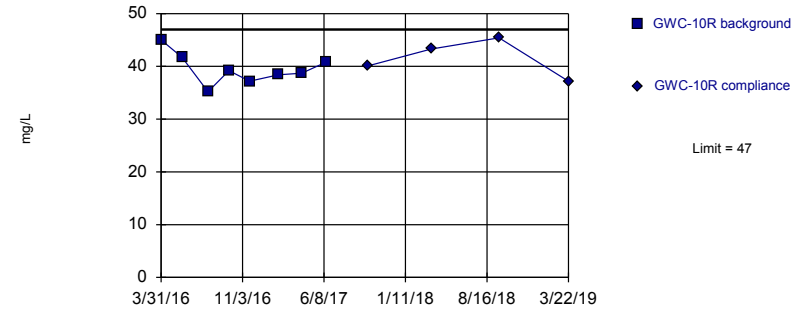


Background Data Summary: Mean=32.1, Std. Dev.=4.372, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:54 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

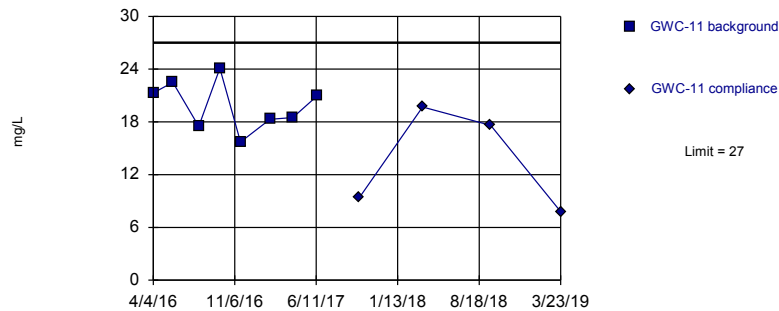


Background Data Summary: Mean=39.53, Std. Dev.=2.988, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9738, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:54 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

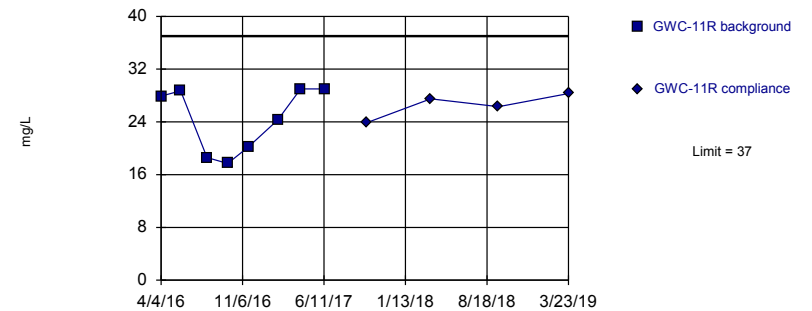


Background Data Summary: Mean=19.86, Std. Dev.=2.815, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9681, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:54 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=24.43, Std. Dev.=4.917, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8246, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:54 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
3/31/2016	36.4	
5/26/2016	37.6	
8/5/2016	30.7	
9/28/2016	32.4	
11/22/2016	31.4	
2/7/2017	30.1	
4/10/2017	23.6	
6/14/2017	34.6	
10/4/2017		35.2
3/20/2018		12 (J)
9/18/2018		36.7
3/22/2019		15.4 (X)

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
3/31/2016	45	
5/26/2016	41.7	
8/3/2016	35.2	
9/28/2016	39.2	
11/22/2016	37.2	
2/7/2017	38.4	
4/10/2017	38.7	
6/14/2017	40.8	
10/4/2017		40.1
3/21/2018		43.3
9/18/2018		45.4
3/22/2019		37.2

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
4/4/2016	21.3	
5/26/2016	22.5	
8/3/2016	17.5	
9/28/2016	24.1	
11/22/2016	15.7	
2/8/2017	18.3	
4/10/2017	18.5	
6/15/2017	21	
10/4/2017		9.4
3/21/2018		19.7 (J)
9/18/2018		17.6 (J)
3/23/2019		7.8

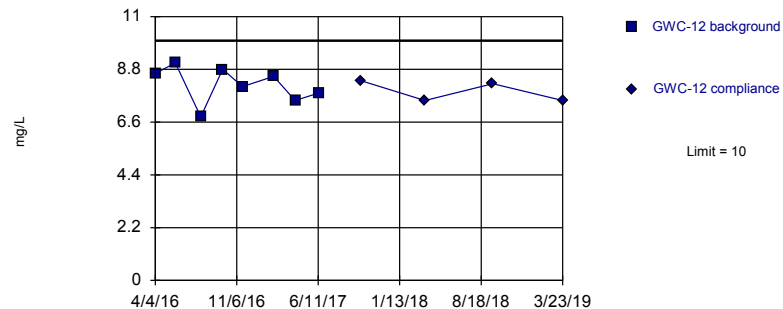
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
4/4/2016	27.9	
5/26/2016	28.7	
8/4/2016	18.6	
9/28/2016	17.7	
11/22/2016	20.2	
2/8/2017	24.3	
4/10/2017	29	
6/15/2017	29	
10/4/2017		23.9
3/22/2018		27.5
9/18/2018		26.3
3/23/2019		28.3

Within Limit

Prediction Limit
Intrawell Parametric

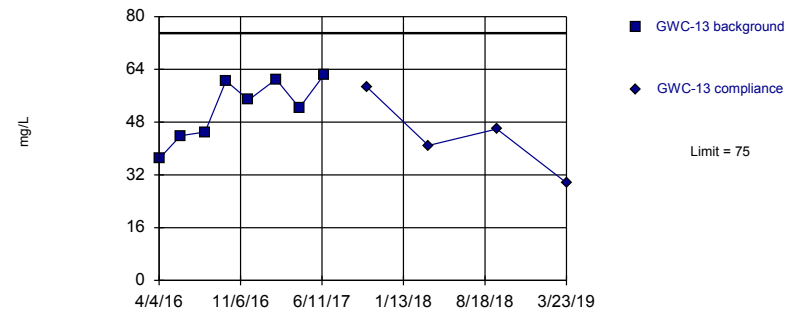


Background Data Summary: Mean=8.154, Std. Dev.=0.7497, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.955, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:54 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

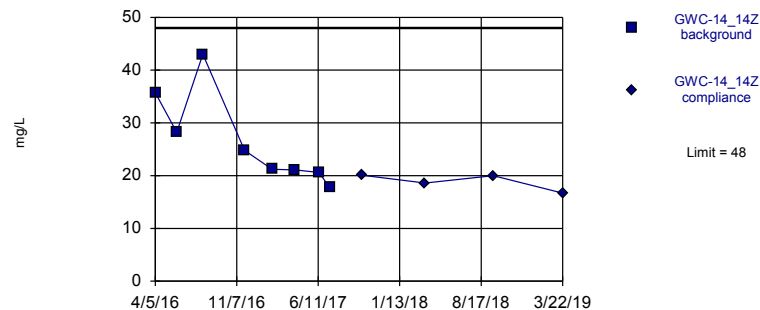


Background Data Summary: Mean=52.08, Std. Dev.=9.33, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9156, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:54 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

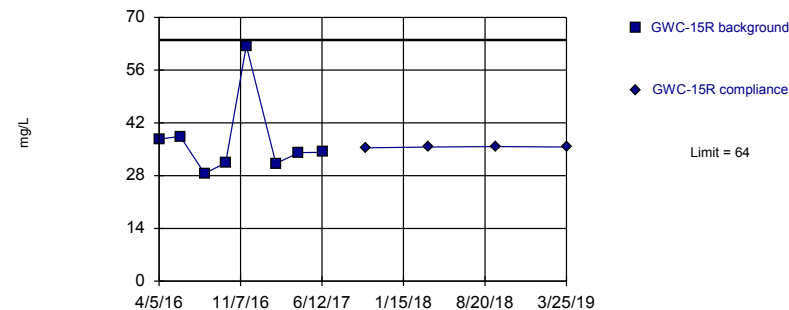


Background Data Summary: Mean=26.54, Std. Dev.=8.719, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.871, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=6.058, Std. Dev.=0.7987, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7543, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
4/4/2016	8.63	
5/27/2016	9.07	
8/3/2016	6.82	
9/30/2016	8.8	
11/22/2016	8.08	
2/13/2017	8.51	
4/11/2017	7.5	
6/14/2017	7.82	
10/4/2017		8.32
3/22/2018		7.5
9/18/2018		8.2
3/23/2019		7.5

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
4/4/2016	36.9	
5/31/2016	43.9	
8/4/2016	45	
9/29/2016	60.5	
11/28/2016	54.7	
2/9/2017	61	
4/12/2017	52.3	
6/16/2017	62.3	
10/9/2017		58.6
3/21/2018		40.9
9/19/2018		45.9
3/23/2019		29.6

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
4/5/2016	35.7	
6/1/2016	28.2	
8/9/2016	43	
11/28/2016	24.8	
2/9/2017	21.2	
4/11/2017	21.1	
6/14/2017	20.6	
7/12/2017	17.7	
10/5/2017		20.1
3/22/2018		18.6 (J)
9/19/2018		20 (J)
3/22/2019		16.7 (XD)

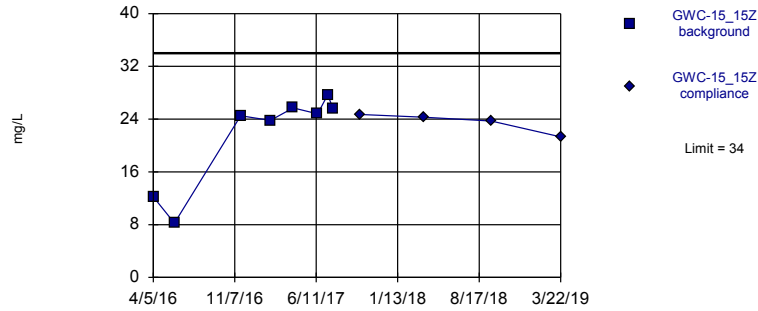
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
4/5/2016	37.7	
5/31/2016	38.4	
8/4/2016	28.6	
9/29/2016	31.4	
11/23/2016	62.5	
2/10/2017	31.2	
4/12/2017	34.1	
6/15/2017	34.2	
10/6/2017		35.4
3/23/2018		35.6
9/19/2018		35.7
3/25/2019		35.6

Within Limit

Prediction Limit
Intrawell Parametric

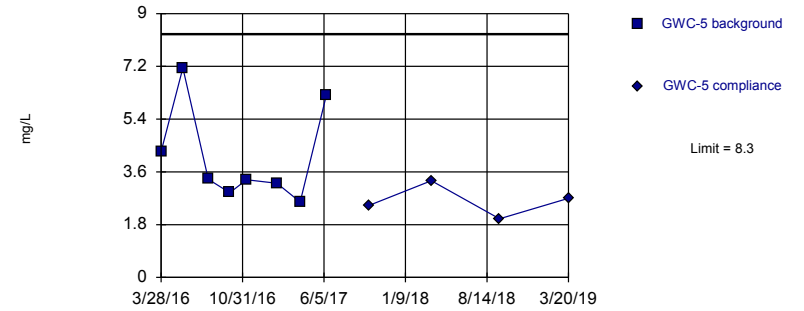


Background Data Summary (based on square transformation): Mean=510.2, Std. Dev.=255.9, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7895, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

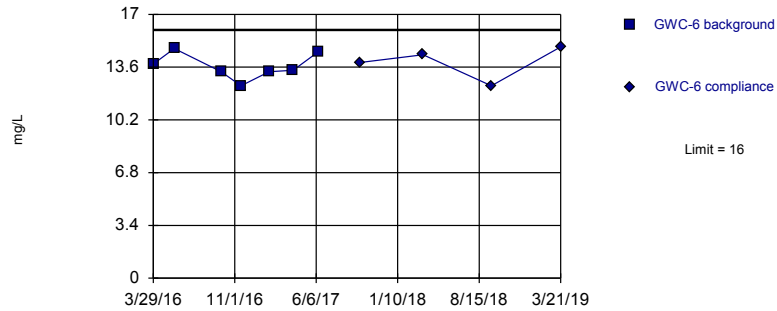


Background Data Summary: Mean=4.126, Std. Dev.=1.672, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8232, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

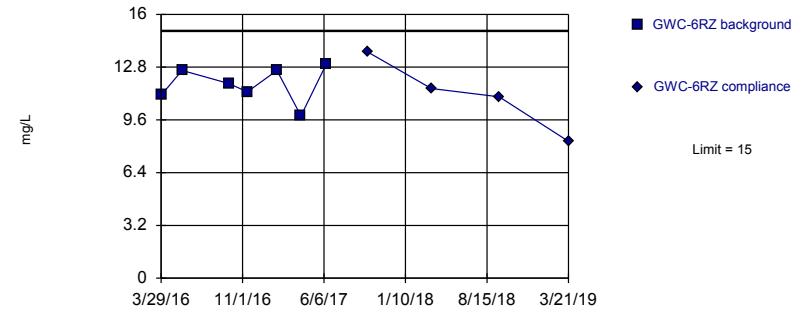


Background Data Summary: Mean=13.66, Std. Dev.=0.8284, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9331, critical = 0.73. Kappa = 2.789 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=11.75, Std. Dev.=1.102, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9328, critical = 0.73. Kappa = 2.789 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
4/5/2016	12.2	
5/31/2016	8.24	
11/23/2016	24.5	
2/10/2017	23.8	
4/11/2017	25.7	
6/15/2017	24.8	
7/12/2017	27.7	
7/26/2017	25.6	
10/6/2017		24.7
3/23/2018		24.3 (J)
9/19/2018		23.7 (J)
3/22/2019		21.3 (XD)

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
3/28/2016	4.29	
5/25/2016	7.15	
8/1/2016	3.35	
9/27/2016	2.89	
11/11/2016	3.33	
1/31/2017	3.21	
4/3/2017	2.57	
6/12/2017	6.22	
10/3/2017		2.45
3/19/2018		3.3
9/17/2018		2
3/20/2019		2.7

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
3/29/2016	13.8	
5/24/2016	14.8	
9/26/2016	13.3	
11/18/2016	12.4	
2/1/2017	13.3	
4/6/2017	13.4	
6/13/2017	14.6	
10/3/2017		13.9
3/19/2018		14.4 (J)
9/17/2018		12.4 (J)
3/21/2019		14.9 (X)

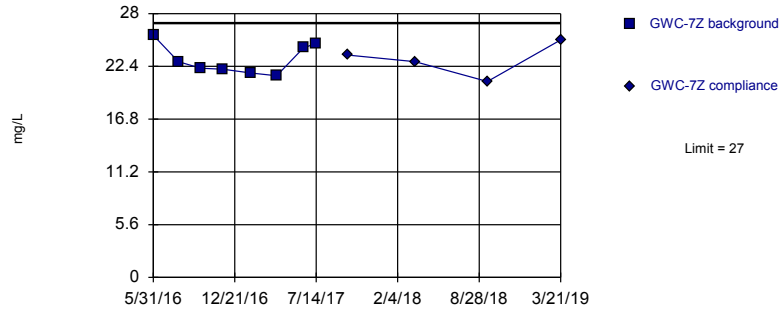
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
3/29/2016	11.1	
5/24/2016	12.6	
9/26/2016	11.8	
11/14/2016	11.3	
2/1/2017	12.6	
4/6/2017	9.84	
6/13/2017	13	
10/3/2017		13.7
3/20/2018		11.5 (J)
9/17/2018		11 (J)
3/21/2019		8.3

Within Limit

Prediction Limit
Intrawell Parametric

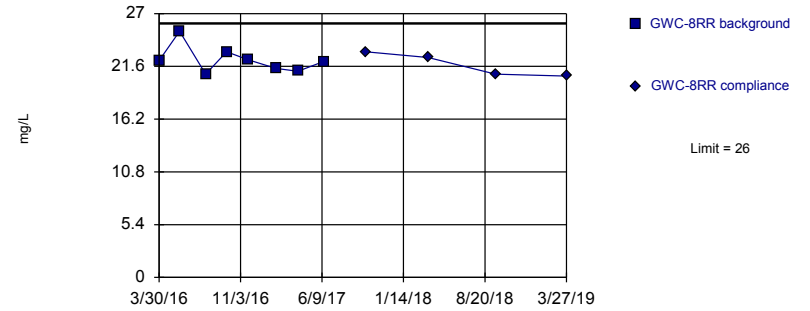


Background Data Summary: Mean=23.15, Std. Dev.=1.604, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8983, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

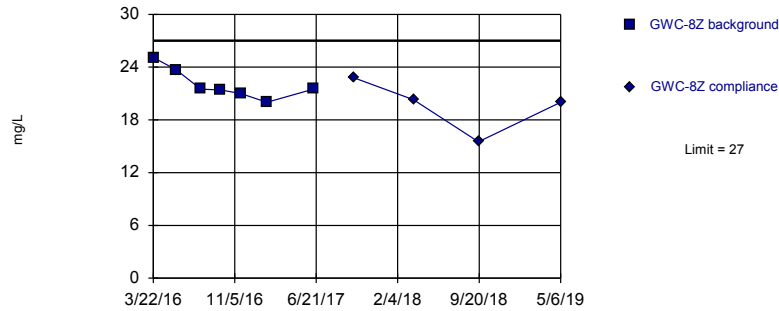


Background Data Summary: Mean=22.28, Std. Dev.=1.394, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8797, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

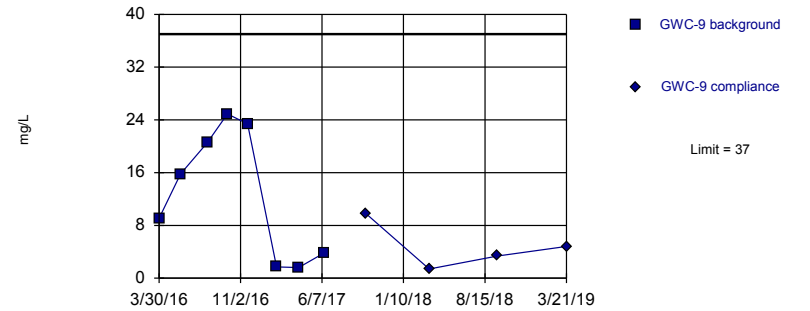


Background Data Summary: Mean=22.03, Std. Dev.=1.749, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8766, critical = 0.73. Kappa = 2.789 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=12.6, Std. Dev.=9.783, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8779, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	25.7	
8/2/2016	22.9	
9/27/2016	22.2	
11/21/2016	22.1	
2/1/2017	21.7	
4/6/2017	21.4	
6/13/2017	24.4	
7/14/2017	24.8	
10/3/2017		23.6
3/20/2018		22.9 (J)
9/18/2018		20.8 (J)
3/21/2019		25.2

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
3/30/2016	22.2	
5/24/2016	25.2	
8/2/2016	20.8	
9/27/2016	23.1	
11/22/2016	22.3	
2/6/2017	21.4	
4/6/2017	21.1	
6/14/2017	22.1	
10/4/2017		23.1
3/21/2018		22.5 (J)
9/18/2018		20.8 (J)
3/27/2019		20.6 (X)

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
3/22/2016	25.1	
5/25/2016	23.7	
8/2/2016	21.5	
9/26/2016	21.4	
11/21/2016	21	
2/3/2017	20	
6/13/2017	21.5	
10/3/2017		22.8
3/20/2018		20.3 (J)
9/18/2018		15.5 (J)
5/6/2019		20 (X)

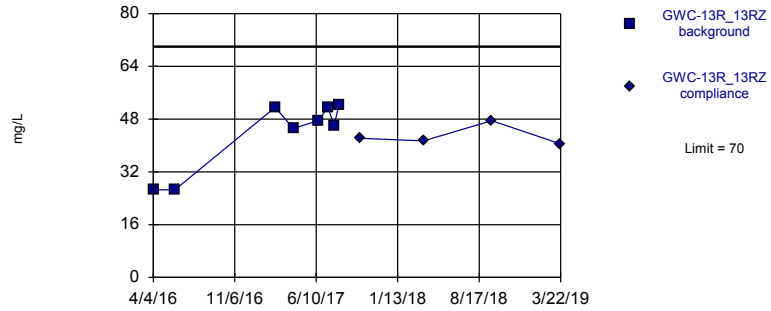
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
3/30/2016	9.07	
5/26/2016	15.8	
8/5/2016	20.5	
9/28/2016	24.9	
11/21/2016	23.4	
2/6/2017	1.7	
4/6/2017	1.6	
6/13/2017	3.82	
10/3/2017		9.77
3/20/2018		1.4
9/18/2018		3.35 (D)
3/21/2019		4.8

Within Limit

Prediction Limit
Intrawell Parametric

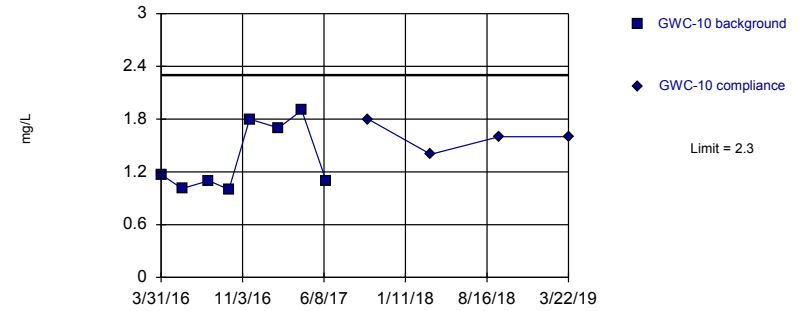


Background Data Summary: Mean=43.4, Std. Dev.=10.73, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7541, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

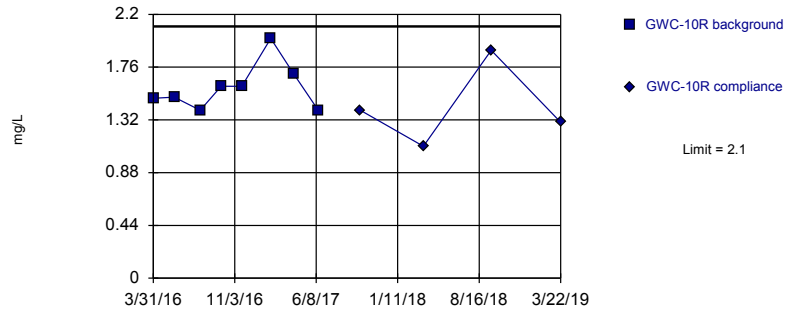


Background Data Summary: Mean=1.348, Std. Dev.=0.3823, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7974, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

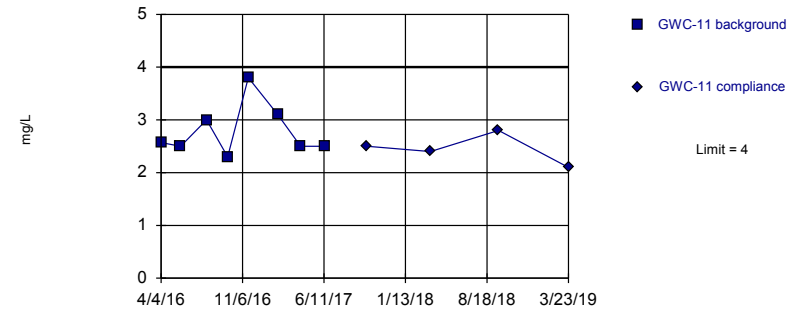


Background Data Summary: Mean=1.589, Std. Dev.=0.1953, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8645, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.784, Std. Dev.=0.4929, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8308, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
4/4/2016	26.5	
6/1/2016	26.6	
2/22/2017	51.6	
4/11/2017	45.2	
6/16/2017	47.5	
7/12/2017	51.6	
7/28/2017	46	
8/10/2017	52.2	
10/6/2017		42.2
3/23/2018		41.4
9/20/2018		47.5
3/22/2019		40.5 (D)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
3/31/2016	1.17	
5/26/2016	1.01	
8/5/2016	1.1	
9/28/2016	1	
11/22/2016	1.8	
2/7/2017	1.7	
4/10/2017	1.9	
6/14/2017	1.1	
10/4/2017		1.8
3/20/2018		1.4
9/18/2018		1.6
3/22/2019		1.6

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_ApplIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
3/31/2016	1.5	
5/26/2016	1.51	
8/3/2016	1.4	
9/28/2016	1.6	
11/22/2016	1.6	
2/7/2017	2	
4/10/2017	1.7	
6/14/2017	1.4	
10/4/2017		1.4
3/21/2018		1.1
9/18/2018		1.9
3/22/2019		1.3

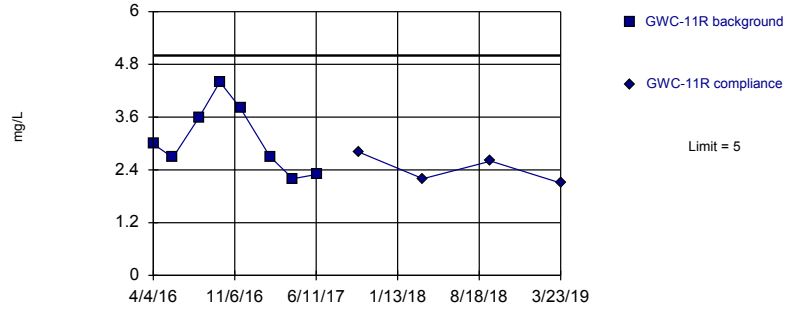
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
4/4/2016	2.57	
5/26/2016	2.5	
8/3/2016	3	
9/28/2016	2.3	
11/22/2016	3.8	
2/8/2017	3.1	
4/10/2017	2.5	
6/15/2017	2.5	
10/4/2017		2.5
3/21/2018		2.4
9/18/2018		2.8
3/23/2019		2.1

Within Limit

Prediction Limit
Intrawell Parametric

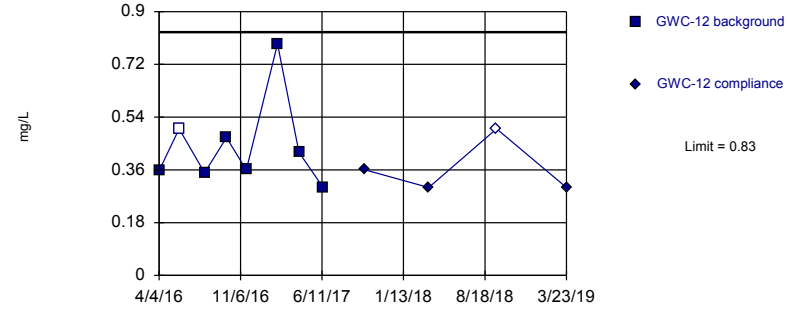


Background Data Summary: Mean=3.084, Std. Dev.=0.777, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9301, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:55 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

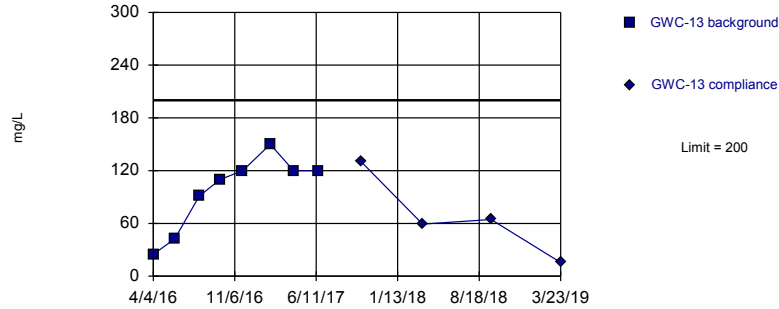


Background Data Summary: Mean=0.4434, Std. Dev.=0.155, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8006, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

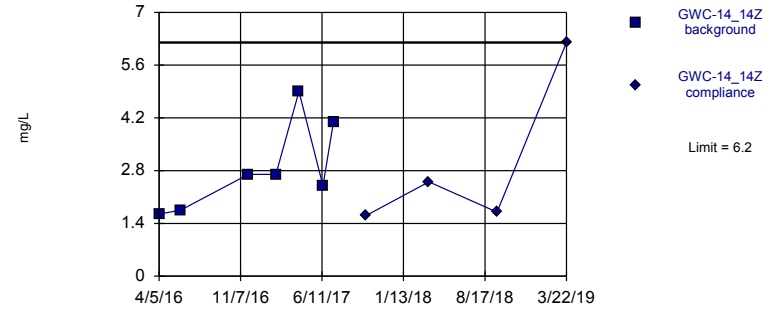


Background Data Summary: Mean=97.29, Std. Dev.=42.73, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8774, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.886, Std. Dev.=1.201, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8931, critical = 0.73. Kappa = 2.789 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_ApplIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
4/4/2016	2.99	
5/26/2016	2.68	
8/4/2016	3.6	
9/28/2016	4.4	
11/22/2016	3.8	
2/8/2017	2.7	
4/10/2017	2.2	
6/15/2017	2.3	
10/4/2017		2.8
3/22/2018		2.2
9/18/2018		2.6
3/23/2019		2.1

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
4/4/2016	0.3574 (J)	
5/27/2016	<1	
8/3/2016	0.35 (J)	
9/30/2016	0.47 (J)	
11/22/2016	0.36 (J)	
2/13/2017	0.79 (J)	
4/11/2017	0.42 (J)	
6/14/2017	0.3 (J)	
10/4/2017		0.36 (J)
3/22/2018		0.3 (J)
9/18/2018		<1
3/23/2019		0.3 (X)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
4/4/2016	24.8	
5/31/2016	42.5	
8/4/2016	91	
9/29/2016	110	
11/28/2016	120	
2/9/2017	150	
4/12/2017	120	
6/16/2017	120	
10/9/2017		130
3/21/2018		59.1
9/19/2018		64.5
3/23/2019		15.5 (X)

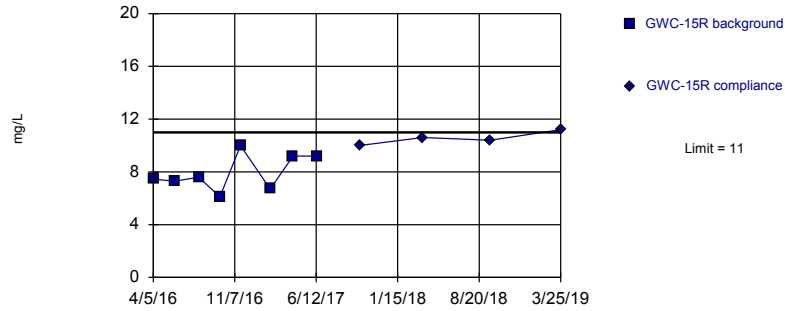
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_ApplIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
4/5/2016	1.65	
6/1/2016	1.75	
11/28/2016	2.7	
2/9/2017	2.7	
4/11/2017	4.9	
6/14/2017	2.4	
7/12/2017	4.1	
10/5/2017		1.6
3/22/2018		2.5
9/19/2018		1.7
3/22/2019		6.2 (D)

Exceeds Limit

Prediction Limit
Intrawell Parametric

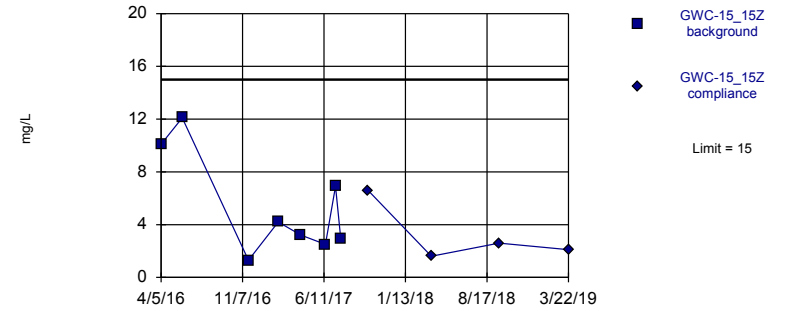


Background Data Summary: Mean=7.943, Std. Dev.=1.369, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9297, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

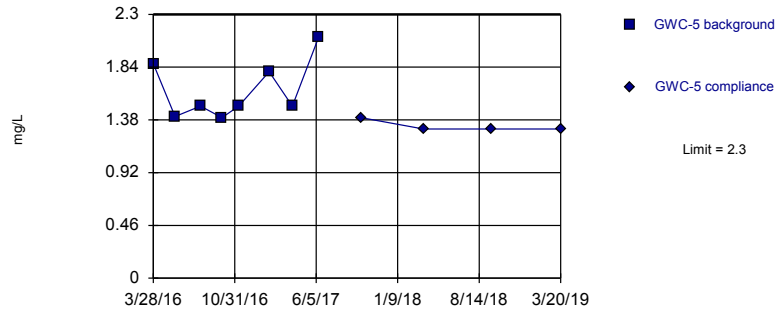


Background Data Summary: Mean=5.4, Std. Dev.=3.909, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8784, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

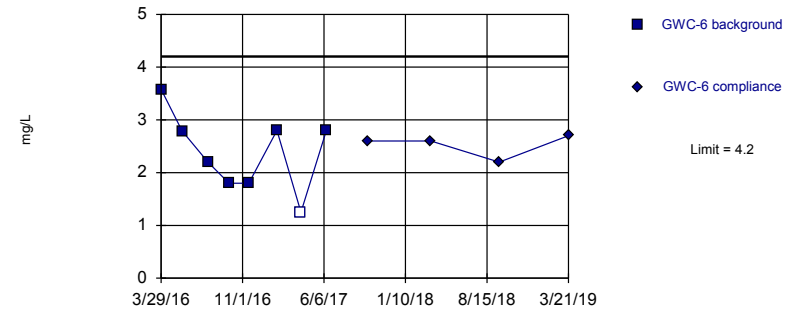


Background Data Summary: Mean=1.635, Std. Dev.=0.2561, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8411, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.378, Std. Dev.=0.7505, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9485, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
4/5/2016	7.45	
5/31/2016	7.29	
8/4/2016	7.6	
9/29/2016	6.1	
11/23/2016	10	
2/10/2017	6.7	
4/12/2017	9.2	
6/15/2017	9.2	
10/6/2017		10
3/23/2018		10.6
9/19/2018		10.4
3/25/2019		11.2

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
4/5/2016	10.1	
5/31/2016	12.1	
11/23/2016	1.3	
2/10/2017	4.2	
4/11/2017	3.2	
6/15/2017	2.5	
7/12/2017	6.9	
7/26/2017	2.9	
10/6/2017		6.6
3/23/2018		1.6
9/19/2018		2.6
3/22/2019		2.1 (D)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
3/28/2016	1.87	
5/25/2016	1.41	
8/1/2016	1.5	
9/27/2016	1.4	
11/11/2016	1.5	
1/31/2017	1.8	
4/3/2017	1.5	
6/12/2017	2.1	
10/3/2017		1.4
3/19/2018		1.3
9/17/2018		1.3
3/20/2019		1.3

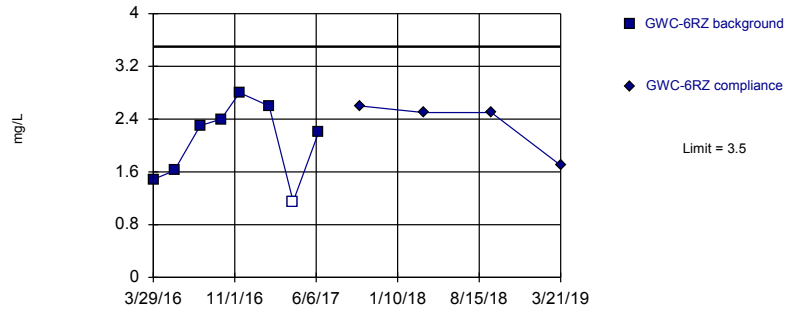
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_ApplIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
3/29/2016	3.5801	
5/24/2016	2.79	
8/1/2016	2.2	
9/26/2016	1.8	
11/18/2016	1.8	
2/1/2017	2.8	
4/6/2017	<2.5 (*)	
6/13/2017	2.8	
10/3/2017		2.6
3/19/2018		2.6
9/17/2018		2.2
3/21/2019		2.7

Within Limit

Prediction Limit
Intrawell Parametric

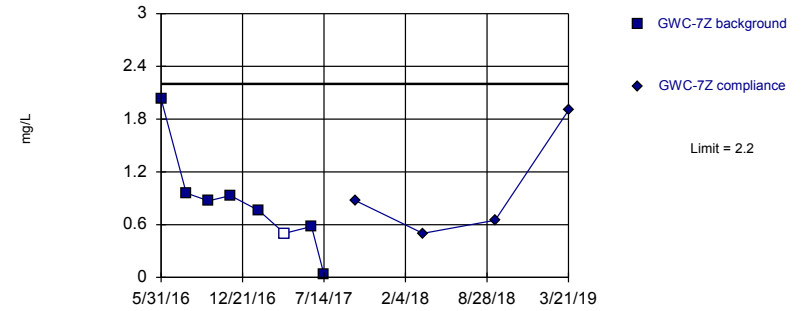


Background Data Summary: Mean=2.07, Std. Dev.=0.5834, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9351, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

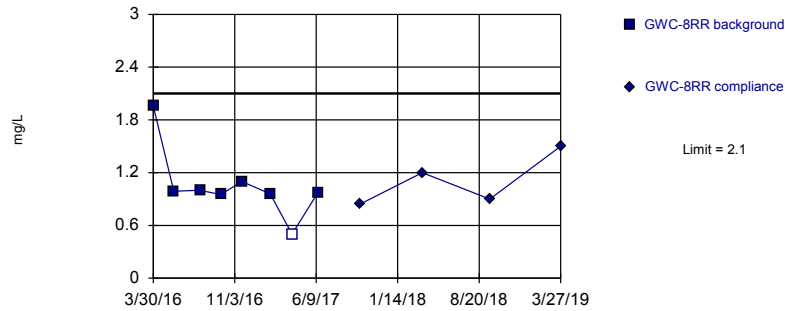


Background Data Summary: Mean=0.8338, Std. Dev.=0.5693, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8851, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

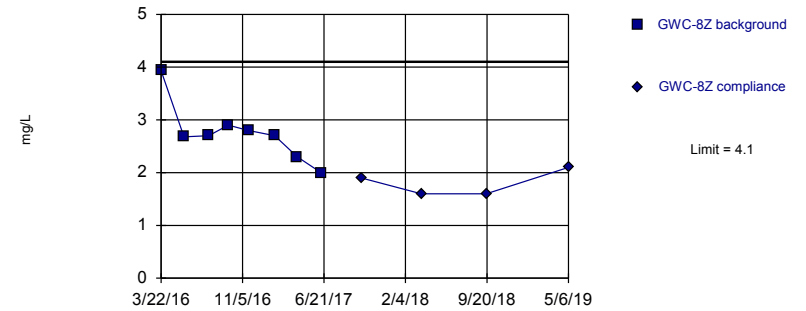


Background Data Summary: Mean=1.053, Std. Dev.=0.4059, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.759, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.752, Std. Dev.=0.5603, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8668, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_ApplIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
3/29/2016	1.4863	
5/24/2016	1.62	
8/1/2016	2.3	
9/26/2016	2.4	
11/14/2016	2.8	
2/1/2017	2.6	
4/6/2017	<2.3 (*)	
6/13/2017	2.2	
10/3/2017		2.6
3/20/2018		2.5
9/17/2018		2.5
3/21/2019		1.7

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	2.03	
8/2/2016	0.96 (J)	
9/27/2016	0.87 (J)	
11/21/2016	0.93 (J)	
2/1/2017	0.76 (J)	
4/6/2017	<1 (*)	
6/13/2017	0.58 (J)	
7/14/2017	0.04 (J)	
10/3/2017		0.87 (J)
3/20/2018		0.5 (J)
9/18/2018		0.65 (J)
3/21/2019		1.9

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_ApplIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
3/30/2016	1.9542	
5/24/2016	0.989 (J)	
8/2/2016	1	
9/27/2016	0.95 (J)	
11/22/2016	1.1	
2/6/2017	0.96 (J)	
4/6/2017	<1 (*)	
6/14/2017	0.97 (J)	
10/4/2017		0.84 (J)
3/21/2018		1.2
9/18/2018		0.9 (J)
3/27/2019		1.5

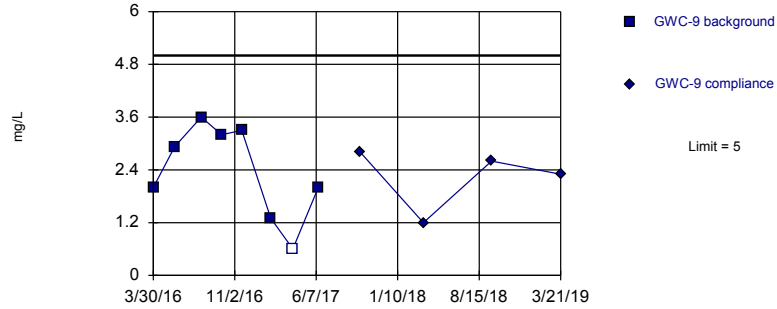
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
3/22/2016	3.9321	
5/25/2016	2.68	
8/2/2016	2.7	
9/26/2016	2.9	
11/21/2016	2.8	
2/3/2017	2.7	
4/7/2017	2.3	
6/13/2017	2	
10/3/2017		1.9
3/20/2018		1.6
9/18/2018		1.6
5/6/2019		2.1

Within Limit

Prediction Limit
Intrawell Parametric

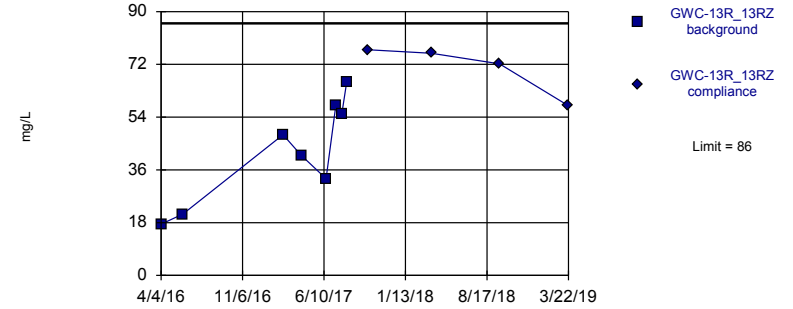


Background Data Summary: Mean=2.366, Std. Dev.=1.064, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9257, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

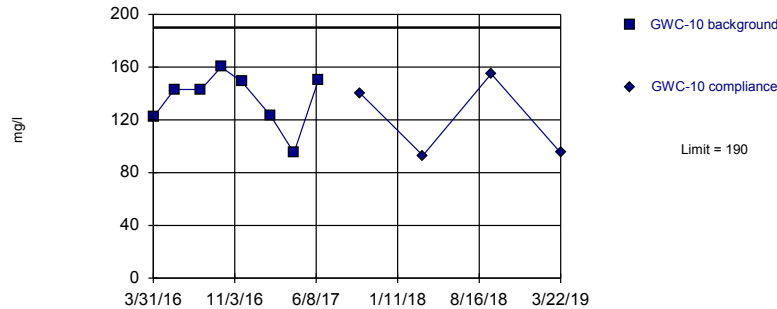


Background Data Summary: Mean=42.43, Std. Dev.=17.58, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9495, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

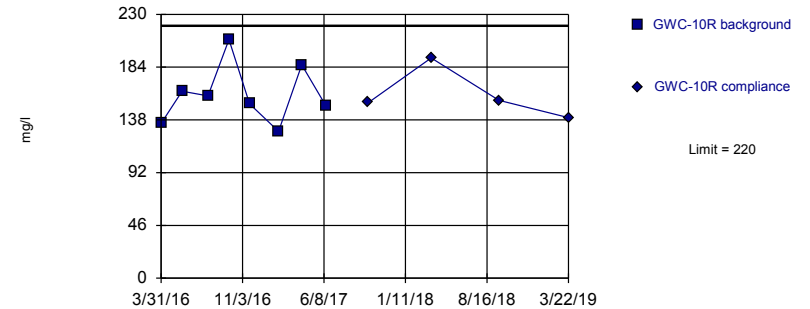


Background Data Summary: Mean=135.6, Std. Dev.=20.99, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9016, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=160.1, Std. Dev.=26.19, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9405, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_ApplIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
3/30/2016	2	
5/26/2016	2.93	
8/5/2016	3.6	
9/28/2016	3.2	
11/21/2016	3.3	
2/6/2017	1.3	
4/6/2017	<1.2 (*)	
6/13/2017	2	
10/3/2017		2.8
3/20/2018		1.2
9/18/2018		2.6
3/21/2019		2.3

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
4/4/2016	17.5	
6/1/2016	20.9	
2/22/2017	48	
4/11/2017	41	
6/16/2017	33	
7/12/2017	58	
7/28/2017	55	
8/10/2017	66	
10/6/2017		77
3/23/2018		75.8
9/20/2018		72.2
3/22/2019		57.9 (D)

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
3/31/2016	122	
5/26/2016	143	
8/5/2016	143	
9/28/2016	160	
11/22/2016	149	
2/7/2017	123	
4/10/2017	95	
6/14/2017	150	
10/4/2017		140
3/20/2018		93
9/18/2018		155
3/22/2019		95

Prediction Limit

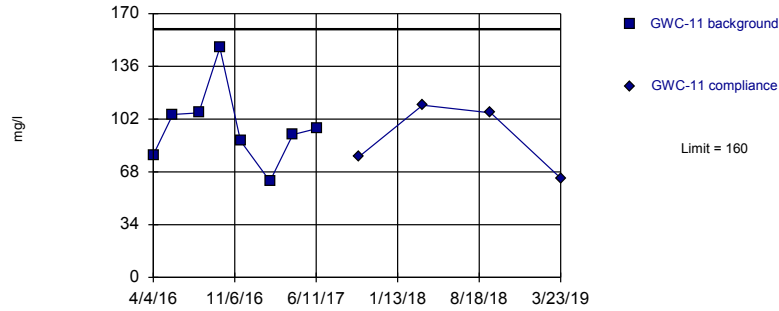
Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
3/31/2016	135	
5/26/2016	163	
8/3/2016	159	
9/28/2016	208	
11/22/2016	152	
2/7/2017	128	
4/10/2017	186	
6/14/2017	150	
10/4/2017		153
3/21/2018		192
9/18/2018		155
3/22/2019		140

Within Limit

Prediction Limit
Intrawell Parametric

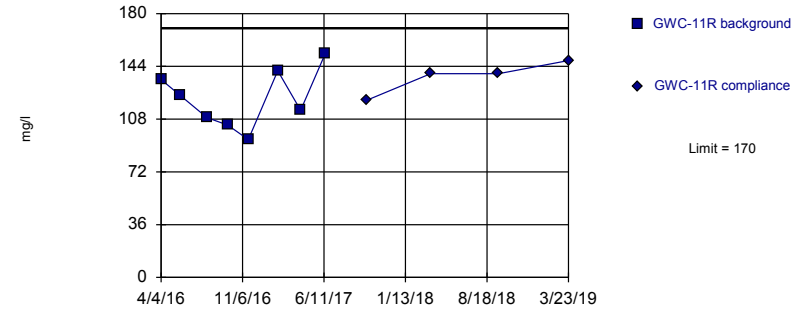


Background Data Summary: Mean=97, Std. Dev.=25.08, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.924, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

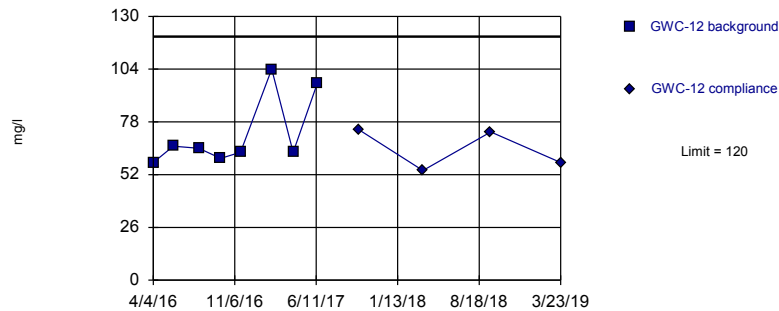


Background Data Summary: Mean=121.8, Std. Dev.=20.13, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9723, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

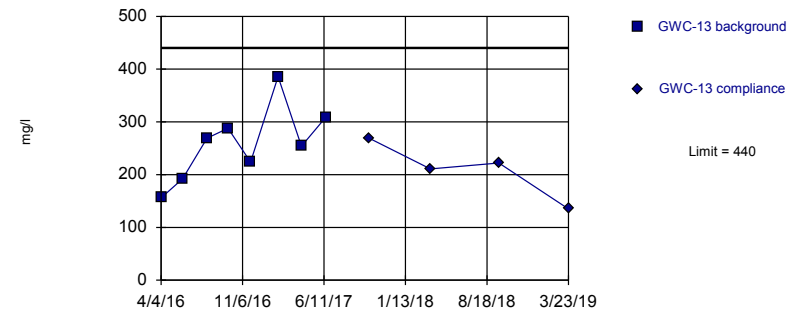


Background Data Summary (based on natural log transformation): Mean=4.253, Std. Dev.=0.2246, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7515, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:56 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=259.8, Std. Dev.=71.63, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9864, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
4/4/2016	79	
5/26/2016	105	
8/3/2016	106	
9/28/2016	148	
11/22/2016	88	
2/8/2017	62	
4/10/2017	92	
6/15/2017	96	
10/4/2017		78
3/21/2018		111
9/18/2018		106
3/23/2019		64

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
4/4/2016	135	
5/26/2016	124	
8/4/2016	109	
9/28/2016	104	
11/22/2016	94	
2/8/2017	141 (J)	
4/10/2017	114	
6/15/2017	153	
10/4/2017		121
3/22/2018		139
9/18/2018		139
3/23/2019		148

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
4/4/2016	58	
5/27/2016	66	
8/3/2016	65	
9/30/2016	60	
11/22/2016	63	
2/13/2017	104 (J)	
4/11/2017	63	
6/14/2017	97	
10/4/2017		74
3/22/2018		54
9/18/2018		73
3/23/2019		58

Prediction Limit

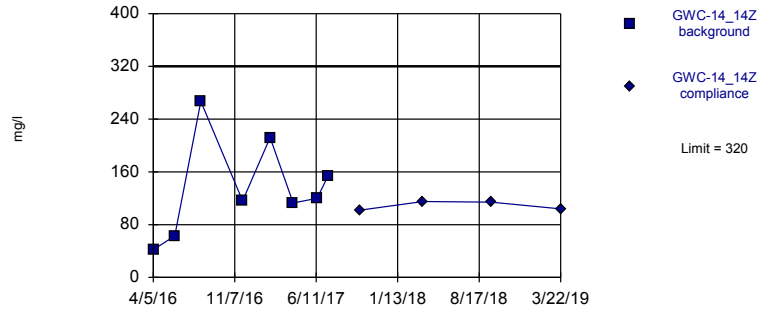
Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
4/4/2016	156	
5/31/2016	192	
8/4/2016	269	
9/29/2016	288	
11/28/2016	224	
2/9/2017	386	
4/12/2017	254	
6/16/2017	309	
10/9/2017		269
3/21/2018		211
9/19/2018		222
3/23/2019		135

Within Limit

Prediction Limit
Intrawell Parametric

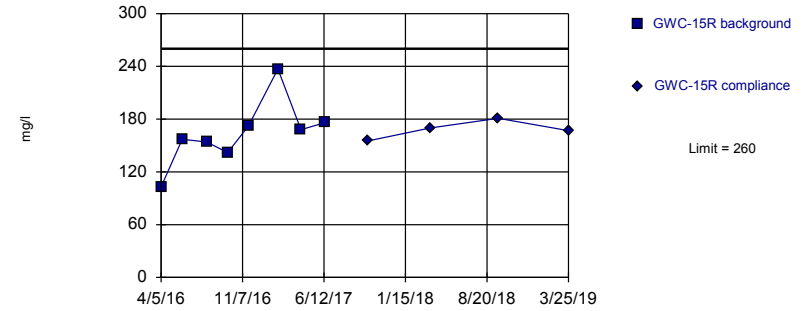


Background Data Summary: Mean=135.8, Std. Dev.=74.23, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9409, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

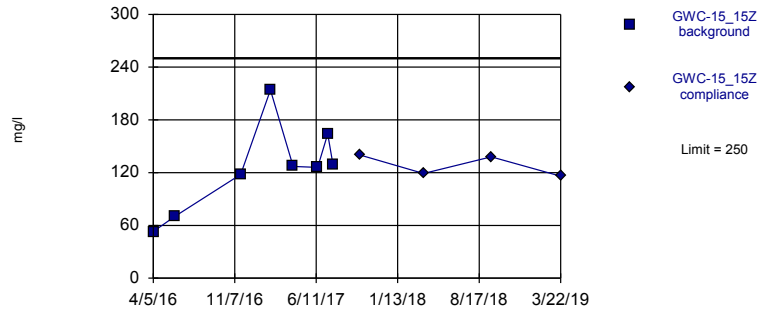


Background Data Summary: Mean=163.6, Std. Dev.=37.62, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9228, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

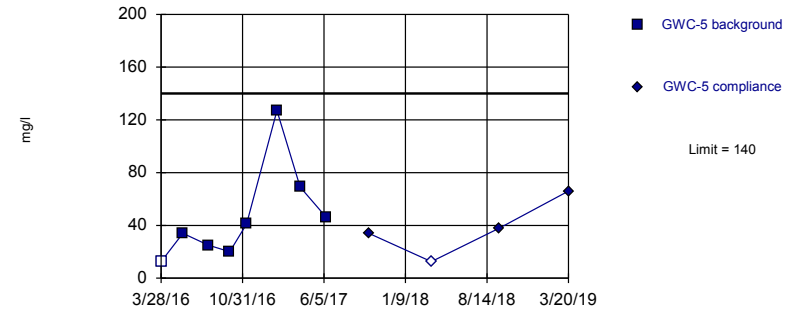


Background Data Summary: Mean=125.1, Std. Dev.=50.31, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9413, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=46.81, Std. Dev.=36.83, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8316, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
4/5/2016	42	
6/1/2016	63	
8/9/2016	267	
11/28/2016	116	
2/9/2017	212 (J)	
4/11/2017	113	
6/14/2017	120	
7/12/2017	153	
10/5/2017		102
3/22/2018		115
9/19/2018		114
3/22/2019		104 (D)

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
4/5/2016	103	
5/31/2016	157	
8/4/2016	154	
9/29/2016	142	
11/23/2016	172	
2/10/2017	237	
4/12/2017	168	
6/15/2017	176	
10/6/2017		155
3/23/2018		170
9/19/2018		181
3/25/2019		167

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
4/5/2016	53	
5/31/2016	70	
11/23/2016	118	
2/10/2017	214	
4/11/2017	127	
6/15/2017	126	
7/12/2017	164	
7/26/2017	129	
10/6/2017		140
3/23/2018		119
9/19/2018		138
3/22/2019		116 (D)

Prediction Limit

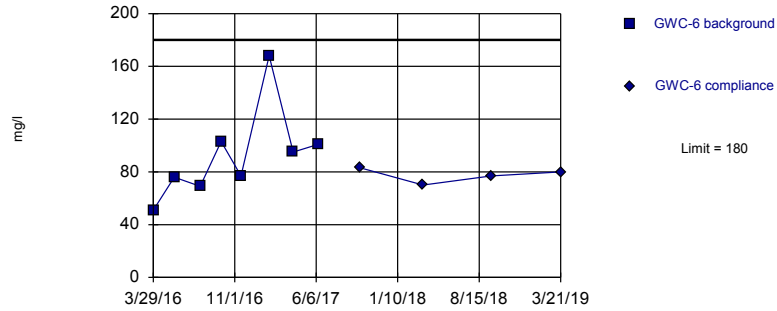
Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
3/28/2016	<25	
5/25/2016	34	
8/1/2016	25	
9/27/2016	20 (J)	
11/11/2016	41	
1/31/2017	127	
4/3/2017	69	
6/12/2017	46	
10/3/2017		34
3/19/2018		<25
9/17/2018		38
3/20/2019		66

Within Limit

Prediction Limit
Intrawell Parametric

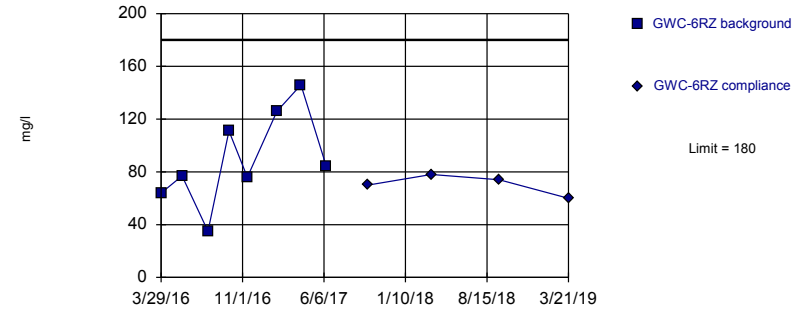


Background Data Summary: Mean=92.5, Std. Dev.=35.21, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8711, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

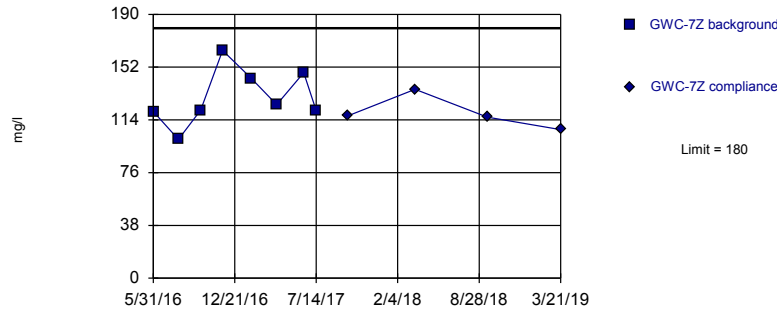


Background Data Summary: Mean=89.88, Std. Dev.=35.81, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9697, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

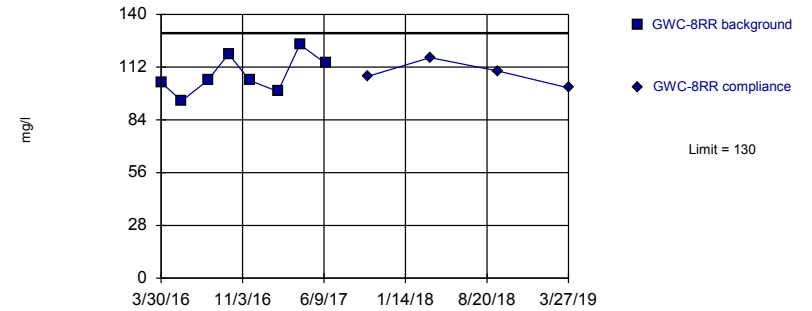


Background Data Summary: Mean=130.4, Std. Dev.=20.22, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9385, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=108, Std. Dev.=10.17, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
3/29/2016	51	
5/24/2016	76	
8/1/2016	69	
9/26/2016	103	
11/18/2016	77	
2/1/2017	168	
4/6/2017	95	
6/13/2017	101	
10/3/2017		83
3/19/2018		70
9/17/2018		77
3/21/2019		80

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
3/29/2016	64	
5/24/2016	77	
8/1/2016	35	
9/26/2016	111	
11/14/2016	76	
2/1/2017	126	
4/6/2017	146	
6/13/2017	84	
10/3/2017		70
3/20/2018		78
9/17/2018		74
3/21/2019		60

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	120	
8/2/2016	100	
9/27/2016	121	
11/21/2016	164	
2/1/2017	144	
4/6/2017	125	
6/13/2017	148	
7/14/2017	121	
10/3/2017		117
3/20/2018		136
9/18/2018		116
3/21/2019		107

Prediction Limit

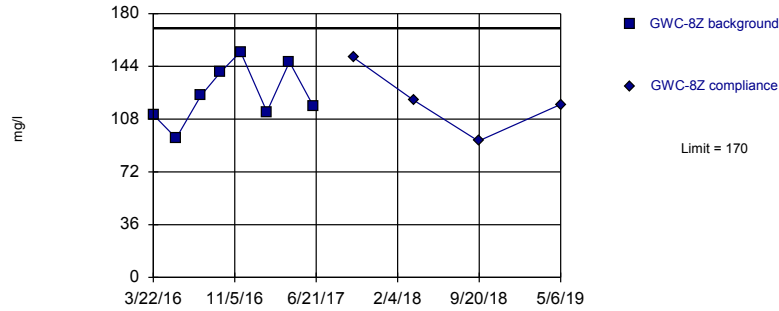
Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
3/30/2016	104	
5/24/2016	94	
8/2/2016	105	
9/27/2016	119	
11/22/2016	105	
2/6/2017	99	
4/6/2017	124	
6/14/2017	114	
10/4/2017		107
3/21/2018		117
9/18/2018		110
3/27/2019		101

Within Limit

Prediction Limit
Intrawell Parametric

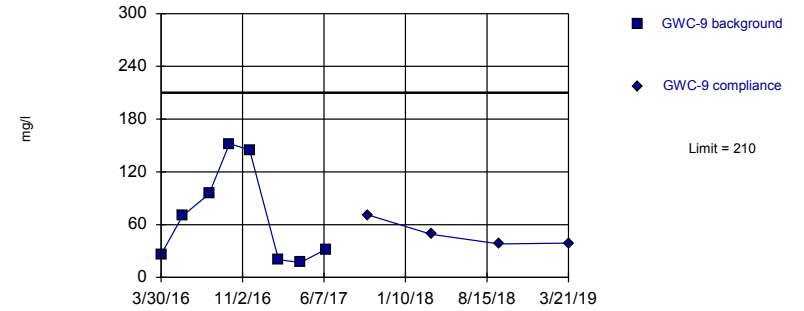


Background Data Summary: Mean=125.1, Std. Dev.=20.2, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9543, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

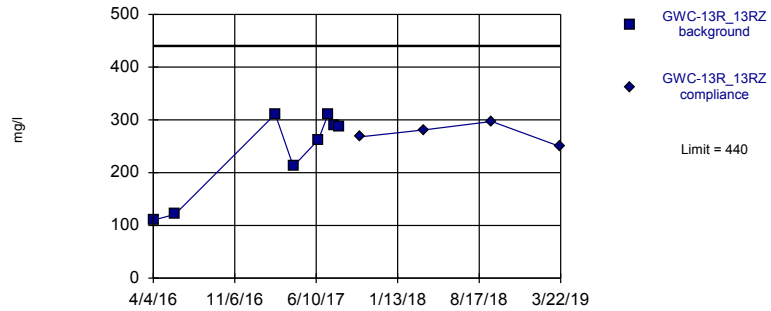


Background Data Summary: Mean=69.63, Std. Dev.=55.63, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8465, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=237.9, Std. Dev.=81.89, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8211, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 12:57 PM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
3/22/2016	111	
5/25/2016	95	
8/2/2016	124	
9/26/2016	140	
11/21/2016	154	
2/3/2017	113	
4/7/2017	147	
6/13/2017	117	
10/3/2017		150
3/20/2018		121
9/18/2018		93
5/6/2019		118

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
3/30/2016	26	
5/26/2016	70	
8/5/2016	95	
9/28/2016	152	
11/21/2016	145	
2/6/2017	20 (J)	
4/6/2017	17 (J)	
6/13/2017	32	
10/3/2017		71
3/20/2018		49
9/18/2018		38
3/21/2019		39

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 12:59 PM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
4/4/2016	110	
6/1/2016	121	
2/22/2017	311	
4/11/2017	212	
6/16/2017	262	
7/12/2017	310	
7/28/2017	289	
8/10/2017	288	
10/6/2017		268
3/23/2018		281
9/20/2018		297
3/22/2019		249 (D)

Trend Test - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 10:29 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-2 (bg)	0	-242	-167	Yes	33	100	n/a	n/a	0.01	NP
Antimony (mg/L)	GWA-50 (bg)	-0.00...	-147	-124	Yes	27	92.59	n/a	n/a	0.01	NP
Antimony (mg/L)	GWA-50R (bg)	-0.00...	-164	-124	Yes	27	100	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-1 (bg)	-0.00...	-295	-167	Yes	33	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-3 (bg)	-0.00...	-357	-161	Yes	32	3.125	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	-0.4945	-39	-38	Yes	12	8.333	n/a	n/a	0.01	NP
pH (pH units)	GWA-3 (bg)	-0.1781	-52	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-1 (bg)	-0.2854	-47	-38	Yes	12	0	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-3 (bg)	-0.00...	-224	-131	Yes	28	3.571	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-50R (bg)	-0.00...	-142	-92	Yes	22	22.73	n/a	n/a	0.01	NP

Trend Test - All Results

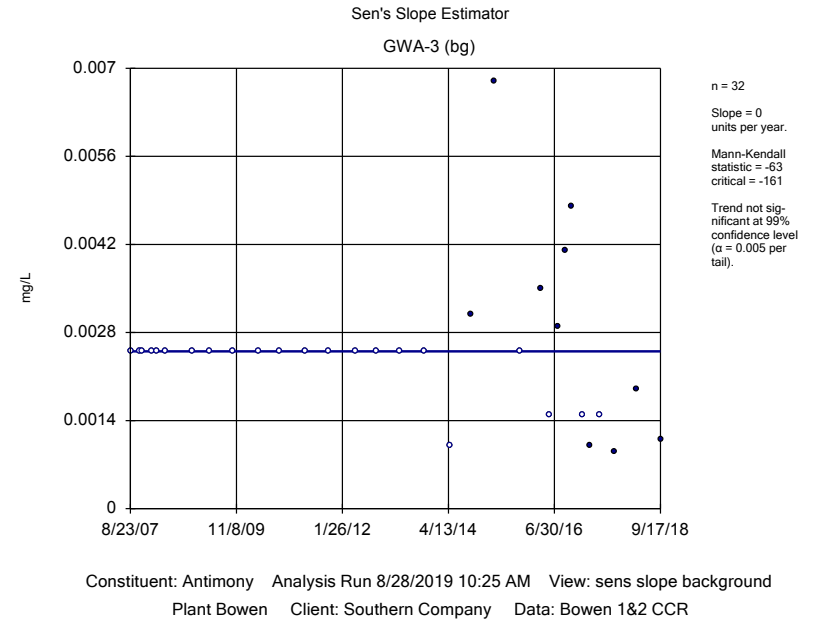
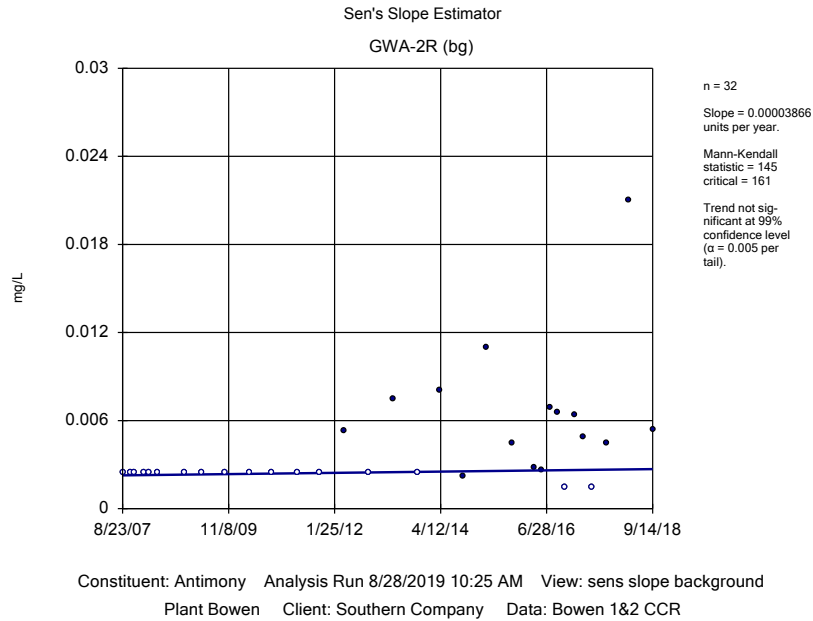
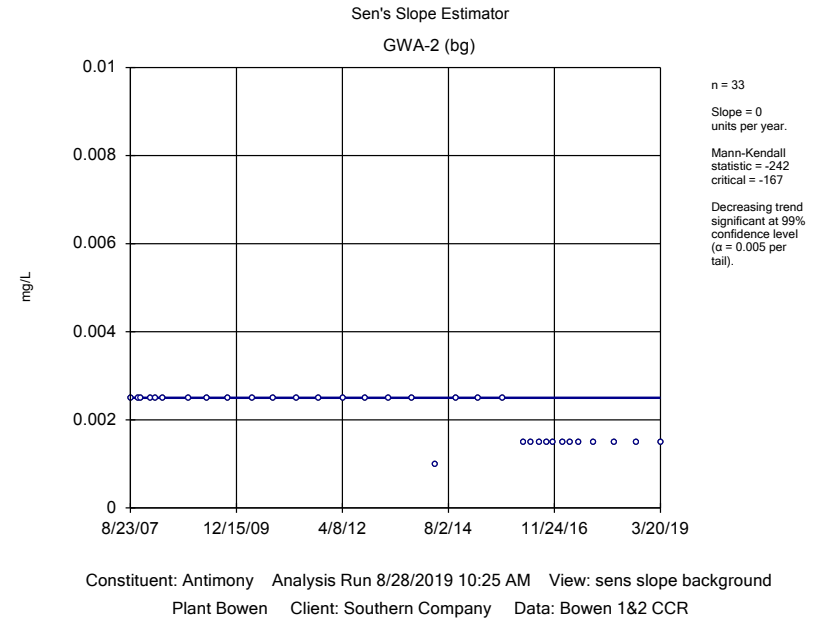
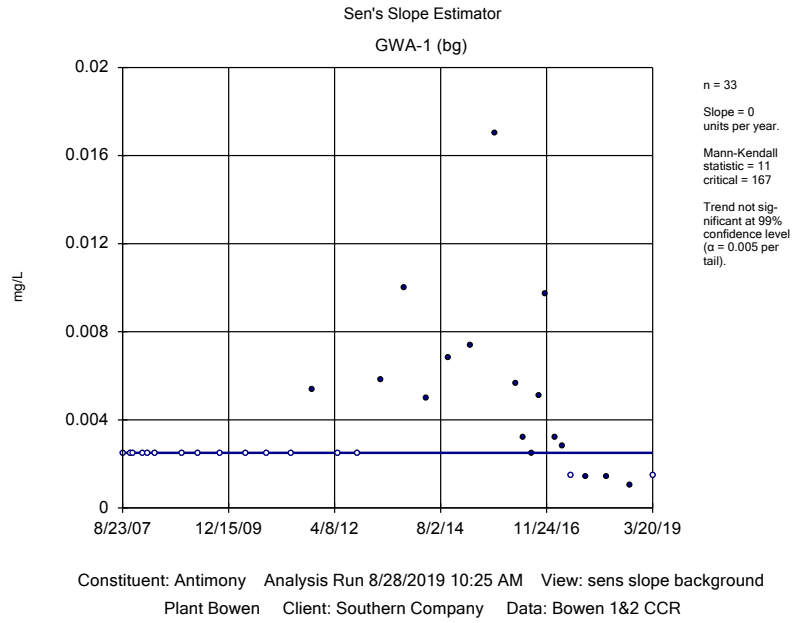
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 10:29 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-1 (bg)	0	11	167	No	33	48.48	n/a	n/a	0.01	NP
Antimony (mg/L)	GWA-2 (bg)	0	-242	-167	Yes	33	100	n/a	n/a	0.01	NP
Antimony (mg/L)	GWA-2R (bg)	0.000...	145	161	No	32	53.13	n/a	n/a	0.01	NP
Antimony (mg/L)	GWA-3 (bg)	0	-63	-161	No	32	68.75	n/a	n/a	0.01	NP
Antimony (mg/L)	GWA-50 (bg)	-0.00...	-147	-124	Yes	27	92.59	n/a	n/a	0.01	NP
Antimony (mg/L)	GWA-50R (bg)	-0.00...	-164	-124	Yes	27	100	n/a	n/a	0.01	NP
Antimony (mg/L)	GWA-4RZ (bg)	0	-4	-38	No	12	66.67	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-1 (bg)	-0.00...	-295	-167	Yes	33	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-2 (bg)	0.000...	35	161	No	32	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-2R (bg)	-0.00...	-14	-152	No	31	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-3 (bg)	-0.00...	-357	-161	Yes	32	3.125	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-50 (bg)	-0.00...	-95	-124	No	27	3.704	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-50R (bg)	-0.00...	-96	-105	No	24	0	n/a	n/a	0.01	NP
Barium (mg/L)	GWA-4RZ (bg)	0.005157	35	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-1 (bg)	0.4334	4	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	-8.458	-18	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2R (bg)	3.947	24	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-3 (bg)	-0.2146	-35	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-50 (bg)	0.1551	9	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-50R (bg)	-0.7937	-14	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-4RZ (bg)	-1.865	-11	-38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-1 (bg)	-0.0457	-8	-38	No	12	8.333	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	-0.4945	-39	-38	Yes	12	8.333	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2R (bg)	0.1356	20	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-3 (bg)	-0.05817	-26	-38	No	12	8.333	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-50 (bg)	0	-5	-38	No	12	8.333	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-50R (bg)	-0.1042	-18	-38	No	12	16.67	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-4RZ (bg)	0.3996	16	38	No	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-1 (bg)	-0.01984	-11	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-2 (bg)	-0.3076	-30	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-2R (bg)	-0.08818	-23	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-3 (bg)	-0.1781	-52	-38	Yes	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-50 (bg)	-0.0421	-9	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-50R (bg)	-0.1531	-22	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-4RZ (bg)	-0.03858	-12	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-1 (bg)	-0.2854	-47	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	-15.81	-18	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2R (bg)	0.2992	5	34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-3 (bg)	-0.2246	-33	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-50 (bg)	-0.05984	-17	-34	No	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-50R (bg)	-0.1123	-14	-34	No	11	9.091	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-4RZ (bg)	4.064	36	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-1 (bg)	3.332	6	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-2 (bg)	-40.56	-22	-38	No	12	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-2R (bg)	8.816	12	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-3 (bg)	0	8	38	No	12	41.67	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-50 (bg)	0.3544	7	38	No	12	33.33	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-50R (bg)	-1.035	-5	-38	No	12	25	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-4RZ (bg)	-34.65	-13	-38	No	12	0	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-1 (bg)	-0.00...	-88	-131	No	28	28.57	n/a	n/a	0.01	NP

Trend Test - All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 10:29 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Zinc (mg/L)	GWA-2 (bg)	-0.00...	-45	-131	No	28	46.43	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-2R (bg)	0	-24	-124	No	27	48.15	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-3 (bg)	-0.00...	-224	-131	Yes	28	3.571	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-50 (bg)	-0.00...	-90	-92	No	22	27.27	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-50R (bg)	-0.00...	-142	-92	Yes	22	22.73	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-4RZ (bg)	0	0	8	No	4	100	n/a	n/a	0.01	NP



Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)
8/23/2007	<0.005
10/23/2007	<0.005
11/18/2007	<0.005
1/30/2008	<0.005
3/10/2008	<0.005
5/13/2008	<0.005
12/5/2008	<0.005
4/15/2009	<0.005
10/7/2009	<0.005
5/3/2010	<0.005
10/12/2010	<0.005
4/27/2011	<0.005
10/17/2011	0.0054
5/2/2012	<0.005
10/8/2012	<0.005
4/12/2013	0.0058
10/16/2013	0.01
4/11/2014	0.005 (J)
9/30/2014	0.0068
3/30/2015	0.0074
10/13/2015	0.017
3/22/2016	0.00567
5/19/2016	0.00319
7/29/2016	0.0025 (J)
9/23/2016	0.0051
11/9/2016	0.0097 (J)
1/30/2017	0.0032
3/30/2017	0.0028 (J)
6/9/2017	<0.003 (*)
10/2/2017	0.0014 (J)
3/16/2018	0.0014 (J)
9/17/2018	0.00105 (JD)
3/20/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
8/23/2007	<0.005
10/24/2007	<0.005
11/18/2007	<0.005
1/31/2008	<0.005
3/11/2008	<0.005
5/6/2008	<0.005
12/4/2008	<0.005
4/21/2009	<0.005
10/7/2009	<0.005
4/26/2010	<0.005
10/4/2010	<0.005
4/13/2011	<0.005
10/5/2011	<0.005
4/11/2012	<0.005
10/9/2012	<0.005
4/15/2013	<0.005
10/15/2013	<0.005
4/22/2014	<0.002
9/30/2014	<0.005
3/30/2015	<0.005
10/13/2015	<0.005
3/23/2016	<0.003
5/20/2016	<0.003
7/29/2016	<0.003
9/23/2016	<0.003
11/9/2016	<0.003 (*)
1/31/2017	<0.003
3/30/2017	<0.003
6/12/2017	<0.003 (*)
10/2/2017	<0.003
3/19/2018	<0.003
9/14/2018	<0.003
3/20/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

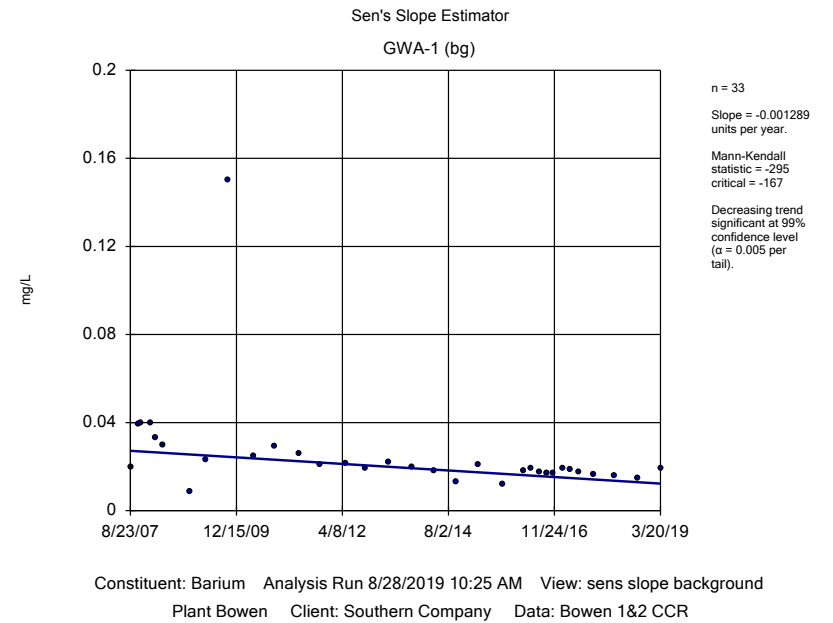
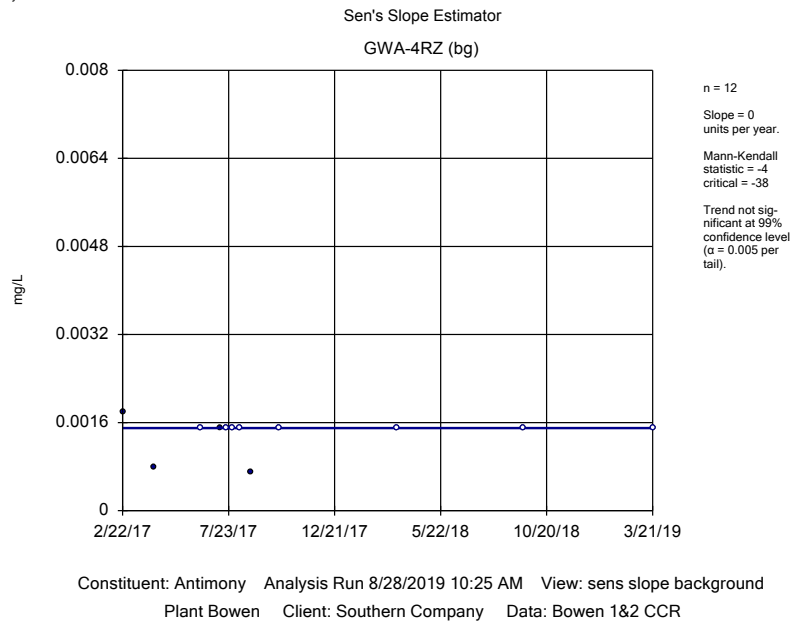
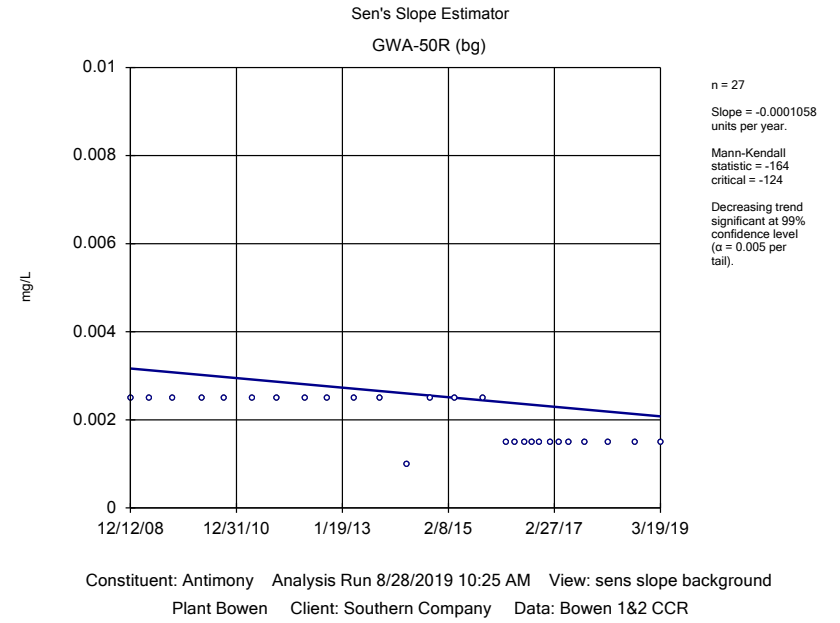
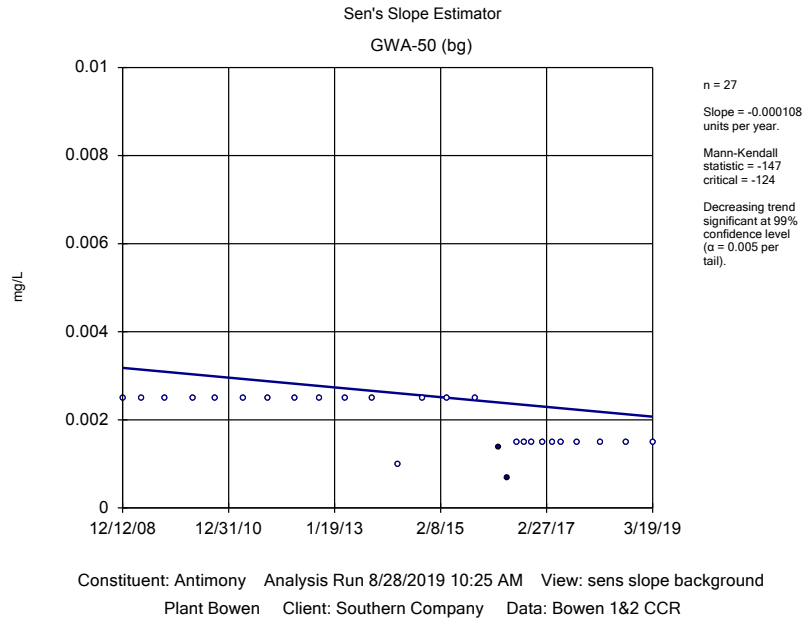
	GWA-2R (bg)
8/23/2007	<0.005
10/24/2007	<0.005
11/18/2007	<0.005
1/31/2008	<0.005
3/10/2008	<0.005
5/13/2008	<0.005
12/4/2008	<0.005
4/21/2009	<0.005
10/8/2009	<0.005
4/21/2010	<0.005
9/28/2010	<0.005
4/12/2011	<0.005
10/4/2011	<0.005
4/3/2012	0.0053
10/9/2012	<0.005
4/11/2013	0.0075
10/16/2013	<0.005
4/10/2014	0.0081
9/30/2014	0.0022 (J)
3/30/2015	0.011
10/13/2015	0.0045 (J)
3/23/2016	0.00281 (J)
5/19/2016	0.00264 (J)
7/29/2016	0.0069
9/22/2016	0.0066
11/10/2016	<0.003 (*)
1/31/2017	0.0064
4/3/2017	0.0049
6/9/2017	<0.003 (*)
10/2/2017	0.0045
3/16/2018	0.021
9/14/2018	0.0054
3/19/2019	0.0019 (X)

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
8/23/2007	<0.005
11/2/2007	<0.005
11/18/2007	<0.005
1/31/2008	<0.005
3/11/2008	<0.005
5/14/2008	<0.005
12/5/2008	<0.005
4/15/2009	<0.005
10/8/2009	<0.005
4/28/2010	<0.005
10/6/2010	<0.005
4/21/2011	<0.005
10/13/2011	<0.005
5/1/2012	<0.005
10/9/2012	<0.005
4/11/2013	<0.005
10/16/2013	<0.005
4/23/2014	<0.002
10/4/2014	0.0031 (J)
3/31/2015	0.0068
10/12/2015	<0.005
3/23/2016	0.0035
5/23/2016	<0.003
7/29/2016	0.0029 (J)
9/22/2016	0.0041
11/10/2016	0.0048 (J)
1/31/2017	<0.003
3/30/2017	0.001 (J)
6/12/2017	<0.003 (*)
10/4/2017	0.0009 (J)
3/19/2018	0.0019 (J)
9/17/2018	0.0011 (J)
3/20/2019	0.0019 (X)



Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50 (bg)
12/12/2008	<0.005
4/23/2009	<0.005
10/6/2009	<0.005
4/27/2010	<0.005
9/30/2010	<0.005
4/14/2011	<0.005
10/5/2011	<0.005
4/11/2012	<0.005
10/2/2012	<0.005
4/9/2013	<0.005
10/15/2013	<0.005
4/10/2014	<0.002
10/1/2014	<0.005
3/30/2015	<0.005
10/11/2015	<0.005
3/28/2016	0.00139 (J)
5/23/2016	0.000677 (J)
8/1/2016	<0.003 (*)
9/26/2016	<0.003
11/10/2016	<0.003 (*)
1/30/2017	<0.003
4/7/2017	<0.003
6/12/2017	<0.003 (*)
10/2/2017	<0.003
3/16/2018	<0.003
9/17/2018	<0.003
3/19/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
12/12/2008	<0.005
4/23/2009	<0.005
10/6/2009	<0.005
5/3/2010	<0.005
10/11/2010	<0.005
4/27/2011	<0.005
10/19/2011	<0.005
5/1/2012	<0.005
10/2/2012	<0.005
4/10/2013	<0.005
10/16/2013	<0.005
4/22/2014	<0.002
10/1/2014	<0.005
3/30/2015	<0.005
10/11/2015	<0.005
3/28/2016	<0.003
5/25/2016	<0.003
8/1/2016	<0.003 (*)
9/26/2016	<0.003
11/11/2016	<0.003
1/30/2017	<0.003
4/3/2017	<0.003
6/12/2017	<0.003
10/2/2017	<0.003
3/16/2018	<0.003
9/18/2018	<0.003
3/19/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)
2/22/2017	0.0018 (J)
4/7/2017	0.0008 (J)
6/14/2017	<0.003 (*)
7/12/2017	0.0015 (J)
7/20/2017	<0.003
7/28/2017	<0.003
8/9/2017	<0.003
8/24/2017	0.0007 (J)
10/3/2017	<0.003
3/21/2018	<0.003
9/18/2018	<0.003
3/21/2019	<0.003

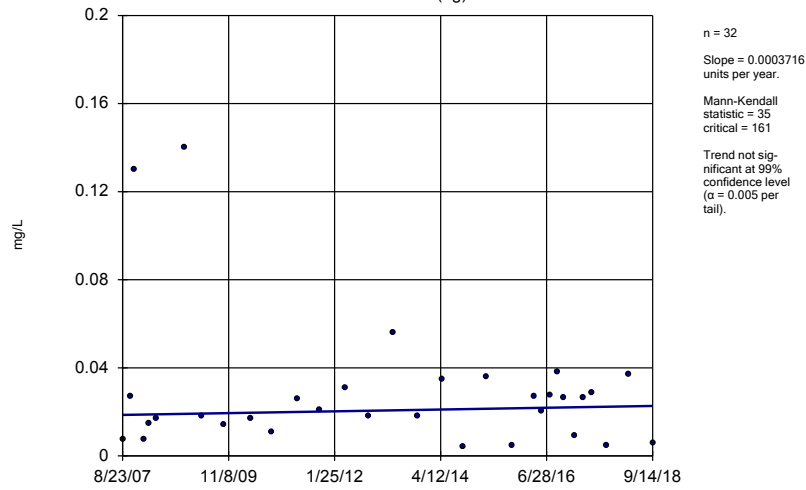
Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

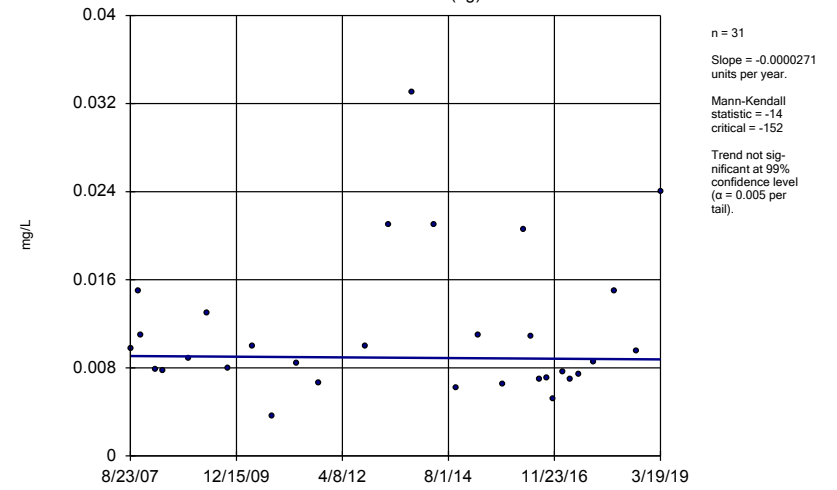
	GWA-1 (bg)
8/23/2007	0.02
10/23/2007	0.039
11/18/2007	0.04 (J)
1/30/2008	0.04
3/10/2008	0.033
5/13/2008	0.03
12/5/2008	0.0087
4/15/2009	0.023
10/7/2009	0.15
5/3/2010	0.025
10/12/2010	0.029
4/27/2011	0.026
10/17/2011	0.021
5/2/2012	0.0212
10/8/2012	0.019
4/12/2013	0.022
10/16/2013	0.02
4/11/2014	0.018
9/30/2014	0.013
3/30/2015	0.021
10/13/2015	0.012
3/22/2016	0.0182
5/19/2016	0.0193
7/29/2016	0.0174
9/23/2016	0.0168
11/9/2016	0.0171
1/30/2017	0.019
3/30/2017	0.0184
6/9/2017	0.0174
10/2/2017	0.0167
3/16/2018	0.016
9/17/2018	0.015 (D)
3/20/2019	0.019

Sen's Slope Estimator
GWA-2 (bg)



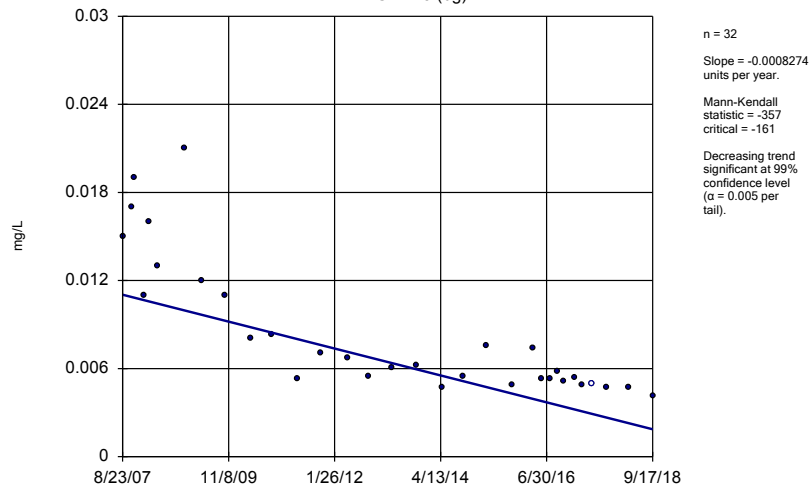
Constituent: Barium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2R (bg)



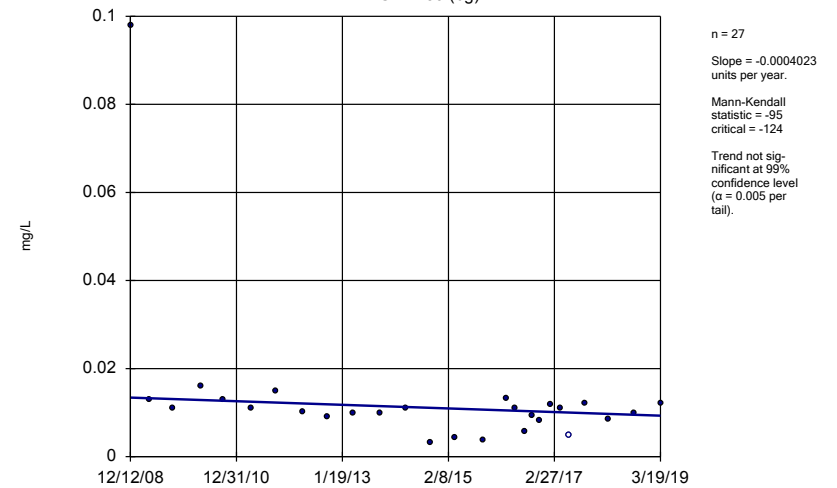
Constituent: Barium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-3 (bg)



Constituent: Barium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-50 (bg)



Constituent: Barium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
8/23/2007	0.0073
10/24/2007	0.027
11/18/2007	0.13
1/31/2008	0.0077
3/11/2008	0.015
5/6/2008	0.017
12/4/2008	0.14
4/21/2009	0.018
10/7/2009	0.014
4/26/2010	0.017
10/4/2010	0.011
4/13/2011	0.026
10/5/2011	0.021
4/11/2012	0.0311
10/9/2012	0.018
4/15/2013	0.056
10/15/2013	0.018
4/22/2014	0.035
9/30/2014	0.0041
3/30/2015	0.036
10/13/2015	0.0048
3/23/2016	0.0271
5/20/2016	0.0206
7/29/2016	0.0275
9/23/2016	0.0384
11/9/2016	0.0266
1/31/2017	0.0094 (J)
3/30/2017	0.0262
6/12/2017	0.0288
10/2/2017	0.0048 (J)
3/19/2018	0.037
9/14/2018	0.0059 (J)
3/20/2019	0.0072 (X)

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
8/23/2007	0.0098
10/24/2007	0.015
11/18/2007	0.011
1/31/2008	0.13 (O)
3/10/2008	0.0078
5/13/2008	0.0077
12/4/2008	0.0089
4/21/2009	0.013
10/8/2009	0.008
4/21/2010	0.01
9/28/2010	0.0036
4/12/2011	0.0084
10/4/2011	0.0066
4/3/2012	0.0625 (O)
10/9/2012	0.01
4/11/2013	0.021
10/16/2013	0.033
4/10/2014	0.021
9/30/2014	0.0062
3/30/2015	0.011
10/13/2015	0.0065
3/23/2016	0.0206
5/19/2016	0.0109
7/29/2016	0.007 (J)
9/22/2016	0.0071 (J)
11/10/2016	0.0052 (J)
1/31/2017	0.0076 (J)
4/3/2017	0.007 (J)
6/9/2017	0.0074 (J)
10/2/2017	0.0085 (J)
3/16/2018	0.015
9/14/2018	0.0095 (J)
3/19/2019	0.024

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

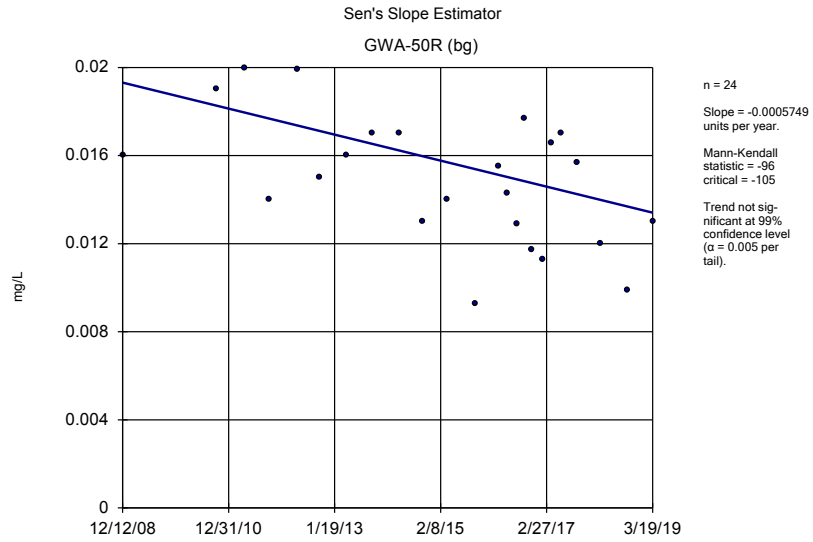
	GWA-3 (bg)
8/23/2007	0.015
11/2/2007	0.017
11/18/2007	0.019
1/31/2008	0.011
3/11/2008	0.016
5/14/2008	0.013
12/5/2008	0.021
4/15/2009	0.012
10/8/2009	0.011
4/28/2010	0.0081
10/6/2010	0.0083
4/21/2011	0.0053
10/13/2011	0.0071
5/1/2012	0.0067
10/9/2012	0.0055
4/11/2013	0.0061
10/16/2013	0.0062
4/23/2014	0.0047
10/4/2014	0.0055
3/31/2015	0.0076
10/12/2015	0.0049
3/23/2016	0.00742 (J)
5/23/2016	0.00532 (J)
7/29/2016	0.0053 (J)
9/22/2016	0.0058 (J)
11/10/2016	0.0051 (J)
1/31/2017	0.0054 (J)
3/30/2017	0.0049 (J)
6/12/2017	<0.01 (*)
10/4/2017	0.0047 (J)
3/19/2018	0.0047 (J)
9/17/2018	0.0041 (J)
3/20/2019	0.0042 (X)

Sen's Slope Estimator

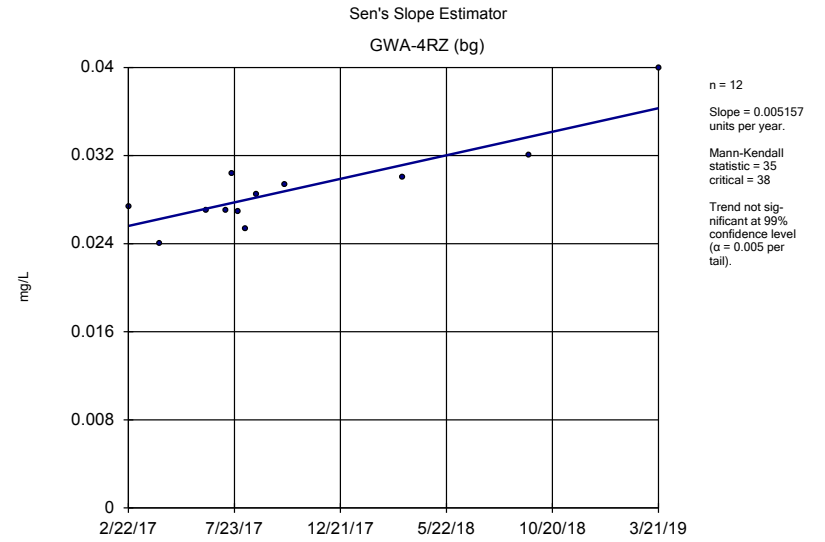
Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

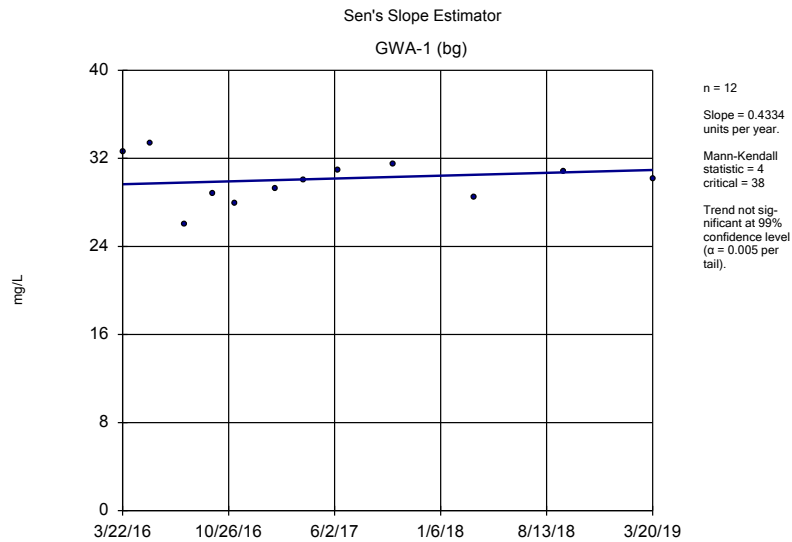
	GWA-50 (bg)
12/12/2008	0.098
4/23/2009	0.013
10/6/2009	0.011
4/27/2010	0.016
9/30/2010	0.013
4/14/2011	0.011
10/5/2011	0.015
4/11/2012	0.0102
10/2/2012	0.0091
4/9/2013	0.01
10/15/2013	0.0098
4/10/2014	0.011
10/1/2014	0.0033
3/30/2015	0.0043
10/11/2015	0.0038
3/28/2016	0.0133
5/23/2016	0.0109
8/1/2016	0.0058 (J)
9/26/2016	0.0092 (J)
11/10/2016	0.0083 (J)
1/30/2017	0.0117
4/7/2017	0.0109
6/12/2017	<0.01 (*)
10/2/2017	0.0122
3/16/2018	0.0084 (J)
9/17/2018	0.01
3/19/2019	0.012



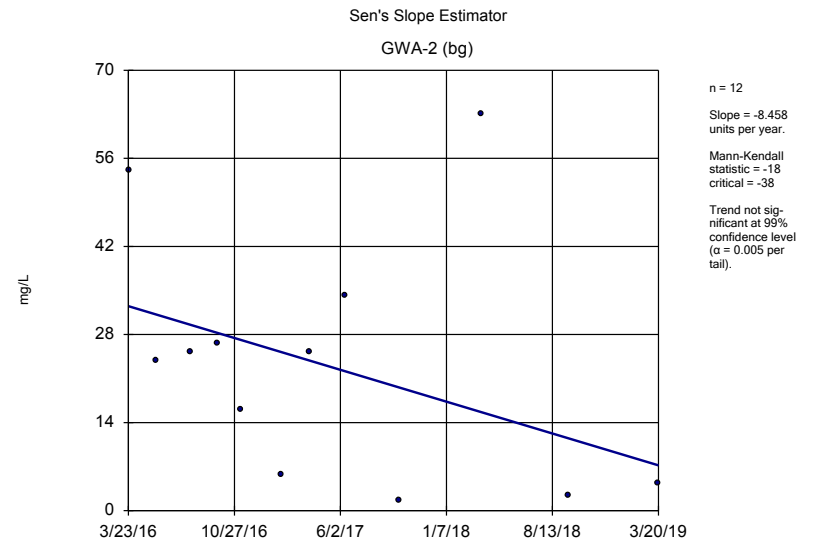
Constituent: Barium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Barium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
12/12/2008	0.016
4/23/2009	0.14 (O)
10/6/2009	0.12 (O)
5/3/2010	0.12 (O)
10/11/2010	0.019
4/27/2011	0.02
10/19/2011	0.014
5/1/2012	0.0199
10/2/2012	0.015
4/10/2013	0.016
10/16/2013	0.017
4/22/2014	0.017
10/1/2014	0.013
3/30/2015	0.014
10/11/2015	0.0093
3/28/2016	0.0155
5/25/2016	0.0143
8/1/2016	0.0129
9/26/2016	0.0177
11/11/2016	0.0117
1/30/2017	0.0113
4/3/2017	0.0166
6/12/2017	0.017
10/2/2017	0.0157
3/16/2018	0.012
9/18/2018	0.0099 (J)
3/19/2019	0.013

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

2/22/2017	0.0273
4/7/2017	0.024
6/14/2017	0.027
7/12/2017	0.027
7/20/2017	0.0304
7/28/2017	0.0269
8/9/2017	0.0254
8/24/2017	0.0285
10/3/2017	0.0294
3/21/2018	0.03
9/18/2018	0.032
3/21/2019	0.04

Sen's Slope Estimator

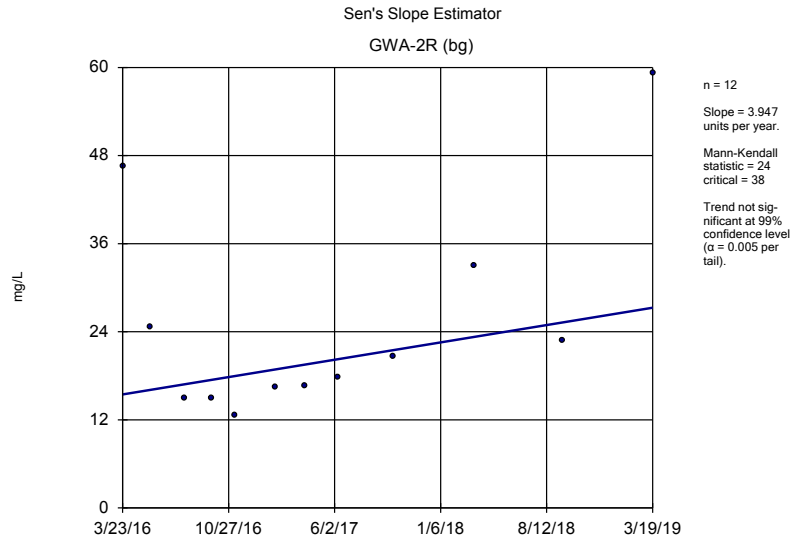
Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)
3/22/2016	32.6
5/19/2016	33.4
7/29/2016	26
9/23/2016	28.8
11/9/2016	27.9
1/30/2017	29.2
3/30/2017	30
6/9/2017	30.9
10/2/2017	31.5
3/16/2018	28.5
9/17/2018	30.8
3/20/2019	30.1

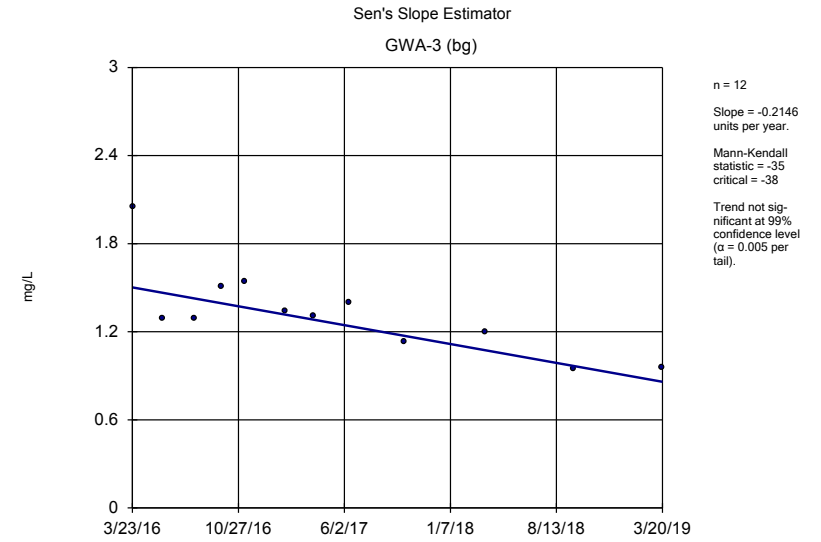
Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

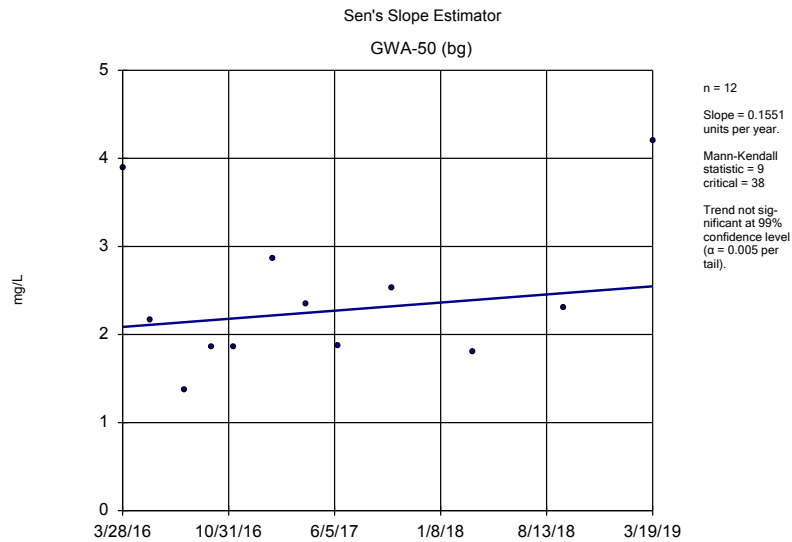
	GWA-2 (bg)
3/23/2016	54.1
5/20/2016	23.9
7/29/2016	25.3
9/23/2016	26.6
11/9/2016	16.1
1/31/2017	5.68
3/30/2017	25.2
6/12/2017	34.2
10/2/2017	1.69
3/19/2018	63
9/14/2018	2.4
3/20/2019	4.3



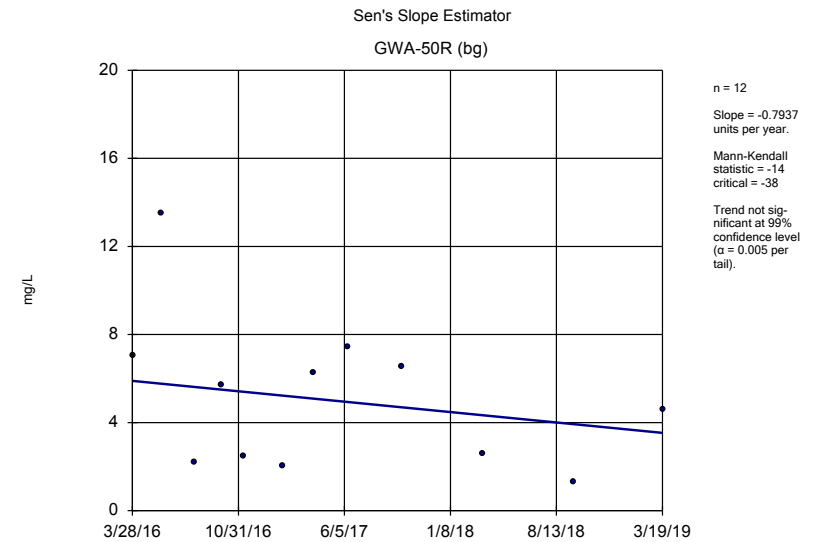
Constituent: Calcium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:25 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	46.5
5/19/2016	24.6
7/29/2016	14.9
9/22/2016	15
11/10/2016	12.6
1/31/2017	16.5
4/3/2017	16.6
6/9/2017	17.8
10/2/2017	20.6
3/16/2018	33
9/14/2018	22.8 (J)
3/19/2019	59.2

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
3/23/2016	2.05
5/23/2016	1.29
7/29/2016	1.29
9/22/2016	1.51
11/10/2016	1.54
1/31/2017	1.34
3/30/2017	1.31
6/12/2017	1.4
10/4/2017	1.13
3/19/2018	1.2
9/17/2018	0.95
3/20/2019	0.96

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

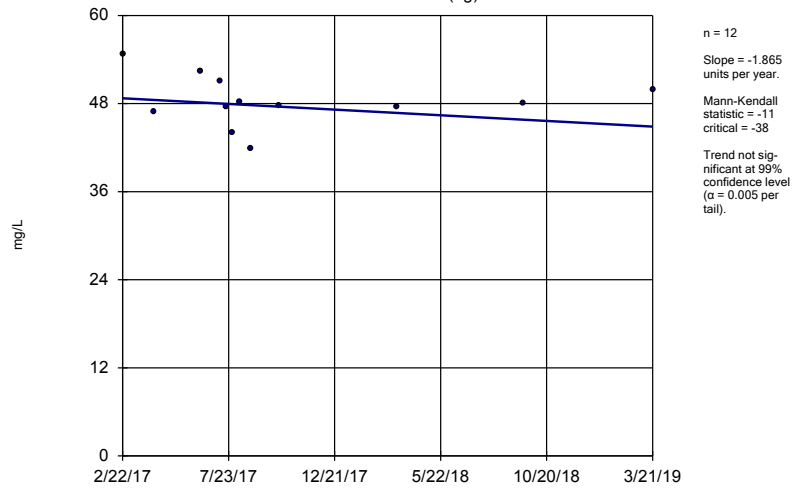
	GWA-50 (bg)
3/28/2016	3.89
5/23/2016	2.16
8/1/2016	1.37
9/26/2016	1.86
11/10/2016	1.86
1/30/2017	2.86
4/7/2017	2.34
6/12/2017	1.87
10/2/2017	2.53
3/16/2018	1.8
9/17/2018	2.3
3/19/2019	4.2

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

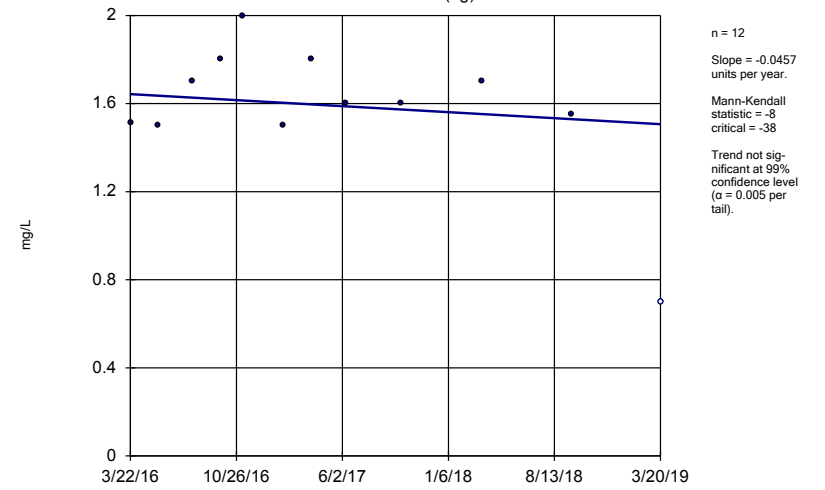
	GWA-50R (bg)
3/28/2016	7.04
5/25/2016	13.5
8/1/2016	2.2
9/26/2016	5.72
11/11/2016	2.5
1/30/2017	2.01
4/3/2017	6.26
6/12/2017	7.44
10/2/2017	6.55
3/16/2018	2.6
9/18/2018	1.3
3/19/2019	4.6

Sen's Slope Estimator
GWA-4RZ (bg)



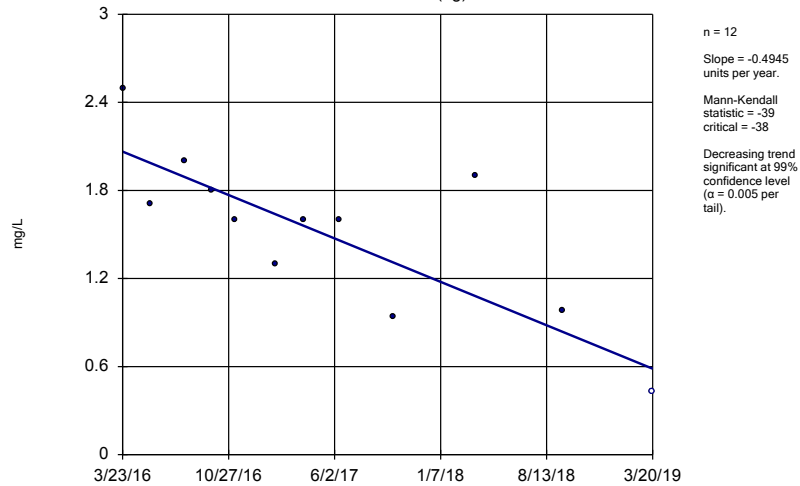
Constituent: Calcium Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-1 (bg)



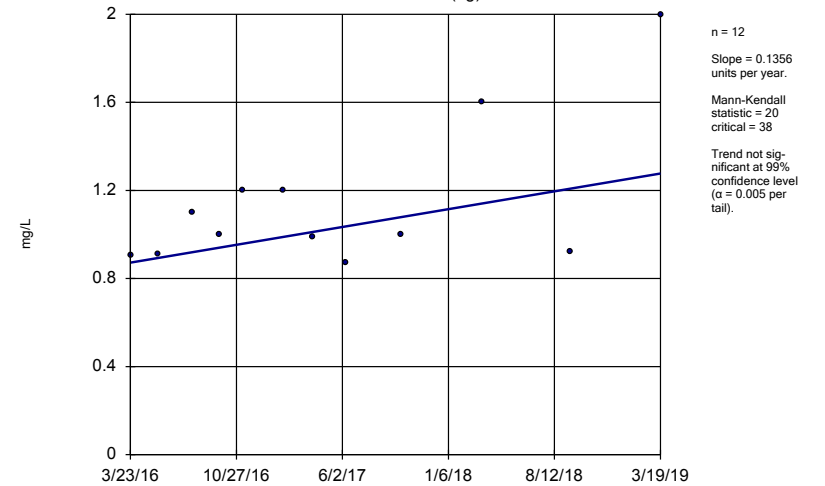
Constituent: Chloride Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2 (bg)



Constituent: Chloride Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2R (bg)



Constituent: Chloride Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

2/22/2017	54.7
4/7/2017	46.8
6/14/2017	52.4
7/12/2017	51.1
7/20/2017	47.5
7/28/2017	44
8/9/2017	48.3
8/24/2017	41.9
10/3/2017	47.7
3/21/2018	47.5
9/18/2018	48.1
3/21/2019	49.9

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)
3/22/2016	1.5101
5/19/2016	1.5
7/29/2016	1.7
9/23/2016	1.8
11/9/2016	2
1/30/2017	1.5
3/30/2017	1.8
6/9/2017	1.6
10/2/2017	1.6
3/16/2018	1.7
9/17/2018	1.55 (D)
3/20/2019	<1.4

Sen's Slope Estimator

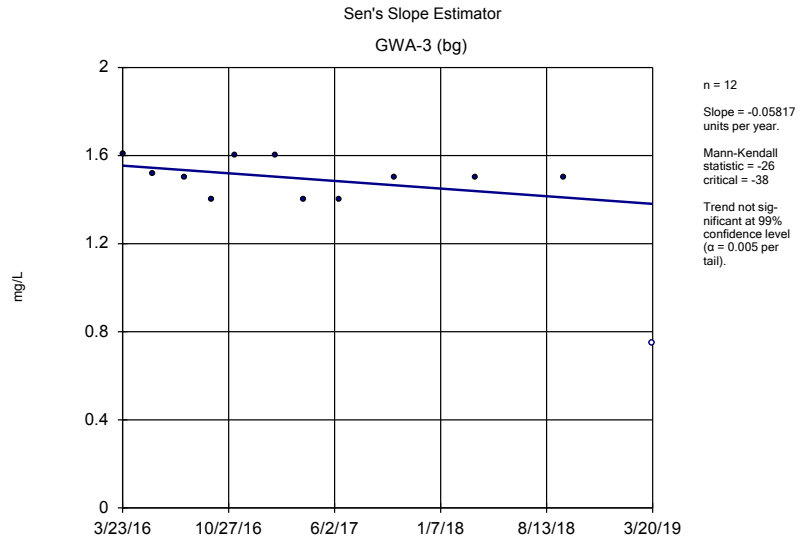
Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	2.4904
5/20/2016	1.71
7/29/2016	2
9/23/2016	1.8
11/9/2016	1.6
1/31/2017	1.3
3/30/2017	1.6
6/12/2017	1.6
10/2/2017	0.94
3/19/2018	1.9
9/14/2018	0.98
3/20/2019	<0.86

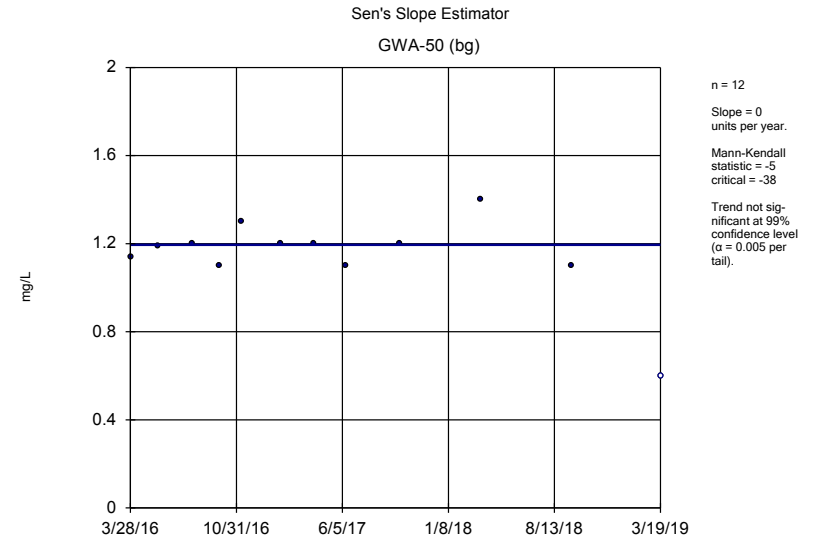
Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

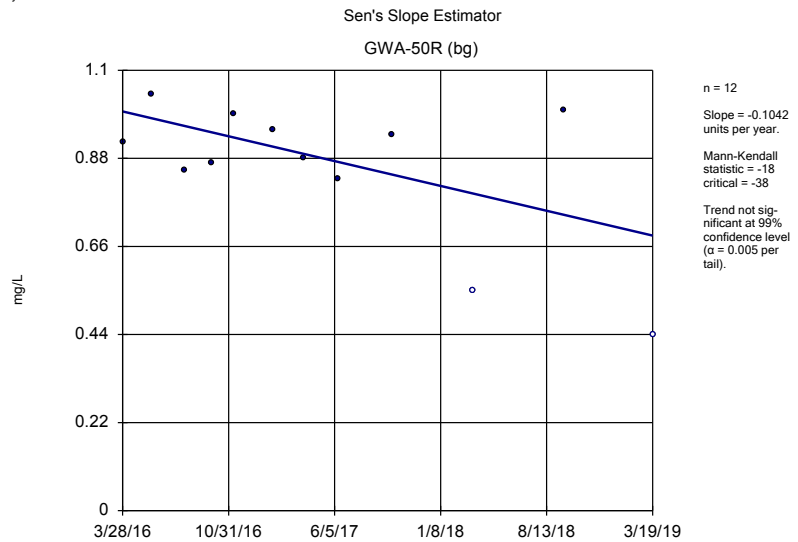
	GWA-2R (bg)
3/23/2016	0.9079
5/19/2016	0.9136
7/29/2016	1.1
9/22/2016	1
11/10/2016	1.2
1/31/2017	1.2
4/3/2017	0.99
6/9/2017	0.87
10/2/2017	1
3/16/2018	1.6
9/14/2018	0.92
3/19/2019	2



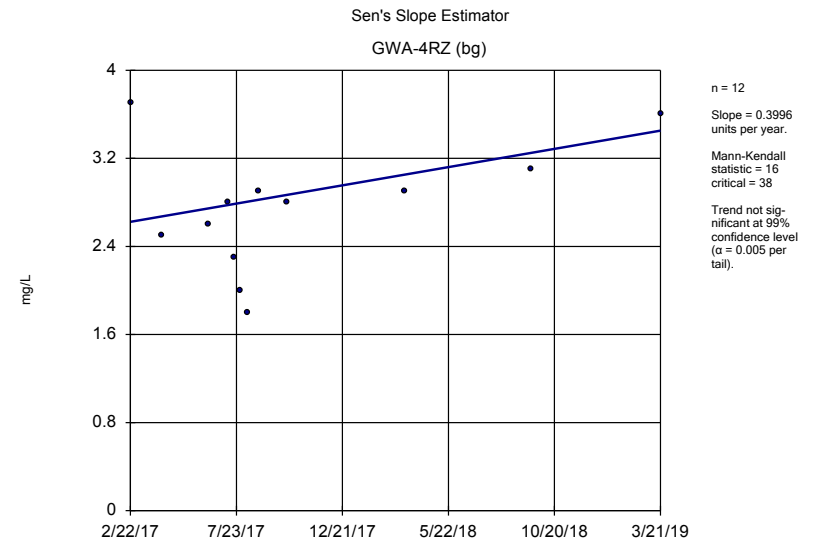
Constituent: Chloride Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Chloride Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Chloride Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Chloride Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
3/23/2016	1.6092
5/23/2016	1.52
7/29/2016	1.5
9/22/2016	1.4
11/10/2016	1.6
1/31/2017	1.6
3/30/2017	1.4
6/12/2017	1.4
10/4/2017	1.5
3/19/2018	1.5
9/17/2018	1.5
3/20/2019	<1.5

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50 (bg)
3/28/2016	1.14
5/23/2016	1.19
8/1/2016	1.2
9/26/2016	1.1
11/10/2016	1.3
1/30/2017	1.2
4/7/2017	1.2
6/12/2017	1.1
10/2/2017	1.2
3/16/2018	1.4
9/17/2018	1.1
3/19/2019	<1.2

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
3/28/2016	0.9204
5/25/2016	1.04
8/1/2016	0.85
9/26/2016	0.87
11/11/2016	0.99
1/30/2017	0.95
4/3/2017	0.88
6/12/2017	0.83
10/2/2017	0.94
3/16/2018	<1.1
9/18/2018	1
3/19/2019	<0.88

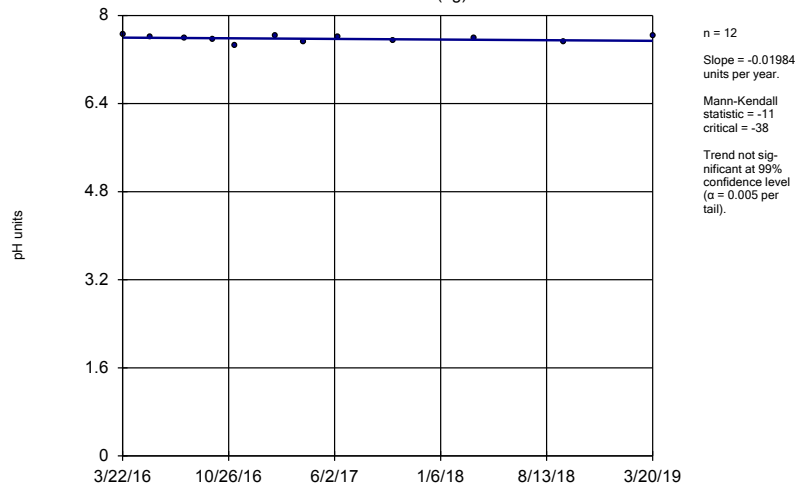
Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

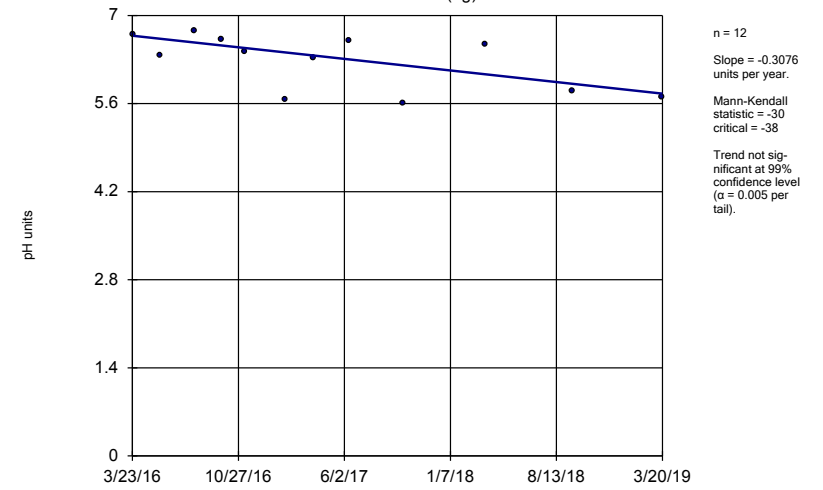
2/22/2017	3.7
4/7/2017	2.5
6/14/2017	2.6
7/12/2017	2.8
7/20/2017	2.3
7/28/2017	2
8/9/2017	1.8
8/24/2017	2.9
10/3/2017	2.8
3/21/2018	2.9
9/18/2018	3.1
3/21/2019	3.6

Sen's Slope Estimator
GWA-1 (bg)



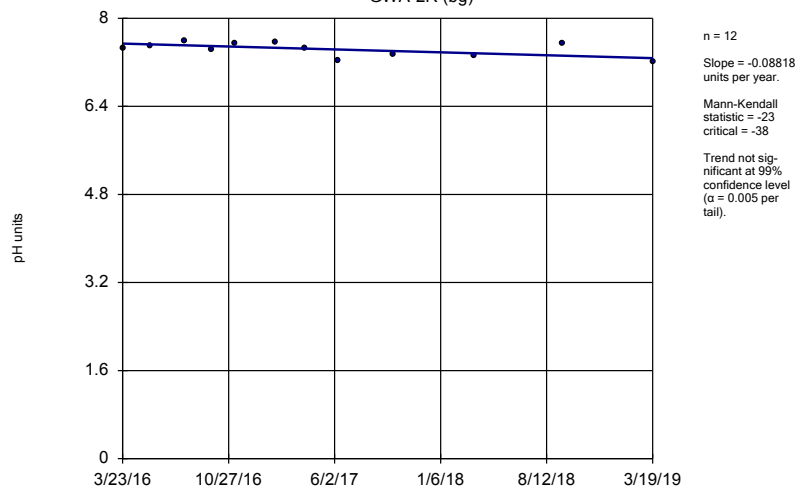
Constituent: pH Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2 (bg)



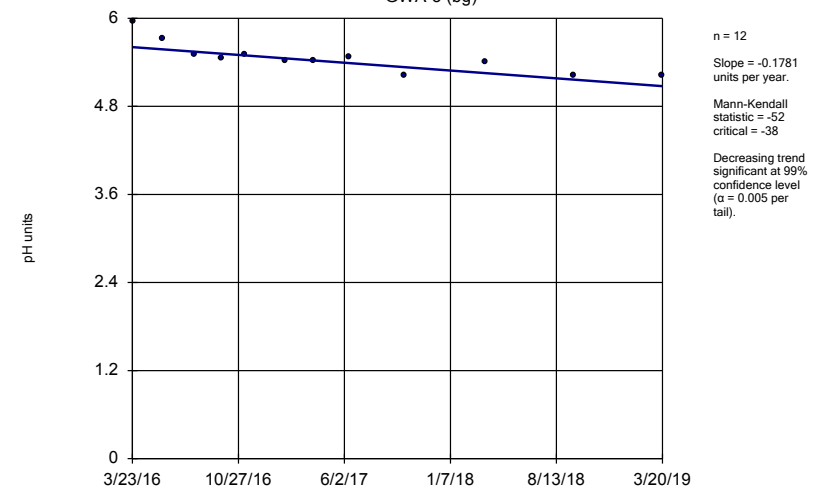
Constituent: pH Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2R (bg)



Constituent: pH Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-3 (bg)



Constituent: pH Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)
3/22/2016	7.65
5/19/2016	7.6
7/29/2016	7.58
9/23/2016	7.57
11/9/2016	7.45
1/30/2017	7.64
3/30/2017	7.51
6/9/2017	7.6
10/2/2017	7.55
3/16/2018	7.58
9/17/2018	7.53 (D)
3/20/2019	7.64

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	6.7
5/20/2016	6.36
7/29/2016	6.75
9/23/2016	6.62
11/9/2016	6.42
1/31/2017	5.66
3/30/2017	6.33
6/12/2017	6.6
10/2/2017	5.61
3/19/2018	6.55
9/14/2018	5.81
3/20/2019	5.71

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	7.45
5/19/2016	7.5
7/29/2016	7.59
9/22/2016	7.44
11/10/2016	7.55
1/31/2017	7.56
4/3/2017	7.46
6/9/2017	7.24
10/2/2017	7.35
3/16/2018	7.31
9/14/2018	7.55
3/19/2019	7.2

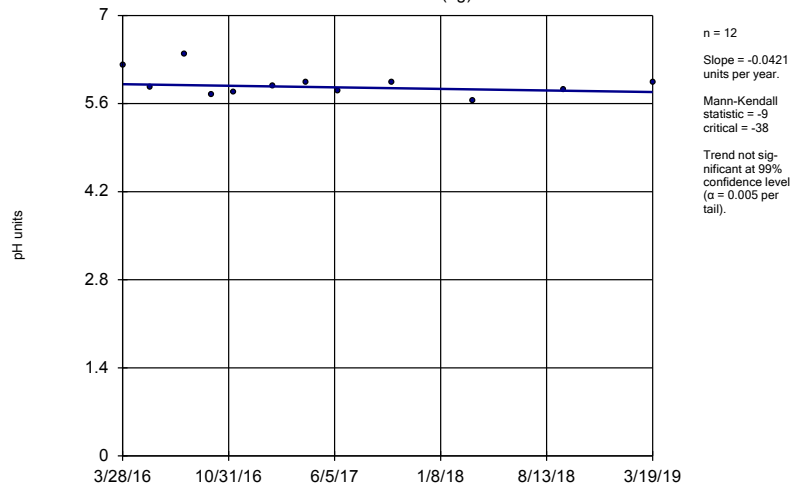
Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-3 (bg)

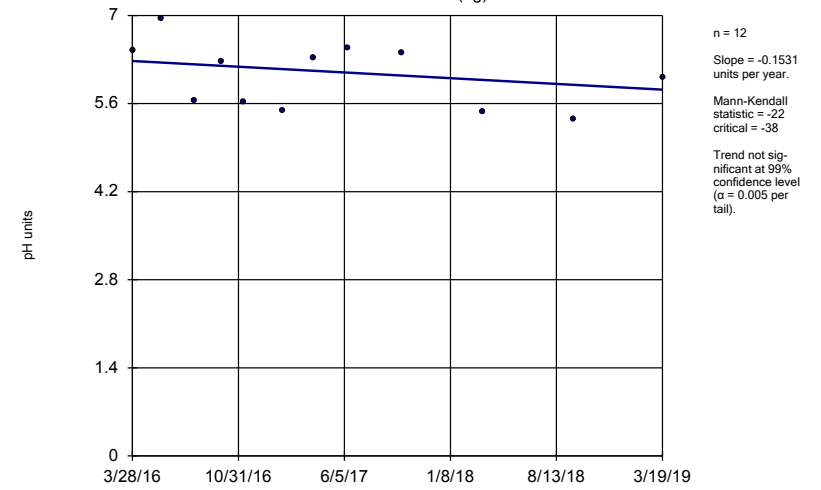
3/23/2016	5.96
5/23/2016	5.73
7/29/2016	5.51
9/22/2016	5.45
11/10/2016	5.51
1/31/2017	5.42
3/30/2017	5.43
6/12/2017	5.47
10/4/2017	5.23
3/19/2018	5.4
9/17/2018	5.22
3/20/2019	5.22

Sen's Slope Estimator
GWA-50 (bg)



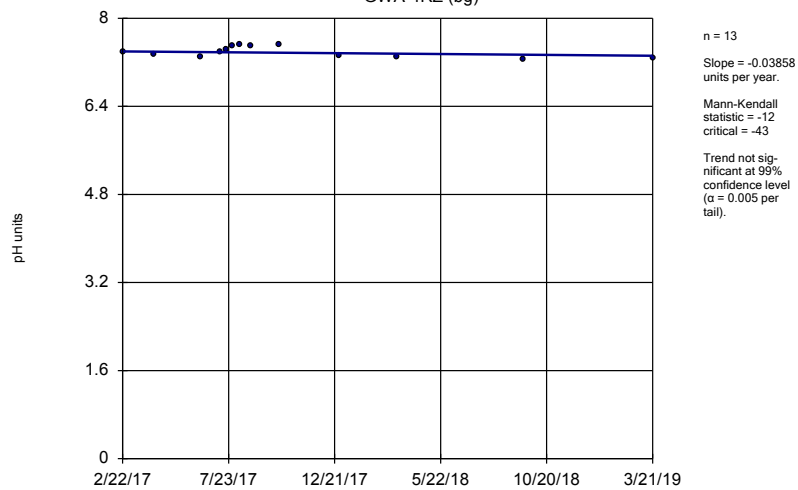
Constituent: pH Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-50R (bg)



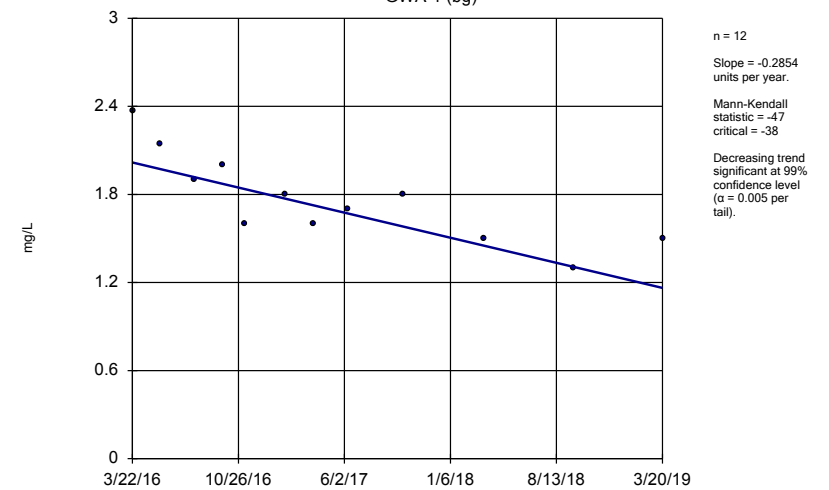
Constituent: pH Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-4RZ (bg)



Constituent: pH Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-1 (bg)



Constituent: Sulfate Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-50 (bg)

3/28/2016	6.22
5/23/2016	5.86
8/1/2016	6.39
9/26/2016	5.74
11/10/2016	5.78
1/30/2017	5.88
4/7/2017	5.94
6/12/2017	5.81
10/2/2017	5.93
3/16/2018	5.64
9/17/2018	5.82
3/19/2019	5.93

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-50R (bg)

3/28/2016	6.45 (D)
5/25/2016	6.96
8/1/2016	5.64
9/26/2016	6.26
11/11/2016	5.62
1/30/2017	5.49
4/3/2017	6.32
6/12/2017	6.48
10/2/2017	6.41
3/16/2018	5.46
9/18/2018	5.35
3/19/2019	6.01

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

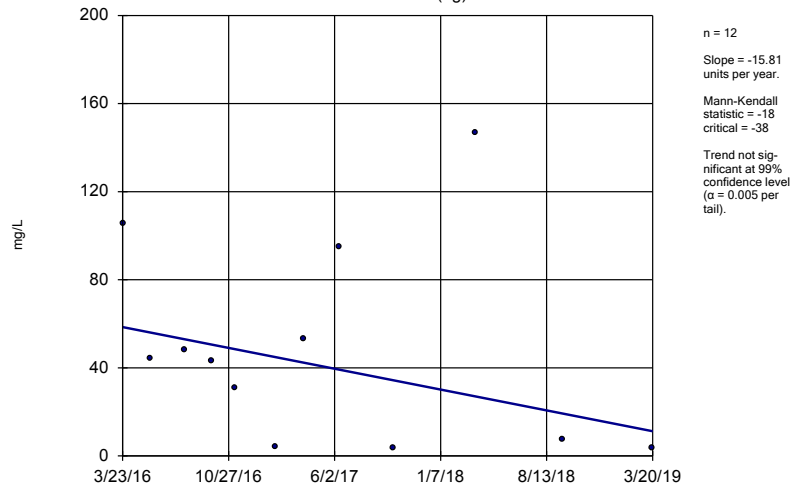
2/22/2017	7.38
4/7/2017	7.35
6/14/2017	7.3
7/12/2017	7.39
7/20/2017	7.44
7/28/2017	7.5
8/9/2017	7.52
8/24/2017	7.5
10/3/2017	7.51
12/28/2017	7.32 (Y)
3/21/2018	7.3
9/18/2018	7.26
3/21/2019	7.28

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

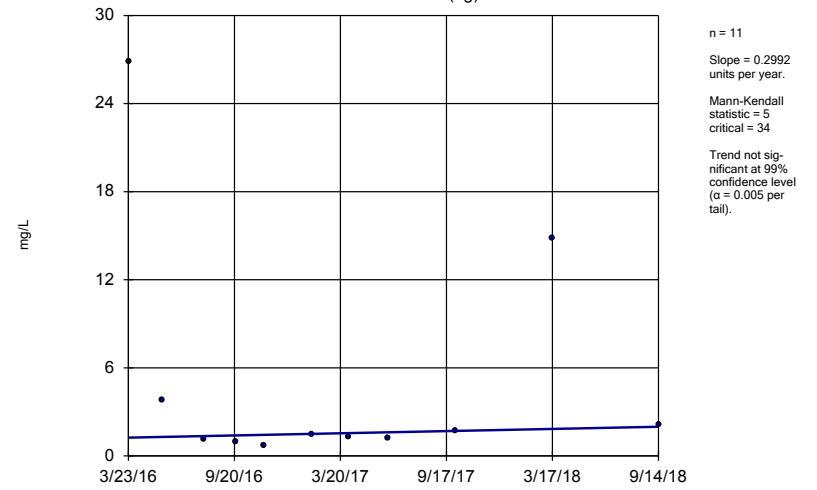
	GWA-1 (bg)
3/22/2016	2.3685
5/19/2016	2.14
7/29/2016	1.9
9/23/2016	2
11/9/2016	1.6
1/30/2017	1.8
3/30/2017	1.6
6/9/2017	1.7
10/2/2017	1.8
3/16/2018	1.5
9/17/2018	1.3 (D)
3/20/2019	1.5

Sen's Slope Estimator
GWA-2 (bg)



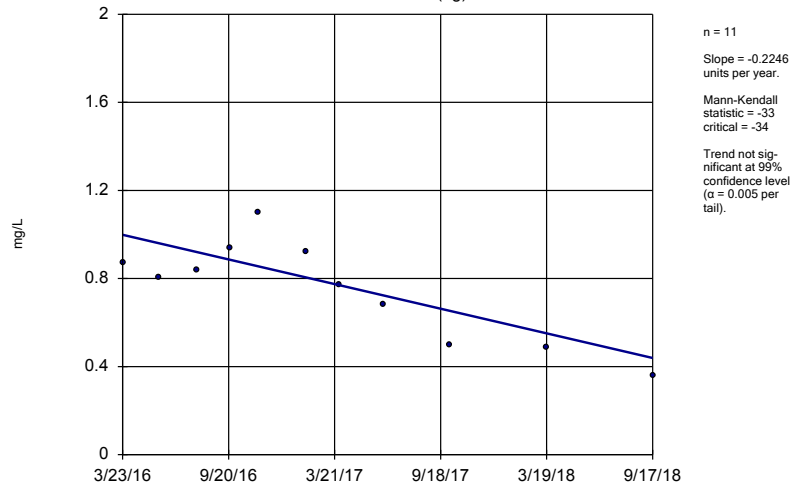
Constituent: Sulfate Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2R (bg)



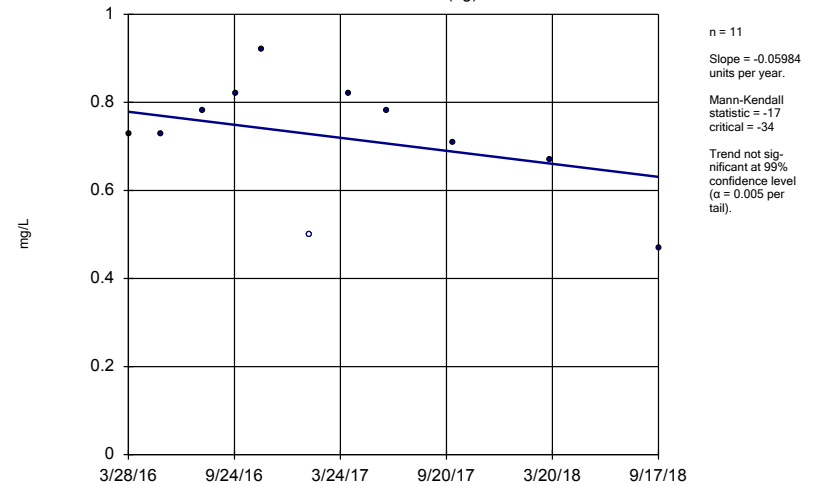
Constituent: Sulfate Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-3 (bg)



Constituent: Sulfate Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-50 (bg)



Constituent: Sulfate Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	105.552
5/20/2016	44.3
7/29/2016	48
9/23/2016	43
11/9/2016	31
1/31/2017	4.2
3/30/2017	53
6/12/2017	95
10/2/2017	3.5
3/19/2018	147
9/14/2018	7.7
3/20/2019	3.6

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	26.8249
5/19/2016	3.81
7/29/2016	1.1
9/22/2016	0.96 (J)
11/10/2016	0.72 (J)
1/31/2017	1.5
4/3/2017	1.3
6/9/2017	1.2
10/2/2017	1.7
3/16/2018	14.8 (J)
9/14/2018	2.1
3/19/2019	32.5 (X)

Sen's Slope Estimator

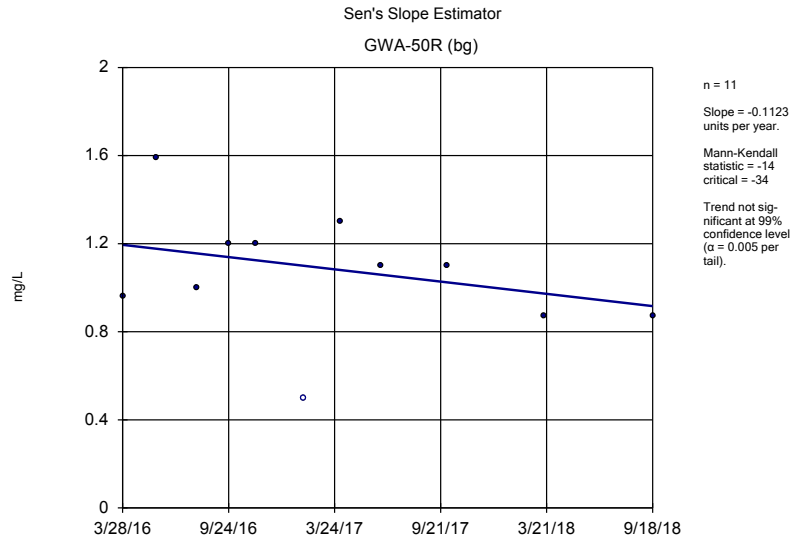
Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
3/23/2016	0.8724 (J)
5/23/2016	0.805 (J)
7/29/2016	0.84 (J)
9/22/2016	0.94 (J)
11/10/2016	1.1
1/31/2017	0.92 (J)
3/30/2017	0.77 (J)
6/12/2017	0.68 (J)
10/4/2017	0.5 (J)
3/19/2018	0.49 (J)
9/17/2018	0.36 (J)
3/20/2019	0.38 (X)

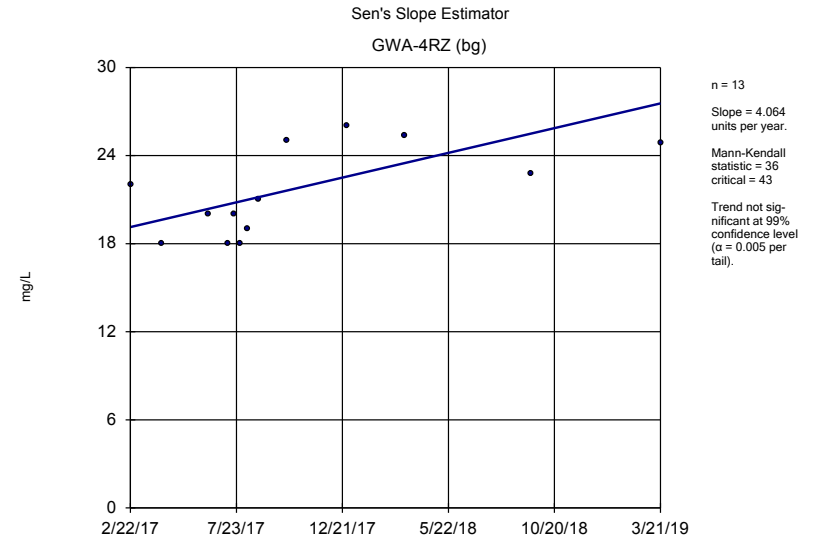
Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

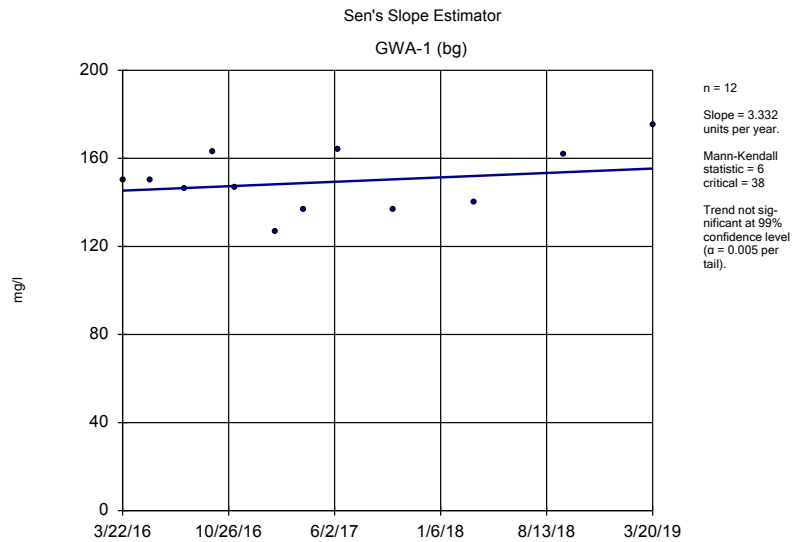
	GWA-50 (bg)
3/28/2016	0.7283 (J)
5/23/2016	0.728 (J)
8/1/2016	0.78 (J)
9/26/2016	0.82 (J)
11/10/2016	0.92 (J)
1/30/2017	<1 (*)
4/7/2017	0.82 (J)
6/12/2017	0.78 (J)
10/2/2017	0.71 (J)
3/16/2018	0.67 (J)
9/17/2018	0.47 (J)
3/19/2019	0.52 (X)



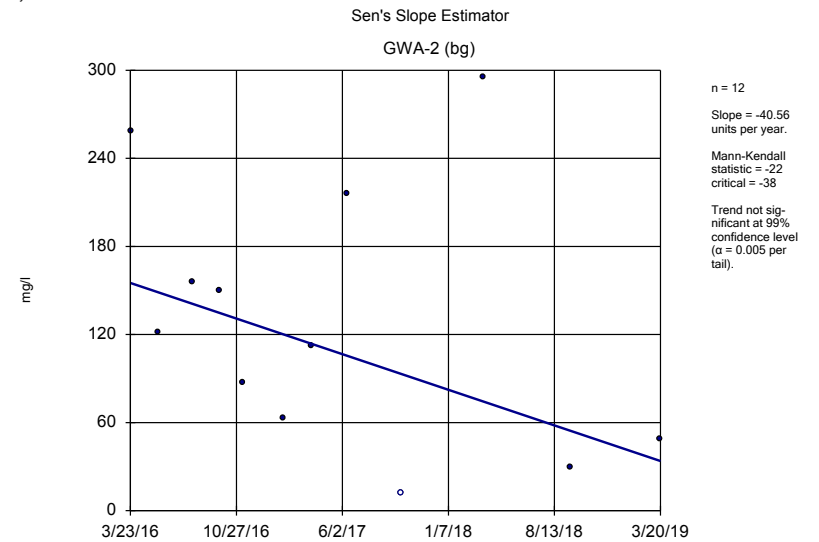
Constituent: Sulfate Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
3/28/2016	0.9594 (J)
5/25/2016	1.59
8/1/2016	1
9/26/2016	1.2
11/11/2016	1.2
1/30/2017	<1 (*)
4/3/2017	1.3
6/12/2017	1.1
10/2/2017	1.1
3/16/2018	0.87 (J)
9/18/2018	0.87 (J)
3/19/2019	0.97 (X)

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

2/22/2017	22
4/7/2017	18
6/14/2017	20
7/12/2017	18
7/20/2017	20
7/28/2017	18
8/9/2017	19
8/24/2017	21
10/3/2017	25
12/28/2017	26 (Y)
3/21/2018	25.4
9/18/2018	22.8
3/21/2019	24.9

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-1 (bg)

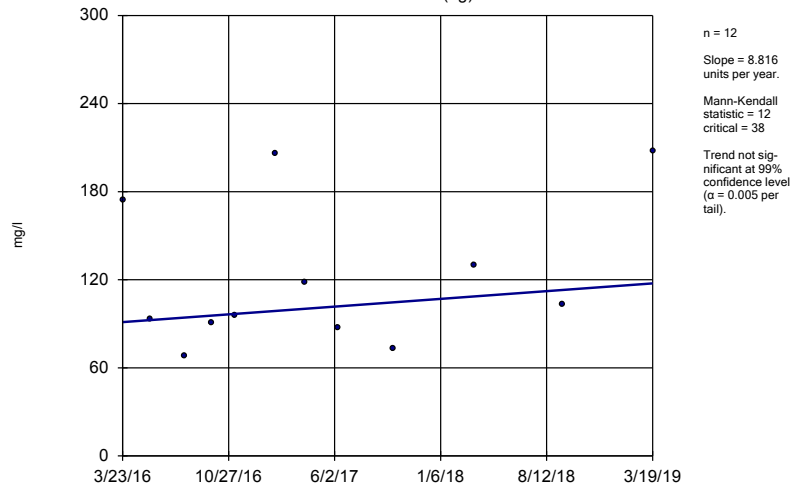
3/22/2016	150
5/19/2016	150
7/29/2016	146
9/23/2016	163
11/9/2016	147
1/30/2017	127
3/30/2017	137
6/9/2017	164
10/2/2017	137
3/16/2018	140
9/17/2018	162
3/20/2019	175

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

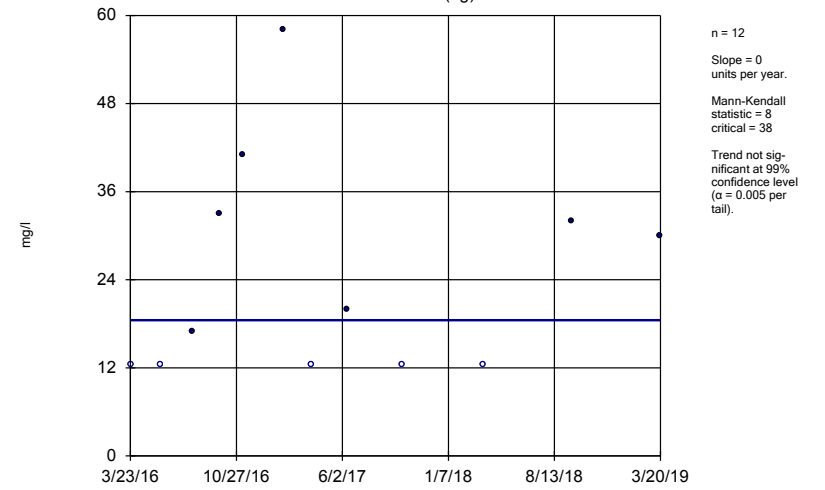
	GWA-2 (bg)
3/23/2016	259
5/20/2016	122
7/29/2016	156
9/23/2016	150
11/9/2016	87
1/31/2017	63
3/30/2017	112
6/12/2017	216
10/2/2017	<25
3/19/2018	295
9/14/2018	30
3/20/2019	49

Sen's Slope Estimator
GWA-2R (bg)



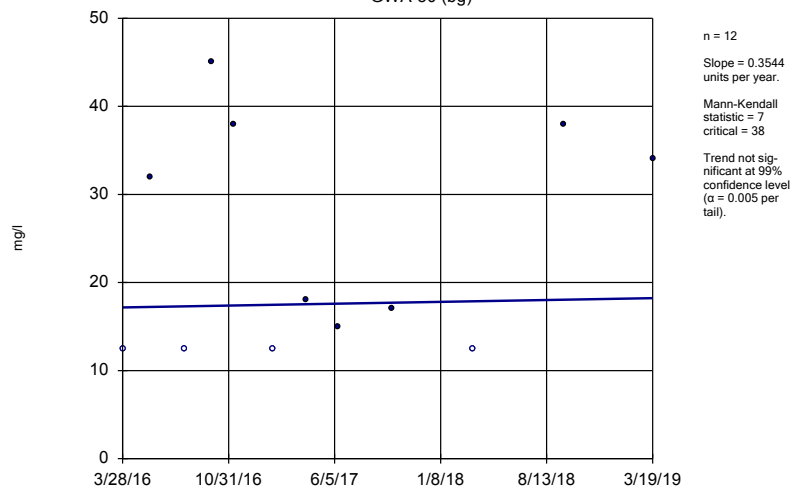
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-3 (bg)



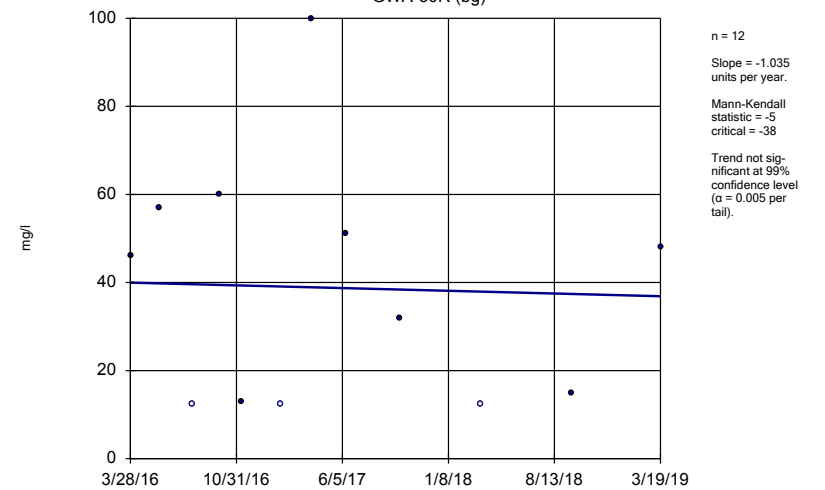
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-50 (bg)



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-50R (bg)



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	174
5/19/2016	93
7/29/2016	68
9/22/2016	91
11/10/2016	96
1/31/2017	206
4/3/2017	118
6/9/2017	87
10/2/2017	73
3/16/2018	130
9/14/2018	103
3/19/2019	208

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-3 (bg)

3/23/2016	<25
5/23/2016	<25
7/29/2016	17 (J)
9/22/2016	33
11/10/2016	41
1/31/2017	58
3/30/2017	<25
6/12/2017	20 (J)
10/4/2017	<25
3/19/2018	<25
9/17/2018	32
3/20/2019	30

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

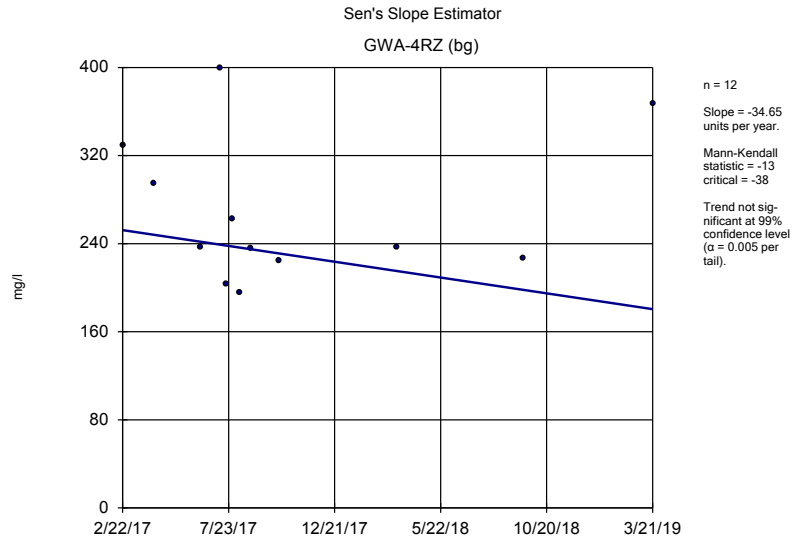
GWA-50 (bg)

3/28/2016	<25
5/23/2016	32
8/1/2016	<25
9/26/2016	45
11/10/2016	38
1/30/2017	<25
4/7/2017	18 (J)
6/12/2017	15 (J)
10/2/2017	17 (J)
3/16/2018	<25
9/17/2018	38
3/19/2019	34

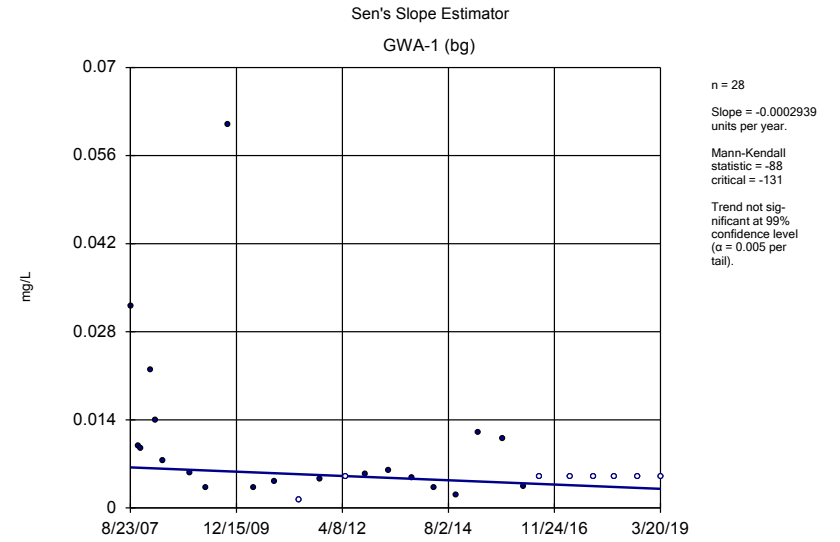
Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

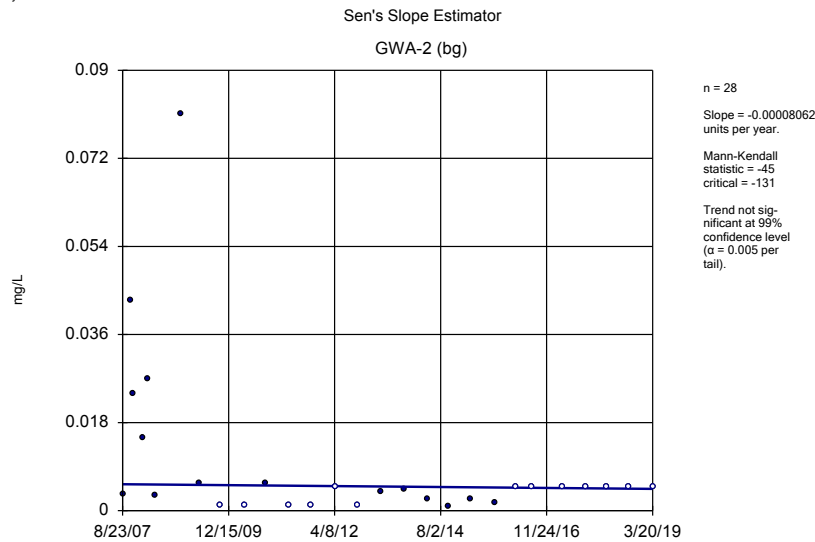
	GWA-50R (bg)
3/28/2016	46
5/25/2016	57
8/1/2016	<25
9/26/2016	60
11/11/2016	13 (J)
1/30/2017	<25
4/3/2017	100
6/12/2017	51
10/2/2017	32
3/16/2018	<25
9/18/2018	15 (J)
3/19/2019	48



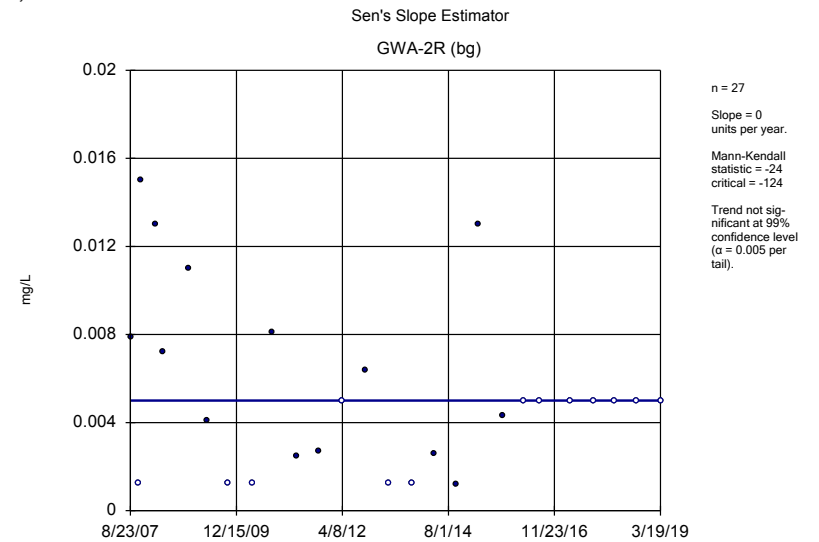
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:26 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:27 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:27 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

2/22/2017	329
4/7/2017	295
6/14/2017	237
7/12/2017	400
7/20/2017	203
7/28/2017	262
8/9/2017	195
8/24/2017	236
10/3/2017	224
3/21/2018	237
9/18/2018	227
3/21/2019	367

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)
8/23/2007	0.032
10/23/2007	0.0099
11/18/2007	0.0095 (J)
1/30/2008	0.022
3/10/2008	0.014
5/13/2008	0.0075
12/5/2008	0.0056 (J)
4/15/2009	0.0033
10/7/2009	0.061
5/3/2010	0.0033
10/12/2010	0.0041
4/27/2011	<0.0025
10/17/2011	0.0046
5/2/2012	<0.01
10/8/2012	0.0053
4/12/2013	0.006
10/16/2013	0.0048
4/11/2014	0.0033
9/30/2014	0.002 (J)
3/30/2015	0.012
10/13/2015	0.011
3/22/2016	0.00346 (J)
7/29/2016	<0.01 (*)
3/30/2017	<0.01 (*)
10/2/2017	<0.01
3/16/2018	<0.01
9/17/2018	<0.01 (D)
3/20/2019	<0.01

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

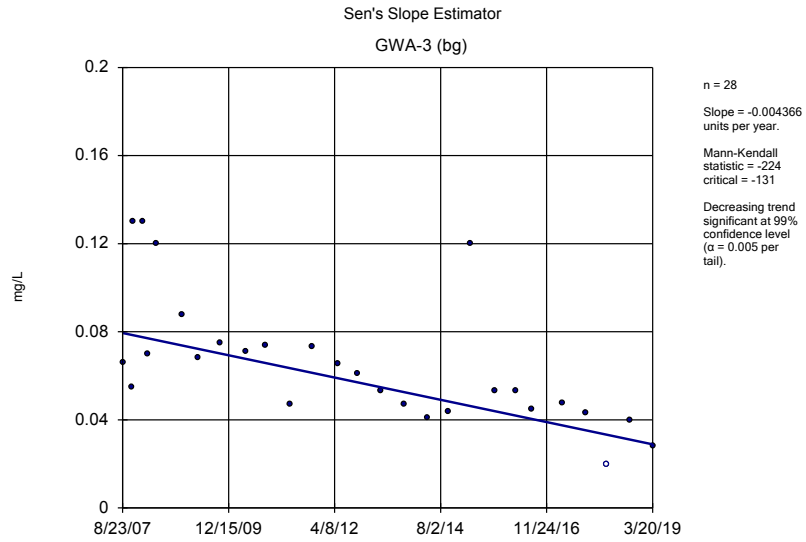
	GWA-2 (bg)
8/23/2007	0.0033
10/24/2007	0.043
11/18/2007	0.024
1/31/2008	0.015
3/11/2008	0.027
5/6/2008	0.0032
12/4/2008	0.081
4/21/2009	0.0057
10/7/2009	<0.0025
4/26/2010	<0.0025
10/4/2010	0.0057
4/13/2011	<0.0025
10/5/2011	<0.0025
4/11/2012	<0.01
10/9/2012	<0.0025
4/15/2013	0.0038
10/15/2013	0.0044
4/22/2014	0.0025 (J)
9/30/2014	0.00076 (J)
3/30/2015	0.0024 (J)
10/13/2015	0.0017 (J)
3/23/2016	<0.01
7/29/2016	<0.01 (*)
3/30/2017	<0.01 (*)
10/2/2017	<0.01
3/19/2018	<0.01
9/14/2018	<0.01
3/20/2019	<0.01

Sen's Slope Estimator

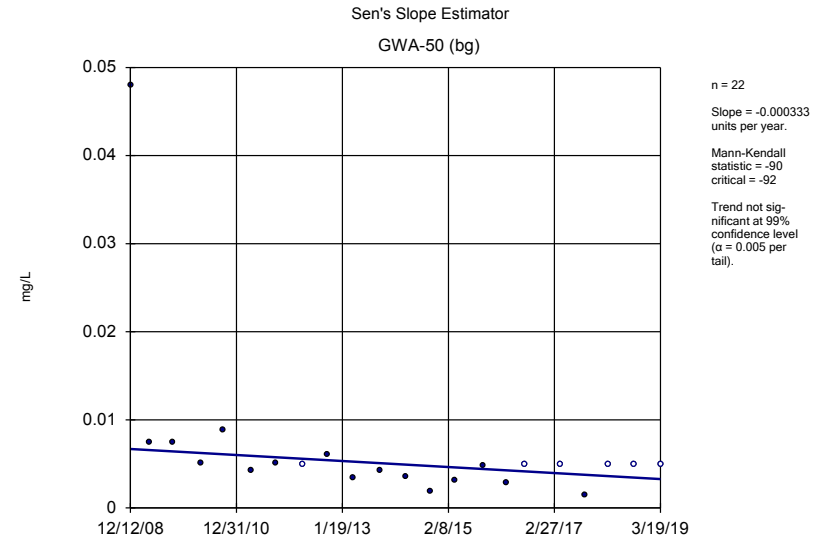
Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

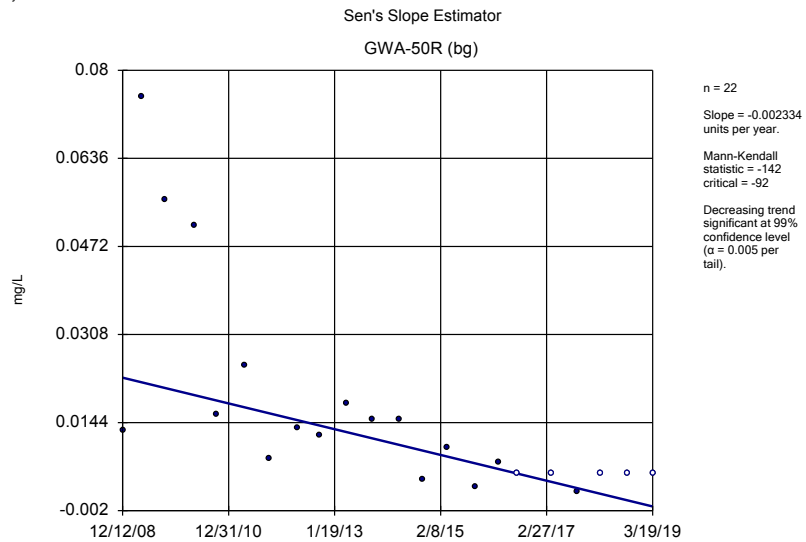
	GWA-2R (bg)
8/23/2007	0.0079
10/24/2007	<0.0025
11/18/2007	0.015
1/31/2008	0.063 (O)
3/10/2008	0.013 (J)
5/13/2008	0.0072
12/4/2008	0.011 (J)
4/21/2009	0.0041
10/8/2009	<0.0025
4/21/2010	<0.0025
9/28/2010	0.0081
4/12/2011	0.0025
10/4/2011	0.0027
4/3/2012	<0.01
10/9/2012	0.0064
4/11/2013	<0.0025
10/16/2013	<0.0025
4/10/2014	0.0026
9/30/2014	0.0012 (J)
3/30/2015	0.013
10/13/2015	0.0043
3/23/2016	<0.01
7/29/2016	<0.01 (*)
4/3/2017	<0.01 (*)
10/2/2017	<0.01
3/16/2018	<0.01
9/14/2018	<0.01
3/19/2019	<0.01



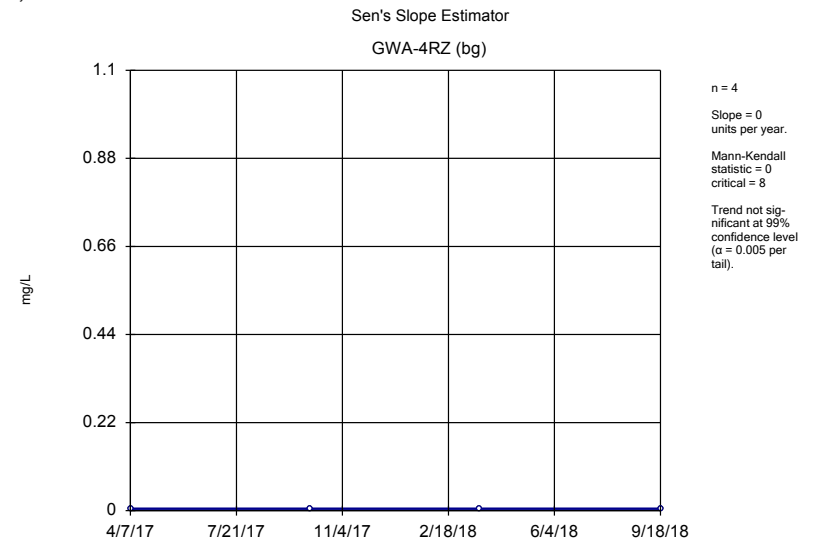
Constituent: Zinc Analysis Run 8/28/2019 10:27 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:27 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:27 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:27 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
8/23/2007	0.066
11/2/2007	0.055
11/18/2007	0.13
1/31/2008	0.13
3/11/2008	0.07
5/14/2008	0.12
12/5/2008	0.088
4/15/2009	0.068
10/8/2009	0.075
4/28/2010	0.071
10/6/2010	0.074
4/21/2011	0.047
10/13/2011	0.073
5/1/2012	0.0652
10/9/2012	0.061
4/11/2013	0.053
10/16/2013	0.047
4/23/2014	0.041
10/4/2014	0.044 (V)
3/31/2015	0.12
10/12/2015	0.053
3/23/2016	0.0532
7/29/2016	0.0446
3/30/2017	0.0479
10/4/2017	0.0429
3/19/2018	<0.04
9/17/2018	0.04
3/20/2019	0.028

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50 (bg)
12/12/2008	0.048 (J)
4/23/2009	0.0075
10/6/2009	0.0075
4/27/2010	0.0051
9/30/2010	0.0089
4/14/2011	0.0043
10/5/2011	0.0051
4/11/2012	<0.01
10/2/2012	0.006
4/9/2013	0.0034
10/15/2013	0.0042
4/10/2014	0.0035
10/1/2014	0.0019 (J)
3/30/2015	0.0032
10/11/2015	0.0048
3/28/2016	0.00282 (J)
8/1/2016	<0.01 (*)
4/7/2017	<0.01 (*)
10/2/2017	0.0015 (J)
3/16/2018	<0.01
9/17/2018	<0.01
3/19/2019	<0.01

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
12/12/2008	0.013 (J)
4/23/2009	0.075
10/6/2009	0.056
5/3/2010	0.051
10/11/2010	0.016
4/27/2011	0.025
10/19/2011	0.0078
5/1/2012	0.0134
10/2/2012	0.012
4/10/2013	0.018
10/16/2013	0.015
4/22/2014	0.015
10/1/2014	0.0038
3/30/2015	0.0097
10/11/2015	0.0024 (J)
3/28/2016	0.00703 (J)
8/1/2016	<0.01 (*)
4/3/2017	<0.01 (*)
10/2/2017	0.0016 (J)
3/16/2018	<0.01
9/18/2018	<0.01
3/19/2019	<0.01

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:29 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

4/7/2017	<0.01 (*)
10/3/2017	<0.01
3/21/2018	<0.01
9/18/2018	<0.01
3/21/2019	0.0034 (X)

Trend Test - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 3:33 PM

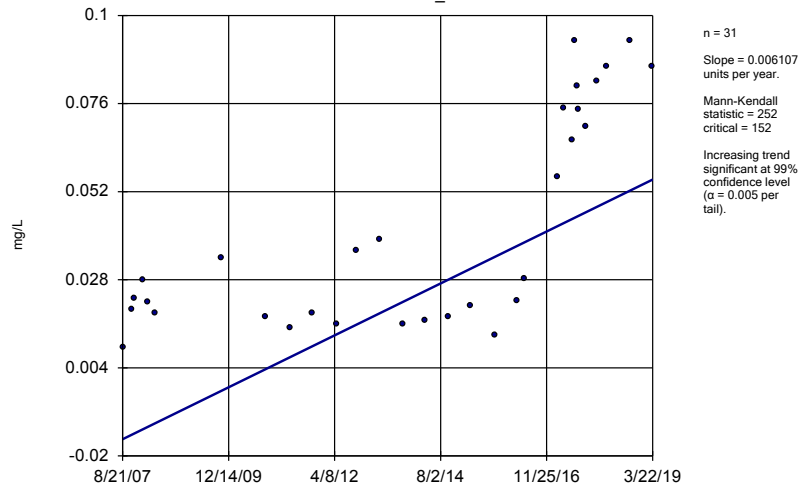
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	GWC-13R_13RZ	0.006107	252	152	Yes	31	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-15R	1.521	42	38	Yes	12	0	n/a	n/a	0.01	NP

Trend Test - All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 8/28/2019, 3:33 PM

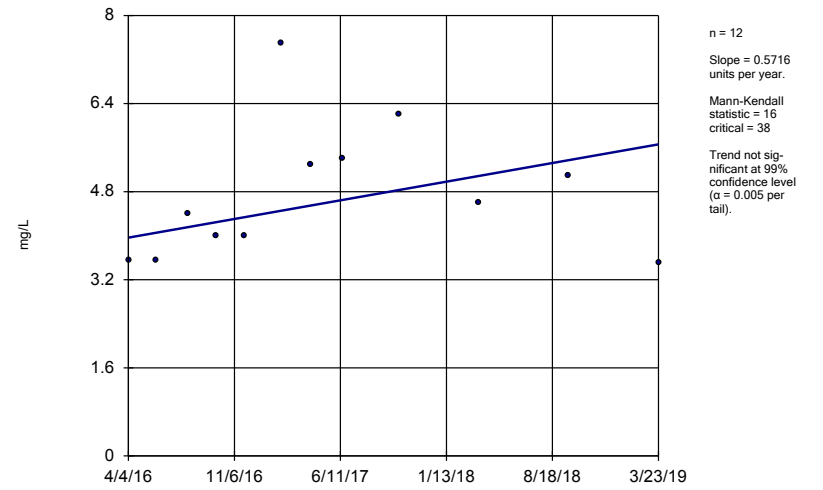
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	GWC-13R_13RZ	0.006107	252	152	Yes	31	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-13	0.5716	16	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-14_14Z	0.5049	28	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-13R_13RZ	2.55	34	38	No	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWC-8RR	-0.0766	-25	-43	No	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWC-8Z	-0.211	-23	-38	No	12	0	n/a	n/a	0.01	NP
pH (pH units)	GWC-9	-0.4293	-21	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-15R	1.521	42	38	Yes	12	0	n/a	n/a	0.01	NP
Zinc (mg/L)	GWC-13	-0.00...	-66	-105	No	24	25	n/a	n/a	0.01	NP

Sen's Slope Estimator
GWC-13R_13RZ



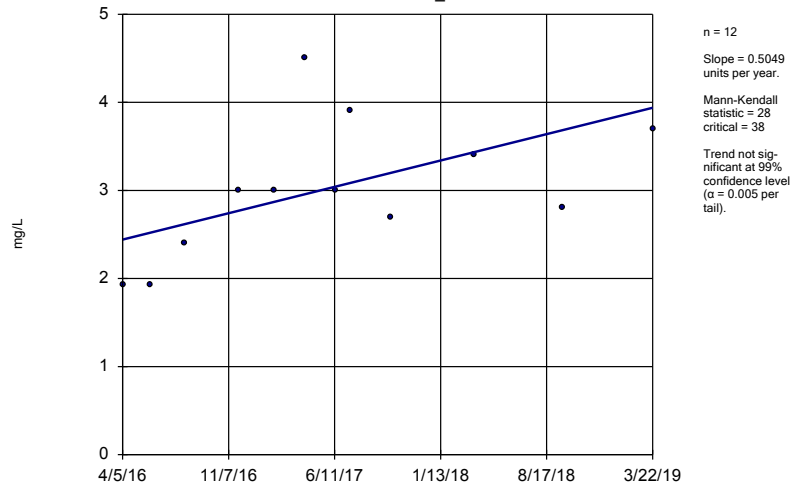
Constituent: Barium Analysis Run 8/28/2019 3:31 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-13



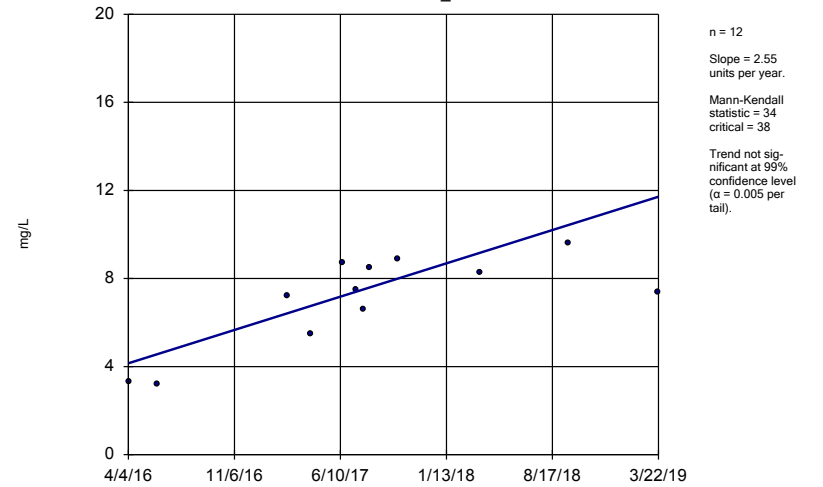
Constituent: Chloride Analysis Run 8/28/2019 3:31 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-14_14Z



Constituent: Chloride Analysis Run 8/28/2019 3:31 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-13R_13RZ



Constituent: Chloride Analysis Run 8/28/2019 3:31 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-13R_13RZ

8/21/2007	0.0095
11/1/2007	0.02
11/19/2007	0.023
1/31/2008	0.028
3/5/2008	0.022
5/7/2008	0.019
12/12/2008	0.19 (O)
4/29/2009	0.14 (O)
10/21/2009	0.034
4/28/2010	0.11 (O)
10/6/2010	0.018
4/20/2011	0.015
10/12/2011	0.019
4/25/2012	0.0158
10/2/2012	0.036
4/2/2013	0.039
10/8/2013	0.016
4/1/2014	0.017
10/1/2014	0.018
3/31/2015	0.021
10/14/2015	0.013
4/4/2016	0.0222
6/1/2016	0.0283
2/22/2017	0.0561
4/11/2017	0.0748
6/16/2017	0.0661
7/12/2017	0.0932
7/28/2017	0.0808
8/10/2017	0.0743
10/6/2017	0.0699
12/28/2017	0.082 (Y)
3/23/2018	0.086
9/20/2018	0.093
3/22/2019	0.086 (D)

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13
4/4/2016	3.55
5/31/2016	3.55
8/4/2016	4.4
9/29/2016	4
11/28/2016	4
2/9/2017	7.5
4/12/2017	5.3
6/16/2017	5.4
10/9/2017	6.2
3/21/2018	4.6
9/19/2018	5.1
3/23/2019	3.5

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-14_14Z

4/5/2016	1.93
6/1/2016	1.93
8/9/2016	2.4
11/28/2016	3
2/9/2017	3
4/11/2017	4.5
6/14/2017	3
7/12/2017	3.9
10/5/2017	2.7
3/22/2018	3.4
9/19/2018	2.8
3/22/2019	3.7 (D)

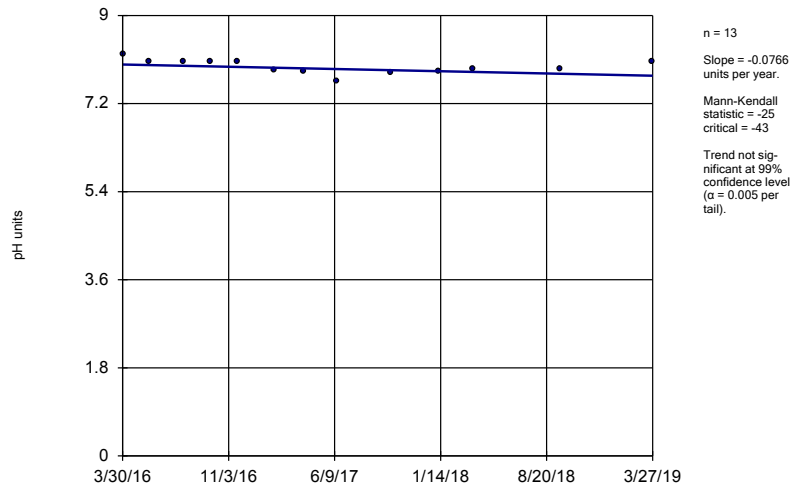
Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-13R_13RZ

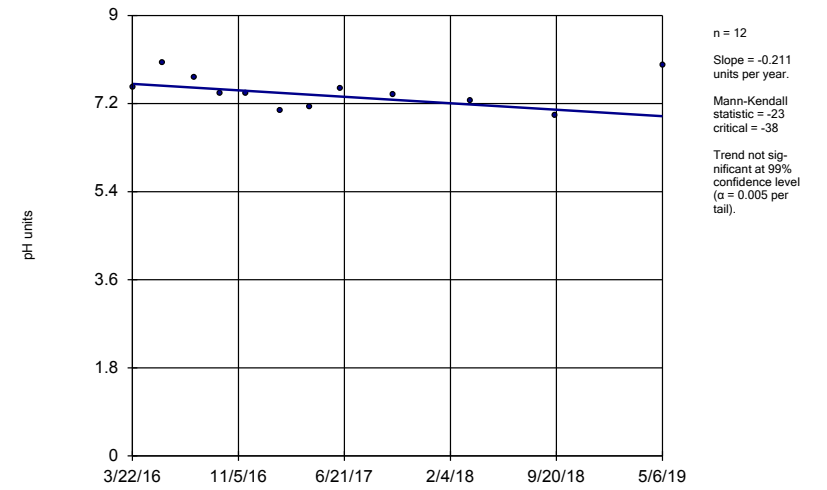
4/4/2016	3.3
6/1/2016	3.18
2/22/2017	7.2
4/11/2017	5.5
6/16/2017	8.7
7/12/2017	7.5
7/28/2017	6.6
8/10/2017	8.5
10/6/2017	8.9
3/23/2018	8.3
9/20/2018	9.6
3/22/2019	7.4 (D)

Sen's Slope Estimator
GWC-8RR



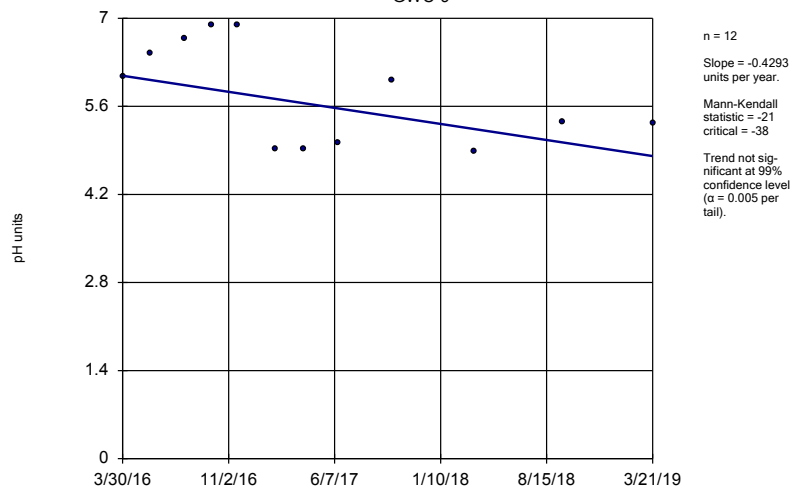
Constituent: pH Analysis Run 8/28/2019 3:31 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-8Z



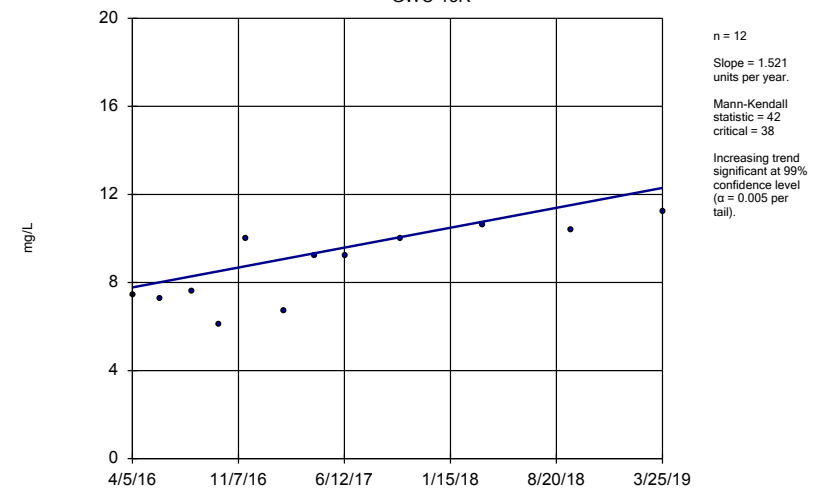
Constituent: pH Analysis Run 8/28/2019 3:32 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-9



Constituent: pH Analysis Run 8/28/2019 3:32 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-15R



Constituent: Sulfate Analysis Run 8/28/2019 3:32 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR
3/30/2016	8.2
5/24/2016	8.07
8/2/2016	8.07
9/27/2016	8.06
11/22/2016	8.07
2/6/2017	7.88
4/6/2017	7.86
6/14/2017	7.66
10/4/2017	7.84
1/9/2018	7.86 (Y)
3/21/2018	7.9
9/18/2018	7.92
3/27/2019	8.07

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z
3/22/2016	7.53 (D)
5/25/2016	8.04
8/2/2016	7.74
9/26/2016	7.4
11/21/2016	7.4
2/3/2017	7.05
4/7/2017	7.14
6/13/2017	7.52
10/3/2017	7.38
3/20/2018	7.27
9/18/2018	6.95
5/6/2019	7.98

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9
3/30/2016	6.07
5/26/2016	6.44
8/5/2016	6.67
9/28/2016	6.89
11/21/2016	6.89
2/6/2017	4.93
4/6/2017	4.92
6/13/2017	5.03
10/3/2017	6.01
3/20/2018	4.88
9/18/2018	5.36 (D)
3/21/2019	5.33

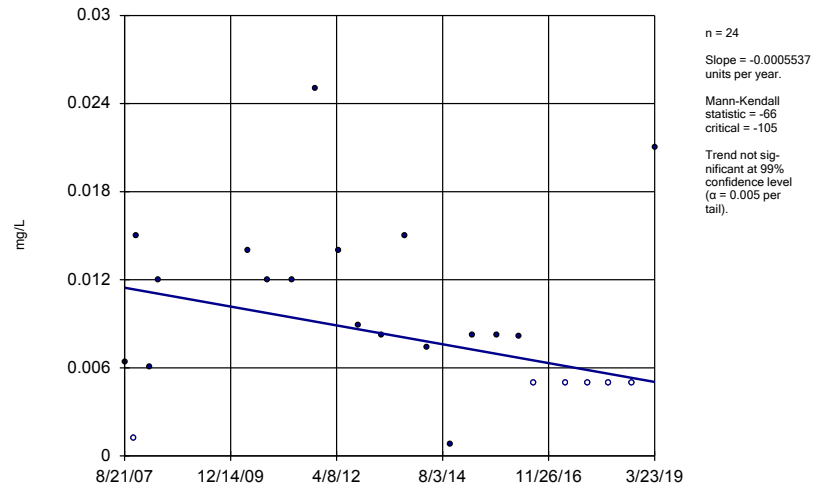
Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-15R

4/5/2016	7.45
5/31/2016	7.29
8/4/2016	7.6
9/29/2016	6.1
11/23/2016	10
2/10/2017	6.7
4/12/2017	9.2
6/15/2017	9.2
10/6/2017	10
3/23/2018	10.6
9/19/2018	10.4
3/25/2019	11.2

Sen's Slope Estimator
GWC-13



Constituent: Zinc Analysis Run 8/28/2019 3:32 PM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 3:33 PM View: Sens slope - compliance wells

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13
8/21/2007	0.0064
11/1/2007	<0.0025
11/19/2007	0.015
1/31/2008	0.032 (o)
3/5/2008	0.0061
5/12/2008	0.012
12/13/2008	0.087 (o)
4/28/2009	0.067 (o)
10/21/2009	0.025 (o)
4/28/2010	0.014
10/5/2010	0.012
4/19/2011	0.012
10/18/2011	0.025
4/25/2012	0.014
10/2/2012	0.0089
4/2/2013	0.0082
10/8/2013	0.015
4/1/2014	0.0074
10/1/2014	0.00077 (J)
4/1/2015	0.0082
10/15/2015	0.0082
4/4/2016	0.00818 (J)
8/4/2016	<0.01 (*)
4/12/2017	<0.01 (*)
10/9/2017	<0.01
3/21/2018	<0.01
9/19/2018	<0.01
3/23/2019	0.021

Intrawell Prediction Limit Summary Table – Metals Cells 3&4 Significant Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-16R	0.019	n/a	3/11/2019	0.02	Yes	20	50	n/a	0.004291	NP (normality) 1 of 2
Barium (mg/L)	GWA-56	0.037	n/a	3/7/2019	0.042	Yes	20	5	No	0.000...	Param 1 of 2

Intrawell Prediction Limit Summary Table – Metals Cells 3&4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GWA-36	0.0032	n/a	3/6/2019	0.0015ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-36R	0.0030	n/a	3/7/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-37	0.0052	n/a	n/a	1 future	n/a	20	45	n/a	0.004291	NP (normality) 1 of 2
Antimony (mg/L)	GWA-38	0.0030	n/a	3/7/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-52	0.0030	n/a	3/7/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-53	0.0025	n/a	3/8/2019	0.0015ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-53R	0.0034	n/a	n/a	1 future	n/a	20	60	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-54	0.0025	n/a	3/7/2019	0.0015ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-55	0.0025	n/a	3/8/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-55R	0.0025	n/a	3/7/2019	0.0015ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-56	0.0025	n/a	3/7/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-16R	0.019	n/a	3/11/2019	0.02	Yes	20	50	n/a	0.004291	NP (normality) 1 of 2
Antimony (mg/L)	GWC-17R	0.0050	n/a	3/12/2019	0.0015ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-18	0.0030	n/a	3/12/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-18R	0.0050	n/a	n/a	1 future	n/a	20	85	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-19R	0.0030	n/a	3/12/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-20R	0.0030	n/a	3/12/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-21R	0.0064	n/a	n/a	1 future	n/a	20	50	n/a	0.004291	NP (normality) 1 of 2
Antimony (mg/L)	GWC-22R	0.0030	n/a	3/11/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-23R	0.0030	n/a	3/12/2019	0.0015ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-24R	0.027	n/a	3/8/2019	0.0015ND	No	20	55	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-25R	0.023	n/a	3/8/2019	0.0015ND	No	20	65	n/a	0.004291	NP (NDs) 1 of 2
Antimony (mg/L)	GWA-51R_51RZ	0.0046	n/a	3/8/2019	0.0015ND	No	20	65	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-36	0.0050	n/a	3/6/2019	0.0025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-36R	0.0036	n/a	3/7/2019	0.0025ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-37	0.0025	n/a	3/6/2019	0.0025ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-38	0.0062	n/a	3/7/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-52	0.0025	n/a	3/7/2019	0.0025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-53	0.0025	n/a	3/8/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-53R	0.0025	n/a	3/12/2019	0.0025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-54	0.0025	n/a	3/7/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-55	0.0025	n/a	3/8/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-55R	0.0028	n/a	3/7/2019	0.0025ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-56	0.0025	n/a	n/a	1 future	n/a	20	70	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-16R	0.089	n/a	3/11/2019	0.0025ND	No	20	65	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-17R	0.0050	n/a	3/12/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-18	0.0025	n/a	3/12/2019	0.0025ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-18R	0.0050	n/a	3/12/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-19R	0.0025	n/a	3/12/2019	0.0025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-20R	0.0025	n/a	3/12/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-21R	0.015	n/a	n/a	1 future	n/a	20	65	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-22R	0.0025	n/a	n/a	1 future	n/a	20	80	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-23R	0.0025	n/a	3/12/2019	0.0025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-24R	0.0025	n/a	3/8/2019	0.0025ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWC-25R	0.0050	n/a	3/8/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Arsenic (mg/L)	GWA-51R_51RZ	0.028	n/a	3/8/2019	0.0025ND	No	20	35	x^(1/3)	0.000...	Param 1 of 2
Barium (mg/L)	GWA-36	0.022	n/a	3/6/2019	0.018	No	20	5	No	0.000...	Param 1 of 2
Barium (mg/L)	GWA-36R	0.034	n/a	3/7/2019	0.018	No	20	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWA-37	0.014	n/a	n/a	1 future	n/a	20	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWA-38	0.030	n/a	3/7/2019	0.011	No	20	0	n/a	0.004291	NP (normality) 1 of 2

Intrawell Prediction Limit Summary Table – Metals Cells 3&4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Barium (mg/L)	GWA-52	0.049	n/a	3/7/2019	0.025	No	20	5	No	0.000...	Param 1 of 2
Barium (mg/L)	GWA-53	0.053	n/a	3/8/2019	0.012	No	20	5	ln(x)	0.000...	Param 1 of 2
Barium (mg/L)	GWA-53R	0.016	n/a	3/12/2019	0.016	No	20	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWA-54	0.058	n/a	3/7/2019	0.039	No	20	5	n/a	0.004291	NP (normality) 1 of 2
Barium (mg/L)	GWA-55	0.037	n/a	3/8/2019	0.027	No	20	5	No	0.000...	Param 1 of 2
Barium (mg/L)	GWA-55R	0.088	n/a	3/7/2019	0.033	No	20	5	No	0.000...	Param 1 of 2
Barium (mg/L)	GWA-56	0.037	n/a	3/7/2019	0.042	Yes	20	5	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-16R	0.079	n/a	3/11/2019	0.044	No	20	0	sqrt(x)	0.000...	Param 1 of 2
Barium (mg/L)	GWC-17R	0.026	n/a	3/12/2019	0.021	No	20	0	n/a	0.004291	NP (normality) 1 of 2
Barium (mg/L)	GWC-18	0.047	n/a	3/12/2019	0.014	No	20	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-18R	0.034	n/a	3/12/2019	0.014	No	20	5	n/a	0.004291	NP (normality) 1 of 2
Barium (mg/L)	GWC-19R	0.018	n/a	3/12/2019	0.016	No	20	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-20R	0.036	n/a	3/12/2019	0.03	No	20	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-21R	0.038	n/a	3/11/2019	0.015	No	20	0	n/a	0.004291	NP (normality) 1 of 2
Barium (mg/L)	GWC-22R	0.065	n/a	3/11/2019	0.048	No	19	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-23R	0.042	n/a	3/12/2019	0.022	No	20	0	No	0.000...	Param 1 of 2
Barium (mg/L)	GWC-24R	0.04	n/a	3/8/2019	0.02	No	20	0	x^(1/3)	0.000...	Param 1 of 2
Barium (mg/L)	GWC-25R	0.017	n/a	3/8/2019	0.017	No	20	0	n/a	0.004291	NP (normality) 1 of 2
Barium (mg/L)	GWA-51R_51RZ	0.034	n/a	3/8/2019	0.015	No	20	0	No	0.000...	Param 1 of 2
Beryllium (mg/L)	GWA-36	0.0015	n/a	n/a	1 future	n/a	20	35	n/a	0.004291	NP (normality) 1 of 2
Beryllium (mg/L)	GWA-36R	0.0028	n/a	n/a	1 future	n/a	20	50	sqrt(x)	0.000...	Param 1 of 2
Beryllium (mg/L)	GWA-37	0.0015	n/a	3/6/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-38	0.0015	n/a	3/7/2019	0.0015ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-52	0.0030	n/a	3/7/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-53	0.0030	n/a	n/a	1 future	n/a	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-53R	0.0020	n/a	3/12/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-54	0.0030	n/a	3/7/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-55	0.0020	n/a	3/8/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-55R	0.0020	n/a	3/7/2019	0.0015ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-56	0.0025	n/a	3/7/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-16R	0.0030	n/a	3/11/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-17R	0.0030	n/a	3/12/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-18	0.0025	n/a	3/12/2019	0.0015ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-18R	0.0025	n/a	3/12/2019	0.0015ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-19R	0.0025	n/a	3/12/2019	0.0015ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-20R	0.0025	n/a	3/12/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-21R	0.0030	n/a	3/11/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-22R	0.0030	n/a	3/11/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-23R	0.0030	n/a	3/12/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-24R	0.0030	n/a	3/8/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWC-25R	0.0030	n/a	3/8/2019	0.0015ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Beryllium (mg/L)	GWA-51R_51RZ	0.0020	n/a	3/8/2019	0.0015ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-36	0.0014	n/a	3/6/2019	0.0013	No	20	15	No	0.000...	Param 1 of 2
Cadmium (mg/L)	GWA-36R	0.00077	n/a	n/a	1 future	n/a	20	40	No	0.000...	Param 1 of 2
Cadmium (mg/L)	GWA-37	0.00065	n/a	n/a	1 future	n/a	20	90	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-38	0.00065	n/a	3/7/2019	0.0005ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-52	0.0010	n/a	3/7/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-53	0.0010	n/a	3/8/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-53R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-54	0.0010	n/a	3/7/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2

Intrawell Prediction Limit Summary Table – Metals Cells 3&4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Cadmium (mg/L)	GWA-55	0.0010	n/a	3/8/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-55R	0.0010	n/a	3/7/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-56	0.0010	n/a	3/7/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-16R	0.0010	n/a	3/11/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-17R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-18	0.050	n/a	3/12/2019	0.0005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-18R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-19R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-20R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-21R	0.050	n/a	3/11/2019	0.0005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-22R	0.050	n/a	3/11/2019	0.0005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-23R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-24R	0.0010	n/a	3/8/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWC-25R	0.050	n/a	3/8/2019	0.0005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Cadmium (mg/L)	GWA-51R_51RZ	0.00065	n/a	3/8/2019	0.0005ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-36	0.0050	n/a	3/6/2019	0.005ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-36R	0.0050	n/a	3/7/2019	0.005ND	No	20	65	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-37	0.0050	n/a	3/6/2019	0.005ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-38	0.012	n/a	3/7/2019	0.005ND	No	20	20	x^(1/3)	0.000...	Param 1 of 2
Chromium (mg/L)	GWA-52	0.0050	n/a	3/7/2019	0.005ND	No	20	60	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-53	0.0050	n/a	3/8/2019	0.005ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-53R	0.0050	n/a	3/12/2019	0.005ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-54	0.0050	n/a	3/7/2019	0.005ND	No	20	40	n/a	0.004291	NP (normality) 1 of 2
Chromium (mg/L)	GWA-55	0.0050	n/a	3/8/2019	0.005ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-55R	0.0050	n/a	3/7/2019	0.005ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-56	0.0050	n/a	3/7/2019	0.005ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-16R	0.0050	n/a	3/11/2019	0.005ND	No	20	65	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-17R	0.0050	n/a	3/12/2019	0.005ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-18	0.006	n/a	3/12/2019	0.005ND	No	20	20	No	0.000...	Param 1 of 2
Chromium (mg/L)	GWC-18R	0.029	n/a	3/12/2019	0.005ND	No	20	55	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-19R	0.0050	n/a	3/12/2019	0.005ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-20R	0.0050	n/a	3/12/2019	0.005ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-21R	0.0050	n/a	3/11/2019	0.005ND	No	20	65	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-22R	0.0050	n/a	3/11/2019	0.005ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-23R	0.0050	n/a	3/12/2019	0.005ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-24R	0.010	n/a	3/8/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWC-25R	0.0050	n/a	3/8/2019	0.005ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Chromium (mg/L)	GWA-51R_51RZ	0.067	n/a	3/8/2019	0.005ND	No	20	50	sqrt(x)	0.000...	Param 1 of 2
Cobalt (mg/L)	GWA-36	0.0050	n/a	3/6/2019	0.005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-36R	0.0050	n/a	3/7/2019	0.005ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-37	0.0050	n/a	3/6/2019	0.005ND	No	20	55	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-38	0.0061	n/a	n/a	1 future	n/a	19	10.53	x^(1/3)	0.000...	Param 1 of 2
Cobalt (mg/L)	GWA-52	0.010	n/a	3/7/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-53	0.010	n/a	3/8/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-53R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-54	0.0050	n/a	3/7/2019	0.005ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-55	0.0072	n/a	n/a	1 future	n/a	20	35	n/a	0.004291	NP (normality) 1 of 2
Cobalt (mg/L)	GWA-55R	0.0050	n/a	3/7/2019	0.005ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-56	0.010	n/a	3/7/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-16R	0.0074	n/a	3/11/2019	0.005ND	No	20	15	sqrt(x)	0.000...	Param 1 of 2

Intrawell Prediction Limit Summary Table – Metals Cells 3&4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GWC-17R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-18	0.0050	n/a	3/12/2019	0.005ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-18R	0.0050	n/a	3/12/2019	0.005ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-19R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-20R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-21R	0.018	n/a	n/a	1 future	n/a	20	70	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-22R	0.0050	n/a	3/11/2019	0.005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-23R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-24R	0.010	n/a	3/8/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWC-25R	0.0050	n/a	3/8/2019	0.005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Cobalt (mg/L)	GWA-51R_51RZ	0.0050	n/a	3/8/2019	0.005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Copper (mg/L)	GWA-36	0.013	n/a	3/6/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-36R	0.013	n/a	3/7/2019	0.0125ND	No	15	66.67	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-37	0.03	n/a	3/6/2019	0.0125ND	No	15	0	No	0.000...	Param 1 of 2
Copper (mg/L)	GWA-38	0.013	n/a	3/7/2019	0.0125ND	No	15	53.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-52	0.013	n/a	3/7/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-53	0.013	n/a	3/8/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-53R	0.013	n/a	3/12/2019	0.0125ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-54	0.013	n/a	3/7/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-55	0.013	n/a	3/8/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-55R	0.013	n/a	3/7/2019	0.0125ND	No	15	80	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-56	0.013	n/a	3/7/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-16R	0.013	n/a	3/11/2019	0.0125ND	No	15	13.33	n/a	0.007533	NP (normality) 1 of 2
Copper (mg/L)	GWC-17R	0.013	n/a	3/12/2019	0.0125ND	No	15	40	n/a	0.007533	NP (xform) 1 of 2
Copper (mg/L)	GWC-18	0.025	n/a	3/12/2019	0.0125ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-18R	0.013	n/a	3/12/2019	0.0125ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-19R	0.013	n/a	3/12/2019	0.0125ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-20R	0.013	n/a	3/12/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-21R	0.013	n/a	3/11/2019	0.0125ND	No	15	53.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-22R	0.013	n/a	3/11/2019	0.0125ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-23R	0.013	n/a	3/12/2019	0.0125ND	No	15	66.67	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-24R	0.013	n/a	3/8/2019	0.0125ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWC-25R	0.025	n/a	3/8/2019	0.0125ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Copper (mg/L)	GWA-51R_51RZ	0.013	n/a	3/8/2019	0.0125ND	No	14	64.29	n/a	0.008612	NP (NDs) 1 of 2
Lead (mg/L)	GWA-36	0.0065	n/a	3/6/2019	0.0025ND	No	20	65	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-36R	0.0069	n/a	3/7/2019	0.0025ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-37	0.0065	n/a	3/6/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-38	0.0065	n/a	3/7/2019	0.0025ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-52	0.0050	n/a	3/7/2019	0.0025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-53	0.0065	n/a	3/8/2019	0.0025ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-53R	0.0065	n/a	3/12/2019	0.0025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-54	0.0050	n/a	3/7/2019	0.0025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-55	0.0065	n/a	3/8/2019	0.0025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-55R	0.0065	n/a	3/7/2019	0.0025ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-56	0.013	n/a	3/7/2019	0.0025ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-16R	0.0065	n/a	3/11/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-17R	0.013	n/a	3/12/2019	0.0025ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-18	0.013	n/a	3/12/2019	0.0025ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-18R	0.013	n/a	3/12/2019	0.0025ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-19R	0.013	n/a	3/12/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2

Intrawell Prediction Limit Summary Table – Metals Cells 3&4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Lead (mg/L)	GWC-20R	0.0050	n/a	3/12/2019	0.0025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-21R	0.013	n/a	3/11/2019	0.0025ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-22R	0.013	n/a	3/11/2019	0.0025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-23R	0.013	n/a	3/12/2019	0.0025ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-24R	0.013	n/a	3/8/2019	0.0025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWC-25R	0.013	n/a	n/a	1 future	n/a	20	85	n/a	0.004291	NP (NDs) 1 of 2
Lead (mg/L)	GWA-51R_51RZ	0.0065	n/a	3/8/2019	0.0025ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-36	0.00025	n/a	3/6/2019	0.00025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-36R	0.00025	n/a	3/7/2019	0.00025ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-37	0.00025	n/a	3/6/2019	0.00025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-38	0.00025	n/a	3/7/2019	0.00025ND	No	20	80	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-52	0.00050	n/a	3/7/2019	0.00025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-53	0.00050	n/a	3/8/2019	0.00025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-53R	0.00050	n/a	3/12/2019	0.00025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-54	0.00050	n/a	3/7/2019	0.00025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-55	0.00050	n/a	3/8/2019	0.00025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-55R	0.00050	n/a	3/7/2019	0.00025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-56	0.00050	n/a	3/7/2019	0.00025ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-16R	0.00025	n/a	3/11/2019	0.00025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-17R	0.025	n/a	3/12/2019	0.00025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-18	0.025	n/a	3/12/2019	0.00025ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-18R	0.025	n/a	3/12/2019	0.00025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-19R	0.025	n/a	3/12/2019	0.00025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-20R	0.025	n/a	3/12/2019	0.00025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-21R	0.025	n/a	3/11/2019	0.00025ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-22R	0.025	n/a	3/11/2019	0.00025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-23R	0.025	n/a	3/12/2019	0.00025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-24R	0.025	n/a	3/8/2019	0.00025ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWC-25R	0.025	n/a	3/8/2019	0.00025ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Mercury (mg/L)	GWA-51R_51RZ	0.00025	n/a	3/8/2019	0.00025ND	No	20	75	n/a	0.004291	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-36	0.014	n/a	3/6/2019	0.005ND	No	15	80	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-36R	0.010	n/a	3/7/2019	0.005ND	No	15	53.33	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-37	0.029	n/a	3/6/2019	0.005ND	No	15	0	No	0.000...	Param 1 of 2
Nickel (mg/L)	GWA-38	0.031	n/a	3/7/2019	0.005ND	No	15	26.67	x^(1/3)	0.000...	Param 1 of 2
Nickel (mg/L)	GWA-52	0.0050	n/a	3/7/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-53	0.0050	n/a	3/8/2019	0.005ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-53R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-54	0.0050	n/a	3/7/2019	0.005ND	No	15	80	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-55	0.0050	n/a	3/8/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-55R	0.0050	n/a	3/7/2019	0.005ND	No	15	66.67	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-56	0.0050	n/a	3/7/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-16R	0.038	n/a	3/11/2019	0.005ND	No	15	0	No	0.000...	Param 1 of 2
Nickel (mg/L)	GWC-17R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-18	0.0050	n/a	3/12/2019	0.005ND	No	15	66.67	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-18R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-19R	0.0050	n/a	3/12/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-20R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-21R	0.026	n/a	3/11/2019	0.005ND	No	15	40	n/a	0.007533	NP (normality) 1 of 2
Nickel (mg/L)	GWC-22R	0.0050	n/a	3/11/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-23R	0.0050	n/a	3/12/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2

Intrawell Prediction Limit Summary Table – Metals Cells 3&4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Nickel (mg/L)	GWC-24R	0.0050	n/a	3/8/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWC-25R	0.0050	n/a	3/8/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Nickel (mg/L)	GWA-51R_51RZ	0.0050	n/a	3/8/2019	0.005ND	No	14	85.71	n/a	0.008612	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-36	0.010	n/a	3/6/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-36R	0.010	n/a	3/7/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-37	0.010	n/a	3/6/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-38	0.010	n/a	3/7/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-52	0.010	n/a	3/7/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-53	0.010	n/a	3/8/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-53R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-54	0.010	n/a	3/7/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-55	0.0050	n/a	n/a	1 future	n/a	20	85	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-55R	0.0050	n/a	n/a	1 future	n/a	20	90	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-56	0.0050	n/a	3/7/2019	0.005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-16R	0.010	n/a	3/11/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-17R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-18	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-18R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-19R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-20R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-21R	0.010	n/a	3/11/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-22R	0.010	n/a	3/11/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-23R	0.010	n/a	3/12/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-24R	0.010	n/a	3/8/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-25R	0.010	n/a	3/8/2019	0.005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Selenium (mg/L)	GWA-51R_51RZ	0.010	n/a	n/a	1 future	n/a	20	50	n/a	0.004291	NP (normality) 1 of 2
Silver (mg/L)	GWA-36	0.010	n/a	3/6/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-36R	0.010	n/a	3/7/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-37	0.010	n/a	3/6/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-38	0.0050	n/a	3/7/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-52	0.010	n/a	3/7/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-53	0.010	n/a	3/8/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-53R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-54	0.010	n/a	3/7/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-55	0.010	n/a	3/8/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-55R	0.010	n/a	3/7/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-56	0.010	n/a	3/7/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-16R	0.0050	n/a	3/11/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-17R	0.0050	n/a	3/12/2019	0.005ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-18	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-18R	0.0050	n/a	3/12/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-19R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-20R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-21R	0.010	n/a	3/11/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-22R	0.010	n/a	3/11/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-23R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-24R	0.010	n/a	3/8/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWC-25R	0.010	n/a	3/8/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Silver (mg/L)	GWA-51R_51RZ	0.010	n/a	3/8/2019	0.005ND	No	14	100	n/a	0.008612	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-36	0.00050	n/a	3/6/2019	0.0005ND	No	20	90	n/a	0.004291	NP (NDs) 1 of 2

Intrawell Prediction Limit Summary Table – Metals Cells 3&4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Thallium (mg/L)	GWA-36R	0.00050	n/a	3/7/2019	0.0005ND	No	19	89.47	n/a	0.004832	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-37	0.0010	n/a	3/6/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-38	0.0010	n/a	3/7/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-52	0.00050	n/a	3/7/2019	0.0005ND	No	20	85	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-53	0.00050	n/a	3/8/2019	0.0005ND	No	20	55	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-53R	0.0010	n/a	3/12/2019	0.0005ND	No	19	100	n/a	0.004832	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-54	0.00050	n/a	3/7/2019	0.0005ND	No	20	50	n/a	0.004291	NP (normality) 1 of 2
Thallium (mg/L)	GWA-55	0.00050	n/a	3/8/2019	0.0005ND	No	20	65	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-55R	0.00050	n/a	3/7/2019	0.0005ND	No	20	95	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-56	0.0010	n/a	3/7/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-16R	0.0022	n/a	n/a	1 future	n/a	20	20	n/a	0.004291	NP (normality) 1 of 2
Thallium (mg/L)	GWC-17R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-18	0.0050	n/a	3/12/2019	0.0005ND	No	20	40	n/a	0.004291	NP (normality) 1 of 2
Thallium (mg/L)	GWC-18R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-19R	0.0010	n/a	3/12/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-20R	0.0050	n/a	3/12/2019	0.0005ND	No	20	45	n/a	0.004291	NP (normality) 1 of 2
Thallium (mg/L)	GWC-21R	0.0050	n/a	3/11/2019	0.0005ND	No	20	40	n/a	0.004291	NP (normality) 1 of 2
Thallium (mg/L)	GWC-22R	0.0050	n/a	n/a	1 future	n/a	20	50	n/a	0.004291	NP (normality) 1 of 2
Thallium (mg/L)	GWC-23R	0.0033	n/a	3/12/2019	0.0005ND	No	19	31.58	n/a	0.004832	NP (normality) 1 of 2
Thallium (mg/L)	GWC-24R	0.0010	n/a	3/8/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-25R	0.0010	n/a	3/8/2019	0.0005ND	No	20	100	n/a	0.004291	NP (NDs) 1 of 2
Thallium (mg/L)	GWA-51R_51RZ	0.00050	n/a	3/8/2019	0.0005ND	No	20	70	n/a	0.004291	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-36	0.010	n/a	3/6/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-36R	0.0073	n/a	3/7/2019	0.005ND	No	15	66.67	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-37	0.0050	n/a	3/6/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-38	0.0050	n/a	3/7/2019	0.005ND	No	15	66.67	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-52	0.0050	n/a	3/7/2019	0.005ND	No	15	80	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-53	0.0050	n/a	3/8/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-53R	0.0050	n/a	3/12/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-54	0.0050	n/a	3/7/2019	0.005ND	No	15	73.33	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-55	0.0050	n/a	3/8/2019	0.005ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-55R	0.0050	n/a	3/7/2019	0.005ND	No	15	73.33	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-56	0.0050	n/a	3/7/2019	0.005ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-16R	0.0050	n/a	3/11/2019	0.005ND	No	15	60	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-17R	0.0050	n/a	3/12/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-18	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-18R	0.0050	n/a	3/12/2019	0.005ND	No	15	86.67	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-19R	0.010	n/a	3/12/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-20R	0.0050	n/a	3/12/2019	0.005ND	No	15	93.33	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-21R	0.010	n/a	3/11/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-22R	0.010	n/a	3/11/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-23R	0.0050	n/a	3/12/2019	0.005ND	No	15	80	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-24R	0.0050	n/a	3/8/2019	0.005ND	No	15	73.33	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWC-25R	0.010	n/a	3/8/2019	0.005ND	No	15	100	n/a	0.007533	NP (NDs) 1 of 2
Vanadium (mg/L)	GWA-51R_51RZ	0.088	n/a	3/8/2019	0.005ND	No	14	42.86	x^(1/3)	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-36	0.69	n/a	3/6/2019	0.56	No	15	0	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-36R	0.47	n/a	3/7/2019	0.043	No	15	0	sqrt(x)	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-37	0.014	n/a	n/a	1 future	n/a	15	6.667	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-38	0.041	n/a	3/7/2019	0.005ND	No	15	20	n/a	0.007533	NP (xform) 1 of 2
Zinc (mg/L)	GWA-52	0.0050	n/a	3/7/2019	0.005ND	No	15	53.33	n/a	0.007533	NP (NDs) 1 of 2

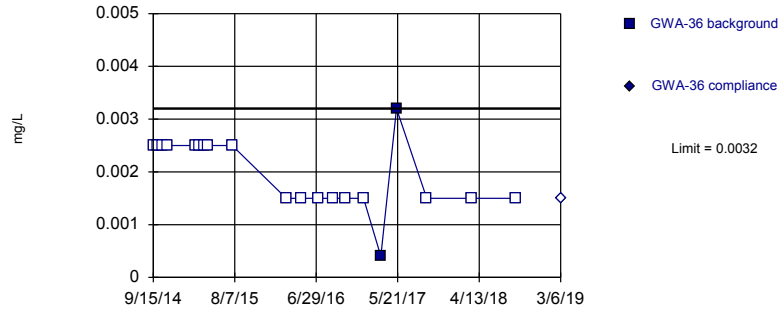
Intrawell Prediction Limit Summary Table – Metals Cells 3&4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/26/2019, 4:35 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Zinc (mg/L)	GWA-53	0.0057	n/a	3/8/2019	0.005ND	No	15	46.67	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-53R	0.0087	n/a	3/12/2019	0.005ND	No	15	40	sqrt(x)	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-54	0.009	n/a	3/7/2019	0.005ND	No	15	40	sqrt(x)	0.000...	Param 1 of 2
Zinc (mg/L)	GWA-55	0.0050	n/a	3/8/2019	0.005ND	No	15	66.67	n/a	0.007533	NP (NDs) 1 of 2
Zinc (mg/L)	GWA-55R	0.0082	n/a	3/7/2019	0.005ND	No	15	60	n/a	0.007533	NP (NDs) 1 of 2
Zinc (mg/L)	GWA-56	0.0063	n/a	3/7/2019	0.005ND	No	15	46.67	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-16R	0.096	n/a	3/11/2019	0.024	No	15	6.667	x^3	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-17R	0.022	n/a	n/a	1 future	n/a	14	14.29	n/a	0.008612	NP (normality) 1 of 2
Zinc (mg/L)	GWC-18	0.022	n/a	3/12/2019	0.005ND	No	15	13.33	n/a	0.007533	NP (normality) 1 of 2
Zinc (mg/L)	GWC-18R	0.0050	n/a	3/12/2019	0.005ND	No	15	53.33	n/a	0.007533	NP (NDs) 1 of 2
Zinc (mg/L)	GWC-19R	0.0081	n/a	3/12/2019	0.005ND	No	15	26.67	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-20R	0.0091	n/a	3/12/2019	0.005ND	No	15	26.67	sqrt(x)	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-21R	0.0071	n/a	n/a	1 future	n/a	15	20	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-22R	0.0071	n/a	n/a	1 future	n/a	15	40	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-23R	0.0053	n/a	3/12/2019	0.005ND	No	15	40	No	0.000...	Param 1 of 2
Zinc (mg/L)	GWC-24R	0.0068	n/a	3/8/2019	0.005ND	No	15	60	n/a	0.007533	NP (NDs) 1 of 2
Zinc (mg/L)	GWC-25R	0.0050	n/a	3/8/2019	0.005ND	No	15	60	n/a	0.007533	NP (NDs) 1 of 2
Zinc (mg/L)	GWA-51R_51RZ	0.12	n/a	3/8/2019	0.005ND	No	14	28.57	n/a	0.008612	NP (xform) 1 of 2

Within Limit

Prediction Limit
Intrawell Non-parametric

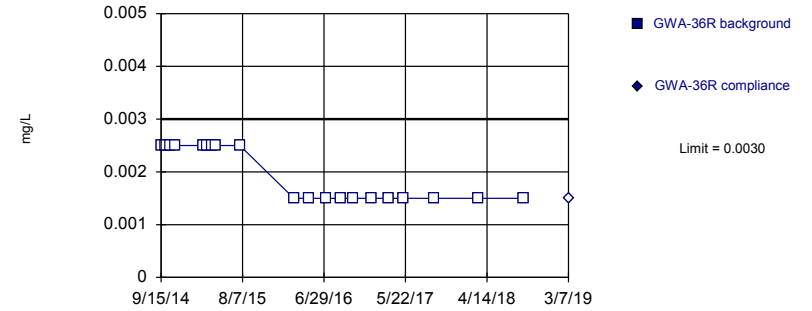


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

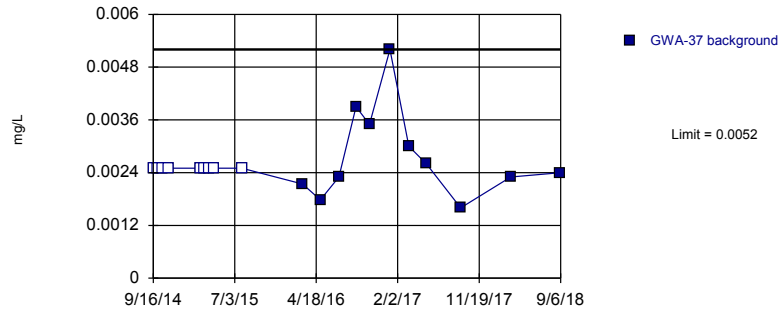


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-37 (bg)

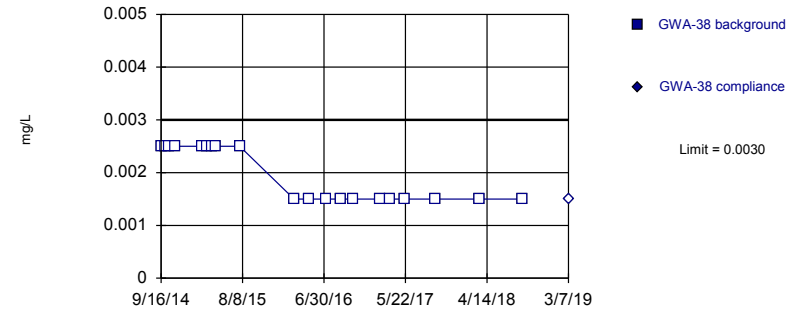


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 45% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.003	
5/2/2016	<0.003	
7/7/2016	<0.003 (*)	
9/7/2016	<0.003	
10/25/2016	<0.003	
1/5/2017	<0.003	
3/15/2017	0.0004 (J)	
5/17/2017	0.0032	
9/15/2017	<0.003	
3/12/2018	<0.003	
9/6/2018	<0.003	
3/6/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.003	
5/2/2016	<0.003	
7/6/2016	<0.003 (*)	
9/7/2016	<0.003	
10/25/2016	<0.003	
1/5/2017	<0.003	
3/14/2017	<0.003	
5/16/2017	<0.003	
9/15/2017	<0.003	
3/12/2018	<0.003	
9/6/2018	<0.003	
3/7/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/1/2016	0.00214 (J)
5/3/2016	0.00178 (J)
7/8/2016	0.0023 (J)
9/7/2016	0.0039
10/25/2016	0.0035
1/6/2017	0.0052
3/14/2017	0.003
5/16/2017	0.0026 (J)
9/15/2017	0.0016 (J)
3/12/2018	0.0023 (J)
9/6/2018	0.0024 (J)
3/6/2019	0.0019 (X)

Prediction Limit

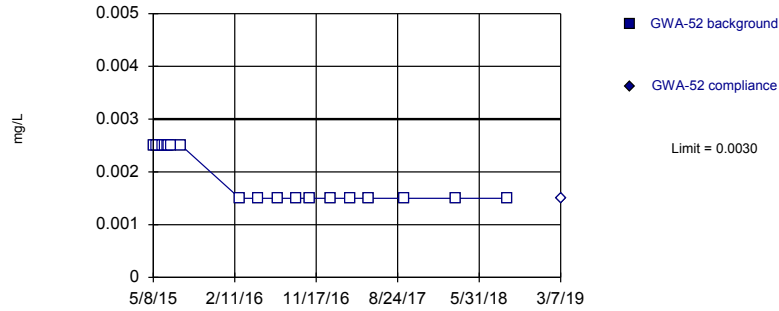
Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/6/2015	<0.005	
4/22/2015	<0.005	
7/28/2015	<0.005	
3/2/2016	<0.003	
5/3/2016	<0.003	
7/7/2016	<0.003	
9/8/2016	<0.003	
10/25/2016	<0.003	
2/9/2017	<0.003	
3/23/2017	<0.003	
5/17/2017	<0.003	
9/19/2017	<0.003	
3/13/2018	<0.003	
9/6/2018	<0.003	
3/7/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

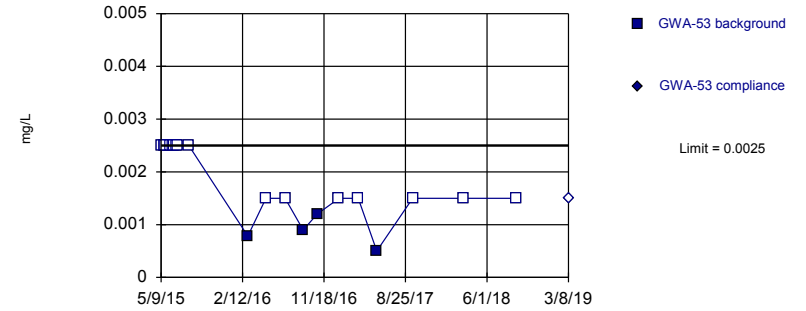


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

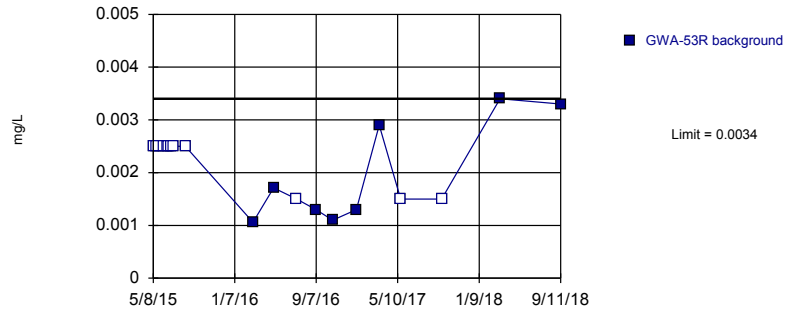
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit
Intrawell Non-parametric, GWA-53R (bg)

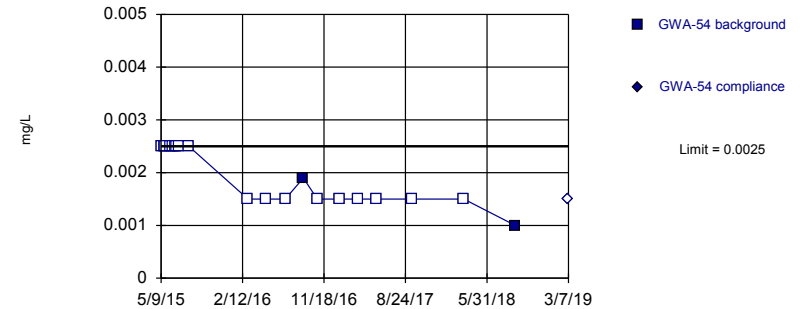


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 60% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
2/29/2016	<0.003	
5/4/2016	<0.003	
7/8/2016	<0.003 (*)	
9/8/2016	<0.003	
10/26/2016	<0.003	
1/6/2017	<0.003	
3/15/2017	<0.003	
5/17/2017	<0.003	
9/15/2017	<0.003	
3/13/2018	<0.003	
9/6/2018	<0.003	
3/7/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/17/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	0.000782 (J)	
5/3/2016	<0.003	
7/8/2016	<0.003 (*)	
9/8/2016	0.0009 (J)	
10/26/2016	0.0012 (J)	
1/9/2017	<0.003	
3/16/2017	<0.003	
5/19/2017	0.0005 (J)	
9/19/2017	<0.003	
3/13/2018	<0.003	
9/11/2018	<0.003	
3/8/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	0.00106 (J)
5/3/2016	0.00171 (J)
7/11/2016	<0.003 (*)
9/7/2016	0.0013 (J)
10/27/2016	0.0011 (J)
1/6/2017	0.0013 (J)
3/16/2017	0.0029 (J)
5/19/2017	<0.003
9/19/2017	<0.003
3/13/2018	0.0034
9/11/2018	0.0033
3/12/2019	0.002 (X)

Prediction Limit

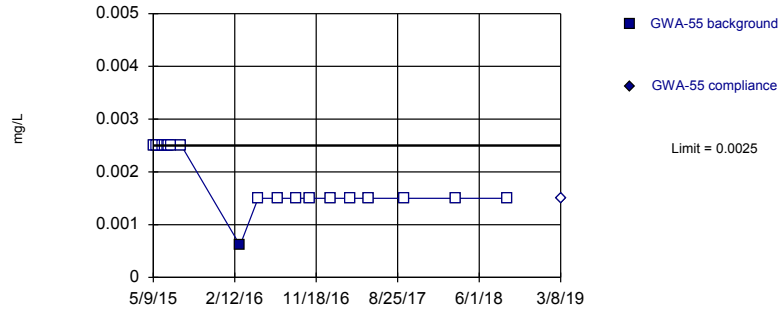
Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.003	
5/4/2016	<0.003	
7/8/2016	<0.003	
9/8/2016	0.0019 (J)	
10/26/2016	<0.003	
1/9/2017	<0.003	
3/15/2017	<0.003	
5/18/2017	<0.003	
9/15/2017	<0.003	
3/13/2018	<0.003	
9/6/2018	0.001 (J)	
3/7/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

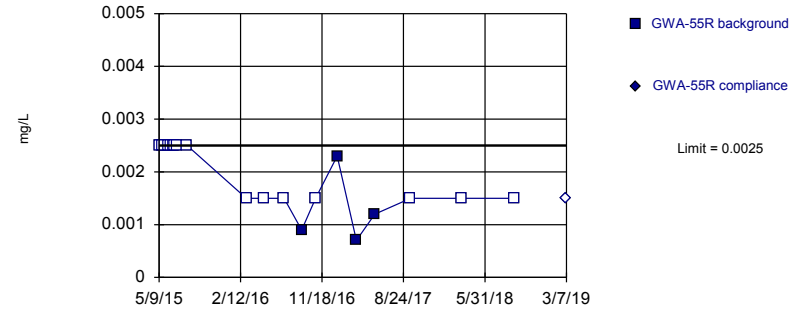


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

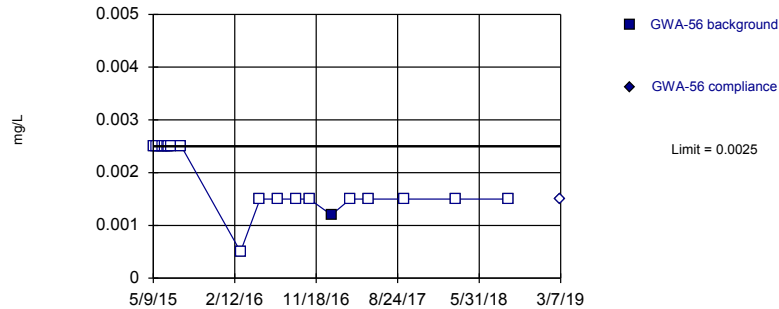


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

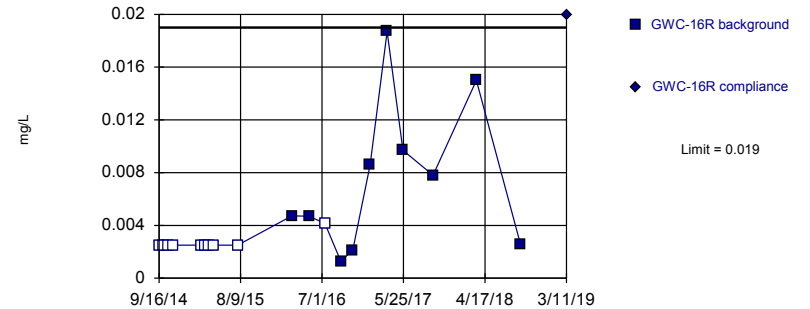


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.005	
5/18/2015	<0.005	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/13/2015	<0.005	
3/2/2016	0.000608 (J)	
5/3/2016	<0.003	
7/11/2016	<0.003 (*)	
9/9/2016	<0.003	
10/26/2016	<0.003	
1/9/2017	<0.003	
3/16/2017	<0.003	
5/18/2017	<0.003	
9/15/2017	<0.003	
3/12/2018	<0.003	
9/7/2018	<0.003	
3/8/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.005	
5/18/2015	<0.005	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/13/2015	<0.005	
3/3/2016	<0.003	
5/3/2016	<0.003	
7/11/2016	<0.003 (*)	
9/9/2016	0.0009 (J)	
10/27/2016	<0.003	
1/9/2017	0.0023 (J)	
3/16/2017	0.0007 (J)	
5/18/2017	0.0012 (J)	
9/18/2017	<0.003	
3/12/2018	<0.003	
9/7/2018	<0.003	
3/7/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.005	
5/19/2015	<0.005	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/13/2015	<0.005	
3/3/2016	<0.001	
5/9/2016	<0.003	
7/11/2016	<0.003	
9/9/2016	<0.003	
10/26/2016	<0.003	
1/9/2017	0.0012 (J)	
3/15/2017	<0.003	
5/18/2017	<0.003	
9/15/2017	<0.003	
3/13/2018	<0.003	
9/7/2018	<0.003	
3/7/2019		<0.003

Prediction Limit

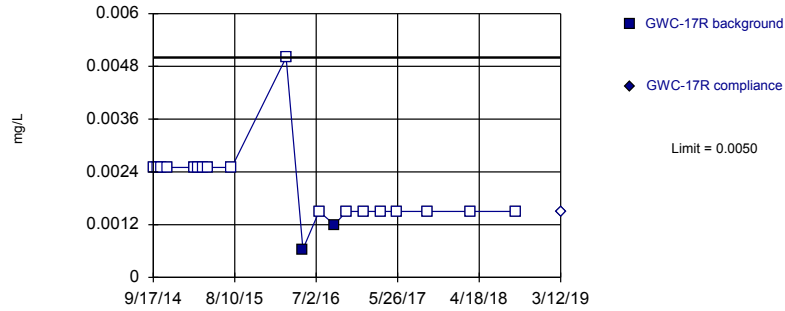
Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/6/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/3/2016	0.00472 (D)	
5/10/2016	0.0047	
7/13/2016	<0.0083 (*)	
9/15/2016	0.0013 (J)	
11/2/2016	0.0021 (J)	
1/11/2017	0.0086	
3/20/2017	0.0187	
5/23/2017	0.0097	
9/21/2017	0.0078	
3/14/2018	0.015	
9/7/2018	0.0026 (J)	
3/11/2019		0.02

Within Limit

Prediction Limit
Intrawell Non-parametric

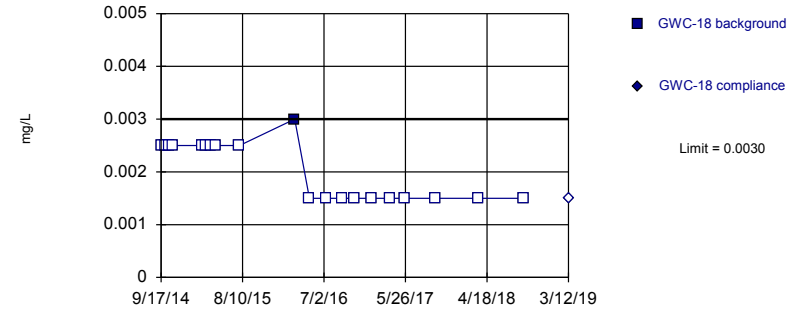


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:08 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

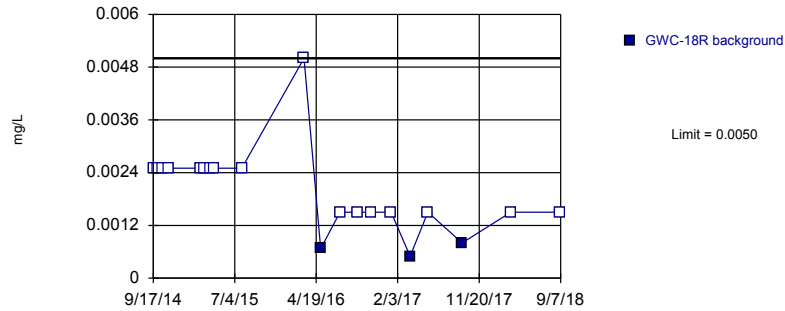
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit
Intrawell Non-parametric, GWC-18R

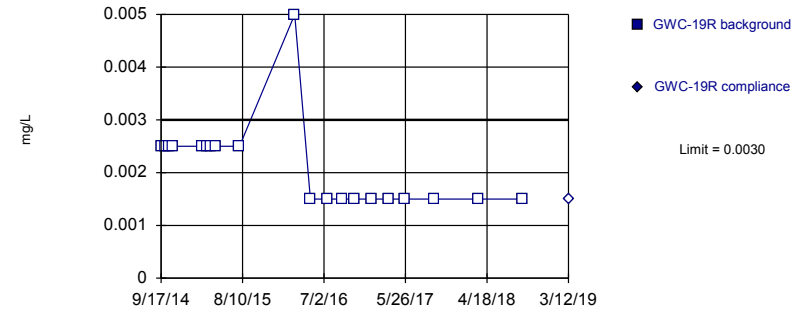


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/6/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/4/2016	<0.01	
5/10/2016	0.000641 (J)	
7/14/2016	<0.003 (*)	
9/14/2016	0.0012 (J)	
11/1/2016	<0.003	
1/11/2017	<0.003	
3/21/2017	<0.003	
5/23/2017	<0.003	
9/22/2017	<0.003	
3/14/2018	<0.003	
9/11/2018	<0.003	
3/12/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	0.003	
5/5/2016	<0.003	
7/13/2016	<0.003 (*)	
9/13/2016	<0.003	
10/31/2016	<0.003	
1/12/2017	<0.003	
3/23/2017	<0.003	
5/23/2017	<0.003	
9/25/2017	<0.003	
3/14/2018	<0.003	
9/11/2018	<0.003	
3/12/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R
9/17/2014	<0.005
10/4/2014	<0.005
10/21/2014	<0.005
11/11/2014	<0.005
3/3/2015	<0.005
3/18/2015	<0.005
4/7/2015	<0.005
4/23/2015	<0.005
7/29/2015	<0.005
3/7/2016	<0.01
5/5/2016	0.000672 (J)
7/13/2016	<0.003 (*)
9/12/2016	<0.003
11/1/2016	<0.003
1/11/2017	<0.003
3/20/2017	0.0005 (J)
5/22/2017	<0.003
9/21/2017	0.0008 (J)
3/14/2018	<0.003
9/7/2018	<0.003
3/12/2019	0.00091 (X)

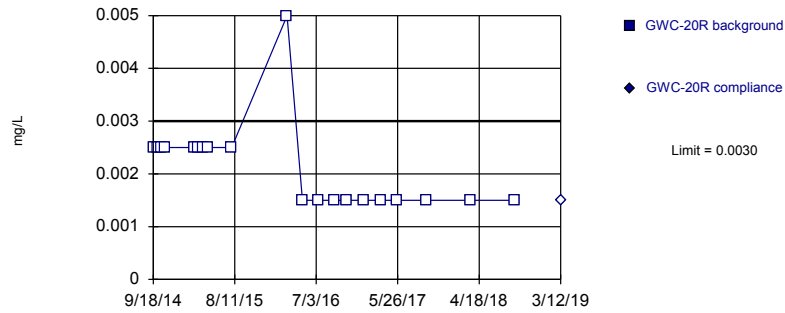
Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.01	
5/9/2016	<0.003	
7/14/2016	<0.003 (*)	
9/12/2016	<0.003	
10/31/2016	<0.003	
1/11/2017	<0.003	
3/21/2017	<0.003	
5/22/2017	<0.003	
9/20/2017	<0.003	
3/14/2018	<0.003	
9/10/2018	<0.003	
3/12/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

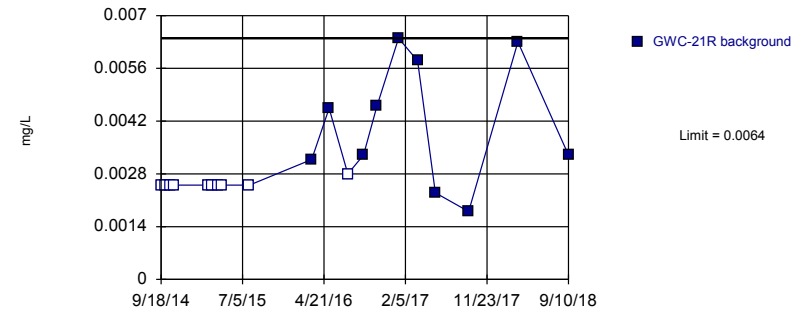


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-21R

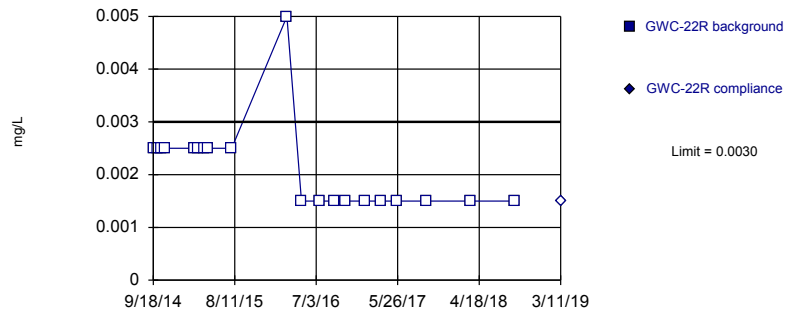


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

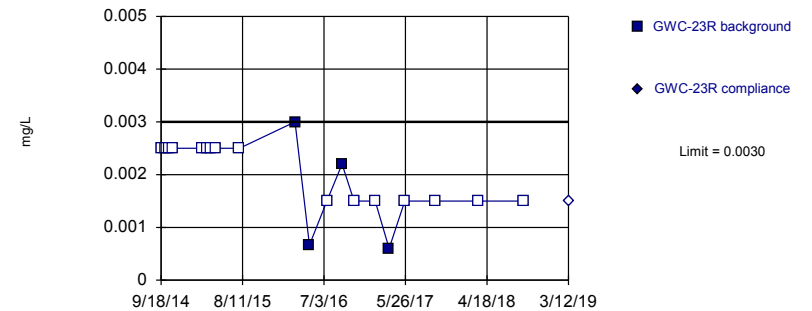


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.01	
5/9/2016	<0.003	
7/14/2016	<0.003 (*)	
9/12/2016	<0.003	
10/31/2016	<0.003	
1/12/2017	<0.003	
3/22/2017	<0.003	
5/22/2017	<0.003	
9/19/2017	<0.003	
3/14/2018	<0.003	
9/10/2018	<0.003	
3/12/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R
9/18/2014	<0.005
10/5/2014	<0.005
10/22/2014	<0.005
11/5/2014	<0.005
3/4/2015	<0.005
3/19/2015	<0.005
4/8/2015	<0.005
4/24/2015	<0.005
7/30/2015	<0.005
3/8/2016	0.00318
5/9/2016	0.00454
7/15/2016	<0.0056 (*)
9/9/2016	0.0033
10/27/2016	0.0046
1/12/2017	0.0064
3/21/2017	0.0058
5/23/2017	0.0023 (J)
9/19/2017	0.0018 (J)
3/14/2018	0.0063
9/10/2018	0.0033
3/11/2019	0.0029 (X)

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/8/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/7/2016	<0.01	
5/5/2016	<0.003	
7/14/2016	<0.003	
9/12/2016	<0.003	
10/27/2016	<0.003	
1/13/2017	<0.003	
3/20/2017	<0.003	
5/23/2017	<0.003	
9/19/2017	<0.003	
3/13/2018	<0.003	
9/7/2018	<0.003	
3/11/2019		<0.003

Prediction Limit

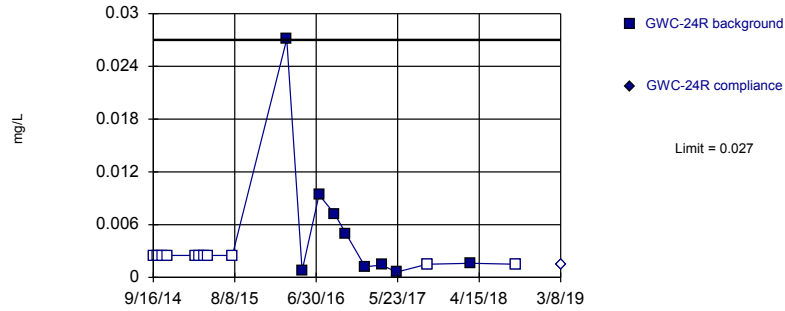
Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/9/2016	0.003	
5/6/2016	0.000666 (J)	
7/15/2016	<0.003 (*)	
9/14/2016	0.0022 (J)	
11/1/2016	<0.003	
1/25/2017	<0.003	
3/22/2017	0.0006 (J)	
5/24/2017	<0.003	
9/21/2017	<0.003	
3/14/2018	<0.003	
9/11/2018	<0.003	
3/12/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

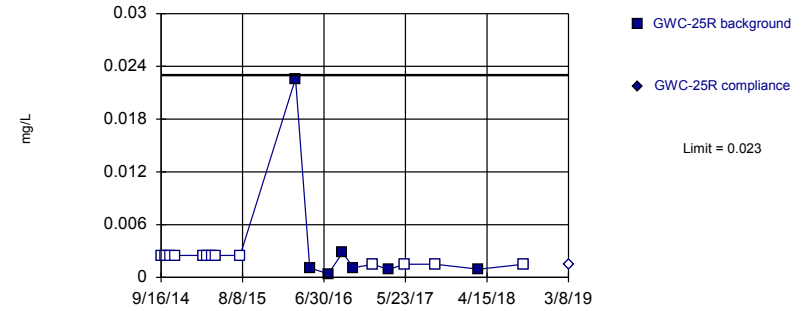


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 55% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

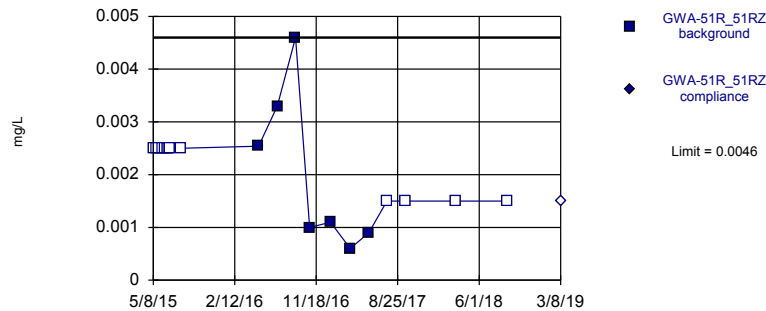


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

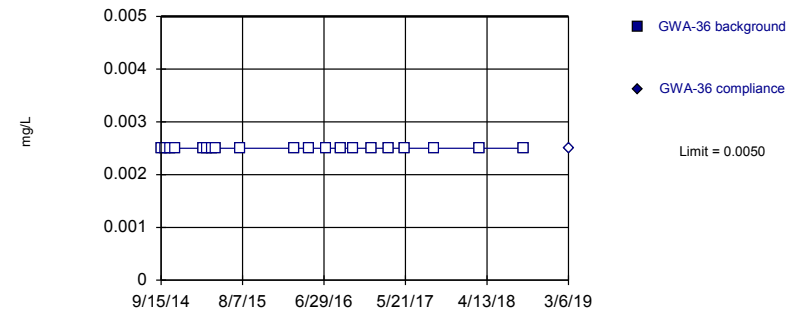


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/4/2016	0.0271 (J)	
5/5/2016	0.000761 (J)	
7/12/2016	0.0094	
9/13/2016	0.0072	
10/27/2016	0.005	
1/13/2017	0.0012 (J)	
3/20/2017	0.0014 (J)	
5/19/2017	0.0006 (J)	
9/19/2017	<0.003	
3/13/2018	0.0016 (J)	
9/11/2018	<0.003	
3/8/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/9/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	0.0226 (J)	
5/4/2016	0.00107 (J)	
7/18/2016	0.0004 (J)	
9/13/2016	0.0028 (J)	
10/27/2016	0.0011 (J)	
1/13/2017	<0.003	
3/16/2017	0.0009 (J)	
5/19/2017	<0.003	
9/19/2017	<0.003	
3/13/2018	0.00093 (J)	
9/11/2018	<0.003	
3/8/2019		<0.003

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
5/4/2016	0.00254 (JD)	
7/7/2016	0.0033 (D)	
9/8/2016	0.0046 (D)	
10/26/2016	0.001 (JD)	
1/6/2017	0.0011 (JD)	
3/15/2017	0.0006 (JD)	
5/18/2017	0.0009 (JD)	
7/19/2017	<0.003 (D)	
9/19/2017	<0.003 (D)	
3/13/2018	<0.003	
9/7/2018	<0.003	
3/8/2019		<0.003

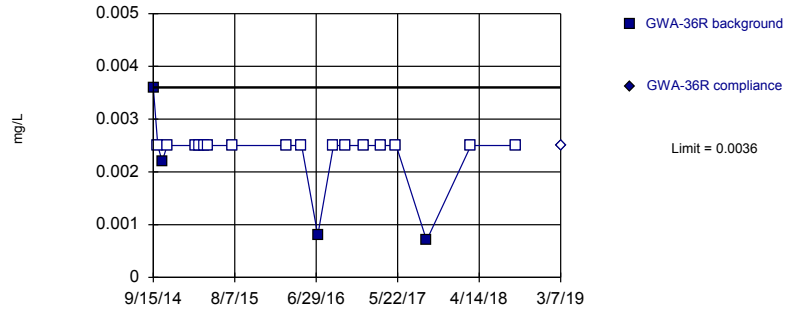
Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.005	
5/2/2016	<0.005	
7/7/2016	<0.005	
9/7/2016	<0.005	
10/25/2016	<0.005	
1/5/2017	<0.005	
3/15/2017	<0.005	
5/17/2017	<0.005	
9/15/2017	<0.005	
3/12/2018	<0.005	
9/6/2018	<0.005	
3/6/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

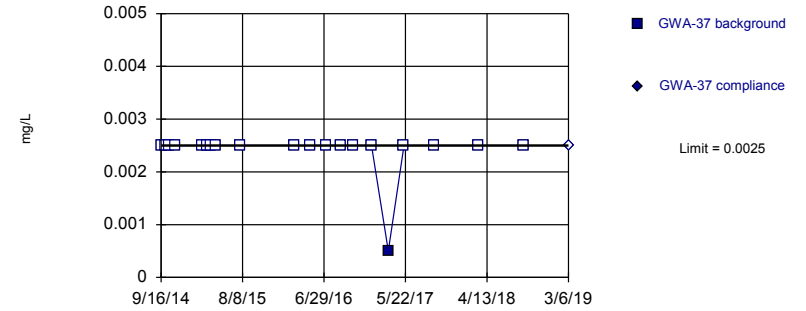


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

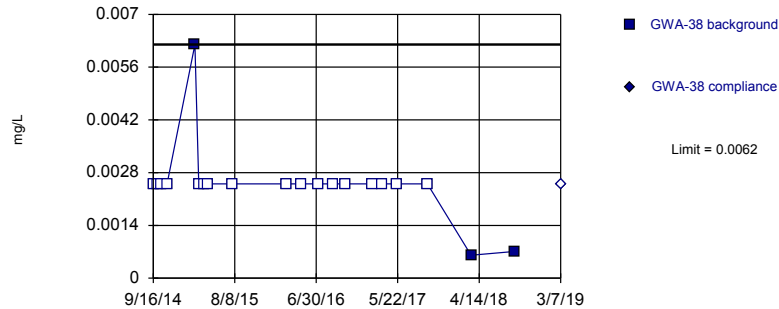


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:09 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

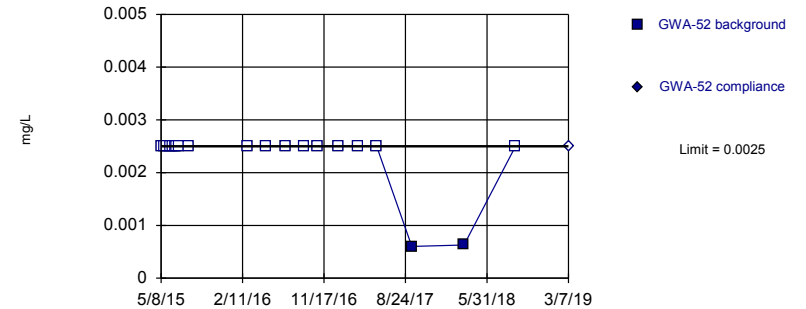


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.0036 (J)	
10/3/2014	<0.005	
10/20/2014	0.0022 (J)	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.005	
5/2/2016	<0.005	
7/6/2016	0.0008 (J)	
9/7/2016	<0.005	
10/25/2016	<0.005	
1/5/2017	<0.005	
3/14/2017	<0.005	
5/16/2017	<0.005	
9/15/2017	0.0007 (J)	
3/12/2018	<0.005	
9/6/2018	<0.005	
3/7/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/22/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.005	
5/3/2016	<0.005	
7/8/2016	<0.005	
9/7/2016	<0.005	
10/25/2016	<0.005	
1/6/2017	<0.005	
3/14/2017	0.0005 (J)	
5/16/2017	<0.005	
9/15/2017	<0.005	
3/12/2018	<0.005	
9/6/2018	<0.005	
3/6/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	0.0062	
3/17/2015	<0.005	
4/6/2015	<0.005	
4/22/2015	<0.005	
7/28/2015	<0.005	
3/2/2016	<0.005	
5/3/2016	<0.005	
7/7/2016	<0.005	
9/8/2016	<0.005	
10/25/2016	<0.005	
2/9/2017	<0.005	
3/23/2017	<0.005	
5/17/2017	<0.005	
9/19/2017	<0.005	
3/13/2018	0.00061 (J)	
9/6/2018	0.00071 (J)	
3/7/2019		<0.005

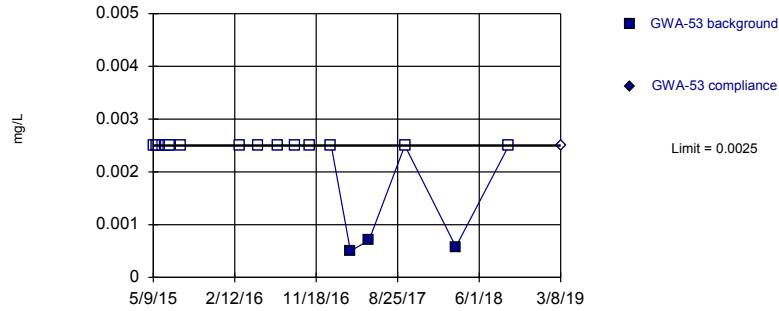
Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
2/29/2016	<0.005	
5/4/2016	<0.005	
7/8/2016	<0.005	
9/8/2016	<0.005	
10/26/2016	<0.005	
1/6/2017	<0.005	
3/15/2017	<0.005	
5/17/2017	<0.005	
9/15/2017	0.0006 (J)	
3/13/2018	0.00063 (J)	
9/6/2018	<0.005	
3/7/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

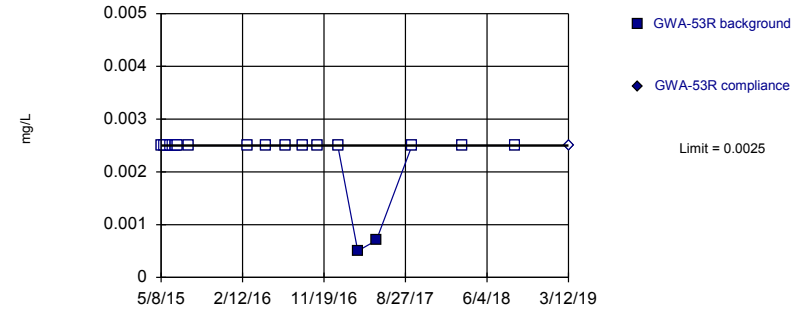


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

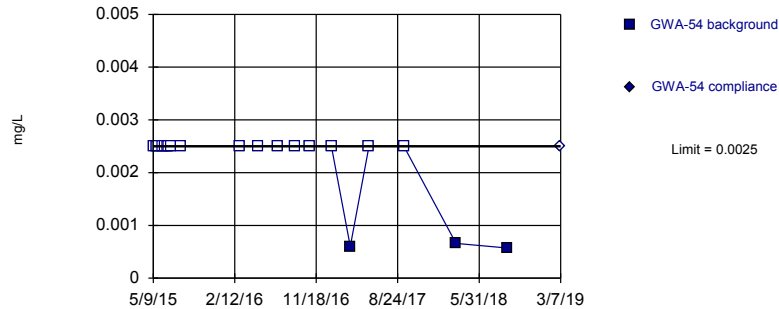


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

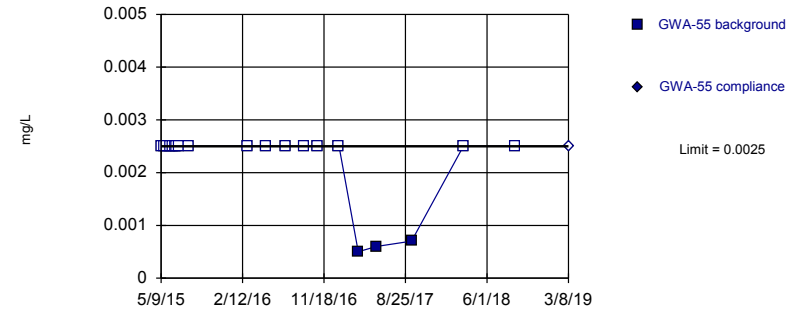


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/17/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.005	
5/3/2016	<0.005	
7/8/2016	<0.005	
9/8/2016	<0.005	
10/26/2016	<0.005	
1/9/2017	<0.005	
3/16/2017	0.0005 (J)	
5/19/2017	0.0007 (J)	
9/19/2017	<0.005	
3/13/2018	0.00058 (J)	
9/11/2018	<0.005	
3/8/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.005	
5/3/2016	<0.005	
7/11/2016	<0.005	
9/7/2016	<0.005	
10/27/2016	<0.005	
1/6/2017	<0.005	
3/16/2017	0.0005 (J)	
5/19/2017	0.0007 (J)	
9/19/2017	<0.005	
3/13/2018	<0.005	
9/11/2018	<0.005	
3/12/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.005	
5/4/2016	<0.005	
7/8/2016	<0.005	
9/8/2016	<0.005	
10/26/2016	<0.005	
1/9/2017	<0.005	
3/15/2017	0.0006 (J)	
5/18/2017	<0.005	
9/15/2017	<0.005	
3/13/2018	0.00066 (J)	
9/6/2018	0.00057 (J)	
3/7/2019		<0.005

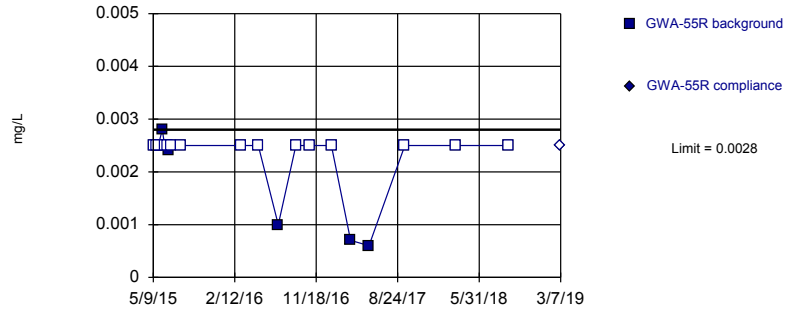
Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.005	
5/18/2015	<0.005	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/13/2015	<0.005	
3/2/2016	<0.005	
5/3/2016	<0.005	
7/11/2016	<0.005	
9/9/2016	<0.005	
10/26/2016	<0.005	
1/9/2017	<0.005	
3/16/2017	0.0005 (J)	
5/18/2017	0.0006 (J)	
9/15/2017	0.0007 (J)	
3/12/2018	<0.005	
9/7/2018	<0.005	
3/8/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

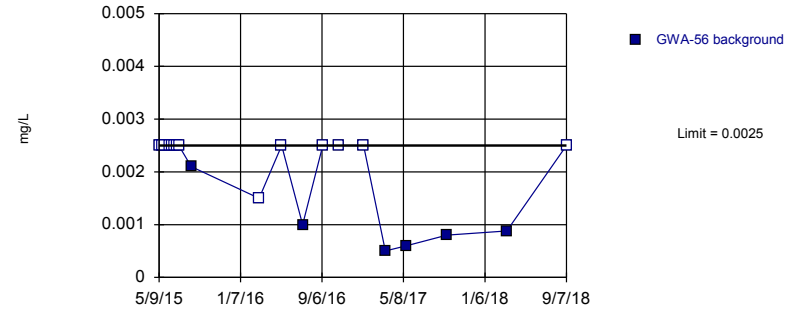


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-56 (bg)

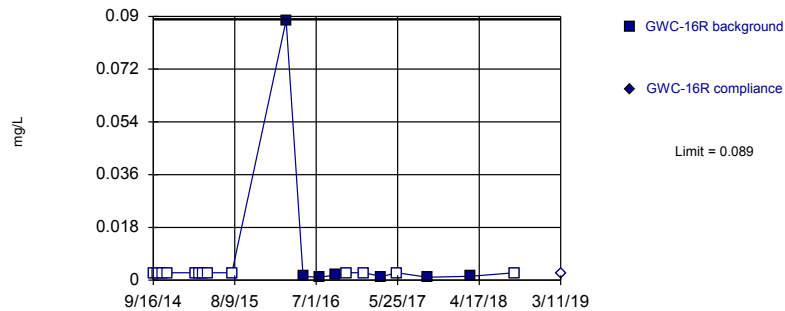


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

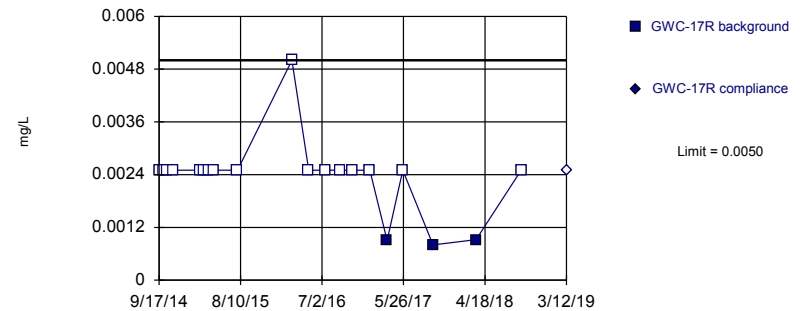


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.005	
5/18/2015	<0.005	
5/26/2015	<0.005	
6/9/2015	0.0028 (J)	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	0.0024 (J)	
7/7/2015	<0.005	
8/13/2015	<0.005	
3/3/2016	<0.005	
5/3/2016	<0.005	
7/11/2016	0.001 (J)	
9/9/2016	<0.005	
10/27/2016	<0.005	
1/9/2017	<0.005	
3/16/2017	0.0007 (J)	
5/18/2017	0.0006 (J)	
9/18/2017	<0.005	
3/12/2018	<0.005	
9/7/2018	<0.005	
3/7/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56
5/9/2015	<0.005
5/19/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	0.0021 (J)
3/3/2016	<0.003
5/9/2016	<0.005
7/11/2016	0.001 (J)
9/9/2016	<0.005
10/26/2016	<0.005
1/9/2017	<0.005
3/15/2017	0.0005 (J)
5/18/2017	0.0006 (J)
9/15/2017	0.0008 (J)
3/13/2018	0.00088 (J)
9/7/2018	<0.005
3/7/2019	0.00085 (X)

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/6/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/3/2016	0.08869 (JD)	
5/10/2016	0.00128 (J)	
7/13/2016	0.001 (J)	
9/15/2016	0.0017 (J)	
11/2/2016	<0.005	
1/11/2017	<0.005	
3/20/2017	0.0012 (J)	
5/23/2017	<0.005	
9/21/2017	0.001 (J)	
3/14/2018	0.0013 (J)	
9/7/2018	<0.005	
3/11/2019		<0.005

Prediction Limit

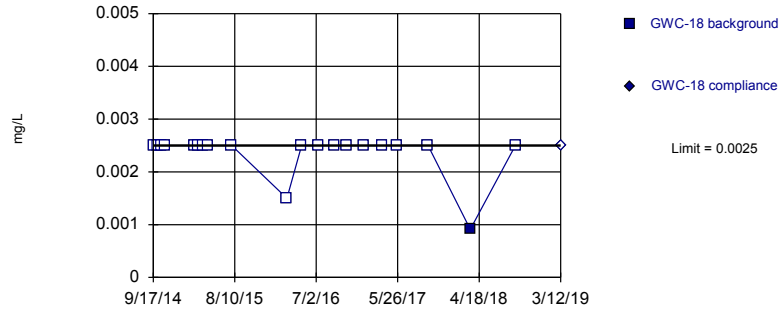
Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:35 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/6/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/4/2016	<0.01	
5/10/2016	<0.005	
7/14/2016	<0.005	
9/14/2016	<0.005	
11/1/2016	<0.005	
1/11/2017	<0.005	
3/21/2017	0.0009 (J)	
5/23/2017	<0.005 (*)	
9/22/2017	0.0008 (J)	
3/14/2018	0.00092 (J)	
9/11/2018	<0.005	
3/12/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

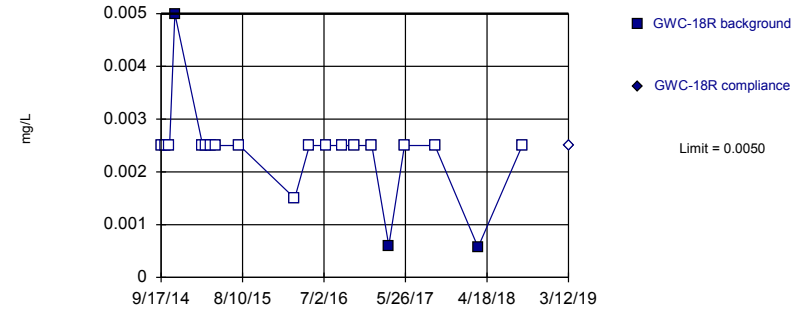


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

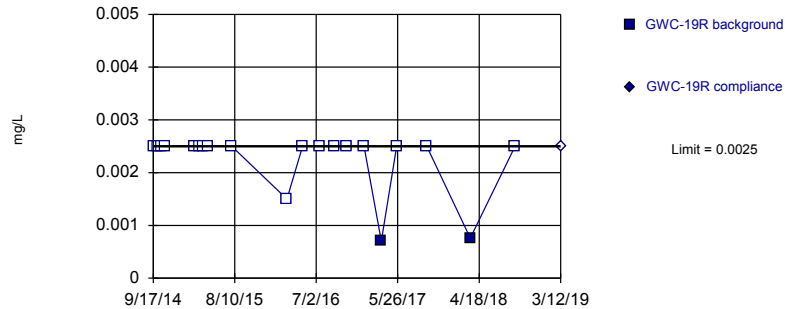


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

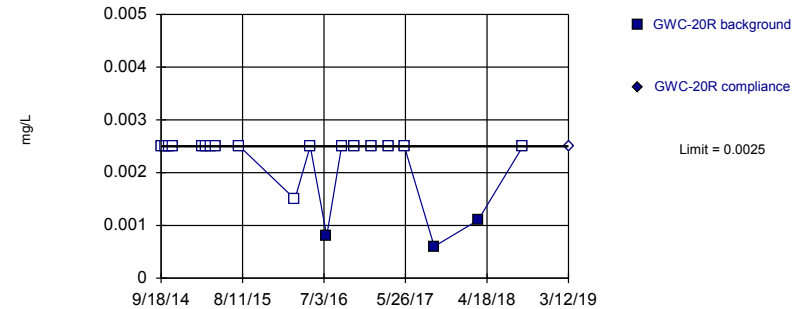


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:10 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.003	
5/5/2016	<0.005	
7/13/2016	<0.005	
9/13/2016	<0.005	
10/31/2016	<0.005	
1/12/2017	<0.005	
3/23/2017	<0.005	
5/23/2017	<0.005	
9/25/2017	<0.005	
3/14/2018	0.00091 (J)	
9/11/2018	<0.005	
3/12/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.003	
5/5/2016	<0.005	
7/13/2016	<0.005	
9/12/2016	<0.005	
11/1/2016	<0.005	
1/11/2017	<0.005	
3/20/2017	0.0006 (J)	
5/22/2017	<0.005 (*)	
9/21/2017	<0.005	
3/14/2018	0.00057 (J)	
9/7/2018	<0.005	
3/12/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.003	
5/9/2016	<0.005	
7/14/2016	<0.005	
9/12/2016	<0.005	
10/31/2016	<0.005	
1/11/2017	<0.005	
3/21/2017	0.0007 (J)	
5/22/2017	<0.005 (*)	
9/20/2017	<0.005	
3/14/2018	0.00076 (J)	
9/10/2018	<0.005	
3/12/2019		<0.005

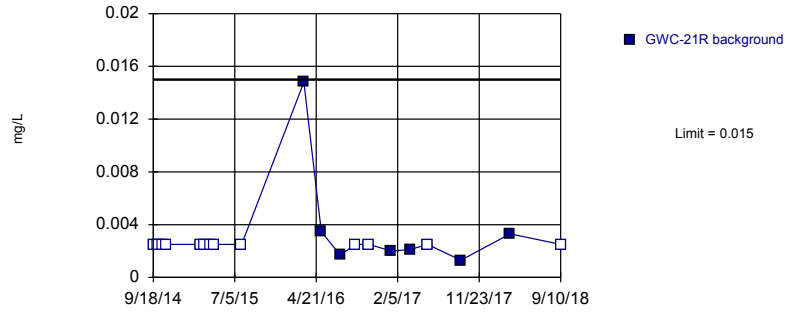
Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.003	
5/9/2016	<0.005	
7/14/2016	0.0008 (J)	
9/12/2016	<0.005	
10/31/2016	<0.005	
1/12/2017	<0.005	
3/22/2017	<0.005	
5/22/2017	<0.005 (*)	
9/19/2017	0.0006 (J)	
3/14/2018	0.0011 (J)	
9/10/2018	<0.005	
3/12/2019		<0.005

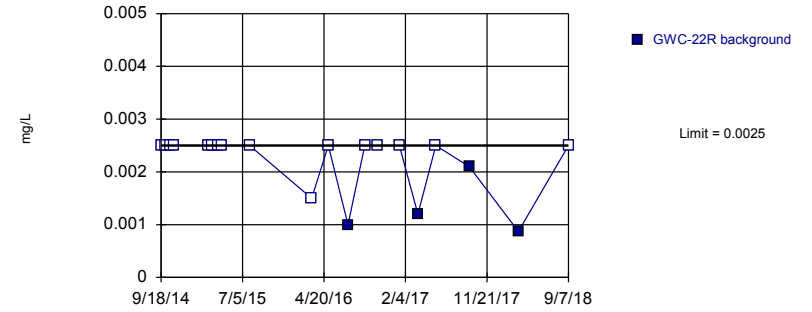
Prediction Limit
Intrawell Non-parametric, GWC-21R



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Arsenic Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit
Intrawell Non-parametric, GWC-22R

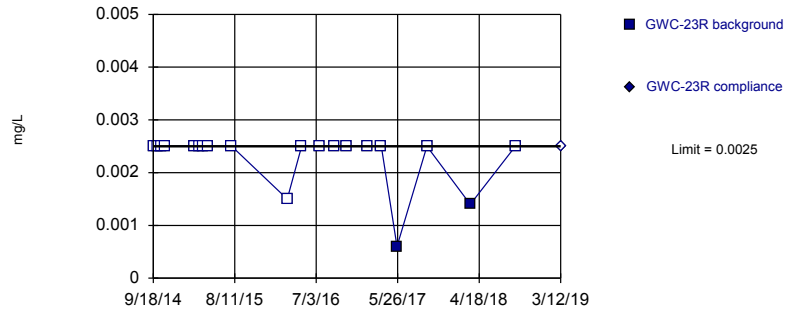


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Arsenic Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

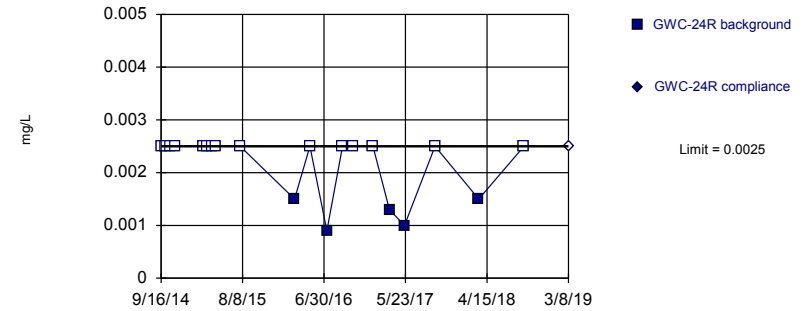


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R
9/18/2014	<0.005
10/5/2014	<0.005
10/22/2014	<0.005
11/5/2014	<0.005
3/4/2015	<0.005
3/19/2015	<0.005
4/8/2015	<0.005
4/24/2015	<0.005
7/30/2015	<0.005
3/8/2016	0.0148
5/9/2016	0.00347 (J)
7/15/2016	0.0017 (J)
9/9/2016	<0.005
10/27/2016	<0.005
1/12/2017	0.002 (J)
3/21/2017	0.0021 (J)
5/23/2017	<0.005 (*)
9/19/2017	0.0013 (J)
3/14/2018	0.0033 (J)
9/10/2018	<0.005
3/11/2019	0.0038 (X)

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R
9/18/2014	<0.005
10/5/2014	<0.005
10/22/2014	<0.005
11/5/2014	<0.005
3/4/2015	<0.005
3/19/2015	<0.005
4/8/2015	<0.005
4/24/2015	<0.005
7/30/2015	<0.005
3/7/2016	<0.003
5/5/2016	<0.005
7/14/2016	0.001 (J)
9/12/2016	<0.005
10/27/2016	<0.005
1/13/2017	<0.005
3/20/2017	0.0012 (J)
5/23/2017	<0.005
9/19/2017	0.0021 (J)
3/13/2018	0.00087 (J)
9/7/2018	<0.005
3/11/2019	0.00099 (X)

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/9/2016	<0.003	
5/6/2016	<0.005	
7/15/2016	<0.005	
9/14/2016	<0.005	
11/1/2016	<0.005	
1/25/2017	<0.005	
3/22/2017	<0.005	
5/24/2017	0.0006 (J)	
9/21/2017	<0.005	
3/14/2018	0.0014 (J)	
9/11/2018	<0.005	
3/12/2019		<0.005

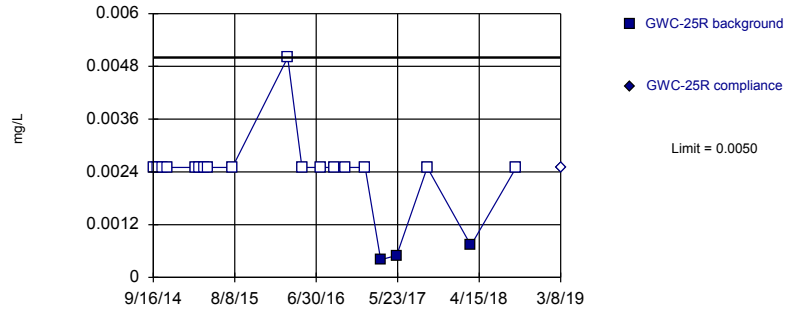
Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/4/2016	0.0015 (J)	
5/5/2016	<0.005	
7/12/2016	0.0009 (J)	
9/13/2016	<0.005	
10/27/2016	<0.005	
1/13/2017	<0.005	
3/20/2017	0.0013 (J)	
5/19/2017	0.001 (J)	
9/19/2017	<0.005	
3/13/2018	0.0015 (J)	
9/11/2018	<0.005	
3/8/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

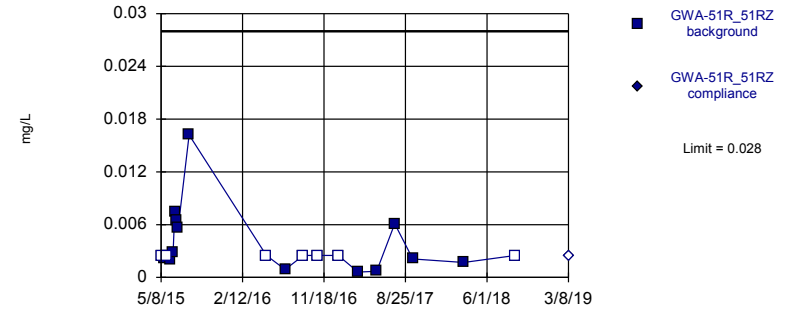


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

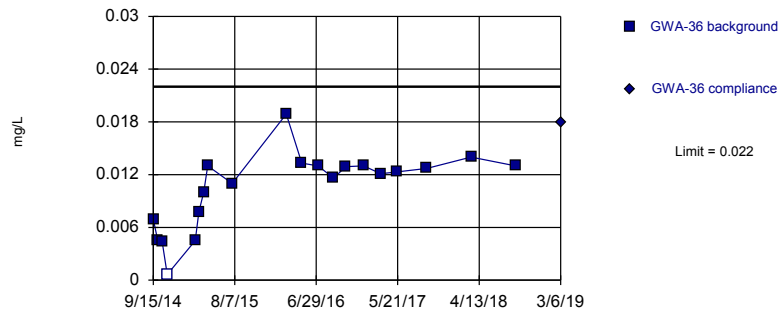


Background Data Summary (based on cube root transformation) (after Aitchison's Adjustment): Mean=0.0954, Std. Dev.=0.08182, n=20, 35% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8777, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Arsenic Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

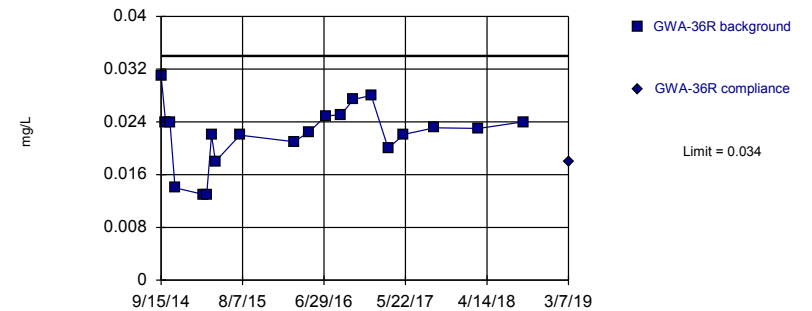


Background Data Summary: Mean=0.01048, Std. Dev.=0.004354, n=20, 5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8956, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02211, Std. Dev.=0.004732, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/9/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.01	
5/4/2016	<0.005	
7/18/2016	<0.005	
9/13/2016	<0.005	
10/27/2016	<0.005	
1/13/2017	<0.005	
3/16/2017	0.0004 (J)	
5/19/2017	0.0005 (J)	
9/19/2017	<0.005	
3/13/2018	0.00073 (J)	
9/11/2018	<0.005	
3/8/2019		<0.005

Prediction Limit

Constituent: Arsenic (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.005	
5/17/2015	0.0021 (J)	
5/25/2015	<0.005	
6/8/2015	0.002 (J)	
6/18/2015	0.0028 (J)	
6/24/2015	0.0074	
6/30/2015	0.0065	
7/6/2015	0.0057	
8/12/2015	0.0162	
5/4/2016	<0.005 (D)	
7/7/2016	0.0009 (JD)	
9/8/2016	<0.005 (D)	
10/26/2016	<0.005 (D)	
1/6/2017	<0.005 (D)	
3/15/2017	0.0006 (JD)	
5/18/2017	0.0007 (JD)	
7/19/2017	0.0061 (D)	
9/19/2017	0.0021 (JD)	
3/13/2018	0.0017 (J)	
9/7/2018	<0.005	
3/8/2019		<0.005

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

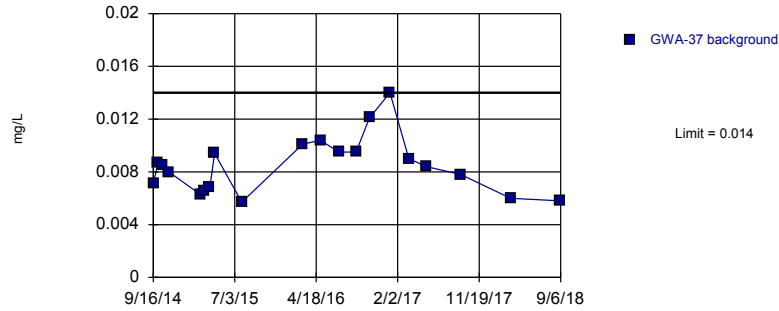
	GWA-36	GWA-36
9/15/2014	0.0069	
10/3/2014	0.0045	
10/20/2014	0.0044	
11/10/2014	<0.0013	
3/2/2015	0.0045	
3/17/2015	0.0078	
4/5/2015	0.01	
4/21/2015	0.013	
7/28/2015	0.011	
3/1/2016	0.0189	
5/2/2016	0.0133	
7/7/2016	0.013	
9/7/2016	0.0116	
10/25/2016	0.0129	
1/5/2017	0.013	
3/15/2017	0.0121	
5/17/2017	0.0123	
9/15/2017	0.0127	
3/12/2018	0.014	
9/6/2018	0.013	
3/6/2019		0.018

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.031	
10/3/2014	0.024	
10/20/2014	0.024	
11/10/2014	0.014	
3/2/2015	0.013	
3/17/2015	0.013	
4/5/2015	0.022	
4/21/2015	0.018	
7/28/2015	0.022	
3/1/2016	0.021	
5/2/2016	0.0225	
7/6/2016	0.0249	
9/7/2016	0.0251	
10/25/2016	0.0274	
1/5/2017	0.028	
3/14/2017	0.02	
5/16/2017	0.0221	
9/15/2017	0.0231	
3/12/2018	0.023	
9/6/2018	0.024	
3/7/2019		0.018

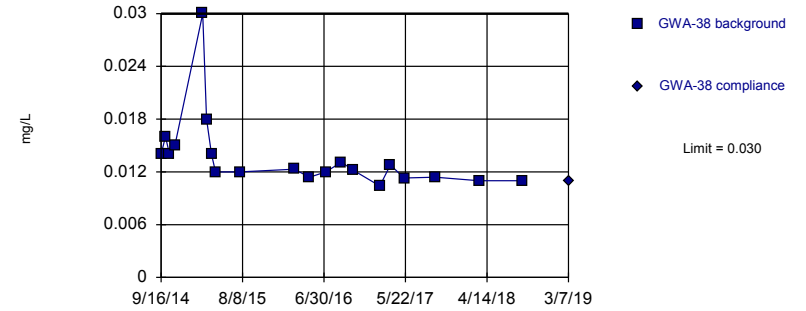
Prediction Limit
Intrawell Parametric, GWA-37 (bg)



Background Data Summary: Mean=0.008485, Std. Dev.=0.002151, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9361, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Barium Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

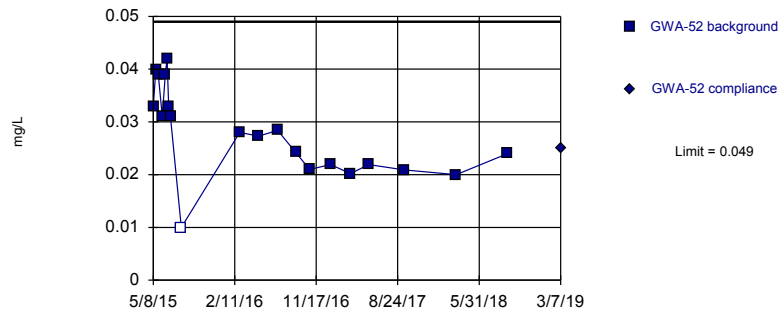
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

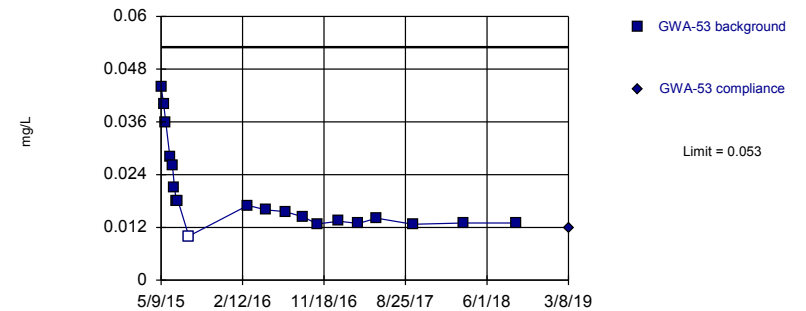
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02779, Std. Dev.=0.008281, n=20, 5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9552, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-4.017, Std. Dev.=0.4237, n=20, 5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8794, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37
9/16/2014	0.0071
10/3/2014	0.0087
10/20/2014	0.0085
11/10/2014	0.008
3/2/2015	0.0063
3/17/2015	0.0066
4/5/2015	0.0068
4/22/2015	0.0094
7/28/2015	0.0057
3/1/2016	0.0101
5/3/2016	0.0104
7/8/2016	0.0095 (J)
9/7/2016	0.0095 (J)
10/25/2016	0.0121
1/6/2017	0.014
3/14/2017	0.009 (J)
5/16/2017	0.0084 (J)
9/15/2017	0.0078 (J)
3/12/2018	0.006 (J)
9/6/2018	0.0058 (J)
3/6/2019	0.0052 (X)

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	0.014	
10/3/2014	0.016	
10/20/2014	0.014	
11/10/2014	0.015	
3/2/2015	0.03	
3/17/2015	0.018	
4/6/2015	0.014	
4/22/2015	0.012	
7/28/2015	0.012	
3/2/2016	0.0123	
5/3/2016	0.0114	
7/7/2016	0.012	
9/8/2016	0.0131	
10/25/2016	0.0122	
2/9/2017	0.0104	
3/23/2017	0.0128	
5/17/2017	0.0113	
9/19/2017	0.0114	
3/13/2018	0.011	
9/6/2018	0.011	
3/7/2019		0.011

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	0.033	
5/17/2015	0.04	
5/25/2015	0.039	
6/8/2015	0.031	
6/18/2015	0.039	
6/24/2015	0.042	
6/30/2015	0.033	
7/6/2015	0.031	
8/12/2015	<0.02	
2/29/2016	0.028	
5/4/2016	0.0273	
7/8/2016	0.0284	
9/8/2016	0.0242	
10/26/2016	0.021	
1/6/2017	0.0219	
3/15/2017	0.0202	
5/17/2017	0.0219	
9/15/2017	0.0209	
3/13/2018	0.02	
9/6/2018	0.024	
3/7/2019		0.025

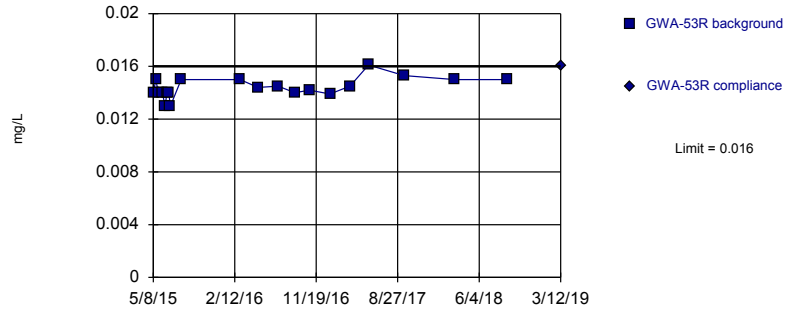
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	0.044	
5/18/2015	0.04	
5/25/2015	0.036	
6/8/2015	0.028	
6/17/2015	0.026	
6/24/2015	0.021	
6/30/2015	0.018	
7/6/2015	0.018	
8/12/2015	<0.02	
3/2/2016	0.017	
5/3/2016	0.016	
7/8/2016	0.0156	
9/8/2016	0.0144	
10/26/2016	0.0128	
1/9/2017	0.0134	
3/16/2017	0.0129	
5/19/2017	0.0141	
9/19/2017	0.0127	
3/13/2018	0.013	
9/11/2018	0.013	
3/8/2019		0.012

Within Limit

Prediction Limit
Intrawell Parametric

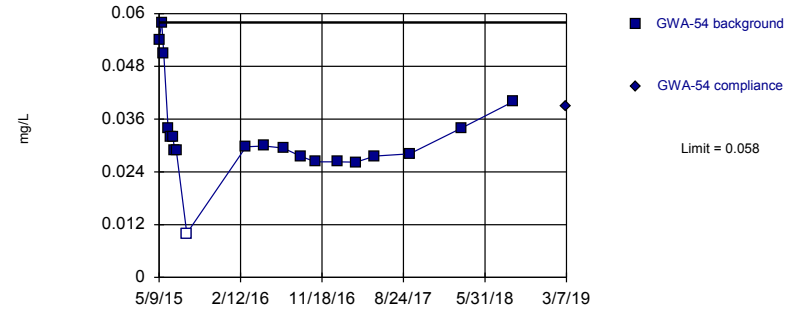


Background Data Summary: Mean=0.0144, Std. Dev.=0.0007501, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9338, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:11 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

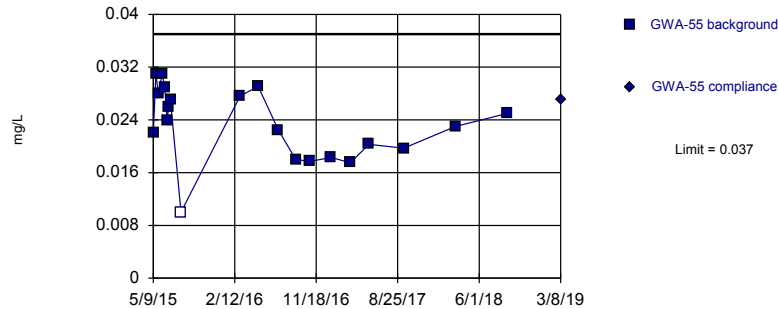


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 5% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

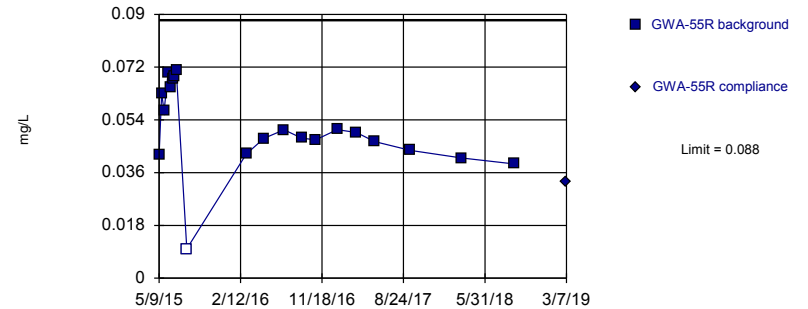


Background Data Summary: Mean=0.02333, Std. Dev.=0.005472, n=20, 5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9513, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.05106, Std. Dev.=0.0144, n=20, 5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8917, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	0.014	
5/17/2015	0.015	
5/25/2015	0.014	
6/8/2015	0.014	
6/18/2015	0.013	
6/24/2015	0.014	
6/30/2015	0.014	
7/6/2015	0.013	
8/12/2015	0.015 (J)	
3/2/2016	0.015	
5/3/2016	0.0144	
7/11/2016	0.0145	
9/7/2016	0.014	
10/27/2016	0.0142	
1/6/2017	0.0139	
3/16/2017	0.0145	
5/19/2017	0.0161	
9/19/2017	0.0153	
3/13/2018	0.015	
9/11/2018	0.015	
3/12/2019		0.016

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	0.054	
5/18/2015	0.058	
5/25/2015	0.051	
6/9/2015	0.034	
6/17/2015	0.032	
6/25/2015	0.032	
7/1/2015	0.029	
7/7/2015	0.029	
8/12/2015	<0.02	
3/2/2016	0.0297	
5/4/2016	0.0299	
7/8/2016	0.0294	
9/8/2016	0.0275	
10/26/2016	0.0263	
1/9/2017	0.0263	
3/15/2017	0.0262	
5/18/2017	0.0276	
9/15/2017	0.0281	
3/13/2018	0.034	
9/6/2018	0.04	
3/7/2019		0.039

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	0.022	
5/18/2015	0.031	
5/26/2015	0.028	
6/9/2015	0.031	
6/17/2015	0.029	
6/25/2015	0.024	
7/1/2015	0.026	
7/7/2015	0.027	
8/12/2015	<0.02	
3/2/2016	0.0276	
5/3/2016	0.0291	
7/11/2016	0.0225	
9/9/2016	0.018	
10/26/2016	0.0177	
1/9/2017	0.0183	
3/16/2017	0.0175	
5/18/2017	0.0203	
9/15/2017	0.0197	
3/12/2018	0.023	
9/7/2018	0.025	
3/8/2019		0.027

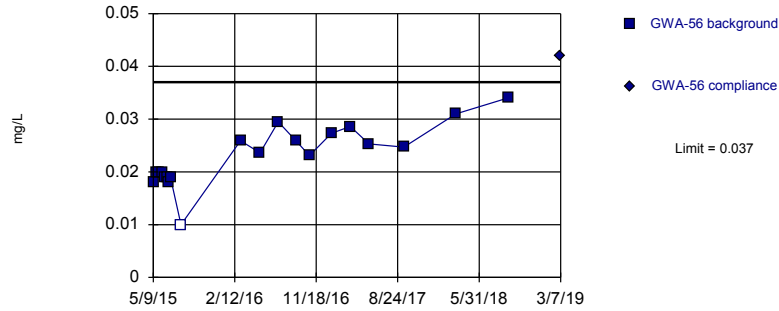
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	0.042	
5/18/2015	0.063	
5/26/2015	0.057	
6/9/2015	0.07	
6/17/2015	0.065	
6/25/2015	0.068	
7/1/2015	0.069	
7/7/2015	0.071	
8/12/2015	<0.02	
3/3/2016	0.0424	
5/3/2016	0.0477	
7/11/2016	0.0506	
9/9/2016	0.0478	
10/27/2016	0.0472	
1/9/2017	0.0507	
3/16/2017	0.0497	
5/18/2017	0.0466	
9/18/2017	0.0436	
3/12/2018	0.041	
9/7/2018	0.039	
3/7/2019		0.033

Exceeds Limit

Prediction Limit
Intrawell Parametric

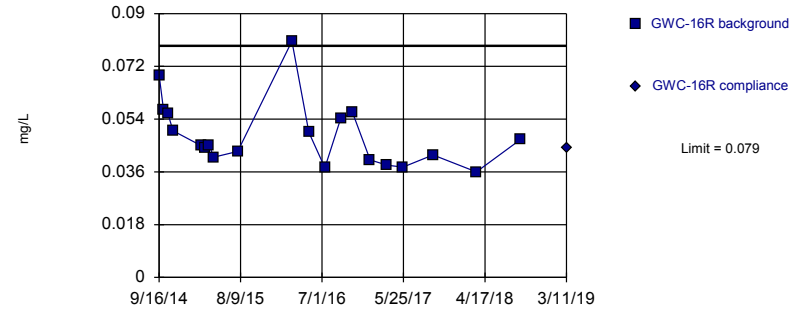


Background Data Summary: Mean=0.02309, Std. Dev.=0.005602, n=20, 5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9649, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

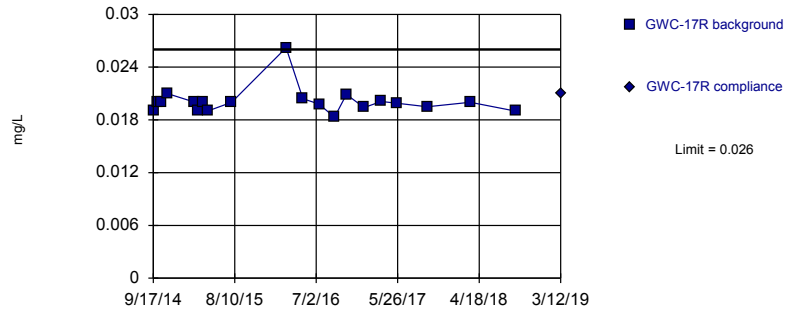


Background Data Summary (based on square root transformation): Mean=0.2188, Std. Dev.=0.02428, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8997, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

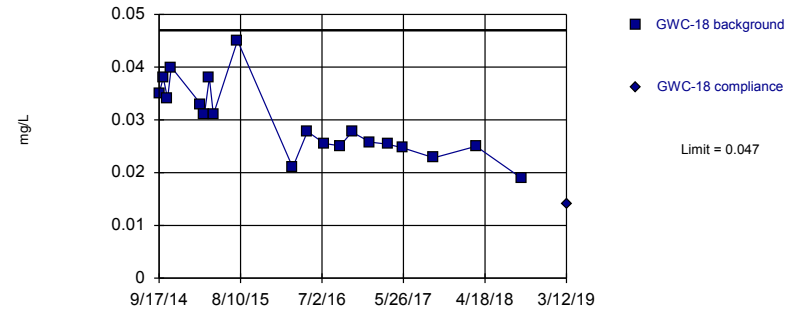


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02974, Std. Dev.=0.006897, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9522, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	0.018	
5/19/2015	0.02	
5/26/2015	0.02	
6/9/2015	0.02	
6/17/2015	0.019	
6/25/2015	0.019	
7/1/2015	0.018	
7/7/2015	0.019	
8/12/2015	<0.02	
3/3/2016	0.0259	
5/9/2016	0.0236	
7/11/2016	0.0295	
9/9/2016	0.0259	
10/26/2016	0.0231	
1/9/2017	0.0273	
3/15/2017	0.0286	
5/18/2017	0.0253	
9/15/2017	0.0247	
3/13/2018	0.031	
9/7/2018	0.034	
3/7/2019		0.042

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	0.069	
10/4/2014	0.057	
10/21/2014	0.056	
11/11/2014	0.05	
3/3/2015	0.045	
3/18/2015	0.044	
4/6/2015	0.045	
4/23/2015	0.041	
7/29/2015	0.043	
3/3/2016	0.0806 (D)	
5/10/2016	0.0495	
7/13/2016	0.0374	
9/15/2016	0.0542	
11/2/2016	0.0561	
1/11/2017	0.0401	
3/20/2017	0.0383	
5/23/2017	0.0376	
9/21/2017	0.0418	
3/14/2018	0.036	
9/7/2018	0.047	
3/11/2019		0.044

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	0.019	
10/4/2014	0.02	
10/21/2014	0.02	
11/11/2014	0.021	
3/3/2015	0.02	
3/18/2015	0.019	
4/6/2015	0.02	
4/23/2015	0.019	
7/29/2015	0.02	
3/4/2016	0.0262 (J)	
5/10/2016	0.0204	
7/14/2016	0.0198	
9/14/2016	0.0183	
11/1/2016	0.0209	
1/11/2017	0.0194	
3/21/2017	0.0201	
5/23/2017	0.0199	
9/22/2017	0.0195	
3/14/2018	0.02	
9/11/2018	0.019	
3/12/2019		0.021

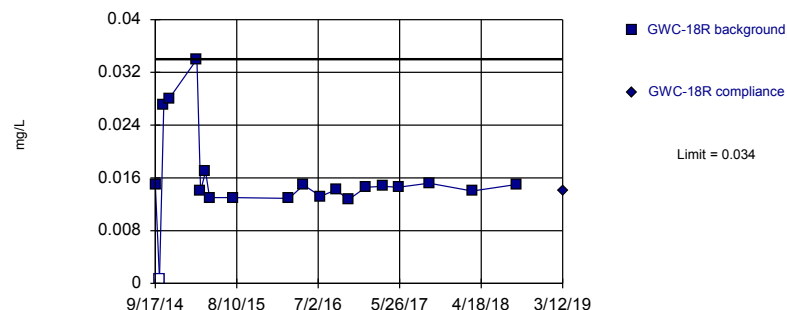
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	0.035	
10/4/2014	0.038	
10/21/2014	0.034	
11/5/2014	0.04	
3/3/2015	0.033	
3/18/2015	0.031	
4/7/2015	0.038	
4/23/2015	0.031	
7/29/2015	0.045	
3/7/2016	0.021	
5/5/2016	0.0278	
7/13/2016	0.0255	
9/13/2016	0.0251	
10/31/2016	0.0277	
1/12/2017	0.0258	
3/23/2017	0.0254	
5/23/2017	0.0247	
9/25/2017	0.0228	
3/14/2018	0.025	
9/11/2018	0.019	
3/12/2019		0.014

Within Limit

Prediction Limit
Intrawell Non-parametric

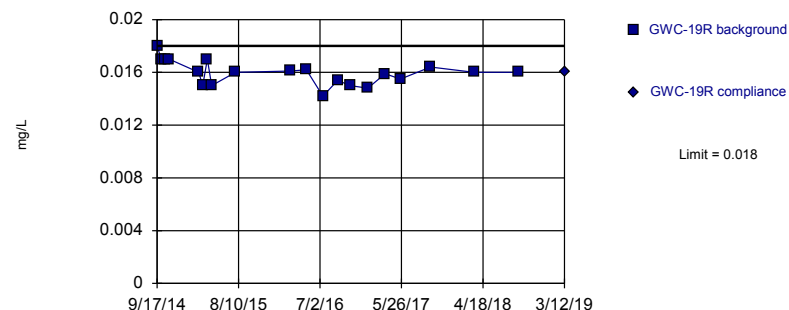


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 5% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

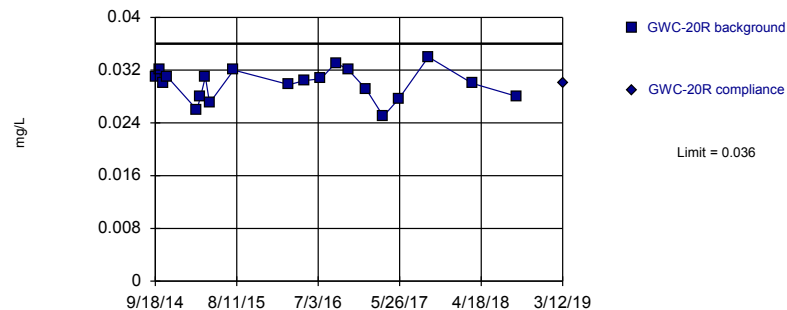


Background Data Summary: Mean=0.01598, Std. Dev.=0.0009318, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9655, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02989, Std. Dev.=0.002362, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9722, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	0.015	
10/4/2014	<0.0013	
10/21/2014	0.027	
11/11/2014	0.028	
3/3/2015	0.034	
3/18/2015	0.014	
4/7/2015	0.017	
4/23/2015	0.013	
7/29/2015	0.013	
3/7/2016	0.0129	
5/5/2016	0.0149	
7/13/2016	0.0132	
9/12/2016	0.0142	
11/1/2016	0.0127	
1/11/2017	0.0146	
3/20/2017	0.0147	
5/22/2017	0.0146	
9/21/2017	0.0152	
3/14/2018	0.014	
9/7/2018	0.015	
3/12/2019		0.014

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	0.018	
10/4/2014	0.017	
10/21/2014	0.017	
11/5/2014	0.017	
3/3/2015	0.016	
3/19/2015	0.015	
4/7/2015	0.017	
4/24/2015	0.015	
7/29/2015	0.016	
3/7/2016	0.0161	
5/9/2016	0.0162	
7/14/2016	0.0142	
9/12/2016	0.0154	
10/31/2016	0.015	
1/11/2017	0.0148	
3/21/2017	0.0159	
5/22/2017	0.0155	
9/20/2017	0.0164	
3/14/2018	0.016	
9/10/2018	0.016	
3/12/2019		0.016

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	0.031	
10/5/2014	0.032	
10/22/2014	0.03	
11/5/2014	0.031	
3/4/2015	0.026	
3/19/2015	0.028	
4/7/2015	0.031	
4/24/2015	0.027	
7/30/2015	0.032	
3/8/2016	0.0298	
5/9/2016	0.0304	
7/14/2016	0.0307	
9/12/2016	0.0331	
10/31/2016	0.0321	
1/12/2017	0.0291	
3/22/2017	0.025	
5/22/2017	0.0276	
9/19/2017	0.034	
3/14/2018	0.03	
9/10/2018	0.028	
3/12/2019		0.03

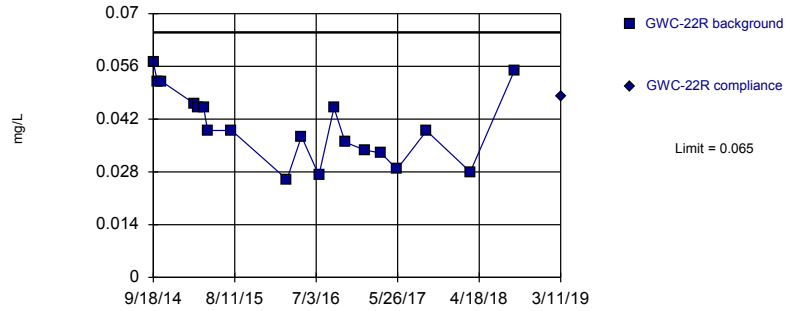
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	0.023	
10/5/2014	0.025	
10/22/2014	0.025	
11/5/2014	0.025	
3/4/2015	0.024	
3/19/2015	0.024	
4/8/2015	0.027	
4/24/2015	0.025	
7/30/2015	0.025	
3/8/2016	0.0377	
5/9/2016	0.0347	
7/15/2016	0.0259	
9/9/2016	0.0242	
10/27/2016	0.0227	
1/12/2017	0.0253	
3/21/2017	0.0292	
5/23/2017	0.0282	
9/19/2017	0.0276	
3/14/2018	0.024	
9/10/2018	0.016	
3/11/2019		0.015

Within Limit

Prediction Limit
Intrawell Parametric

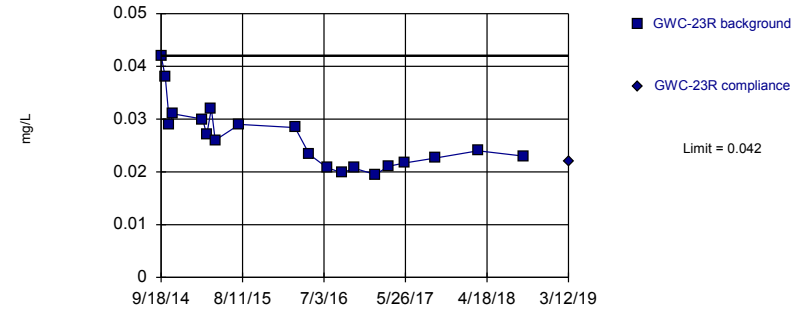


Background Data Summary: Mean=0.0402, Std. Dev.=0.009605, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.951, critical = 0.863. Kappa = 2.601 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

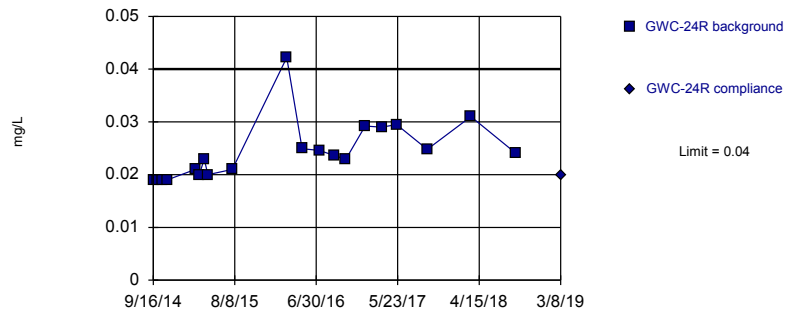


Background Data Summary: Mean=0.02645, Std. Dev.=0.006104, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8978, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:12 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

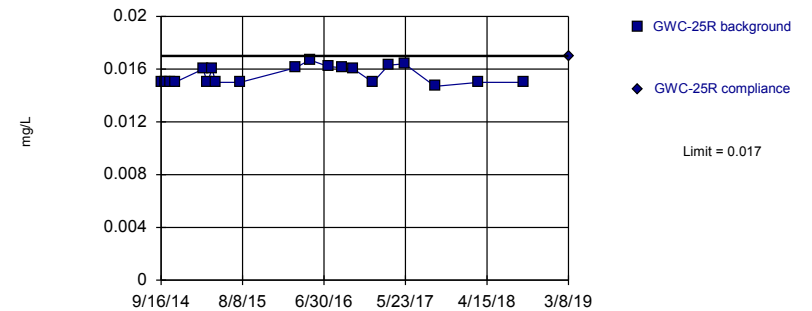


Background Data Summary (based on cube root transformation): Mean=0.2883, Std. Dev.=0.02078, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8744, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	0.057	
10/5/2014	0.052	
10/22/2014	0.052	
11/5/2014	<0.0013 (o)	
3/4/2015	0.046	
3/19/2015	0.045	
4/8/2015	0.045	
4/24/2015	0.039	
7/30/2015	0.039	
3/7/2016	0.026	
5/5/2016	0.0374	
7/14/2016	0.0271	
9/12/2016	0.045	
10/27/2016	0.0359	
1/13/2017	0.0338	
3/20/2017	0.033	
5/23/2017	0.0287	
9/19/2017	0.0389	
3/13/2018	0.028	
9/7/2018	0.055	
3/11/2019		0.048

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	0.042	
10/5/2014	0.038	
10/22/2014	0.029	
11/5/2014	0.031	
3/4/2015	0.03	
3/20/2015	0.027	
4/8/2015	0.032	
4/23/2015	0.026	
7/30/2015	0.029	
3/9/2016	0.0284 (J)	
5/6/2016	0.0233	
7/15/2016	0.0208	
9/14/2016	0.0198	
11/1/2016	0.0207	
1/25/2017	0.0195	
3/22/2017	0.0211	
5/24/2017	0.0217	
9/21/2017	0.0226	
3/14/2018	0.024	
9/11/2018	0.023	
3/12/2019		0.022

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	0.019	
10/4/2014	0.019	
10/23/2014	0.019	
11/10/2014	0.019	
3/4/2015	0.021	
3/20/2015	0.02	
4/8/2015	0.023	
4/23/2015	0.02	
7/30/2015	0.021	
3/4/2016	0.0422	
5/5/2016	0.0249	
7/12/2016	0.0246	
9/13/2016	0.0236	
10/27/2016	0.0229	
1/13/2017	0.0292	
3/20/2017	0.029	
5/19/2017	0.0295	
9/19/2017	0.0248	
3/13/2018	0.031	
9/11/2018	0.024	
3/8/2019		0.02

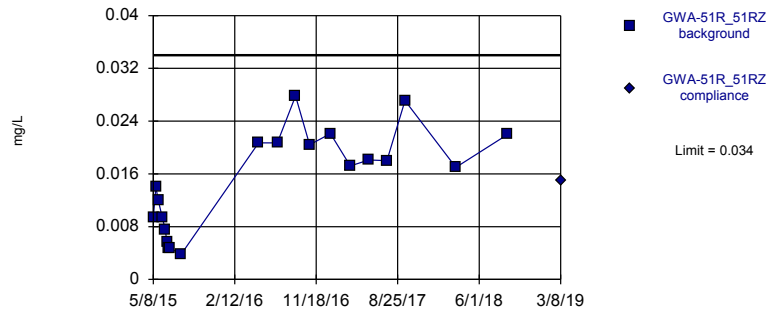
Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	0.015	
10/4/2014	0.015	
10/23/2014	0.015	
11/10/2014	0.015	
3/4/2015	0.016	
3/20/2015	0.015	
4/9/2015	0.016	
4/23/2015	0.015	
7/30/2015	0.015	
3/8/2016	0.0161	
5/4/2016	0.0167	
7/18/2016	0.0162	
9/13/2016	0.0161	
10/27/2016	0.016	
1/13/2017	0.015	
3/16/2017	0.0163	
5/19/2017	0.0164	
9/19/2017	0.0147	
3/13/2018	0.015	
9/11/2018	0.015	
3/8/2019		0.017

Within Limit

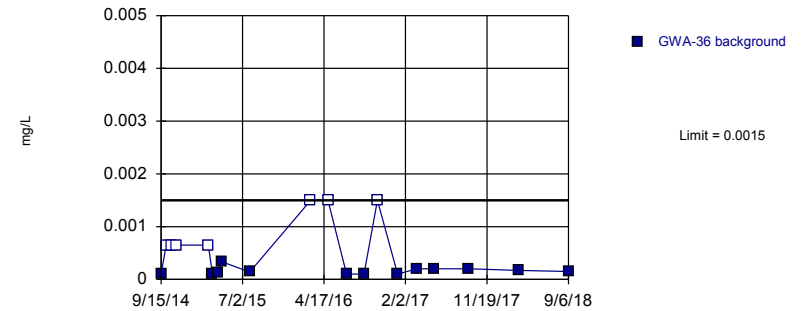
Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.01511, Std. Dev.=0.007558, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9362, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

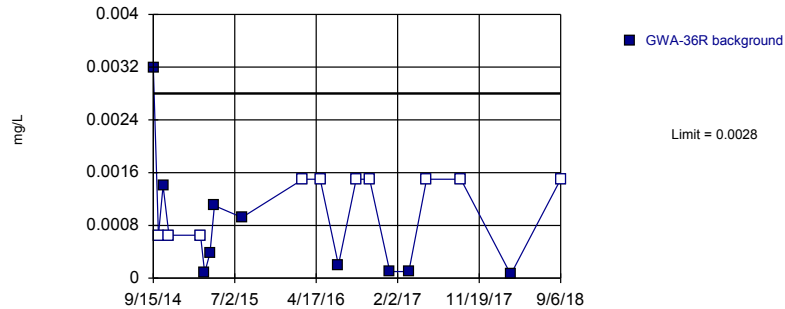
Prediction Limit
Intrawell Non-parametric, GWA-36 (bg)



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 35% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit
Intrawell Parametric, GWA-36R (bg)

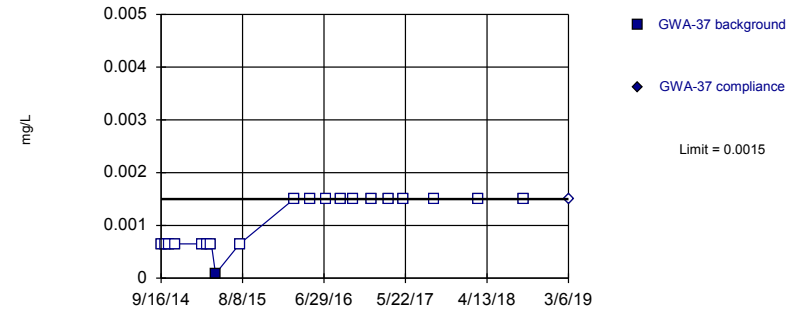


Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.01139, Std. Dev.=0.01613, n=20, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	0.0094	
5/17/2015	0.014	
5/25/2015	0.012	
6/8/2015	0.0094	
6/18/2015	0.0075	
6/24/2015	0.0056	
6/30/2015	0.0047	
7/6/2015	0.0047	
8/12/2015	0.00383 (J)	
5/4/2016	0.0207 (D)	
7/7/2016	0.0207 (D)	
9/8/2016	0.0278 (D)	
10/26/2016	0.0204 (D)	
1/6/2017	0.0221 (D)	
3/15/2017	0.0172 (D)	
5/18/2017	0.0181 (D)	
7/19/2017	0.018 (D)	
9/19/2017	0.0271 (D)	
3/13/2018	0.017	
9/7/2018	0.022	
3/8/2019		0.015

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36
9/15/2014	0.00011 (J)
10/3/2014	<0.0013
10/20/2014	<0.0013
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	0.0001 (J)
4/5/2015	0.00012 (J)
4/21/2015	0.00033 (J)
7/28/2015	0.00014 (J)
3/1/2016	<0.003
5/2/2016	<0.003
7/7/2016	0.0001 (J)
9/7/2016	0.0001 (J)
10/25/2016	<0.003
1/5/2017	0.0001 (J)
3/15/2017	0.0002 (J)
5/17/2017	0.0002 (J)
9/15/2017	0.0002 (J)
3/12/2018	0.00017 (J)
9/6/2018	0.00015 (J)
3/6/2019	0.00029 (X)

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R
9/15/2014	0.0032
10/3/2014	<0.0013
10/20/2014	0.0014
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	8.3E-05 (J)
4/5/2015	0.00038 (J)
4/21/2015	0.0011 (J)
7/28/2015	0.00092 (J)
3/1/2016	<0.003
5/2/2016	<0.003
7/6/2016	0.0002 (J)
9/7/2016	<0.003
10/25/2016	<0.003
1/5/2017	0.0001 (J)
3/14/2017	0.0001 (J)
5/16/2017	<0.003
9/15/2017	<0.003
3/12/2018	5.6E-05 (J)
9/6/2018	<0.003
3/7/2019	6.8E-05 (X)

Prediction Limit

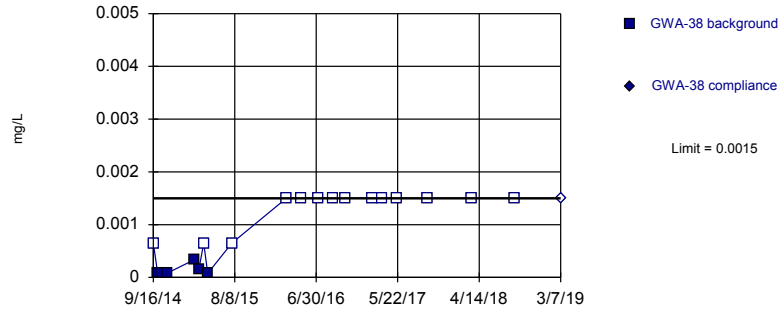
Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	<0.0013	
10/3/2014	<0.0013	
10/20/2014	<0.0013	
11/10/2014	<0.0013	
3/2/2015	<0.0013	
3/17/2015	<0.0013	
4/5/2015	<0.0013	
4/22/2015	8.3E-05 (J)	
7/28/2015	<0.0013	
3/1/2016	<0.003	
5/3/2016	<0.003	
7/8/2016	<0.003	
9/7/2016	<0.003	
10/25/2016	<0.003	
1/6/2017	<0.003	
3/14/2017	<0.003	
5/16/2017	<0.003	
9/15/2017	<0.003	
3/12/2018	<0.003	
9/6/2018	<0.003	
3/6/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

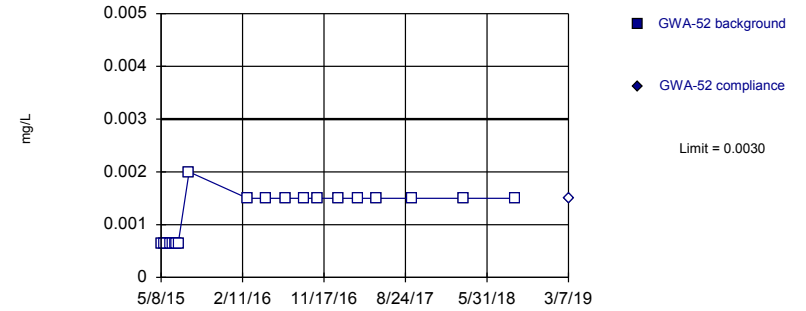


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

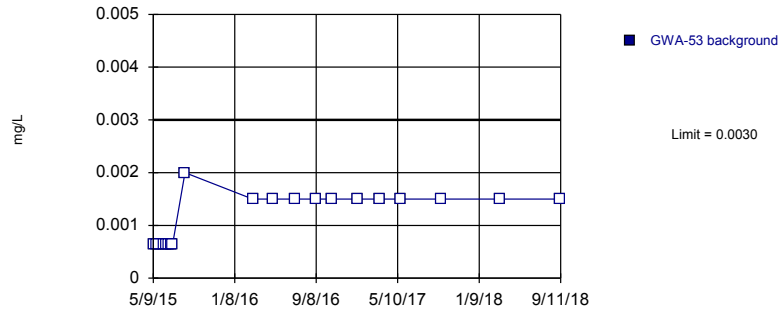


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-53 (bg)

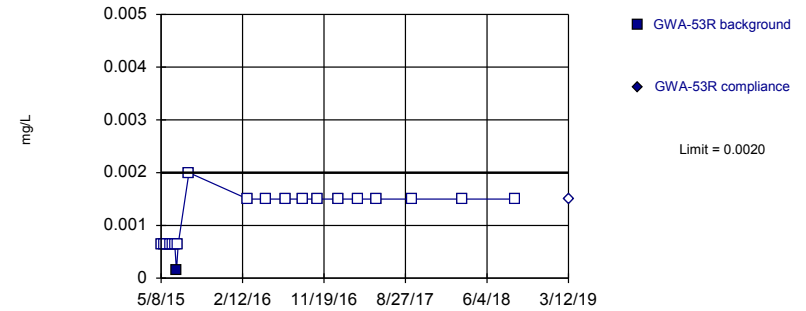


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	<0.0013	
10/3/2014	8.3E-05 (J)	
10/20/2014	7.8E-05 (J)	
11/10/2014	8E-05 (J)	
3/2/2015	0.00034 (J)	
3/17/2015	0.00014 (J)	
4/6/2015	<0.0013	
4/22/2015	7.8E-05 (J)	
7/28/2015	<0.0013	
3/2/2016	<0.003	
5/3/2016	<0.003	
7/7/2016	<0.003	
9/8/2016	<0.003	
10/25/2016	<0.003	
2/9/2017	<0.003	
3/23/2017	<0.003	
5/17/2017	<0.003	
9/19/2017	<0.003	
3/13/2018	<0.003	
9/6/2018	<0.003	
3/7/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.0013	
5/17/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.004	
2/29/2016	<0.003	
5/4/2016	<0.003	
7/8/2016	<0.003	
9/8/2016	<0.003	
10/26/2016	<0.003	
1/6/2017	<0.003	
3/15/2017	<0.003	
5/17/2017	<0.003	
9/15/2017	<0.003	
3/13/2018	<0.003	
9/6/2018	<0.003	
3/7/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53
5/9/2015	<0.0013
5/18/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/17/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.004
3/2/2016	<0.003
5/3/2016	<0.003
7/8/2016	<0.003
9/8/2016	<0.003
10/26/2016	<0.003
1/9/2017	<0.003
3/16/2017	<0.003
5/19/2017	<0.003
9/19/2017	<0.003
3/13/2018	<0.003
9/11/2018	<0.003
3/8/2019	5.7E-05 (X)

Prediction Limit

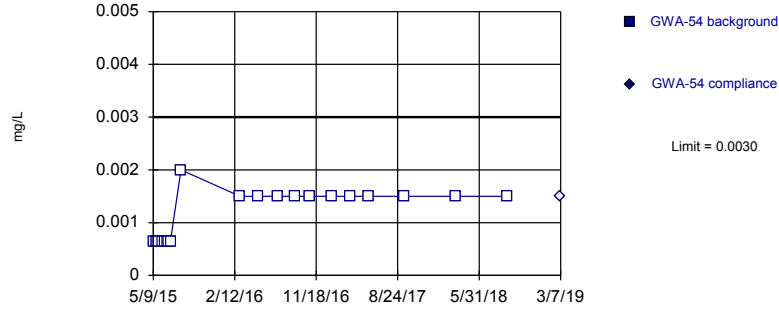
Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.0013	
5/17/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	0.00014 (J)	
7/6/2015	<0.0013	
8/12/2015	<0.004	
3/2/2016	<0.003	
5/3/2016	<0.003	
7/11/2016	<0.003	
9/7/2016	<0.003	
10/27/2016	<0.003	
1/6/2017	<0.003	
3/16/2017	<0.003	
5/19/2017	<0.003	
9/19/2017	<0.003	
3/13/2018	<0.003	
9/11/2018	<0.003	
3/12/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

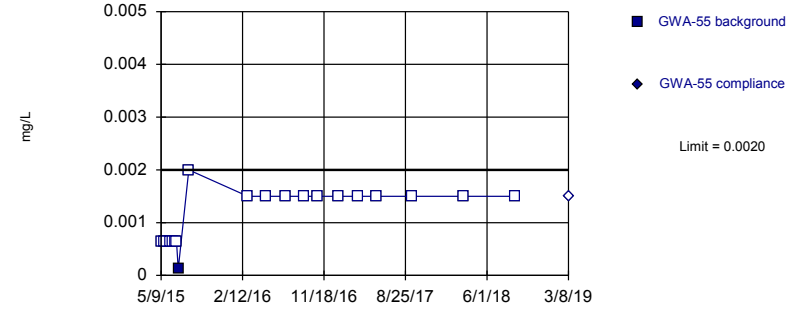


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:13 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/25/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/12/2015	<0.004	
3/2/2016	<0.003	
5/4/2016	<0.003	
7/8/2016	<0.003	
9/8/2016	<0.003	
10/26/2016	<0.003	
1/9/2017	<0.003	
3/15/2017	<0.003	
5/18/2017	<0.003	
9/15/2017	<0.003	
3/13/2018	<0.003	
9/6/2018	<0.003	
3/7/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	0.00012 (J)	
8/12/2015	<0.004	
3/2/2016	<0.003	
5/3/2016	<0.003	
7/11/2016	<0.003	
9/9/2016	<0.003	
10/26/2016	<0.003	
1/9/2017	<0.003	
3/16/2017	<0.003	
5/18/2017	<0.003	
9/15/2017	<0.003	
3/12/2018	<0.003	
9/7/2018	<0.003	
3/8/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.0013	
5/18/2015	0.00011 (J)	
5/26/2015	<0.0013	
6/9/2015	0.00025 (J)	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	0.00024 (J)	
7/7/2015	<0.0013	
8/12/2015	<0.004	
3/3/2016	<0.003	
5/3/2016	<0.003	
7/11/2016	<0.003	
9/9/2016	<0.003	
10/27/2016	<0.003	
1/9/2017	<0.003	
3/16/2017	<0.003	
5/18/2017	<0.003	
9/18/2017	<0.003	
3/12/2018	<0.003	
9/7/2018	<0.003	
3/7/2019		<0.003

Prediction Limit

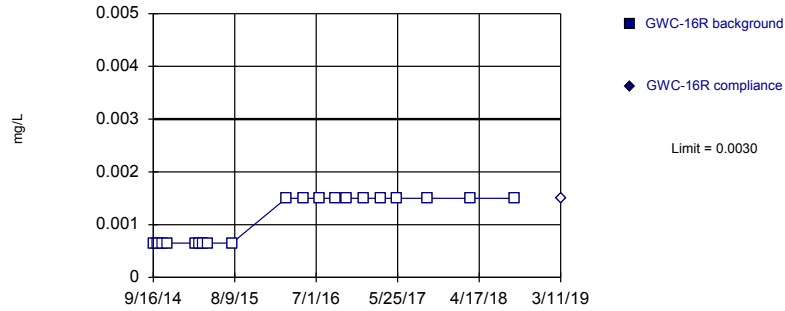
Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.0013	
5/19/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/12/2015	<0.004	
3/3/2016	<0.005	
5/9/2016	<0.003	
7/11/2016	0.0001 (J)	
9/9/2016	<0.003	
10/26/2016	<0.003	
1/9/2017	<0.003	
3/15/2017	<0.003	
5/18/2017	<0.003	
9/15/2017	<0.003	
3/13/2018	<0.003	
9/7/2018	<0.003	
3/7/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

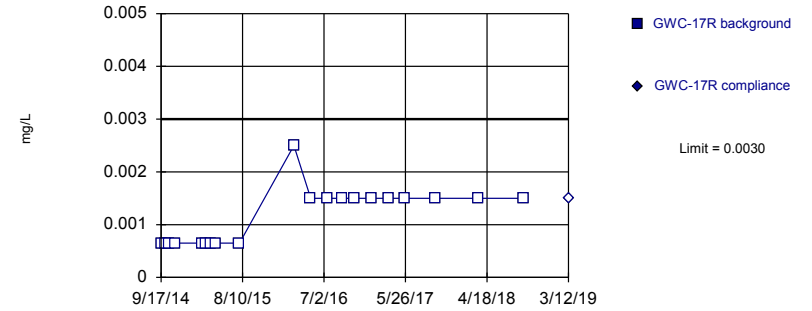


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

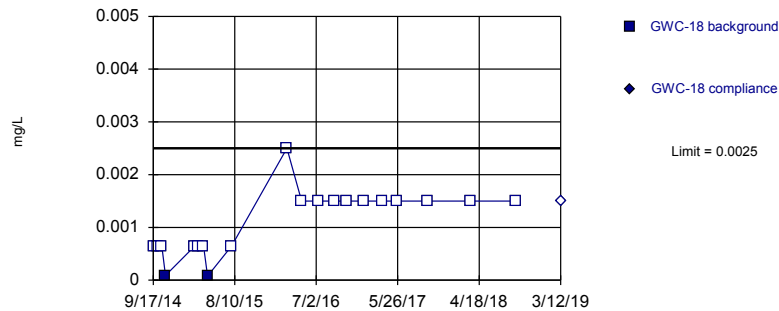


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

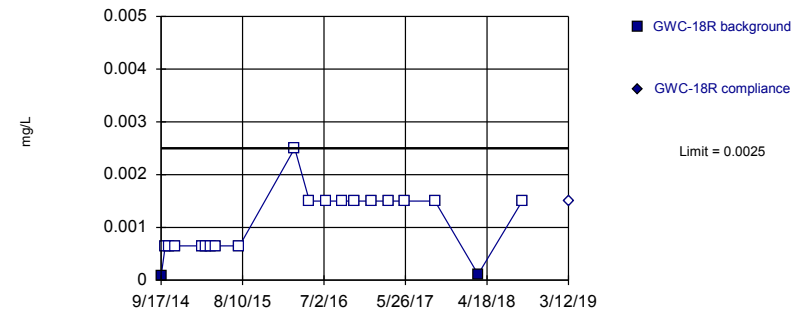


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/11/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/6/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/3/2016	<0.003 (D)	
5/10/2016	<0.003	
7/13/2016	<0.003	
9/15/2016	<0.003	
11/2/2016	<0.003	
1/11/2017	<0.003	
3/20/2017	<0.003	
5/23/2017	<0.003	
9/21/2017	<0.003	
3/14/2018	<0.003	
9/7/2018	<0.003	
3/11/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/11/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/6/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/4/2016	<0.005	
5/10/2016	<0.003	
7/14/2016	<0.003	
9/14/2016	<0.003	
11/1/2016	<0.003	
1/11/2017	<0.003	
3/21/2017	<0.003	
5/23/2017	<0.003	
9/22/2017	<0.003	
3/14/2018	<0.003	
9/11/2018	<0.003	
3/12/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/5/2014	9E-05 (J)	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/7/2015	<0.0013	
4/23/2015	7.8E-05 (J)	
7/29/2015	<0.0013	
3/7/2016	<0.005	
5/5/2016	<0.003	
7/13/2016	<0.003	
9/13/2016	<0.003	
10/31/2016	<0.003	
1/12/2017	<0.003	
3/23/2017	<0.003	
5/23/2017	<0.003	
9/25/2017	<0.003	
3/14/2018	<0.003	
9/11/2018	<0.003	
3/12/2019		<0.003

Prediction Limit

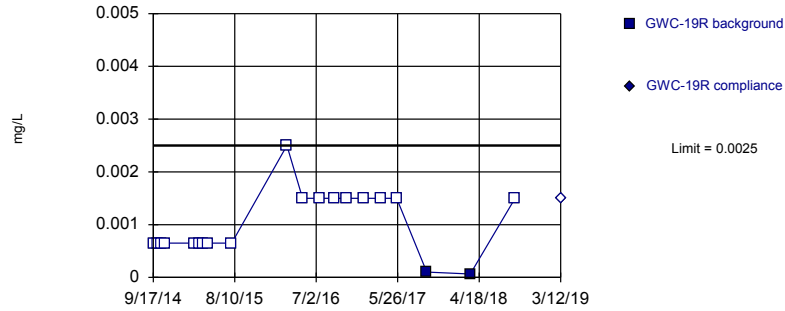
Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	7.8E-05 (J)	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/11/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/7/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.005	
5/5/2016	<0.003	
7/13/2016	<0.003	
9/12/2016	<0.003	
11/1/2016	<0.003	
1/11/2017	<0.003	
3/20/2017	<0.003	
5/22/2017	<0.003	
9/21/2017	<0.003	
3/14/2018	0.00011 (J)	
9/7/2018	<0.003	
3/12/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

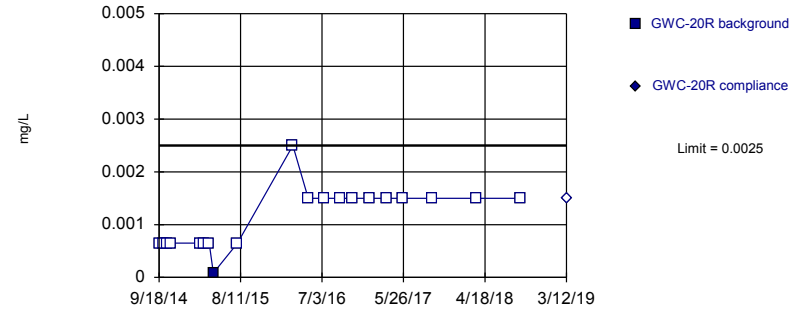


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

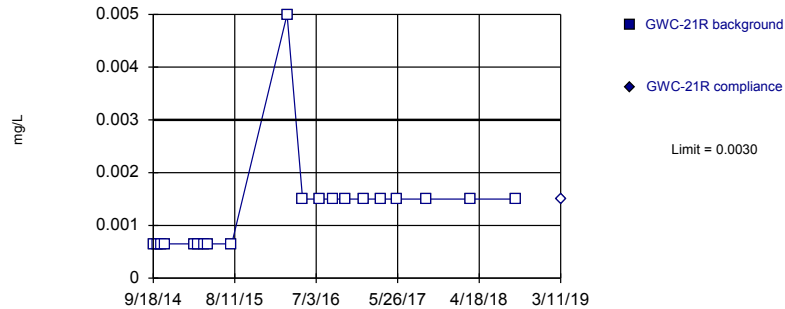


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

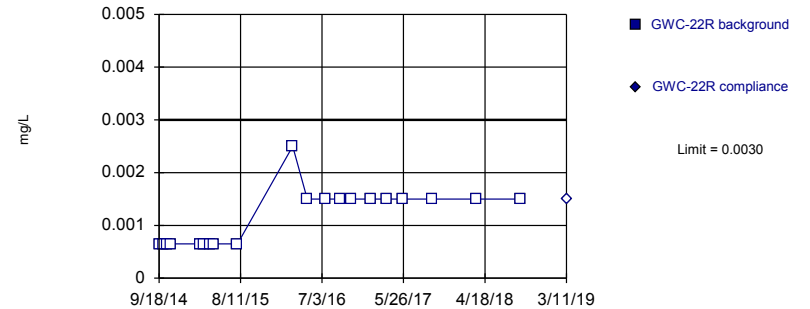


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/5/2014	<0.0013	
3/3/2015	<0.0013	
3/19/2015	<0.0013	
4/7/2015	<0.0013	
4/24/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.005	
5/9/2016	<0.003	
7/14/2016	<0.003	
9/12/2016	<0.003	
10/31/2016	<0.003	
1/11/2017	<0.003	
3/21/2017	<0.003	
5/22/2017	<0.003	
9/20/2017	0.0001 (J)	
3/14/2018	6.5E-05 (J)	
9/10/2018	<0.003	
3/12/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/7/2015	<0.0013	
4/24/2015	8.3E-05 (J)	
7/30/2015	<0.0013	
3/8/2016	<0.005	
5/9/2016	<0.003	
7/14/2016	<0.003	
9/12/2016	<0.003	
10/31/2016	<0.003	
1/12/2017	<0.003	
3/22/2017	<0.003	
5/22/2017	<0.003	
9/19/2017	<0.003	
3/14/2018	<0.003	
9/10/2018	<0.003	
3/12/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/8/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	<0.0013	
3/8/2016	<0.01	
5/9/2016	<0.003	
7/15/2016	<0.003	
9/9/2016	<0.003	
10/27/2016	<0.003	
1/12/2017	<0.003	
3/21/2017	<0.003	
5/23/2017	<0.003	
9/19/2017	<0.003	
3/14/2018	<0.003	
9/10/2018	<0.003	
3/11/2019		<0.003

Prediction Limit

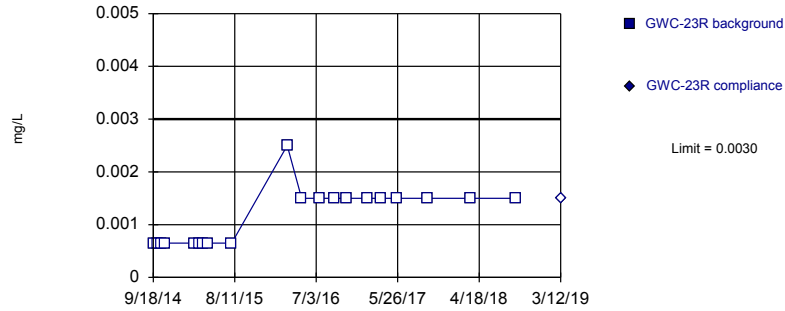
Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/8/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	<0.0013	
3/7/2016	<0.005	
5/5/2016	<0.003	
7/14/2016	<0.003	
9/12/2016	<0.003	
10/27/2016	<0.003	
1/13/2017	<0.003	
3/20/2017	<0.003	
5/23/2017	<0.003	
9/19/2017	<0.003	
3/13/2018	<0.003	
9/7/2018	<0.003	
3/11/2019		<0.003

Within Limit

Prediction Limit
Intrawell Non-parametric

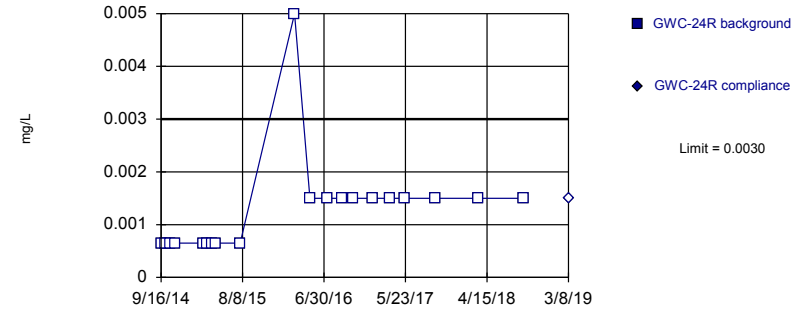


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

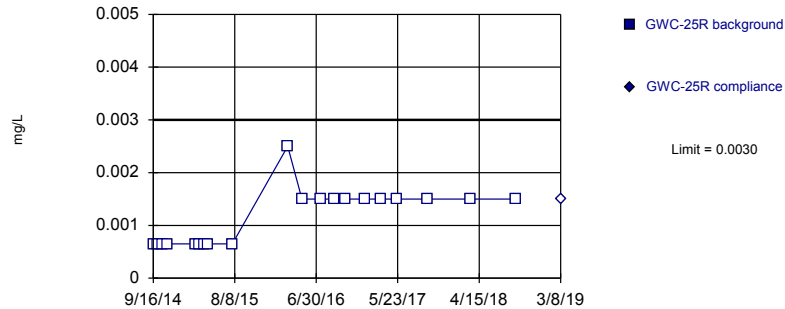


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

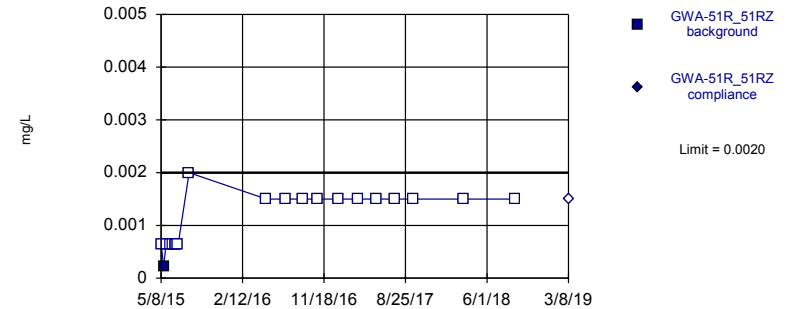


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/8/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/9/2016	<0.005	
5/6/2016	<0.003	
7/15/2016	<0.003	
9/14/2016	<0.003	
11/1/2016	<0.003	
1/25/2017	<0.003	
3/22/2017	<0.003	
5/24/2017	<0.003	
9/21/2017	<0.003	
3/14/2018	<0.003	
9/11/2018	<0.003	
3/12/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/23/2014	<0.0013	
11/10/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/8/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/4/2016	<0.01	
5/5/2016	<0.003	
7/12/2016	<0.003	
9/13/2016	<0.003	
10/27/2016	<0.003	
1/13/2017	<0.003	
3/20/2017	<0.003	
5/19/2017	<0.003	
9/19/2017	<0.003	
3/13/2018	<0.003	
9/11/2018	<0.003	
3/8/2019		<0.003

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/23/2014	<0.0013	
11/10/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/9/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/8/2016	<0.005	
5/4/2016	<0.003	
7/18/2016	<0.003	
9/13/2016	<0.003	
10/27/2016	<0.003	
1/13/2017	<0.003	
3/16/2017	<0.003	
5/19/2017	<0.003	
9/19/2017	<0.003	
3/13/2018	<0.003	
9/11/2018	<0.003	
3/8/2019		<0.003

Prediction Limit

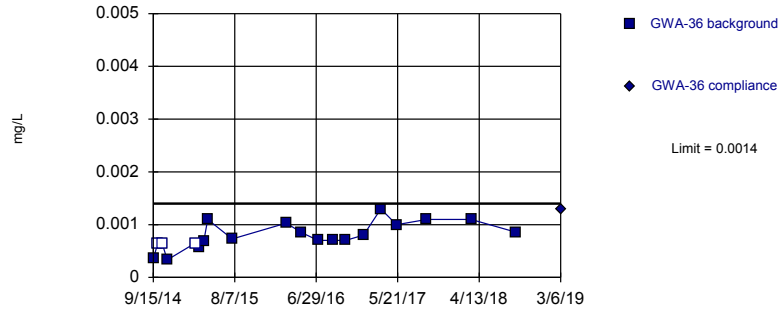
Constituent: Beryllium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.0013	
5/17/2015	0.00022 (J)	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.004	
5/4/2016	<0.003 (D)	
7/7/2016	<0.003 (D)	
9/8/2016	<0.003 (D)	
10/26/2016	<0.003 (D)	
1/6/2017	<0.003 (D)	
3/15/2017	<0.003 (D)	
5/18/2017	<0.003 (D)	
7/19/2017	<0.003 (D)	
9/19/2017	<0.003 (D)	
3/13/2018	<0.003	
9/7/2018	<0.003	
3/8/2019		<0.003

Within Limit

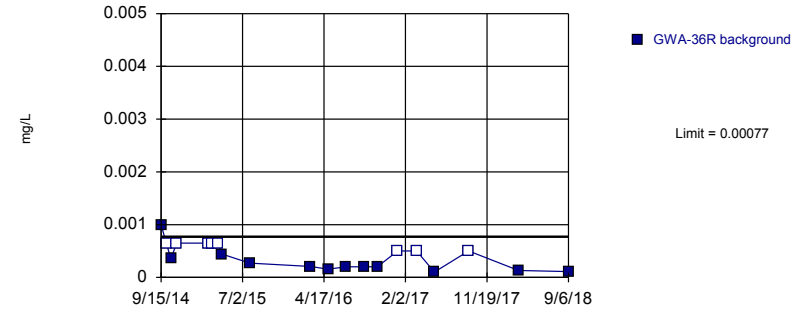
Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.0007923, Std. Dev.=0.0002524, n=20, 15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9525, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Cadmium Analysis Run 8/26/2019 4:14 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

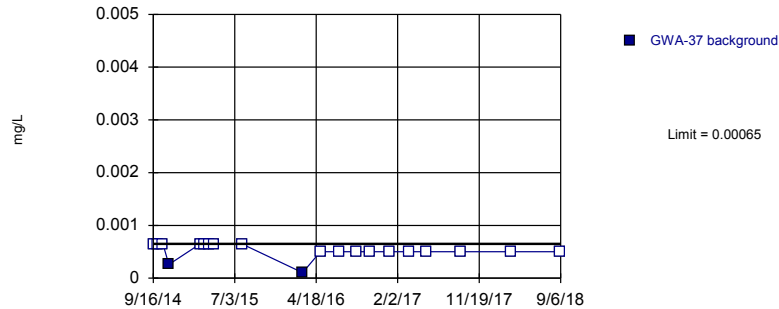
Prediction Limit
Intrawell Parametric, GWA-36R (bg)



Background Data Summary (after Aitchison's Adjustment): Mean=0.0001686, Std. Dev.=0.0002355, n=20, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9013, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit
Intrawell Non-parametric, GWA-37 (bg)

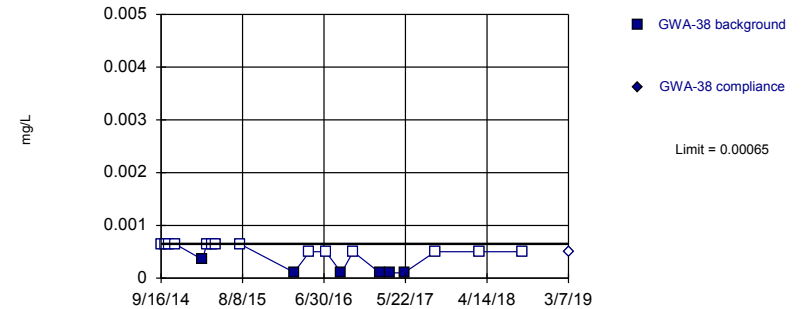


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	0.00035 (J)	
10/3/2014	<0.0013	
10/20/2014	<0.0013	
11/10/2014	0.00033 (J)	
3/2/2015	<0.0013	
3/17/2015	0.00057 (J)	
4/5/2015	0.00068 (J)	
4/21/2015	0.0011 (J)	
7/28/2015	0.00073 (J)	
3/1/2016	0.00103	
5/2/2016	0.000846 (J)	
7/7/2016	0.0007 (J)	
9/7/2016	0.0007 (J)	
10/25/2016	0.0007 (J)	
1/5/2017	0.0008 (J)	
3/15/2017	0.0013	
5/17/2017	0.001	
9/15/2017	0.0011	
3/12/2018	0.0011	
9/6/2018	0.00086 (J)	
3/6/2019		0.0013

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R
9/15/2014	0.001 (J)
10/3/2014	<0.0013
10/20/2014	0.00036 (J)
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	<0.0013
4/5/2015	<0.0013
4/21/2015	0.00044 (J)
7/28/2015	0.00027 (J)
3/1/2016	0.000207 (J)
5/2/2016	0.000154 (J)
7/6/2016	0.0002 (J)
9/7/2016	0.0002 (J)
10/25/2016	0.0002 (J)
1/5/2017	<0.001 (*)
3/14/2017	<0.001 (*)
5/16/2017	0.0001 (J)
9/15/2017	<0.001
3/12/2018	0.00013 (J)
9/6/2018	0.00011 (J)
3/7/2019	0.00017 (X)

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37
9/16/2014	<0.0013
10/3/2014	<0.0013
10/20/2014	<0.0013
11/10/2014	0.00026 (J)
3/2/2015	<0.0013
3/17/2015	<0.0013
4/5/2015	<0.0013
4/22/2015	<0.0013
7/28/2015	<0.0013
3/1/2016	0.000103 (J)
5/3/2016	<0.001
7/8/2016	<0.001
9/7/2016	<0.001
10/25/2016	<0.001
1/6/2017	<0.001 (*)
3/14/2017	<0.001 (*)
5/16/2017	<0.001
9/15/2017	<0.001
3/12/2018	<0.001
9/6/2018	<0.001
3/6/2019	9.3E-05 (X)

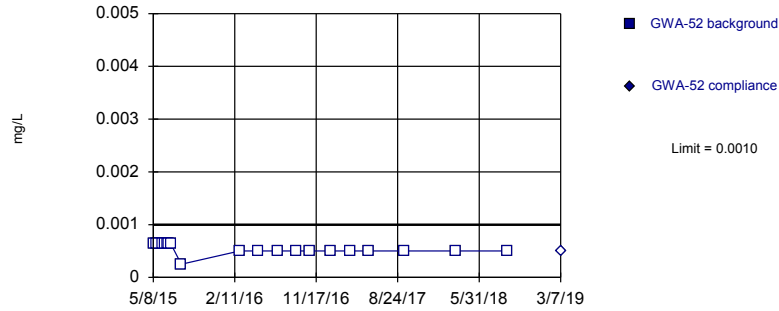
Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	<0.0013	
10/3/2014	<0.0013	
10/20/2014	<0.0013	
11/10/2014	<0.0013	
3/2/2015	0.00035 (J)	
3/17/2015	<0.0013	
4/6/2015	<0.0013	
4/22/2015	<0.0013	
7/28/2015	<0.0013	
3/2/2016	0.000109 (J)	
5/3/2016	<0.001	
7/7/2016	<0.001	
9/8/2016	0.0001 (J)	
10/25/2016	<0.001	
2/9/2017	0.0001 (J)	
3/23/2017	0.0001 (J)	
5/17/2017	0.0001 (J)	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/6/2018	<0.001	
3/7/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

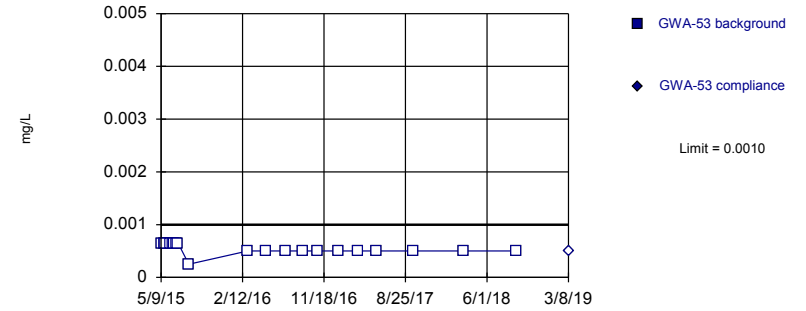


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

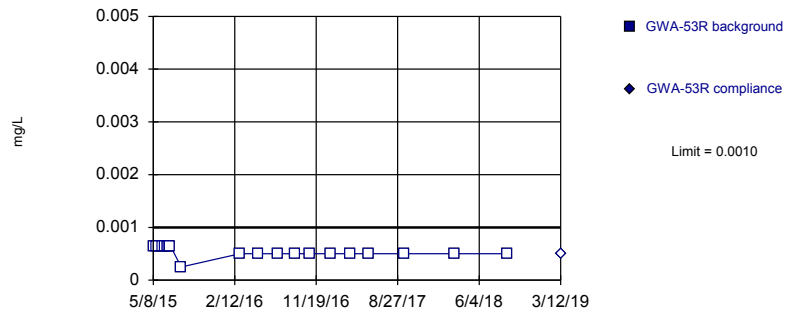


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

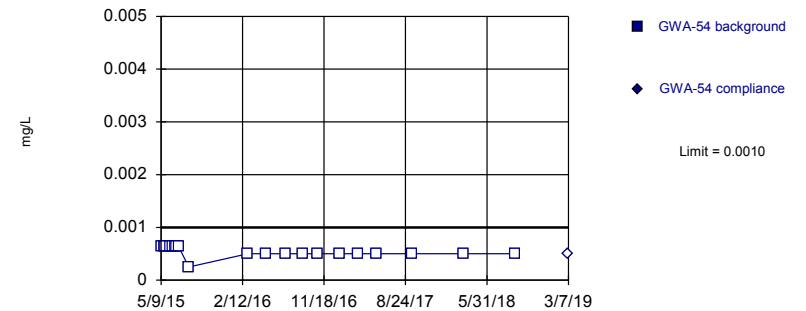


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.0013	
5/17/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.0005	
2/29/2016	<0.001	
5/4/2016	<0.001	
7/8/2016	<0.001	
9/8/2016	<0.001	
10/26/2016	<0.001	
1/6/2017	<0.001	
3/15/2017	<0.001 (*)	
5/17/2017	<0.001	
9/15/2017	<0.001	
3/13/2018	<0.001	
9/6/2018	<0.001	
3/7/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/17/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.0005	
3/2/2016	<0.001	
5/3/2016	<0.001	
7/8/2016	<0.001	
9/8/2016	<0.001	
10/26/2016	<0.001	
1/9/2017	<0.001	
3/16/2017	<0.001 (*)	
5/19/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/11/2018	<0.001	
3/8/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.0013	
5/17/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.0005	
3/2/2016	<0.001	
5/3/2016	<0.001	
7/11/2016	<0.001	
9/7/2016	<0.001	
10/27/2016	<0.001	
1/6/2017	<0.001	
3/16/2017	<0.001	
5/19/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/11/2018	<0.001	
3/12/2019		<0.001

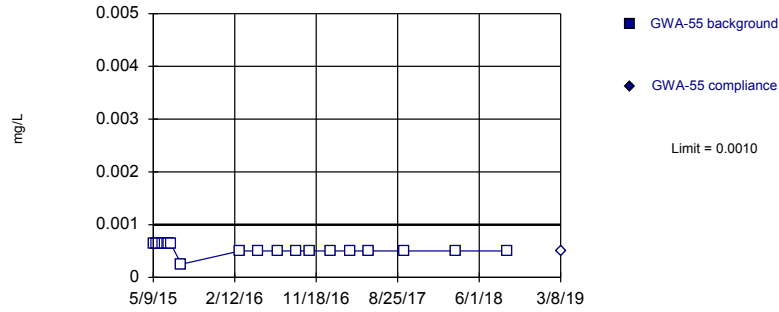
Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/25/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/12/2015	<0.0005	
3/2/2016	<0.001	
5/4/2016	<0.001	
7/8/2016	<0.001	
9/8/2016	<0.001	
10/26/2016	<0.001	
1/9/2017	<0.001	
3/15/2017	<0.001 (*)	
5/18/2017	<0.001	
9/15/2017	<0.001	
3/13/2018	<0.001	
9/6/2018	<0.001	
3/7/2019		<0.001

Sanitas™ v.9.6.20 Sanitas software licensed to AMEC, UG
Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

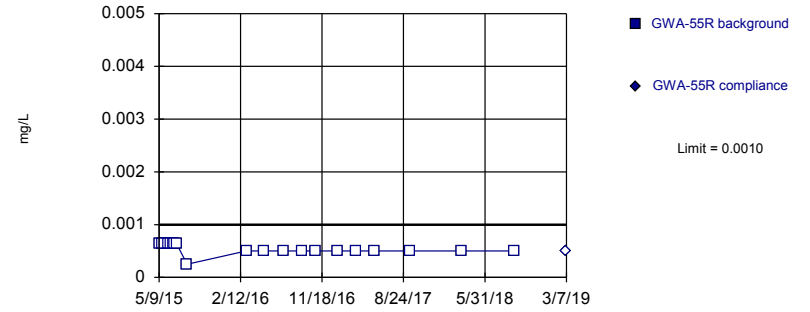


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sanitas™ v.9.6.20 Sanitas software licensed to AMEC, UG
Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

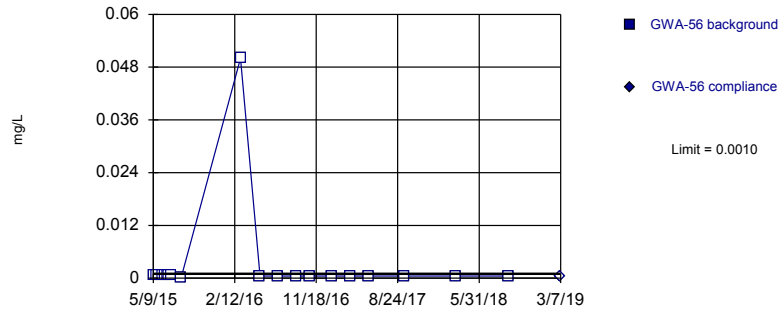


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sanitas™ v.9.6.20 Sanitas software licensed to AMEC, UG
Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

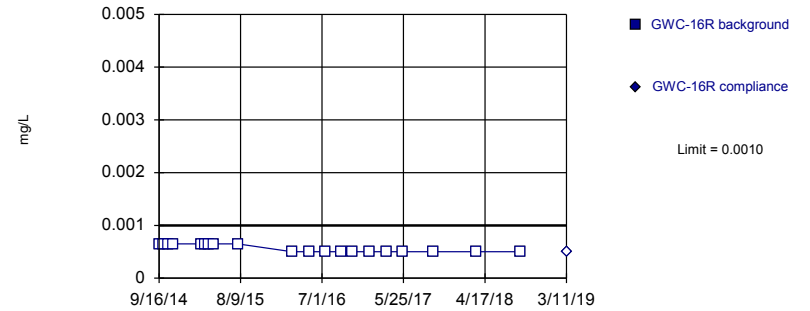


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sanitas™ v.9.6.20 Sanitas software licensed to AMEC, UG
Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/13/2015	<0.0005	
3/2/2016	<0.001	
5/3/2016	<0.001	
7/11/2016	<0.001	
9/9/2016	<0.001	
10/26/2016	<0.001	
1/9/2017	<0.001 (*)	
3/16/2017	<0.001	
5/18/2017	<0.001	
9/15/2017	<0.001	
3/12/2018	<0.001	
9/7/2018	<0.001	
3/8/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/13/2015	<0.0005	
3/3/2016	<0.001	
5/3/2016	<0.001	
7/11/2016	<0.001	
9/9/2016	<0.001	
10/27/2016	<0.001	
1/9/2017	<0.001 (*)	
3/16/2017	<0.001 (*)	
5/18/2017	<0.001	
9/18/2017	<0.001	
3/12/2018	<0.001	
9/7/2018	<0.001	
3/7/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.0013	
5/19/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/13/2015	<0.0005	
3/3/2016	<0.1	
5/9/2016	<0.001	
7/11/2016	<0.001	
9/9/2016	<0.001	
10/26/2016	<0.001	
1/9/2017	<0.001	
3/15/2017	<0.001 (*)	
5/18/2017	<0.001	
9/15/2017	<0.001	
3/13/2018	<0.001	
9/7/2018	<0.001	
3/7/2019		<0.001

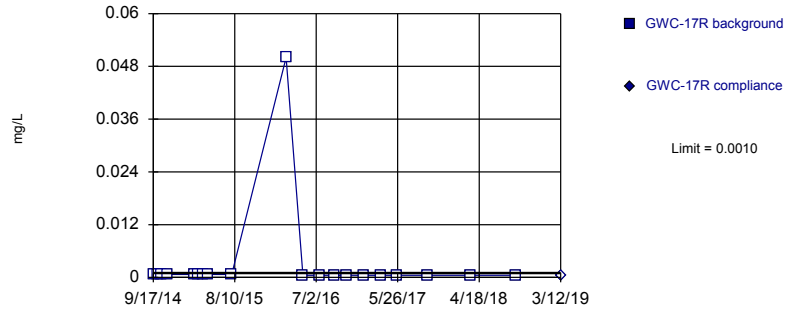
Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/11/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/6/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/3/2016	<0.001 (D)	
5/10/2016	<0.001	
7/13/2016	<0.001	
9/15/2016	<0.001	
11/2/2016	<0.001	
1/11/2017	<0.001 (*)	
3/20/2017	<0.001	
5/23/2017	<0.001	
9/21/2017	<0.001	
3/14/2018	<0.001	
9/7/2018	<0.001	
3/11/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

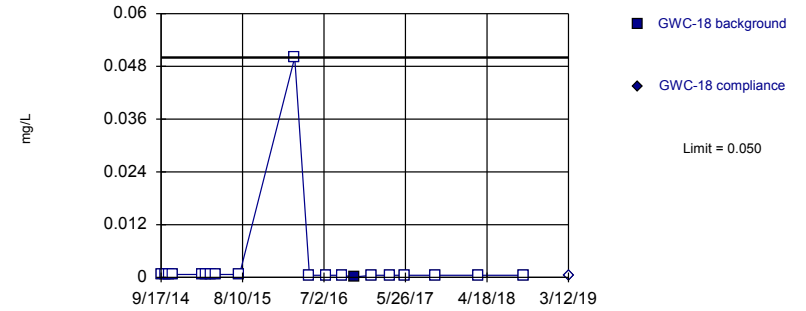


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

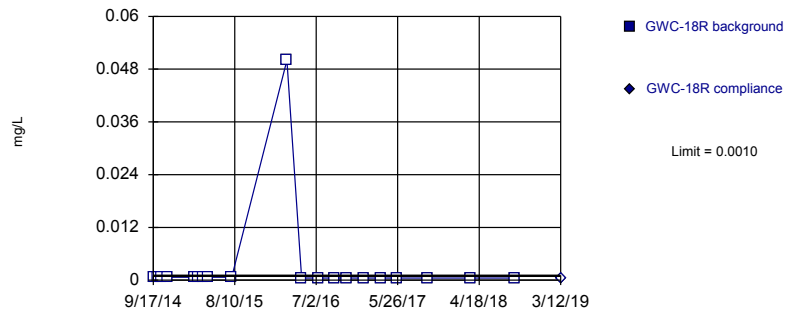


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

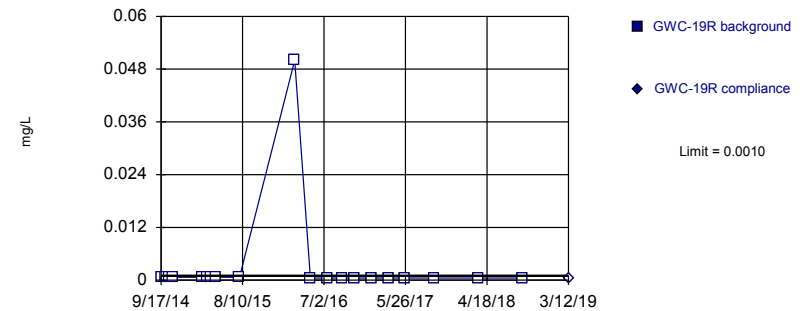


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:15 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/11/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/6/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/4/2016	<0.1	
5/10/2016	<0.001	
7/14/2016	<0.001	
9/14/2016	<0.001	
11/1/2016	<0.001	
1/11/2017	<0.001 (*)	
3/21/2017	<0.001	
5/23/2017	<0.001	
9/22/2017	<0.001	
3/14/2018	<0.001	
9/11/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/5/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/7/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.1	
5/5/2016	<0.001	
7/13/2016	<0.001	
9/13/2016	<0.001	
10/31/2016	8E-05 (J)	
1/12/2017	<0.001 (*)	
3/23/2017	<0.001	
5/23/2017	<0.001	
9/25/2017	<0.001	
3/14/2018	<0.001	
9/11/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/11/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/7/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.1	
5/5/2016	<0.001	
7/13/2016	<0.001	
9/12/2016	<0.001	
11/1/2016	<0.001	
1/11/2017	<0.001 (*)	
3/20/2017	<0.001	
5/22/2017	<0.001	
9/21/2017	<0.001	
3/14/2018	<0.001	
9/7/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

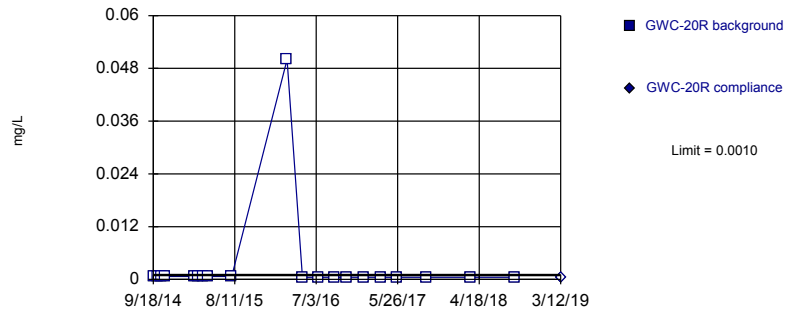
Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/5/2014	<0.0013	
3/3/2015	<0.0013	
3/19/2015	<0.0013	
4/7/2015	<0.0013	
4/24/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.1	
5/9/2016	<0.001	
7/14/2016	<0.001	
9/12/2016	<0.001	
10/31/2016	<0.001	
1/11/2017	<0.001	
3/21/2017	<0.001	
5/22/2017	<0.001	
9/20/2017	<0.001	
3/14/2018	<0.001	
9/10/2018	<0.001	
3/12/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

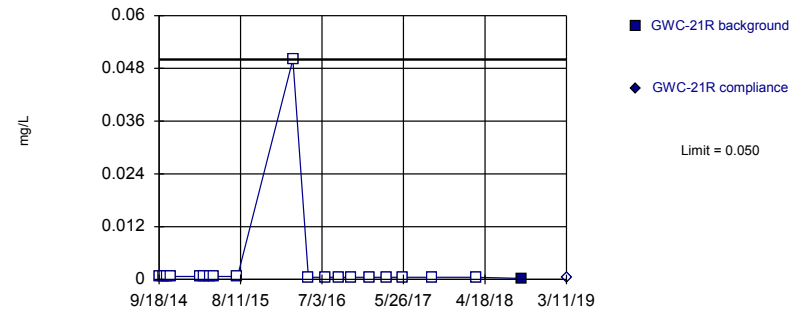


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

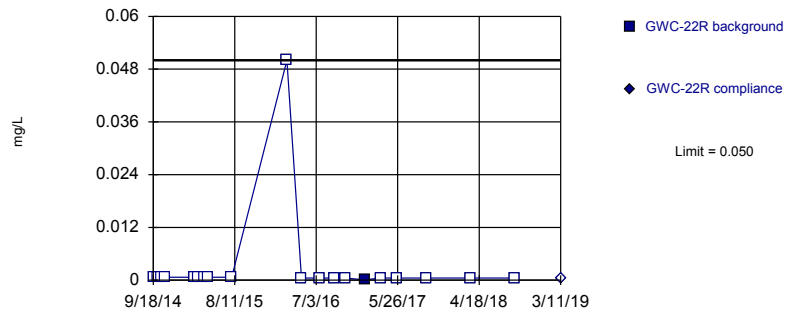


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

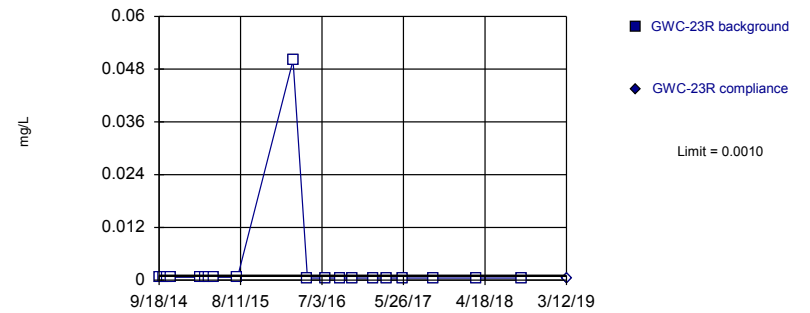


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/7/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	<0.0013	
3/8/2016	<0.1	
5/9/2016	<0.001	
7/14/2016	<0.001	
9/12/2016	<0.001	
10/31/2016	<0.001	
1/12/2017	<0.001 (*)	
3/22/2017	<0.001	
5/22/2017	<0.001	
9/19/2017	<0.001	
3/14/2018	<0.001	
9/10/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/8/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	<0.0013	
3/8/2016	<0.1	
5/9/2016	<0.001	
7/15/2016	<0.001	
9/9/2016	<0.001	
10/27/2016	<0.001	
1/12/2017	<0.001 (*)	
3/21/2017	<0.001	
5/23/2017	<0.001	
9/19/2017	<0.001	
3/14/2018	<0.001	
9/10/2018	0.00021 (J)	
3/11/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/8/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	<0.0013	
3/7/2016	<0.1	
5/5/2016	<0.001	
7/14/2016	<0.001	
9/12/2016	<0.001	
10/27/2016	<0.001	
1/13/2017	8E-05 (J)	
3/20/2017	<0.001	
5/23/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/7/2018	<0.001	
3/11/2019		<0.001

Prediction Limit

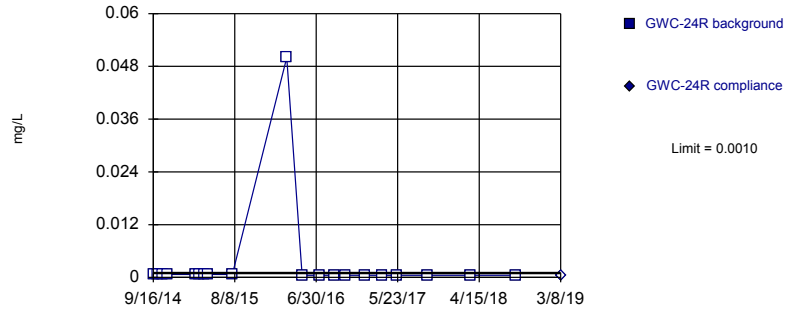
Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/8/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/9/2016	<0.1	
5/6/2016	<0.001	
7/15/2016	<0.001	
9/14/2016	<0.001	
11/1/2016	<0.001	
1/25/2017	<0.001	
3/22/2017	<0.001	
5/24/2017	<0.001	
9/21/2017	<0.001	
3/14/2018	<0.001	
9/11/2018	<0.001	
3/12/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

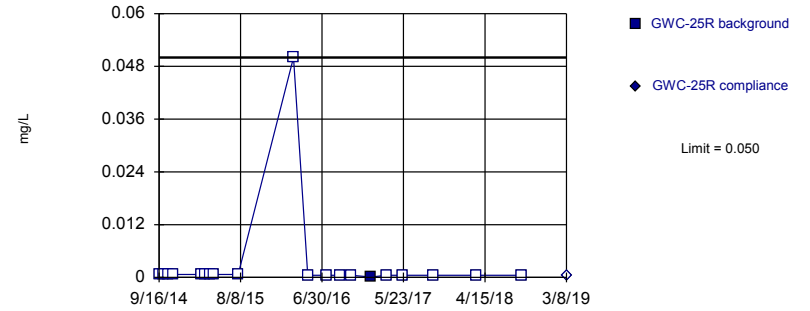


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

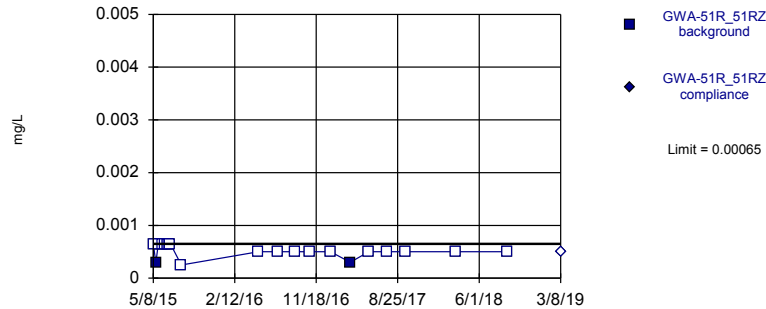


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

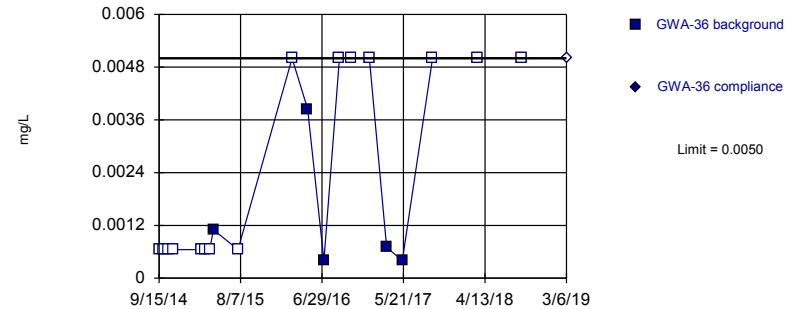


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/23/2014	<0.0013	
11/10/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/8/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/4/2016	<0.1	
5/5/2016	<0.001	
7/12/2016	<0.001	
9/13/2016	<0.001	
10/27/2016	<0.001	
1/13/2017	<0.001	
3/20/2017	<0.001	
5/19/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/11/2018	<0.001	
3/8/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/23/2014	<0.0013	
11/10/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/9/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/8/2016	<0.1	
5/4/2016	<0.001	
7/18/2016	<0.001	
9/13/2016	<0.001	
10/27/2016	<0.001	
1/13/2017	0.0001 (J)	
3/16/2017	<0.001 (*)	
5/19/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/11/2018	<0.001	
3/8/2019		<0.001

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.0013	
5/17/2015	0.00029 (J)	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.0005	
5/4/2016	<0.001 (D)	
7/7/2016	<0.001 (D)	
9/8/2016	<0.001 (D)	
10/26/2016	<0.001 (D)	
1/6/2017	<0.001 (D)	
3/15/2017	0.0003 (D)	
5/18/2017	<0.001 (D)	
7/19/2017	<0.001 (D)	
9/19/2017	<0.001 (D)	
3/13/2018	<0.001	
9/7/2018	<0.001	
3/8/2019		<0.001

Prediction Limit

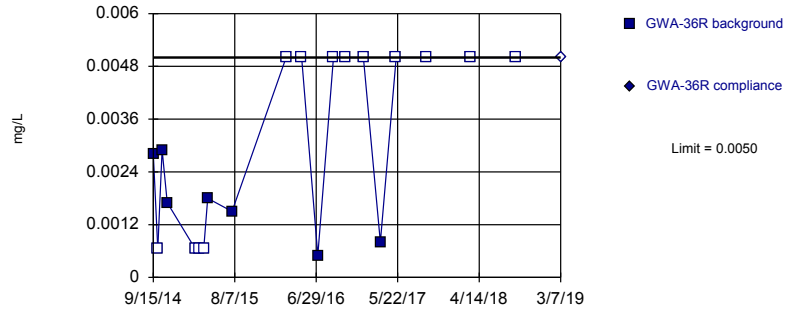
Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.0013	
10/3/2014	<0.0013	
10/20/2014	<0.0013	
11/10/2014	<0.0013	
3/2/2015	<0.0013	
3/17/2015	<0.0013	
4/5/2015	<0.0013	
4/21/2015	0.0011 (J)	
7/28/2015	<0.0013	
3/1/2016	<0.01	
5/2/2016	0.00385 (J)	
7/7/2016	0.0004 (J)	
9/7/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
3/15/2017	0.0007 (J)	
5/17/2017	0.0004 (J)	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

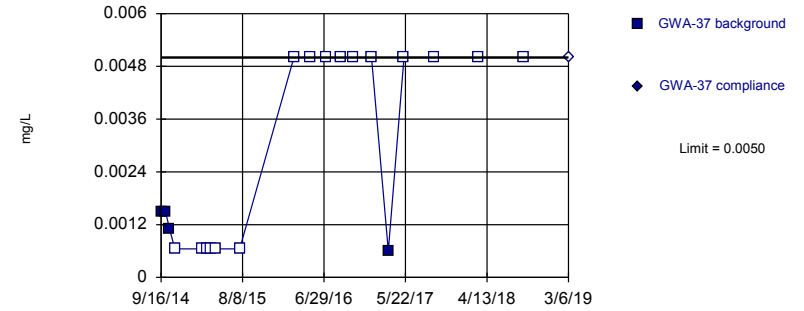


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

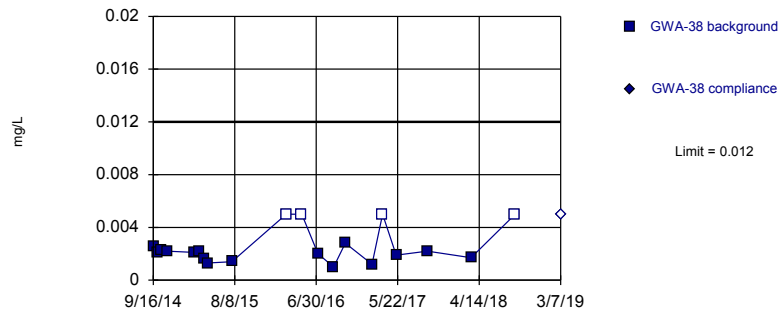


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

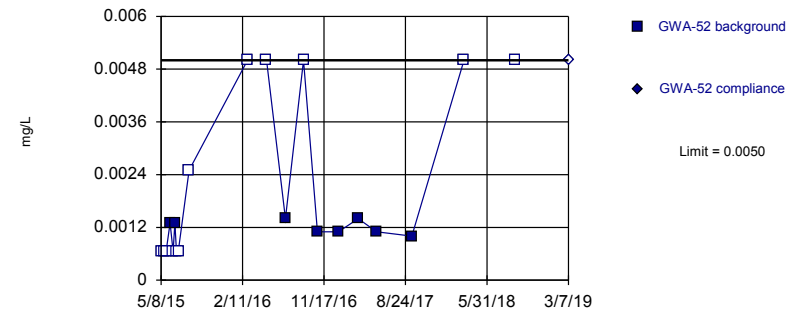


Background Data Summary (based on cube root transformation) (after Aitchison's Adjustment): Mean=0.09851, Std. Dev.=0.05156, n=20, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8738, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Chromium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 60% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.0028	
10/3/2014	<0.0013	
10/20/2014	0.0029	
11/10/2014	0.0017	
3/2/2015	<0.0013	
3/17/2015	<0.0013	
4/5/2015	<0.0013	
4/21/2015	0.0018	
7/28/2015	0.0015	
3/1/2016	<0.01	
5/2/2016	<0.01	
7/6/2016	0.0005 (J)	
9/7/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
3/14/2017	0.0008 (J)	
5/16/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	0.0015	
10/3/2014	0.0015	
10/20/2014	0.0011 (J)	
11/10/2014	<0.0013	
3/2/2015	<0.0013	
3/17/2015	<0.0013	
4/5/2015	<0.0013	
4/22/2015	<0.0013	
7/28/2015	<0.0013	
3/1/2016	<0.01	
5/3/2016	<0.01	
7/8/2016	<0.01	
9/7/2016	<0.01	
10/25/2016	<0.01	
1/6/2017	<0.01	
3/14/2017	0.0006 (J)	
5/16/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	0.0026	
10/3/2014	0.0021	
10/20/2014	0.0023	
11/10/2014	0.0022	
3/2/2015	0.0021	
3/17/2015	0.0022	
4/6/2015	0.0016	
4/22/2015	0.0013	
7/28/2015	0.0014	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/7/2016	0.002 (J)	
9/8/2016	0.001 (J)	
10/25/2016	0.0028 (J)	
2/9/2017	0.0012 (J)	
3/23/2017	<0.01 (*)	
5/17/2017	0.0019 (J)	
9/19/2017	0.0022 (J)	
3/13/2018	0.0017 (J)	
9/6/2018	<0.01	
3/7/2019		<0.01

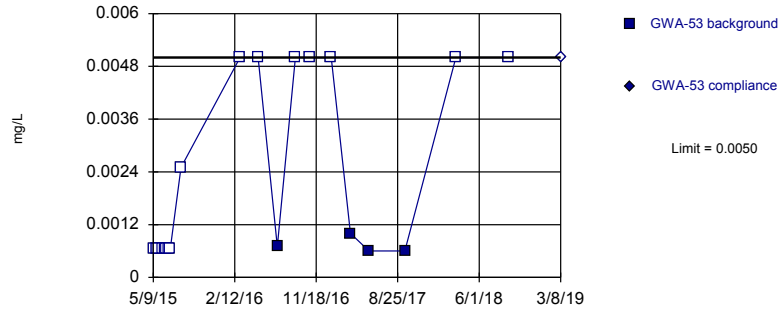
Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.0013	
5/17/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	0.0013	
6/18/2015	<0.0013	
6/24/2015	0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.005	
2/29/2016	<0.01	
5/4/2016	<0.01	
7/8/2016	0.0014 (J)	
9/8/2016	<0.01	
10/26/2016	0.0011 (J)	
1/6/2017	0.0011 (J)	
3/15/2017	0.0014 (J)	
5/17/2017	0.0011 (J)	
9/15/2017	0.001 (J)	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

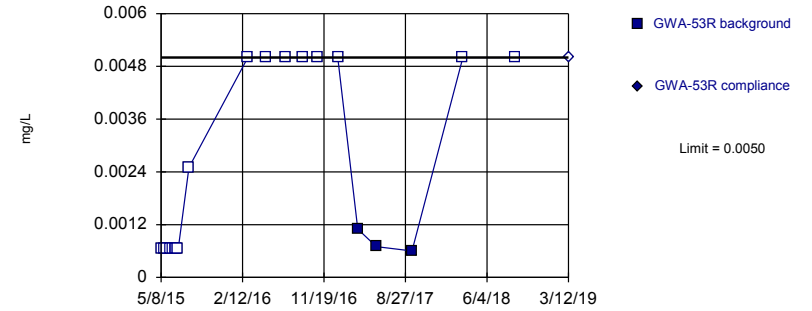


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

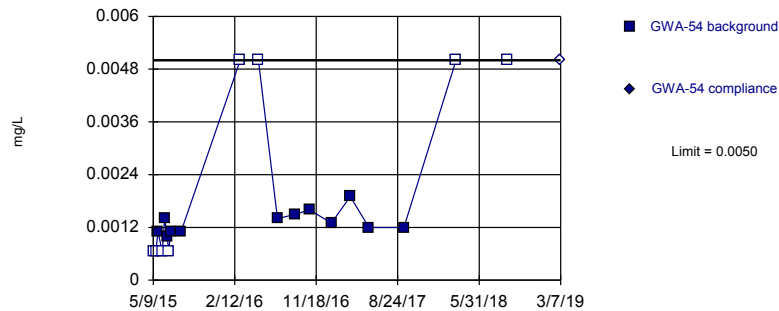


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:16 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

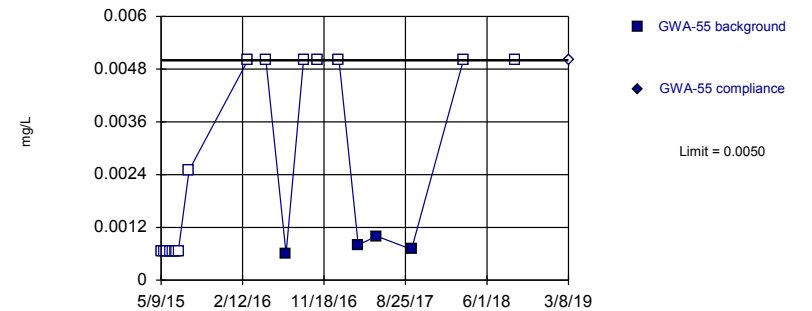


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/17/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.005	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/8/2016	0.0007 (J)	
9/8/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	<0.01	
3/16/2017	0.001 (J)	
5/19/2017	0.0006 (J)	
9/19/2017	0.0006 (J)	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.0013	
5/17/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.005	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/11/2016	<0.01	
9/7/2016	<0.01	
10/27/2016	<0.01	
1/6/2017	<0.01	
3/16/2017	0.0011 (J)	
5/19/2017	0.0007 (J)	
9/19/2017	0.0006 (J)	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/25/2015	0.0011 (J)	
6/9/2015	<0.0013	
6/17/2015	0.0014	
6/25/2015	0.001 (J)	
7/1/2015	<0.0013	
7/7/2015	0.0011 (J)	
8/12/2015	0.0011 (J)	
3/2/2016	<0.01	
5/4/2016	<0.01	
7/8/2016	0.0014 (J)	
9/8/2016	0.0015 (J)	
10/26/2016	0.0016 (J)	
1/9/2017	0.0013 (J)	
3/15/2017	0.0019 (J)	
5/18/2017	0.0012 (J)	
9/15/2017	0.0012 (J)	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

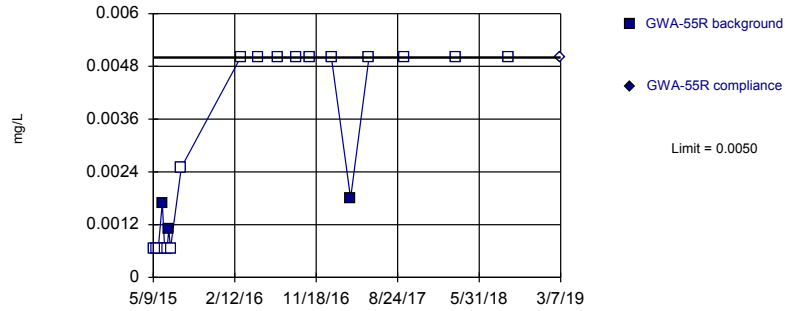
Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/13/2015	<0.005	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/11/2016	0.0006 (J)	
9/9/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	<0.01	
3/16/2017	0.0008 (J)	
5/18/2017	0.001 (J)	
9/15/2017	0.0007 (J)	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

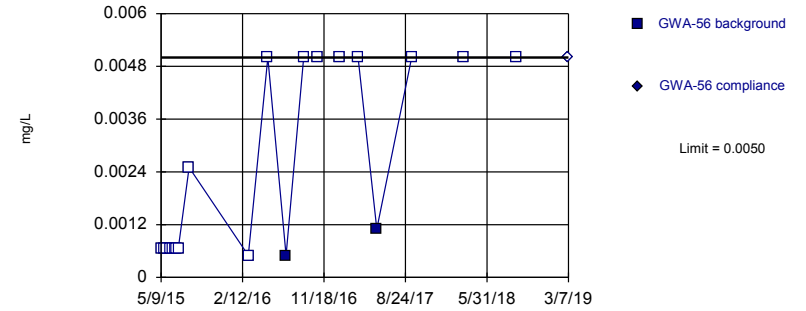


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

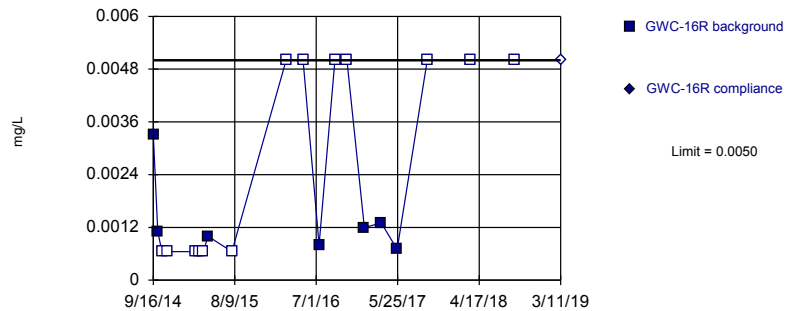


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

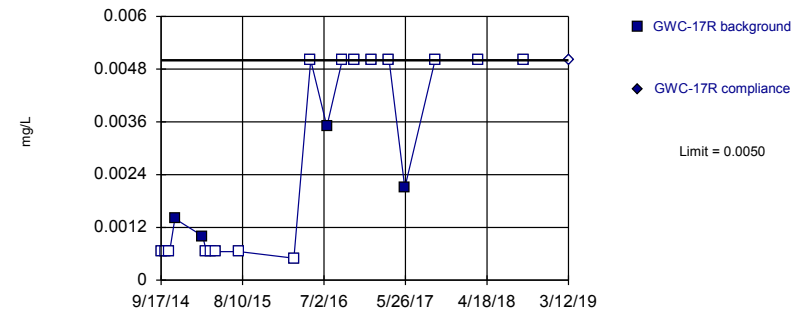


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	0.0017	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	0.0011 (J)	
7/7/2015	<0.0013	
8/13/2015	<0.005	
3/3/2016	<0.01	
5/3/2016	<0.01	
7/11/2016	<0.01	
9/9/2016	<0.01	
10/27/2016	<0.01	
1/9/2017	<0.01	
3/16/2017	0.0018 (J)	
5/18/2017	<0.01	
9/18/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.0013	
5/19/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/13/2015	<0.005	
3/3/2016	<0.001	
5/9/2016	<0.01	
7/11/2016	0.0005 (J)	
9/9/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	<0.01	
3/15/2017	<0.01	
5/18/2017	0.0011 (J)	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	0.0033	
10/4/2014	0.0011 (J)	
10/21/2014	<0.0013	
11/11/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/6/2015	<0.0013	
4/23/2015	0.001 (J)	
7/29/2015	<0.0013	
3/3/2016	<0.01 (D)	
5/10/2016	<0.01	
7/13/2016	0.0008 (J)	
9/15/2016	<0.01	
11/2/2016	<0.01	
1/11/2017	0.0012 (J)	
3/20/2017	0.0013 (J)	
5/23/2017	0.0007 (J)	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

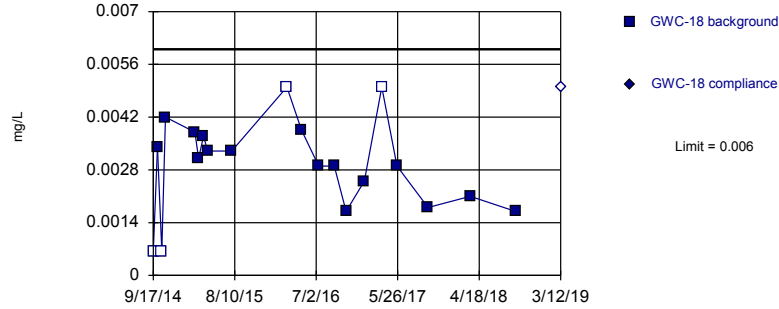
Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/11/2014	0.0014	
3/3/2015	0.001 (J)	
3/18/2015	<0.0013	
4/6/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/4/2016	<0.001	
5/10/2016	<0.01	
7/14/2016	0.0035 (J)	
9/14/2016	<0.01	
11/1/2016	<0.01	
1/11/2017	<0.01	
3/21/2017	<0.01 (*)	
5/23/2017	0.0021 (J)	
9/22/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Parametric

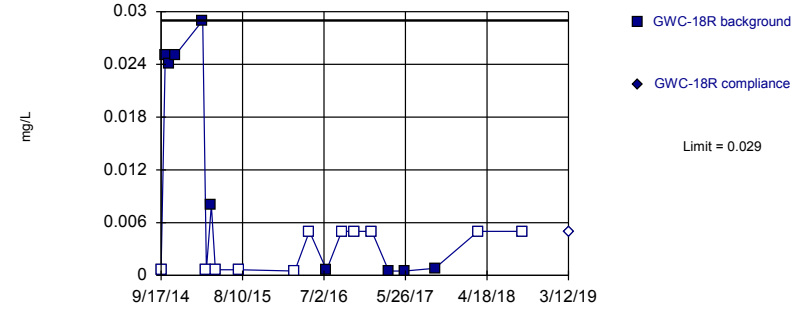


Background Data Summary (after Aitchison's Adjustment): Mean=0.002358, Std. Dev.=0.001401, n=20, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9625, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

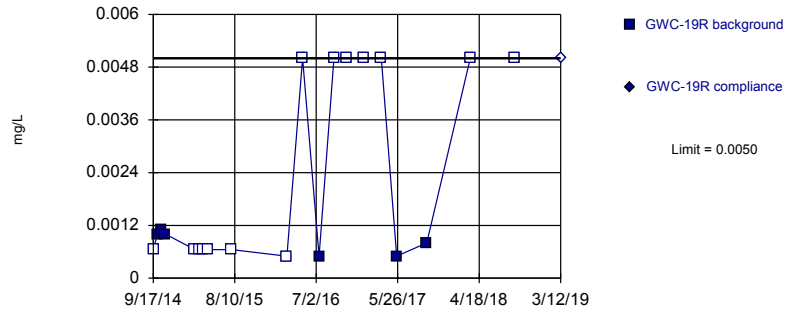


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 55% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

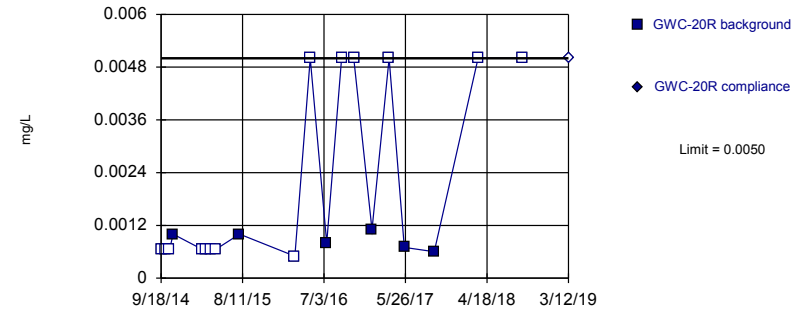


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.0013	
10/4/2014	0.0034	
10/21/2014	<0.0013	
11/5/2014	0.0042	
3/3/2015	0.0038	
3/18/2015	0.0031	
4/7/2015	0.0037	
4/23/2015	0.0033	
7/29/2015	0.0033	
3/7/2016	<0.01	
5/5/2016	0.00385 (J)	
7/13/2016	0.0029 (J)	
9/13/2016	0.0029 (J)	
10/31/2016	0.0017 (J)	
1/12/2017	0.0025 (J)	
3/23/2017	<0.01 (*)	
5/23/2017	0.0029 (J)	
9/25/2017	0.0018 (J)	
3/14/2018	0.0021 (J)	
9/11/2018	0.0017 (J)	
3/12/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.0013	
10/4/2014	0.025	
10/21/2014	0.024	
11/11/2014	0.025	
3/3/2015	0.029	
3/18/2015	<0.0013	
4/7/2015	0.008	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.001	
5/5/2016	<0.01	
7/13/2016	0.0006 (J)	
9/12/2016	<0.01	
11/1/2016	<0.01	
1/11/2017	<0.01	
3/20/2017	0.0005 (J)	
5/22/2017	0.0005 (J)	
9/21/2017	0.0008 (J)	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.0013	
10/4/2014	0.001 (J)	
10/21/2014	0.0011 (J)	
11/5/2014	0.001 (J)	
3/3/2015	<0.0013	
3/19/2015	<0.0013	
4/7/2015	<0.0013	
4/24/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.001	
5/9/2016	<0.01	
7/14/2016	0.0005 (J)	
9/12/2016	<0.01	
10/31/2016	<0.01	
1/11/2017	<0.01	
3/21/2017	<0.01 (*)	
5/22/2017	0.0005 (J)	
9/20/2017	0.0008 (J)	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

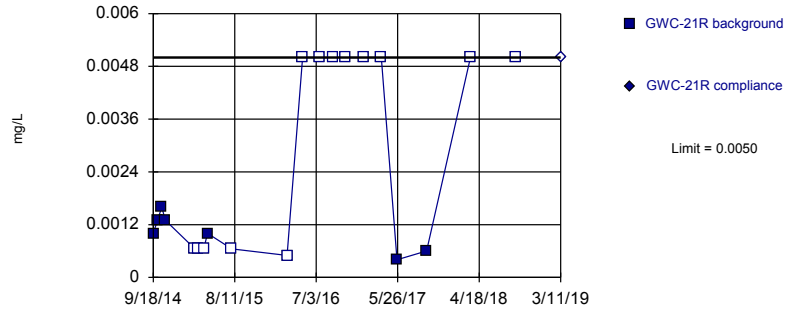
Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	0.001 (J)	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/7/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	0.001 (J)	
3/8/2016	<0.001	
5/9/2016	<0.01	
7/14/2016	0.0008 (J)	
9/12/2016	<0.01	
10/31/2016	<0.01	
1/12/2017	0.0011 (J)	
3/22/2017	<0.01 (*)	
5/22/2017	0.0007 (J)	
9/19/2017	0.0006 (J)	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

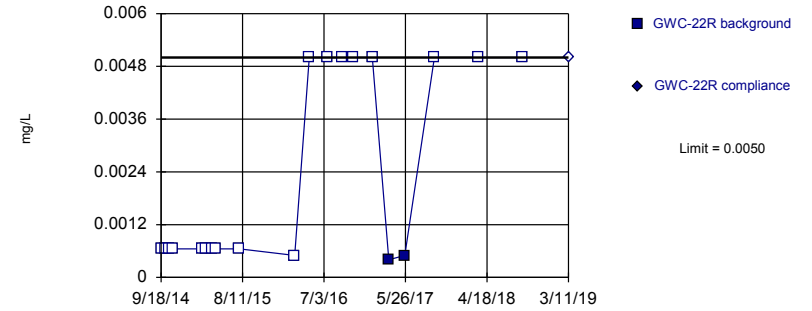


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

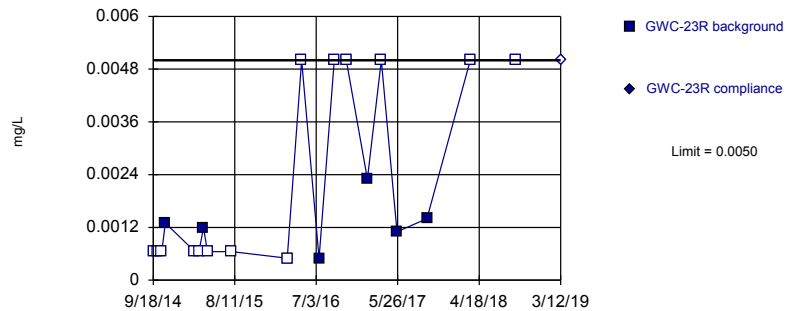


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

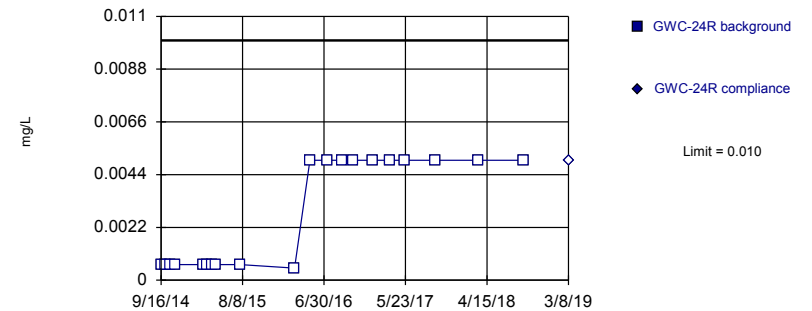


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:17 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	0.001 (J)	
10/5/2014	0.0013	
10/22/2014	0.0016	
11/5/2014	0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/8/2015	<0.0013	
4/24/2015	0.001 (J)	
7/30/2015	<0.0013	
3/8/2016	<0.001	
5/9/2016	<0.01	
7/15/2016	<0.01	
9/9/2016	<0.01	
10/27/2016	<0.01	
1/12/2017	<0.01	
3/21/2017	<0.01 (*)	
5/23/2017	0.0004 (J)	
9/19/2017	0.0006 (J)	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/8/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	<0.0013	
3/7/2016	<0.001	
5/5/2016	<0.01	
7/14/2016	<0.01	
9/12/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/20/2017	0.0004 (J)	
5/23/2017	0.0005 (J)	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/8/2015	0.0012 (J)	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/9/2016	<0.001	
5/6/2016	<0.01	
7/15/2016	0.0005 (J)	
9/14/2016	<0.01	
11/1/2016	<0.01	
1/25/2017	0.0023 (J)	
3/22/2017	<0.01 (*)	
5/24/2017	0.0011 (J)	
9/21/2017	0.0014 (J)	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

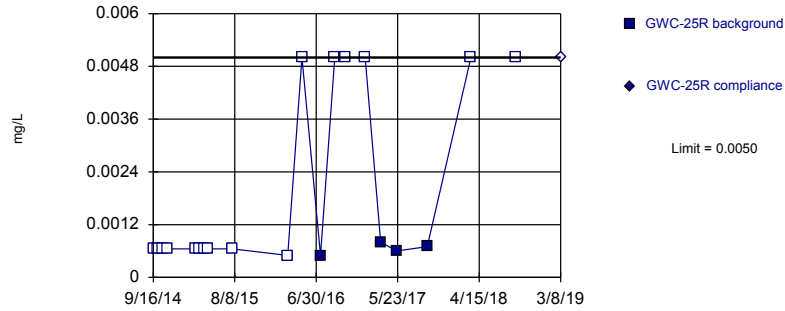
Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/23/2014	<0.0013	
11/10/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/8/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/4/2016	<0.001	
5/5/2016	<0.01	
7/12/2016	<0.01	
9/13/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/20/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

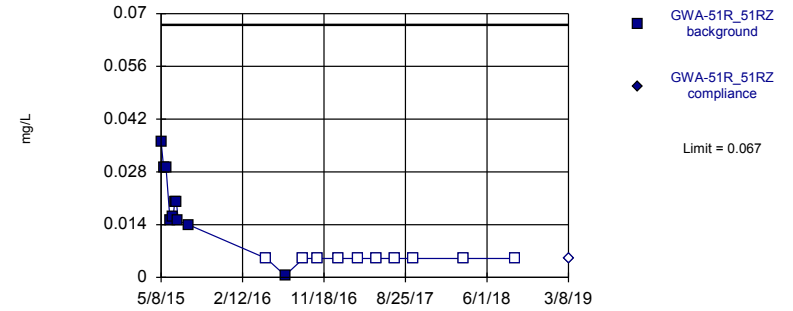


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

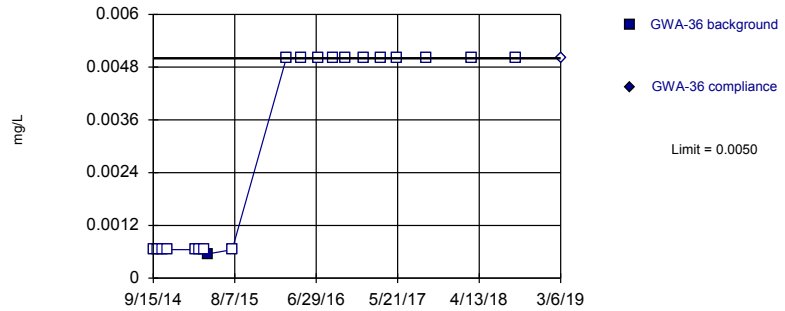


Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.06624, Std. Dev.=0.07492, n=20, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8706, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Chromium Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

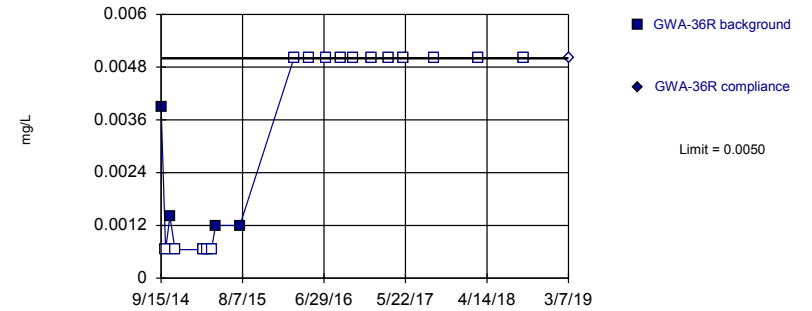


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/23/2014	<0.0013	
11/10/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/9/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/8/2016	<0.001	
5/4/2016	<0.01	
7/18/2016	0.0005 (J)	
9/13/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/16/2017	0.0008 (J)	
5/19/2017	0.0006 (J)	
9/19/2017	0.0007 (J)	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Chromium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	0.036	
5/17/2015	0.029	
5/25/2015	0.029	
6/8/2015	0.015	
6/18/2015	0.016	
6/24/2015	0.02	
6/30/2015	0.02	
7/6/2015	0.015	
8/12/2015	0.0139	
5/4/2016	<0.01 (D)	
7/7/2016	0.0005 (JD)	
9/8/2016	<0.01 (D)	
10/26/2016	<0.01 (D)	
1/6/2017	<0.01 (D)	
3/15/2017	<0.01 (D)	
5/18/2017	<0.01 (D)	
7/19/2017	<0.01 (D)	
9/19/2017	<0.01 (D)	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.0013	
10/3/2014	<0.0013	
10/20/2014	<0.0013	
11/10/2014	<0.0013	
3/2/2015	<0.0013	
3/17/2015	<0.0013	
4/5/2015	<0.0013	
4/21/2015	0.00055 (J)	
7/28/2015	<0.0013	
3/1/2016	<0.01	
5/2/2016	<0.01	
7/7/2016	<0.01	
9/7/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
3/15/2017	<0.01	
5/17/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

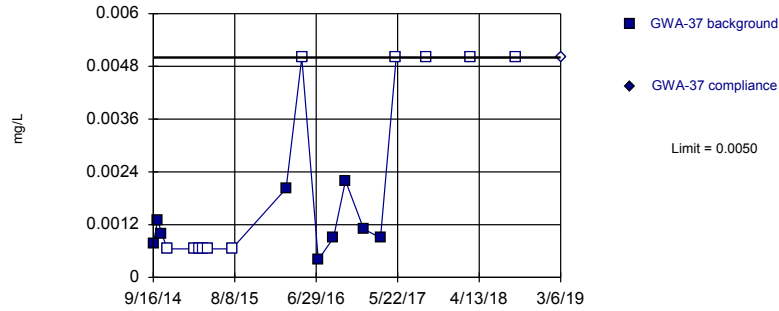
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.0039	
10/3/2014	<0.0013	
10/20/2014	0.0014	
11/10/2014	<0.0013	
3/2/2015	<0.0013	
3/17/2015	<0.0013	
4/5/2015	<0.0013	
4/21/2015	0.0012 (J)	
7/28/2015	0.0012 (J)	
3/1/2016	<0.01	
5/2/2016	<0.01	
7/6/2016	<0.01	
9/7/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
3/14/2017	<0.01	
5/16/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

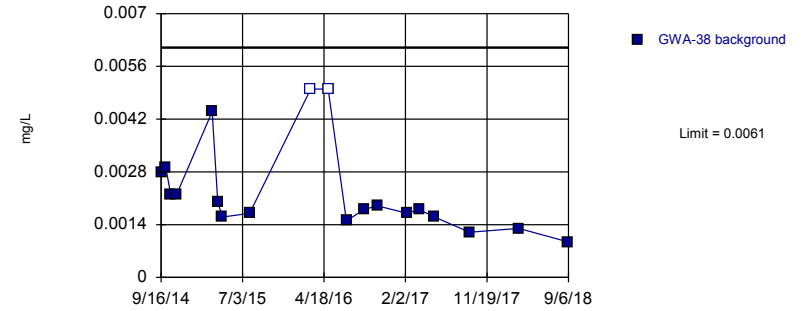


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 55% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric, GWA-38 (bg)

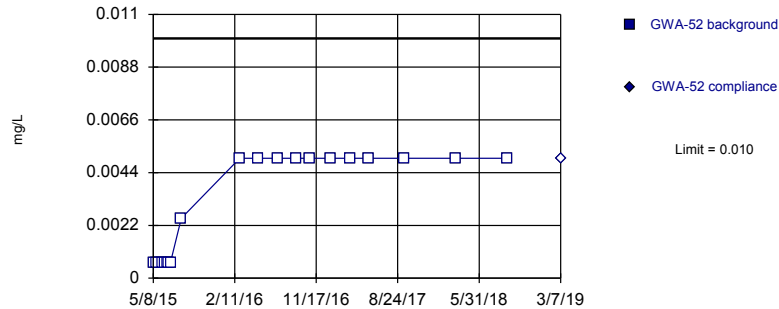


Background Data Summary (based on cube root transformation): Mean=0.1286, Std. Dev.=0.02078, n=19, 10.53% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8842, critical = 0.863. Kappa = 2.601 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

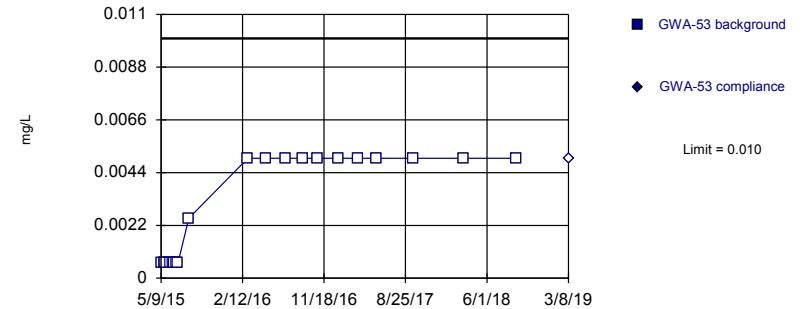


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	0.00077 (J)	
10/3/2014	0.0013	
10/20/2014	0.001 (J)	
11/10/2014	<0.0013	
3/2/2015	<0.0013	
3/17/2015	<0.0013	
4/5/2015	<0.0013	
4/22/2015	<0.0013	
7/28/2015	<0.0013	
3/1/2016	0.00202 (J)	
5/3/2016	<0.01	
7/8/2016	0.0004 (J)	
9/7/2016	0.0009 (J)	
10/25/2016	0.0022 (J)	
1/6/2017	0.0011 (J)	
3/14/2017	0.0009 (J)	
5/16/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38
9/16/2014	0.0028
10/3/2014	0.0029
10/20/2014	0.0022
11/10/2014	0.0022
3/17/2015	0.0044
4/6/2015	0.002
4/22/2015	0.0016
7/28/2015	0.0017
3/2/2016	<0.01
5/3/2016	<0.01
7/7/2016	0.0015 (J)
9/8/2016	0.0018 (J)
10/25/2016	0.0019 (J)
2/9/2017	0.0017 (J)
3/23/2017	0.0018 (J)
5/17/2017	0.0016 (J)
9/19/2017	0.0012 (J)
3/13/2018	0.0013 (J)
9/6/2018	0.00094 (J)
3/7/2019	0.00087 (X)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.0013	
5/17/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.005	
2/29/2016	<0.01	
5/4/2016	<0.01	
7/8/2016	<0.01	
9/8/2016	<0.01	
10/26/2016	<0.01	
1/6/2017	<0.01	
3/15/2017	<0.01	
5/17/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

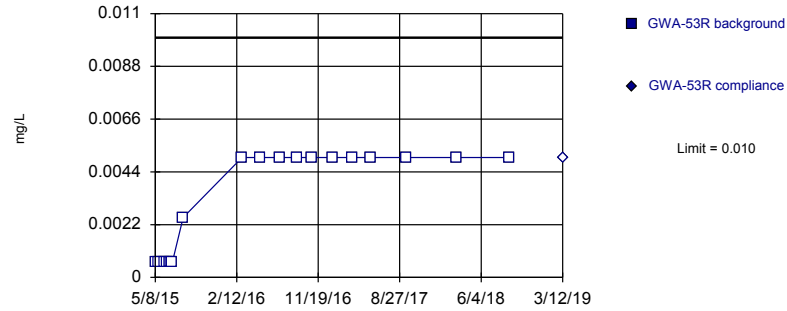
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.0013	
5/18/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/17/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.005	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/8/2016	<0.01	
9/8/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	<0.01	
3/16/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

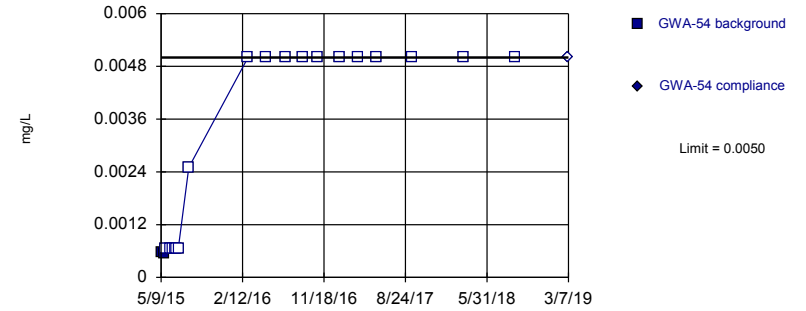


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

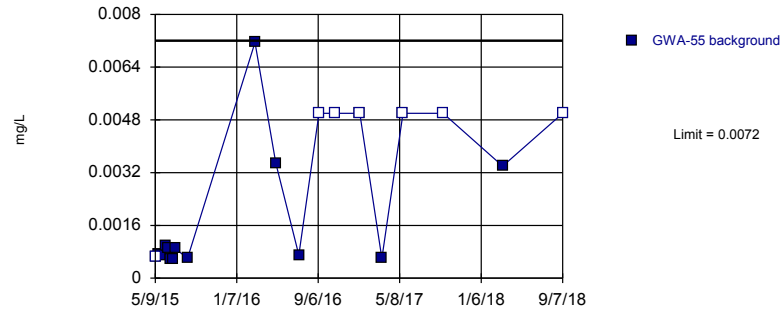


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-55 (bg)

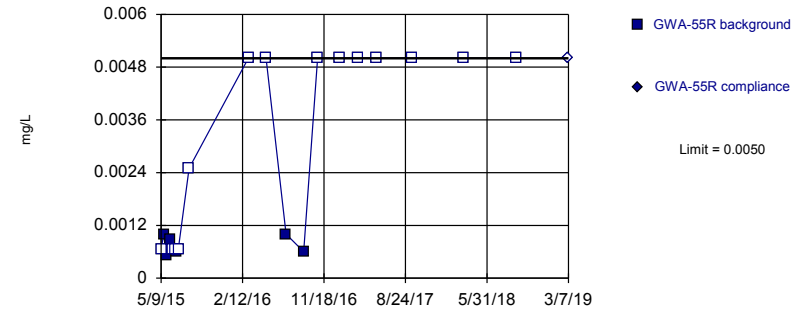


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 35% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.0013	
5/17/2015	<0.0013	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.005	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/11/2016	<0.01	
9/7/2016	<0.01	
10/27/2016	<0.01	
1/6/2017	<0.01	
3/16/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	0.00057 (J)	
5/18/2015	0.00055 (J)	
5/25/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/12/2015	<0.005	
3/2/2016	<0.01	
5/4/2016	<0.01	
7/8/2016	<0.01	
9/8/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	<0.01	
3/15/2017	<0.01	
5/18/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55
5/9/2015	<0.0013
5/18/2015	0.00071 (J)
5/26/2015	0.00067 (J)
6/9/2015	0.001 (J)
6/17/2015	0.00093 (J)
6/25/2015	0.00059 (J)
7/1/2015	0.00059 (J)
7/7/2015	0.00091 (J)
8/13/2015	0.0006 (J)
3/2/2016	0.00715 (J)
5/3/2016	0.00349 (J)
7/11/2016	0.0007 (J)
9/9/2016	<0.01
10/26/2016	<0.01
1/9/2017	<0.01
3/16/2017	0.0006 (J)
5/18/2017	<0.01
9/15/2017	<0.01
3/12/2018	0.0034 (J)
9/7/2018	<0.01
3/8/2019	0.0044 (X)

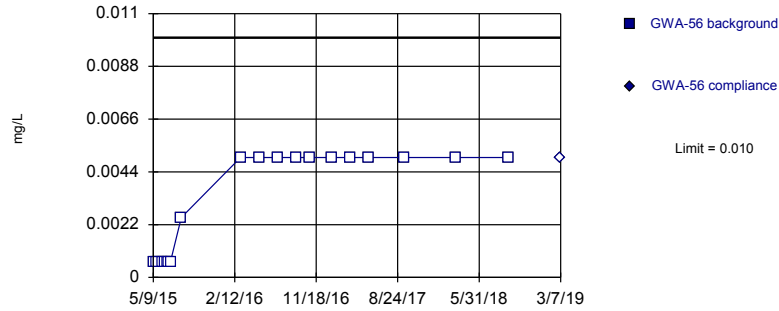
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.0013	
5/18/2015	0.001 (J)	
5/26/2015	0.00052 (J)	
6/9/2015	0.00087 (J)	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	0.0006 (J)	
7/7/2015	<0.0013	
8/13/2015	<0.005	
3/3/2016	<0.01	
5/3/2016	<0.01	
7/11/2016	0.001 (J)	
9/9/2016	0.0006 (J)	
10/27/2016	<0.01	
1/9/2017	<0.01	
3/16/2017	<0.01	
5/18/2017	<0.01	
9/18/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

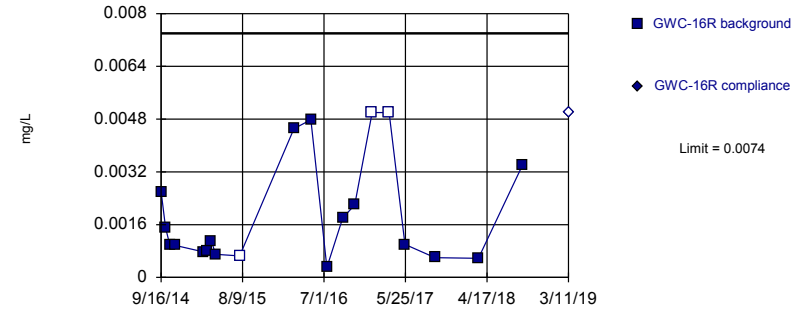


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

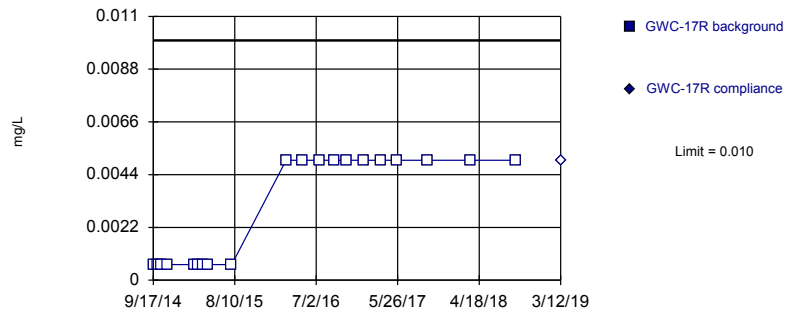


Background Data Summary (based on square root transformation): Mean=0.04084, Std. Dev.=0.01765, n=20, 15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8717, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

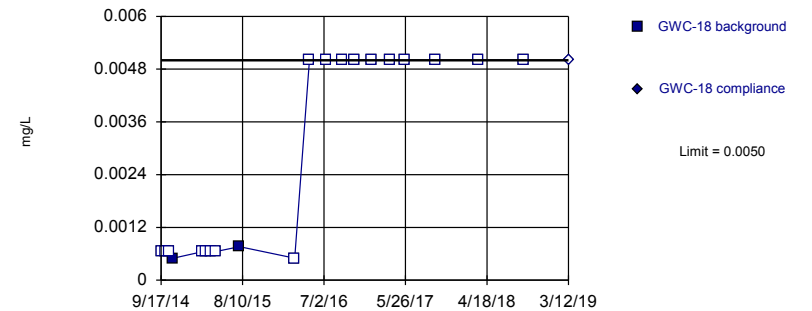


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:18 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.0013	
5/19/2015	<0.0013	
5/26/2015	<0.0013	
6/9/2015	<0.0013	
6/17/2015	<0.0013	
6/25/2015	<0.0013	
7/1/2015	<0.0013	
7/7/2015	<0.0013	
8/13/2015	<0.005	
3/3/2016	<0.01	
5/9/2016	<0.01	
7/11/2016	<0.01	
9/9/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	<0.01	
3/15/2017	<0.01	
5/18/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	0.0026	
10/4/2014	0.0015	
10/21/2014	0.00099 (J)	
11/11/2014	0.00097 (J)	
3/3/2015	0.00078 (J)	
3/18/2015	0.00081 (J)	
4/6/2015	0.0011 (J)	
4/23/2015	0.0007 (J)	
7/29/2015	<0.0013	
3/3/2016	0.00451 (JD)	
5/10/2016	0.00478 (J)	
7/13/2016	0.0003 (J)	
9/15/2016	0.0018 (J)	
11/2/2016	0.0022 (J)	
1/11/2017	<0.01	
3/20/2017	<0.01	
5/23/2017	0.001 (J)	
9/21/2017	0.0006 (J)	
3/14/2018	0.00058 (J)	
9/7/2018	0.0034 (J)	
3/11/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/11/2014	<0.0013	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/6/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/4/2016	<0.01	
5/10/2016	<0.01	
7/14/2016	<0.01	
9/14/2016	<0.01	
11/1/2016	<0.01	
1/11/2017	<0.01	
3/21/2017	<0.01	
5/23/2017	<0.01	
9/22/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

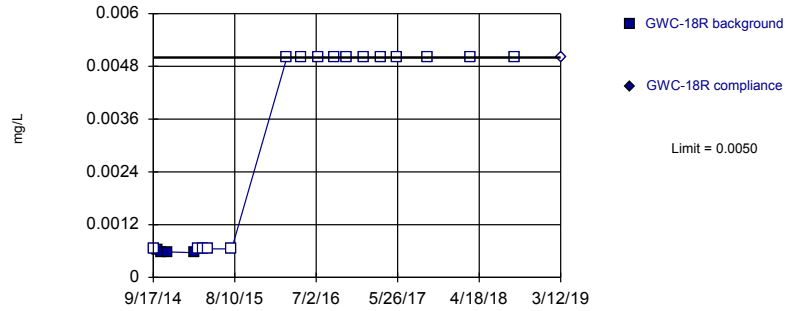
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/5/2014	0.0005 (J)	
3/3/2015	<0.0013	
3/18/2015	<0.0013	
4/7/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	0.00076 (J)	
3/7/2016	<0.001	
5/5/2016	<0.01	
7/13/2016	<0.01	
9/13/2016	<0.01	
10/31/2016	<0.01	
1/12/2017	<0.01	
3/23/2017	<0.01	
5/23/2017	<0.01	
9/25/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

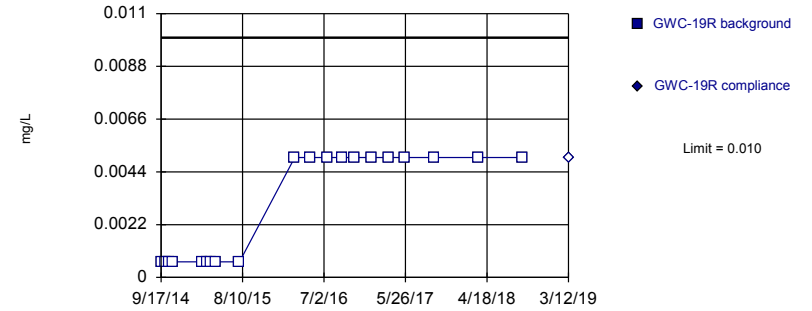


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

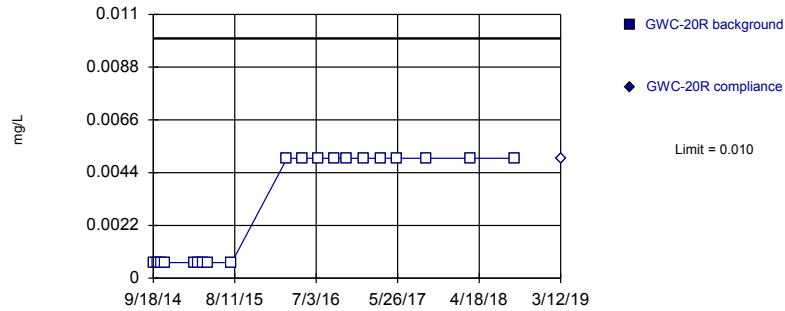


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

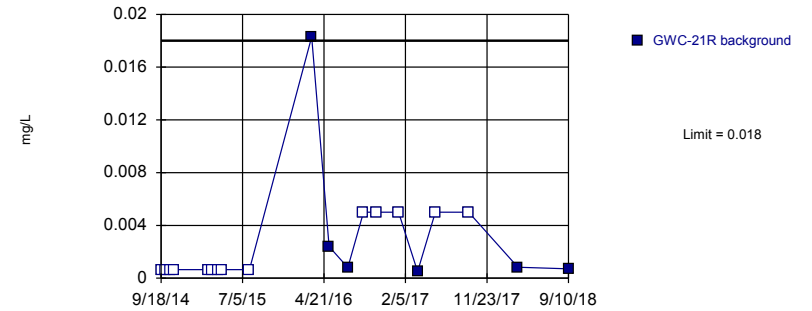


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-21R



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.0013	
10/4/2014	0.00063 (J)	
10/21/2014	0.00058 (J)	
11/11/2014	0.00058 (J)	
3/3/2015	0.00056 (J)	
3/18/2015	<0.0013	
4/7/2015	<0.0013	
4/23/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.01	
5/5/2016	<0.01	
7/13/2016	<0.01	
9/12/2016	<0.01	
11/1/2016	<0.01	
1/11/2017	<0.01	
3/20/2017	<0.01	
5/22/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.0013	
10/4/2014	<0.0013	
10/21/2014	<0.0013	
11/5/2014	<0.0013	
3/3/2015	<0.0013	
3/19/2015	<0.0013	
4/7/2015	<0.0013	
4/24/2015	<0.0013	
7/29/2015	<0.0013	
3/7/2016	<0.01	
5/9/2016	<0.01	
7/14/2016	<0.01	
9/12/2016	<0.01	
10/31/2016	<0.01	
1/11/2017	<0.01	
3/21/2017	<0.01	
5/22/2017	<0.01	
9/20/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/7/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	<0.0013	
3/8/2016	<0.01	
5/9/2016	<0.01	
7/14/2016	<0.01	
9/12/2016	<0.01	
10/31/2016	<0.01	
1/12/2017	<0.01	
3/22/2017	<0.01	
5/22/2017	<0.01	
9/19/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

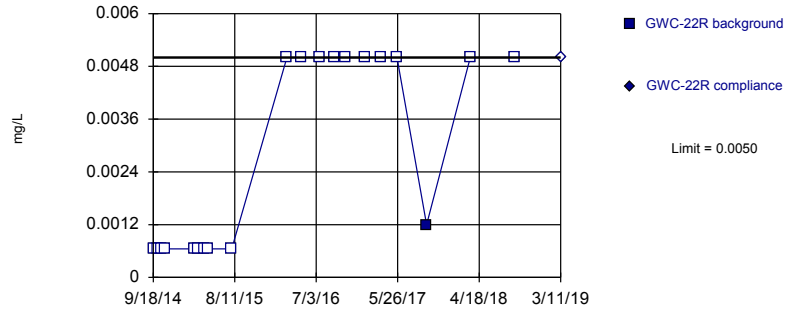
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R
9/18/2014	<0.0013
10/5/2014	<0.0013
10/22/2014	<0.0013
11/5/2014	<0.0013
3/4/2015	<0.0013
3/19/2015	<0.0013
4/8/2015	<0.0013
4/24/2015	<0.0013
7/30/2015	<0.0013
3/8/2016	0.0183 (J)
5/9/2016	0.00239 (J)
7/15/2016	0.0008 (J)
9/9/2016	<0.01
10/27/2016	<0.01
1/12/2017	<0.01
3/21/2017	0.0005 (J)
5/23/2017	<0.01
9/19/2017	<0.01
3/14/2018	0.00083 (J)
9/10/2018	0.00071 (J)
3/11/2019	0.00056 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

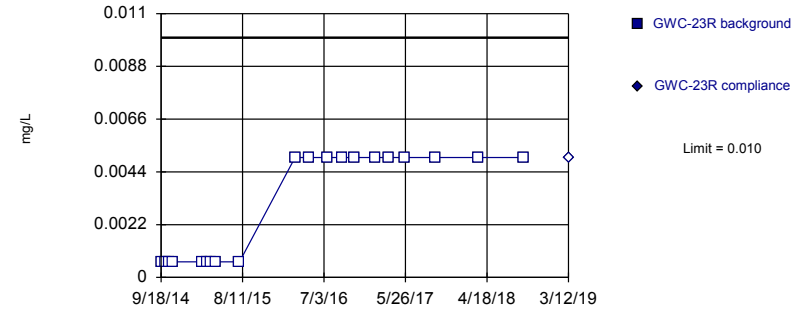


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

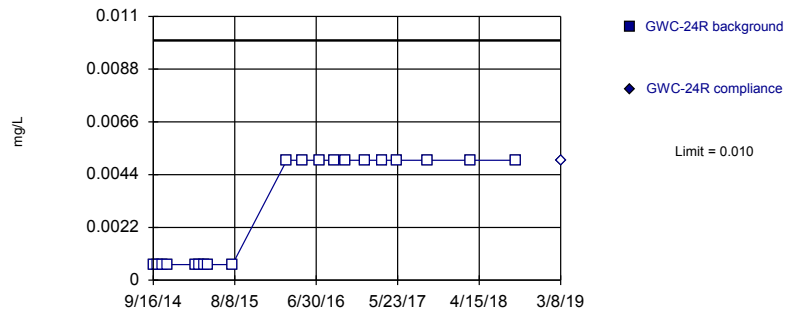


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

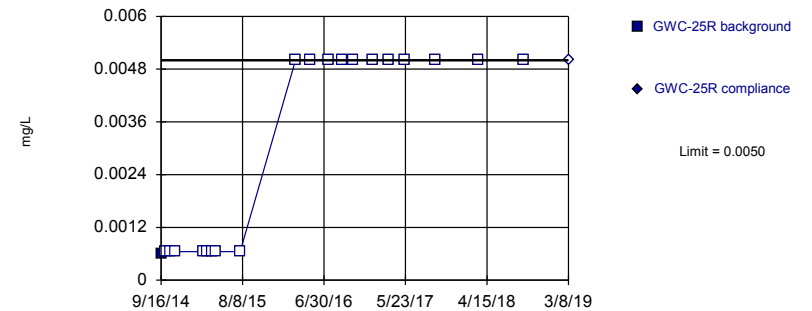


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/19/2015	<0.0013	
4/8/2015	<0.0013	
4/24/2015	<0.0013	
7/30/2015	<0.0013	
3/7/2016	<0.01	
5/5/2016	<0.01	
7/14/2016	<0.01	
9/12/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/20/2017	<0.01	
5/23/2017	<0.01	
9/19/2017	0.0012 (J)	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.0013	
10/5/2014	<0.0013	
10/22/2014	<0.0013	
11/5/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/8/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/9/2016	<0.01	
5/6/2016	<0.01	
7/15/2016	<0.01	
9/14/2016	<0.01	
11/1/2016	<0.01	
1/25/2017	<0.01	
3/22/2017	<0.01	
5/24/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.0013	
10/4/2014	<0.0013	
10/23/2014	<0.0013	
11/10/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/8/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/4/2016	<0.01	
5/5/2016	<0.01	
7/12/2016	<0.01	
9/13/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/20/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

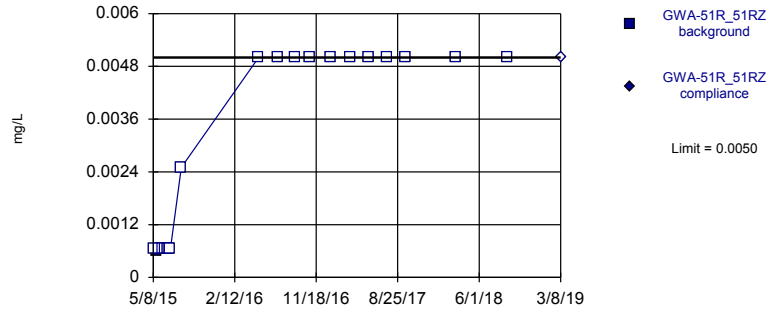
Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	0.0006 (J)	
10/4/2014	<0.0013	
10/23/2014	<0.0013	
11/10/2014	<0.0013	
3/4/2015	<0.0013	
3/20/2015	<0.0013	
4/9/2015	<0.0013	
4/23/2015	<0.0013	
7/30/2015	<0.0013	
3/8/2016	<0.01	
5/4/2016	<0.01	
7/18/2016	<0.01	
9/13/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/16/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Within Limit

Prediction Limit
 Intrawell Non-parametric

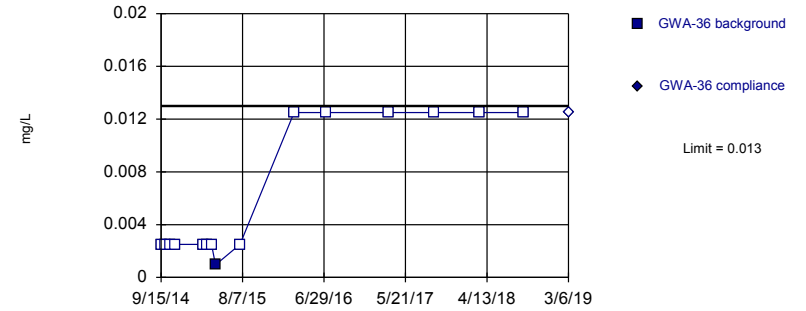


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

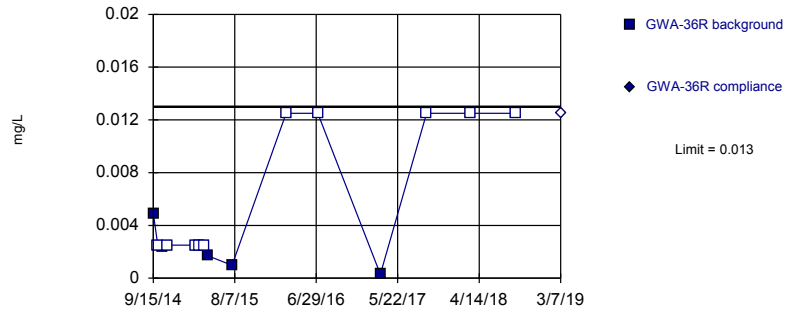


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

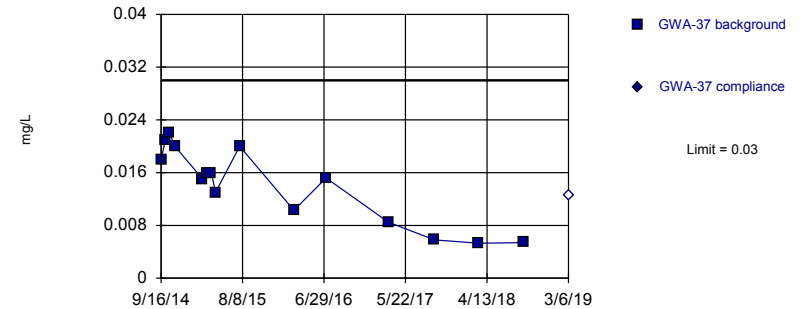


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=0.0141, Std. Dev.=0.005813, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9153, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Copper Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.0013	
5/17/2015	0.00059 (J)	
5/25/2015	<0.0013	
6/8/2015	<0.0013	
6/18/2015	<0.0013	
6/24/2015	<0.0013	
6/30/2015	<0.0013	
7/6/2015	<0.0013	
8/12/2015	<0.005	
5/4/2016	<0.01 (D)	
7/7/2016	<0.01 (D)	
9/8/2016	<0.01 (D)	
10/26/2016	<0.01 (D)	
1/6/2017	<0.01 (D)	
3/15/2017	<0.01 (D)	
5/18/2017	<0.01 (D)	
7/19/2017	<0.01 (D)	
9/19/2017	<0.01 (D)	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	0.00095 (J)	
7/28/2015	<0.005	
3/1/2016	<0.025	
7/7/2016	<0.025	
3/15/2017	<0.025 (*)	
9/15/2017	<0.025	
3/12/2018	<0.025	
9/6/2018	<0.025	
3/6/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.0049 (J)	
10/3/2014	<0.005	
10/20/2014	0.0024 (J)	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	0.0017 (J)	
7/28/2015	0.00097 (J)	
3/1/2016	<0.025	
7/6/2016	<0.025	
3/14/2017	0.0003 (J)	
9/15/2017	<0.025	
3/12/2018	<0.025	
9/6/2018	<0.025	
3/7/2019		<0.025

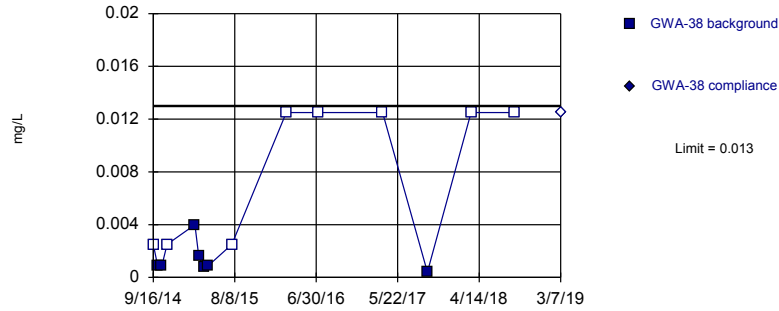
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	0.018	
10/3/2014	0.021	
10/20/2014	0.022	
11/10/2014	0.02	
3/2/2015	0.015	
3/17/2015	0.016	
4/5/2015	0.016	
4/22/2015	0.013	
7/28/2015	0.02	
3/1/2016	0.0103 (J)	
7/8/2016	0.0152 (J)	
3/14/2017	0.0085 (J)	
9/15/2017	0.0058 (J)	
3/12/2018	0.0053 (J)	
9/6/2018	0.0054 (J)	
3/6/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

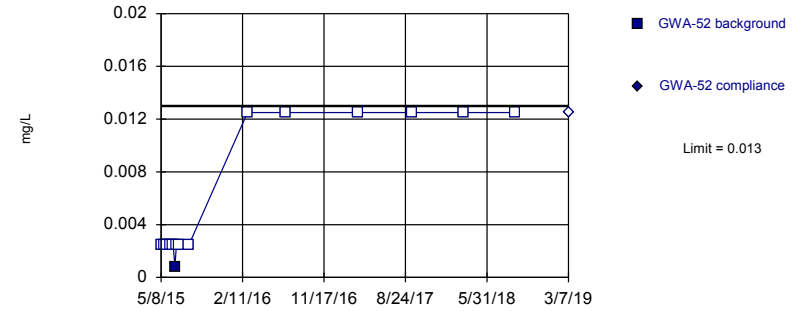


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

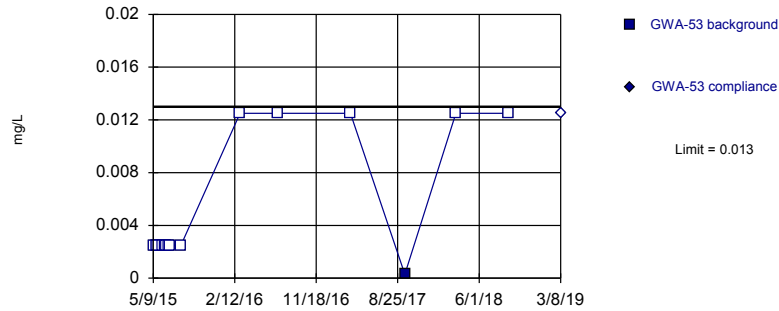


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:19 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

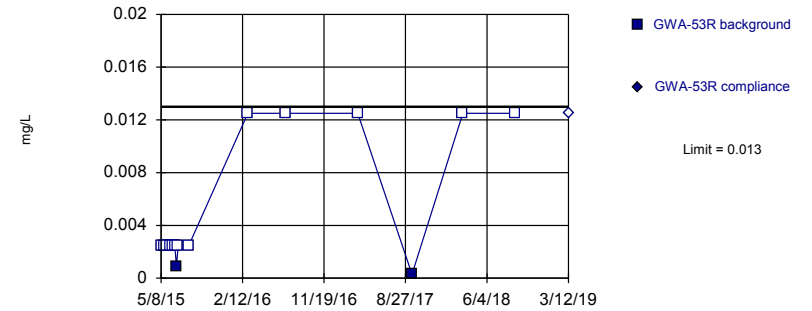


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	<0.005	
10/3/2014	0.00089 (J)	
10/20/2014	0.00087 (J)	
11/10/2014	<0.005	
3/2/2015	0.004 (J)	
3/17/2015	0.0016 (J)	
4/6/2015	0.00083 (J)	
4/22/2015	0.00085 (J)	
7/28/2015	<0.005	
3/2/2016	<0.025	
7/7/2016	<0.025	
3/23/2017	<0.025	
9/19/2017	0.0004 (J)	
3/13/2018	<0.025	
9/6/2018	<0.025	
3/7/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	0.00082 (J)	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
2/29/2016	<0.025	
7/8/2016	<0.025	
3/15/2017	<0.025	
9/15/2017	<0.025	
3/13/2018	<0.025	
9/6/2018	<0.025	
3/7/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/17/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.025	
7/8/2016	<0.025	
3/16/2017	<0.025	
9/19/2017	0.0003 (J)	
3/13/2018	<0.025	
9/11/2018	<0.025	
3/8/2019		<0.025

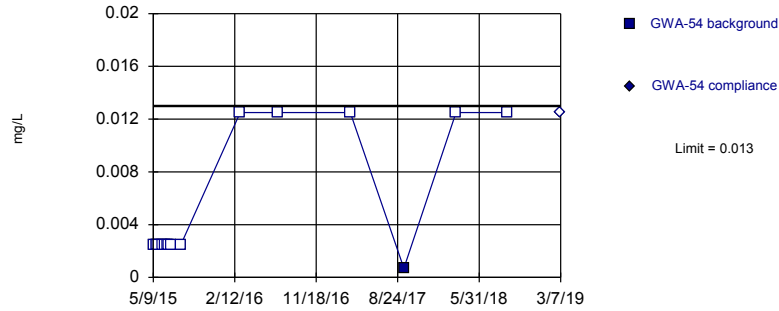
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	0.00093 (J)	
7/6/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.025	
7/11/2016	<0.025	
3/16/2017	<0.025	
9/19/2017	0.0003 (J)	
3/13/2018	<0.025	
9/11/2018	<0.025	
3/12/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

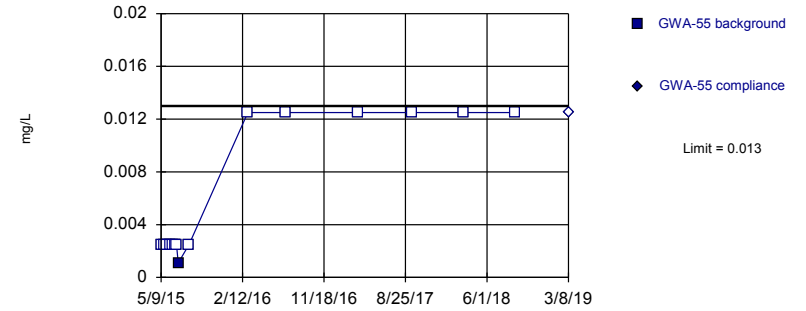


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

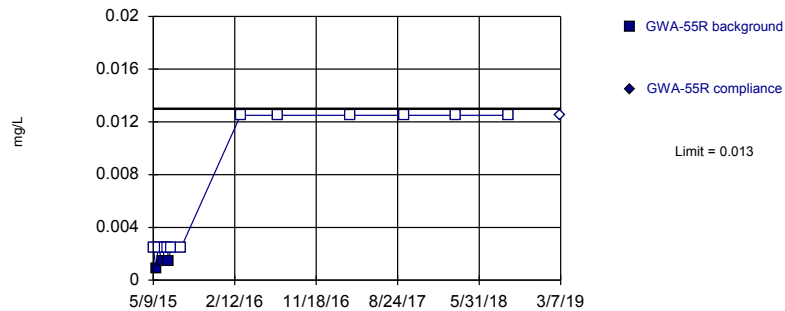


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

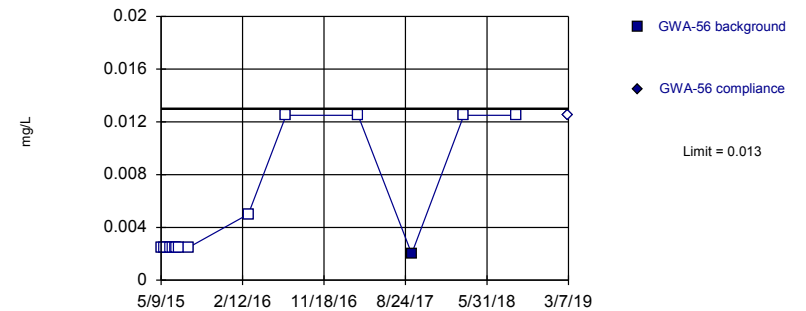


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.025	
7/8/2016	<0.025	
3/15/2017	<0.025	
9/15/2017	0.0007 (J)	
3/13/2018	<0.025	
9/6/2018	<0.025	
3/7/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.005	
5/18/2015	<0.005	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	0.0011 (J)	
8/13/2015	<0.005	
3/2/2016	<0.025	
7/11/2016	<0.025	
3/16/2017	<0.025	
9/15/2017	<0.025	
3/12/2018	<0.025	
9/7/2018	<0.025	
3/8/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.005	
5/18/2015	0.00093 (J)	
5/26/2015	<0.005	
6/9/2015	0.0014 (J)	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	0.0014 (J)	
7/7/2015	<0.005	
8/13/2015	<0.005	
3/3/2016	<0.025	
7/11/2016	<0.025	
3/16/2017	<0.025 (*)	
9/18/2017	<0.025	
3/12/2018	<0.025	
9/7/2018	<0.025	
3/7/2019		<0.025

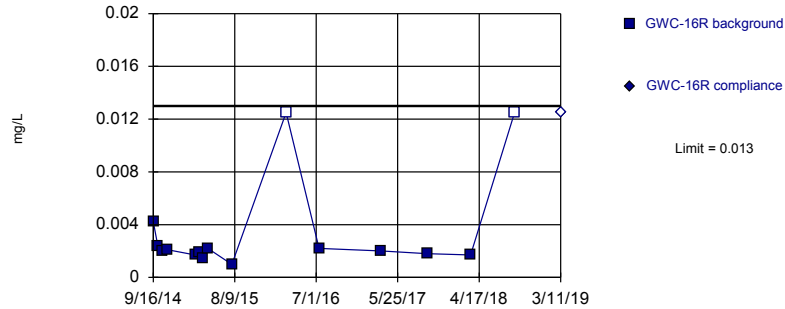
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.005	
5/19/2015	<0.005	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/13/2015	<0.005	
3/3/2016	<0.01	
7/11/2016	<0.025	
3/15/2017	<0.025 (*)	
9/15/2017	0.002 (J)	
3/13/2018	<0.025	
9/7/2018	<0.025	
3/7/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

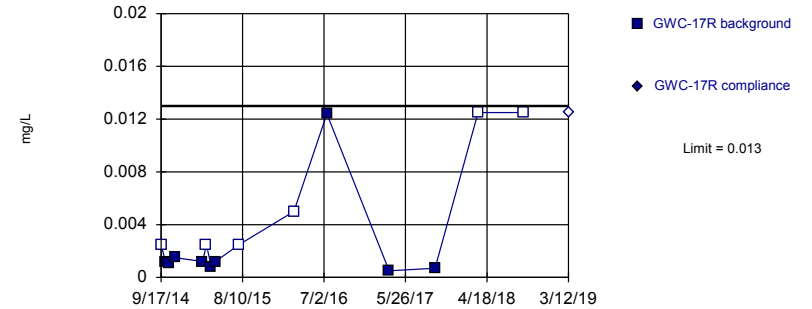


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 13.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

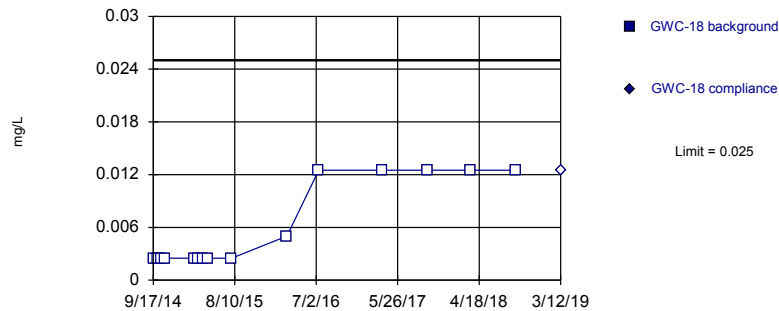


Non-parametric test used after natural log transformation resulted in a parametric limit of 263.9, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

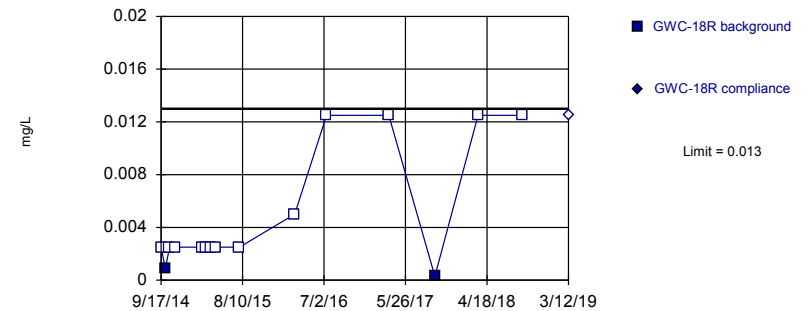


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	0.0042 (J)	
10/4/2014	0.0024 (J)	
10/21/2014	0.002 (J)	
11/11/2014	0.0021 (J)	
3/3/2015	0.0017 (J)	
3/18/2015	0.0019 (J)	
4/6/2015	0.0014 (J)	
4/23/2015	0.0022 (J)	
7/29/2015	0.00098 (J)	
3/3/2016	<0.025 (D)	
7/13/2016	0.0022 (J)	
3/20/2017	0.002 (J)	
9/21/2017	0.0018 (J)	
3/14/2018	0.0017 (J)	
9/7/2018	<0.025	
3/11/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.005	
10/4/2014	0.0012 (J)	
10/21/2014	0.0011 (J)	
11/11/2014	0.0015 (J)	
3/3/2015	0.0012 (J)	
3/18/2015	<0.005	
4/6/2015	0.00083 (J)	
4/23/2015	0.0012 (J)	
7/29/2015	<0.005	
3/4/2016	<0.01	
7/14/2016	0.0124 (J)	
3/21/2017	0.0005 (J)	
9/22/2017	0.0007 (J)	
3/14/2018	<0.025	
9/11/2018	<0.025	
3/12/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.01	
7/13/2016	<0.025	
3/23/2017	<0.025	
9/25/2017	<0.025	
3/14/2018	<0.025	
9/11/2018	<0.025	
3/12/2019		<0.025

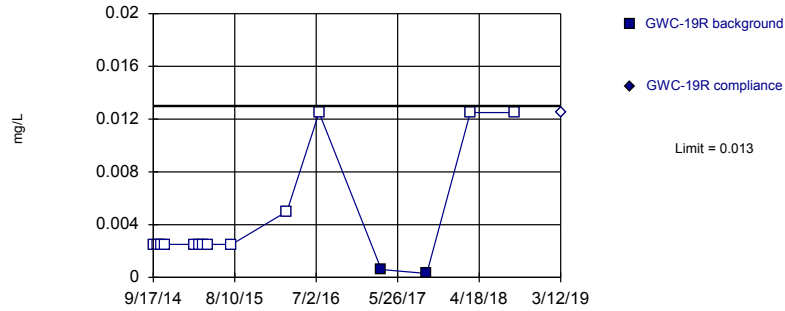
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.005	
10/4/2014	0.00086 (J)	
10/21/2014	<0.005	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.01	
7/13/2016	<0.025	
3/20/2017	<0.025	
9/21/2017	0.0003 (J)	
3/14/2018	<0.025	
9/7/2018	<0.025	
3/12/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

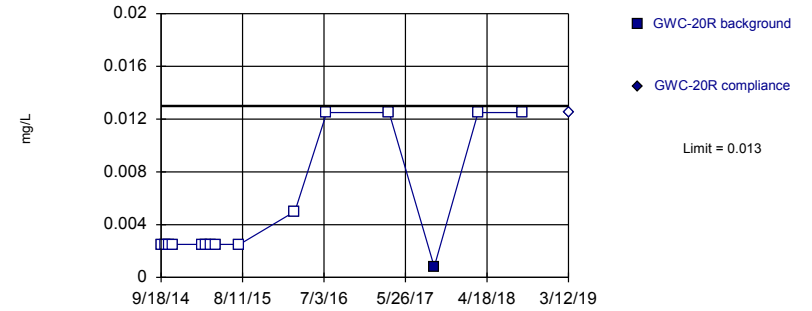


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

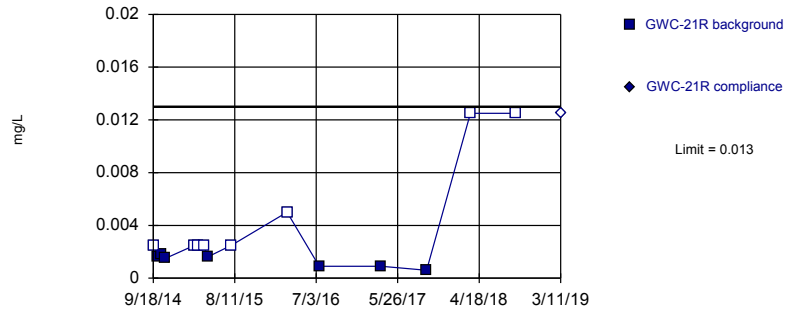


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

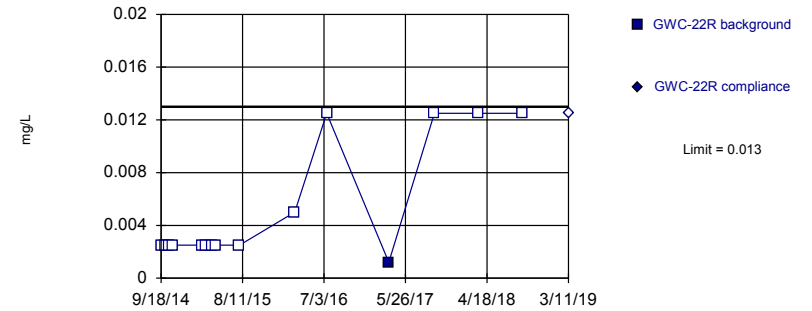


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.01	
7/14/2016	<0.025	
3/21/2017	0.0006 (J)	
9/20/2017	0.0003 (J)	
3/14/2018	<0.025	
9/10/2018	<0.025	
3/12/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.01	
7/14/2016	<0.025	
3/22/2017	<0.025	
9/19/2017	0.0008 (J)	
3/14/2018	<0.025	
9/10/2018	<0.025	
3/12/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.005	
10/5/2014	0.0016 (J)	
10/22/2014	0.0018 (J)	
11/5/2014	0.0015 (J)	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/8/2015	<0.005	
4/24/2015	0.0016 (J)	
7/30/2015	<0.005	
3/8/2016	<0.01	
7/15/2016	0.0009 (J)	
3/21/2017	0.0009 (J)	
9/19/2017	0.0006 (J)	
3/14/2018	<0.025	
9/10/2018	<0.025	
3/11/2019		<0.025

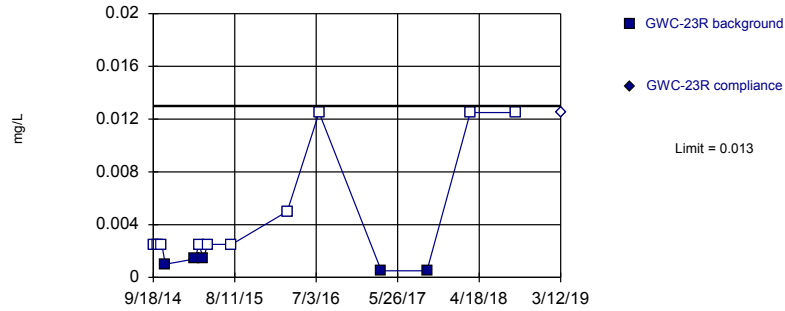
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/8/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/7/2016	<0.01	
7/14/2016	<0.025	
3/20/2017	0.0012 (J)	
9/19/2017	<0.025	
3/13/2018	<0.025	
9/7/2018	<0.025	
3/11/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

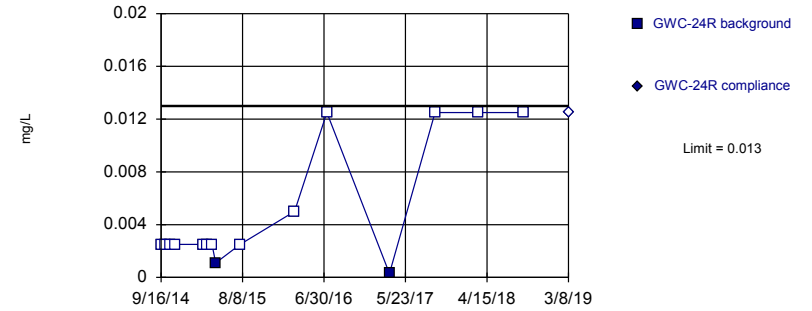


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

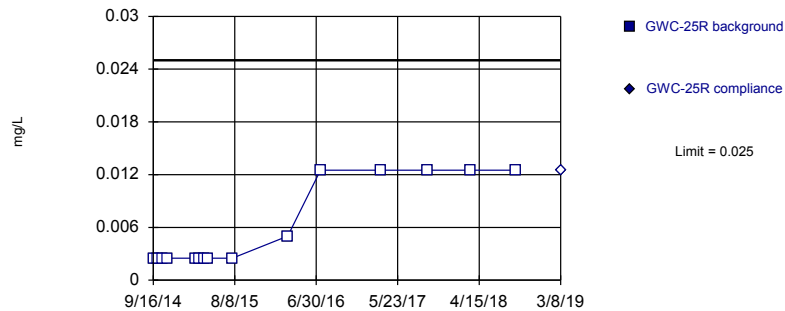


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

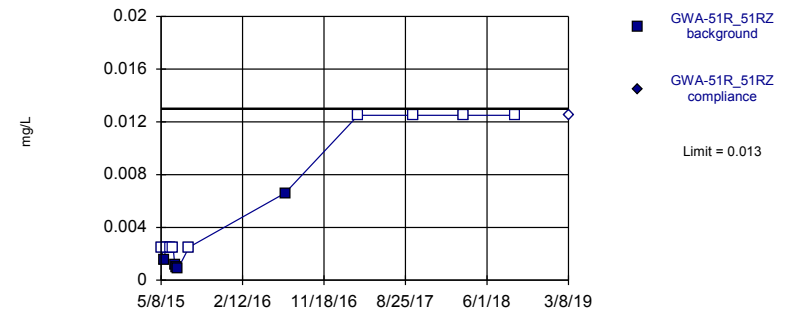


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Copper Analysis Run 8/26/2019 4:20 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	0.001 (J)	
3/4/2015	0.0014 (J)	
3/20/2015	<0.005	
4/8/2015	0.0014 (J)	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/9/2016	<0.01	
7/15/2016	<0.025	
3/22/2017	0.0005 (J)	
9/21/2017	0.0005 (J)	
3/14/2018	<0.025	
9/11/2018	<0.025	
3/12/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	<0.005	
4/23/2015	0.0011 (J)	
7/30/2015	<0.005	
3/4/2016	<0.01	
7/12/2016	<0.025	
3/20/2017	0.0003 (J)	
9/19/2017	<0.025	
3/13/2018	<0.025	
9/11/2018	<0.025	
3/8/2019		<0.025

Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/9/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.01	
7/18/2016	<0.025	
3/16/2017	<0.025 (*)	
9/19/2017	<0.025	
3/13/2018	<0.025	
9/11/2018	<0.025	
3/8/2019		<0.025

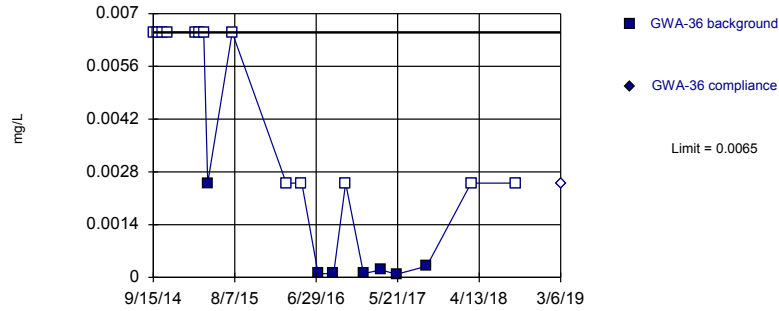
Prediction Limit

Constituent: Copper (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.005	
5/17/2015	0.0015 (J)	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	0.0012 (J)	
6/30/2015	0.00096 (J)	
7/6/2015	0.00091 (J)	
8/12/2015	<0.005	
7/7/2016	0.0066 (JD)	
3/15/2017	<0.025 (D)	
9/19/2017	<0.025 (D)	
3/13/2018	<0.025	
9/7/2018	<0.025	
3/8/2019		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

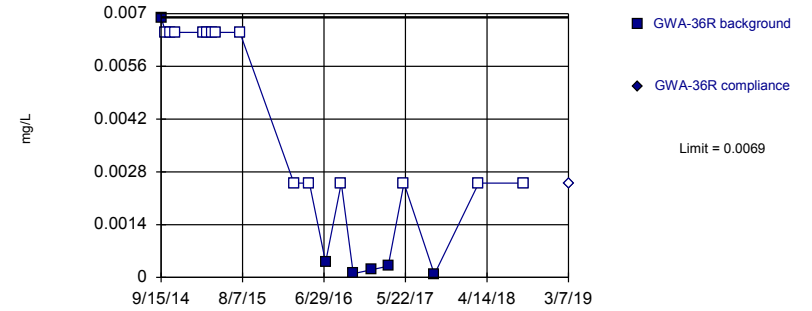


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

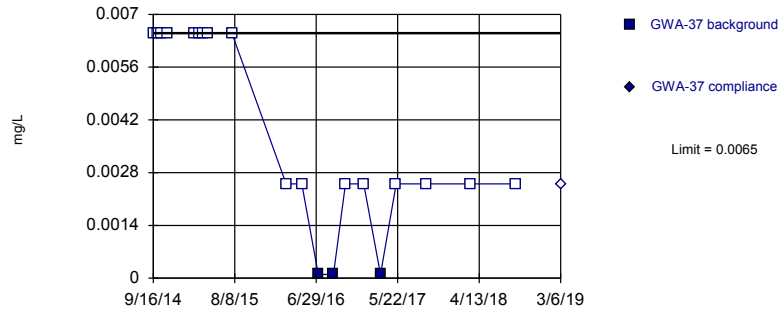


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

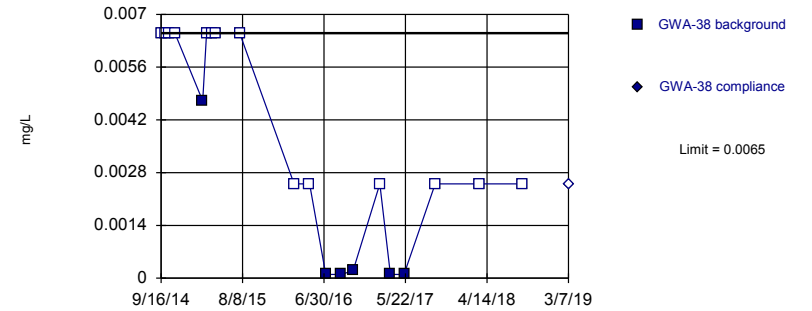


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.013	
10/3/2014	<0.013	
10/20/2014	<0.013	
11/10/2014	<0.013	
3/2/2015	<0.013	
3/17/2015	<0.013	
4/5/2015	<0.013	
4/21/2015	0.0025 (J)	
7/28/2015	<0.013	
3/1/2016	<0.005	
5/2/2016	<0.005	
7/7/2016	0.0001 (J)	
9/7/2016	0.0001 (J)	
10/25/2016	<0.005	
1/5/2017	0.0001 (J)	
3/15/2017	0.0002 (J)	
5/17/2017	8E-05 (J)	
9/15/2017	0.0003 (J)	
3/12/2018	<0.005	
9/6/2018	<0.005	
3/6/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.0069 (J)	
10/3/2014	<0.013	
10/20/2014	<0.013	
11/10/2014	<0.013	
3/2/2015	<0.013	
3/17/2015	<0.013	
4/5/2015	<0.013	
4/21/2015	<0.013	
7/28/2015	<0.013	
3/1/2016	<0.005	
5/2/2016	<0.005	
7/6/2016	0.0004 (J)	
9/7/2016	<0.005	
10/25/2016	0.0001 (J)	
1/5/2017	0.0002 (J)	
3/14/2017	0.0003 (J)	
5/16/2017	<0.005	
9/15/2017	8E-05 (J)	
3/12/2018	<0.005	
9/6/2018	<0.005	
3/7/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	<0.013	
10/3/2014	<0.013	
10/20/2014	<0.013	
11/10/2014	<0.013	
3/2/2015	<0.013	
3/17/2015	<0.013	
4/5/2015	<0.013	
4/22/2015	<0.013	
7/28/2015	<0.013	
3/1/2016	<0.005	
5/3/2016	<0.005	
7/8/2016	0.0001 (J)	
9/7/2016	0.0001 (J)	
10/25/2016	<0.005	
1/6/2017	<0.005	
3/14/2017	0.0001 (J)	
5/16/2017	<0.005	
9/15/2017	<0.005	
3/12/2018	<0.005	
9/6/2018	<0.005	
3/6/2019		<0.005

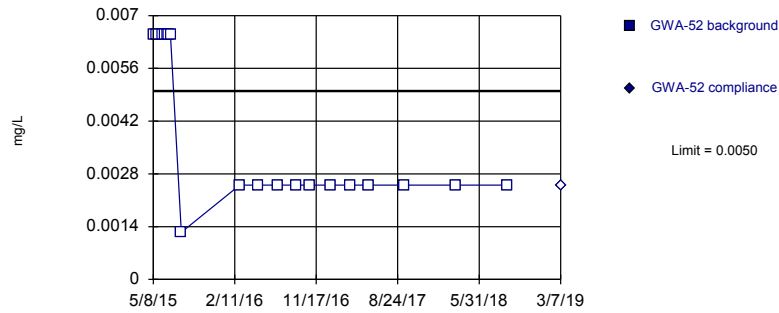
Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	<0.013	
10/3/2014	<0.013	
10/20/2014	<0.013	
11/10/2014	<0.013	
3/2/2015	0.0047 (J)	
3/17/2015	<0.013	
4/6/2015	<0.013	
4/22/2015	<0.013	
7/28/2015	<0.013	
3/2/2016	<0.005	
5/3/2016	<0.005	
7/7/2016	0.0001 (J)	
9/8/2016	0.0001 (J)	
10/25/2016	0.0002 (J)	
2/9/2017	<0.005	
3/23/2017	0.0001 (J)	
5/17/2017	0.0001 (J)	
9/19/2017	<0.005	
3/13/2018	<0.005	
9/6/2018	<0.005	
3/7/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

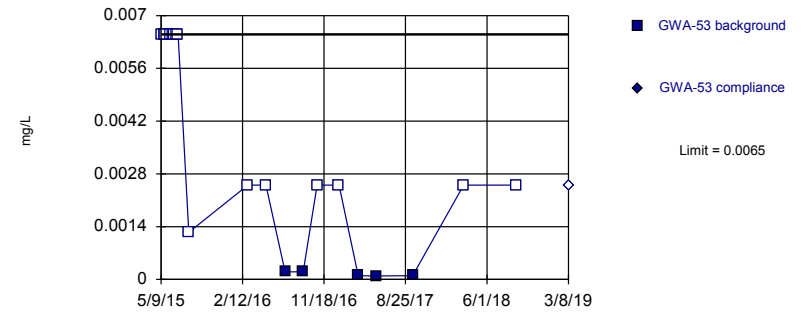


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

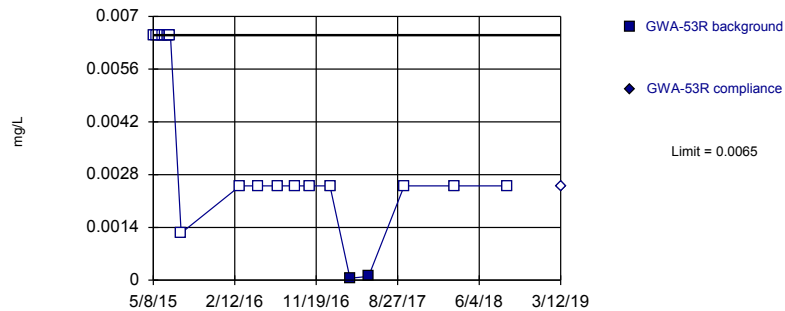


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

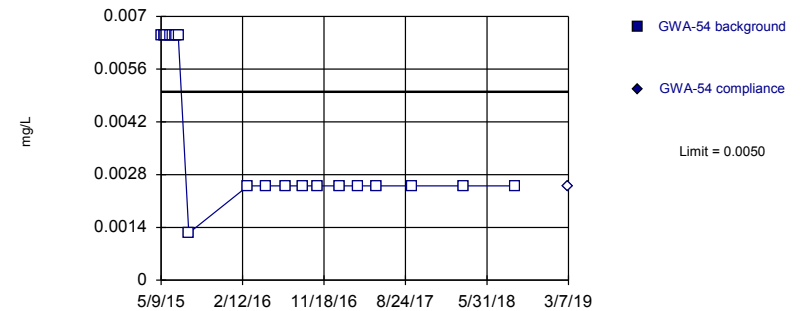


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.013	
5/17/2015	<0.013	
5/25/2015	<0.013	
6/8/2015	<0.013	
6/18/2015	<0.013	
6/24/2015	<0.013	
6/30/2015	<0.013	
7/6/2015	<0.013	
8/12/2015	<0.0025	
2/29/2016	<0.005	
5/4/2016	<0.005	
7/8/2016	<0.005	
9/8/2016	<0.005	
10/26/2016	<0.005	
1/6/2017	<0.005	
3/15/2017	<0.005	
5/17/2017	<0.005	
9/15/2017	<0.005	
3/13/2018	<0.005	
9/6/2018	<0.005	
3/7/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.013	
5/18/2015	<0.013	
5/25/2015	<0.013	
6/8/2015	<0.013	
6/17/2015	<0.013	
6/24/2015	<0.013	
6/30/2015	<0.013	
7/6/2015	<0.013	
8/12/2015	<0.0025	
3/2/2016	<0.005	
5/3/2016	<0.005	
7/8/2016	0.0002 (J)	
9/8/2016	0.0002 (J)	
10/26/2016	<0.005	
1/9/2017	<0.005	
3/16/2017	0.0001 (J)	
5/19/2017	9E-05 (J)	
9/19/2017	0.0001 (J)	
3/13/2018	<0.005	
9/11/2018	<0.005	
3/8/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.013	
5/17/2015	<0.013	
5/25/2015	<0.013	
6/8/2015	<0.013	
6/18/2015	<0.013	
6/24/2015	<0.013	
6/30/2015	<0.013	
7/6/2015	<0.013	
8/12/2015	<0.0025	
3/2/2016	<0.005	
5/3/2016	<0.005	
7/11/2016	<0.005	
9/7/2016	<0.005	
10/27/2016	<0.005	
1/6/2017	<0.005	
3/16/2017	5E-05 (J)	
5/19/2017	0.0001 (J)	
9/19/2017	<0.005	
3/13/2018	<0.005	
9/11/2018	<0.005	
3/12/2019		<0.005

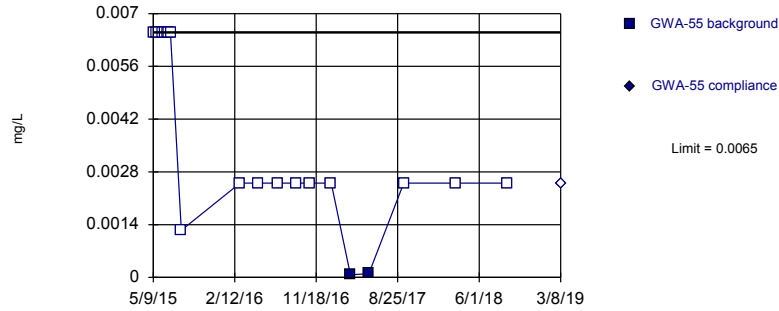
Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.013	
5/18/2015	<0.013	
5/25/2015	<0.013	
6/9/2015	<0.013	
6/17/2015	<0.013	
6/25/2015	<0.013	
7/1/2015	<0.013	
7/7/2015	<0.013	
8/12/2015	<0.0025	
3/2/2016	<0.005	
5/4/2016	<0.005	
7/8/2016	<0.005	
9/8/2016	<0.005	
10/26/2016	<0.005	
1/9/2017	<0.005	
3/15/2017	<0.005	
5/18/2017	<0.005	
9/15/2017	<0.005	
3/13/2018	<0.005	
9/6/2018	<0.005	
3/7/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

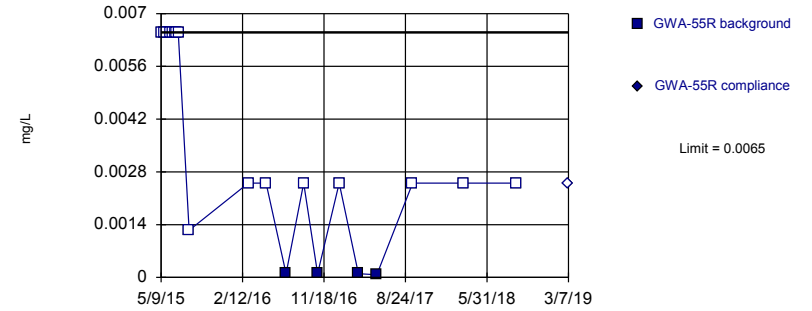


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

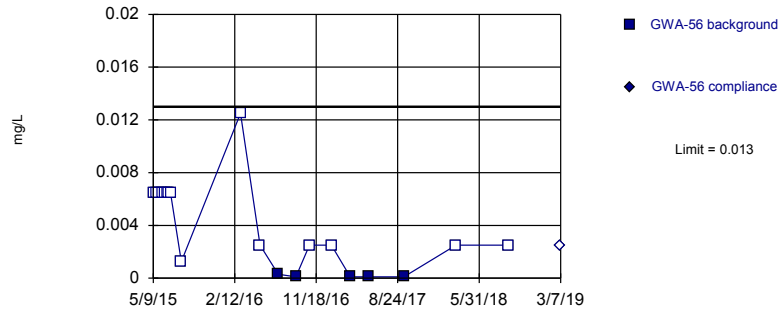


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

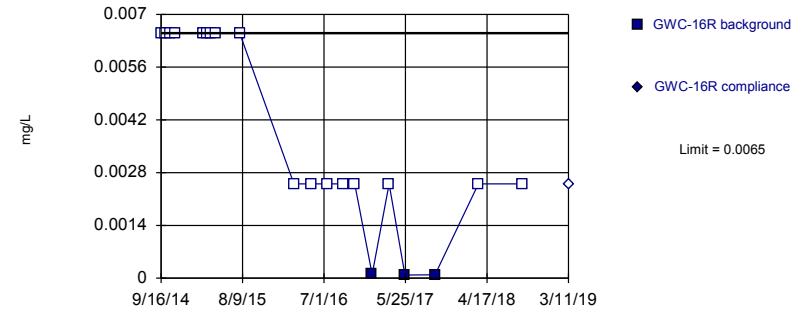


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.013	
5/18/2015	<0.013	
5/26/2015	<0.013	
6/9/2015	<0.013	
6/17/2015	<0.013	
6/25/2015	<0.013	
7/1/2015	<0.013	
7/7/2015	<0.013	
8/13/2015	<0.0025	
3/2/2016	<0.005	
5/3/2016	<0.005	
7/11/2016	<0.005	
9/9/2016	<0.005	
10/26/2016	<0.005	
1/9/2017	<0.005	
3/16/2017	7E-05 (J)	
5/18/2017	0.0001 (J)	
9/15/2017	<0.005	
3/12/2018	<0.005	
9/7/2018	<0.005	
3/8/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.013	
5/18/2015	<0.013	
5/26/2015	<0.013	
6/9/2015	<0.013	
6/17/2015	<0.013	
6/25/2015	<0.013	
7/1/2015	<0.013	
7/7/2015	<0.013	
8/13/2015	<0.0025	
3/3/2016	<0.005	
5/3/2016	<0.005	
7/11/2016	0.0001 (J)	
9/9/2016	<0.005	
10/27/2016	0.0001 (J)	
1/9/2017	<0.005	
3/16/2017	0.0001 (J)	
5/18/2017	7E-05 (J)	
9/18/2017	<0.005	
3/12/2018	<0.005	
9/7/2018	<0.005	
3/7/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.013	
5/19/2015	<0.013	
5/26/2015	<0.013	
6/9/2015	<0.013	
6/17/2015	<0.013	
6/25/2015	<0.013	
7/1/2015	<0.013	
7/7/2015	<0.013	
8/13/2015	<0.0025	
3/3/2016	<0.025	
5/9/2016	<0.005	
7/11/2016	0.0003 (J)	
9/9/2016	0.0001 (J)	
10/26/2016	<0.005	
1/9/2017	<0.005	
3/15/2017	0.0001 (J)	
5/18/2017	0.0001 (J)	
9/15/2017	0.0001 (J)	
3/13/2018	<0.005	
9/7/2018	<0.005	
3/7/2019		<0.005

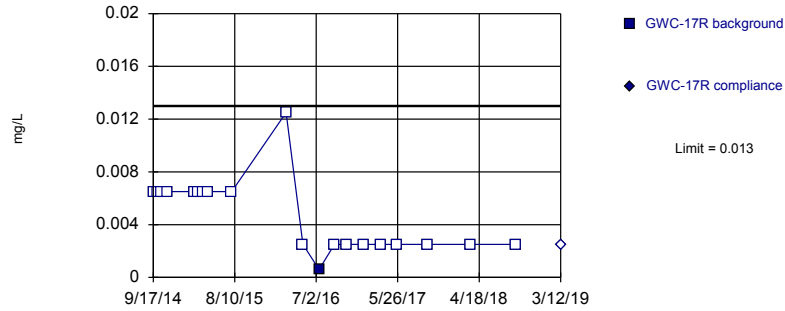
Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	<0.013	
10/4/2014	<0.013	
10/21/2014	<0.013	
11/11/2014	<0.013	
3/3/2015	<0.013	
3/18/2015	<0.013	
4/6/2015	<0.013	
4/23/2015	<0.013	
7/29/2015	<0.013	
3/3/2016	<0.005 (D)	
5/10/2016	<0.005	
7/13/2016	<0.005	
9/15/2016	<0.005	
11/2/2016	<0.005	
1/11/2017	0.0001 (J)	
3/20/2017	<0.005	
5/23/2017	8E-05 (J)	
9/21/2017	9E-05 (J)	
3/14/2018	<0.005	
9/7/2018	<0.005	
3/11/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

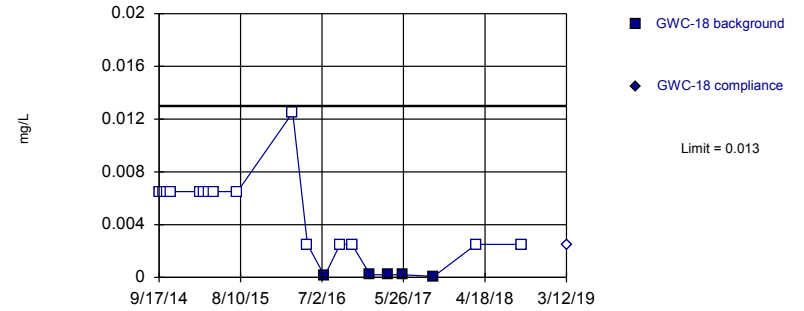


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

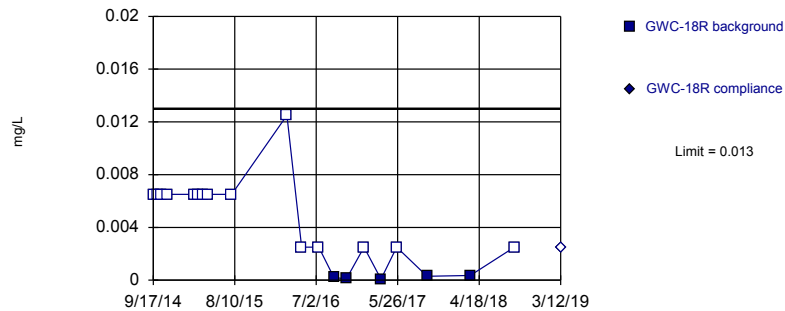


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

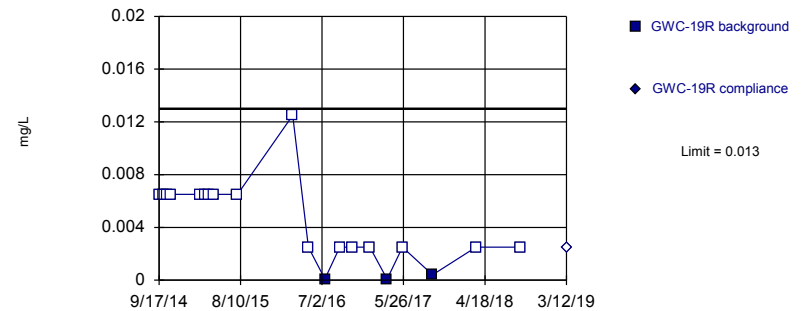


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:21 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.013	
10/4/2014	<0.013	
10/21/2014	<0.013	
11/11/2014	<0.013	
3/3/2015	<0.013	
3/18/2015	<0.013	
4/6/2015	<0.013	
4/23/2015	<0.013	
7/29/2015	<0.013	
3/4/2016	<0.025	
5/10/2016	<0.005	
7/14/2016	0.0006 (J)	
9/14/2016	<0.005	
11/1/2016	<0.005	
1/11/2017	<0.005	
3/21/2017	<0.005	
5/23/2017	<0.005	
9/22/2017	<0.005	
3/14/2018	<0.005	
9/11/2018	<0.005	
3/12/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.013	
10/4/2014	<0.013	
10/21/2014	<0.013	
11/5/2014	<0.013	
3/3/2015	<0.013	
3/18/2015	<0.013	
4/7/2015	<0.013	
4/23/2015	<0.013	
7/29/2015	<0.013	
3/7/2016	<0.025	
5/5/2016	<0.005	
7/13/2016	0.0001 (J)	
9/13/2016	<0.005	
10/31/2016	<0.005	
1/12/2017	0.0002 (J)	
3/23/2017	0.0002 (J)	
5/23/2017	0.0002 (J)	
9/25/2017	8E-05 (J)	
3/14/2018	<0.005	
9/11/2018	<0.005	
3/12/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.013	
10/4/2014	<0.013	
10/21/2014	<0.013	
11/11/2014	<0.013	
3/3/2015	<0.013	
3/18/2015	<0.013	
4/7/2015	<0.013	
4/23/2015	<0.013	
7/29/2015	<0.013	
3/7/2016	<0.025	
5/5/2016	<0.005	
7/13/2016	<0.005	
9/12/2016	0.0002 (J)	
11/1/2016	0.0001 (J)	
1/11/2017	<0.005	
3/20/2017	7E-05 (J)	
5/22/2017	<0.005	
9/21/2017	0.0003 (J)	
3/14/2018	0.00035 (J)	
9/7/2018	<0.005	
3/12/2019		<0.005

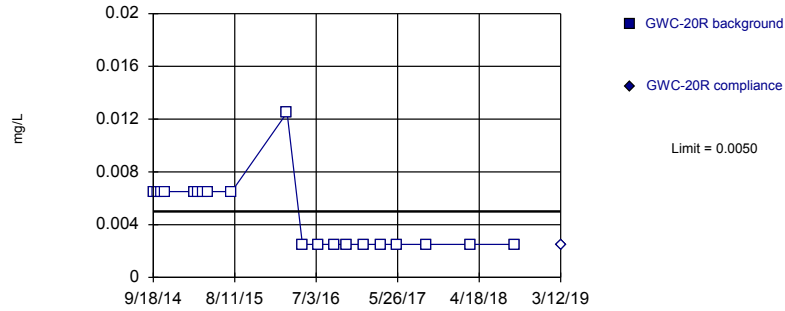
Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.013	
10/4/2014	<0.013	
10/21/2014	<0.013	
11/5/2014	<0.013	
3/3/2015	<0.013	
3/19/2015	<0.013	
4/7/2015	<0.013	
4/24/2015	<0.013	
7/29/2015	<0.013	
3/7/2016	<0.025	
5/9/2016	<0.005	
7/14/2016	9E-05 (J)	
9/12/2016	<0.005	
10/31/2016	<0.005	
1/11/2017	<0.005	
3/21/2017	7E-05 (J)	
5/22/2017	<0.005	
9/20/2017	0.0004 (J)	
3/14/2018	<0.005	
9/10/2018	<0.005	
3/12/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

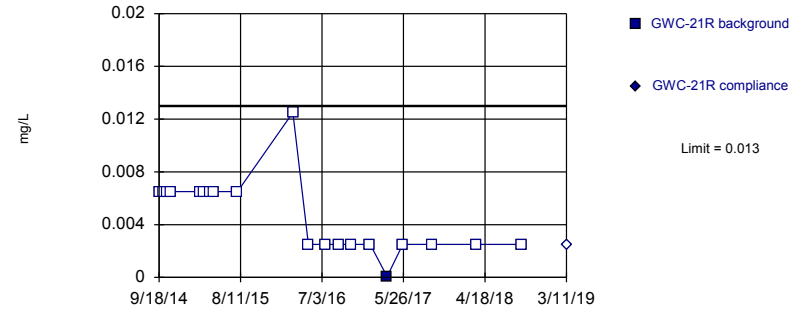


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

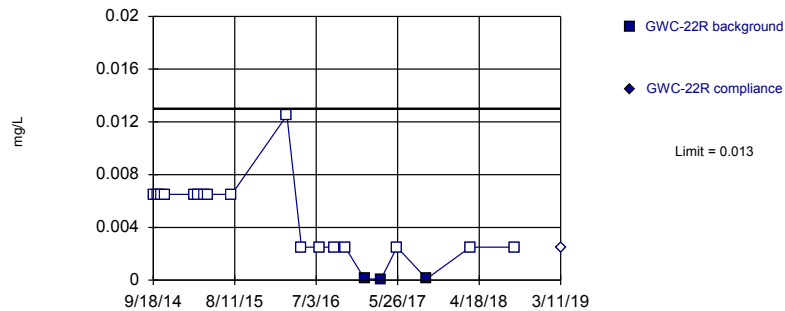


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

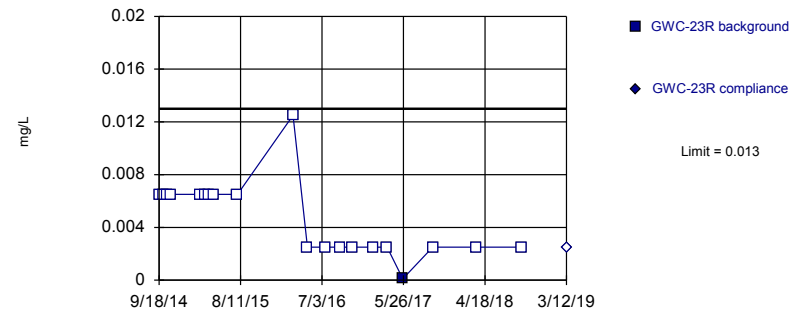


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.013	
10/5/2014	<0.013	
10/22/2014	<0.013	
11/5/2014	<0.013	
3/4/2015	<0.013	
3/19/2015	<0.013	
4/7/2015	<0.013	
4/24/2015	<0.013	
7/30/2015	<0.013	
3/8/2016	<0.025	
5/9/2016	<0.005	
7/14/2016	<0.005	
9/12/2016	<0.005	
10/31/2016	<0.005	
1/12/2017	<0.005	
3/22/2017	<0.005	
5/22/2017	<0.005	
9/19/2017	<0.005	
3/14/2018	<0.005	
9/10/2018	<0.005	
3/12/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.013	
10/5/2014	<0.013	
10/22/2014	<0.013	
11/5/2014	<0.013	
3/4/2015	<0.013	
3/19/2015	<0.013	
4/8/2015	<0.013	
4/24/2015	<0.013	
7/30/2015	<0.013	
3/8/2016	<0.025	
5/9/2016	<0.005	
7/15/2016	<0.005	
9/9/2016	<0.005	
10/27/2016	<0.005	
1/12/2017	<0.005	
3/21/2017	6E-05 (J)	
5/23/2017	<0.005	
9/19/2017	<0.005	
3/14/2018	<0.005	
9/10/2018	<0.005	
3/11/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.013	
10/5/2014	<0.013	
10/22/2014	<0.013	
11/5/2014	<0.013	
3/4/2015	<0.013	
3/19/2015	<0.013	
4/8/2015	<0.013	
4/24/2015	<0.013	
7/30/2015	<0.013	
3/7/2016	<0.025	
5/5/2016	<0.005	
7/14/2016	<0.005	
9/12/2016	<0.005	
10/27/2016	<0.005	
1/13/2017	0.0001 (J)	
3/20/2017	7E-05 (J)	
5/23/2017	<0.005	
9/19/2017	0.0001 (J)	
3/13/2018	<0.005	
9/7/2018	<0.005	
3/11/2019		<0.005

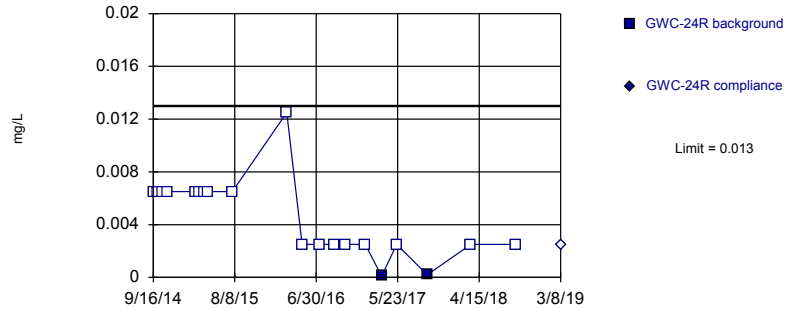
Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.013	
10/5/2014	<0.013	
10/22/2014	<0.013	
11/5/2014	<0.013	
3/4/2015	<0.013	
3/20/2015	<0.013	
4/8/2015	<0.013	
4/23/2015	<0.013	
7/30/2015	<0.013	
3/9/2016	<0.025	
5/6/2016	<0.005	
7/15/2016	<0.005	
9/14/2016	<0.005	
11/1/2016	<0.005	
1/25/2017	<0.005	
3/22/2017	<0.005	
5/24/2017	0.0001 (J)	
9/21/2017	<0.005	
3/14/2018	<0.005	
9/11/2018	<0.005	
3/12/2019		<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

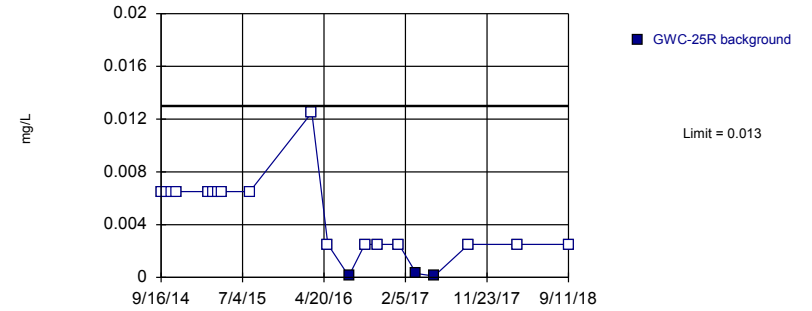


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-25R

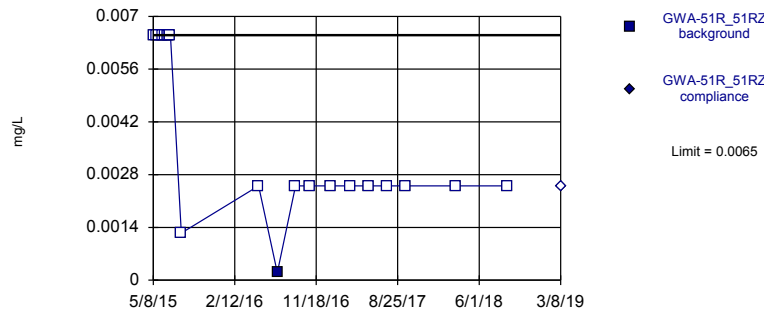


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Lead Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

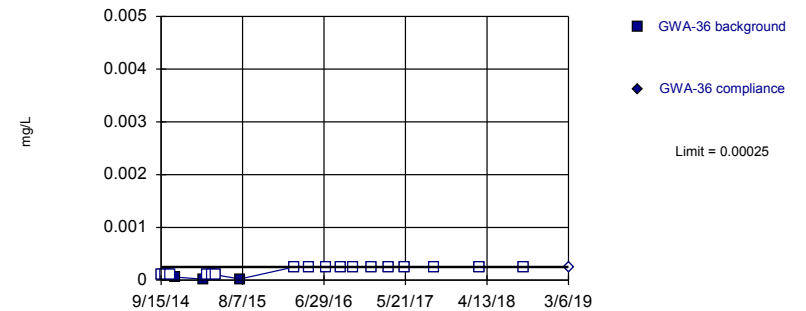


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.013	
10/4/2014	<0.013	
10/23/2014	<0.013	
11/10/2014	<0.013	
3/4/2015	<0.013	
3/20/2015	<0.013	
4/8/2015	<0.013	
4/23/2015	<0.013	
7/30/2015	<0.013	
3/4/2016	<0.025	
5/5/2016	<0.005	
7/12/2016	<0.005	
9/13/2016	<0.005	
10/27/2016	<0.005	
1/13/2017	<0.005	
3/20/2017	0.0001 (J)	
5/19/2017	<0.005	
9/19/2017	0.0002 (J)	
3/13/2018	<0.005	
9/11/2018	<0.005	
3/8/2019		<0.005

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R
9/16/2014	<0.013
10/4/2014	<0.013
10/23/2014	<0.013
11/10/2014	<0.013
3/4/2015	<0.013
3/20/2015	<0.013
4/9/2015	<0.013
4/23/2015	<0.013
7/30/2015	<0.013
3/8/2016	<0.025
5/4/2016	<0.005
7/18/2016	0.0001 (J)
9/13/2016	<0.005
10/27/2016	<0.005
1/13/2017	<0.005
3/16/2017	0.0003 (J)
5/19/2017	0.0001 (J)
9/19/2017	<0.005
3/13/2018	<0.005
9/11/2018	<0.005
3/8/2019	0.00035 (X)

Prediction Limit

Constituent: Lead (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.013	
5/17/2015	<0.013	
5/25/2015	<0.013	
6/8/2015	<0.013	
6/18/2015	<0.013	
6/24/2015	<0.013	
6/30/2015	<0.013	
7/6/2015	<0.013	
8/12/2015	<0.0025	
5/4/2016	<0.005 (D)	
7/7/2016	0.0002 (JD)	
9/8/2016	<0.005 (D)	
10/26/2016	<0.005 (D)	
1/6/2017	<0.005 (D)	
3/15/2017	<0.005 (D)	
5/18/2017	<0.005 (D)	
7/19/2017	<0.005 (D)	
9/19/2017	<0.005 (D)	
3/13/2018	<0.005	
9/7/2018	<0.005	
3/8/2019		<0.005

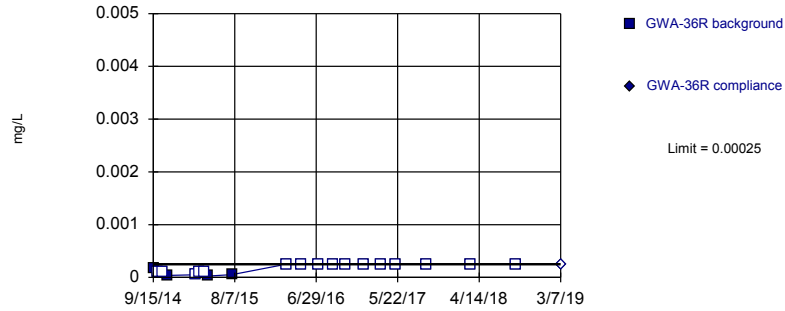
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.0002	
10/3/2014	<0.0002	
10/20/2014	<0.0002	
11/10/2014	5.8E-05 (J)	
3/2/2015	2.04E-05 (J)	
3/17/2015	<0.0002	
4/5/2015	<0.0002	
4/21/2015	<0.0002	
7/28/2015	2.13E-05 (J)	
3/1/2016	<0.0005	
5/2/2016	<0.0005	
7/7/2016	<0.0005	
9/7/2016	<0.0005	
10/25/2016	<0.0005	
1/5/2017	<0.0005	
3/15/2017	<0.0005	
5/17/2017	<0.0005	
9/15/2017	<0.0005	
3/12/2018	<0.0005	
9/6/2018	<0.0005	
3/6/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

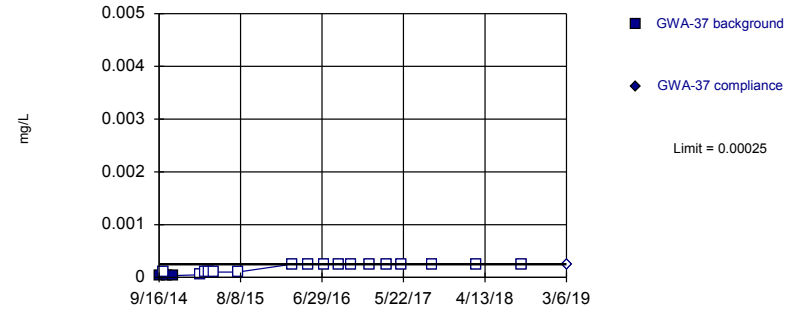


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

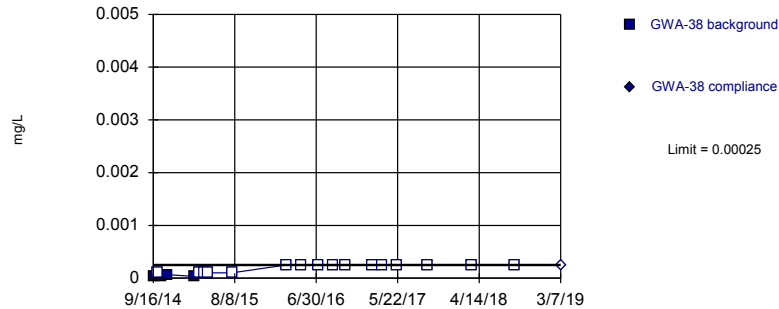


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

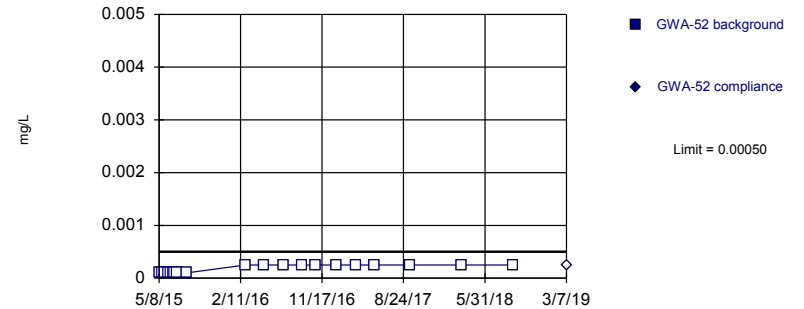


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.000172 (J)	
10/3/2014	<0.0002	
10/20/2014	<0.0002	
11/10/2014	3.84E-05 (J)	
3/2/2015	<0.0001	
3/17/2015	<0.0002	
4/5/2015	<0.0002	
4/21/2015	2.39E-05 (J)	
7/28/2015	5.2E-05 (J)	
3/1/2016	<0.0005	
5/2/2016	<0.0005	
7/6/2016	<0.0005	
9/7/2016	<0.0005	
10/25/2016	<0.0005	
1/5/2017	<0.0005	
3/14/2017	<0.0005	
5/16/2017	<0.0005	
9/15/2017	<0.0005	
3/12/2018	<0.0005	
9/6/2018	<0.0005	
3/7/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	4.23E-05 (J)	
10/3/2014	<0.0002	
10/20/2014	3.87E-05 (J)	
11/10/2014	3.34E-05 (J)	
3/2/2015	<0.0001	
3/17/2015	<0.0002	
4/5/2015	<0.0002	
4/22/2015	<0.0002	
7/28/2015	<0.0002	
3/1/2016	<0.0005	
5/3/2016	<0.0005	
7/8/2016	<0.0005	
9/7/2016	<0.0005	
10/25/2016	<0.0005	
1/6/2017	<0.0005	
3/14/2017	<0.0005	
5/16/2017	<0.0005	
9/15/2017	<0.0005	
3/12/2018	<0.0005	
9/6/2018	<0.0005	
3/6/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	2.75E-05 (J)	
10/3/2014	<0.0002	
10/20/2014	4.07E-05 (J)	
11/10/2014	6.86E-05 (J)	
3/2/2015	3.07E-05 (J)	
3/17/2015	<0.0002	
4/6/2015	<0.0002	
4/22/2015	<0.0002	
7/28/2015	<0.0002	
3/2/2016	<0.0005	
5/3/2016	<0.0005	
7/7/2016	<0.0005	
9/8/2016	<0.0005	
10/25/2016	<0.0005	
2/9/2017	<0.0005	
3/23/2017	<0.0005	
5/17/2017	<0.0005	
9/19/2017	<0.0005	
3/13/2018	<0.0005	
9/6/2018	<0.0005	
3/7/2019		<0.0005

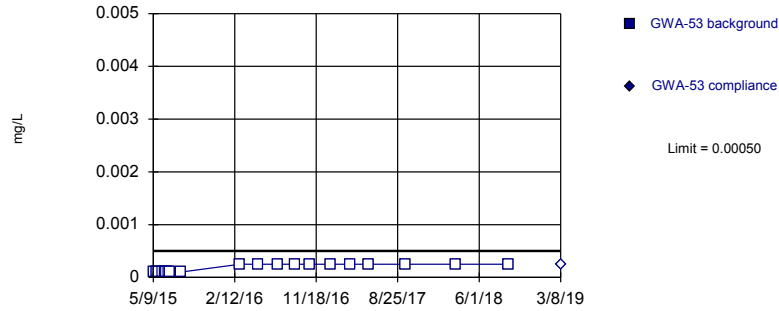
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.0002	
5/17/2015	<0.0002	
5/25/2015	<0.0002	
6/8/2015	<0.0002	
6/18/2015	<0.0002	
6/24/2015	<0.0002	
6/30/2015	<0.0002	
7/6/2015	<0.0002	
8/12/2015	<0.0002	
2/29/2016	<0.0005	
5/4/2016	<0.0005	
7/8/2016	<0.0005	
9/8/2016	<0.0005	
10/26/2016	<0.0005	
1/6/2017	<0.0005	
3/15/2017	<0.0005	
5/17/2017	<0.0005	
9/15/2017	<0.0005	
3/13/2018	<0.0005	
9/6/2018	<0.0005	
3/7/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

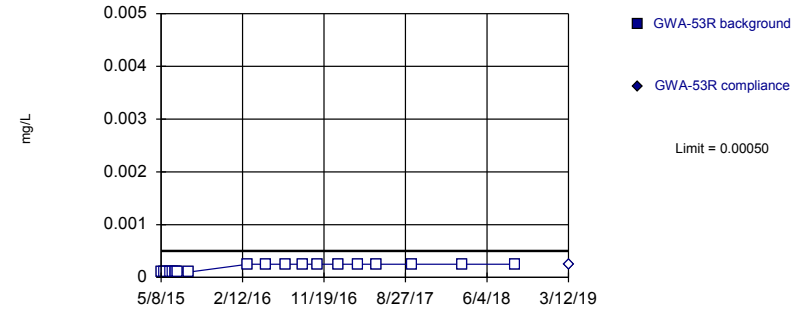


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

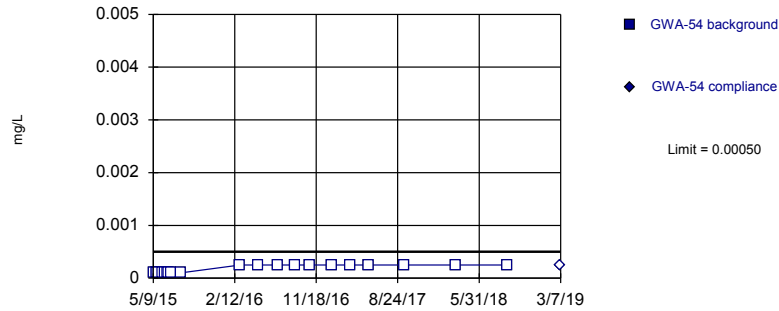


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:22 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

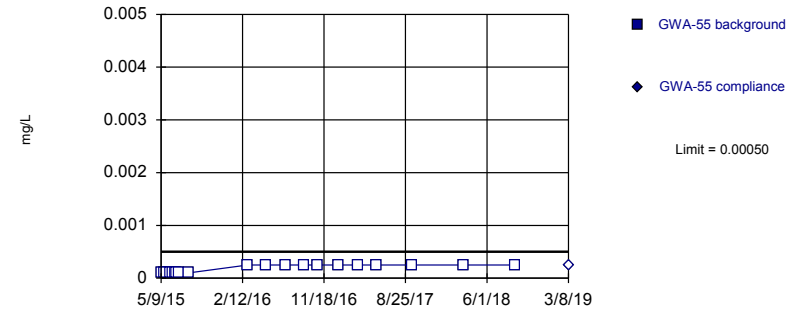


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.0002	
5/18/2015	<0.0002	
5/25/2015	<0.0002	
6/8/2015	<0.0002	
6/17/2015	<0.0002	
6/24/2015	<0.0002	
6/30/2015	<0.0002	
7/6/2015	<0.0002	
8/12/2015	<0.0002	
3/2/2016	<0.0005	
5/3/2016	<0.0005	
7/8/2016	<0.0005	
9/8/2016	<0.0005	
10/26/2016	<0.0005	
1/9/2017	<0.0005	
3/16/2017	<0.0005	
5/19/2017	<0.0005	
9/19/2017	<0.0005	
3/13/2018	<0.0005	
9/11/2018	<0.0005	
3/8/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.0002	
5/17/2015	<0.0002	
5/25/2015	<0.0002	
6/8/2015	<0.0002	
6/18/2015	<0.0002	
6/24/2015	<0.0002	
6/30/2015	<0.0002	
7/6/2015	<0.0002	
8/12/2015	<0.0002	
3/2/2016	<0.0005	
5/3/2016	<0.0005	
7/11/2016	<0.0005	
9/7/2016	<0.0005	
10/27/2016	<0.0005	
1/6/2017	<0.0005	
3/16/2017	<0.0005	
5/19/2017	<0.0005	
9/19/2017	<0.0005	
3/13/2018	<0.0005	
9/11/2018	<0.0005	
3/12/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.0002	
5/18/2015	<0.0002	
5/25/2015	<0.0002	
6/9/2015	<0.0002	
6/17/2015	<0.0002	
6/25/2015	<0.0002	
7/1/2015	<0.0002	
7/7/2015	<0.0002	
8/12/2015	<0.0002	
3/2/2016	<0.0005	
5/4/2016	<0.0005	
7/8/2016	<0.0005	
9/8/2016	<0.0005	
10/26/2016	<0.0005	
1/9/2017	<0.0005	
3/15/2017	<0.0005	
5/18/2017	<0.0005	
9/15/2017	<0.0005	
3/13/2018	<0.0005	
9/6/2018	<0.0005	
3/7/2019		<0.0005

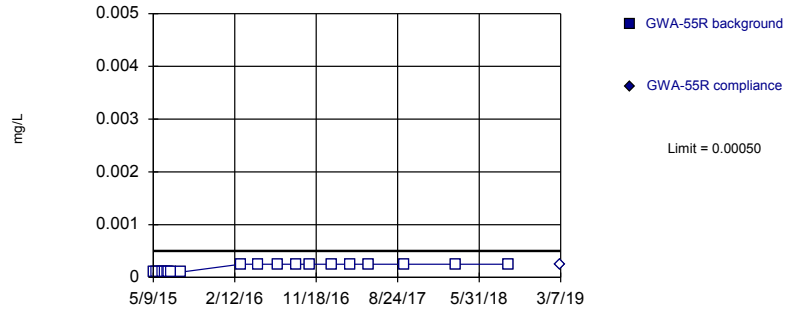
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.0002	
5/18/2015	<0.0002	
5/26/2015	<0.0002	
6/9/2015	<0.0002	
6/17/2015	<0.0002	
6/25/2015	<0.0002	
7/1/2015	<0.0002	
7/7/2015	<0.0002	
8/13/2015	<0.0002	
3/2/2016	<0.0005	
5/3/2016	<0.0005	
7/11/2016	<0.0005	
9/9/2016	<0.0005	
10/26/2016	<0.0005	
1/9/2017	<0.0005	
3/16/2017	<0.0005	
5/18/2017	<0.0005	
9/15/2017	<0.0005	
3/12/2018	<0.0005	
9/7/2018	<0.0005	
3/8/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

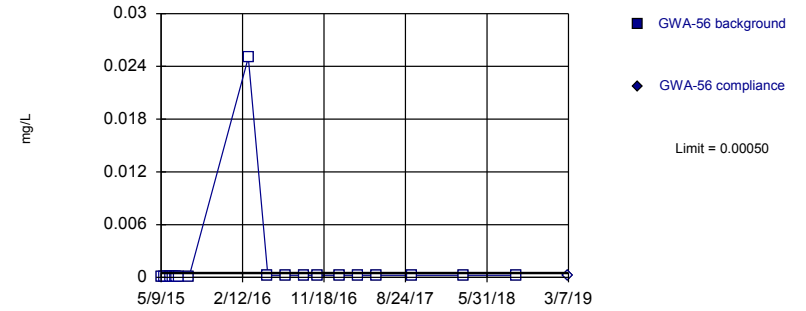


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

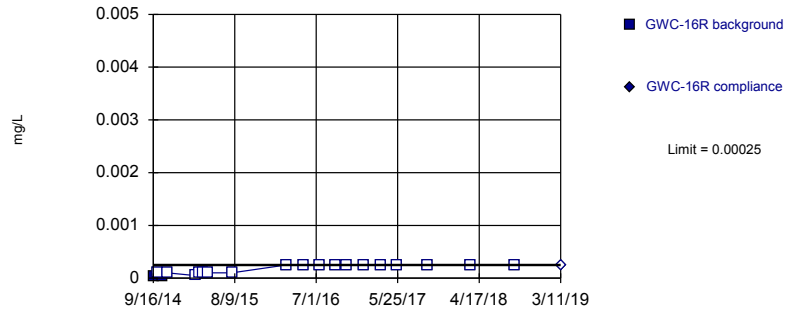


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

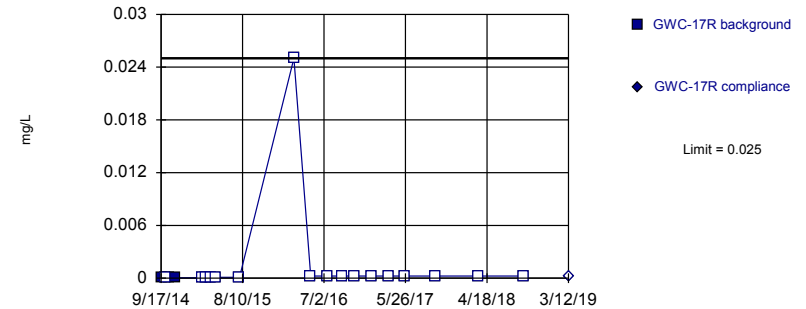


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.0002	
5/18/2015	<0.0002	
5/26/2015	<0.0002	
6/9/2015	<0.0002	
6/17/2015	<0.0002	
6/25/2015	<0.0002	
7/1/2015	<0.0002	
7/7/2015	<0.0002	
8/13/2015	<0.0002	
3/3/2016	<0.0005	
5/3/2016	<0.0005	
7/11/2016	<0.0005	
9/9/2016	<0.0005	
10/27/2016	<0.0005	
1/9/2017	<0.0005	
3/16/2017	<0.0005	
5/18/2017	<0.0005	
9/18/2017	<0.0005	
3/12/2018	<0.0005	
9/7/2018	<0.0005	
3/7/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.0002	
5/19/2015	<0.0002	
5/26/2015	<0.0002	
6/9/2015	<0.0002	
6/17/2015	<0.0002	
6/25/2015	<0.0002	
7/1/2015	<0.0002	
7/7/2015	<0.0002	
8/13/2015	<0.0002	
3/3/2016	<0.05	
5/9/2016	<0.0005	
7/11/2016	<0.0005	
9/9/2016	<0.0005	
10/26/2016	<0.0005	
1/9/2017	<0.0005	
3/15/2017	<0.0005	
5/18/2017	<0.0005	
9/15/2017	<0.0005	
3/13/2018	<0.0005	
9/7/2018	<0.0005	
3/7/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	2.69E-05 (J)	
10/4/2014	<0.0002	
10/21/2014	3.18E-05 (J)	
11/11/2014	<0.0002	
3/3/2015	<0.0001	
3/18/2015	<0.0002	
4/6/2015	<0.0002	
4/23/2015	<0.0002	
7/29/2015	<0.0002	
3/3/2016	<0.0005 (D)	
5/10/2016	<0.0005	
7/13/2016	<0.0005	
9/15/2016	<0.0005	
11/2/2016	<0.0005	
1/11/2017	<0.0005	
3/20/2017	<0.0005	
5/23/2017	<0.0005	
9/21/2017	<0.0005	
3/14/2018	<0.0005	
9/7/2018	<0.0005	
3/11/2019		<0.0005

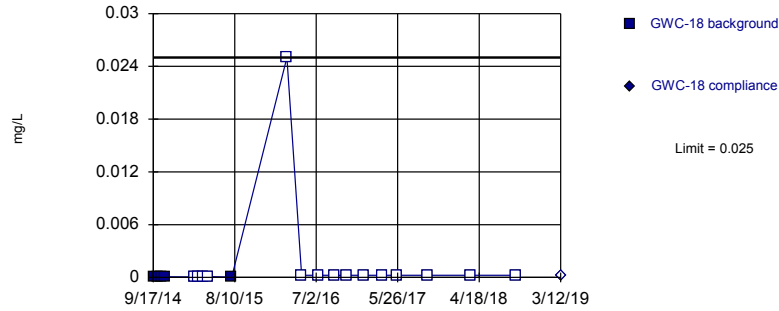
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	2.97E-05 (J)	
10/4/2014	<0.0002	
10/21/2014	5.02E-05 (J)	
11/11/2014	3.66E-05 (J)	
3/3/2015	<0.0001	
3/18/2015	<0.0002	
4/6/2015	<0.0002	
4/23/2015	<0.0002	
7/29/2015	<0.0002	
3/4/2016	<0.05	
5/10/2016	<0.0005	
7/14/2016	<0.0005	
9/14/2016	<0.0005	
11/1/2016	<0.0005	
1/11/2017	<0.0005	
3/21/2017	<0.0005	
5/23/2017	<0.0005	
9/22/2017	<0.0005	
3/14/2018	<0.0005	
9/11/2018	<0.0005	
3/12/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

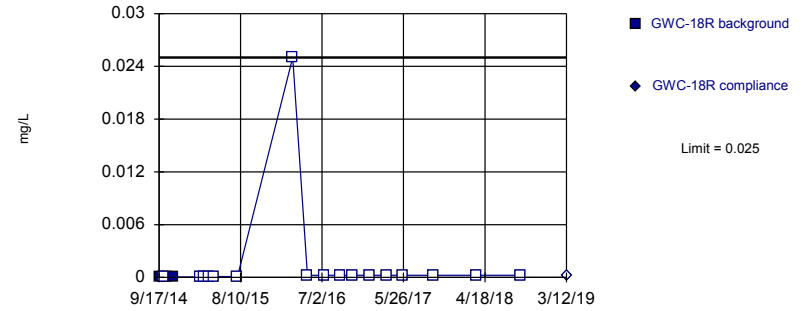


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

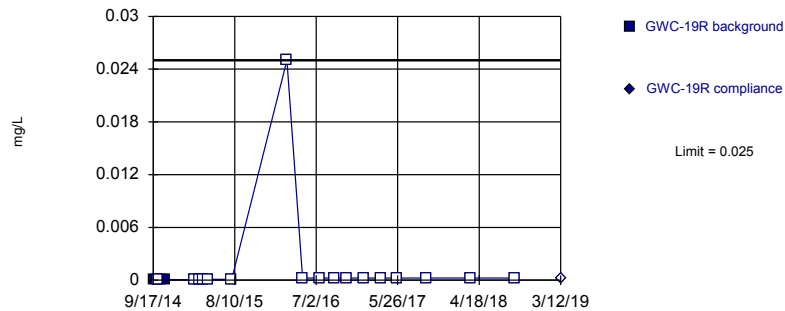


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

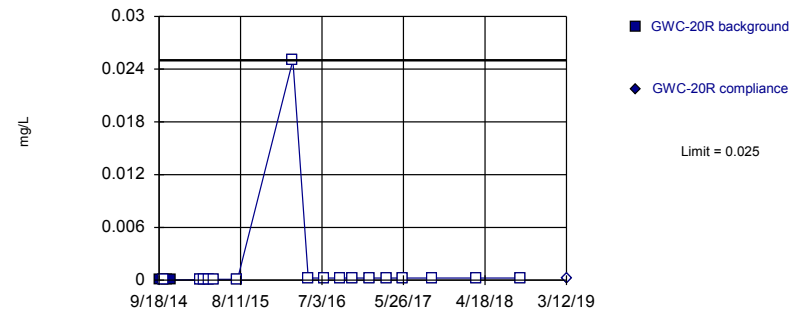


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	4.24E-05 (J)	
10/4/2014	2.5E-05 (J)	
10/21/2014	6.4E-05 (J)	
11/5/2014	7.02E-05 (J)	
3/3/2015	<0.0001	
3/18/2015	<0.0002	
4/7/2015	<0.0002	
4/23/2015	<0.0002	
7/29/2015	3.14E-05 (J)	
3/7/2016	<0.05	
5/5/2016	<0.0005	
7/13/2016	<0.0005	
9/13/2016	<0.0005	
10/31/2016	<0.0005	
1/12/2017	<0.0005	
3/23/2017	<0.0005	
5/23/2017	<0.0005	
9/25/2017	<0.0005	
3/14/2018	<0.0005	
9/11/2018	<0.0005	
3/12/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	3.5E-05 (J)	
10/4/2014	<0.0002	
10/21/2014	5.35E-05 (J)	
11/11/2014	4.64E-05 (J)	
3/3/2015	<0.0001	
3/18/2015	<0.0002	
4/7/2015	<0.0002	
4/23/2015	<0.0002	
7/29/2015	<0.0002	
3/7/2016	<0.05	
5/5/2016	<0.0005	
7/13/2016	<0.0005	
9/12/2016	<0.0005	
11/1/2016	<0.0005	
1/11/2017	<0.0005	
3/20/2017	<0.0005	
5/22/2017	<0.0005	
9/21/2017	<0.0005	
3/14/2018	<0.0005	
9/7/2018	<0.0005	
3/12/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	4.15E-05 (J)	
10/4/2014	<0.0002	
10/21/2014	5.89E-05 (J)	
11/5/2014	7.28E-05 (J)	
3/3/2015	<0.0001	
3/19/2015	<0.0002	
4/7/2015	<0.0002	
4/24/2015	<0.0002	
7/29/2015	<0.0002	
3/7/2016	<0.05	
5/9/2016	<0.0005	
7/14/2016	<0.0005	
9/12/2016	<0.0005	
10/31/2016	<0.0005	
1/11/2017	<0.0005	
3/21/2017	<0.0005	
5/22/2017	<0.0005	
9/20/2017	<0.0005	
3/14/2018	<0.0005	
9/10/2018	<0.0005	
3/12/2019		<0.0005

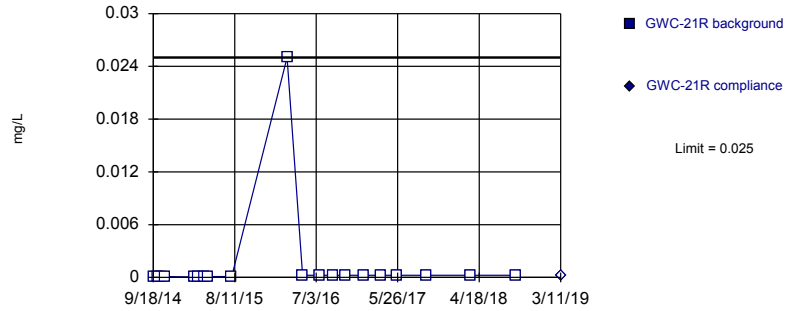
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	5.34E-05 (J)	
10/5/2014	<0.0002	
10/22/2014	4.88E-05 (J)	
11/5/2014	2.85E-05 (J)	
3/4/2015	<0.0001	
3/19/2015	<0.0002	
4/7/2015	<0.0002	
4/24/2015	<0.0002	
7/30/2015	<0.0002	
3/8/2016	<0.05	
5/9/2016	<0.0005	
7/14/2016	<0.0005	
9/12/2016	<0.0005	
10/31/2016	<0.0005	
1/12/2017	<0.0005	
3/22/2017	<0.0005	
5/22/2017	<0.0005	
9/19/2017	<0.0005	
3/14/2018	<0.0005	
9/10/2018	<0.0005	
3/12/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

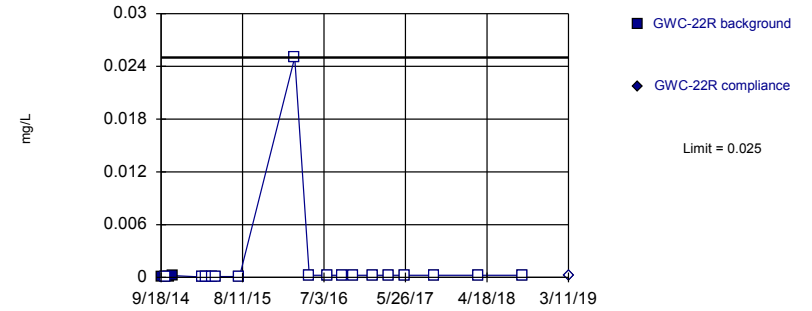


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

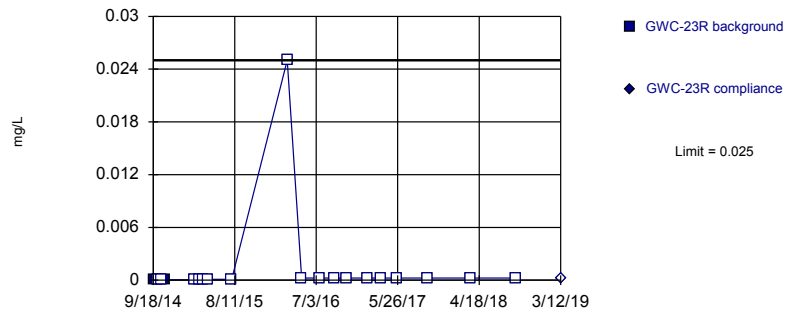


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

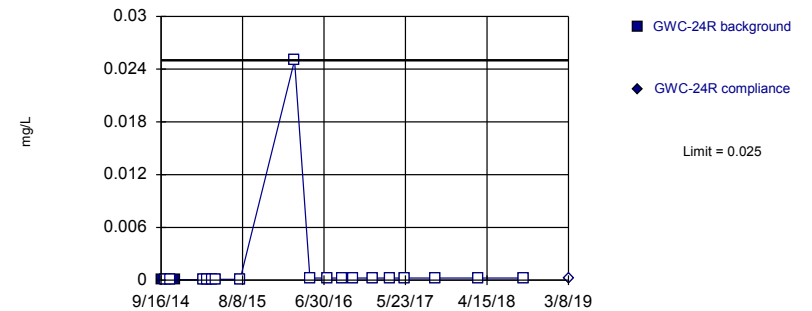


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:23 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.0002	
10/5/2014	<0.0002	
10/22/2014	2.57E-05 (J)	
11/5/2014	<0.0002	
3/4/2015	<0.0001	
3/19/2015	<0.0002	
4/8/2015	<0.0002	
4/24/2015	<0.0002	
7/30/2015	<0.0002	
3/8/2016	<0.05	
5/9/2016	<0.0005	
7/15/2016	<0.0005	
9/9/2016	<0.0005	
10/27/2016	<0.0005	
1/12/2017	<0.0005	
3/21/2017	<0.0005	
5/23/2017	<0.0005	
9/19/2017	<0.0005	
3/14/2018	<0.0005	
9/10/2018	<0.0005	
3/11/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	2.54E-05 (J)	
10/5/2014	<0.0002	
10/22/2014	2.83E-05 (J)	
11/5/2014	0.0002	
3/4/2015	<0.0001	
3/19/2015	<0.0002	
4/8/2015	<0.0002	
4/24/2015	<0.0002	
7/30/2015	<0.0002	
3/7/2016	<0.05	
5/5/2016	<0.0005	
7/14/2016	<0.0005	
9/12/2016	<0.0005	
10/27/2016	<0.0005	
1/13/2017	<0.0005	
3/20/2017	<0.0005	
5/23/2017	<0.0005	
9/19/2017	<0.0005	
3/13/2018	<0.0005	
9/7/2018	<0.0005	
3/11/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	2.82E-05 (J)	
10/5/2014	<0.0002	
10/22/2014	<0.0002	
11/5/2014	4.83E-05 (J)	
3/4/2015	<0.0001	
3/20/2015	<0.0002	
4/8/2015	<0.0002	
4/23/2015	<0.0002	
7/30/2015	<0.0002	
3/9/2016	<0.05	
5/6/2016	<0.0005	
7/15/2016	<0.0005	
9/14/2016	<0.0005	
11/1/2016	<0.0005	
1/25/2017	<0.0005	
3/22/2017	<0.0005	
5/24/2017	<0.0005	
9/21/2017	<0.0005	
3/14/2018	<0.0005	
9/11/2018	<0.0005	
3/12/2019		<0.0005

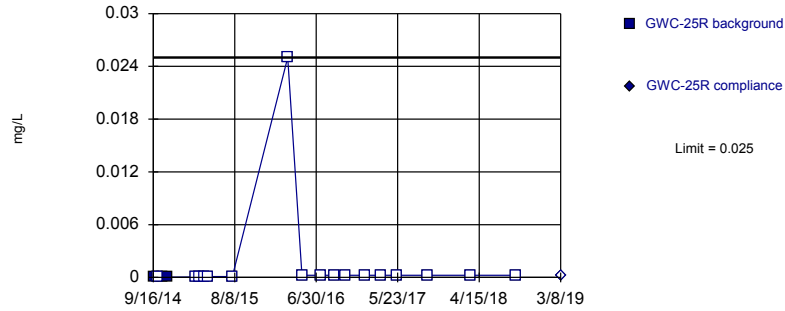
Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	2.81E-05 (J)	
10/4/2014	<0.0002	
10/23/2014	<0.0002	
11/10/2014	5.15E-05 (J)	
3/4/2015	<0.0001	
3/20/2015	<0.0002	
4/8/2015	<0.0002	
4/23/2015	<0.0002	
7/30/2015	<0.0002	
3/4/2016	<0.05	
5/5/2016	<0.0005	
7/12/2016	<0.0005	
9/13/2016	<0.0005	
10/27/2016	<0.0005	
1/13/2017	<0.0005	
3/20/2017	<0.0005	
5/19/2017	<0.0005	
9/19/2017	<0.0005	
3/13/2018	<0.0005	
9/11/2018	<0.0005	
3/8/2019		<0.0005

Within Limit

Prediction Limit
Intrawell Non-parametric

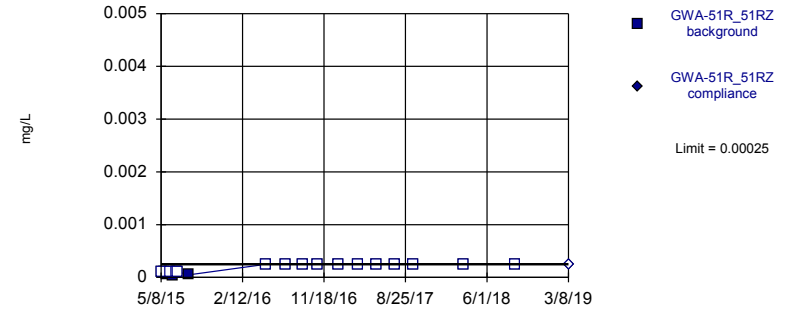


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

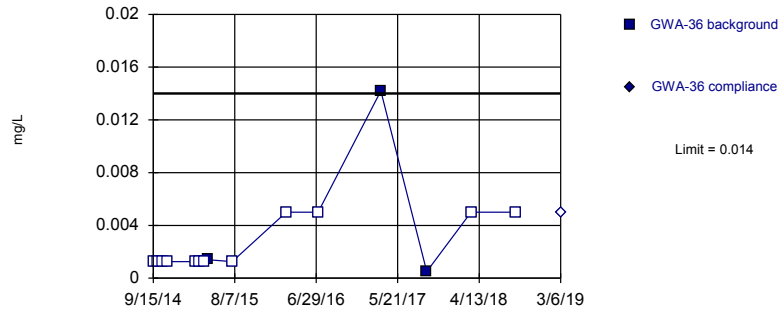


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

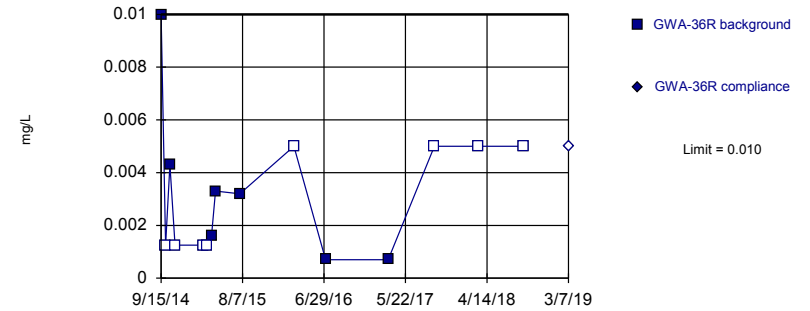


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	3.13E-05 (J)	
10/4/2014	<0.0002	
10/23/2014	4.6E-05 (J)	
11/10/2014	2.5E-05 (J)	
3/4/2015	<0.0001	
3/20/2015	<0.0002	
4/9/2015	<0.0002	
4/23/2015	<0.0002	
7/30/2015	<0.0002	
3/8/2016	<0.05	
5/4/2016	<0.0005	
7/18/2016	<0.0005	
9/13/2016	<0.0005	
10/27/2016	<0.0005	
1/13/2017	<0.0005	
3/16/2017	<0.0005	
5/19/2017	<0.0005	
9/19/2017	<0.0005	
3/13/2018	<0.0005	
9/11/2018	<0.0005	
3/8/2019		<0.0005

Prediction Limit

Constituent: Mercury (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.0002	
5/17/2015	0.000101 (J)	
5/25/2015	4.88E-05 (J)	
6/8/2015	<0.0002	
6/18/2015	4.1E-05 (J)	
6/24/2015	8.41E-05 (J)	
6/30/2015	<0.0002	
7/6/2015	<0.0002	
8/12/2015	4.91E-05 (J)	
5/4/2016	<0.0005 (D)	
7/7/2016	<0.0005 (D)	
9/8/2016	<0.0005 (D)	
10/26/2016	<0.0005 (D)	
1/6/2017	<0.0005 (D)	
3/15/2017	<0.0005 (D)	
5/18/2017	<0.0005 (D)	
7/19/2017	<0.0005 (D)	
9/19/2017	<0.0005 (D)	
3/13/2018	<0.0005	
9/7/2018	<0.0005	
3/8/2019		<0.0005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.0025	
10/3/2014	<0.0025	
10/20/2014	<0.0025	
11/10/2014	<0.0025	
3/2/2015	<0.0025	
3/17/2015	<0.0025	
4/5/2015	<0.0025	
4/21/2015	0.0014 (J)	
7/28/2015	<0.0025	
3/1/2016	<0.01	
7/7/2016	<0.01	
3/15/2017	0.0142	
9/15/2017	0.0005 (J)	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

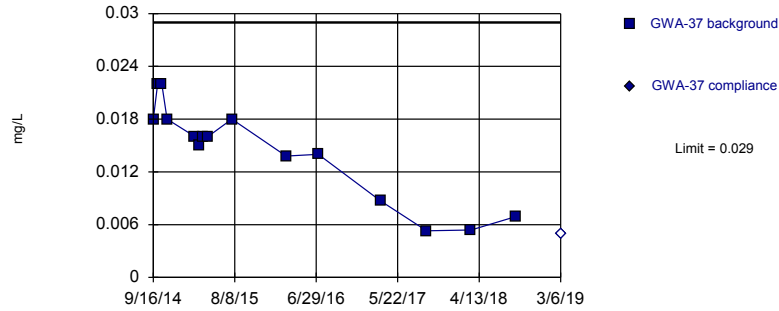
Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.01	
10/3/2014	<0.0025	
10/20/2014	0.0043	
11/10/2014	<0.0025	
3/2/2015	<0.0025	
3/17/2015	<0.0025	
4/5/2015	0.0016 (J)	
4/21/2015	0.0033	
7/28/2015	0.0032	
3/1/2016	<0.01	
7/6/2016	0.0007 (J)	
3/14/2017	0.0007 (J)	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Parametric

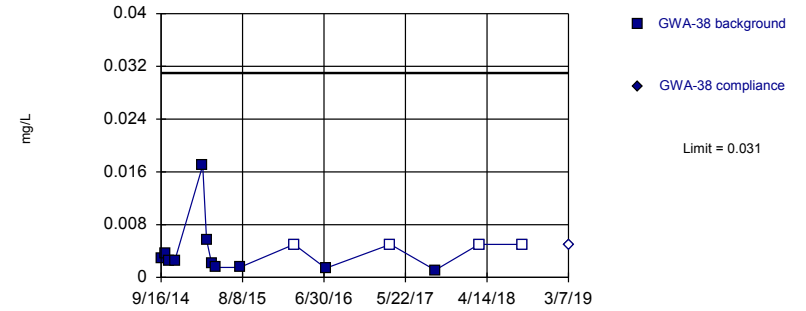


Background Data Summary: Mean=0.01434, Std. Dev.=0.005448, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9052, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

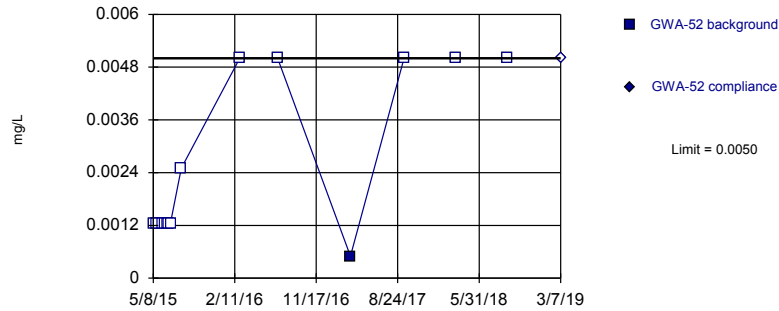


Background Data Summary (based on cube root transformation) (after Aitchison's Adjustment): Mean=0.1052, Std. Dev.=0.07519, n=15, 26.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8699, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

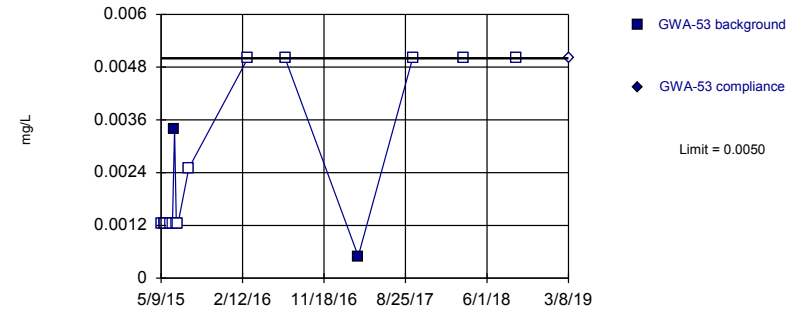


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	0.018	
10/3/2014	0.022	
10/20/2014	0.022	
11/10/2014	0.018	
3/2/2015	0.016	
3/17/2015	0.015	
4/5/2015	0.016	
4/22/2015	0.016	
7/28/2015	0.018	
3/1/2016	0.0138	
7/8/2016	0.014	
3/14/2017	0.0087 (J)	
9/15/2017	0.0053 (J)	
3/12/2018	0.0054 (J)	
9/6/2018	0.0069 (J)	
3/6/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	0.0028	
10/3/2014	0.0036	
10/20/2014	0.0025	
11/10/2014	0.0026	
3/2/2015	0.017	
3/17/2015	0.0057	
4/6/2015	0.0022 (J)	
4/22/2015	0.0015 (J)	
7/28/2015	0.0015 (J)	
3/2/2016	<0.01	
7/7/2016	0.0014 (J)	
3/23/2017	<0.01 (*)	
9/19/2017	0.0011 (J)	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.0025	
5/17/2015	<0.0025	
5/25/2015	<0.0025	
6/8/2015	<0.0025	
6/18/2015	<0.0025	
6/24/2015	<0.0025	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	<0.005	
2/29/2016	<0.01	
7/8/2016	<0.01	
3/15/2017	0.0005 (J)	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

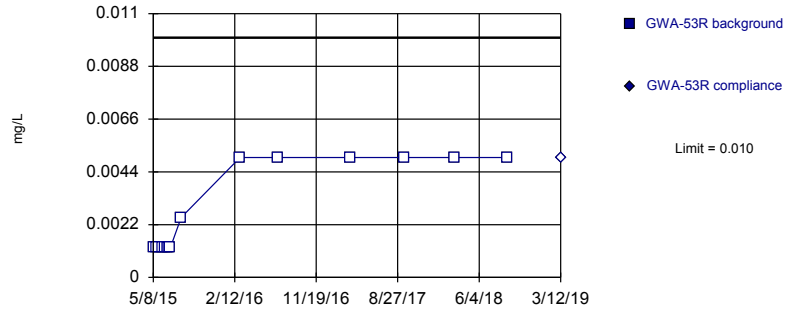
Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.0025	
5/18/2015	<0.0025	
5/25/2015	<0.0025	
6/8/2015	<0.0025	
6/17/2015	<0.0025	
6/24/2015	0.0034	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	<0.005	
3/2/2016	<0.01	
7/8/2016	<0.01	
3/16/2017	0.0005 (J)	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

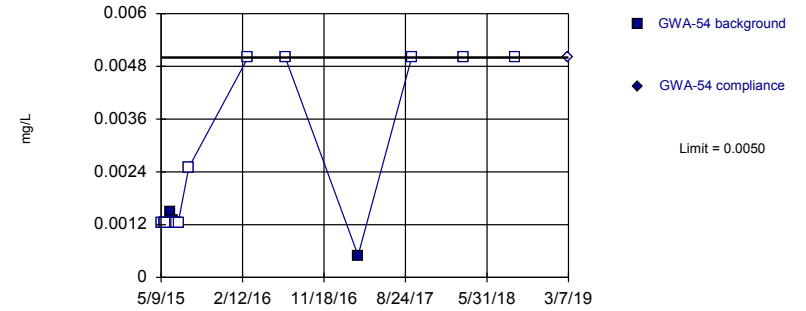


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

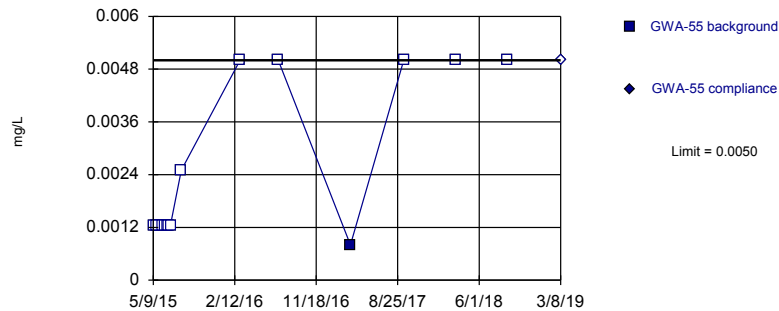


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

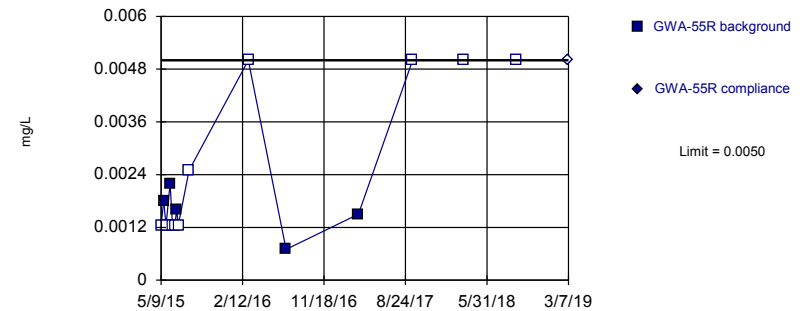


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.0025	
5/17/2015	<0.0025	
5/25/2015	<0.0025	
6/8/2015	<0.0025	
6/18/2015	<0.0025	
6/24/2015	<0.0025	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	<0.005	
3/2/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.0025	
5/18/2015	<0.0025	
5/25/2015	<0.0025	
6/9/2015	0.0015 (J)	
6/17/2015	0.0013 (J)	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/12/2015	<0.005	
3/2/2016	<0.01	
7/8/2016	<0.01	
3/15/2017	0.0005 (J)	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.0025	
5/18/2015	<0.0025	
5/26/2015	<0.0025	
6/9/2015	<0.0025	
6/17/2015	<0.0025	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/13/2015	<0.005	
3/2/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	0.0008 (J)	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

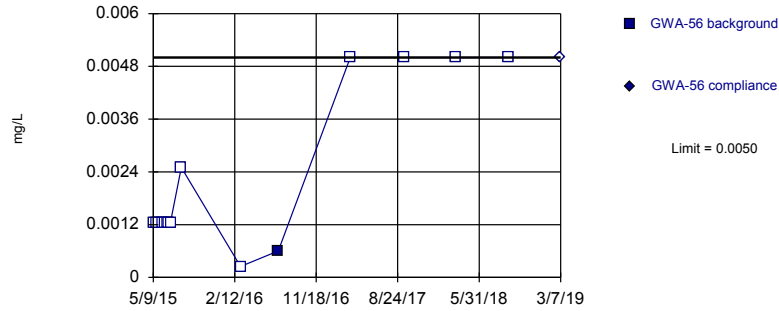
Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.0025	
5/18/2015	0.0018 (J)	
5/26/2015	<0.0025	
6/9/2015	0.0022 (J)	
6/17/2015	<0.0025	
6/25/2015	<0.0025	
7/1/2015	0.0016 (J)	
7/7/2015	<0.0025	
8/13/2015	<0.005	
3/3/2016	<0.01	
7/11/2016	0.0007 (J)	
3/16/2017	0.0015 (J)	
9/18/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Within Limit

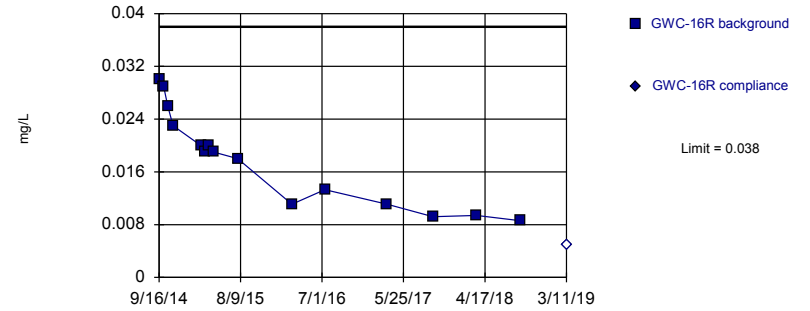
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Within Limit

Prediction Limit
Intrawell Parametric



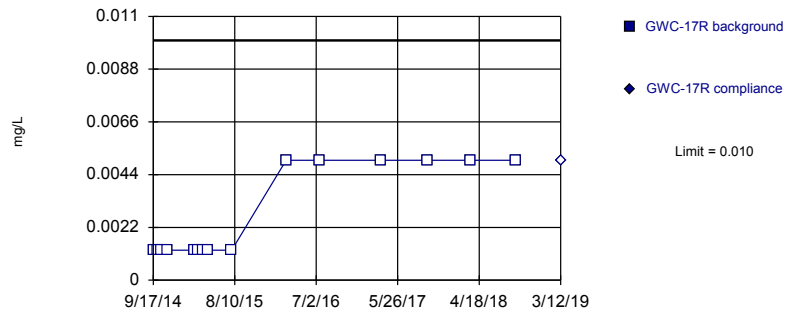
Background Data Summary: Mean=0.01778, Std. Dev.=0.007173, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9227, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

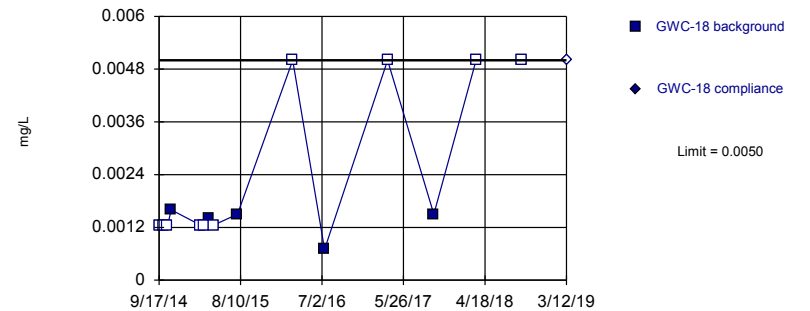


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.0025	
5/19/2015	<0.0025	
5/26/2015	<0.0025	
6/9/2015	<0.0025	
6/17/2015	<0.0025	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/13/2015	<0.005	
3/3/2016	<0.0005	
7/11/2016	0.0006 (J)	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	0.03	
10/4/2014	0.029	
10/21/2014	0.026	
11/11/2014	0.023	
3/3/2015	0.02	
3/18/2015	0.019	
4/6/2015	0.02	
4/23/2015	0.019	
7/29/2015	0.018	
3/3/2016	0.0111 (D)	
7/13/2016	0.0133	
3/20/2017	0.0111	
9/21/2017	0.0092 (J)	
3/14/2018	0.0094 (J)	
9/7/2018	0.0086 (J)	
3/11/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.0025	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/11/2014	<0.0025	
3/3/2015	<0.0025	
3/18/2015	<0.0025	
4/6/2015	<0.0025	
4/23/2015	<0.0025	
7/29/2015	<0.0025	
3/4/2016	<0.01	
7/14/2016	<0.01	
3/21/2017	<0.01	
9/22/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

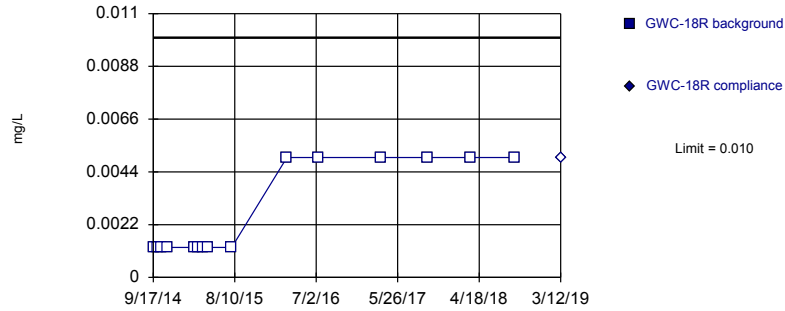
Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.0025	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/5/2014	0.0016 (J)	
3/3/2015	<0.0025	
3/18/2015	<0.0025	
4/7/2015	0.0014 (J)	
4/23/2015	<0.0025	
7/29/2015	0.0015 (J)	
3/7/2016	<0.01	
7/13/2016	0.0007 (J)	
3/23/2017	<0.01 (*)	
9/25/2017	0.0015 (J)	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

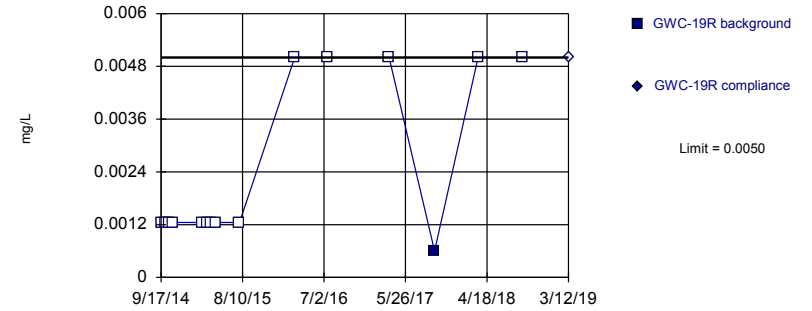


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

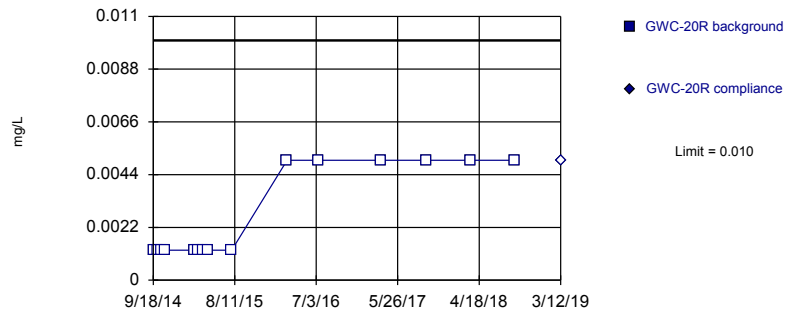


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:24 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

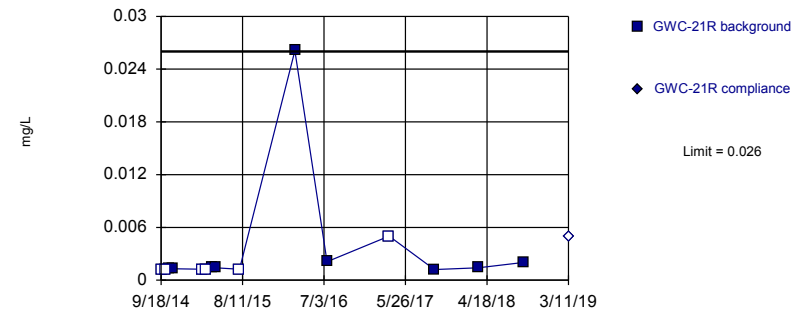


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.0025	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/11/2014	<0.0025	
3/3/2015	<0.0025	
3/18/2015	<0.0025	
4/7/2015	<0.0025	
4/23/2015	<0.0025	
7/29/2015	<0.0025	
3/7/2016	<0.01	
7/13/2016	<0.01	
3/20/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.0025	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/5/2014	<0.0025	
3/3/2015	<0.0025	
3/19/2015	<0.0025	
4/7/2015	<0.0025	
4/24/2015	<0.0025	
7/29/2015	<0.0025	
3/7/2016	<0.01	
7/14/2016	<0.01	
3/21/2017	<0.01 (*)	
9/20/2017	0.0006 (J)	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.0025	
10/5/2014	<0.0025	
10/22/2014	<0.0025	
11/5/2014	<0.0025	
3/4/2015	<0.0025	
3/19/2015	<0.0025	
4/7/2015	<0.0025	
4/24/2015	<0.0025	
7/30/2015	<0.0025	
3/8/2016	<0.01	
7/14/2016	<0.01	
3/22/2017	<0.01	
9/19/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

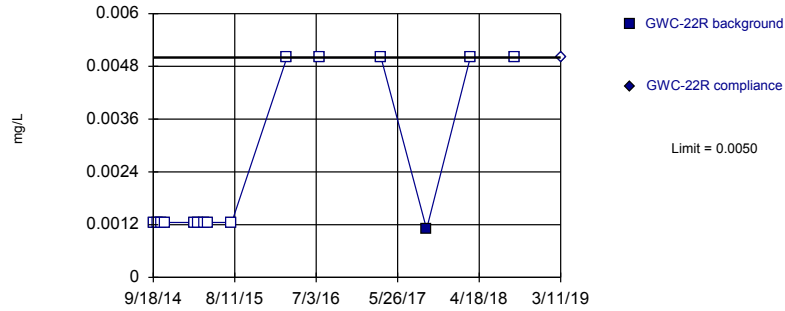
Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.0025	
10/5/2014	<0.0025	
10/22/2014	0.0013 (J)	
11/5/2014	0.0013 (J)	
3/4/2015	<0.0025	
3/19/2015	<0.0025	
4/8/2015	0.0014 (J)	
4/24/2015	0.0014 (J)	
7/30/2015	<0.0025	
3/8/2016	0.0261	
7/15/2016	0.0021 (J)	
3/21/2017	<0.01 (*)	
9/19/2017	0.0012 (J)	
3/14/2018	0.0014 (J)	
9/10/2018	0.002 (J)	
3/11/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

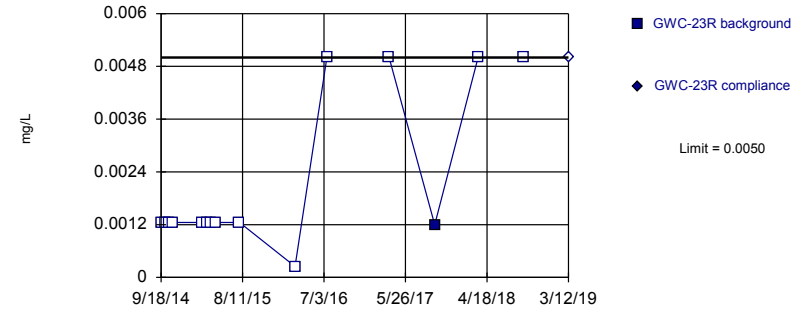


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

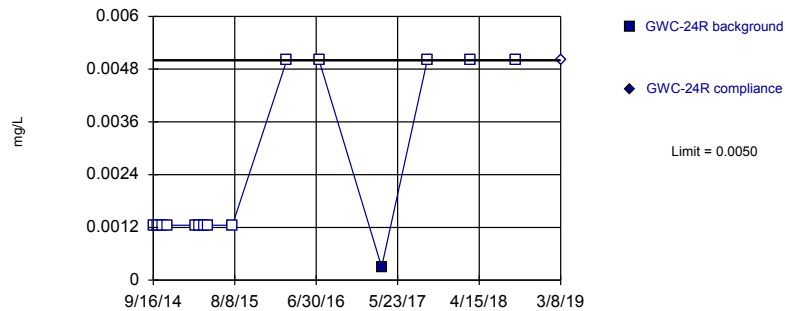


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

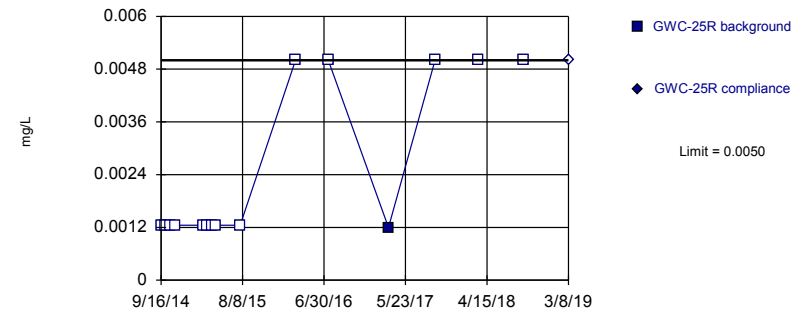


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.0025	
10/5/2014	<0.0025	
10/22/2014	<0.0025	
11/5/2014	<0.0025	
3/4/2015	<0.0025	
3/19/2015	<0.0025	
4/8/2015	<0.0025	
4/24/2015	<0.0025	
7/30/2015	<0.0025	
3/7/2016	<0.01	
7/14/2016	<0.01	
3/20/2017	<0.01	
9/19/2017	0.0011 (J)	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.0025	
10/5/2014	<0.0025	
10/22/2014	<0.0025	
11/5/2014	<0.0025	
3/4/2015	<0.0025	
3/20/2015	<0.0025	
4/8/2015	<0.0025	
4/23/2015	<0.0025	
7/30/2015	<0.0025	
3/9/2016	<0.0005	
7/15/2016	<0.01	
3/22/2017	<0.01 (*)	
9/21/2017	0.0012 (J)	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.0025	
10/4/2014	<0.0025	
10/23/2014	<0.0025	
11/10/2014	<0.0025	
3/4/2015	<0.0025	
3/20/2015	<0.0025	
4/8/2015	<0.0025	
4/23/2015	<0.0025	
7/30/2015	<0.0025	
3/4/2016	<0.01	
7/12/2016	<0.01	
3/20/2017	0.0003 (J)	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

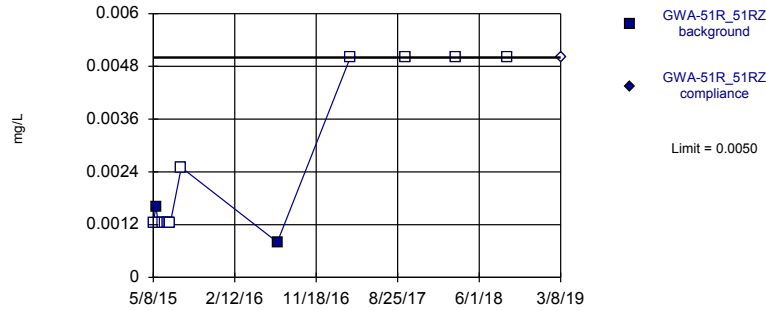
Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.0025	
10/4/2014	<0.0025	
10/23/2014	<0.0025	
11/10/2014	<0.0025	
3/4/2015	<0.0025	
3/20/2015	<0.0025	
4/9/2015	<0.0025	
4/23/2015	<0.0025	
7/30/2015	<0.0025	
3/8/2016	<0.01	
7/18/2016	<0.01	
3/16/2017	0.0012 (J)	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

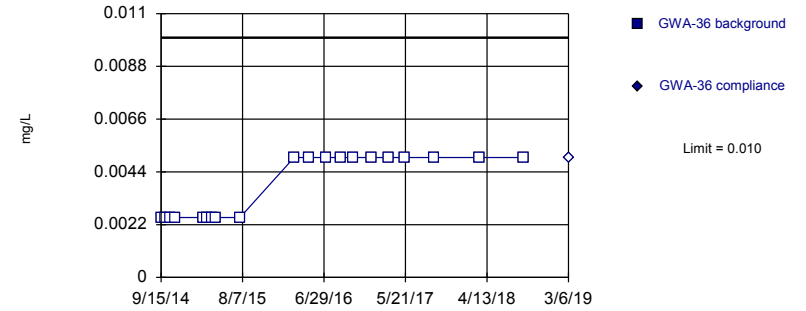


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

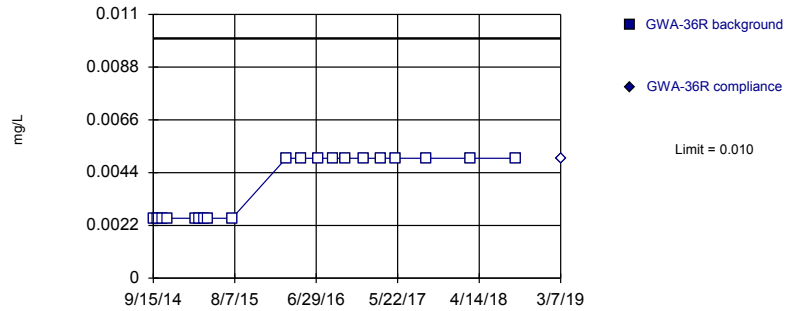


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

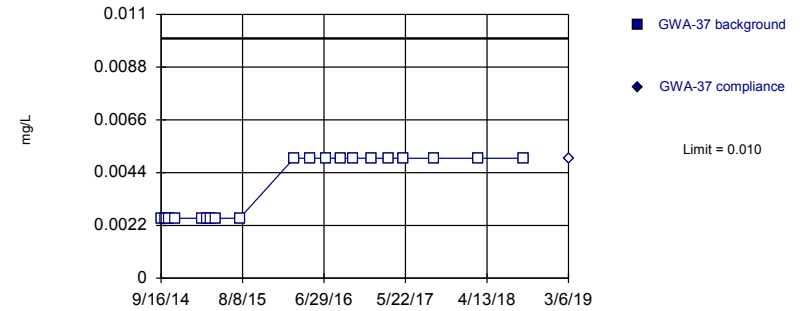


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Nickel Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.0025	
5/17/2015	0.0016 (J)	
5/25/2015	<0.0025	
6/8/2015	<0.0025	
6/18/2015	<0.0025	
6/24/2015	<0.0025	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	<0.005	
7/7/2016	0.0008 (JD)	
3/15/2017	<0.01 (D)	
9/19/2017	<0.01 (D)	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.01	
5/2/2016	<0.01	
7/7/2016	<0.01	
9/7/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
3/15/2017	<0.01	
5/17/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.01	
5/2/2016	<0.01	
7/6/2016	<0.01	
9/7/2016	<0.01	
10/25/2016	<0.01	
1/5/2017	<0.01	
3/14/2017	<0.01	
5/16/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

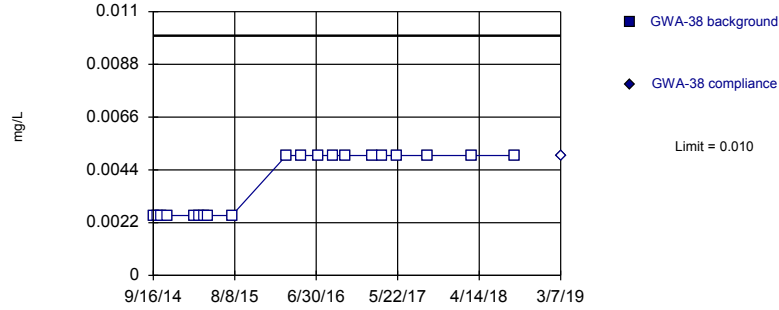
Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/22/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.01	
5/3/2016	<0.01	
7/8/2016	<0.01	
9/7/2016	<0.01	
10/25/2016	<0.01	
1/6/2017	<0.01	
3/14/2017	<0.01	
5/16/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

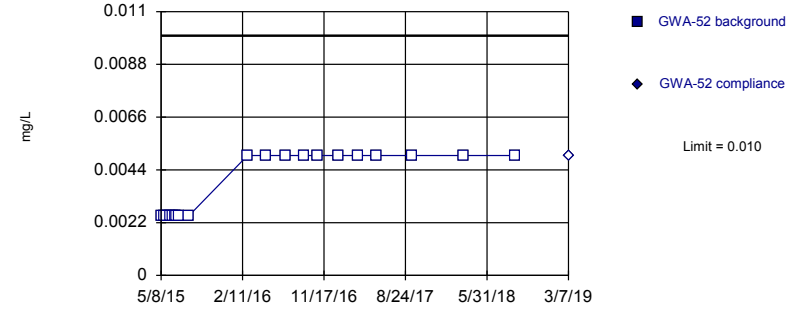


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

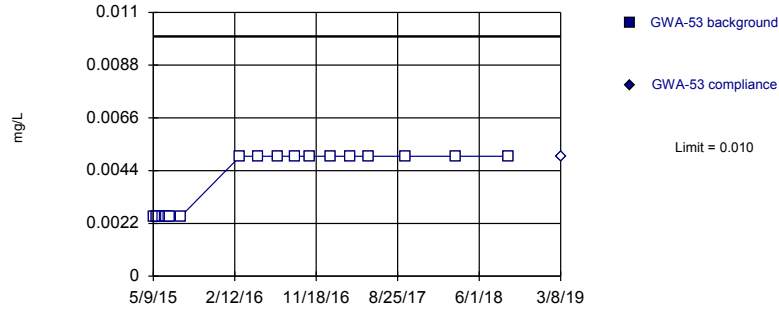


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

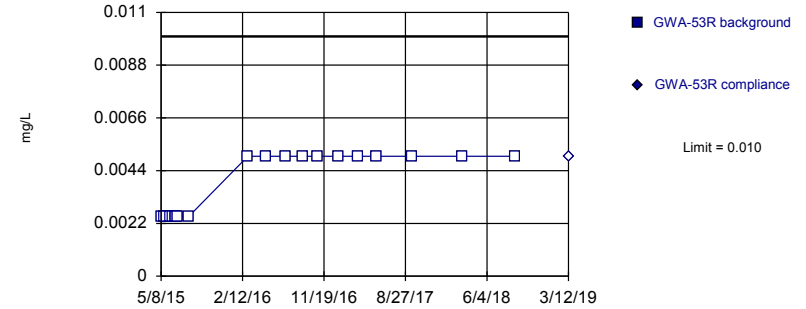


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:36 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/6/2015	<0.005	
4/22/2015	<0.005	
7/28/2015	<0.005	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/7/2016	<0.01	
9/8/2016	<0.01	
10/25/2016	<0.01	
2/9/2017	<0.01	
3/23/2017	<0.01	
5/17/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
2/29/2016	<0.01	
5/4/2016	<0.01	
7/8/2016	<0.01	
9/8/2016	<0.01	
10/26/2016	<0.01	
1/6/2017	<0.01	
3/15/2017	<0.01	
5/17/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/17/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/8/2016	<0.01	
9/8/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	<0.01	
3/16/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

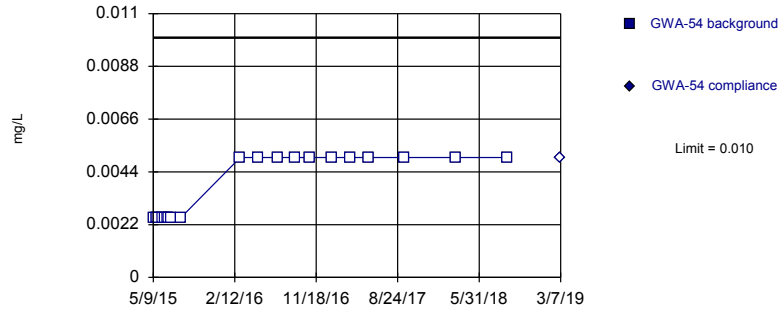
Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.01	
5/3/2016	<0.01	
7/11/2016	<0.01	
9/7/2016	<0.01	
10/27/2016	<0.01	
1/6/2017	<0.01	
3/16/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

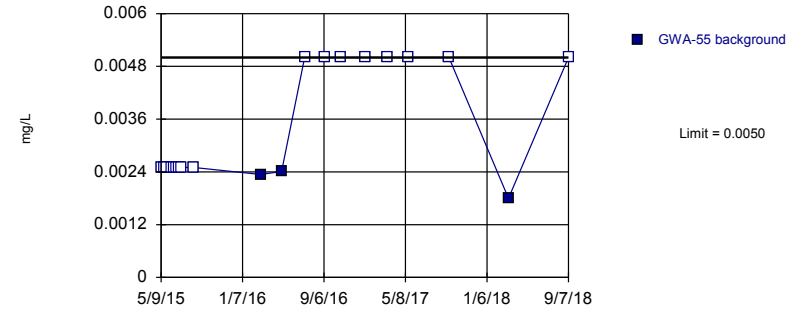


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-55 (bg)

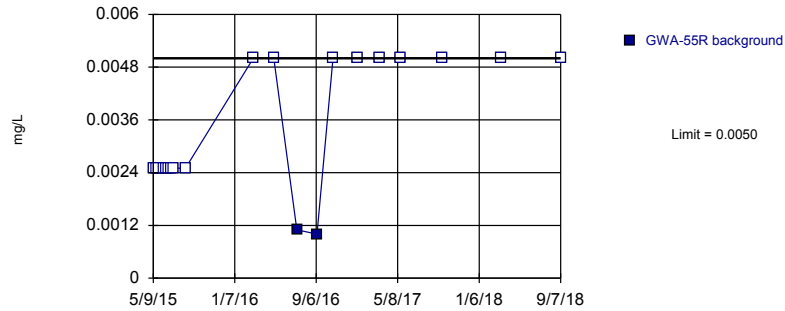


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Selenium Analysis Run 8/26/2019 4:25 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-55R (bg)

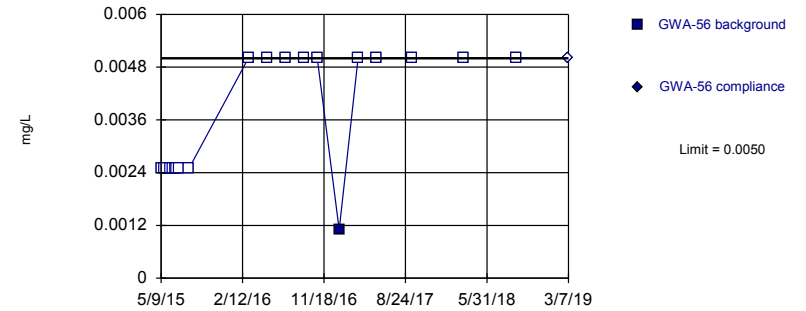


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/12/2015	<0.005	
3/2/2016	<0.01	
5/4/2016	<0.01	
7/8/2016	<0.01	
9/8/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	<0.01	
3/15/2017	<0.01	
5/18/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/2/2016	0.00234 (J)
5/3/2016	0.00241 (J)
7/11/2016	<0.01
9/9/2016	<0.01
10/26/2016	<0.01
1/9/2017	<0.01
3/16/2017	<0.01
5/18/2017	<0.01
9/15/2017	<0.01
3/12/2018	0.0018 (J)
9/7/2018	<0.01
3/8/2019	0.0026 (X)

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.01
5/3/2016	<0.01
7/11/2016	0.0011 (J)
9/9/2016	0.001 (J)
10/27/2016	<0.01
1/9/2017	<0.01
3/16/2017	<0.01
5/18/2017	<0.01
9/18/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/7/2019	0.0016 (X)

Prediction Limit

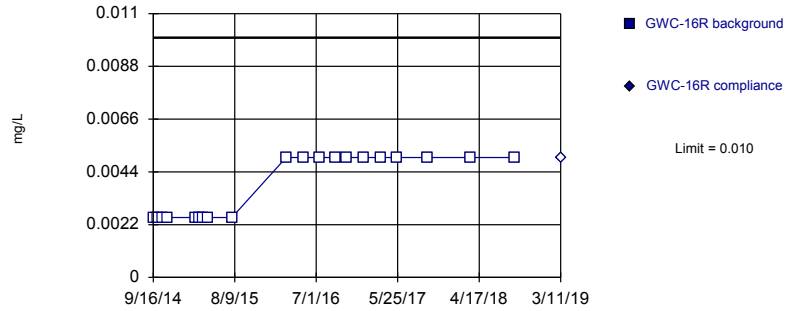
Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.005	
5/19/2015	<0.005	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/13/2015	<0.005	
3/3/2016	<0.01	
5/9/2016	<0.01	
7/11/2016	<0.01	
9/9/2016	<0.01	
10/26/2016	<0.01	
1/9/2017	0.0011 (J)	
3/15/2017	<0.01	
5/18/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

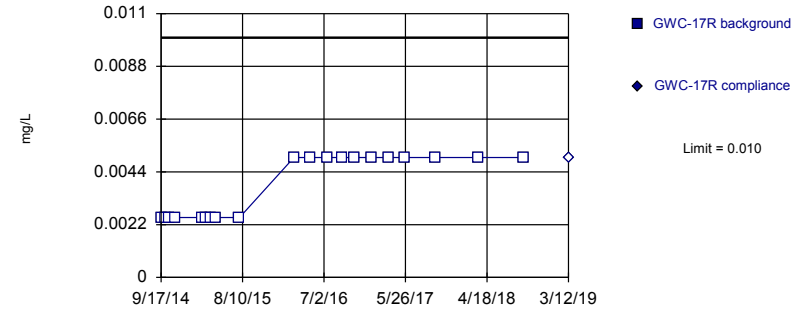


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

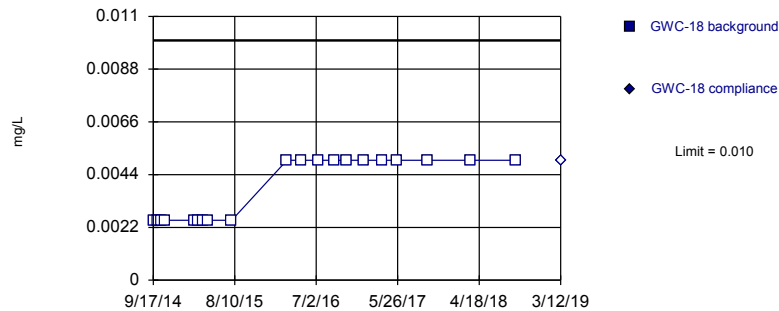


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

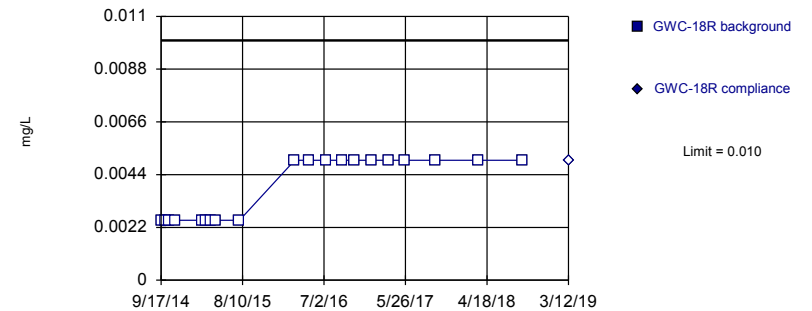


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/6/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/3/2016	<0.01 (D)	
5/10/2016	<0.01	
7/13/2016	<0.01	
9/15/2016	<0.01	
11/2/2016	<0.01	
1/11/2017	<0.01	
3/20/2017	<0.01	
5/23/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/6/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/4/2016	<0.01	
5/10/2016	<0.01	
7/14/2016	<0.01	
9/14/2016	<0.01	
11/1/2016	<0.01	
1/11/2017	<0.01	
3/21/2017	<0.01	
5/23/2017	<0.01	
9/22/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.01	
5/5/2016	<0.01	
7/13/2016	<0.01	
9/13/2016	<0.01	
10/31/2016	<0.01	
1/12/2017	<0.01	
3/23/2017	<0.01	
5/23/2017	<0.01	
9/25/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

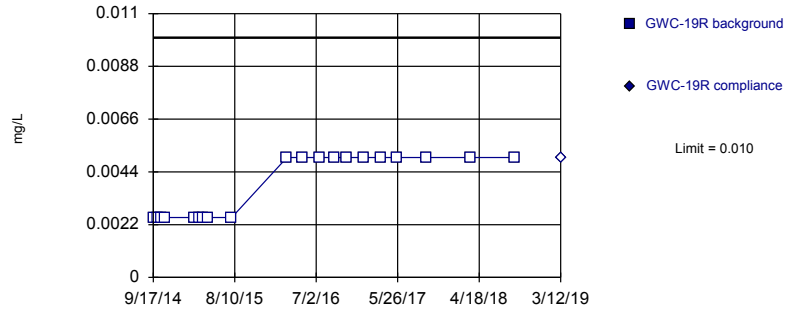
Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.01	
5/5/2016	<0.01	
7/13/2016	<0.01	
9/12/2016	<0.01	
11/1/2016	<0.01	
1/11/2017	<0.01	
3/20/2017	<0.01	
5/22/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

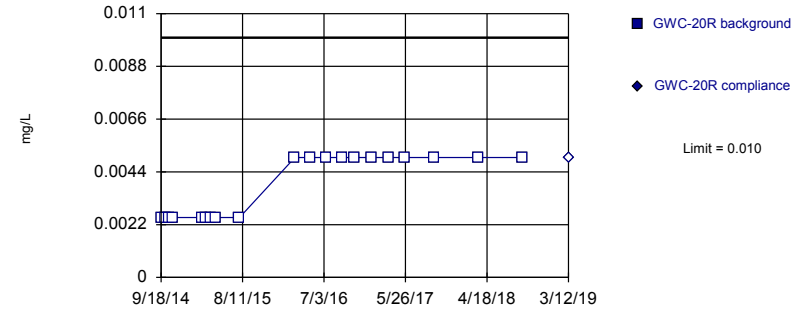


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

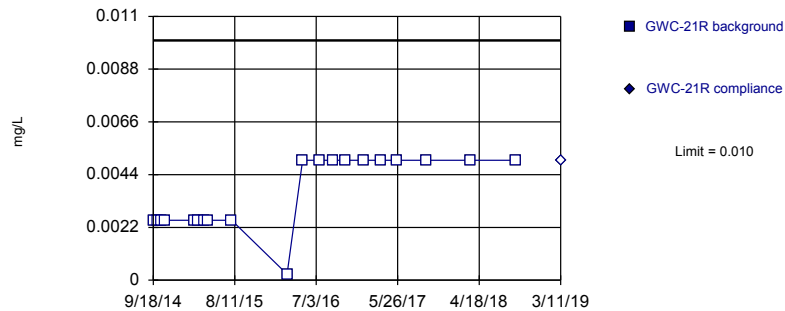


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

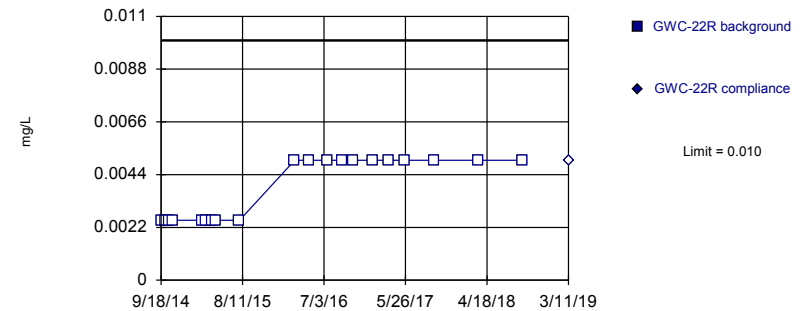


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.01	
5/9/2016	<0.01	
7/14/2016	<0.01	
9/12/2016	<0.01	
10/31/2016	<0.01	
1/11/2017	<0.01	
3/21/2017	<0.01	
5/22/2017	<0.01	
9/20/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.01	
5/9/2016	<0.01	
7/14/2016	<0.01	
9/12/2016	<0.01	
10/31/2016	<0.01	
1/12/2017	<0.01	
3/22/2017	<0.01	
5/22/2017	<0.01	
9/19/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/8/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.0005	
5/9/2016	<0.01	
7/15/2016	<0.01	
9/9/2016	<0.01	
10/27/2016	<0.01	
1/12/2017	<0.01	
3/21/2017	<0.01	
5/23/2017	<0.01	
9/19/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

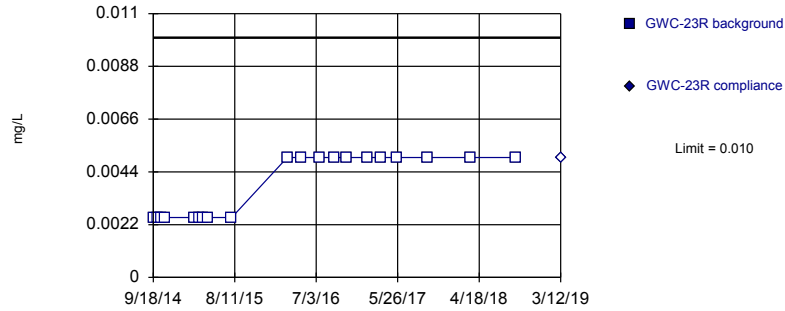
Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/8/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/7/2016	<0.01	
5/5/2016	<0.01	
7/14/2016	<0.01	
9/12/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/20/2017	<0.01	
5/23/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

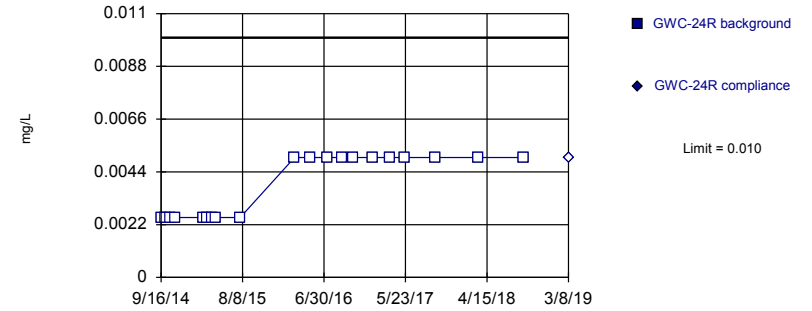


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

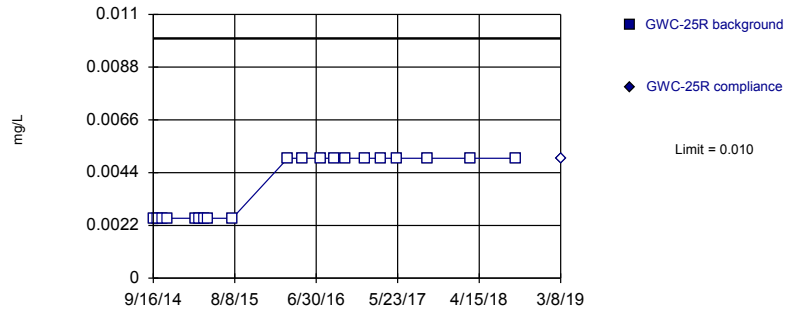


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

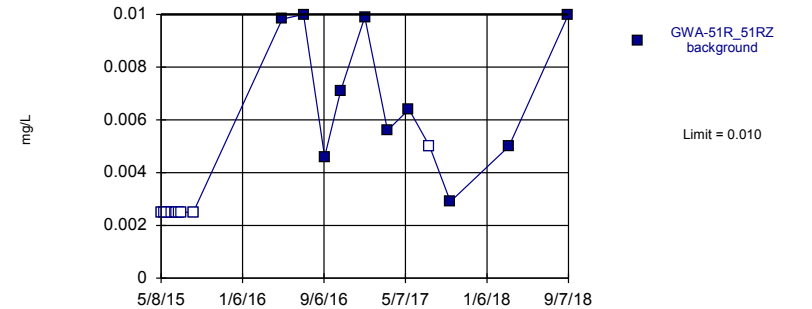


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-51R_51RZ (bg)



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Selenium Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/9/2016	<0.01	
5/6/2016	<0.01	
7/15/2016	<0.01	
9/14/2016	<0.01	
11/1/2016	<0.01	
1/25/2017	<0.01	
3/22/2017	<0.01	
5/24/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/4/2016	<0.01	
5/5/2016	<0.01	
7/12/2016	<0.01	
9/13/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/20/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/9/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.01	
5/4/2016	<0.01	
7/18/2016	<0.01	
9/13/2016	<0.01	
10/27/2016	<0.01	
1/13/2017	<0.01	
3/16/2017	<0.01	
5/19/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

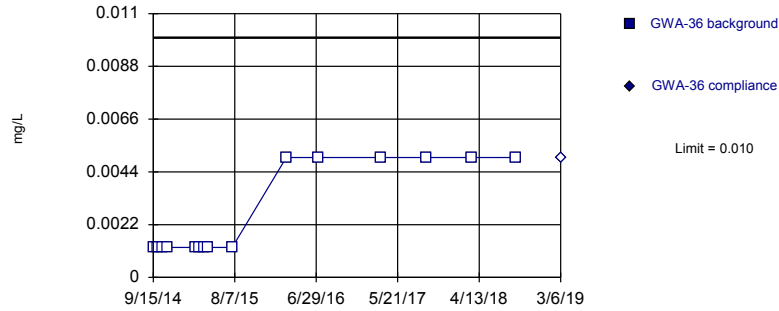
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ

5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
5/4/2016	0.00982 (JD)
7/7/2016	0.01 (D)
9/8/2016	0.0046 (JD)
10/26/2016	0.0071 (JD)
1/6/2017	0.0099 (JD)
3/15/2017	0.0056 (JD)
5/18/2017	0.0064 (JD)
7/19/2017	<0.01 (D)
9/19/2017	0.0029 (JD)
3/13/2018	0.005 (J)
9/7/2018	0.01
3/8/2019	0.0052 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

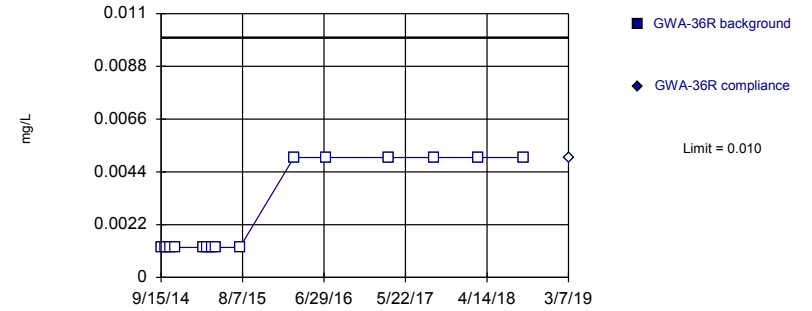


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:26 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

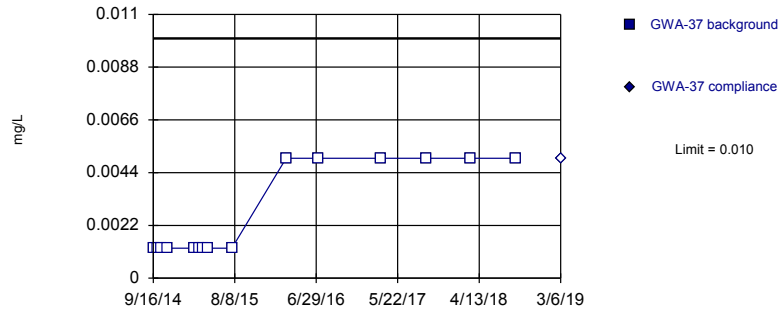


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

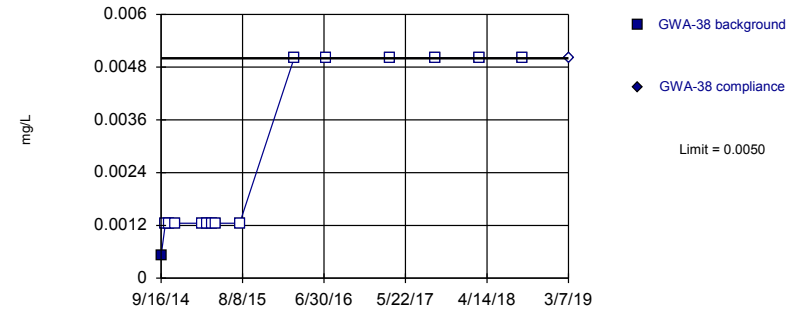


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.0025	
10/3/2014	<0.0025	
10/20/2014	<0.0025	
11/10/2014	<0.0025	
3/2/2015	<0.0025	
3/17/2015	<0.0025	
4/5/2015	<0.0025	
4/21/2015	<0.0025	
7/28/2015	<0.0025	
3/1/2016	<0.01	
7/7/2016	<0.01	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	<0.0025	
10/3/2014	<0.0025	
10/20/2014	<0.0025	
11/10/2014	<0.0025	
3/2/2015	<0.0025	
3/17/2015	<0.0025	
4/5/2015	<0.0025	
4/21/2015	<0.0025	
7/28/2015	<0.0025	
3/1/2016	<0.01	
7/6/2016	<0.01	
3/14/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	<0.0025	
10/3/2014	<0.0025	
10/20/2014	<0.0025	
11/10/2014	<0.0025	
3/2/2015	<0.0025	
3/17/2015	<0.0025	
4/5/2015	<0.0025	
4/22/2015	<0.0025	
7/28/2015	<0.0025	
3/1/2016	<0.01	
7/8/2016	<0.01	
3/14/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

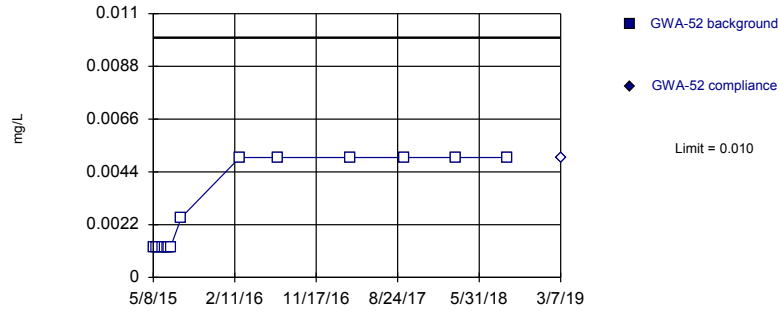
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	0.00051 (J)	
10/3/2014	<0.0025	
10/20/2014	<0.0025	
11/10/2014	<0.0025	
3/2/2015	<0.0025	
3/17/2015	<0.0025	
4/6/2015	<0.0025	
4/22/2015	<0.0025	
7/28/2015	<0.0025	
3/2/2016	<0.01	
7/7/2016	<0.01	
3/23/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

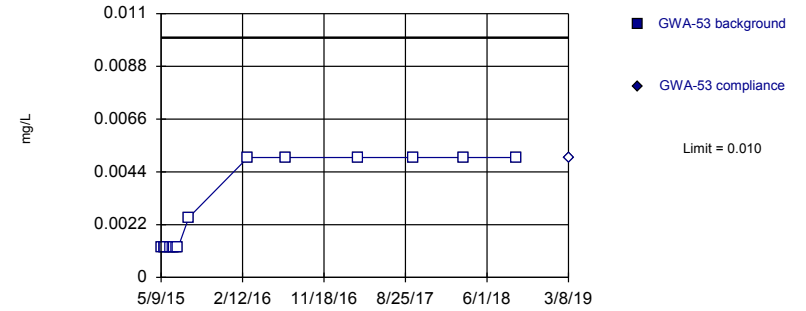


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

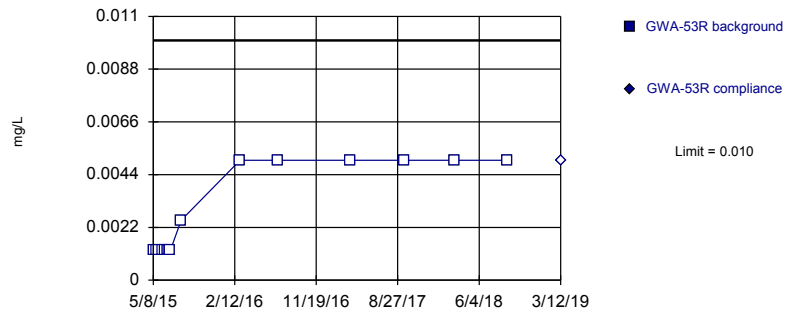


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

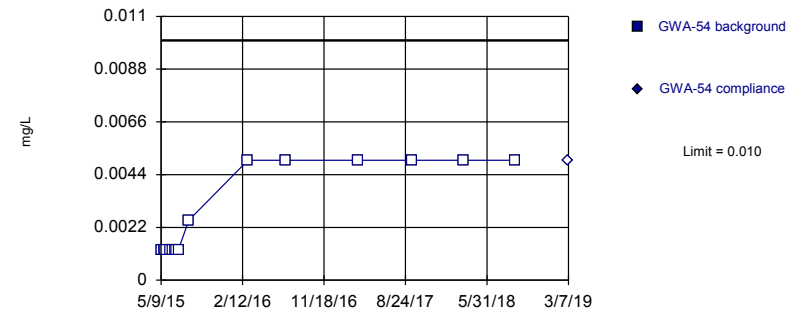


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.0025	
5/17/2015	<0.0025	
5/25/2015	<0.0025	
6/8/2015	<0.0025	
6/18/2015	<0.0025	
6/24/2015	<0.0025	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	<0.005	
2/29/2016	<0.01	
7/8/2016	<0.01	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.0025	
5/18/2015	<0.0025	
5/25/2015	<0.0025	
6/8/2015	<0.0025	
6/17/2015	<0.0025	
6/24/2015	<0.0025	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	<0.005	
3/2/2016	<0.01	
7/8/2016	<0.01	
3/16/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.0025	
5/17/2015	<0.0025	
5/25/2015	<0.0025	
6/8/2015	<0.0025	
6/18/2015	<0.0025	
6/24/2015	<0.0025	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	<0.005	
3/2/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

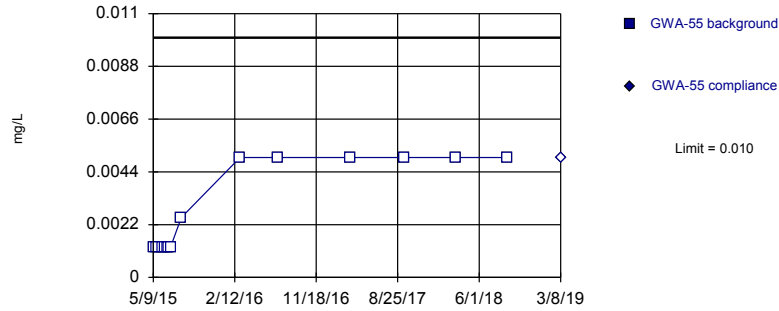
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.0025	
5/18/2015	<0.0025	
5/25/2015	<0.0025	
6/9/2015	<0.0025	
6/17/2015	<0.0025	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/12/2015	<0.005	
3/2/2016	<0.01	
7/8/2016	<0.01	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

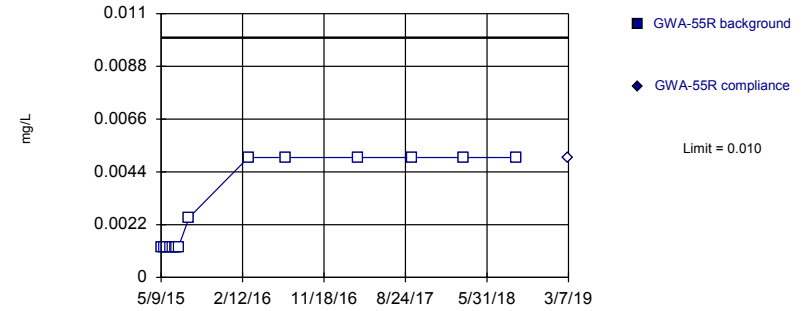


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

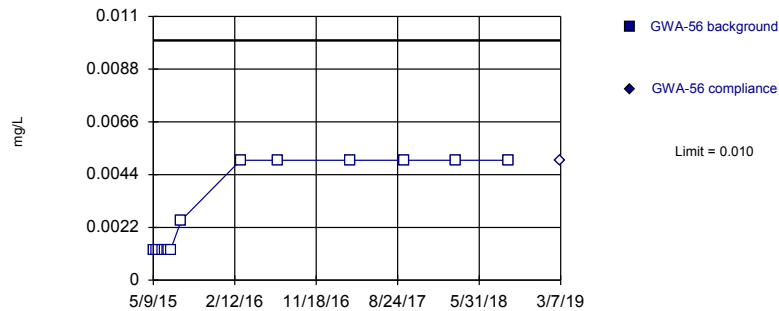


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

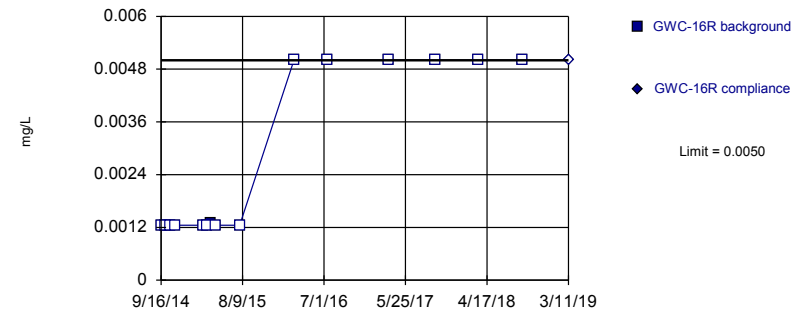


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.0025	
5/18/2015	<0.0025	
5/26/2015	<0.0025	
6/9/2015	<0.0025	
6/17/2015	<0.0025	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/13/2015	<0.005	
3/2/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.0025	
5/18/2015	<0.0025	
5/26/2015	<0.0025	
6/9/2015	<0.0025	
6/17/2015	<0.0025	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/13/2015	<0.005	
3/3/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	<0.01	
9/18/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.0025	
5/19/2015	<0.0025	
5/26/2015	<0.0025	
6/9/2015	<0.0025	
6/17/2015	<0.0025	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/13/2015	<0.005	
3/3/2016	<0.01	
7/11/2016	<0.01	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

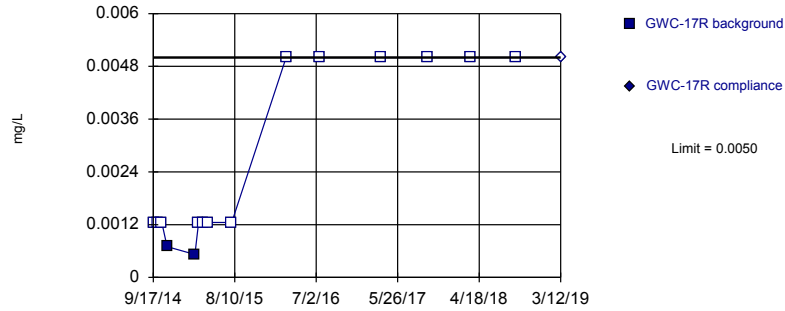
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	<0.0025	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/11/2014	<0.0025	
3/3/2015	<0.0025	
3/18/2015	<0.0025	
4/6/2015	0.0013 (J)	
4/23/2015	<0.0025	
7/29/2015	<0.0025	
3/3/2016	<0.01 (D)	
7/13/2016	<0.01	
3/20/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

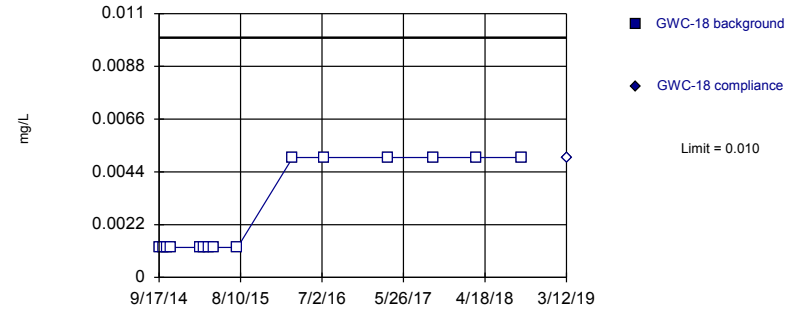


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

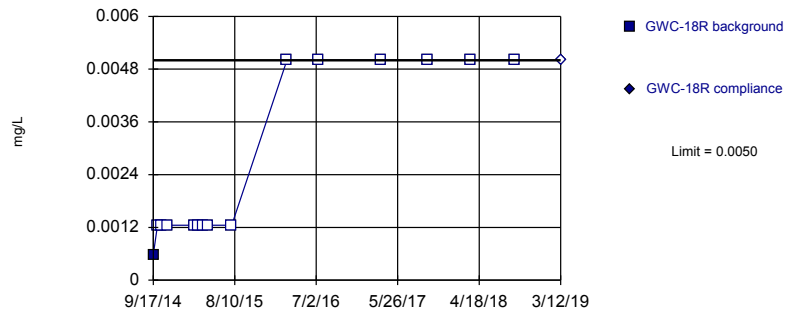


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

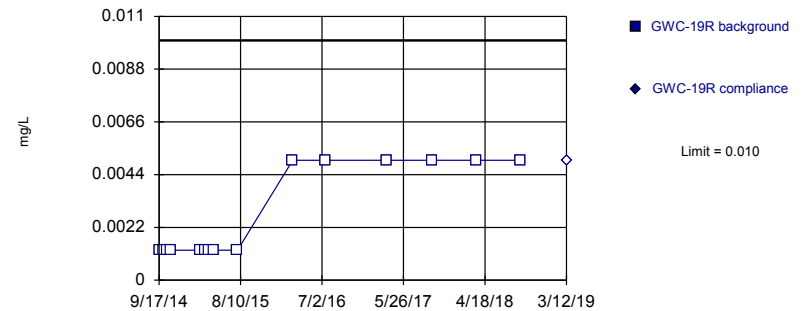


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.0025	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/11/2014	0.0007 (J)	
3/3/2015	0.00052 (J)	
3/18/2015	<0.0025	
4/6/2015	<0.0025	
4/23/2015	<0.0025	
7/29/2015	<0.0025	
3/4/2016	<0.01	
7/14/2016	<0.01	
3/21/2017	<0.01	
9/22/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.0025	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/5/2014	<0.0025	
3/3/2015	<0.0025	
3/18/2015	<0.0025	
4/7/2015	<0.0025	
4/23/2015	<0.0025	
7/29/2015	<0.0025	
3/7/2016	<0.01	
7/13/2016	<0.01	
3/23/2017	<0.01	
9/25/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	0.00058 (J)	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/11/2014	<0.0025	
3/3/2015	<0.0025	
3/18/2015	<0.0025	
4/7/2015	<0.0025	
4/23/2015	<0.0025	
7/29/2015	<0.0025	
3/7/2016	<0.01	
7/13/2016	<0.01	
3/20/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/12/2019		<0.01

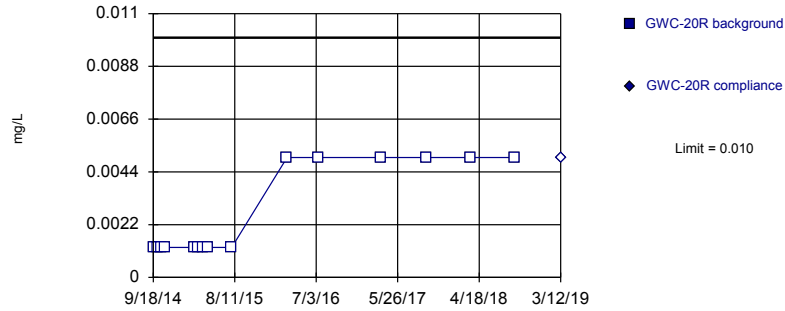
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.0025	
10/4/2014	<0.0025	
10/21/2014	<0.0025	
11/5/2014	<0.0025	
3/3/2015	<0.0025	
3/19/2015	<0.0025	
4/7/2015	<0.0025	
4/24/2015	<0.0025	
7/29/2015	<0.0025	
3/7/2016	<0.01	
7/14/2016	<0.01	
3/21/2017	<0.01	
9/20/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

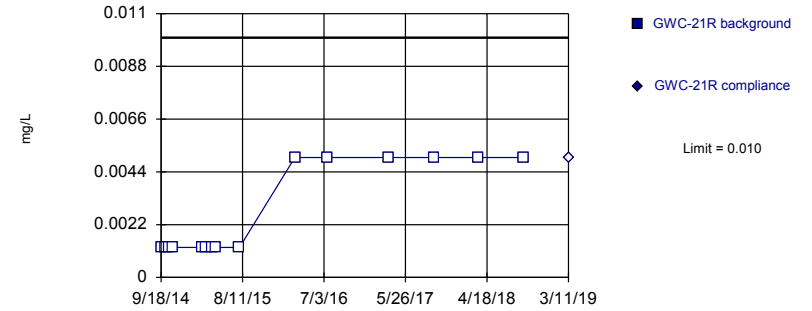


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

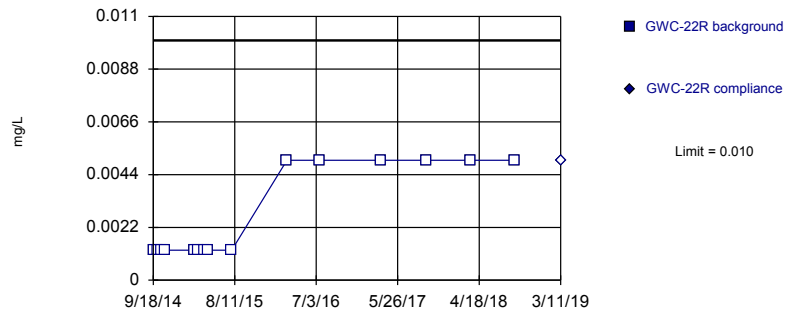


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

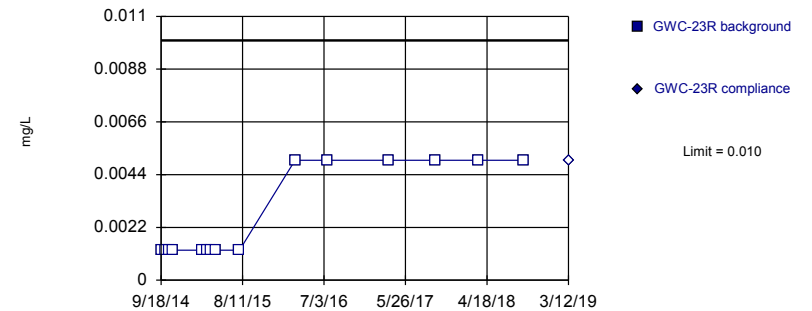


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:27 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.0025	
10/5/2014	<0.0025	
10/22/2014	<0.0025	
11/5/2014	<0.0025	
3/4/2015	<0.0025	
3/19/2015	<0.0025	
4/7/2015	<0.0025	
4/24/2015	<0.0025	
7/30/2015	<0.0025	
3/8/2016	<0.01	
7/14/2016	<0.01	
3/22/2017	<0.01	
9/19/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.0025	
10/5/2014	<0.0025	
10/22/2014	<0.0025	
11/5/2014	<0.0025	
3/4/2015	<0.0025	
3/19/2015	<0.0025	
4/8/2015	<0.0025	
4/24/2015	<0.0025	
7/30/2015	<0.0025	
3/8/2016	<0.01	
7/15/2016	<0.01	
3/21/2017	<0.01	
9/19/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.0025	
10/5/2014	<0.0025	
10/22/2014	<0.0025	
11/5/2014	<0.0025	
3/4/2015	<0.0025	
3/19/2015	<0.0025	
4/8/2015	<0.0025	
4/24/2015	<0.0025	
7/30/2015	<0.0025	
3/7/2016	<0.01	
7/14/2016	<0.01	
3/20/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

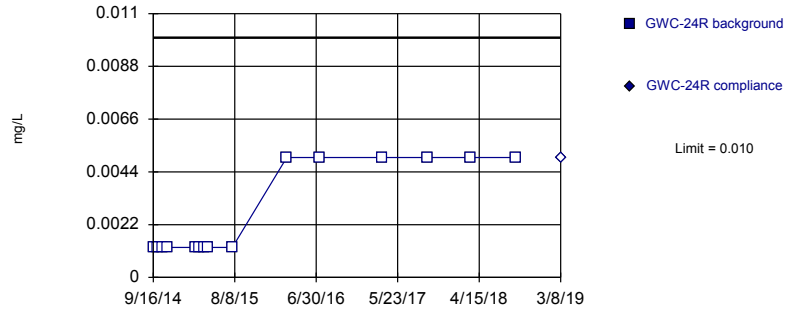
Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.0025	
10/5/2014	<0.0025	
10/22/2014	<0.0025	
11/5/2014	<0.0025	
3/4/2015	<0.0025	
3/20/2015	<0.0025	
4/8/2015	<0.0025	
4/23/2015	<0.0025	
7/30/2015	<0.0025	
3/9/2016	<0.01	
7/15/2016	<0.01	
3/22/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

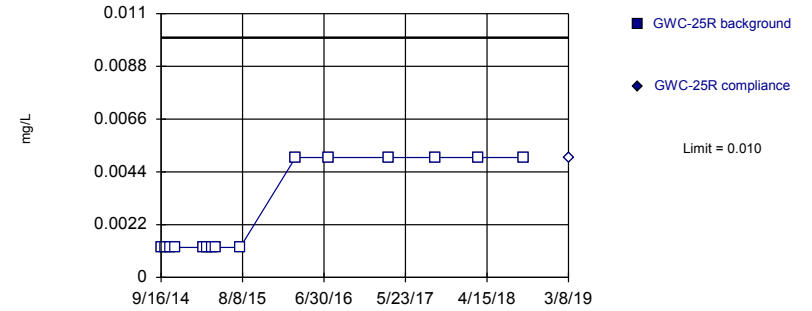


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

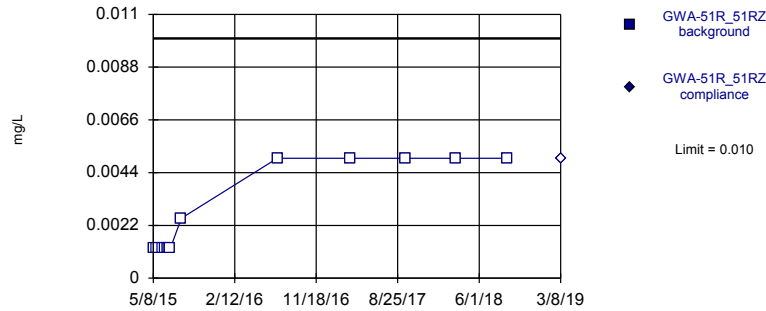


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

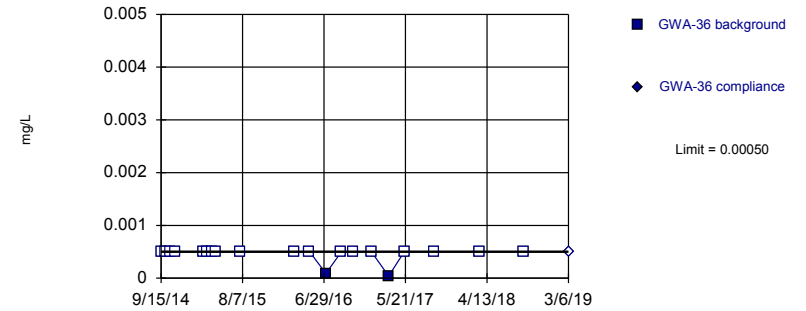


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Silver Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.0025	
10/4/2014	<0.0025	
10/23/2014	<0.0025	
11/10/2014	<0.0025	
3/4/2015	<0.0025	
3/20/2015	<0.0025	
4/8/2015	<0.0025	
4/23/2015	<0.0025	
7/30/2015	<0.0025	
3/4/2016	<0.01	
7/12/2016	<0.01	
3/20/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.0025	
10/4/2014	<0.0025	
10/23/2014	<0.0025	
11/10/2014	<0.0025	
3/4/2015	<0.0025	
3/20/2015	<0.0025	
4/9/2015	<0.0025	
4/23/2015	<0.0025	
7/30/2015	<0.0025	
3/8/2016	<0.01	
7/18/2016	<0.01	
3/16/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Silver (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.0025	
5/17/2015	<0.0025	
5/25/2015	<0.0025	
6/8/2015	<0.0025	
6/18/2015	<0.0025	
6/24/2015	<0.0025	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	<0.005	
7/7/2016	<0.01 (D)	
3/15/2017	<0.01 (D)	
9/19/2017	<0.01 (D)	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

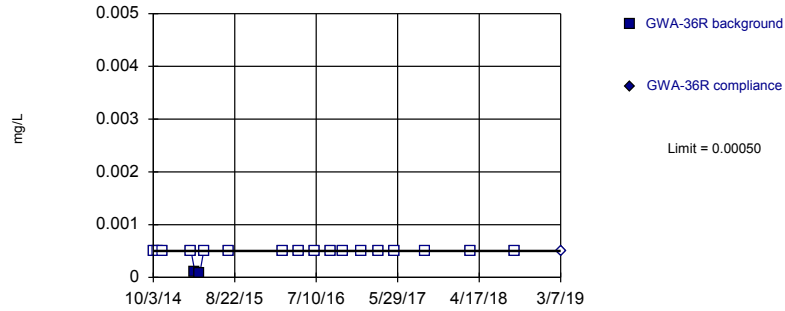
Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.001	
10/3/2014	<0.001	
10/20/2014	<0.001	
11/10/2014	<0.001	
3/2/2015	<0.001	
3/17/2015	<0.001	
4/5/2015	<0.001	
4/21/2015	<0.001	
7/28/2015	<0.001	
3/1/2016	<0.001	
5/2/2016	<0.001	
7/7/2016	9E-05 (J)	
9/7/2016	<0.001	
10/25/2016	<0.001	
1/5/2017	<0.001	
3/15/2017	4E-05 (J)	
5/17/2017	<0.001	
9/15/2017	<0.001	
3/12/2018	<0.001	
9/6/2018	<0.001	
3/6/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

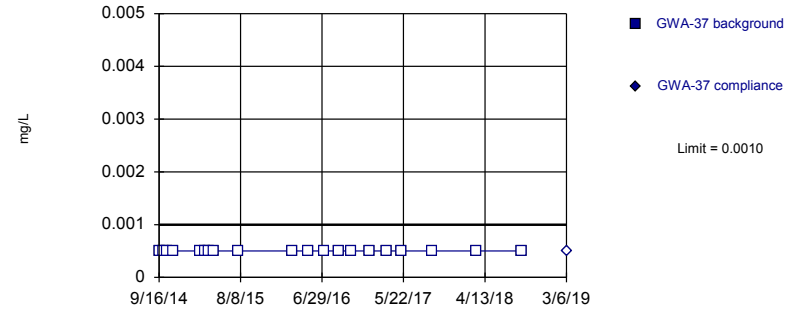


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

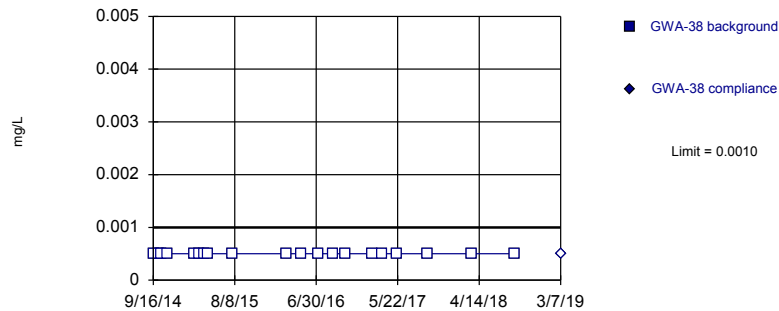


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

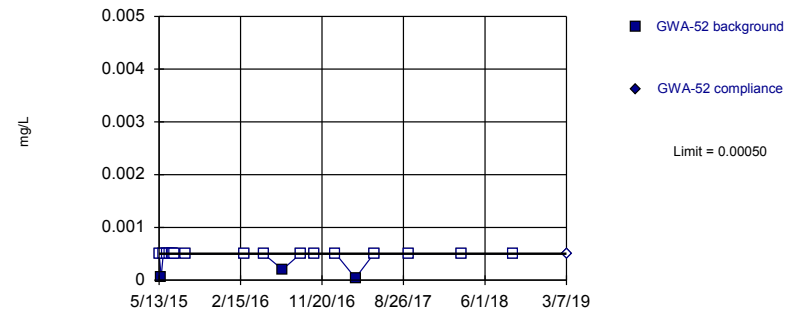


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
10/3/2014	<0.001	
10/20/2014	<0.001	
11/10/2014	<0.001	
3/2/2015	<0.001	
3/17/2015	0.0001 (J)	
4/5/2015	7E-05 (J)	
4/21/2015	<0.001	
7/28/2015	<0.001	
3/1/2016	<0.001	
5/2/2016	<0.001	
7/6/2016	<0.001	
9/7/2016	<0.001	
10/25/2016	<0.001	
1/5/2017	<0.001	
3/14/2017	<0.001	
5/16/2017	<0.001	
9/15/2017	<0.001	
3/12/2018	<0.001	
9/6/2018	<0.001	
3/7/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	<0.001	
10/3/2014	<0.001	
10/20/2014	<0.001	
11/10/2014	<0.001	
3/2/2015	<0.001	
3/17/2015	<0.001	
4/5/2015	<0.001	
4/22/2015	<0.001	
7/28/2015	<0.001	
3/1/2016	<0.001	
5/3/2016	<0.001	
7/8/2016	<0.001	
9/7/2016	<0.001	
10/25/2016	<0.001	
1/6/2017	<0.001	
3/14/2017	<0.001	
5/16/2017	<0.001	
9/15/2017	<0.001	
3/12/2018	<0.001	
9/6/2018	<0.001	
3/6/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	<0.001	
10/6/2014	<0.001	
10/20/2014	<0.001	
11/10/2014	<0.001	
3/2/2015	<0.001	
3/17/2015	<0.001	
4/6/2015	<0.001	
4/22/2015	<0.001	
7/28/2015	<0.001	
3/2/2016	<0.001	
5/3/2016	<0.001	
7/7/2016	<0.001	
9/8/2016	<0.001	
10/25/2016	<0.001	
2/9/2017	<0.001	
3/23/2017	<0.001	
5/17/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/6/2018	<0.001	
3/7/2019		<0.001

Prediction Limit

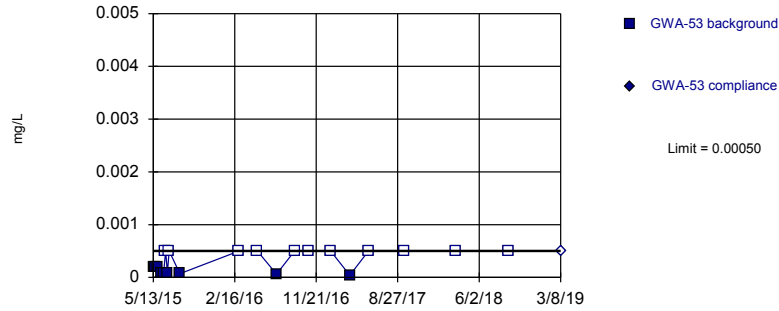
Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/13/2015	<0.001	
5/20/2015	6E-05 (J)	
5/27/2015	<0.001	
6/8/2015	<0.001	
6/18/2015	<0.001	
6/24/2015	<0.001	
6/30/2015	<0.001	
7/6/2015	<0.001	
8/12/2015	<0.001	
2/29/2016	<0.001	
5/4/2016	<0.001	
7/8/2016	0.0002 (J)	
9/8/2016	<0.001	
10/26/2016	<0.001	
1/6/2017	<0.001	
3/15/2017	4E-05 (J)	
5/17/2017	<0.001	
9/15/2017	<0.001	
3/13/2018	<0.001	
9/6/2018	<0.001	
3/7/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

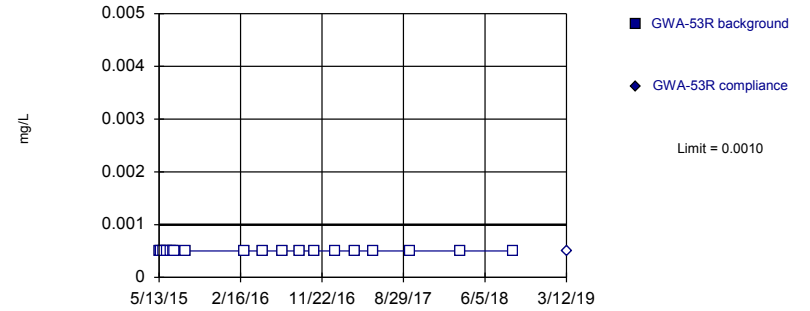


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 55% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

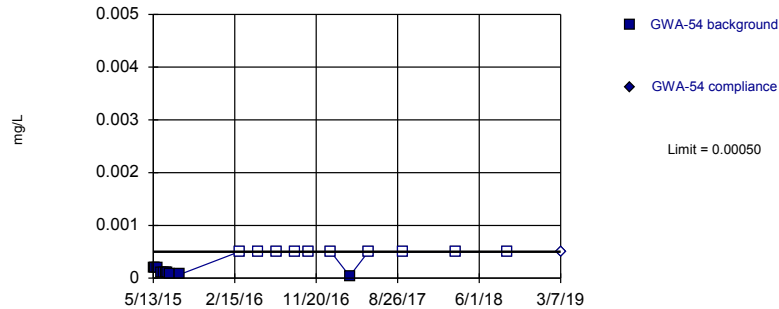


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 19) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

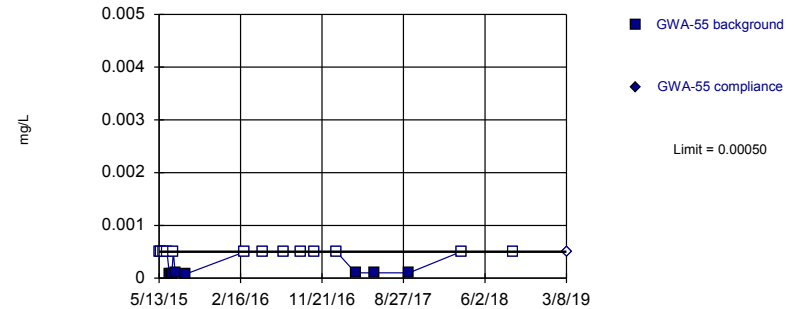


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/13/2015	0.0002 (J)	
5/20/2015	0.0002 (J)	
5/27/2015	0.0002 (J)	
6/8/2015	9E-05 (J)	
6/17/2015	7E-05 (J)	
6/24/2015	<0.001	
6/30/2015	9E-05 (J)	
7/6/2015	<0.001	
8/12/2015	7E-05 (J)	
3/2/2016	<0.001	
5/3/2016	<0.001	
7/8/2016	6E-05 (J)	
9/8/2016	<0.001	
10/26/2016	<0.001	
1/9/2017	<0.001	
3/16/2017	4E-05 (J)	
5/19/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/11/2018	<0.001	
3/8/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/13/2015	<0.001	
5/20/2015	<0.001	
5/27/2015	<0.001	
6/8/2015	<0.001 (D)	
6/24/2015	<0.001	
6/30/2015	<0.001	
7/6/2015	<0.001	
8/12/2015	<0.001	
3/2/2016	<0.001	
5/3/2016	<0.001	
7/11/2016	<0.001	
9/7/2016	<0.001	
10/27/2016	<0.001	
1/6/2017	<0.001	
3/16/2017	<0.001	
5/19/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/11/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/13/2015	0.0002 (J)	
5/20/2015	0.0002 (J)	
5/27/2015	0.0002 (J)	
6/9/2015	0.0001 (J)	
6/17/2015	0.0001 (J)	
6/25/2015	0.0001 (J)	
7/1/2015	0.0001 (J)	
7/7/2015	9E-05 (J)	
8/12/2015	7E-05 (J)	
3/2/2016	<0.001	
5/4/2016	<0.001	
7/8/2016	<0.001	
9/8/2016	<0.001	
10/26/2016	<0.001	
1/9/2017	<0.001	
3/15/2017	4E-05 (J)	
5/18/2017	<0.001	
9/15/2017	<0.001	
3/13/2018	<0.001	
9/6/2018	<0.001	
3/7/2019		<0.001

Prediction Limit

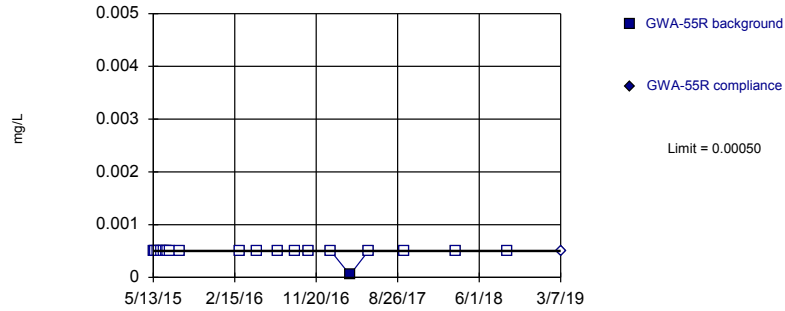
Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/13/2015	<0.001	
5/20/2015	<0.001	
5/27/2015	<0.001	
6/9/2015	<0.001	
6/17/2015	8E-05 (J)	
6/25/2015	7E-05 (J)	
7/1/2015	<0.001	
7/7/2015	0.0001 (J)	
8/13/2015	8E-05 (J)	
3/2/2016	<0.001	
5/3/2016	<0.001	
7/11/2016	<0.001 (*)	
9/9/2016	<0.001	
10/26/2016	<0.001	
1/9/2017	<0.001	
3/16/2017	0.0001 (J)	
5/18/2017	0.0001 (J)	
9/15/2017	0.0001 (J)	
3/12/2018	<0.001	
9/7/2018	<0.001	
3/8/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

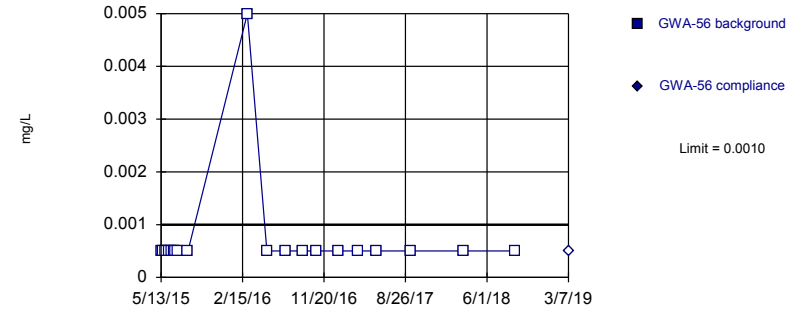


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

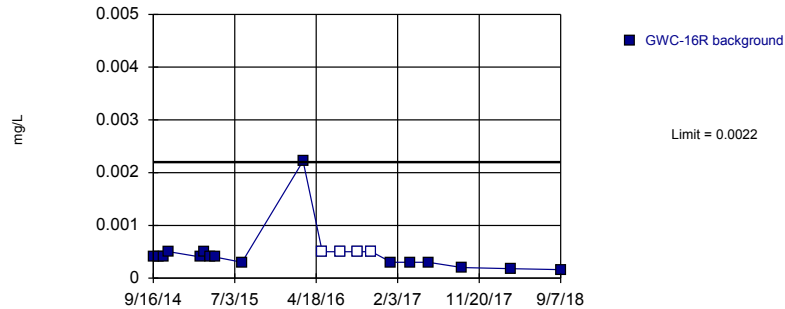
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:28 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit
Intrawell Non-parametric, GWC-16R

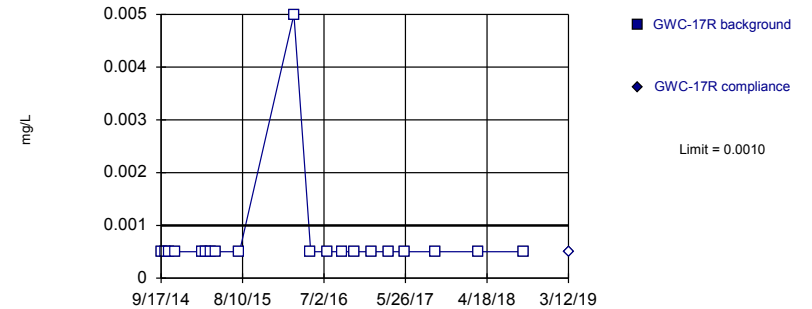


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 20% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/13/2015	<0.001	
5/20/2015	<0.001	
5/27/2015	<0.001	
6/9/2015	<0.001	
6/17/2015	<0.001	
6/24/2015	<0.001	
7/1/2015	<0.001	
7/7/2015	<0.001	
8/13/2015	<0.001	
3/3/2016	<0.001	
5/3/2016	<0.001	
7/11/2016	<0.001	
9/9/2016	<0.001	
10/27/2016	<0.001	
1/9/2017	<0.001	
3/16/2017	5E-05 (J)	
5/18/2017	<0.001	
9/18/2017	<0.001	
3/12/2018	<0.001	
9/7/2018	<0.001	
3/7/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/13/2015	<0.001	
5/20/2015	<0.001	
5/27/2015	<0.001	
6/9/2015	<0.001	
6/17/2015	<0.001	
6/25/2015	<0.001	
7/1/2015	<0.001	
7/7/2015	<0.001	
8/13/2015	<0.001	
3/3/2016	<0.01	
5/9/2016	<0.001	
7/11/2016	<0.001	
9/9/2016	<0.001	
10/26/2016	<0.001	
1/9/2017	<0.001	
3/15/2017	<0.001	
5/18/2017	<0.001	
9/15/2017	<0.001	
3/13/2018	<0.001	
9/7/2018	<0.001	
3/7/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R
9/16/2014	0.0004 (J)
10/4/2014	0.0004 (J)
10/21/2014	0.0004 (J)
11/11/2014	0.0005 (J)
3/3/2015	0.0004 (J)
3/18/2015	0.0005 (J)
4/6/2015	0.0004 (J)
4/23/2015	0.0004 (J)
7/29/2015	0.0003 (J)
3/3/2016	0.002222 (JD)
5/10/2016	<0.001
7/13/2016	<0.001 (*)
9/15/2016	<0.001
11/2/2016	<0.001
1/11/2017	0.0003 (J)
3/20/2017	0.0003 (J)
5/23/2017	0.0003 (J)
9/21/2017	0.0002 (J)
3/14/2018	0.00018 (J)
9/7/2018	0.00016 (J)
3/11/2019	0.00026 (X)

Prediction Limit

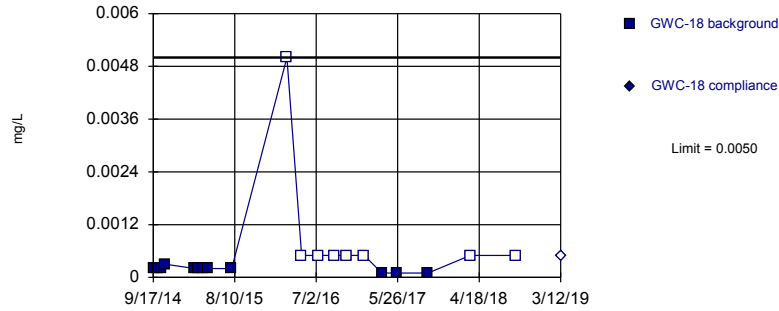
Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.001	
10/4/2014	<0.001	
10/21/2014	<0.001	
11/11/2014	<0.001	
3/3/2015	<0.001	
3/18/2015	<0.001	
4/6/2015	<0.001	
4/23/2015	<0.001	
7/29/2015	<0.001	
3/4/2016	<0.01	
5/10/2016	<0.001	
7/14/2016	<0.001 (*)	
9/14/2016	<0.001	
11/1/2016	<0.001	
1/11/2017	<0.001	
3/21/2017	<0.001	
5/23/2017	<0.001	
9/22/2017	<0.001	
3/14/2018	<0.001	
9/11/2018	<0.001	
3/12/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

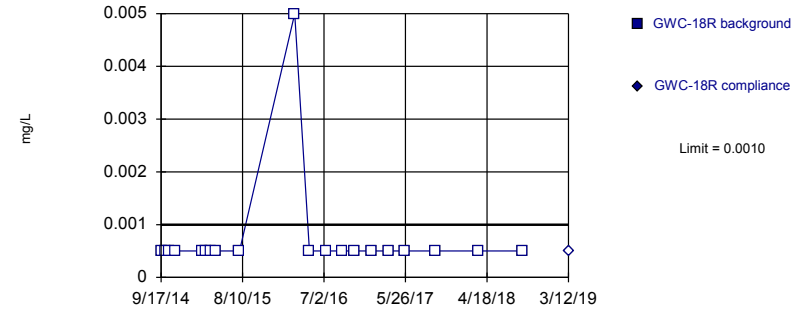


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

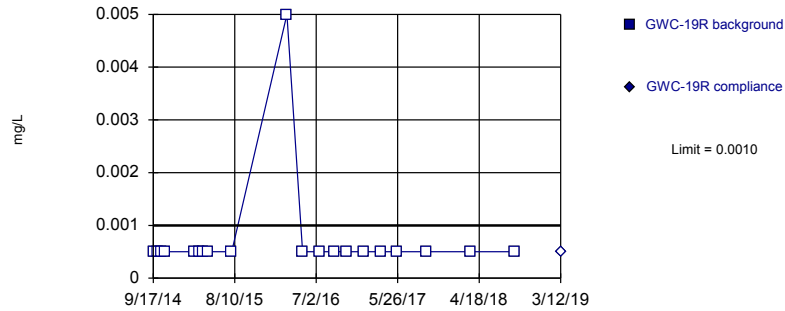


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

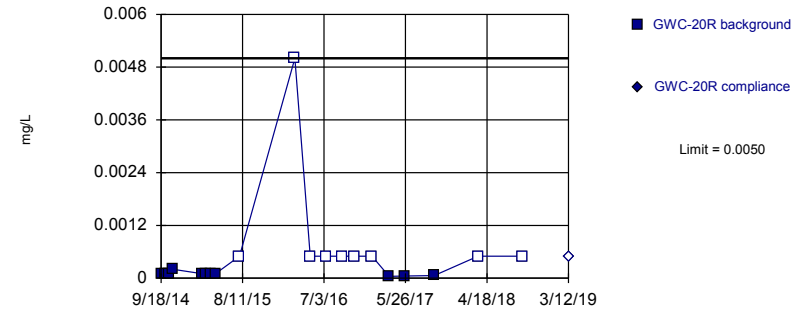


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 45% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	0.0002 (J)	
10/4/2014	0.0002 (J)	
10/21/2014	0.0002 (J)	
11/5/2014	0.0003 (J)	
3/3/2015	0.0002 (J)	
3/18/2015	0.0002 (J)	
4/7/2015	0.0002 (J)	
4/23/2015	0.0002 (J)	
7/29/2015	0.0002 (J)	
3/7/2016	<0.01	
5/5/2016	<0.001	
7/13/2016	<0.001 (*)	
9/13/2016	<0.001	
10/31/2016	<0.001	
1/12/2017	<0.001	
3/23/2017	0.0001 (J)	
5/23/2017	0.0001 (J)	
9/25/2017	0.0001 (J)	
3/14/2018	<0.001	
9/11/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	<0.001	
10/4/2014	<0.001	
10/21/2014	<0.001	
11/11/2014	<0.001	
3/3/2015	<0.001	
3/18/2015	<0.001	
4/7/2015	<0.001	
4/23/2015	<0.001	
7/29/2015	<0.001	
3/7/2016	<0.01	
5/5/2016	<0.001	
7/13/2016	<0.001	
9/12/2016	<0.001	
11/1/2016	<0.001	
1/11/2017	<0.001	
3/20/2017	<0.001	
5/22/2017	<0.001	
9/21/2017	<0.001	
3/14/2018	<0.001	
9/7/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.001	
10/4/2014	<0.001	
10/21/2014	<0.001	
11/5/2014	<0.001	
3/3/2015	<0.001	
3/19/2015	<0.001	
4/7/2015	<0.001	
4/24/2015	<0.001	
7/29/2015	<0.001	
3/7/2016	<0.01	
5/9/2016	<0.001	
7/14/2016	<0.001	
9/12/2016	<0.001	
10/31/2016	<0.001	
1/11/2017	<0.001	
3/21/2017	<0.001	
5/22/2017	<0.001	
9/20/2017	<0.001	
3/14/2018	<0.001	
9/10/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

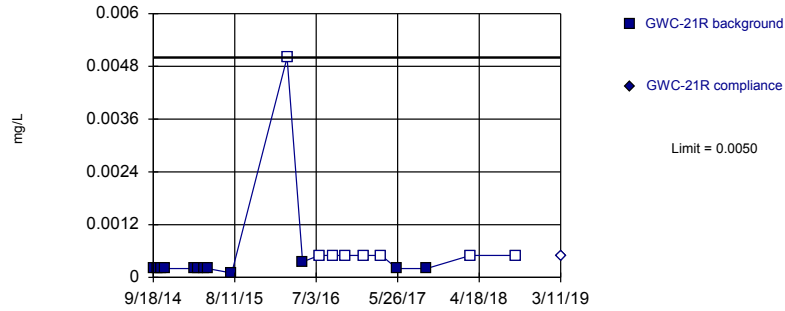
Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	0.0001 (J)	
10/5/2014	0.0001 (J)	
10/22/2014	0.0001 (J)	
11/5/2014	0.0002 (J)	
3/4/2015	0.0001 (J)	
3/19/2015	0.0001 (J)	
4/7/2015	0.0001 (J)	
4/24/2015	0.0001 (J)	
7/30/2015	<0.001	
3/8/2016	<0.01	
5/9/2016	<0.001	
7/14/2016	<0.001 (*)	
9/12/2016	<0.001	
10/31/2016	<0.001	
1/12/2017	<0.001	
3/22/2017	4E-05 (J)	
5/22/2017	5E-05 (J)	
9/19/2017	6E-05 (J)	
3/14/2018	<0.001	
9/10/2018	<0.001	
3/12/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

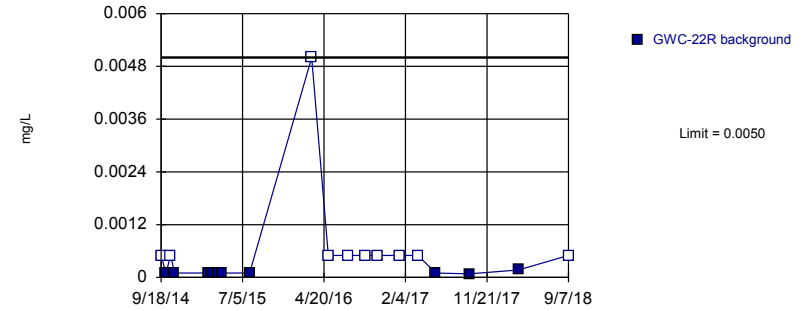


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-22R

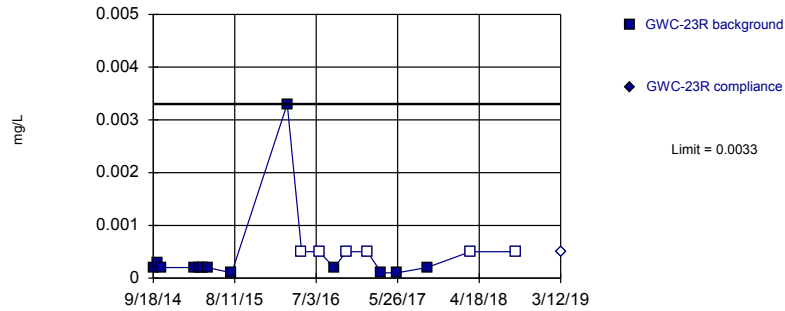


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Assumes 1 future value.

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

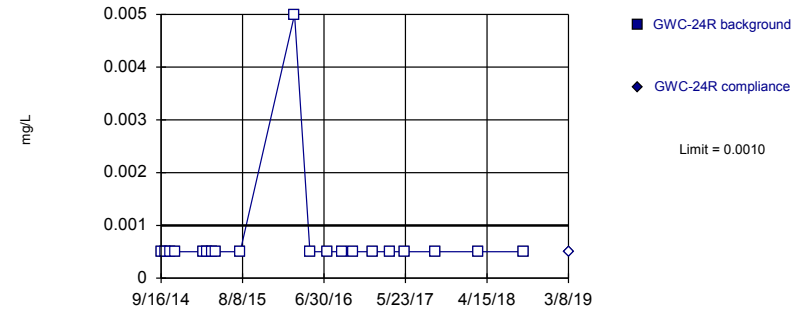


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 19 background values. 31.58% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	0.0002 (J)	
10/5/2014	0.0002 (J)	
10/22/2014	0.0002 (J)	
11/5/2014	0.0002 (J)	
3/4/2015	0.0002 (J)	
3/19/2015	0.0002 (J)	
4/8/2015	0.0002 (J)	
4/24/2015	0.0002 (J)	
7/30/2015	0.0001 (J)	
3/8/2016	<0.01	
5/9/2016	0.000353 (J)	
7/15/2016	<0.001 (*)	
9/9/2016	<0.001	
10/27/2016	<0.001	
1/12/2017	<0.001	
3/21/2017	<0.001 (*)	
5/23/2017	0.0002 (J)	
9/19/2017	0.0002 (J)	
3/14/2018	<0.001	
9/10/2018	<0.001	
3/11/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R
9/18/2014	<0.001
10/5/2014	0.0001 (J)
10/22/2014	<0.001
11/5/2014	0.0001 (J)
3/4/2015	0.0001 (J)
3/19/2015	0.0001 (J)
4/8/2015	0.0001 (J)
4/24/2015	0.0001 (J)
7/30/2015	0.0001 (J)
3/7/2016	<0.01
5/5/2016	<0.001
7/14/2016	<0.001 (*)
9/12/2016	<0.001
10/27/2016	<0.001
1/13/2017	<0.001
3/20/2017	<0.001 (*)
5/23/2017	0.0001 (J)
9/19/2017	8E-05 (J)
3/13/2018	0.00017 (J)
9/7/2018	<0.001
3/11/2019	0.00015 (X)

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	0.0002 (J)	
10/5/2014	0.0003 (J)	
10/22/2014	0.0002 (J)	
3/4/2015	0.0002 (J)	
3/20/2015	0.0002 (J)	
4/8/2015	0.0002 (J)	
4/23/2015	0.0002 (J)	
7/30/2015	0.0001 (J)	
3/9/2016	0.0033 (J)	
5/6/2016	<0.001	
7/15/2016	<0.001 (*)	
9/14/2016	0.0002 (J)	
11/1/2016	<0.001	
1/25/2017	<0.001	
3/22/2017	0.0001 (J)	
5/24/2017	0.0001 (J)	
9/21/2017	0.0002 (J)	
3/14/2018	<0.001	
9/11/2018	<0.001	
3/12/2019		<0.001

Prediction Limit

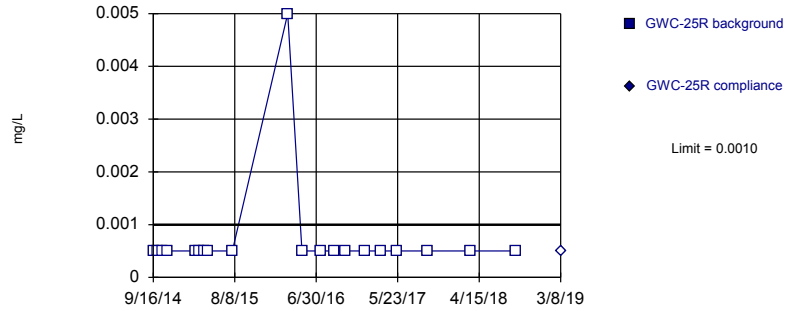
Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	<0.001	
10/4/2014	<0.001	
10/23/2014	<0.001	
11/10/2014	<0.001	
3/4/2015	<0.001	
3/20/2015	<0.001	
4/8/2015	<0.001	
4/23/2015	<0.001	
7/30/2015	<0.001	
3/4/2016	<0.01	
5/5/2016	<0.001	
7/12/2016	<0.001 (*)	
9/13/2016	<0.001	
10/27/2016	<0.001	
1/13/2017	<0.001	
3/20/2017	<0.001 (*)	
5/19/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/11/2018	<0.001	
3/8/2019		<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

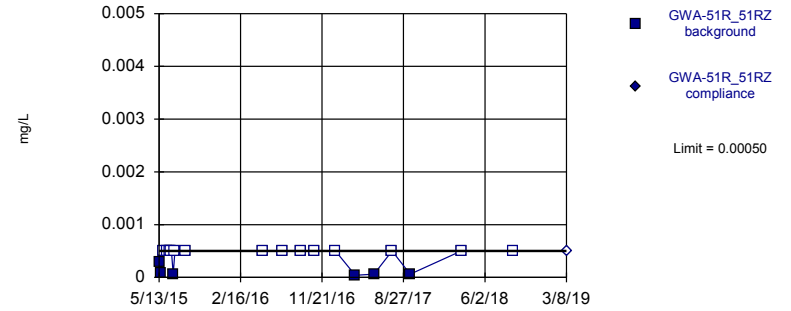


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

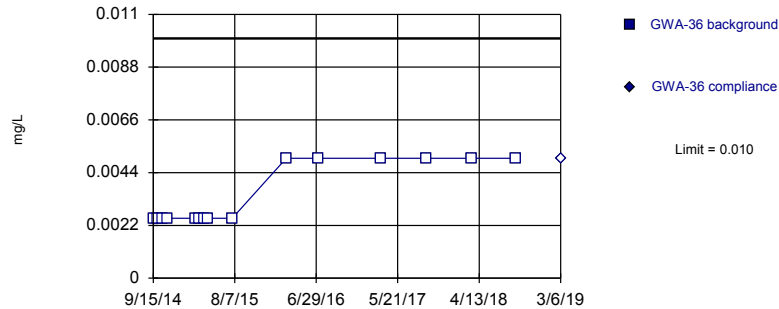


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

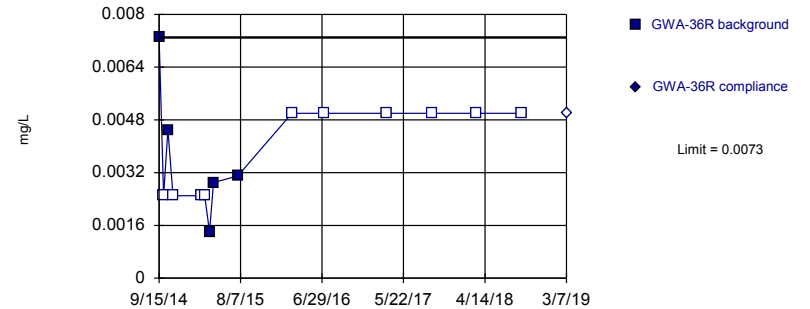


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.001	
10/4/2014	<0.001	
10/23/2014	<0.001	
11/10/2014	<0.001	
3/4/2015	<0.001	
3/20/2015	<0.001	
4/9/2015	<0.001	
4/23/2015	<0.001	
7/30/2015	<0.001	
3/8/2016	<0.01	
5/4/2016	<0.001	
7/18/2016	<0.001	
9/13/2016	<0.001	
10/27/2016	<0.001	
1/13/2017	<0.001	
3/16/2017	<0.001	
5/19/2017	<0.001	
9/19/2017	<0.001	
3/13/2018	<0.001	
9/11/2018	<0.001	
3/8/2019		<0.001

Prediction Limit

Constituent: Thallium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/13/2015	0.0003 (J)	
5/20/2015	9E-05 (J)	
5/27/2015	<0.001	
6/8/2015	<0.001	
6/18/2015	<0.001	
6/24/2015	<0.001	
6/30/2015	6E-05 (J)	
7/6/2015	<0.001	
8/12/2015	<0.001	
5/4/2016	<0.001 (D)	
7/7/2016	<0.001 (D)	
9/8/2016	<0.001 (D)	
10/26/2016	<0.001 (D)	
1/6/2017	<0.001 (D)	
3/15/2017	4E-05 (JD)	
5/18/2017	6E-05 (JD)	
7/19/2017	<0.001 (D)	
9/19/2017	6E-05 (JD)	
3/13/2018	<0.001	
9/7/2018	<0.001	
3/8/2019		<0.001

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/21/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.01	
7/7/2016	<0.01	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

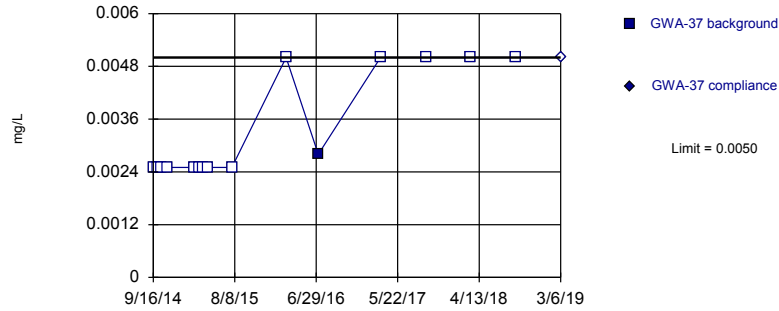
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.0073	
10/3/2014	<0.005	
10/20/2014	0.0045 (J)	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	0.0014 (J)	
4/21/2015	0.0029 (J)	
7/28/2015	0.0031 (J)	
3/1/2016	<0.01	
7/6/2016	<0.01	
3/14/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

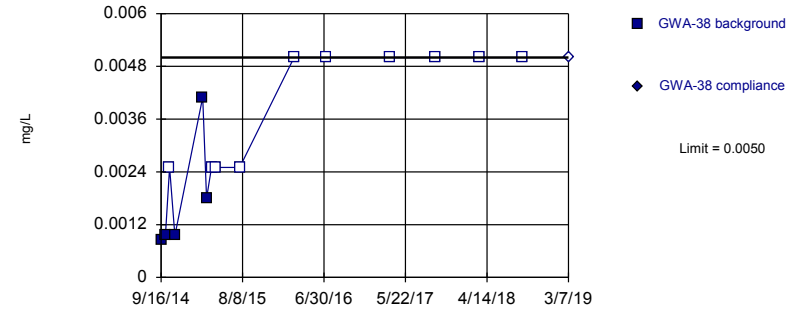


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:29 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

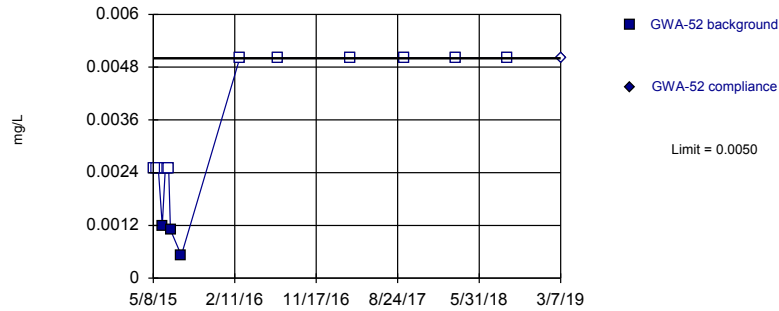


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

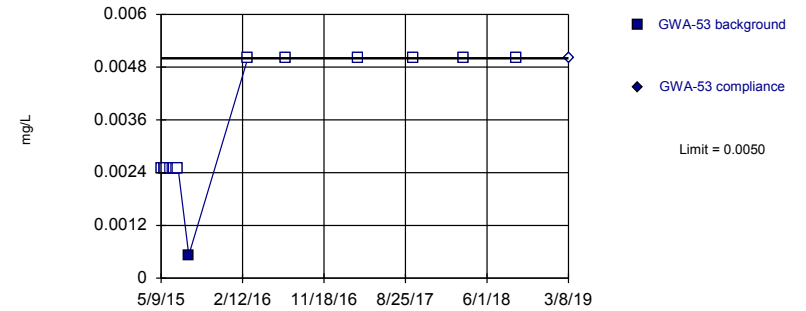


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37	GWA-37
9/16/2014	<0.005	
10/3/2014	<0.005	
10/20/2014	<0.005	
11/10/2014	<0.005	
3/2/2015	<0.005	
3/17/2015	<0.005	
4/5/2015	<0.005	
4/22/2015	<0.005	
7/28/2015	<0.005	
3/1/2016	<0.01	
7/8/2016	0.0028 (J)	
3/14/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/6/2018	<0.01	
3/6/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	0.00085 (J)	
10/3/2014	0.00096 (J)	
10/20/2014	<0.005	
11/10/2014	0.00095 (J)	
3/2/2015	0.0041 (J)	
3/17/2015	0.0018 (J)	
4/6/2015	<0.005	
4/22/2015	<0.005	
7/28/2015	<0.005	
3/2/2016	<0.01	
7/7/2016	<0.01	
3/23/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	0.0012 (J)	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	0.0011 (J)	
8/12/2015	0.000519 (J)	
2/29/2016	<0.01	
7/8/2016	<0.01	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

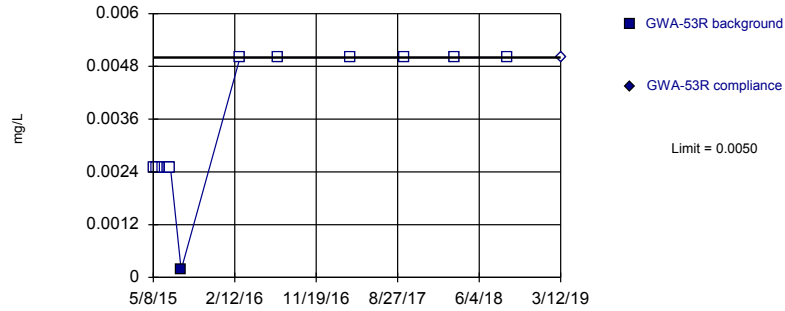
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	<0.005	
5/18/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/17/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	0.000525 (J)	
3/2/2016	<0.01	
7/8/2016	<0.01	
3/16/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

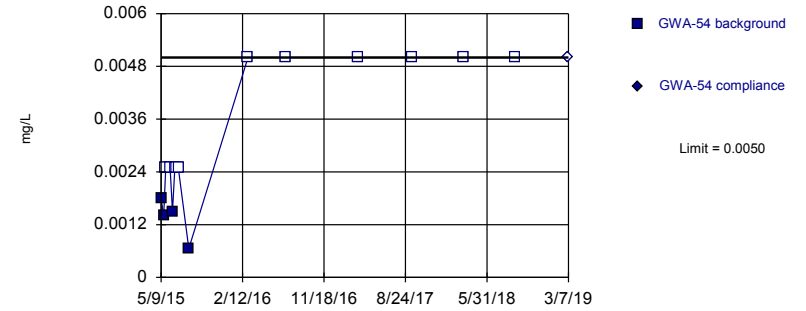


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

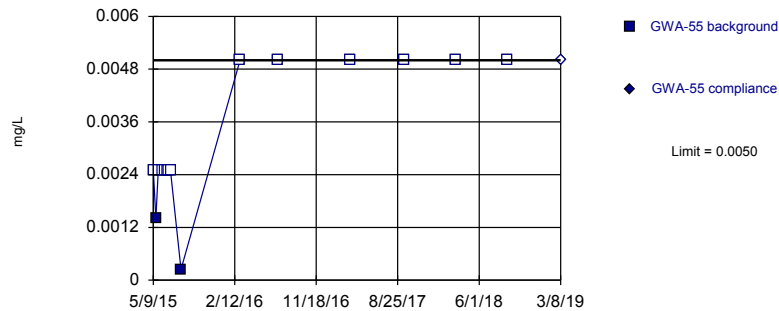


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 73.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

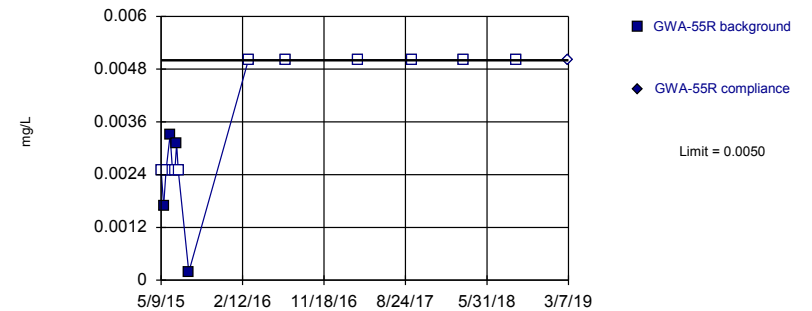


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 73.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	<0.005	
5/17/2015	<0.005	
5/25/2015	<0.005	
6/8/2015	<0.005	
6/18/2015	<0.005	
6/24/2015	<0.005	
6/30/2015	<0.005	
7/6/2015	<0.005	
8/12/2015	0.000172 (J)	
3/2/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	0.0018 (J)	
5/18/2015	0.0014 (J)	
5/25/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	0.0015 (J)	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/12/2015	0.000656 (J)	
3/2/2016	<0.01	
7/8/2016	<0.01	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.005	
5/18/2015	0.0014 (J)	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/12/2015	0.000246 (J)	
3/2/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	<0.01	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

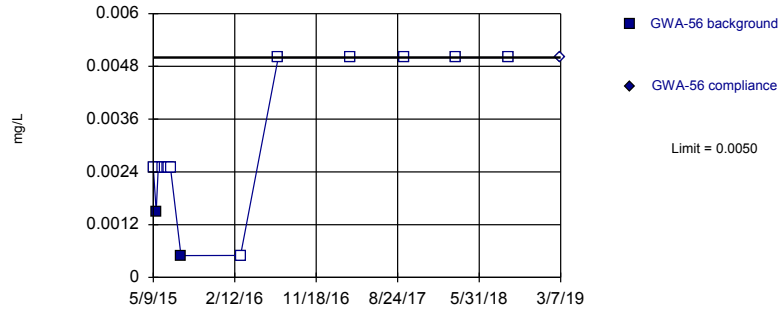
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.005	
5/18/2015	0.0017 (J)	
5/26/2015	<0.005	
6/9/2015	0.0033 (J)	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	0.0031 (J)	
7/7/2015	<0.005	
8/12/2015	0.000187 (J)	
3/3/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	<0.01	
9/18/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

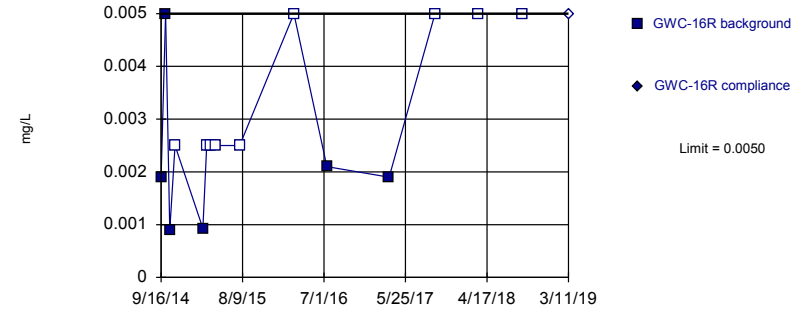


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

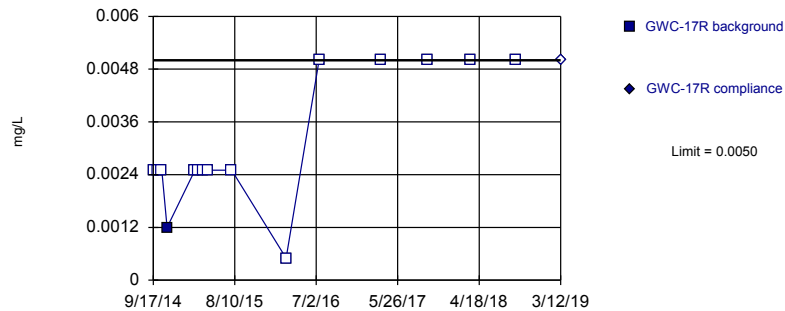


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

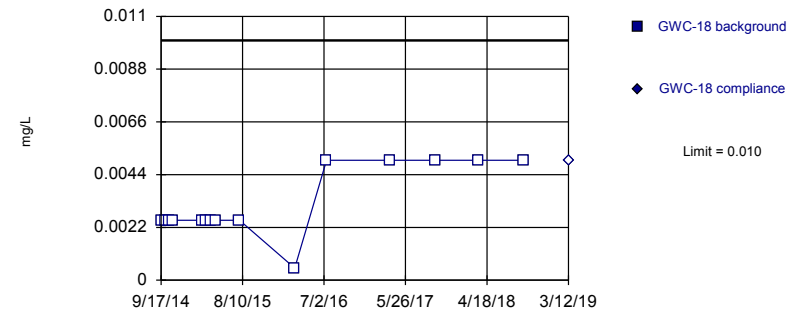


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.005	
5/19/2015	0.0015 (J)	
5/26/2015	<0.005	
6/9/2015	<0.005	
6/17/2015	<0.005	
6/25/2015	<0.005	
7/1/2015	<0.005	
7/7/2015	<0.005	
8/12/2015	0.000497 (J)	
3/3/2016	<0.001	
7/11/2016	<0.01	
3/15/2017	<0.01	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	0.0019 (J)	
10/4/2014	0.005	
10/21/2014	0.00089 (J)	
11/11/2014	<0.005	
3/3/2015	0.00093 (J)	
3/18/2015	<0.005	
4/6/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/3/2016	<0.01 (D)	
7/13/2016	0.0021 (J)	
3/20/2017	0.0019 (J)	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/11/2014	0.0012 (J)	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/6/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/4/2016	<0.001	
7/14/2016	<0.01	
3/21/2017	<0.01	
9/22/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

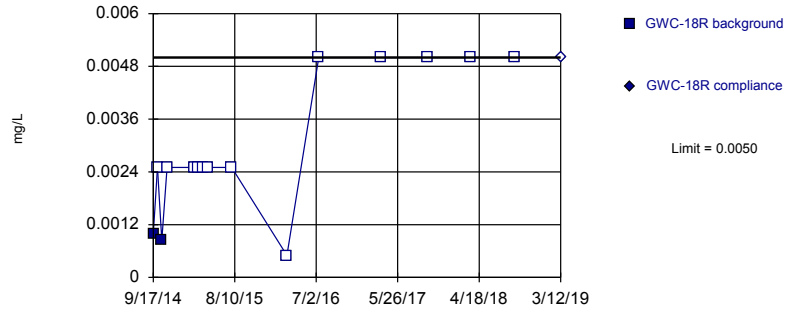
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.001	
7/13/2016	<0.01	
3/23/2017	<0.01	
9/25/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

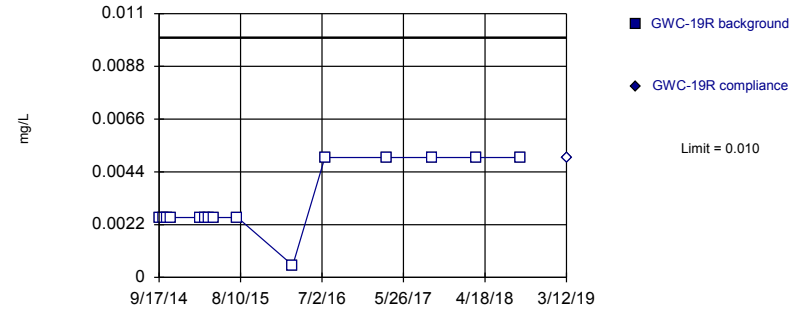


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

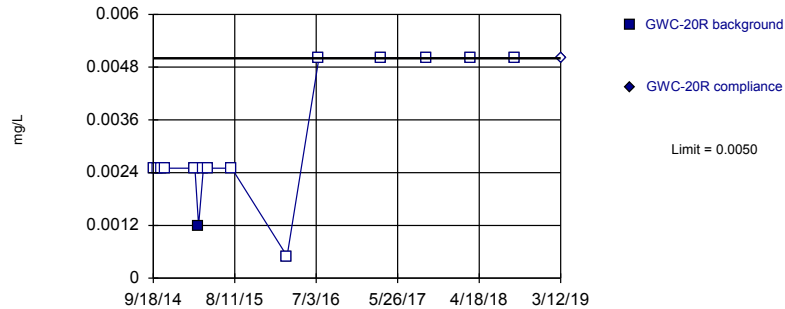


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

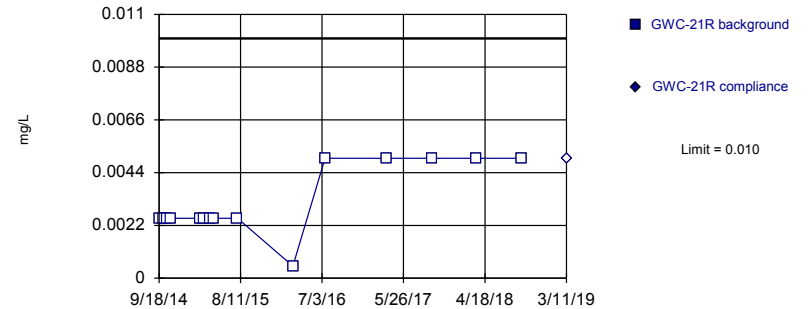


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	0.001 (J)	
10/4/2014	<0.005	
10/21/2014	0.00084 (J)	
11/11/2014	<0.005	
3/3/2015	<0.005	
3/18/2015	<0.005	
4/7/2015	<0.005	
4/23/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.001	
7/13/2016	<0.01	
3/20/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	<0.005	
10/4/2014	<0.005	
10/21/2014	<0.005	
11/5/2014	<0.005	
3/3/2015	<0.005	
3/19/2015	<0.005	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/29/2015	<0.005	
3/7/2016	<0.001	
7/14/2016	<0.01	
3/21/2017	<0.01	
9/20/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	0.0012 (J)	
4/7/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.001	
7/14/2016	<0.01	
3/22/2017	<0.01	
9/19/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

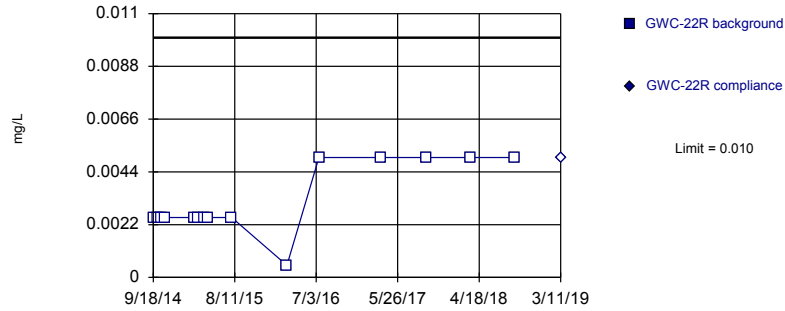
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/8/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.001	
7/15/2016	<0.01	
3/21/2017	<0.01	
9/19/2017	<0.01	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/11/2019		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

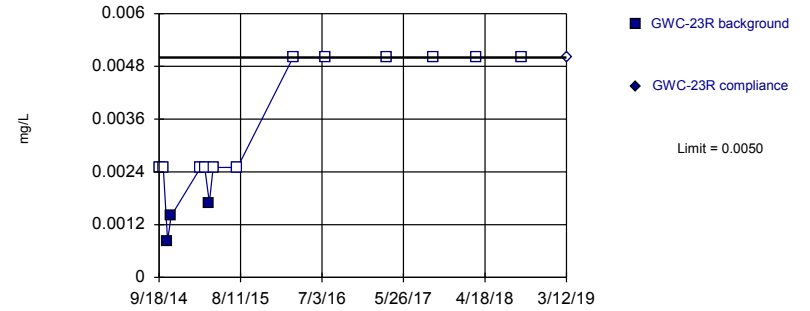


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

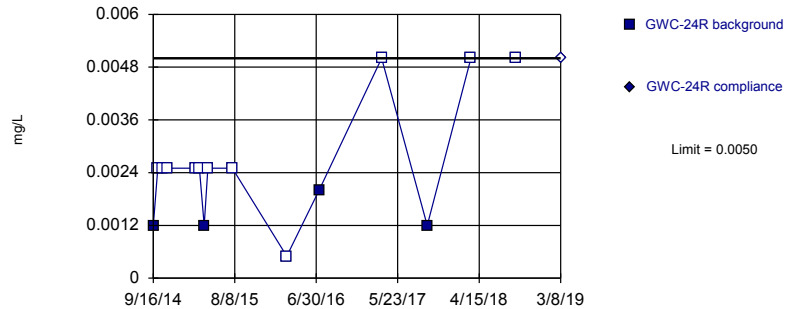


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

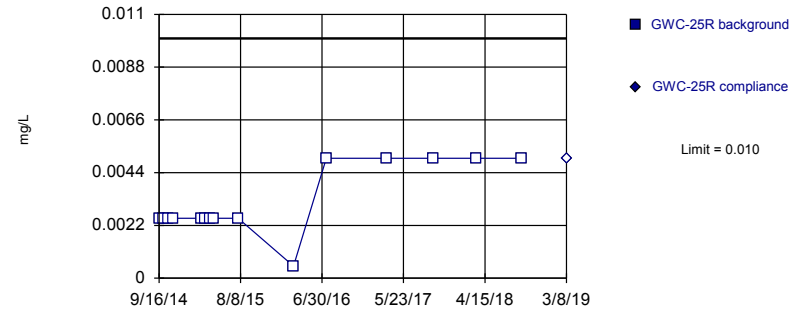


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 73.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:30 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	<0.005	
11/5/2014	<0.005	
3/4/2015	<0.005	
3/19/2015	<0.005	
4/8/2015	<0.005	
4/24/2015	<0.005	
7/30/2015	<0.005	
3/7/2016	<0.001	
7/14/2016	<0.01	
3/20/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/11/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	<0.005	
10/5/2014	<0.005	
10/22/2014	0.00083 (J)	
11/5/2014	0.0014 (J)	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	0.0017 (J)	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/9/2016	<0.01	
7/15/2016	<0.01	
3/22/2017	<0.01	
9/21/2017	<0.01	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	0.0012 (J)	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/8/2015	0.0012 (J)	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/4/2016	<0.001	
7/12/2016	0.002 (J)	
3/20/2017	<0.01	
9/19/2017	0.0012 (J)	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

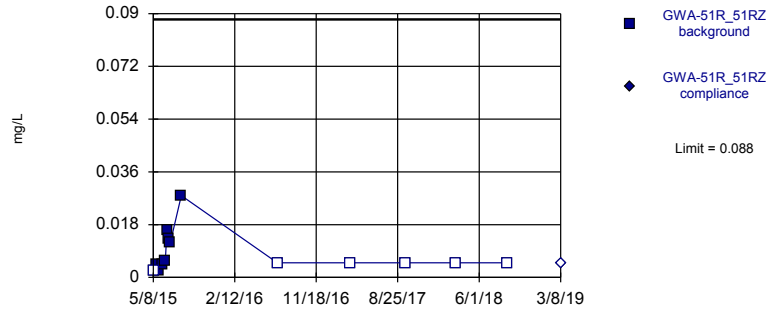
Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	<0.005	
10/4/2014	<0.005	
10/23/2014	<0.005	
11/10/2014	<0.005	
3/4/2015	<0.005	
3/20/2015	<0.005	
4/9/2015	<0.005	
4/23/2015	<0.005	
7/30/2015	<0.005	
3/8/2016	<0.001	
7/18/2016	<0.01	
3/16/2017	<0.01	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Within Limit

Prediction Limit
Intrawell Parametric

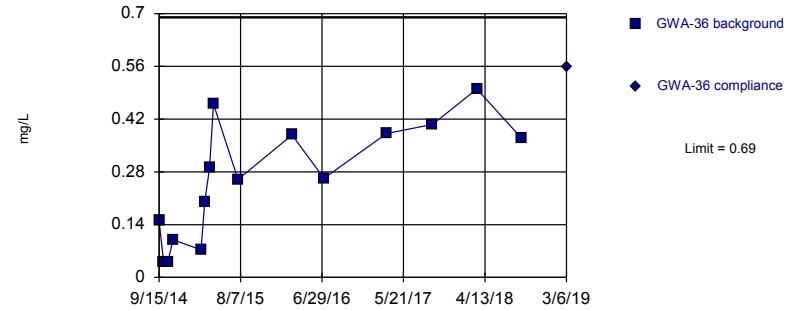


Background Data Summary (based on cube root transformation) (after Aitchison's Adjustment): Mean=0.1184, Std. Dev.=0.1143, n=14, 42.86% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8362, critical = 0.825. Kappa = 2.85 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Vanadium Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

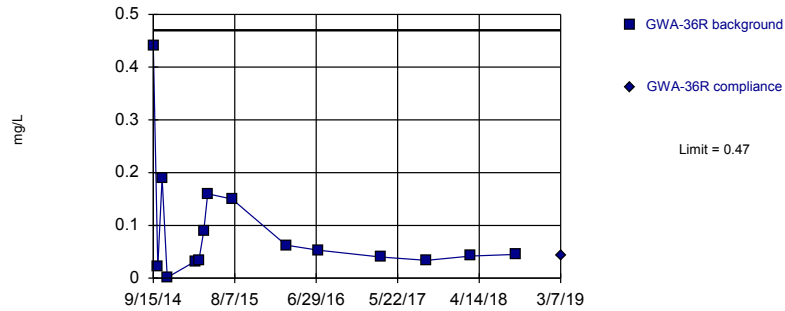


Background Data Summary: Mean=0.2609, Std. Dev.=0.1542, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9361, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

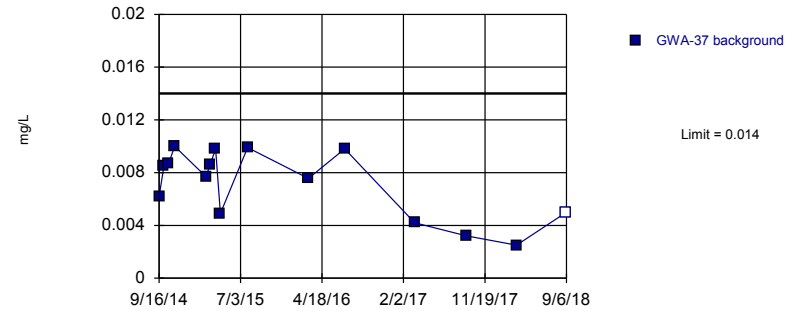


Background Data Summary (based on square root transformation): Mean=0.2675, Std. Dev.=0.1514, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8852, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric, GWA-37 (bg)



Background Data Summary: Mean=0.007104, Std. Dev.=0.002578, n=15, 6.667% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8996, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Vanadium (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	<0.005	
5/17/2015	0.0044 (J)	
5/25/2015	0.0025 (J)	
6/8/2015	0.0042 (J)	
6/18/2015	0.0056	
6/24/2015	0.016	
6/30/2015	0.013	
7/6/2015	0.012	
8/12/2015	0.0279 (J)	
7/7/2016	<0.01 (D)	
3/15/2017	<0.01 (D)	
9/19/2017	<0.01 (D)	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36	GWA-36
9/15/2014	0.15	
10/3/2014	0.04	
10/20/2014	0.042	
11/10/2014	0.1	
3/2/2015	0.073	
3/17/2015	0.2	
4/5/2015	0.29	
4/21/2015	0.46	
7/28/2015	0.26	
3/1/2016	0.378	
7/7/2016	0.263	
3/15/2017	0.382	
9/15/2017	0.406	
3/12/2018	0.5	
9/6/2018	0.37	
3/6/2019		0.56

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R	GWA-36R
9/15/2014	0.44	
10/3/2014	0.021	
10/20/2014	0.19	
11/10/2014	0.0014 (J)	
3/2/2015	0.032	
3/17/2015	0.034	
4/5/2015	0.089	
4/21/2015	0.16	
7/28/2015	0.15	
3/1/2016	0.0627	
7/6/2016	0.0532	
3/14/2017	0.0401	
9/15/2017	0.0338	
3/12/2018	0.042	
9/6/2018	0.045	
3/7/2019		0.043

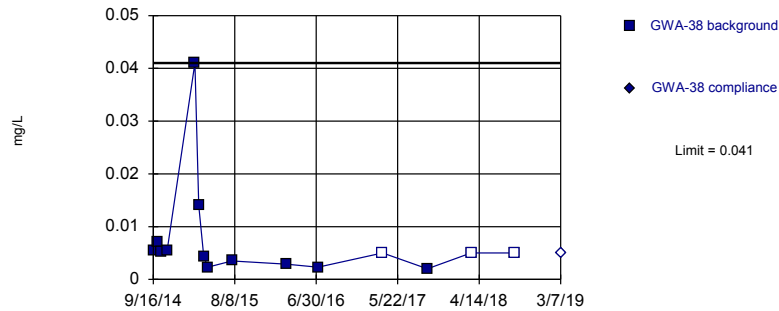
Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37
9/16/2014	0.0062
10/3/2014	0.0085
10/20/2014	0.0087
11/10/2014	0.01
3/2/2015	0.0077
3/17/2015	0.0086
4/5/2015	0.0098
4/22/2015	0.0049
7/28/2015	0.0099
3/1/2016	0.00756 (J)
7/8/2016	0.0098 (J)
3/14/2017	0.0042 (J)
9/15/2017	0.0032 (J)
3/12/2018	0.0025 (J)
9/6/2018	<0.01
3/6/2019	0.0035 (X)

Within Limit

Prediction Limit
Intrawell Non-parametric

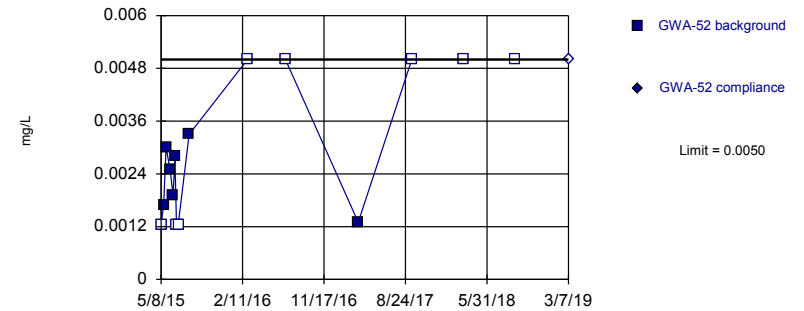


Non-parametric test used after natural log transformation resulted in a parametric limit of 9.121, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 15 background values. 20% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

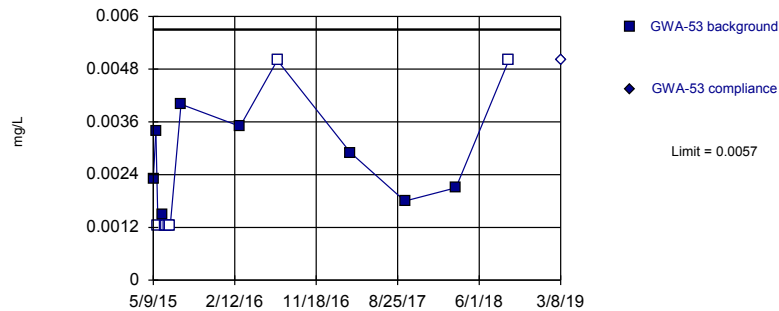


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

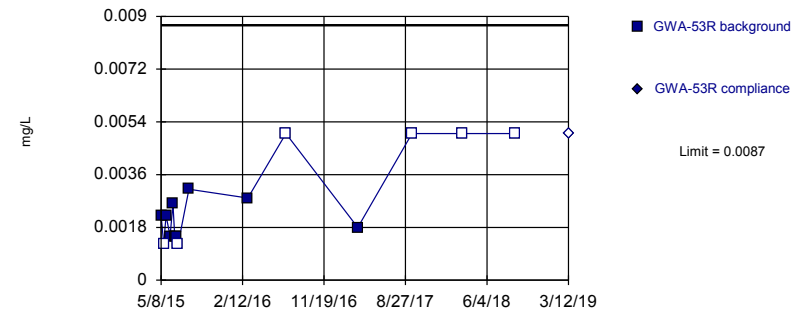


Background Data Summary (after Aitchison's Adjustment): Mean=0.001433, Std. Dev.=0.001526, n=15, 46.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8481, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.02747, Std. Dev.=0.02373, n=15, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8505, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38	GWA-38
9/16/2014	0.0054	
10/3/2014	0.007	
10/20/2014	0.0052	
11/10/2014	0.0054	
3/2/2015	0.041	
3/17/2015	0.014	
4/6/2015	0.0044	
4/22/2015	0.0023 (J)	
7/28/2015	0.0035	
3/2/2016	0.0029 (J)	
7/7/2016	0.0023 (J)	
3/23/2017	<0.01 (*)	
9/19/2017	0.002 (J)	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52	GWA-52
5/8/2015	<0.0025	
5/17/2015	0.0017 (J)	
5/25/2015	0.003	
6/8/2015	0.0025	
6/18/2015	0.0019 (J)	
6/24/2015	0.0028	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	0.0033 (BJ)	
2/29/2016	<0.01	
7/8/2016	<0.01	
3/15/2017	0.0013 (J)	
9/15/2017	<0.01	
3/13/2018	<0.01	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53	GWA-53
5/9/2015	0.0023 (J)	
5/18/2015	0.0034	
5/25/2015	<0.0025	
6/8/2015	0.0015 (J)	
6/17/2015	<0.0025	
6/24/2015	<0.0025	
6/30/2015	<0.0025	
7/6/2015	<0.0025	
8/12/2015	0.004 (BJ)	
3/2/2016	0.0035 (J)	
7/8/2016	<0.01	
3/16/2017	0.0029 (J)	
9/19/2017	0.0018 (J)	
3/13/2018	0.0021 (J)	
9/11/2018	<0.01	
3/8/2019		<0.01

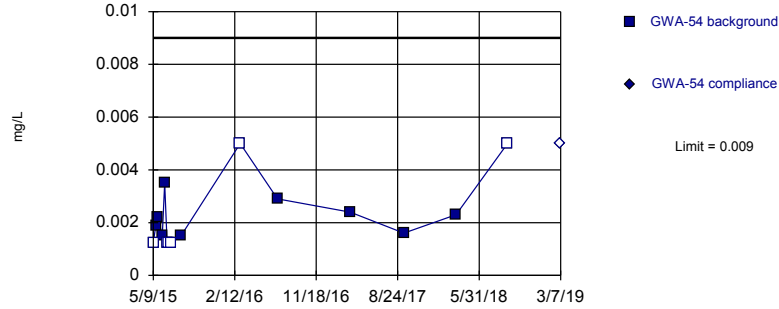
Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R	GWA-53R
5/8/2015	0.0022 (J)	
5/17/2015	<0.0025	
5/25/2015	0.0022 (J)	
6/8/2015	0.0015 (J)	
6/18/2015	0.0026	
6/24/2015	0.0015 (J)	
6/30/2015	0.0015 (J)	
7/6/2015	<0.0025	
8/12/2015	0.0031 (BJ)	
3/2/2016	0.0028 (J)	
7/11/2016	<0.01	
3/16/2017	0.0018 (J)	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Parametric

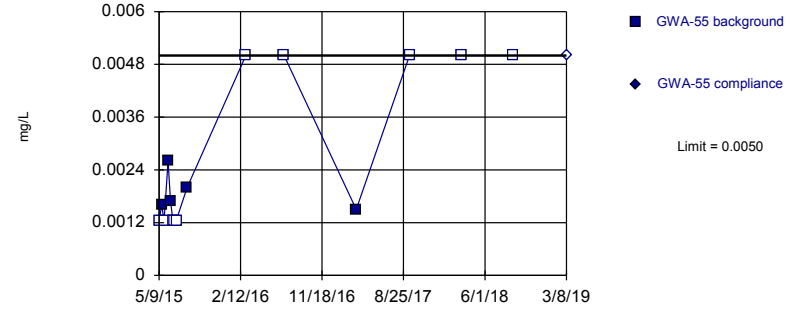


Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.02786, Std. Dev.=0.02414, n=15, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8474, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

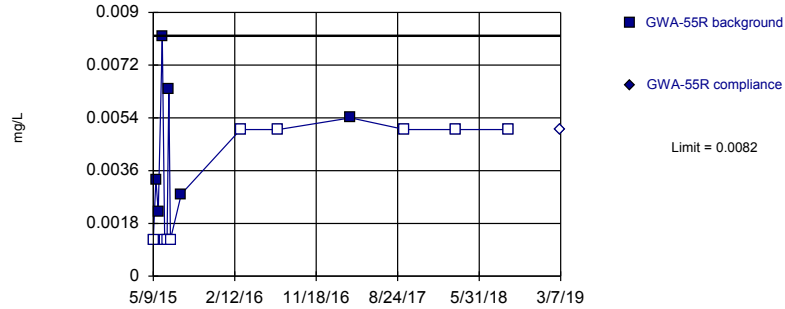


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

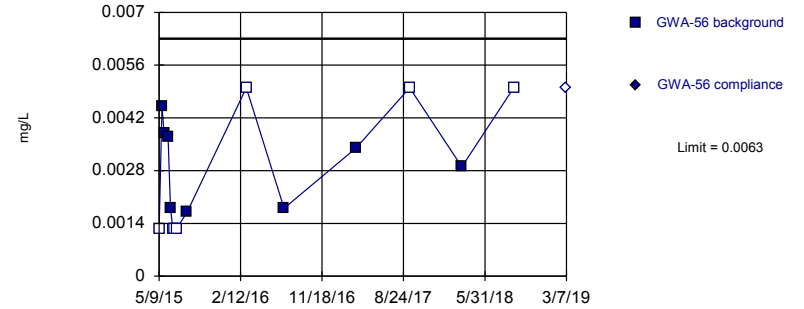


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.001573, Std. Dev.=0.001703, n=15, 46.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8509, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54	GWA-54
5/9/2015	<0.0025	
5/18/2015	0.0019 (J)	
5/25/2015	0.0022 (J)	
6/9/2015	0.0015 (J)	
6/17/2015	0.0035	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/12/2015	0.0015 (BJ)	
3/2/2016	<0.01	
7/8/2016	0.0029 (J)	
3/15/2017	0.0024 (J)	
9/15/2017	0.0016 (J)	
3/13/2018	0.0023 (J)	
9/6/2018	<0.01	
3/7/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55	GWA-55
5/9/2015	<0.0025	
5/18/2015	0.0016 (J)	
5/26/2015	<0.0025	
6/9/2015	0.0026	
6/17/2015	0.0017 (J)	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/13/2015	0.002 (BJ)	
3/2/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	0.0015 (J)	
9/15/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R	GWA-55R
5/9/2015	<0.0025	
5/18/2015	0.0033	
5/26/2015	0.0022 (J)	
6/9/2015	0.0082	
6/17/2015	<0.0025	
6/25/2015	<0.0025	
7/1/2015	0.0064	
7/7/2015	<0.0025	
8/13/2015	0.0028 (BJ)	
3/3/2016	<0.01	
7/11/2016	<0.01	
3/16/2017	0.0054 (J)	
9/18/2017	<0.01	
3/12/2018	<0.01	
9/7/2018	<0.01	
3/7/2019		<0.01

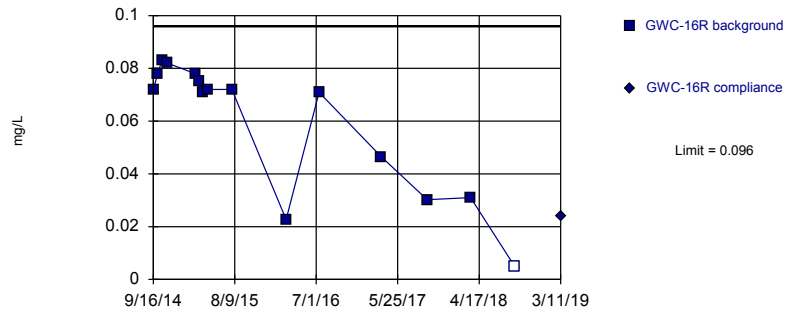
Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56	GWA-56
5/9/2015	<0.0025	
5/19/2015	0.0045	
5/26/2015	0.0038	
6/9/2015	0.0037	
6/17/2015	0.0018 (J)	
6/25/2015	<0.0025	
7/1/2015	<0.0025	
7/7/2015	<0.0025	
8/13/2015	0.0017 (BJ)	
3/3/2016	<0.01	
7/11/2016	0.0018 (J)	
3/15/2017	0.0034 (J)	
9/15/2017	<0.01	
3/13/2018	0.0029 (J)	
9/7/2018	<0.01	
3/7/2019		<0.01

Within Limit

Prediction Limit
Intrawell Parametric

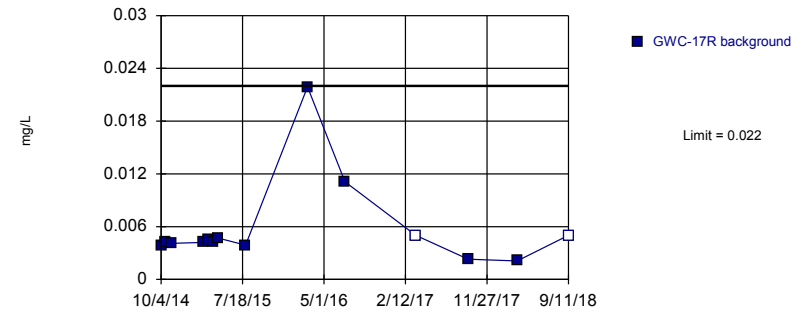


Background Data Summary (based on cube transformation): Mean=0.0002999, Std. Dev.=0.0002062, n=15, 6.667% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8548, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-17R

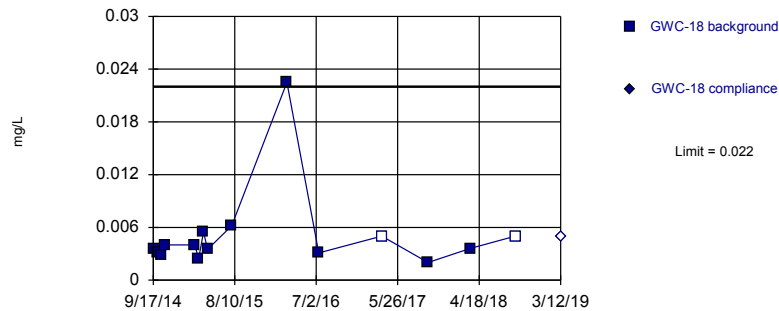


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 14.29% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2). Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

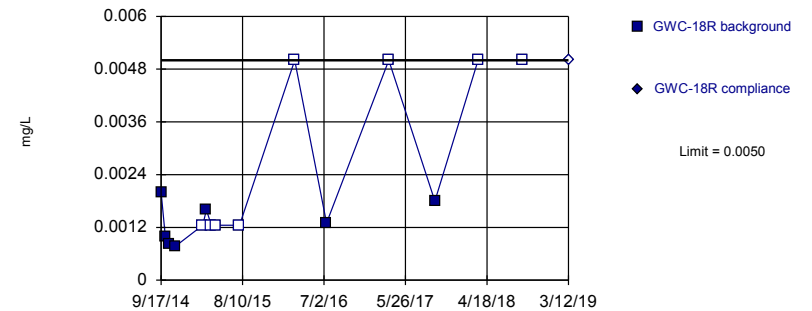


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 13.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:31 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
9/16/2014	0.072	
10/4/2014	0.078	
10/21/2014	0.083	
11/11/2014	0.082	
3/3/2015	0.078	
3/18/2015	0.075	
4/6/2015	0.071	
4/23/2015	0.072	
7/29/2015	0.072	
3/3/2016	0.0227 (D)	
7/13/2016	0.0709	
3/20/2017	0.0465	
9/21/2017	0.0302	
3/14/2018	0.031	
9/7/2018	<0.01	
3/11/2019		0.024

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R
9/17/2014	0.0028 (o)
10/4/2014	0.0038
10/21/2014	0.0043
11/11/2014	0.0041
3/3/2015	0.0042
3/18/2015	0.0046
4/6/2015	0.0043
4/23/2015	0.0047
7/29/2015	0.0039
3/4/2016	0.0219 (J)
7/14/2016	0.0111
3/21/2017	<0.01 (*)
9/22/2017	0.0023 (J)
3/14/2018	0.0021 (J)
9/11/2018	<0.01
3/12/2019	0.0038 (X)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
9/17/2014	0.0035	
10/4/2014	0.0032	
10/21/2014	0.0028	
11/5/2014	0.004	
3/3/2015	0.004	
3/18/2015	0.0024 (J)	
4/7/2015	0.0055	
4/23/2015	0.0035	
7/29/2015	0.0062	
3/7/2016	0.0225 (J)	
7/13/2016	0.0031 (J)	
3/23/2017	<0.01 (*)	
9/25/2017	0.002 (J)	
3/14/2018	0.0036 (J)	
9/11/2018	<0.01	
3/12/2019		<0.01

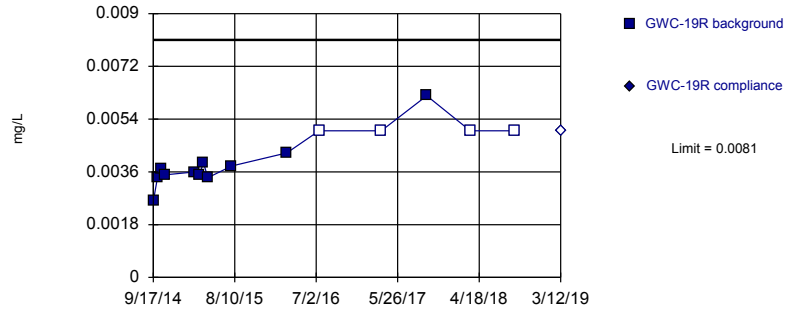
Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
9/17/2014	0.002 (J)	
10/4/2014	0.001 (J)	
10/21/2014	0.00082 (J)	
11/11/2014	0.00076 (J)	
3/3/2015	<0.0025	
3/18/2015	0.0016 (J)	
4/7/2015	<0.0025	
4/23/2015	<0.0025	
7/29/2015	<0.0025	
3/7/2016	<0.01	
7/13/2016	0.0013 (J)	
3/20/2017	<0.01	
9/21/2017	0.0018 (J)	
3/14/2018	<0.01	
9/7/2018	<0.01	
3/12/2019		<0.01

Within Limit

Prediction Limit
Intrawell Parametric

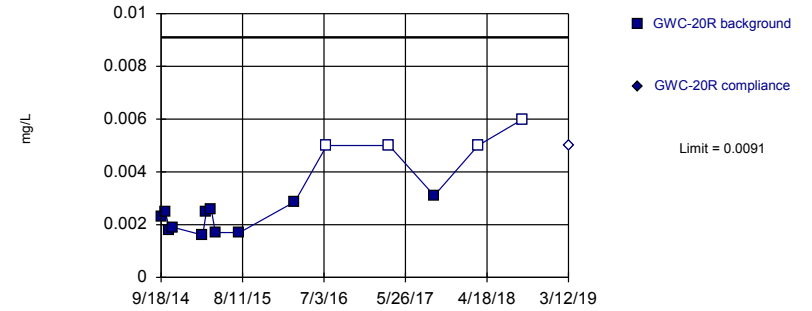


Background Data Summary (after Aitchison's Adjustment): Mean=0.00279, Std. Dev.=0.001898, n=15, 26.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9138, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:32 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

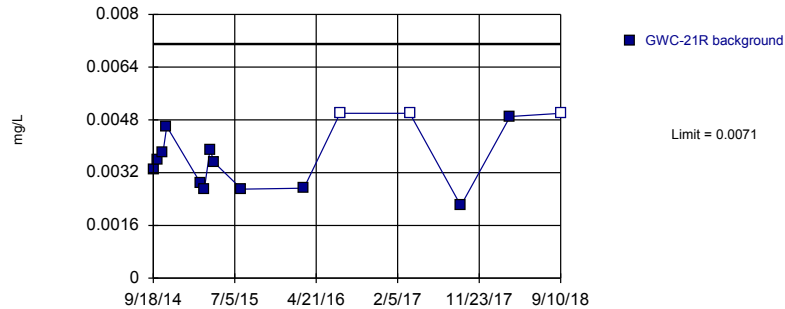
Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.03445, Std. Dev.=0.022, n=15, 26.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8625, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:32 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

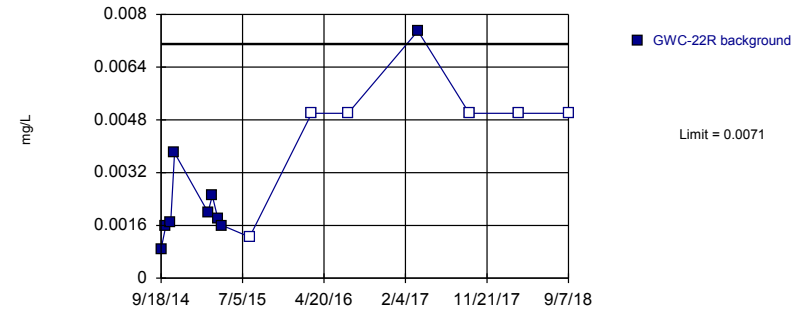
Prediction Limit
Intrawell Parametric, GWC-21R



Background Data Summary (after Aitchison's Adjustment): Mean=0.002722, Std. Dev.=0.001583, n=15, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9033, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 4:32 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit
Intrawell Parametric, GWC-22R



Background Data Summary (after Aitchison's Adjustment): Mean=0.001559, Std. Dev.=0.002009, n=15, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8706, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 4:32 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
9/17/2014	0.0026	
10/4/2014	0.0034	
10/21/2014	0.0037	
11/5/2014	0.0035	
3/3/2015	0.0036	
3/19/2015	0.0035	
4/7/2015	0.0039	
4/24/2015	0.0034	
7/29/2015	0.0038	
3/7/2016	0.00425 (J)	
7/14/2016	<0.01	
3/21/2017	<0.01 (*)	
9/20/2017	0.0062 (J)	
3/14/2018	<0.01	
9/10/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
9/18/2014	0.0023 (J)	
10/5/2014	0.0025	
10/22/2014	0.0018 (J)	
11/5/2014	0.0019 (J)	
3/4/2015	0.0016 (J)	
3/19/2015	0.0025	
4/7/2015	0.0026	
4/24/2015	0.0017 (J)	
7/30/2015	0.0017 (J)	
3/8/2016	0.00287 (J)	
7/14/2016	<0.01 (*)	
3/22/2017	<0.01	
9/19/2017	0.0031 (J)	
3/14/2018	<0.01	
9/10/2018	<0.012	
3/12/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R
9/18/2014	0.0033
10/5/2014	0.0036
10/22/2014	0.0038
11/5/2014	0.0046
3/4/2015	0.0029
3/19/2015	0.0027
4/8/2015	0.0039
4/24/2015	0.0035
7/30/2015	0.0027
3/8/2016	0.00273 (J)
7/15/2016	<0.01 (*)
3/21/2017	<0.01 (*)
9/19/2017	0.0022 (J)
3/14/2018	0.0049 (J)
9/10/2018	<0.01
3/11/2019	0.0034 (X)

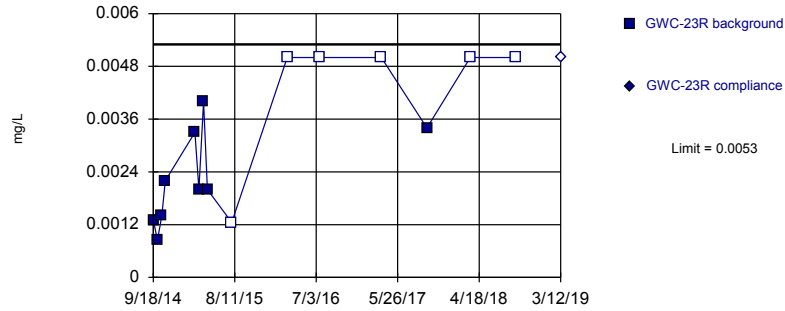
Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R
9/18/2014	0.00089 (J)
10/5/2014	0.0016 (J)
10/22/2014	0.0017 (J)
11/5/2014	0.0038
3/4/2015	0.002 (J)
3/19/2015	0.0025
4/8/2015	0.0018 (J)
4/24/2015	0.0016 (J)
7/30/2015	<0.0025
3/7/2016	<0.01
7/14/2016	<0.01
3/20/2017	0.0075 (J)
9/19/2017	<0.01
3/13/2018	<0.01
9/7/2018	<0.01
3/11/2019	0.0021 (X)

Within Limit

Prediction Limit
Intrawell Parametric

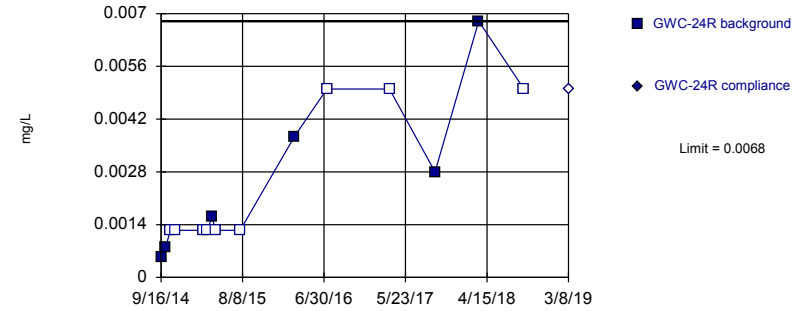


Background Data Summary (after Aitchison's Adjustment): Mean=0.001363, Std. Dev.=0.001409, n=15, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8545, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 8/26/2019 4:32 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

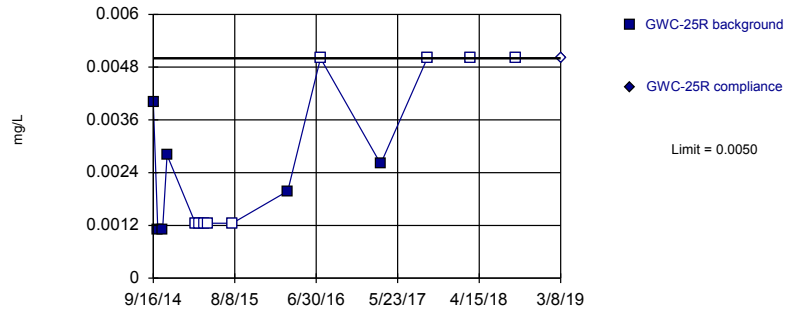


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:32 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

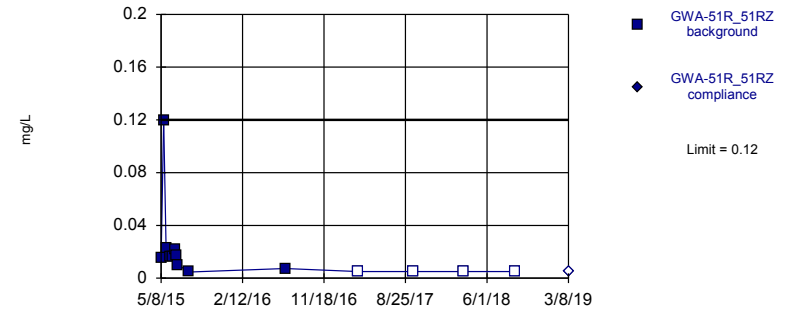


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:32 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used after natural log transformation resulted in a parametric limit of 18.59, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 14 background values. 28.57% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Zinc Analysis Run 8/26/2019 4:32 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
9/18/2014	0.0013 (J)	
10/5/2014	0.00085 (J)	
10/22/2014	0.0014 (J)	
11/5/2014	0.0022 (J)	
3/4/2015	0.0033	
3/20/2015	0.002 (J)	
4/8/2015	0.004	
4/23/2015	0.002 (J)	
7/30/2015	<0.0025	
3/9/2016	<0.01	
7/15/2016	<0.01 (*)	
3/22/2017	<0.01 (*)	
9/21/2017	0.0034 (J)	
3/14/2018	<0.01	
9/11/2018	<0.01	
3/12/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
9/16/2014	0.00054 (J)	
10/4/2014	0.0008 (J)	
10/23/2014	<0.0025	
11/10/2014	<0.0025	
3/4/2015	<0.0025	
3/20/2015	<0.0025	
4/8/2015	0.0016 (J)	
4/23/2015	<0.0025	
7/30/2015	<0.0025	
3/4/2016	0.00374 (J)	
7/12/2016	<0.01	
3/20/2017	<0.01	
9/19/2017	0.0028 (J)	
3/13/2018	0.0068 (J)	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
9/16/2014	0.004	
10/4/2014	0.0011 (J)	
10/23/2014	0.0011 (J)	
11/10/2014	0.0028	
3/4/2015	<0.0025	
3/20/2015	<0.0025	
4/9/2015	<0.0025	
4/23/2015	<0.0025	
7/30/2015	<0.0025	
3/8/2016	0.00198 (J)	
7/18/2016	<0.01 (*)	
3/16/2017	0.0026 (J)	
9/19/2017	<0.01	
3/13/2018	<0.01	
9/11/2018	<0.01	
3/8/2019		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 8/26/2019 4:37 PM View: cell 3&4 OB&BR intrawell metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-51R_51RZ	GWA-51R_51RZ
5/8/2015	0.015	
5/17/2015	0.12	
5/25/2015	0.023	
6/8/2015	0.016	
6/18/2015	0.016	
6/24/2015	0.022	
6/30/2015	0.017	
7/6/2015	0.01	
8/12/2015	0.0047 (BJ)	
7/7/2016	0.0073 (JD)	
3/15/2017	<0.01 (D)	
9/19/2017	<0.01 (D)	
3/13/2018	<0.01	
9/7/2018	<0.01	
3/8/2019		<0.01

Interwell Prediction Limits AppIII - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 1:03 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GWC-16R	49	n/a	3/11/2019	63.8	Yes	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-17R	49	n/a	3/12/2019	65.3	Yes	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-21R	49	n/a	3/11/2019	67.1	Yes	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-23R	49	n/a	3/12/2019	61.6	Yes	144	0	n/a	0.000...	NP (normality) 1 of 2

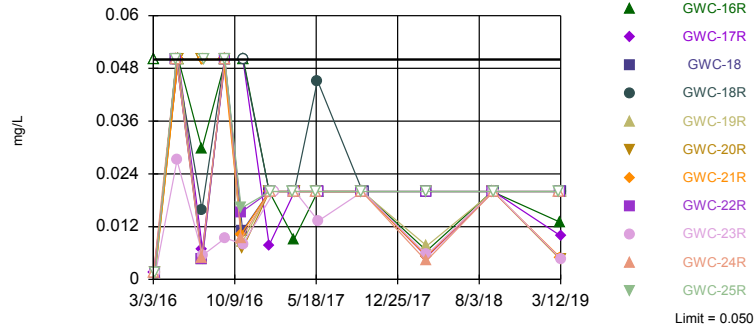
Interwell Prediction Limits AppIII - All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 1:03 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWC-16R	0.050	n/a	3/11/2019	0.013	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-17R	0.050	n/a	3/12/2019	0.0099	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-18	0.050	n/a	3/12/2019	0.02ND	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-18R	0.050	n/a	3/12/2019	0.02ND	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-19R	0.050	n/a	3/12/2019	0.02ND	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-20R	0.050	n/a	3/12/2019	0.0045	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-21R	0.050	n/a	3/11/2019	0.005	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-22R	0.050	n/a	3/11/2019	0.02ND	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-23R	0.050	n/a	3/12/2019	0.0047	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-24R	0.050	n/a	3/8/2019	0.02ND	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-25R	0.050	n/a	3/8/2019	0.02ND	No	144	67.36	n/a	0.000...	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-16R	49	n/a	3/11/2019	63.8	Yes	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-17R	49	n/a	3/12/2019	65.3	Yes	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-18	49	n/a	3/12/2019	23.2	No	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-18R	49	n/a	3/12/2019	28.6	No	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-19R	49	n/a	3/12/2019	31.1	No	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-20R	49	n/a	3/12/2019	35.2	No	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-21R	49	n/a	3/11/2019	67.1	Yes	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-22R	49	n/a	3/11/2019	33.9	No	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-23R	49	n/a	3/12/2019	61.6	Yes	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-24R	49	n/a	3/8/2019	28.8	No	144	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-25R	49	n/a	3/8/2019	33.1	No	144	0	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-16R	0.40	n/a	3/11/2019	0.23	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-17R	0.40	n/a	3/12/2019	0.056	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-18	0.40	n/a	3/12/2019	0.05	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-18R	0.40	n/a	3/12/2019	0.042	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-19R	0.40	n/a	3/12/2019	0.04	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-20R	0.40	n/a	3/12/2019	0.048	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-21R	0.40	n/a	6/18/2019	0.15ND	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-22R	0.40	n/a	3/11/2019	0.15ND	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-23R	0.40	n/a	3/12/2019	0.06	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-24R	0.40	n/a	3/8/2019	0.15ND	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-25R	0.40	n/a	3/8/2019	0.15ND	No	144	45.83	n/a	0.000...	NP (normality) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

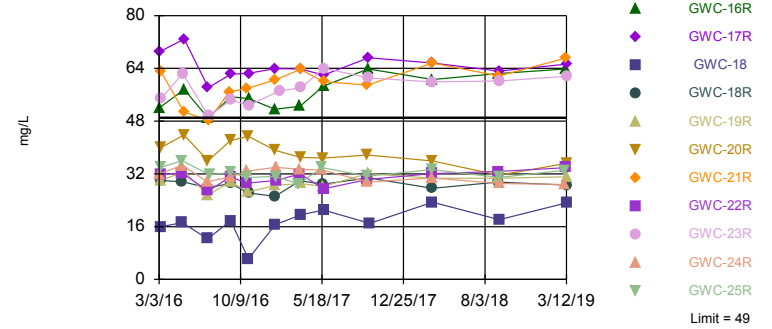


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 144 background values. 67.36% NDs. Annual per-constituent alpha = 0.002083. Individual comparison alpha = 0.00009478 (1 of 2). Comparing 11 points to limit.

Constituent: Boron Analysis Run 8/28/2019 1:01 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit: GWC-16R, GWC-17R, GWC-21R, GWC-23R

Prediction Limit
Interwell Non-parametric

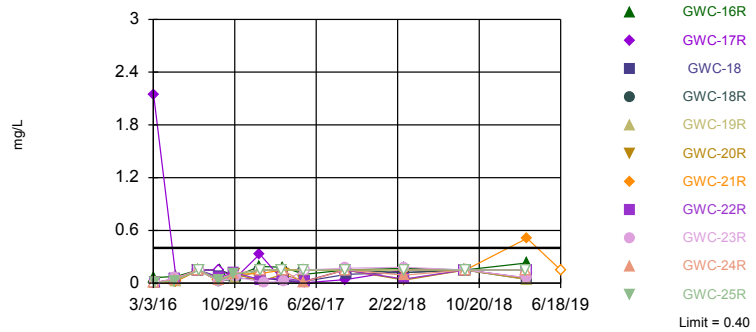


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 144 background values. Annual per-constituent alpha = 0.002083. Individual comparison alpha = 0.00009478 (1 of 2). Comparing 11 points to limit.

Constituent: Calcium Analysis Run 8/28/2019 1:01 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 144 background values. 45.83% NDs. Annual per-constituent alpha = 0.002083. Individual comparison alpha = 0.00009478 (1 of 2). Comparing 11 points to limit.

Constituent: Fluoride Analysis Run 8/28/2019 1:02 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)	GWA-36 (bg)	GWA-37 (bg)	GWA-36R (bg)	GWA-55 (bg)	GWA-54 (bg)	GWA-53R (bg)	GWA-53 (bg)	GWA-38 (bg)
5/16/2017			<0.04	<0.04					
5/17/2017	<0.04	<0.04							<0.04
5/18/2017					<0.04	<0.04			
5/19/2017							<0.04	<0.04	
5/22/2017									
5/23/2017									
5/24/2017									
7/19/2017									
9/15/2017	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04			
9/18/2017									
9/19/2017							<0.04	<0.04	<0.04
9/20/2017									
9/21/2017									
9/22/2017									
9/25/2017									
3/12/2018		<0.04	0.004 (J)	0.0082 (J)	0.0055 (J)				
3/13/2018	0.0084 (J)					0.0053 (J)	<0.04	<0.04	<0.04
3/14/2018									
9/6/2018	<0.04	<0.04	<0.04	<0.04		<0.04			<0.04
9/7/2018					<0.04				
9/10/2018									
9/11/2018							<0.04	<0.04	
3/6/2019		<0.04	<0.04						
3/7/2019	<0.04			0.0049 (X)		<0.04			<0.04
3/8/2019					0.0056 (X)			<0.04	
3/11/2019									
3/12/2019							<0.04		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)	GWA-55R (bg)	GWC-16R	GWC-24R	GWC-17R	GWC-22R	GWC-19R	GWC-18	GWC-18R
2/29/2016									
3/1/2016									
3/2/2016									
3/3/2016	<0.003	<0.1	<0.1 (D)						
3/4/2016				<0.003	<0.003				
3/7/2016						<0.003	<0.003	<0.003	<0.003
3/8/2016									
3/9/2016									
5/2/2016									
5/3/2016		<0.1							
5/4/2016									
5/5/2016				<0.1		<0.1		<0.1	<0.1
5/6/2016									
5/9/2016	<0.1						<0.1		
5/10/2016			<0.1		<0.1				
7/6/2016									
7/7/2016									
7/8/2016									
7/11/2016	0.0128 (J)	0.0047 (J)							
7/12/2016				0.005 (J)					
7/13/2016			0.0297 (J)					0.0047 (J)	0.0159 (J)
7/14/2016					0.0069 (J)	0.0047 (J)	0.0045 (J)		
7/15/2016									
7/18/2016									
9/7/2016									
9/8/2016									
9/9/2016	0.0158 (J)	<0.1							
9/12/2016						<0.1	<0.1		<0.1
9/13/2016				<0.1				<0.1	
9/14/2016					<0.1				
9/15/2016			<0.1						
10/25/2016									
10/26/2016	0.0257 (J)								
10/27/2016		0.0108 (J)		0.0093 (J)		0.0153 (J)			
10/31/2016							0.0086 (J)	0.0111 (J)	
11/1/2016					<0.1				<0.1
11/2/2016			<0.1						
1/5/2017									
1/6/2017									
1/9/2017	0.0219 (J)	<0.04							
1/11/2017			<0.04		0.0078 (J)		<0.04		<0.04
1/12/2017								<0.04	
1/13/2017				<0.04		<0.04			
1/25/2017									
2/9/2017									
3/14/2017									
3/15/2017	0.0253 (J)								
3/16/2017		<0.04							
3/20/2017			0.0092 (J)	<0.04		<0.04			<0.04
3/21/2017					<0.04		<0.04		
3/22/2017									
3/23/2017								<0.04	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)	GWA-55R (bg)	GWC-16R	GWC-24R	GWC-17R	GWC-22R	GWC-19R	GWC-18	GWC-18R
5/16/2017									
5/17/2017									
5/18/2017	0.0249 (J)	<0.04							
5/19/2017				<0.04					
5/22/2017							<0.04 (*)		0.0452
5/23/2017			<0.04 (*)		<0.04	<0.04		<0.04	
5/24/2017									
7/19/2017									
9/15/2017	<0.04 (*)								
9/18/2017		<0.04							
9/19/2017				<0.04		<0.04			
9/20/2017							<0.04 (*)		
9/21/2017			<0.04						<0.04
9/22/2017					<0.04				
9/25/2017								<0.04	
3/12/2018		0.0041 (J)							
3/13/2018	0.024 (J)			0.0042 (J)		<0.04			
3/14/2018			0.0065 (J)		0.0051 (J)		0.0076 (J)	<0.04	<0.04
9/6/2018									
9/7/2018	0.024 (J)	<0.04	<0.04			<0.04			<0.04
9/10/2018							<0.04		
9/11/2018				<0.04	<0.04			<0.04	
3/6/2019									
3/7/2019	0.02 (X)	<0.04							
3/8/2019				<0.04					
3/11/2019			0.013 (X)			<0.04			
3/12/2019					0.0099 (X)		<0.04	<0.04	<0.04

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-25R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
2/29/2016					
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016					
3/7/2016					
3/8/2016	<0.003	<0.003	<0.003		
3/9/2016				<0.003	
5/2/2016					
5/3/2016					
5/4/2016		<0.1			<0.1 (D)
5/5/2016					
5/6/2016				0.0271 (J)	
5/9/2016	<0.1		<0.1		
5/10/2016					
7/6/2016					
7/7/2016					0.0096 (JD)
7/8/2016					
7/11/2016					
7/12/2016					
7/13/2016					
7/14/2016			<0.1		
7/15/2016	<0.1			0.0055 (J)	
7/18/2016		<0.1			
9/7/2016					
9/8/2016					0.0137 (JD)
9/9/2016	<0.1				
9/12/2016			<0.1		
9/13/2016		<0.1			
9/14/2016				0.0094 (J)	
9/15/2016					
10/25/2016					
10/26/2016					0.0247 (JD)
10/27/2016	0.0103 (J)	0.0162 (J)			
10/31/2016			0.007 (J)		
11/1/2016				0.008 (J)	
11/2/2016					
1/5/2017					
1/6/2017					0.0082 (JD)
1/9/2017					
1/11/2017					
1/12/2017	<0.04		<0.04		
1/13/2017		<0.04			
1/25/2017				<0.04	
2/9/2017					
3/14/2017					
3/15/2017					<0.04 (D)
3/16/2017		<0.04			
3/20/2017					
3/21/2017	<0.04				
3/22/2017			<0.04	<0.04	
3/23/2017					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-25R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
5/16/2017					
5/17/2017					
5/18/2017					0.0076 (JD)
5/19/2017		<0.04			
5/22/2017			<0.04 (*)		
5/23/2017	<0.04 (*)				
5/24/2017				0.0133 (J)	
7/19/2017					0.0193 (JD)
9/15/2017					
9/18/2017					
9/19/2017	<0.04	<0.04	<0.04		0.0132 (JD)
9/20/2017					
9/21/2017				<0.04 (*)	
9/22/2017					
9/25/2017					
3/12/2018					
3/13/2018		<0.04			0.013 (J)
3/14/2018	0.0053 (J)		<0.04	0.0056 (J)	
9/6/2018					
9/7/2018					<0.04
9/10/2018	<0.04		<0.04		
9/11/2018		<0.04		<0.04	
3/6/2019					
3/7/2019					
3/8/2019		<0.04			0.0085 (X)
3/11/2019	0.005 (X)				
3/12/2019			0.0045 (X)	0.0047 (X)	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)	GWA-36 (bg)	GWA-37 (bg)	GWA-36R (bg)	GWA-55 (bg)	GWA-54 (bg)	GWA-53R (bg)	GWA-53 (bg)	GWA-38 (bg)
5/16/2017			0.922	28.5					
5/17/2017	27.6	16.8							0.889
5/18/2017					37.2	26.7			
5/19/2017							30.9	29.2	
5/22/2017									
5/23/2017									
5/24/2017									
7/19/2017									
9/15/2017	27.7	13.9	0.85	29.1	38.5	25.1			
9/18/2017									
9/19/2017							28.5	26.9	1.28
9/20/2017									
9/21/2017									
9/22/2017									
9/25/2017									
3/12/2018		11.8 (J)	0.81	30.6	39.6				
3/13/2018	26.2					24.3 (J)	29.3	28.6	1.4
3/14/2018									
9/6/2018	27.9	13.5 (J)	0.79	26.1		25.6			1.6
9/7/2018					45.2				
9/10/2018									
9/11/2018							26.3	27.3	
3/6/2019		11.2 (X)	0.78						
3/7/2019	29.5			28		23.8 (X)			2.6
3/8/2019					45.2			25.9	
3/11/2019									
3/12/2019							28		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)	GWA-55R (bg)	GWC-16R	GWC-24R	GWC-17R	GWC-22R	GWC-19R	GWC-18	GWC-18R
5/16/2017									
5/17/2017									
5/18/2017	26.9	31.3							
5/19/2017				33.2					
5/22/2017							28.2		28.9
5/23/2017			58.7		62	27.5		21	
5/24/2017									
7/19/2017									
9/15/2017	19.6								
9/18/2017		29.7							
9/19/2017				29.5		30.3			
9/20/2017							32.1		
9/21/2017			63.8						30.8
9/22/2017					67.2				
9/25/2017								17	
3/12/2018		38.2							
3/13/2018	26			30.8		32.1			
3/14/2018			60.6		65.6		30.7	23.4 (J)	27.6
9/6/2018									
9/7/2018	25.1	40.3	62.4			32.7			29.5
9/10/2018							30.7		
9/11/2018				29.1	63.2			18.1 (J)	
3/6/2019									
3/7/2019	33.3	40.4							
3/8/2019				28.8					
3/11/2019			63.8			33.9			
3/12/2019					65.3		31.1	23.2 (X)	28.6

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-25R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
2/29/2016					
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016					
3/7/2016					
3/8/2016	63	34	40		
3/9/2016				55	
5/2/2016					
5/3/2016					
5/4/2016		36			43.4 (D)
5/5/2016					
5/6/2016				62.4	
5/9/2016	50.8		43.8		
5/10/2016					
7/6/2016					
7/7/2016					40.1 (D)
7/8/2016					
7/11/2016					
7/12/2016					
7/13/2016					
7/14/2016			36		
7/15/2016	48.2			49.5	
7/18/2016		31.7			
9/7/2016					
9/8/2016					37.1 (D)
9/9/2016	56.9				
9/12/2016			42.1		
9/13/2016		32.5			
9/14/2016				54.4	
9/15/2016					
10/25/2016					
10/26/2016					38.8 (D)
10/27/2016	57.9	30.9			
10/31/2016			43.4		
11/1/2016				52.8	
11/2/2016					
1/5/2017					
1/6/2017					39.6 (D)
1/9/2017					
1/11/2017					
1/12/2017	60.5		39.1		
1/13/2017		31.2			
1/25/2017				57.2	
2/9/2017					
3/14/2017					
3/15/2017					36.1 (D)
3/16/2017		29			
3/20/2017					
3/21/2017	63.7				
3/22/2017			37	58.1	
3/23/2017					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-25R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
5/16/2017					
5/17/2017					
5/18/2017					40.1 (D)
5/19/2017		33.9			
5/22/2017			36.8		
5/23/2017	60				
5/24/2017				64	
7/19/2017					46.9 (D)
9/15/2017					
9/18/2017					
9/19/2017	58.9	31.3	37.7		47.7 (D)
9/20/2017					
9/21/2017				61.1	
9/22/2017					
9/25/2017					
3/12/2018					
3/13/2018		33.3			46.1 (D)
3/14/2018	65.6		35.9	59.9	
9/6/2018					
9/7/2018					44.2
9/10/2018	61.7		31.6		
9/11/2018		30.9		60.2	
3/6/2019					
3/7/2019					
3/8/2019		33.1			46.6
3/11/2019	67.1				
3/12/2019			35.2	61.6	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)	GWA-36 (bg)	GWA-36R (bg)	GWA-37 (bg)	GWA-55 (bg)	GWA-38 (bg)	GWA-53R (bg)	GWA-53 (bg)	GWA-54 (bg)
2/29/2016	0.0375 (J)								
3/1/2016		0.0153 (J)	0.0172 (J)	0.0215 (J)					
3/2/2016					0.0293 (J)	0.0121 (J)	0.0238 (J)	0.0202 (J)	0.0427 (J)
3/3/2016									
3/4/2016									
3/7/2016									
3/8/2016									
3/9/2016									
5/2/2016		0.018 (J)	0.018 (J)						
5/3/2016				0.023 (J)	0.049 (J)	0.013 (J)	0.027 (J)	0.025 (J)	
5/4/2016	0.04 (J)								0.048 (J)
5/5/2016									
5/6/2016									
5/9/2016									
5/10/2016									
7/6/2016			0.02 (J)						
7/7/2016		<0.3				<0.3			
7/8/2016	0.11 (J)			0.02 (J)				0.09 (J)	0.12 (J)
7/11/2016					<0.3 (*)		<0.3 (*)		
7/12/2016									
7/13/2016									
7/14/2016									
7/15/2016									
7/18/2016									
9/7/2016		<0.3	<0.3	<0.3			<0.3		
9/8/2016	<0.3					<0.3		<0.3	<0.3
9/9/2016					0.05 (J)				
9/12/2016									
9/13/2016									
9/14/2016									
9/15/2016									
10/25/2016		<0.3	0.03 (J)	0.04 (J)		0.03 (J)			
10/26/2016	0.04 (J)				0.08 (J)			0.04 (J)	0.11 (J)
10/27/2016							0.1 (J)		
10/31/2016									
11/1/2016									
11/2/2016									
1/5/2017		<0.3	0.03 (J)						
1/6/2017	0.04 (J)			<0.3			0.02 (J)		
1/9/2017					0.05 (J)			0.02 (J)	0.04 (J)
1/11/2017									
1/12/2017									
1/13/2017									
1/25/2017									
2/9/2017						<0.3			
3/14/2017			<0.3	<0.3					
3/15/2017	<0.3	<0.3							0.009 (J)
3/16/2017					0.07 (J)		0.04 (J)	<0.3	
3/20/2017									
3/21/2017									
3/22/2017									
3/23/2017						<0.3			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-21R	GWC-25R	GWC-23R	GWA-51R_51RZ ...
2/29/2016					
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016					
3/7/2016					
3/8/2016	0.00425 (J)	0.00287 (J)	0.00246 (J)		
3/9/2016				<0.01	
5/2/2016					
5/3/2016					
5/4/2016			0.027 (J)		0.057 (JD)
5/5/2016					
5/6/2016				0.056 (J)	
5/9/2016	0.0259 (J)	0.0222 (J)			
5/10/2016					
7/6/2016					
7/7/2016					0.09 (JD)
7/8/2016					
7/11/2016					
7/12/2016					
7/13/2016					
7/14/2016	<0.3				
7/15/2016		<0.3		<0.3	
7/18/2016			<0.3		
9/7/2016					
9/8/2016					0.03 (JD)
9/9/2016		0.03 (J)			
9/12/2016	0.03 (J)				
9/13/2016			0.03 (J)		
9/14/2016				0.02 (J)	
9/15/2016					
10/25/2016					
10/26/2016					0.15 (JD)
10/27/2016		0.1 (J)	0.1 (J)		
10/31/2016	0.11 (J)				
11/1/2016				0.07 (J)	
11/2/2016					
1/5/2017					
1/6/2017					0.11 (JD)
1/9/2017					
1/11/2017					
1/12/2017	0.02 (J)	0.11 (J)			
1/13/2017			<0.3		
1/25/2017				0.01 (J)	
2/9/2017					
3/14/2017					
3/15/2017					0.004 (JD)
3/16/2017			<0.3		
3/20/2017					
3/21/2017		<0.3			
3/22/2017	0.1 (J)			0.02 (J)	
3/23/2017					

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 1:03 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-21R	GWC-25R	GWC-23R	GWA-51R_51RZ ...
5/16/2017					
5/17/2017					
5/18/2017					0.007 (JD)
5/19/2017			<0.3		
5/22/2017	0.02 (J)				
5/23/2017		<0.3			
5/24/2017				<0.3	
7/19/2017					0.12 (JD)
9/15/2017					
9/18/2017					
9/19/2017	<0.3	<0.3	<0.3		0.07 (JD)
9/20/2017					
9/21/2017				0.17 (J)	
9/22/2017					
9/25/2017					
3/12/2018					
3/13/2018			<0.3		0.16 (J)
3/14/2018	0.035 (J)	<0.3		0.18 (J)	
9/6/2018					
9/7/2018					<0.3
9/10/2018	<0.3	<0.3			
9/11/2018			<0.3	<0.3	
3/6/2019					
3/7/2019					
3/8/2019			<0.3		0.075 (X)
3/11/2019		0.51			
3/12/2019	0.048 (X)			0.06 (X)	
6/18/2019		<0.3			

Intrawell Prediction Limits AppIII - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 1:07 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Chloride (mg/L)	GWC-18	2.4	n/a	3/12/2019	2.8	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-18R	2.9	n/a	3/12/2019	3.3	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-20R	2.3	n/a	3/12/2019	2.7	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-17R	9.3	n/a	3/12/2019	25.9	Yes	8	0	ln(x)	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-19R	3.7	n/a	3/12/2019	4.3	Yes	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-16R	340	n/a	3/11/2019	344	Yes	8	0	No	0.000...	Param 1 of 3

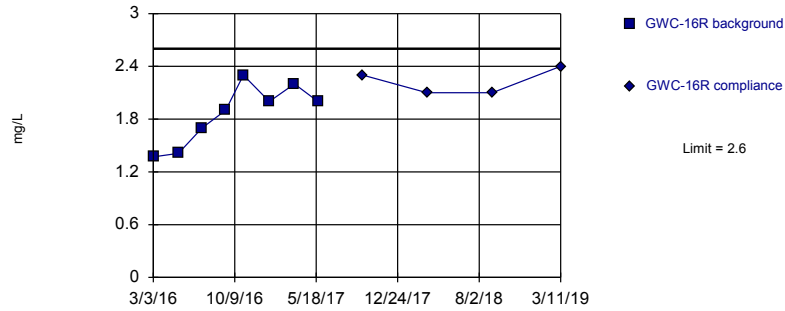
Intrawell Prediction Limits AppIII - All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 1:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Chloride (mg/L)	GWC-16R	2.6	n/a	3/11/2019	2.4	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-17R	7.4	n/a	3/12/2019	6.9	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-18	2.4	n/a	3/12/2019	2.8	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-18R	2.9	n/a	3/12/2019	3.3	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-19R	3	n/a	3/12/2019	2.8	No	8	0	sqrt(x)	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-20R	2.3	n/a	3/12/2019	2.7	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-21R	5.1	n/a	3/11/2019	4.2	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-22R	3.3	n/a	3/11/2019	3.2	No	8	0	sqrt(x)	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-23R	2.6	n/a	3/12/2019	2.4	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-24R	3.1	n/a	3/8/2019	2.6	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-25R	3.2	n/a	3/8/2019	2.8	No	8	0	No	0.000...	Param 1 of 3
pH (pH units)	GWC-16R	7.5	6.8	3/11/2019	7.21	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-17R	7.3	7.1	3/12/2019	7.28	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-18	7.5	5.8	3/12/2019	7.06	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-18R	8	7.5	3/12/2019	7.76	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-19R	7.9	7.5	3/12/2019	7.6	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-20R	7.9	7.3	3/12/2019	7.63	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-21R	7.4	6.8	3/11/2019	6.95	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-22R	7.9	7.5	3/11/2019	7.51	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-23R	7.7	7	3/12/2019	7.42	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-24R	8	6.8	3/8/2019	7.65	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-25R	7.8	7.2	3/8/2019	7.69	No	8	0	No	0.000342	Param 1 of 3
Sulfate (mg/L)	GWC-16R	13	n/a	3/11/2019	11	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-17R	9.3	n/a	3/12/2019	25.9	Yes	8	0	ln(x)	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-18	2.5	n/a	3/12/2019	2.3	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-18R	2.6	n/a	3/12/2019	2.6	No	7	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-19R	3.7	n/a	3/12/2019	4.3	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-20R	1.9	n/a	3/12/2019	1.5	No	8	0	x^2	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-21R	6.3	n/a	3/11/2019	3.4	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-22R	2.6	n/a	3/11/2019	2	No	7	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-23R	27	n/a	3/12/2019	17.7	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-24R	15	n/a	3/8/2019	1.9	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-25R	2	n/a	3/8/2019	1.6	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-16R	340	n/a	3/11/2019	344	Yes	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-17R	390	n/a	3/12/2019	306	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-18	140	n/a	3/12/2019	135	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-18R	190	n/a	3/12/2019	143	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-19R	240	n/a	3/12/2019	156	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-20R	220	n/a	3/12/2019	191	No	7	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-21R	430	n/a	3/11/2019	311	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-22R	200	n/a	3/11/2019	166	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-23R	360	n/a	3/12/2019	310	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-24R	220	n/a	3/8/2019	164	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-25R	200	n/a	3/8/2019	155	No	8	0	No	0.000...	Param 1 of 3

Within Limit

Prediction Limit
Intrawell Parametric

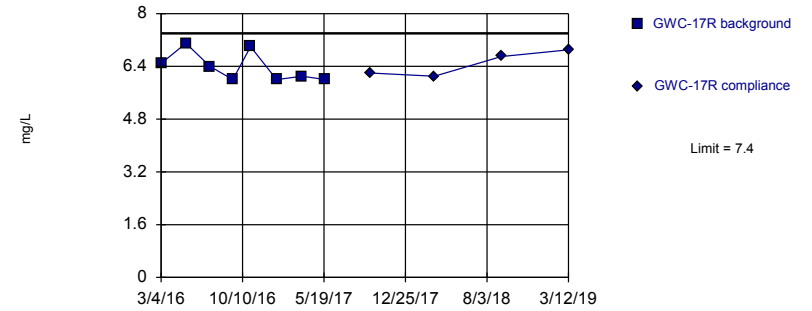


Background Data Summary: Mean=1.86, Std. Dev.=0.3417, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9264, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:04 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

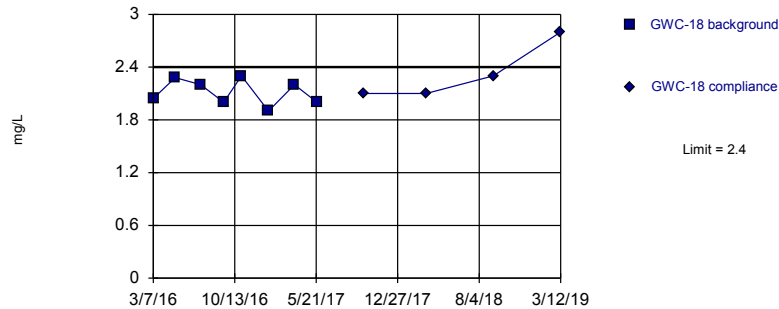


Background Data Summary: Mean=6.386, Std. Dev.=0.4515, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8243, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:04 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

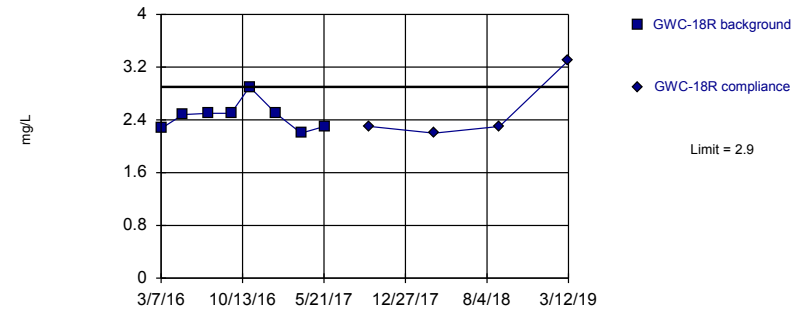


Background Data Summary: Mean=2.116, Std. Dev.=0.1481, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9123, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.456, Std. Dev.=0.2165, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8642, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
3/3/2016	1.3707 (D)	
5/10/2016	1.41	
7/13/2016	1.7	
9/15/2016	1.9	
11/2/2016	2.3	
1/11/2017	2	
3/20/2017	2.2	
5/23/2017	2	
9/21/2017		2.3
3/14/2018		2.1
9/7/2018		2.1
3/11/2019		2.4

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
3/4/2016	6.4905	
5/10/2016	7.1	
7/14/2016	6.4	
9/14/2016	6	
11/1/2016	7	
1/11/2017	6	
3/21/2017	6.1	
5/23/2017	6	
9/22/2017		6.2
3/14/2018		6.1
9/11/2018		6.7
3/12/2019		6.9

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
3/7/2016	2.0446	
5/5/2016	2.28	
7/13/2016	2.2	
9/13/2016	2	
10/31/2016	2.3	
1/12/2017	1.9	
3/23/2017	2.2	
5/23/2017	2	
9/25/2017		2.1
3/14/2018		2.1
9/11/2018		2.3
3/12/2019		2.8

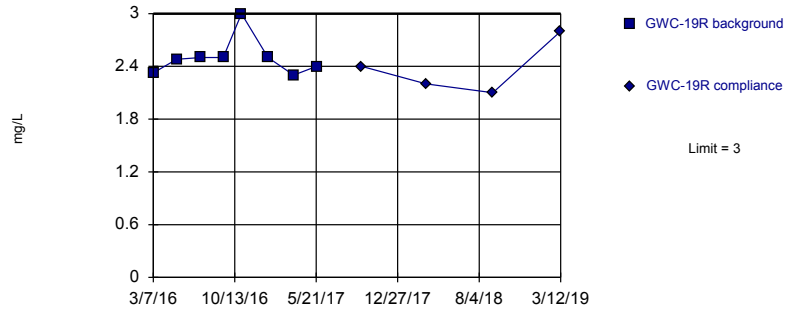
Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
3/7/2016	2.2698	
5/5/2016	2.48	
7/13/2016	2.5	
9/12/2016	2.5	
11/1/2016	2.9	
1/11/2017	2.5	
3/20/2017	2.2	
5/22/2017	2.3	
9/21/2017		2.3
3/14/2018		2.2
9/7/2018		2.3
3/12/2019		3.3

Within Limit

Prediction Limit
Intrawell Parametric

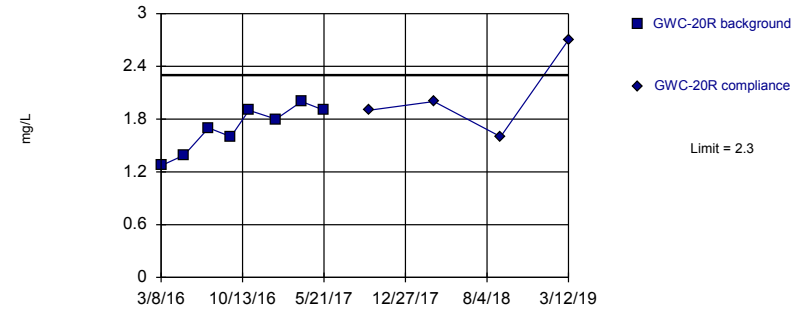


Background Data Summary (based on square root transformation): Mean=1.58, Std. Dev.=0.06671, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7624, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

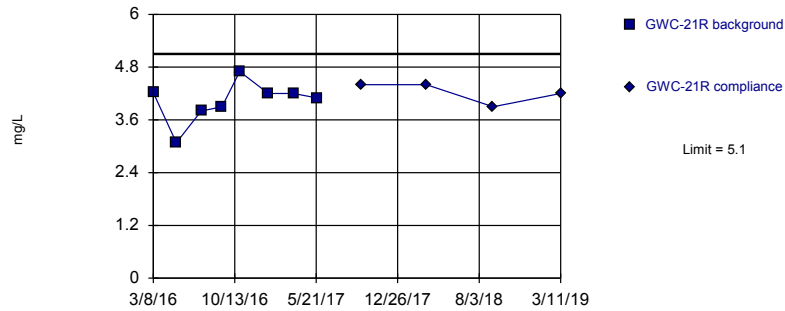


Background Data Summary: Mean=1.695, Std. Dev.=0.2594, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9282, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

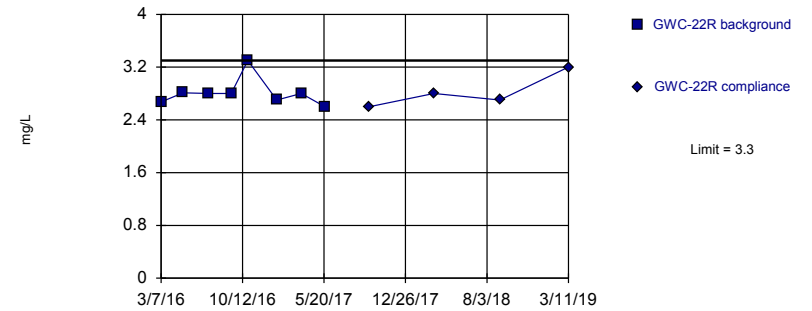


Background Data Summary: Mean=4.025, Std. Dev.=0.4659, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9022, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.675, Std. Dev.=0.06163, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7573, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
3/7/2016	2.3254	
5/9/2016	2.48	
7/14/2016	2.5	
9/12/2016	2.5	
10/31/2016	3	
1/11/2017	2.5	
3/21/2017	2.3	
5/22/2017	2.4	
9/20/2017		2.4
3/14/2018		2.2
9/10/2018		2.1
3/12/2019		2.8

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
3/8/2016	1.2699	
5/9/2016	1.39	
7/14/2016	1.7	
9/12/2016	1.6	
10/31/2016	1.9	
1/12/2017	1.8	
3/22/2017	2	
5/22/2017	1.9	
9/19/2017		1.9
3/14/2018		2
9/10/2018		1.6
3/12/2019		2.7

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
3/8/2016	4.2184	
5/9/2016	3.08	
7/15/2016	3.8	
9/9/2016	3.9	
10/27/2016	4.7	
1/12/2017	4.2	
3/21/2017	4.2	
5/23/2017	4.1	
9/19/2017		4.4
3/14/2018		4.4
9/10/2018		3.9
3/11/2019		4.2

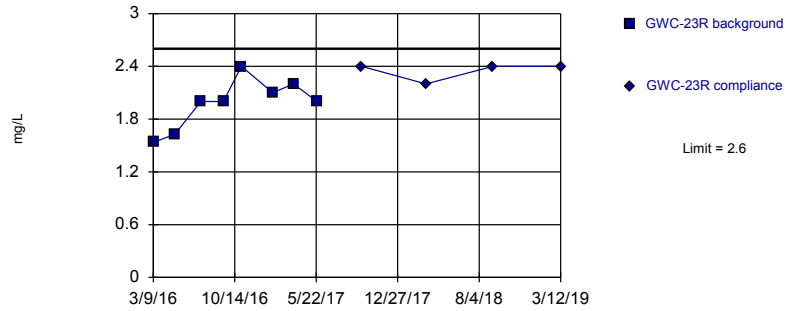
Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
3/7/2016	2.6729	
5/5/2016	2.81	
7/14/2016	2.8	
9/12/2016	2.8	
10/27/2016	3.3	
1/13/2017	2.7	
3/20/2017	2.8	
5/23/2017	2.6	
9/19/2017		2.6
3/13/2018		2.8
9/7/2018		2.7
3/11/2019		3.2

Within Limit

Prediction Limit
Intrawell Parametric

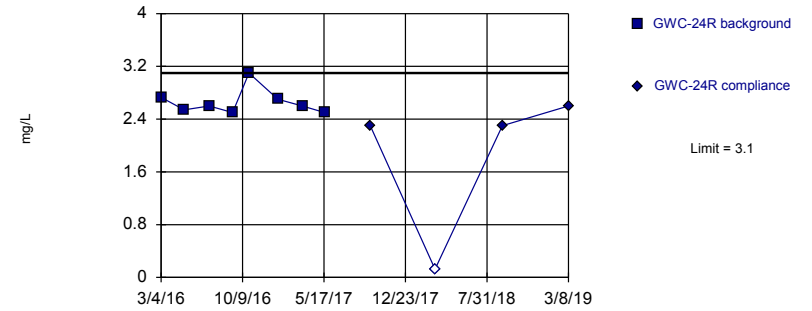


Background Data Summary: Mean=1.983, Std. Dev.=0.2831, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9276, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

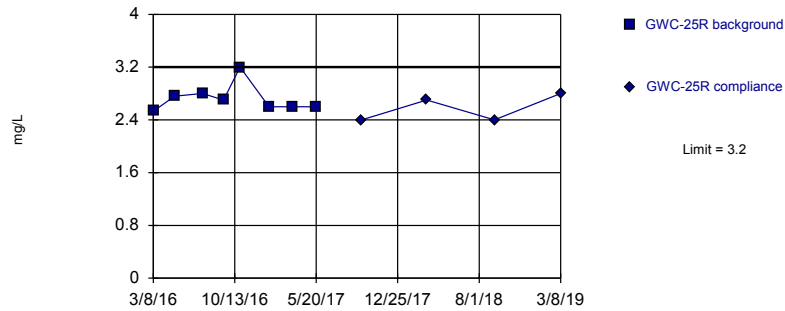


Background Data Summary: Mean=2.659, Std. Dev.=0.1974, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7876, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

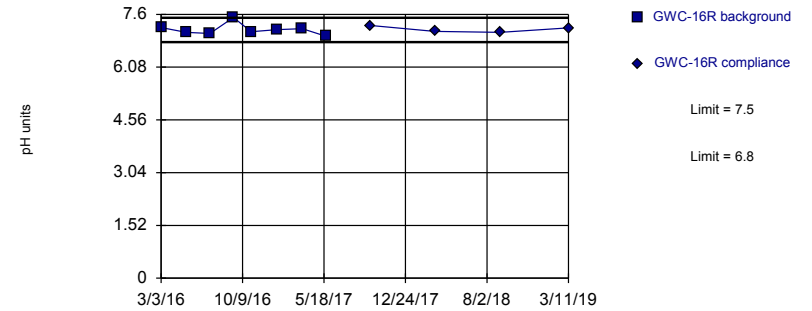


Background Data Summary: Mean=2.724, Std. Dev.=0.213, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7927, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.16, Std. Dev.=0.1627, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8775, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
3/9/2016	1.5349	
5/6/2016	1.63	
7/15/2016	2	
9/14/2016	2	
11/1/2016	2.4	
1/25/2017	2.1	
3/22/2017	2.2	
5/24/2017	2	
9/21/2017		2.4
3/14/2018		2.2
9/11/2018		2.4
3/12/2019		2.4

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
3/4/2016	2.7291	
5/5/2016	2.54	
7/12/2016	2.6	
9/13/2016	2.5	
10/27/2016	3.1	
1/13/2017	2.7	
3/20/2017	2.6	
5/19/2017	2.5	
9/19/2017		2.3
3/13/2018		<0.25
9/11/2018		2.3
3/8/2019		2.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
3/8/2016	2.5307	
5/4/2016	2.76	
7/18/2016	2.8	
9/13/2016	2.7	
10/27/2016	3.2	
1/13/2017	2.6	
3/16/2017	2.6	
5/19/2017	2.6	
9/19/2017		2.4
3/13/2018		2.7
9/11/2018		2.4
3/8/2019		2.8

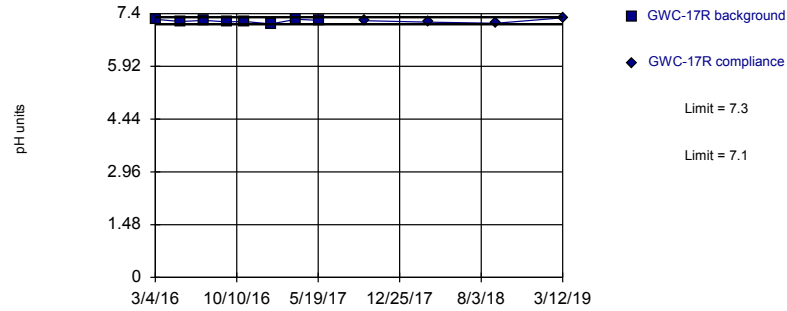
Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:07 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
3/3/2016	7.22 (D)	
5/10/2016	7.08	
7/13/2016	7.05	
9/15/2016	7.51	
11/2/2016	7.1	
1/11/2017	7.16	
3/20/2017	7.19	
5/23/2017	6.97	
9/21/2017		7.28
3/14/2018		7.11
9/7/2018		7.08
3/11/2019		7.21

Within Limits

Prediction Limit
Intrawell Parametric

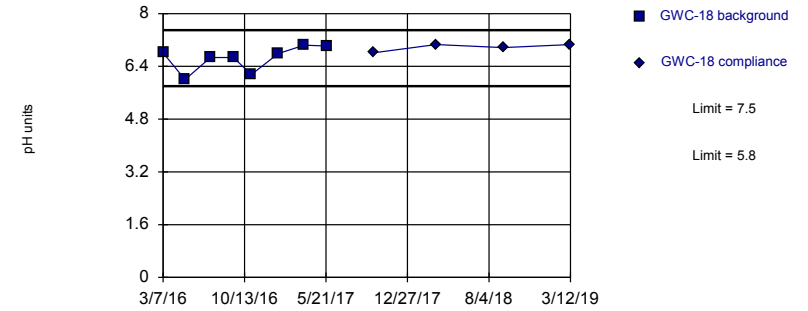


Background Data Summary: Mean=7.193, Std. Dev.=0.04268, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9104, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

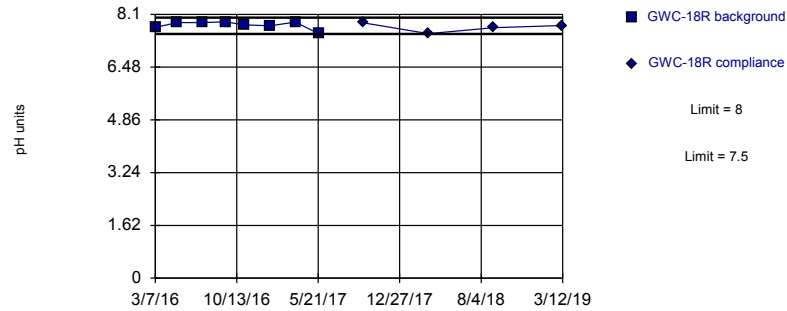


Background Data Summary: Mean=6.644, Std. Dev.=0.3793, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8695, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

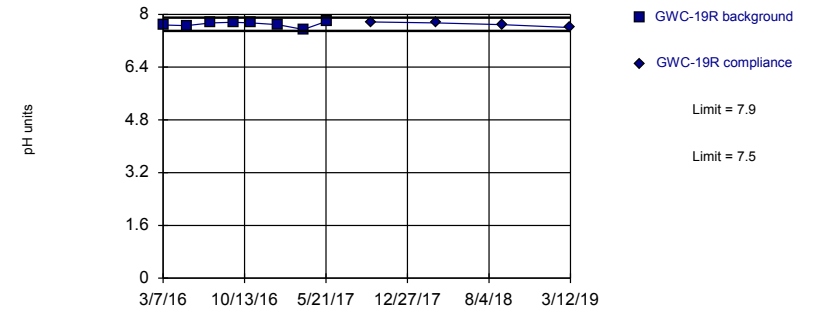


Background Data Summary: Mean=7.771, Std. Dev.=0.1218, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8087, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.7, Std. Dev.=0.07801, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9037, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
3/4/2016	7.24	
5/10/2016	7.18	
7/14/2016	7.21	
9/13/2016	7.17	
11/1/2016	7.18	
1/11/2017	7.11	
3/21/2017	7.24	
5/23/2017	7.21	
9/22/2017		7.2
3/14/2018		7.16
9/11/2018		7.13
3/12/2019		7.28

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
3/7/2016	6.81	
5/5/2016	6	
7/13/2016	6.67	
9/13/2016	6.67	
10/31/2016	6.15	
1/12/2017	6.79	
3/23/2017	7.04	
5/23/2017	7.02	
9/25/2017		6.81
3/14/2018		7.06
9/11/2018		6.97
3/12/2019		7.06

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
3/7/2016	7.7	
5/5/2016	7.85	
7/13/2016	7.85	
9/12/2016	7.87	
11/1/2016	7.78	
1/11/2017	7.75	
3/20/2017	7.86	
5/22/2017	7.51	
9/21/2017		7.84
3/14/2018		7.51
9/7/2018		7.69
3/12/2019		7.76

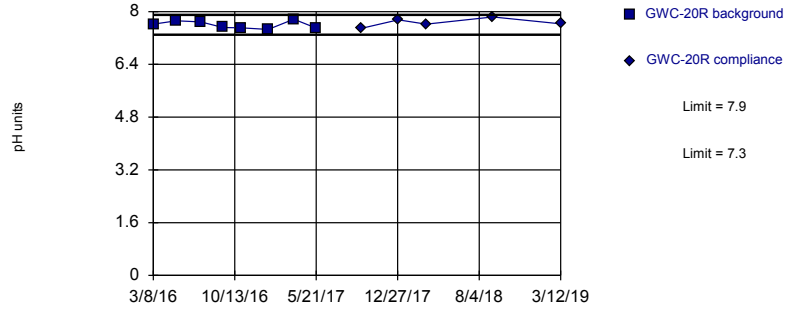
Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
3/7/2016	7.68	
5/9/2016	7.66	
7/14/2016	7.74	
9/12/2016	7.76	
10/31/2016	7.74	
1/11/2017	7.69	
3/21/2017	7.54	
5/22/2017	7.79	
9/20/2017		7.77
3/14/2018		7.74
9/10/2018		7.69
3/12/2019		7.6

Within Limits

Prediction Limit
Intrawell Parametric

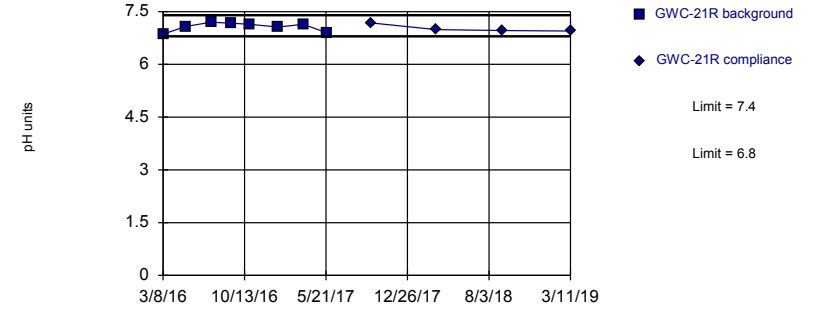


Background Data Summary: Mean=7.599, Std. Dev.=0.117, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9027, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

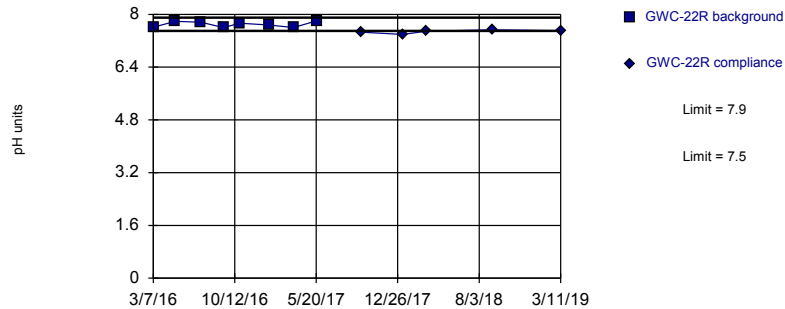


Background Data Summary: Mean=7.069, Std. Dev.=0.1253, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8661, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

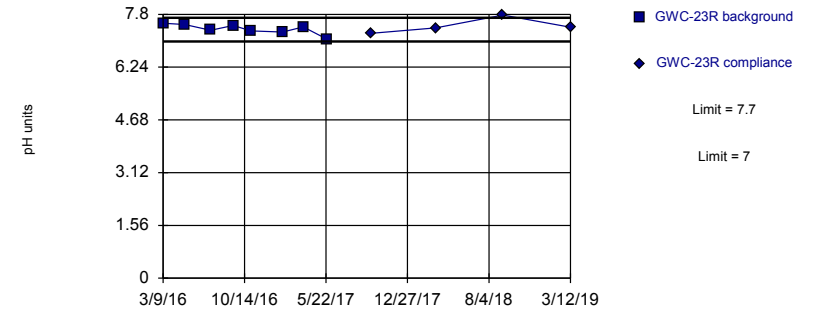


Background Data Summary: Mean=7.698, Std. Dev.=0.08714, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8791, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.366, Std. Dev.=0.1524, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9238, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
3/8/2016	7.62	
5/9/2016	7.72	
7/14/2016	7.69	
9/12/2016	7.52	
10/31/2016	7.51	
1/12/2017	7.46	
3/22/2017	7.77	
5/22/2017	7.5	
9/19/2017		7.49
12/29/2017		7.75 (Y)
3/14/2018		7.62
9/10/2018		7.84
3/12/2019		7.63

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
3/8/2016	6.86	
5/9/2016	7.08	
7/15/2016	7.2	
9/9/2016	7.17	
10/27/2016	7.14	
1/12/2017	7.06	
3/21/2017	7.14	
5/23/2017	6.9	
9/19/2017		7.18
3/14/2018		6.99
9/10/2018		6.96
3/11/2019		6.95

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
3/7/2016	7.61	
5/5/2016	7.79	
7/14/2016	7.76	
9/12/2016	7.6	
10/27/2016	7.73	
1/13/2017	7.68	
3/20/2017	7.6	
5/23/2017	7.81	
9/19/2017		7.46
1/9/2018		7.39 (Y)
3/13/2018		7.49
9/7/2018		7.53
3/11/2019		7.51

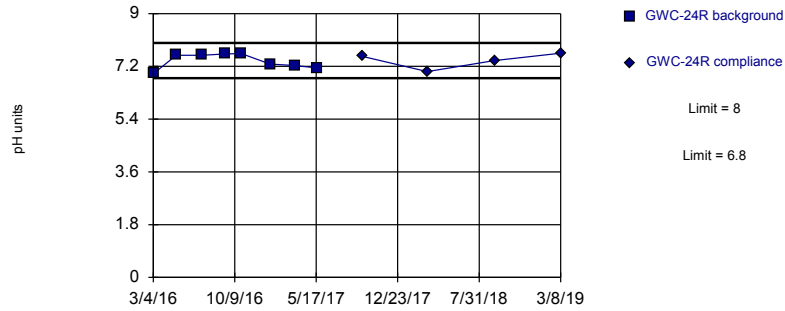
Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
3/9/2016	7.54	
5/6/2016	7.5	
7/15/2016	7.33	
9/14/2016	7.47	
11/1/2016	7.31	
1/25/2017	7.28	
3/22/2017	7.43	
5/24/2017	7.07	
9/21/2017		7.24
3/14/2018		7.4
9/11/2018		7.78
3/12/2019		7.42

Within Limits

Prediction Limit
Intrawell Parametric

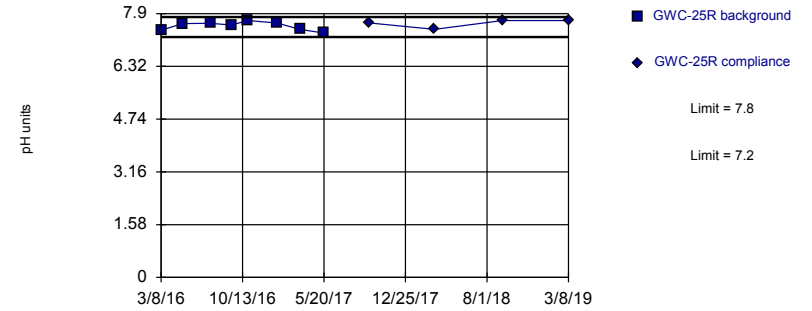


Background Data Summary: Mean=7.379, Std. Dev.=0.2606, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8726, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

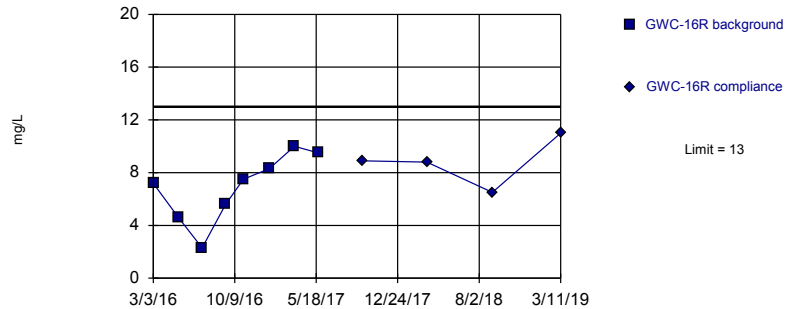


Background Data Summary: Mean=7.529, Std. Dev.=0.1292, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9156, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

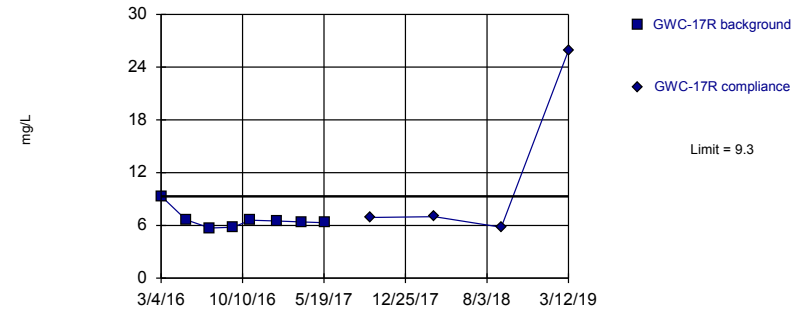


Background Data Summary: Mean=6.873, Std. Dev.=2.589, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9568, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=1.885, Std. Dev.=0.1523, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7603, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
3/4/2016	6.95	
5/5/2016	7.58	
7/12/2016	7.58	
9/13/2016	7.62	
10/27/2016	7.64	
1/13/2017	7.28	
3/20/2017	7.23	
5/19/2017	7.15	
9/19/2017		7.54
3/13/2018		7.02
9/11/2018		7.4
3/8/2019		7.65

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
3/8/2016	7.4	
5/4/2016	7.6	
7/18/2016	7.61	
9/13/2016	7.56	
10/27/2016	7.69	
1/13/2017	7.62	
3/16/2017	7.43	
5/19/2017	7.32	
9/19/2017		7.62
3/13/2018		7.43
9/11/2018		7.69
3/8/2019		7.69

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
3/3/2016	7.1809 (D)	
5/10/2016	4.6	
7/13/2016	2.3	
9/15/2016	5.6	
11/2/2016	7.5	
1/11/2017	8.3	
3/20/2017	10	
5/23/2017	9.5	
9/21/2017		8.9
3/14/2018		8.8
9/7/2018		6.5
3/11/2019		11

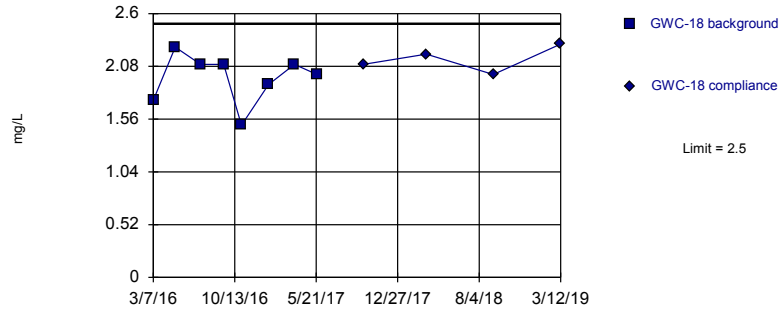
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
3/4/2016	9.3417	
5/10/2016	6.65	
7/14/2016	5.7	
9/14/2016	5.8	
11/1/2016	6.6	
1/11/2017	6.5	
3/21/2017	6.4	
5/23/2017	6.3	
9/22/2017		6.9
3/14/2018		7
9/11/2018		5.8
3/12/2019		25.9

Within Limit

Prediction Limit
Intrawell Parametric

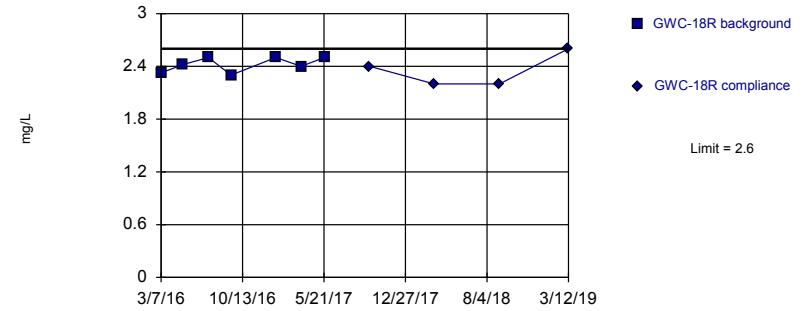


Background Data Summary: Mean=1.965, Std. Dev.=0.2441, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9166, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

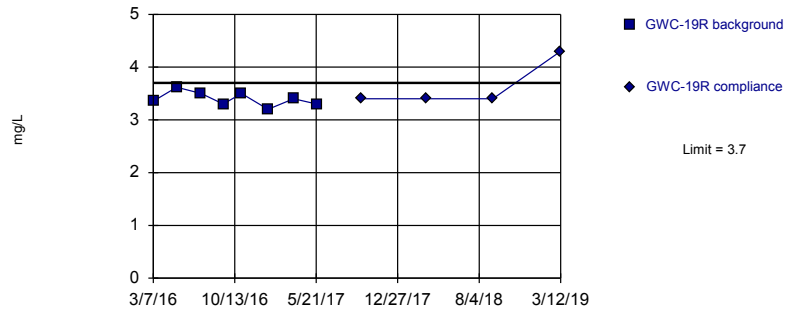


Background Data Summary: Mean=2.421, Std. Dev.=0.08453, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8552, critical = 0.73. Kappa = 2.527 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

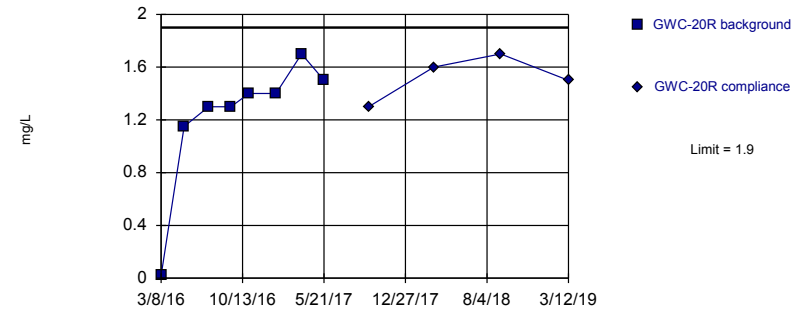


Background Data Summary: Mean=3.397, Std. Dev.=0.1364, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9662, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:05 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square transformation): Mean=1.72, Std. Dev.=0.8351, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9072, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
3/7/2016	1.7468	
5/5/2016	2.27	
7/13/2016	2.1	
9/13/2016	2.1	
10/31/2016	1.5	
1/12/2017	1.9	
3/23/2017	2.1	
5/23/2017	2	
9/25/2017		2.1
3/14/2018		2.2
9/11/2018		2
3/12/2019		2.3

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
3/7/2016	2.3258	
5/5/2016	2.42	
7/13/2016	2.5	
9/12/2016	2.3	
1/11/2017	2.5	
3/20/2017	2.4	
5/22/2017	2.5	
9/21/2017		2.4
3/14/2018		2.2
9/7/2018		2.2
3/12/2019		2.6

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
3/7/2016	3.3556	
5/9/2016	3.62	
7/14/2016	3.5	
9/12/2016	3.3	
10/31/2016	3.5	
1/11/2017	3.2	
3/21/2017	3.4	
5/22/2017	3.3	
9/20/2017		3.4
3/14/2018		3.4
9/10/2018		3.4
3/12/2019		4.3

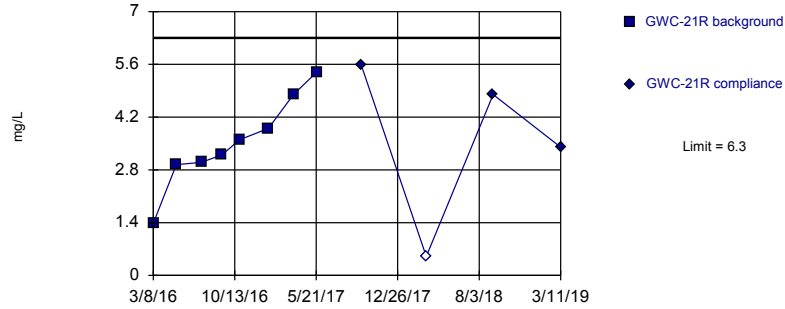
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
3/8/2016	0.0196 (J)	
5/9/2016	1.15	
7/14/2016	1.3	
9/12/2016	1.3	
10/31/2016	1.4	
1/12/2017	1.4	
3/22/2017	1.7	
5/22/2017	1.5	
9/19/2017		1.3
3/14/2018		1.6
9/10/2018		1.7
3/12/2019		1.5

Within Limit

Prediction Limit
 Intrawell Parametric

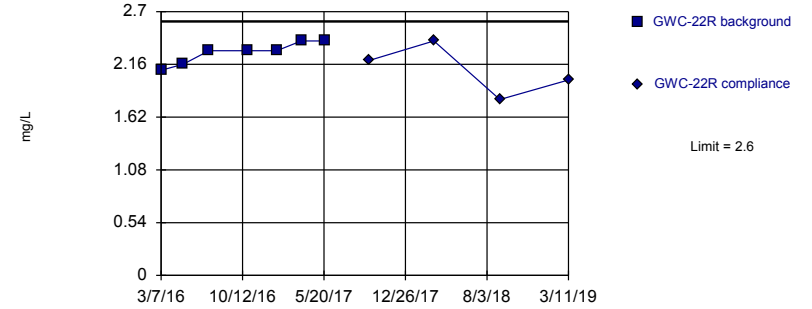


Background Data Summary: Mean=3.528, Std. Dev.=1.23, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9655, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
 Intrawell Parametric

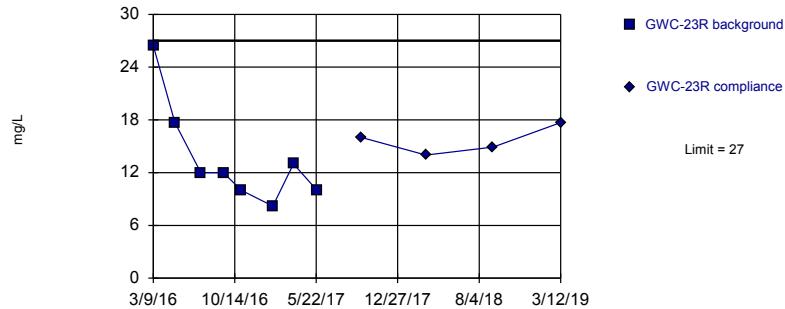


Background Data Summary: Mean=2.28, Std. Dev.=0.1129, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8783, critical = 0.73. Kappa = 2.527 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
 Intrawell Parametric

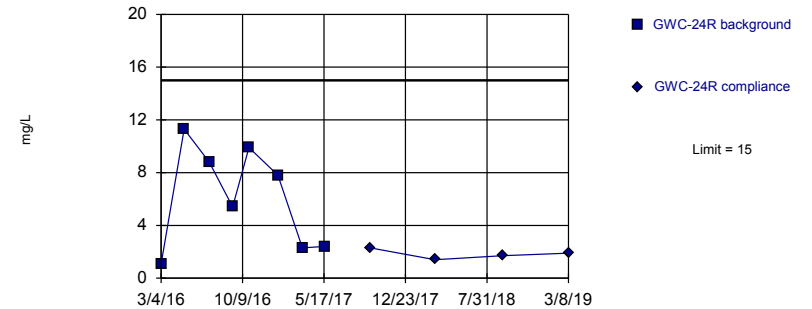


Background Data Summary: Mean=13.67, Std. Dev.=5.88, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8091, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=6.123, Std. Dev.=3.881, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9179, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
3/8/2016	1.3858	
5/9/2016	2.94	
7/15/2016	3	
9/9/2016	3.2	
10/27/2016	3.6	
1/12/2017	3.9	
3/21/2017	4.8	
5/23/2017	5.4	
9/19/2017		5.6
3/14/2018		<1
9/10/2018		4.8
3/11/2019		3.4

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
3/7/2016	2.1008	
5/5/2016	2.16	
7/14/2016	2.3	
10/27/2016	2.3	
1/13/2017	2.3	
3/20/2017	2.4	
5/23/2017	2.4	
9/19/2017		2.2
3/13/2018		2.4
9/7/2018		1.8
3/11/2019		2

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
3/9/2016	26.4322	
5/6/2016	17.7	
7/15/2016	12	
9/14/2016	12	
11/1/2016	10	
1/25/2017	8.2	
3/22/2017	13	
5/24/2017	10	
9/21/2017		16
3/14/2018		14
9/11/2018		14.9
3/12/2019		17.7

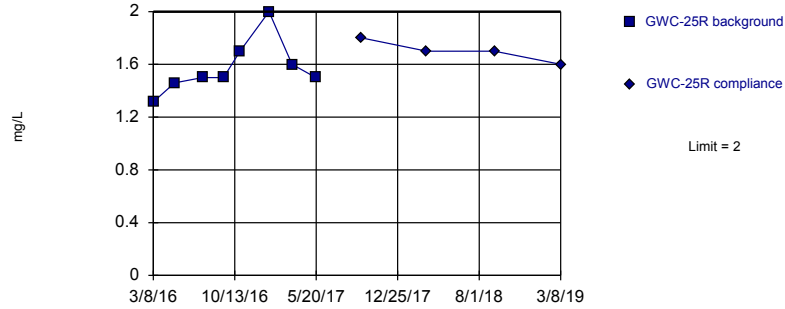
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
3/4/2016	1.0816	
5/5/2016	11.3	
7/12/2016	8.8	
9/13/2016	5.4	
10/27/2016	9.9	
1/13/2017	7.8	
3/20/2017	2.3	
5/19/2017	2.4	
9/19/2017		2.3
3/13/2018		1.4
9/11/2018		1.7
3/8/2019		1.9

Within Limit

Prediction Limit
Intrawell Parametric

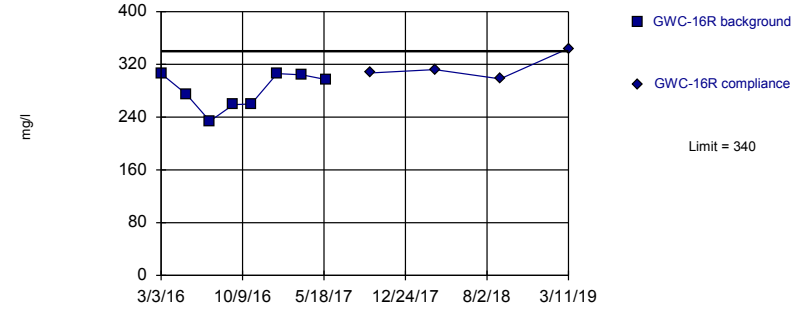


Background Data Summary: Mean=1.572, Std. Dev.=0.205, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8756, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

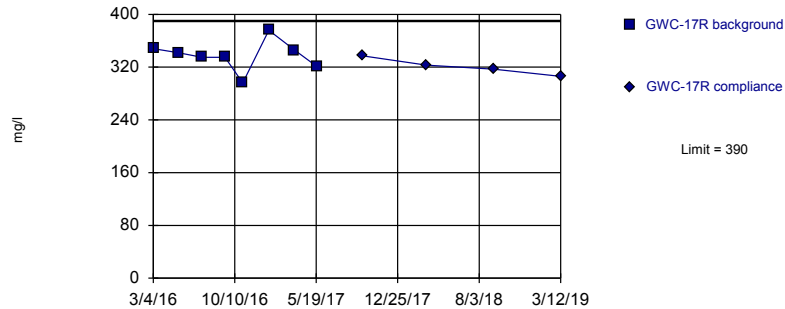


Background Data Summary: Mean=280.1, Std. Dev.=27.25, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8725, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

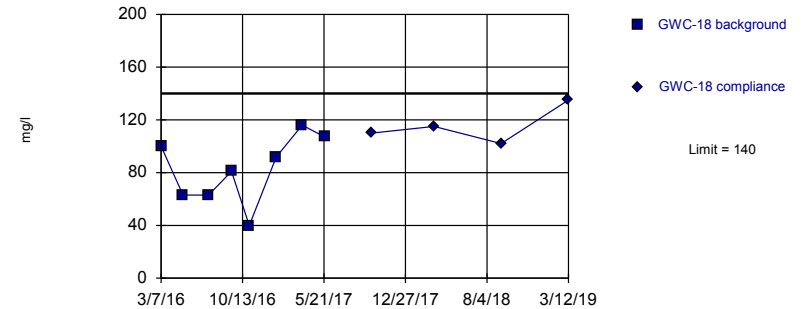


Background Data Summary: Mean=337.3, Std. Dev.=23.07, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.953, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=82.75, Std. Dev.=25.88, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9572, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
3/8/2016	1.3157	
5/4/2016	1.46	
7/18/2016	1.5	
9/13/2016	1.5	
10/27/2016	1.7	
1/13/2017	2	
3/16/2017	1.6	
5/19/2017	1.5	
9/19/2017		1.8
3/13/2018		1.7
9/11/2018		1.7
3/8/2019		1.6

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
3/3/2016	306 (D)	
5/10/2016	275 (D)	
7/13/2016	234 (D)	
9/15/2016	259 (D)	
11/2/2016	260 (D)	
1/11/2017	306	
3/20/2017	304	
5/23/2017	297	
9/21/2017		307
3/14/2018		312
9/7/2018		298
3/11/2019		344

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
3/4/2016	348 (D)	
5/10/2016	342 (D)	
7/14/2016	335 (D)	
9/14/2016	335 (D)	
11/1/2016	296 (D)	
1/11/2017	376	
3/21/2017	346	
5/23/2017	320	
9/22/2017		337
3/14/2018		323
9/11/2018		317
3/12/2019		306

Prediction Limit

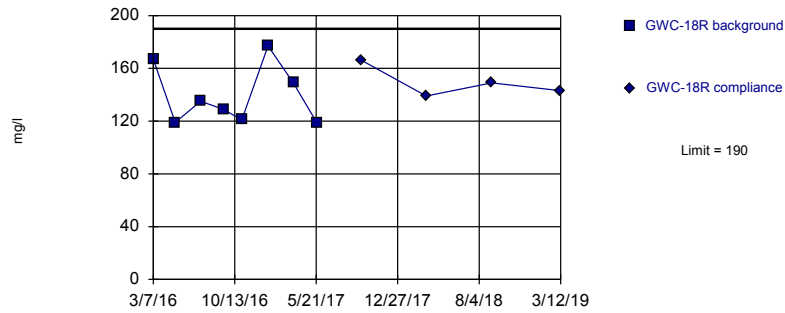
Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
3/7/2016	100 (D)	
5/5/2016	63 (D)	
7/13/2016	63 (D)	
9/13/2016	81 (D)	
10/31/2016	40 (D)	
1/12/2017	92	
3/23/2017	116	
5/23/2017	107	
9/25/2017		110
3/14/2018		115
9/11/2018		102
3/12/2019		135 (X)

Within Limit

Prediction Limit
Intrawell Parametric

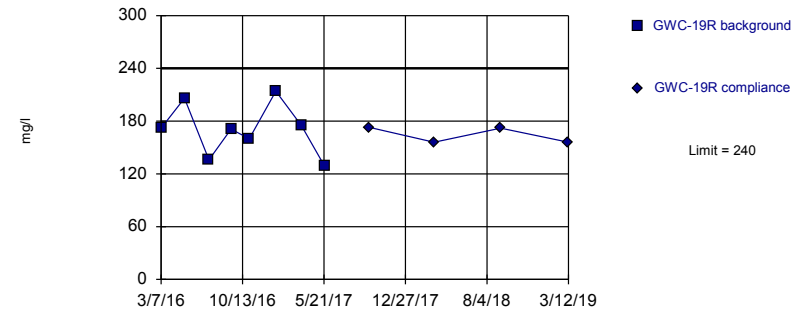


Background Data Summary: Mean=139.5, Std. Dev.=22.57, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.864, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

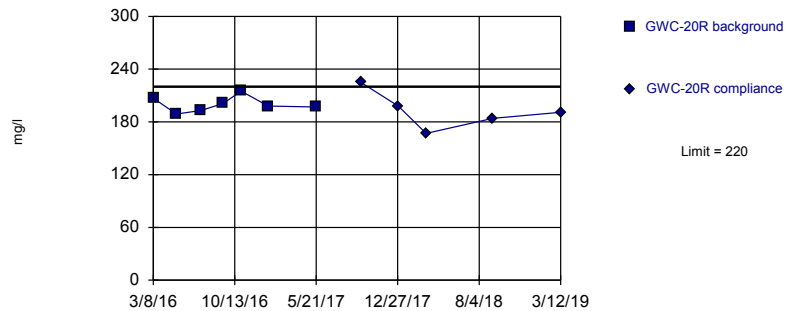


Background Data Summary: Mean=170.4, Std. Dev.=29.76, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9383, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

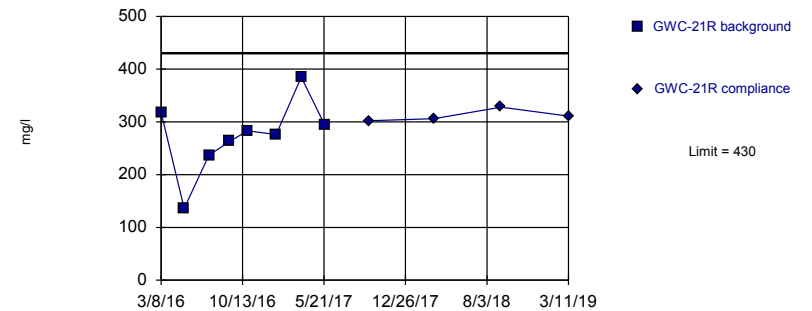


Background Data Summary: Mean=200, Std. Dev.=8.737, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9638, critical = 0.73. Kappa = 2.527 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=274, Std. Dev.=70.99, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9402, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
3/7/2016	167 (D)	
5/5/2016	119 (D)	
7/13/2016	135 (D)	
9/12/2016	129 (D)	
11/1/2016	121 (D)	
1/11/2017	177	
3/20/2017	149	
5/22/2017	119	
9/21/2017		166
3/14/2018		139
9/7/2018		149
3/12/2019		143 (X)

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
3/7/2016	172 (D)	
5/9/2016	206 (D)	
7/14/2016	136 (D)	
9/12/2016	171 (D)	
10/31/2016	160 (D)	
1/11/2017	214	
3/21/2017	175 (J)	
5/22/2017	129	
9/20/2017		173
3/14/2018		156
9/10/2018		172
3/12/2019		156 (X)

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
3/8/2016	207 (D)	
5/9/2016	189 (D)	
7/14/2016	193 (D)	
9/12/2016	201 (D)	
10/31/2016	215 (D)	
1/12/2017	198	
5/22/2017	197	
9/19/2017		225
12/29/2017		198 (Y)
3/14/2018		167
9/10/2018		184
3/12/2019		191 (X)

Prediction Limit

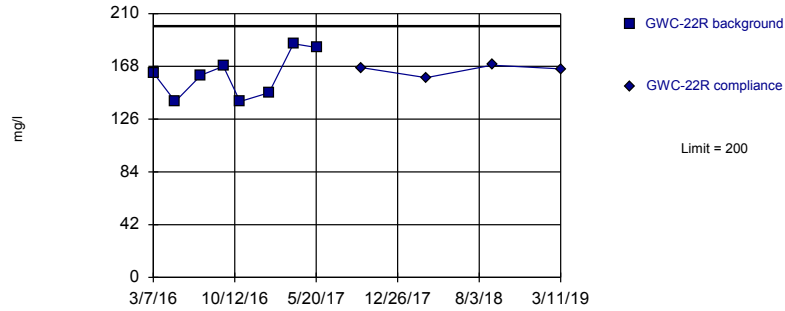
Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
3/8/2016	318 (D)	
5/9/2016	136 (D)	
7/15/2016	237 (D)	
9/9/2016	263 (D)	
10/27/2016	283 (D)	
1/12/2017	276	
3/21/2017	385	
5/23/2017	294	
9/19/2017		302
3/14/2018		306
9/10/2018		328
3/11/2019		311

Within Limit

Prediction Limit
Intrawell Parametric

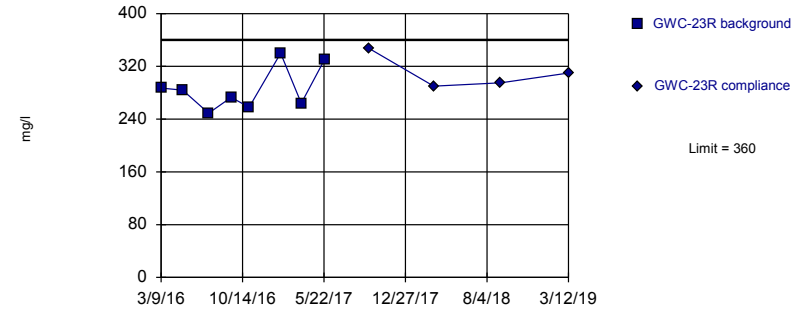


Background Data Summary: Mean=161, Std. Dev.=17.89, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9128, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

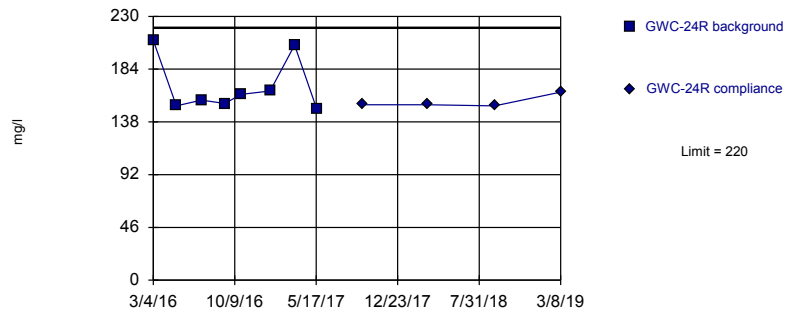


Background Data Summary: Mean=285.8, Std. Dev.=33.28, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8844, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

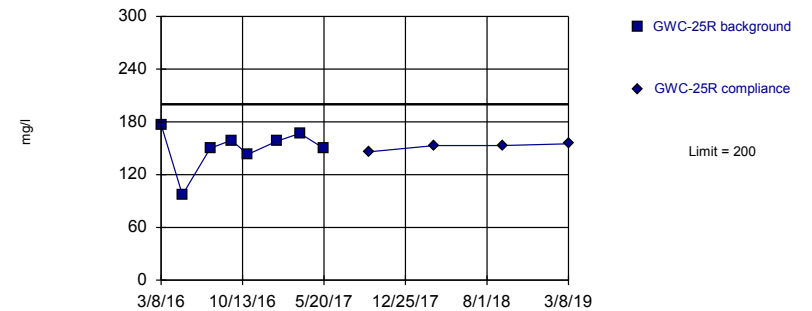


Background Data Summary: Mean=169.1, Std. Dev.=23.96, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7604, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=150.1, Std. Dev.=23.97, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8374, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:06 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
3/7/2016	163 (D)	
5/5/2016	140 (D)	
7/14/2016	161 (D)	
9/12/2016	168 (D)	
10/27/2016	140 (D)	
1/13/2017	147 (J)	
3/20/2017	186	
5/23/2017	183	
9/19/2017		167
3/13/2018		159
9/7/2018		169
3/11/2019		166

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
3/9/2016	287 (D)	
5/6/2016	284 (D)	
7/15/2016	249 (D)	
9/14/2016	273 (D)	
11/1/2016	258 (D)	
1/25/2017	340	
3/22/2017	264	
5/24/2017	331	
9/21/2017		347
3/14/2018		290
9/11/2018		295
3/12/2019		310 (X)

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
3/4/2016	209 (D)	
5/5/2016	152 (D)	
7/12/2016	157 (D)	
9/13/2016	154 (D)	
10/27/2016	162 (D)	
1/13/2017	165	
3/20/2017	205 (J)	
5/19/2017	149	
9/19/2017		153
3/13/2018		153
9/11/2018		152
3/8/2019		164

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 1:08 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
3/8/2016	177 (D)	
5/4/2016	97 (D)	
7/18/2016	150 (D)	
9/13/2016	159 (D)	
10/27/2016	143 (D)	
1/13/2017	158	
3/16/2017	167	
5/19/2017	150	
9/19/2017		146
3/13/2018		153
9/11/2018		153
3/8/2019		155

Trend Test - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 10:46 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-36 (bg)	-0.00...	-89	-78	Yes	21	90.48	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-36R (bg)	-0.00...	-108	-78	Yes	21	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-38 (bg)	-0.00...	-108	-78	Yes	21	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-52 (bg)	-0.00...	-108	-78	Yes	21	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-53 (bg)	-0.00...	-92	-78	Yes	21	80.95	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-54 (bg)	-0.00...	-121	-78	Yes	21	90.48	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-55 (bg)	-0.00...	-97	-78	Yes	21	95.24	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-55R (bg)	-0.00...	-106	-78	Yes	21	80.95	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-56 (bg)	-0.00...	-95	-78	Yes	21	95.24	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-36 (bg)	0.002134	115	78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-38 (bg)	-0.00...	-128	-78	Yes	21	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-52 (bg)	-0.00...	-122	-78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-53 (bg)	-0.00...	-162	-78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-53R (bg)	0.000...	81	78	Yes	21	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-55R (bg)	-0.00...	-86	-78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-56 (bg)	0.004478	120	78	Yes	21	4.762	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-36 (bg)	-3.109	-32	-31	Yes	11	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-37 (bg)	-0.08034	-45	-35	Yes	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-56 (bg)	-5.368	-38	-35	Yes	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-37 (bg)	-0.1098	-37	-35	Yes	12	8.333	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-54 (bg)	-0.2358	-42	-35	Yes	12	8.333	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-55R (bg)	0.2467	43	35	Yes	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-36 (bg)	-0.2132	-42	-35	Yes	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-37 (bg)	-0.1367	-40	-35	Yes	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-56 (bg)	0.1063	46	39	Yes	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-36 (bg)	-0.5177	-38	-31	Yes	11	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-37 (bg)	-0.2275	-43	-31	Yes	11	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-54 (bg)	-1.393	-58	-35	Yes	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-52 (bg)	11.61	34	31	Yes	11	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-55R (bg)	24.14	46	35	Yes	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-56 (bg)	54.77	36	35	Yes	12	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-36 (bg)	0.1003	84	53	Yes	16	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-52 (bg)	0.000...	58	53	Yes	16	56.25	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-53R (bg)	0.000...	61	53	Yes	16	43.75	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-55 (bg)	0.001022	59	53	Yes	16	68.75	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-51R_5...	-0.00...	-62	-48	Yes	15	33.33	n/a	n/a	0.02	NP

Trend Test - All Results

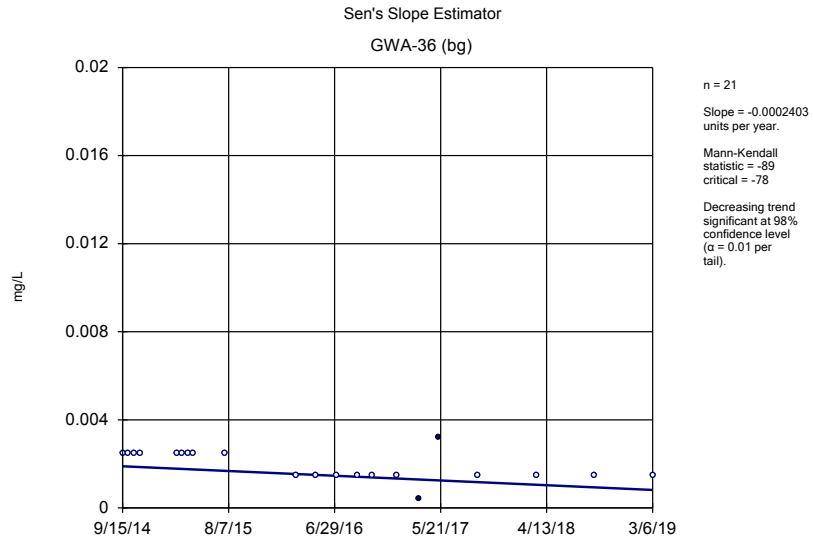
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 10:46 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Antimony (mg/L)	GWA-36 (bg)	-0.00...	-89	-78	Yes	21	90.48	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-36R (bg)	-0.00...	-108	-78	Yes	21	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-37 (bg)	0	-9	-73	No	20	45	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-38 (bg)	-0.00...	-108	-78	Yes	21	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-52 (bg)	-0.00...	-108	-78	Yes	21	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-53 (bg)	-0.00...	-92	-78	Yes	21	80.95	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-53R (bg)	0	-20	-73	No	20	60	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-54 (bg)	-0.00...	-121	-78	Yes	21	90.48	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-55 (bg)	-0.00...	-97	-78	Yes	21	95.24	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-55R (bg)	-0.00...	-106	-78	Yes	21	80.95	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-56 (bg)	-0.00...	-95	-78	Yes	21	95.24	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-51R_5...	-0.00...	-60	-78	No	21	66.67	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-36 (bg)	0.002134	115	78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-36R (bg)	0.000...	24	78	No	21	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-37 (bg)	0.000...	7	73	No	20	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-38 (bg)	-0.00...	-128	-78	Yes	21	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-52 (bg)	-0.00...	-122	-78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-53 (bg)	-0.00...	-162	-78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-53R (bg)	0.000...	81	78	Yes	21	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-54 (bg)	-0.00...	-62	-78	No	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-55 (bg)	-0.00...	-56	-78	No	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-55R (bg)	-0.00...	-86	-78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-56 (bg)	0.004478	120	78	Yes	21	4.762	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-51R_5...	0.003057	55	78	No	21	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-36 (bg)	-3.109	-32	-31	Yes	11	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-36R (bg)	-1.096	-27	-35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-37 (bg)	-0.08034	-45	-35	Yes	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-38 (bg)	-0.212	-6	-35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-52 (bg)	-0.2006	-7	-35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-53 (bg)	-0.9773	-21	-35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-53R (bg)	-0.3345	-12	-35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-54 (bg)	-0.8435	-14	-31	No	11	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-55 (bg)	2.908	17	35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-55R (bg)	1.274	10	35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-56 (bg)	-5.368	-38	-35	Yes	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-51R_5...	3.129	25	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-36 (bg)	-0.1192	-17	-35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-36R (bg)	-0.1475	-26	-35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-37 (bg)	-0.1098	-37	-35	Yes	12	8.333	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-38 (bg)	0.09467	19	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-52 (bg)	0.000...	5	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-53 (bg)	0	1	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-53R (bg)	-0.02697	-5	-35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-54 (bg)	-0.2358	-42	-35	Yes	12	8.333	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-55 (bg)	0.169	23	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-55R (bg)	0.2467	43	35	Yes	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-56 (bg)	0.7573	17	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-51R_5...	0.1991	30	35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-36 (bg)	-0.2132	-42	-35	Yes	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-36R (bg)	-0.03785	-12	-35	No	12	0	n/a	n/a	0.02	NP

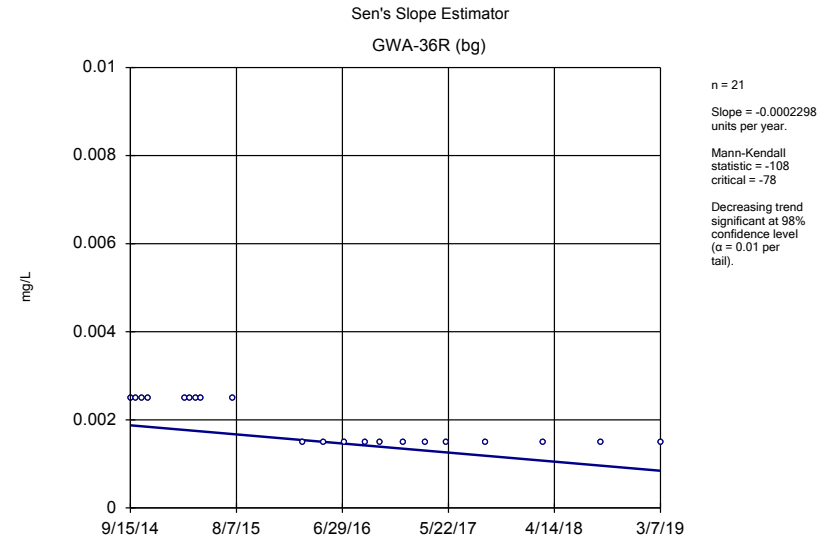
Trend Test - All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 10:46 AM

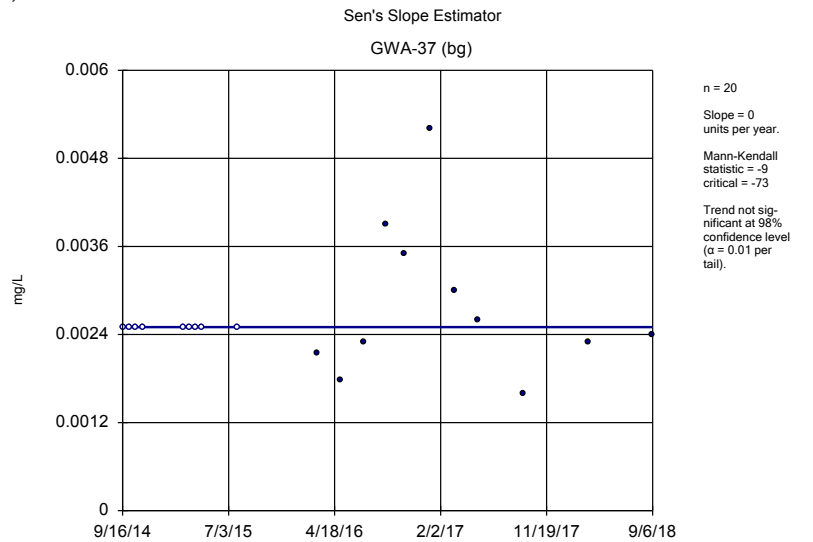
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
pH (pH units)	GWA-37 (bg)	-0.1367	-40	-35	Yes	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-38 (bg)	-0.03795	-6	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-52 (bg)	-0.07832	-32	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-53 (bg)	-0.03961	-21	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-53R (bg)	-0.01183	-7	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-54 (bg)	-0.03289	-9	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-55 (bg)	-0.04102	-8	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-55R (bg)	-0.05302	-12	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-56 (bg)	0.1063	46	39	Yes	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-51R_5...	0.005275	2	39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-36 (bg)	-0.5177	-38	-31	Yes	11	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-36R (bg)	0.5505	13	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-37 (bg)	-0.2275	-43	-31	Yes	11	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-38 (bg)	-0.2596	-16	-35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-52 (bg)	0.5432	8	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-53 (bg)	0	-6	-35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-53R (bg)	0	0	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-54 (bg)	-1.393	-58	-35	Yes	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-55 (bg)	-0.661	-2	-35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-55R (bg)	1.709	23	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-56 (bg)	15.6	28	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-51R_5...	3.492	33	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-36 (bg)	0.9229	2	31	No	11	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-36R (bg)	2.527	5	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-37 (bg)	0	-1	-31	No	11	36.36	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-38 (bg)	4.965	14	35	No	12	41.67	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-52 (bg)	11.61	34	31	Yes	11	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-53 (bg)	10.1	33	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-53R (bg)	9.885	12	27	No	10	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-54 (bg)	7.603	16	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-55 (bg)	34.01	34	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-55R (bg)	24.14	46	35	Yes	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-56 (bg)	54.77	36	35	Yes	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-51R_5...	24.9	22	35	No	12	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-36 (bg)	0.1003	84	53	Yes	16	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-36R (bg)	-0.00...	-10	-53	No	16	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-37 (bg)	-0.001	-34	-48	No	15	6.667	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-38 (bg)	-0.00...	-42	-53	No	16	25	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-52 (bg)	0.000...	58	53	Yes	16	56.25	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-53 (bg)	0.000...	41	53	No	16	50	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-53R (bg)	0.000...	61	53	Yes	16	43.75	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-54 (bg)	0.000...	46	53	No	16	43.75	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-55 (bg)	0.001022	59	53	Yes	16	68.75	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-55R (bg)	0.000...	33	53	No	16	62.5	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-56 (bg)	0.000...	35	53	No	16	50	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-51R_5...	-0.00...	-62	-48	Yes	15	33.33	n/a	n/a	0.02	NP



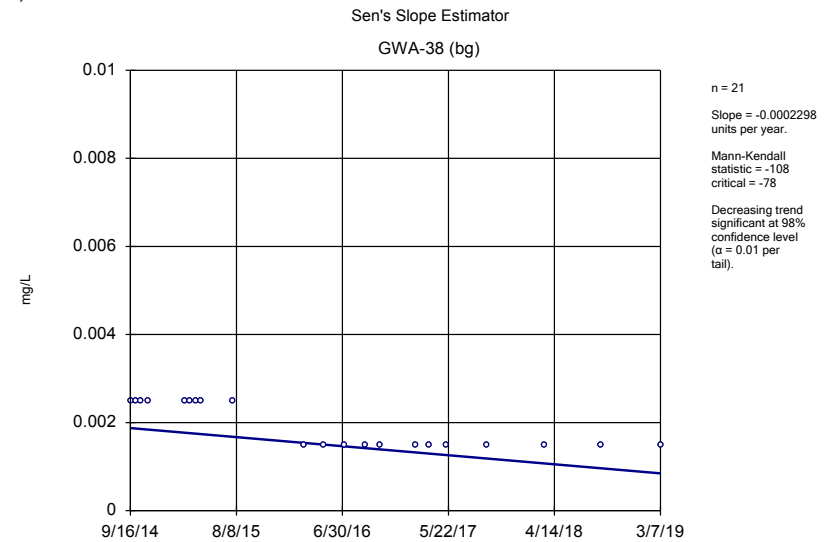
Constituent: Antimony Analysis Run 8/28/2019 10:38 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:38 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:38 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:38 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.003
5/2/2016	<0.003
7/7/2016	<0.003 (*)
9/7/2016	<0.003
10/25/2016	<0.003
1/5/2017	<0.003
3/15/2017	0.0004 (J)
5/17/2017	0.0032
9/15/2017	<0.003
3/12/2018	<0.003
9/6/2018	<0.003
3/6/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.003
5/2/2016	<0.003
7/6/2016	<0.003 (*)
9/7/2016	<0.003
10/25/2016	<0.003
1/5/2017	<0.003
3/14/2017	<0.003
5/16/2017	<0.003
9/15/2017	<0.003
3/12/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

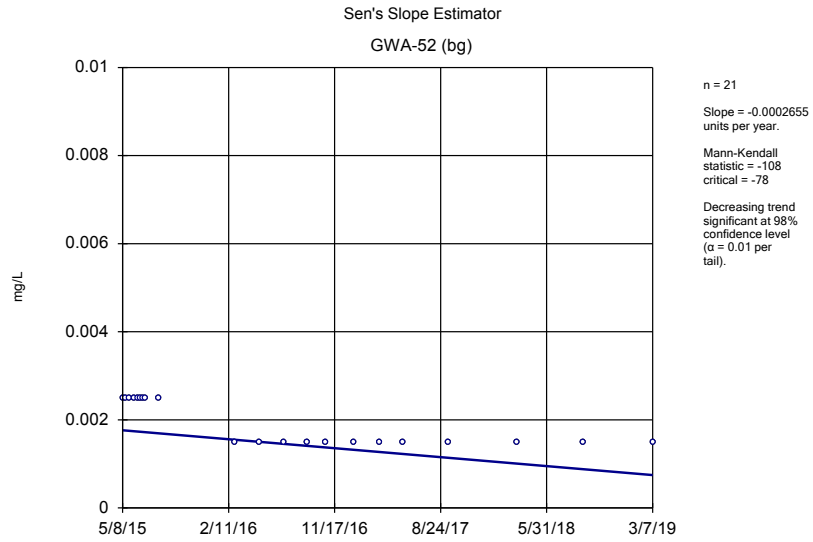
	GWA-37 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/1/2016	0.00214 (J)
5/3/2016	0.00178 (J)
7/8/2016	0.0023 (J)
9/7/2016	0.0039
10/25/2016	0.0035
1/6/2017	0.0052
3/14/2017	0.003
5/16/2017	0.0026 (J)
9/15/2017	0.0016 (J)
3/12/2018	0.0023 (J)
9/6/2018	0.0024 (J)
3/6/2019	0.0019 (X)

Sen's Slope Estimator

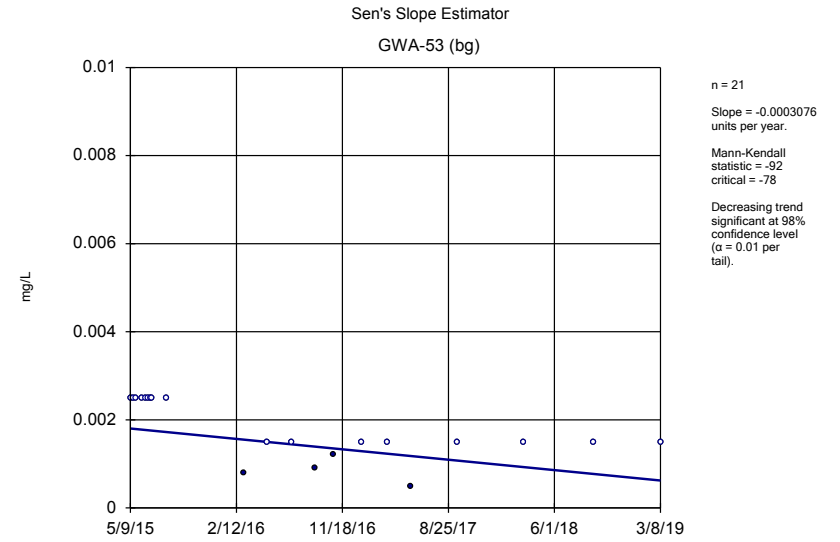
Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

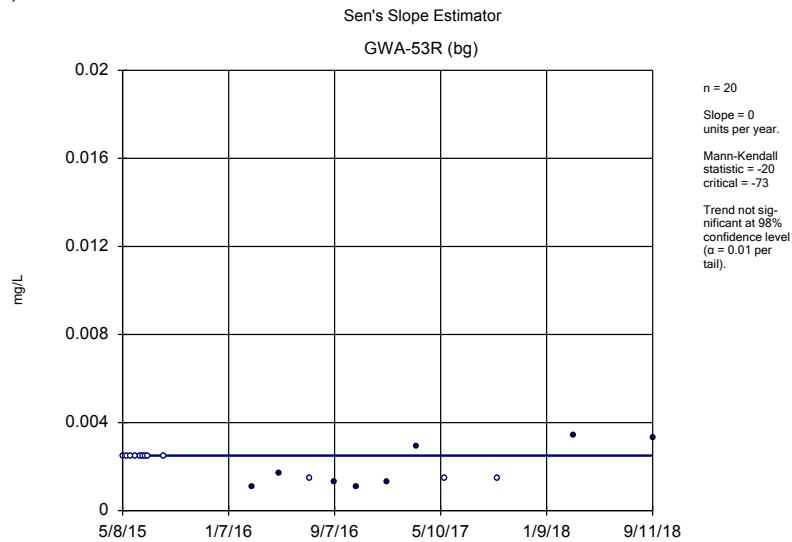
	GWA-38 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/6/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/2/2016	<0.003
5/3/2016	<0.003
7/7/2016	<0.003
9/8/2016	<0.003
10/25/2016	<0.003
2/9/2017	<0.003
3/23/2017	<0.003
5/17/2017	<0.003
9/19/2017	<0.003
3/13/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003



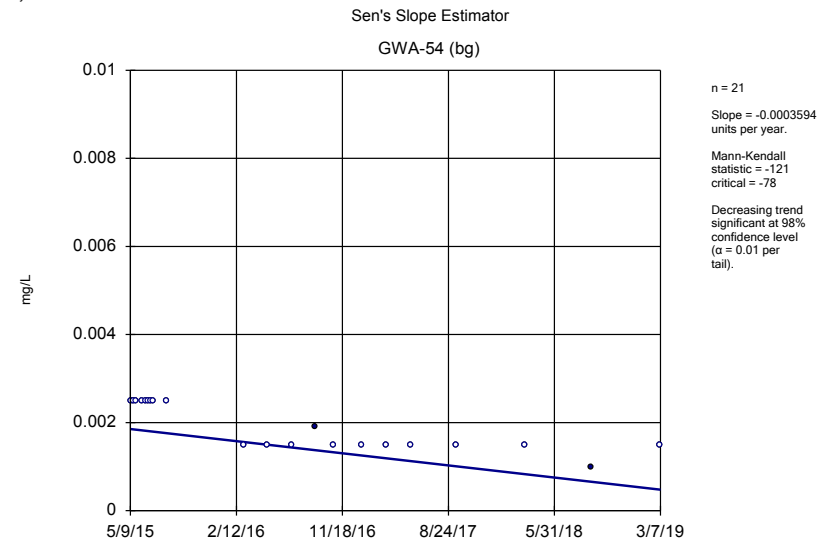
Constituent: Antimony Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
2/29/2016	<0.003
5/4/2016	<0.003
7/8/2016	<0.003 (*)
9/8/2016	<0.003
10/26/2016	<0.003
1/6/2017	<0.003
3/15/2017	<0.003
5/17/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/17/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	0.000782 (J)
5/3/2016	<0.003
7/8/2016	<0.003 (*)
9/8/2016	0.0009 (J)
10/26/2016	0.0012 (J)
1/9/2017	<0.003
3/16/2017	<0.003
5/19/2017	0.0005 (J)
9/19/2017	<0.003
3/13/2018	<0.003
9/11/2018	<0.003
3/8/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

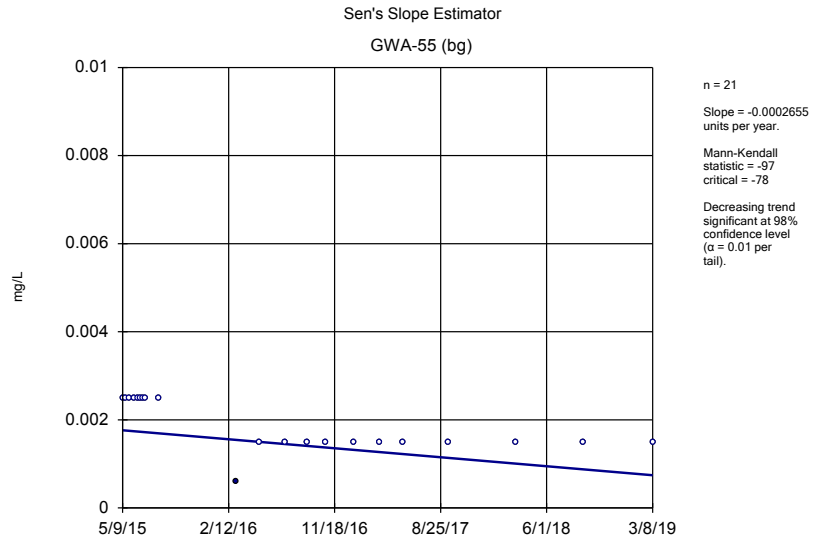
	GWA-53R (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	0.00106 (J)
5/3/2016	0.00171 (J)
7/11/2016	<0.003 (*)
9/7/2016	0.0013 (J)
10/27/2016	0.0011 (J)
1/6/2017	0.0013 (J)
3/16/2017	0.0029 (J)
5/19/2017	<0.003
9/19/2017	<0.003
3/13/2018	0.0034
9/11/2018	0.0033
3/12/2019	0.002 (X)

Sen's Slope Estimator

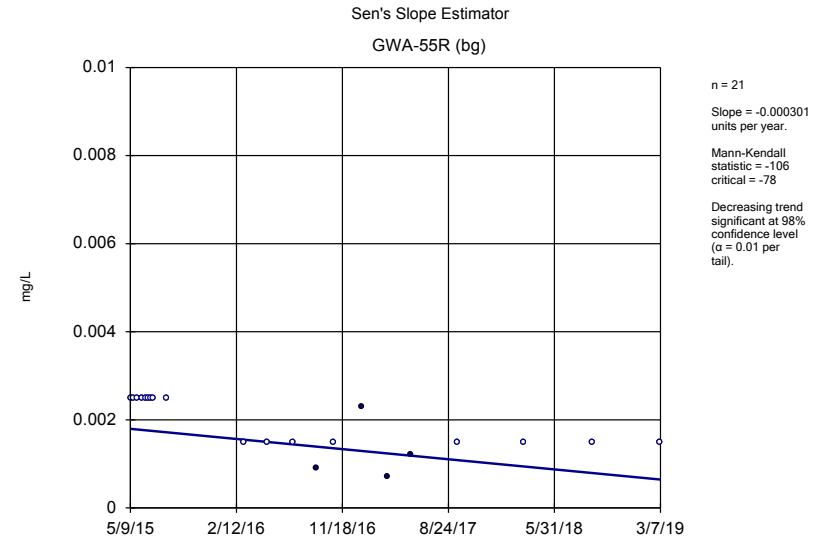
Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

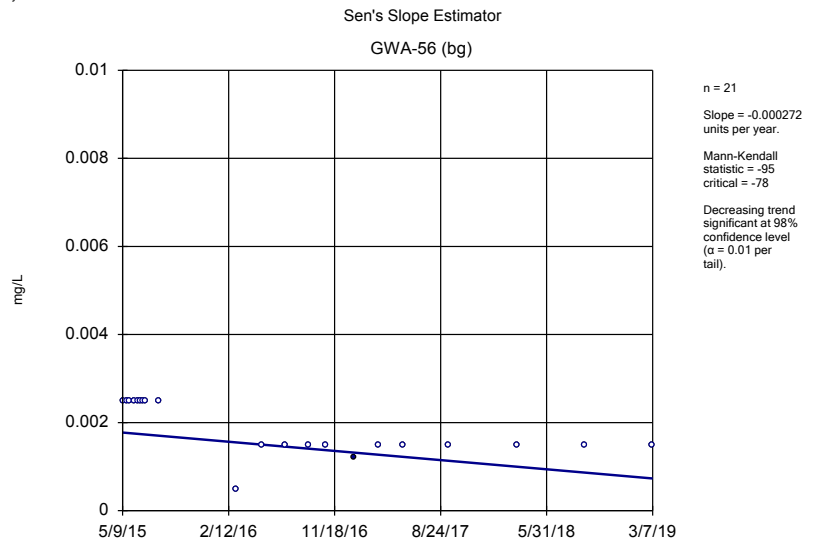
	GWA-54 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.003
5/4/2016	<0.003
7/8/2016	<0.003
9/8/2016	0.0019 (J)
10/26/2016	<0.003
1/9/2017	<0.003
3/15/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/6/2018	0.001 (J)
3/7/2019	<0.003



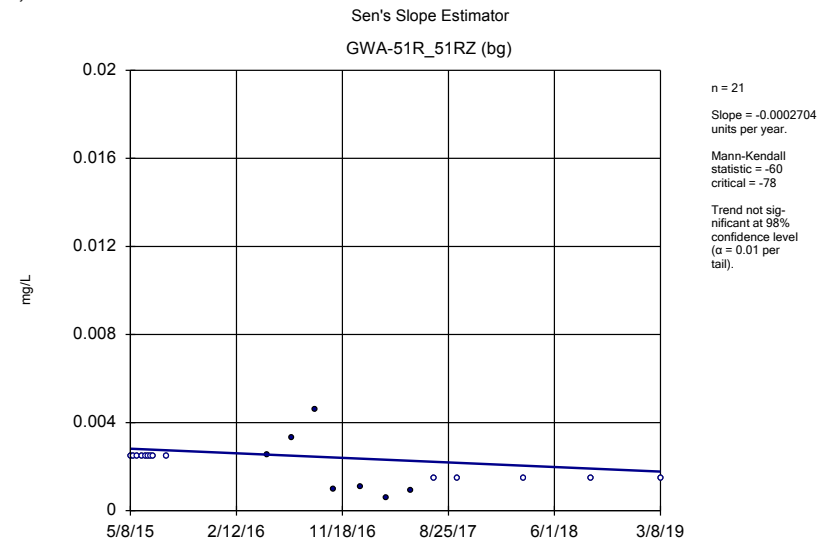
Constituent: Antimony Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/2/2016	0.000608 (J)
5/3/2016	<0.003
7/11/2016	<0.003 (*)
9/9/2016	<0.003
10/26/2016	<0.003
1/9/2017	<0.003
3/16/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/12/2018	<0.003
9/7/2018	<0.003
3/8/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.003
5/3/2016	<0.003
7/11/2016	<0.003 (*)
9/9/2016	0.0009 (J)
10/27/2016	<0.003
1/9/2017	0.0023 (J)
3/16/2017	0.0007 (J)
5/18/2017	0.0012 (J)
9/18/2017	<0.003
3/12/2018	<0.003
9/7/2018	<0.003
3/7/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.005
5/19/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.001
5/9/2016	<0.003
7/11/2016	<0.003
9/9/2016	<0.003
10/26/2016	<0.003
1/9/2017	0.0012 (J)
3/15/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/7/2018	<0.003
3/7/2019	<0.003

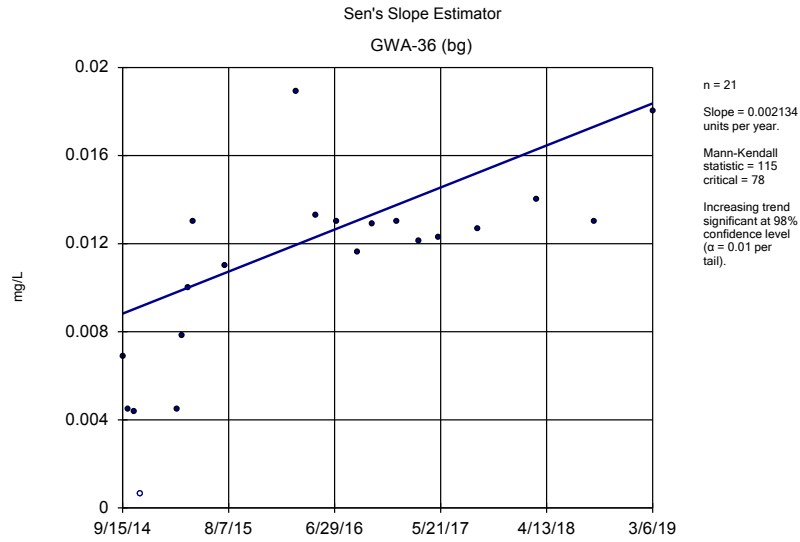
Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes

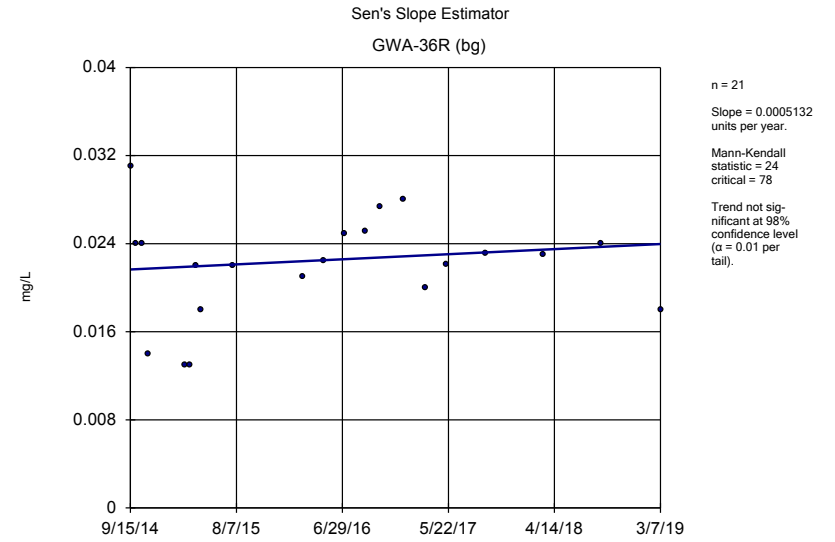
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

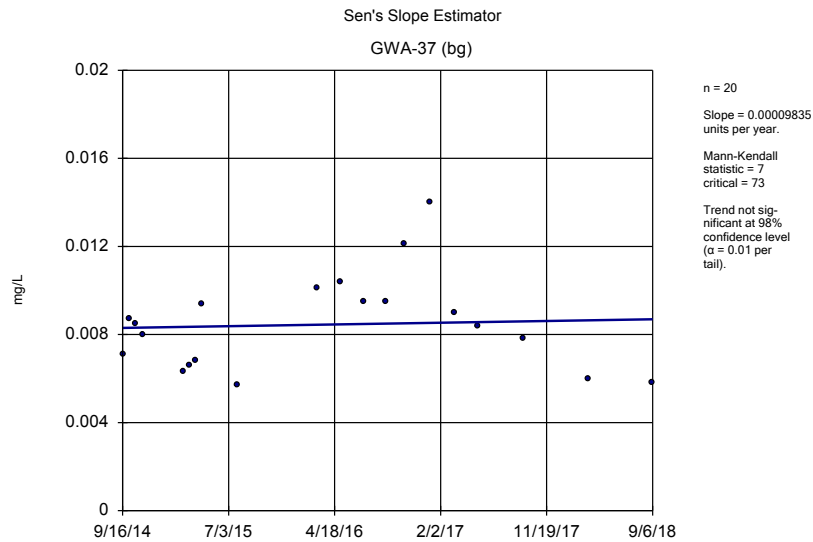
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
5/4/2016	0.00254 (JD)
7/7/2016	0.0033 (D)
9/8/2016	0.0046 (D)
10/26/2016	0.001 (JD)
1/6/2017	0.0011 (JD)
3/15/2017	0.0006 (JD)
5/18/2017	0.0009 (JD)
7/19/2017	<0.003 (D)
9/19/2017	<0.003 (D)
3/13/2018	<0.003
9/7/2018	<0.003
3/8/2019	<0.003



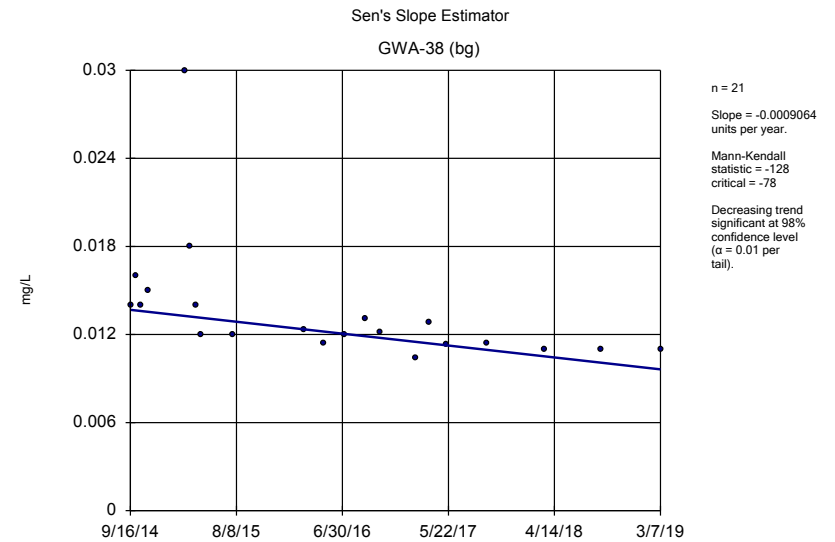
Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	0.0069
10/3/2014	0.0045
10/20/2014	0.0044
11/10/2014	<0.0013
3/2/2015	0.0045
3/17/2015	0.0078
4/5/2015	0.01
4/21/2015	0.013
7/28/2015	0.011
3/1/2016	0.0189
5/2/2016	0.0133
7/7/2016	0.013
9/7/2016	0.0116
10/25/2016	0.0129
1/5/2017	0.013
3/15/2017	0.0121
5/17/2017	0.0123
9/15/2017	0.0127
3/12/2018	0.014
9/6/2018	0.013
3/6/2019	0.018

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.031
10/3/2014	0.024
10/20/2014	0.024
11/10/2014	0.014
3/2/2015	0.013
3/17/2015	0.013
4/5/2015	0.022
4/21/2015	0.018
7/28/2015	0.022
3/1/2016	0.021
5/2/2016	0.0225
7/6/2016	0.0249
9/7/2016	0.0251
10/25/2016	0.0274
1/5/2017	0.028
3/14/2017	0.02
5/16/2017	0.0221
9/15/2017	0.0231
3/12/2018	0.023
9/6/2018	0.024
3/7/2019	0.018

Sen's Slope Estimator

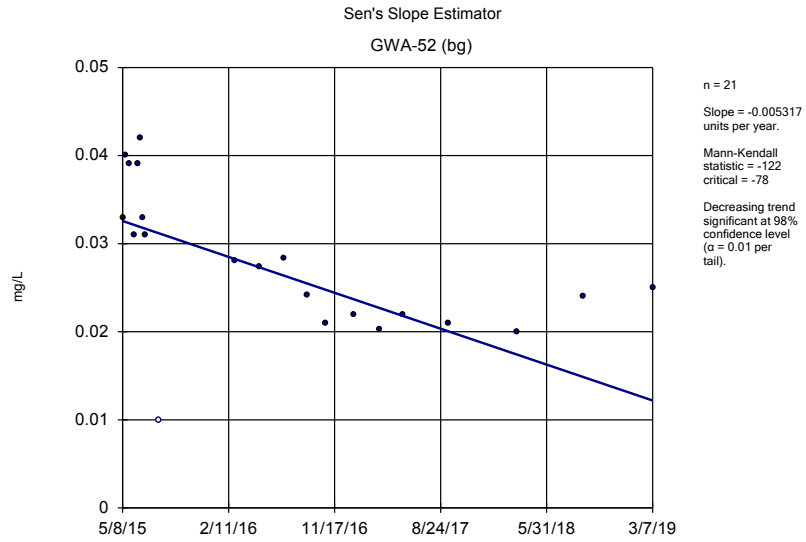
Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	0.0071
10/3/2014	0.0087
10/20/2014	0.0085
11/10/2014	0.008
3/2/2015	0.0063
3/17/2015	0.0066
4/5/2015	0.0068
4/22/2015	0.0094
7/28/2015	0.0057
3/1/2016	0.0101
5/3/2016	0.0104
7/8/2016	0.0095 (J)
9/7/2016	0.0095 (J)
10/25/2016	0.0121
1/6/2017	0.014
3/14/2017	0.009 (J)
5/16/2017	0.0084 (J)
9/15/2017	0.0078 (J)
3/12/2018	0.006 (J)
9/6/2018	0.0058 (J)
3/6/2019	0.0052 (X)

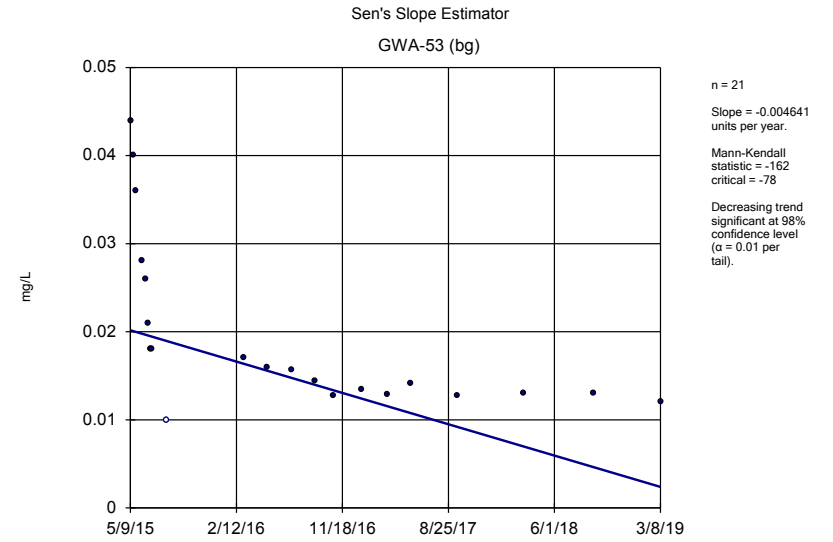
Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

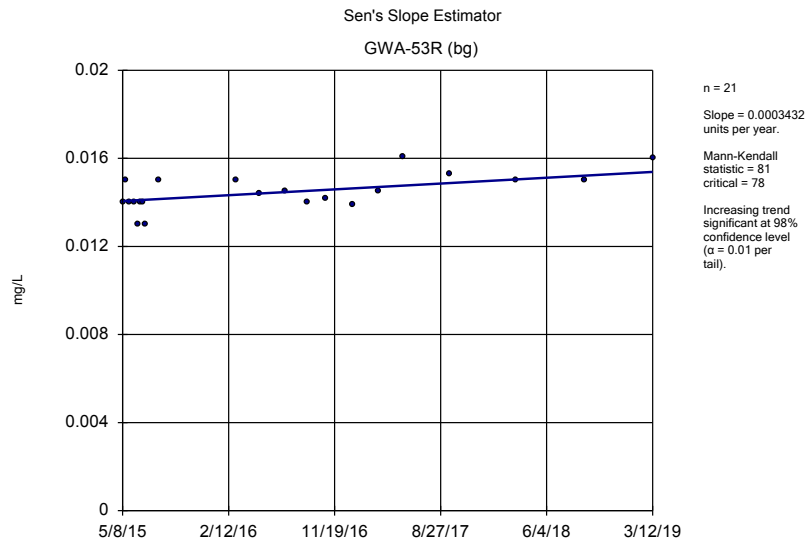
	GWA-38 (bg)
9/16/2014	0.014
10/3/2014	0.016
10/20/2014	0.014
11/10/2014	0.015
3/2/2015	0.03
3/17/2015	0.018
4/6/2015	0.014
4/22/2015	0.012
7/28/2015	0.012
3/2/2016	0.0123
5/3/2016	0.0114
7/7/2016	0.012
9/8/2016	0.0131
10/25/2016	0.0122
2/9/2017	0.0104
3/23/2017	0.0128
5/17/2017	0.0113
9/19/2017	0.0114
3/13/2018	0.011
9/6/2018	0.011
3/7/2019	0.011



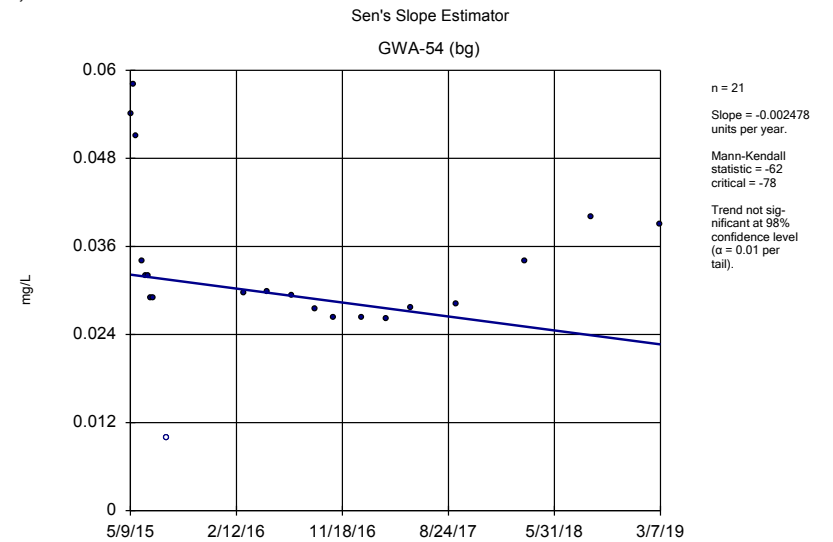
Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	0.033
5/17/2015	0.04
5/25/2015	0.039
6/8/2015	0.031
6/18/2015	0.039
6/24/2015	0.042
6/30/2015	0.033
7/6/2015	0.031
8/12/2015	<0.02
2/29/2016	0.028
5/4/2016	0.0273
7/8/2016	0.0284
9/8/2016	0.0242
10/26/2016	0.021
1/6/2017	0.0219
3/15/2017	0.0202
5/17/2017	0.0219
9/15/2017	0.0209
3/13/2018	0.02
9/6/2018	0.024
3/7/2019	0.025

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	0.044
5/18/2015	0.04
5/25/2015	0.036
6/8/2015	0.028
6/17/2015	0.026
6/24/2015	0.021
6/30/2015	0.018
7/6/2015	0.018
8/12/2015	<0.02
3/2/2016	0.017
5/3/2016	0.016
7/8/2016	0.0156
9/8/2016	0.0144
10/26/2016	0.0128
1/9/2017	0.0134
3/16/2017	0.0129
5/19/2017	0.0141
9/19/2017	0.0127
3/13/2018	0.013
9/11/2018	0.013
3/8/2019	0.012

Sen's Slope Estimator

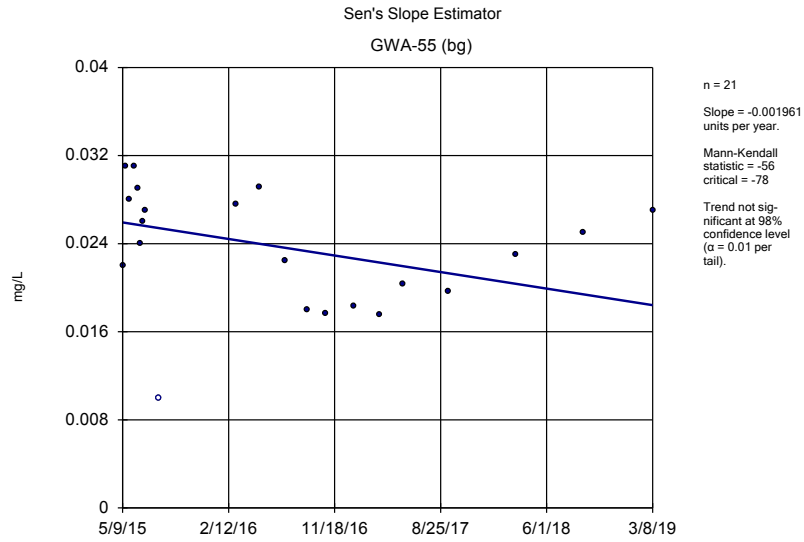
Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	0.014
5/17/2015	0.015
5/25/2015	0.014
6/8/2015	0.014
6/18/2015	0.013
6/24/2015	0.014
6/30/2015	0.014
7/6/2015	0.013
8/12/2015	0.015 (J)
3/2/2016	0.015
5/3/2016	0.0144
7/11/2016	0.0145
9/7/2016	0.014
10/27/2016	0.0142
1/6/2017	0.0139
3/16/2017	0.0145
5/19/2017	0.0161
9/19/2017	0.0153
3/13/2018	0.015
9/11/2018	0.015
3/12/2019	0.016

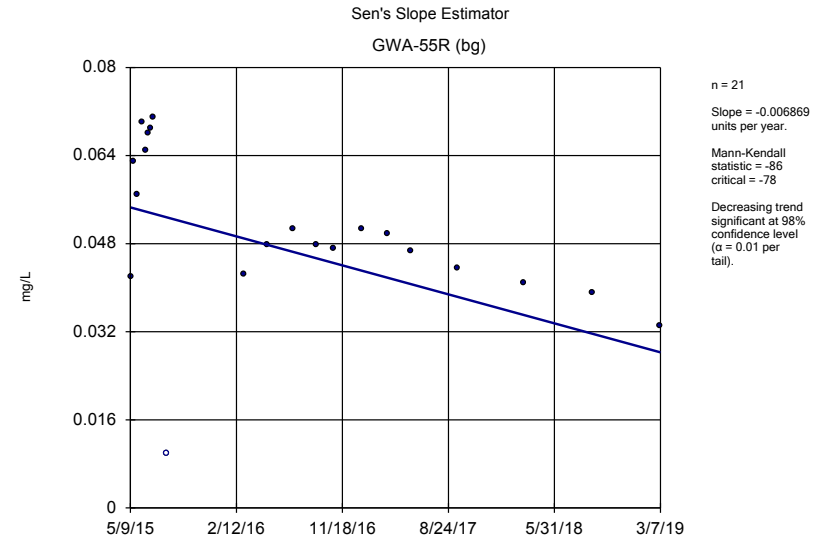
Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

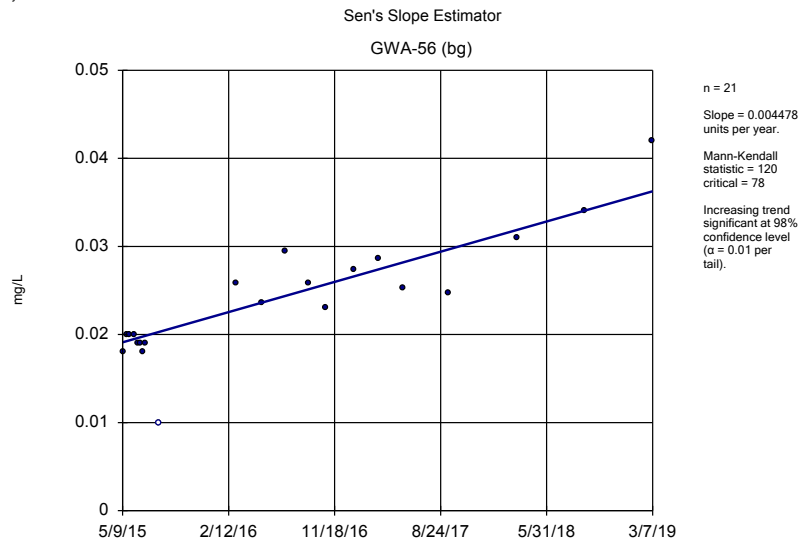
	GWA-54 (bg)
5/9/2015	0.054
5/18/2015	0.058
5/25/2015	0.051
6/9/2015	0.034
6/17/2015	0.032
6/25/2015	0.032
7/1/2015	0.029
7/7/2015	0.029
8/12/2015	<0.02
3/2/2016	0.0297
5/4/2016	0.0299
7/8/2016	0.0294
9/8/2016	0.0275
10/26/2016	0.0263
1/9/2017	0.0263
3/15/2017	0.0262
5/18/2017	0.0276
9/15/2017	0.0281
3/13/2018	0.034
9/6/2018	0.04
3/7/2019	0.039



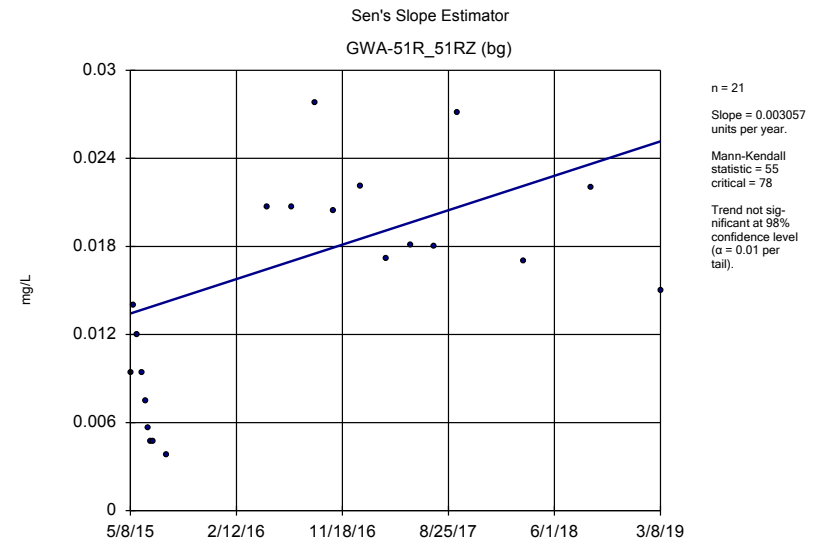
Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:39 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	0.022
5/18/2015	0.031
5/26/2015	0.028
6/9/2015	0.031
6/17/2015	0.029
6/25/2015	0.024
7/1/2015	0.026
7/7/2015	0.027
8/12/2015	<0.02
3/2/2016	0.0276
5/3/2016	0.0291
7/11/2016	0.0225
9/9/2016	0.018
10/26/2016	0.0177
1/9/2017	0.0183
3/16/2017	0.0175
5/18/2017	0.0203
9/15/2017	0.0197
3/12/2018	0.023
9/7/2018	0.025
3/8/2019	0.027

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	0.042
5/18/2015	0.063
5/26/2015	0.057
6/9/2015	0.07
6/17/2015	0.065
6/25/2015	0.068
7/1/2015	0.069
7/7/2015	0.071
8/12/2015	<0.02
3/3/2016	0.0424
5/3/2016	0.0477
7/11/2016	0.0506
9/9/2016	0.0478
10/27/2016	0.0472
1/9/2017	0.0507
3/16/2017	0.0497
5/18/2017	0.0466
9/18/2017	0.0436
3/12/2018	0.041
9/7/2018	0.039
3/7/2019	0.033

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

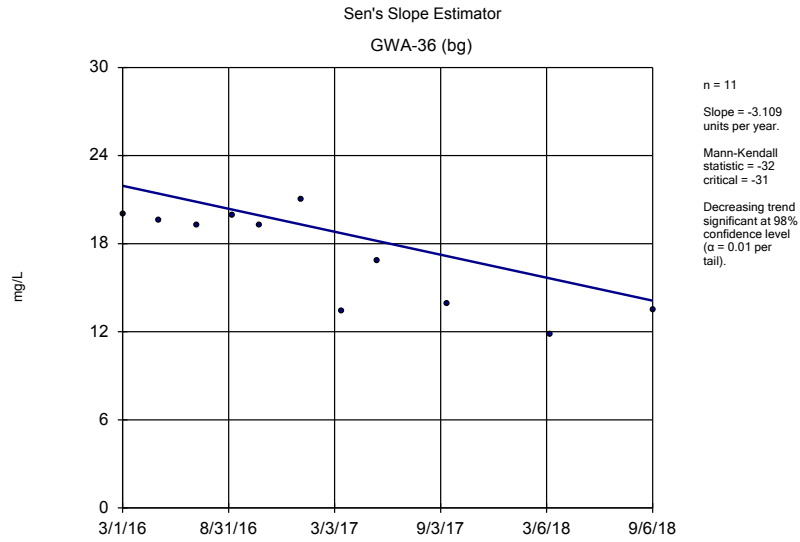
	GWA-56 (bg)
5/9/2015	0.018
5/19/2015	0.02
5/26/2015	0.02
6/9/2015	0.02
6/17/2015	0.019
6/25/2015	0.019
7/1/2015	0.018
7/7/2015	0.019
8/12/2015	<0.02
3/3/2016	0.0259
5/9/2016	0.0236
7/11/2016	0.0295
9/9/2016	0.0259
10/26/2016	0.0231
1/9/2017	0.0273
3/15/2017	0.0286
5/18/2017	0.0253
9/15/2017	0.0247
3/13/2018	0.031
9/7/2018	0.034
3/7/2019	0.042

Sen's Slope Estimator

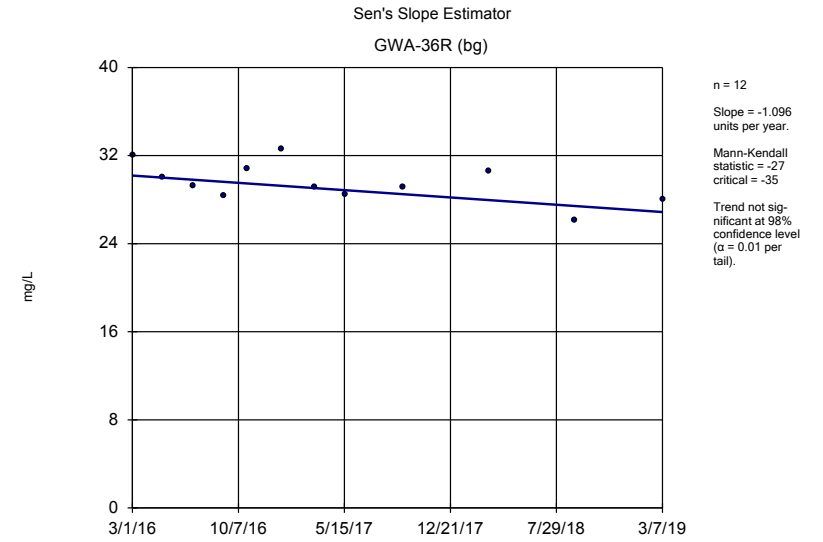
Constituent: Barium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

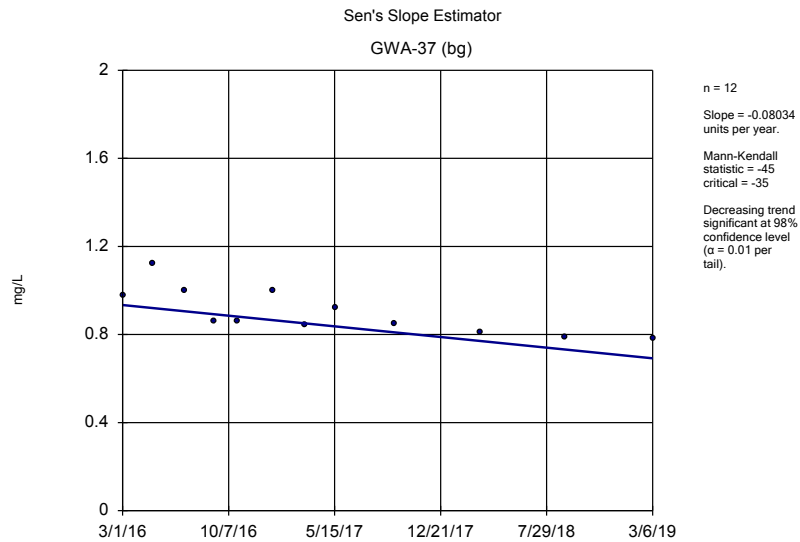
5/8/2015	0.0094
5/17/2015	0.014
5/25/2015	0.012
6/8/2015	0.0094
6/18/2015	0.0075
6/24/2015	0.0056
6/30/2015	0.0047
7/6/2015	0.0047
8/12/2015	0.00383 (J)
5/4/2016	0.0207 (D)
7/7/2016	0.0207 (D)
9/8/2016	0.0278 (D)
10/26/2016	0.0204 (D)
1/6/2017	0.0221 (D)
3/15/2017	0.0172 (D)
5/18/2017	0.0181 (D)
7/19/2017	0.018 (D)
9/19/2017	0.0271 (D)
3/13/2018	0.017
9/7/2018	0.022
3/8/2019	0.015



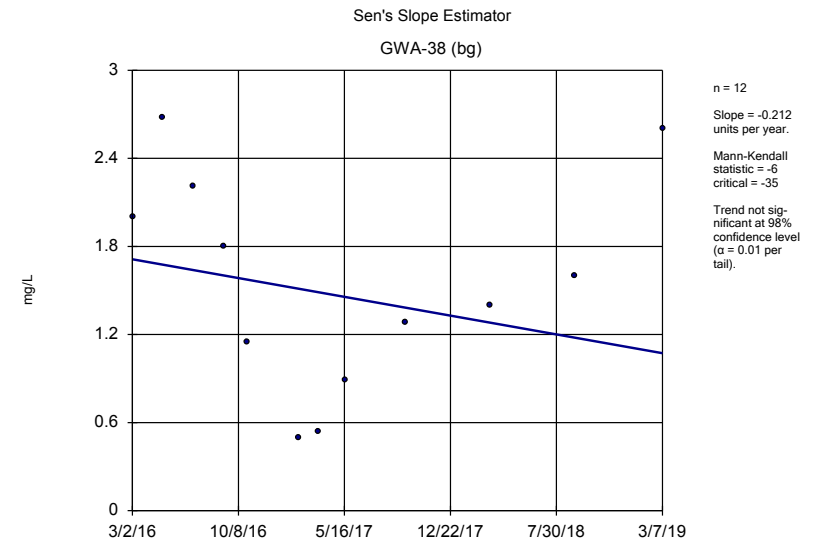
Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	20
5/2/2016	19.6
7/7/2016	19.3
9/7/2016	19.9
10/25/2016	19.3
1/5/2017	21
3/15/2017	13.4
5/17/2017	16.8
9/15/2017	13.9
3/12/2018	11.8 (J)
9/6/2018	13.5 (J)
3/6/2019	11.2 (X)

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	32
5/2/2016	30
7/6/2016	29.2
9/7/2016	28.4
10/25/2016	30.8
1/5/2017	32.6
3/14/2017	29.1
5/16/2017	28.5
9/15/2017	29.1
3/12/2018	30.6
9/6/2018	26.1
3/7/2019	28

Sen's Slope Estimator

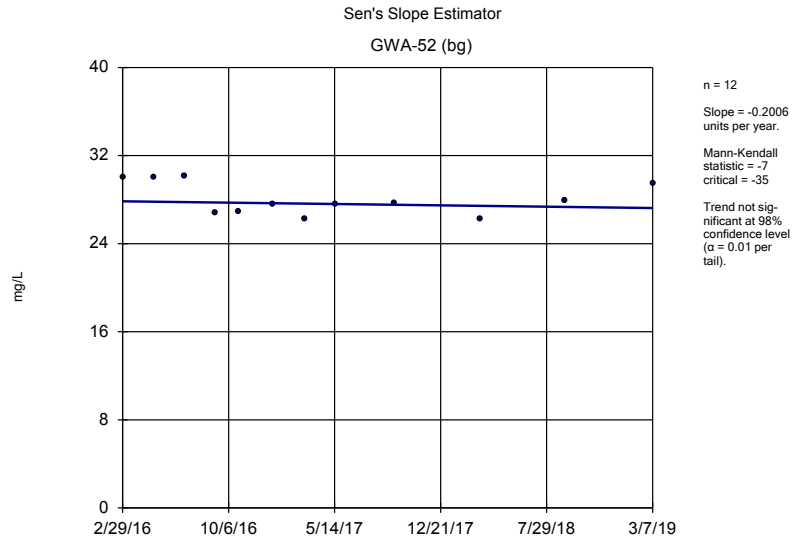
Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
3/1/2016	0.98
5/3/2016	1.12
7/8/2016	1
9/7/2016	0.858
10/25/2016	0.859
1/6/2017	1
3/14/2017	0.844
5/16/2017	0.922
9/15/2017	0.85
3/12/2018	0.81
9/6/2018	0.79
3/6/2019	0.78

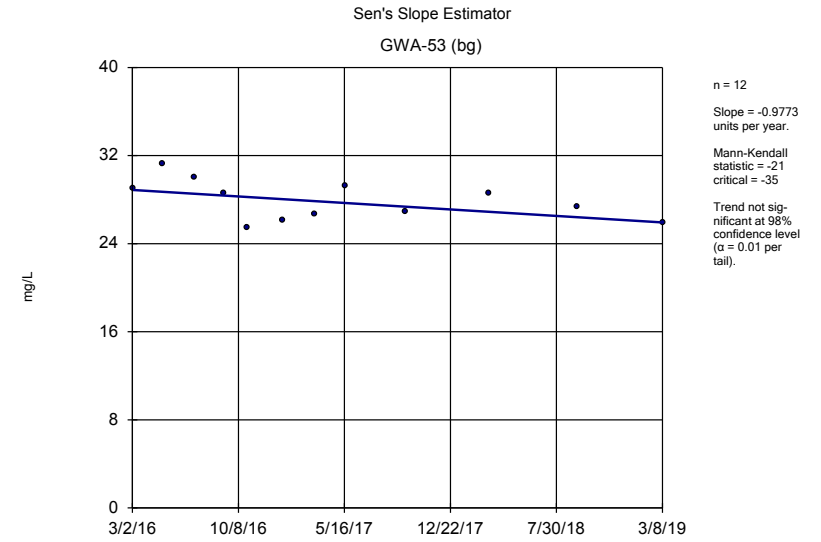
Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

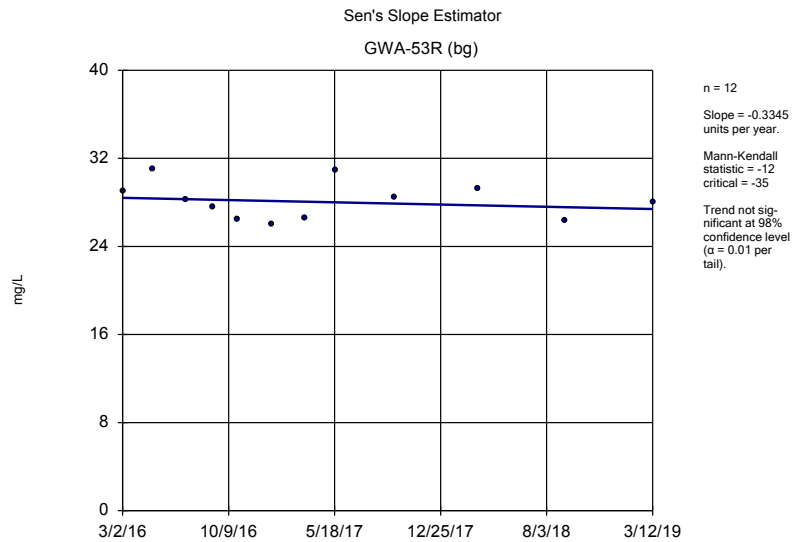
	GWA-38 (bg)
3/2/2016	2
5/3/2016	2.68
7/7/2016	2.21
9/8/2016	1.8
10/25/2016	1.15
2/9/2017	0.495 (J)
3/23/2017	0.543
5/17/2017	0.889
9/19/2017	1.28
3/13/2018	1.4
9/6/2018	1.6
3/7/2019	2.6



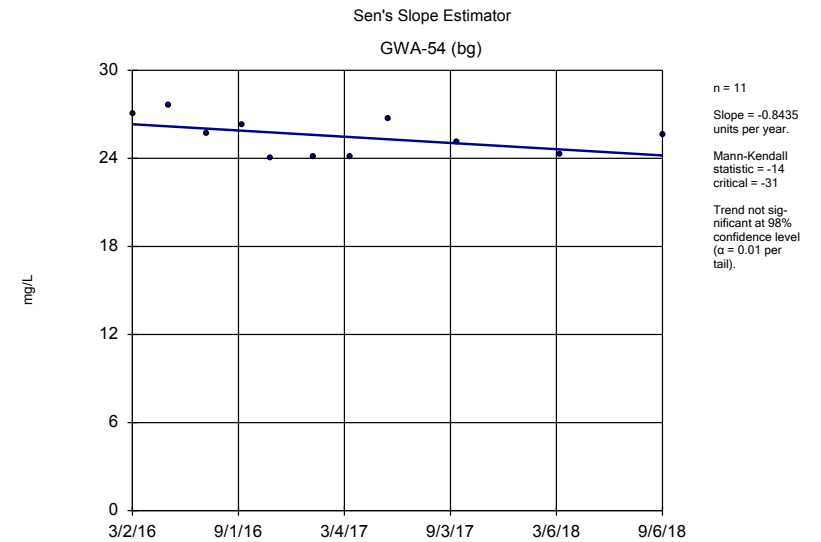
Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	30
5/4/2016	30
7/8/2016	30.1
9/8/2016	26.8
10/26/2016	26.9
1/6/2017	27.6
3/15/2017	26.2
5/17/2017	27.6
9/15/2017	27.7
3/13/2018	26.2
9/6/2018	27.9
3/7/2019	29.5

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	29
5/3/2016	31.2
7/8/2016	30
9/8/2016	28.6
10/26/2016	25.5
1/9/2017	26.1
3/16/2017	26.7
5/19/2017	29.2
9/19/2017	26.9
3/13/2018	28.6
9/11/2018	27.3
3/8/2019	25.9

Sen's Slope Estimator

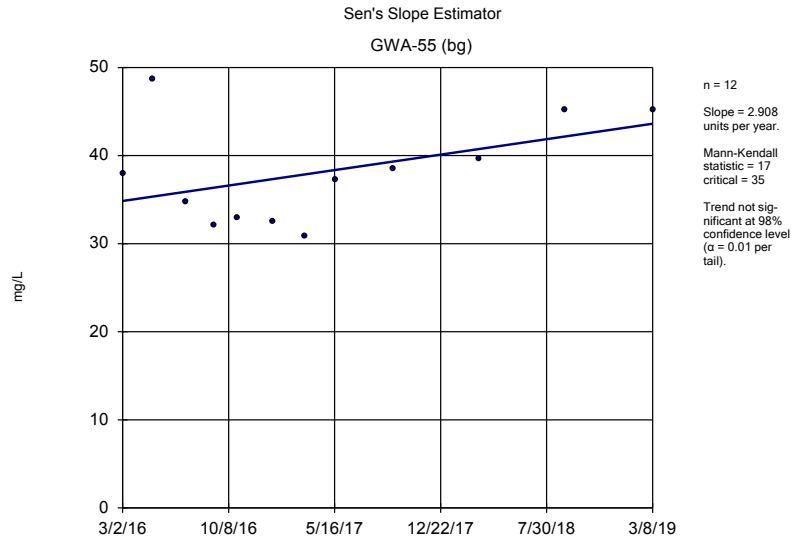
Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
3/2/2016	29
5/3/2016	31
7/11/2016	28.2
9/7/2016	27.6
10/27/2016	26.5
1/6/2017	26
3/16/2017	26.6
5/19/2017	30.9
9/19/2017	28.5
3/13/2018	29.3
9/11/2018	26.3
3/12/2019	28

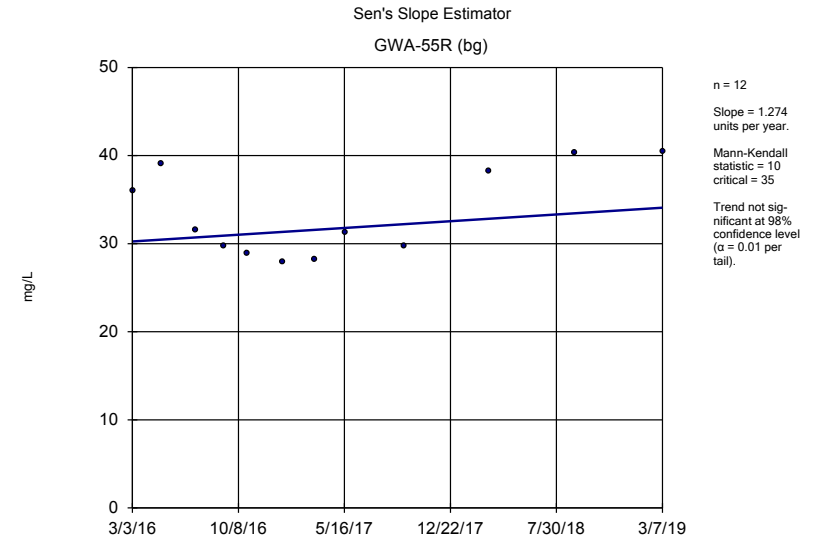
Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

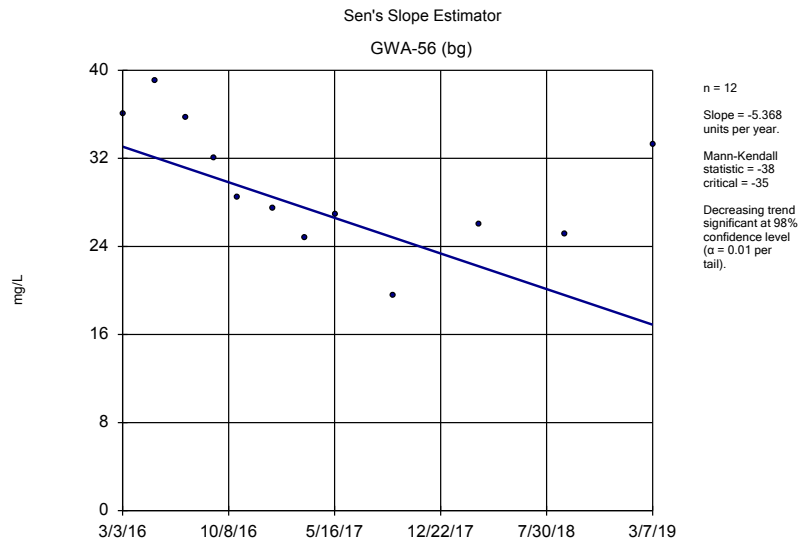
	GWA-54 (bg)
3/2/2016	27
5/4/2016	27.6
7/8/2016	25.7
9/8/2016	26.3
10/26/2016	24
1/9/2017	24.1
3/15/2017	24.1
5/18/2017	26.7
9/15/2017	25.1
3/13/2018	24.3 (J)
9/6/2018	25.6
3/7/2019	23.8 (X)



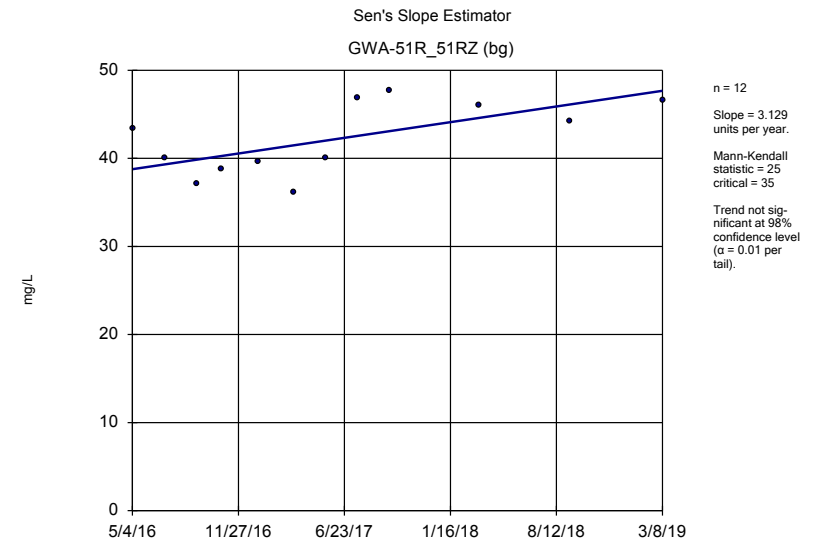
Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	38
5/3/2016	48.7
7/11/2016	34.8
9/9/2016	32.1
10/26/2016	32.9
1/9/2017	32.5
3/16/2017	30.8
5/18/2017	37.2
9/15/2017	38.5
3/12/2018	39.6
9/7/2018	45.2
3/8/2019	45.2

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:46 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
3/3/2016	36
5/3/2016	39.1
7/11/2016	31.6
9/9/2016	29.8
10/27/2016	28.9
1/9/2017	27.9
3/16/2017	28.2
5/18/2017	31.3
9/18/2017	29.7
3/12/2018	38.2
9/7/2018	40.3
3/7/2019	40.4

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
3/3/2016	36
5/9/2016	39
7/11/2016	35.7
9/9/2016	32
10/26/2016	28.5
1/9/2017	27.5
3/15/2017	24.8
5/18/2017	26.9
9/15/2017	19.6
3/13/2018	26
9/7/2018	25.1
3/7/2019	33.3

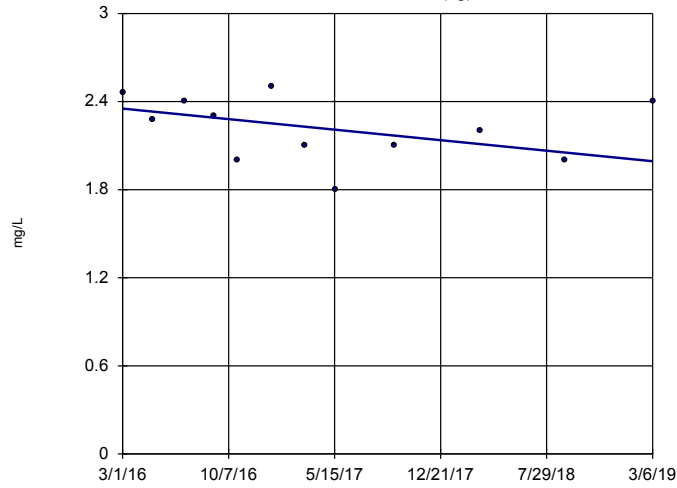
Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

5/4/2016	43.4 (D)
7/7/2016	40.1 (D)
9/8/2016	37.1 (D)
10/26/2016	38.8 (D)
1/6/2017	39.6 (D)
3/15/2017	36.1 (D)
5/18/2017	40.1 (D)
7/19/2017	46.9 (D)
9/19/2017	47.7 (D)
3/13/2018	46.1 (D)
9/7/2018	44.2
3/8/2019	46.6

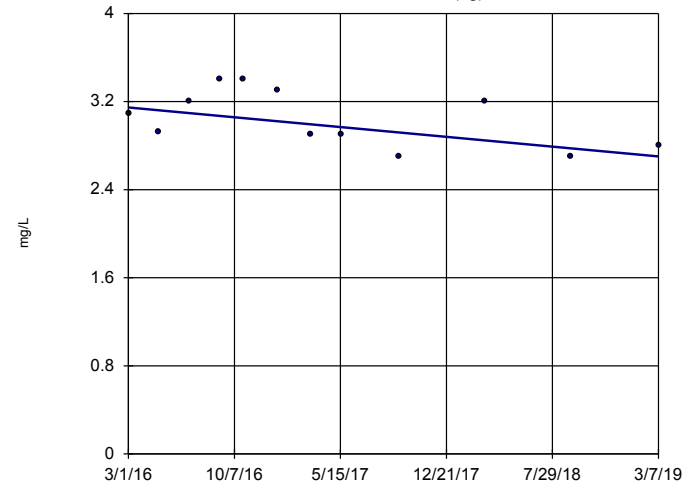
Sen's Slope Estimator
GWA-36 (bg)



n = 12
 Slope = -0.1192
 units per year.
 Mann-Kendall
 statistic = -17
 critical = -35
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

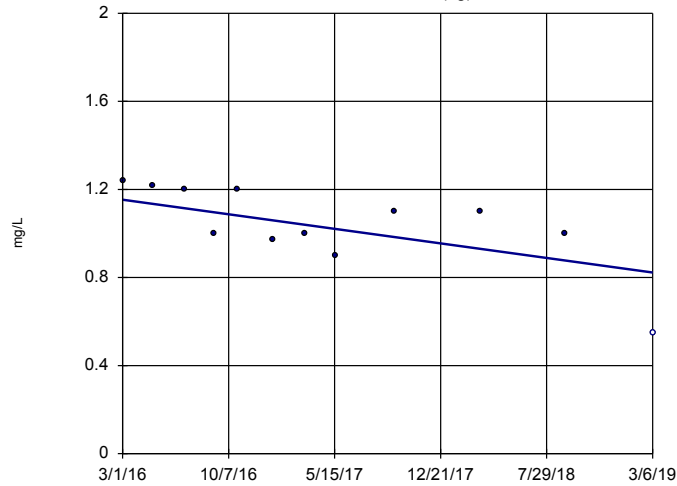
Sen's Slope Estimator
GWA-36R (bg)



n = 12
 Slope = -0.1475
 units per year.
 Mann-Kendall
 statistic = -26
 critical = -35
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

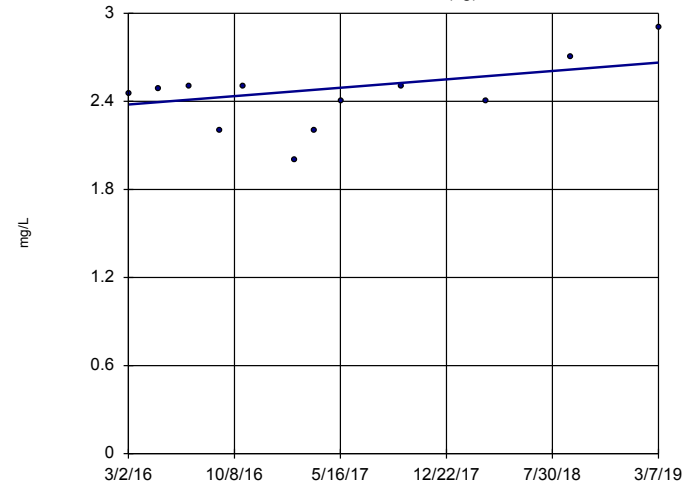
Sen's Slope Estimator
GWA-37 (bg)



n = 12
 Slope = -0.1098
 units per year.
 Mann-Kendall
 statistic = -37
 critical = -35
 Decreasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-38 (bg)



n = 12
 Slope = 0.09467
 units per year.
 Mann-Kendall
 statistic = 19
 critical = 35
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	2.4587
5/2/2016	2.28
7/7/2016	2.4
9/7/2016	2.3
10/25/2016	2
1/5/2017	2.5 (J)
3/15/2017	2.1
5/17/2017	1.8
9/15/2017	2.1
3/12/2018	2.2
9/6/2018	2
3/6/2019	2.4

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	3.096
5/2/2016	2.92
7/6/2016	3.2
9/7/2016	3.4
10/25/2016	3.4
1/5/2017	3.3
3/14/2017	2.9
5/16/2017	2.9
9/15/2017	2.7
3/12/2018	3.2
9/6/2018	2.7
3/7/2019	2.8

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

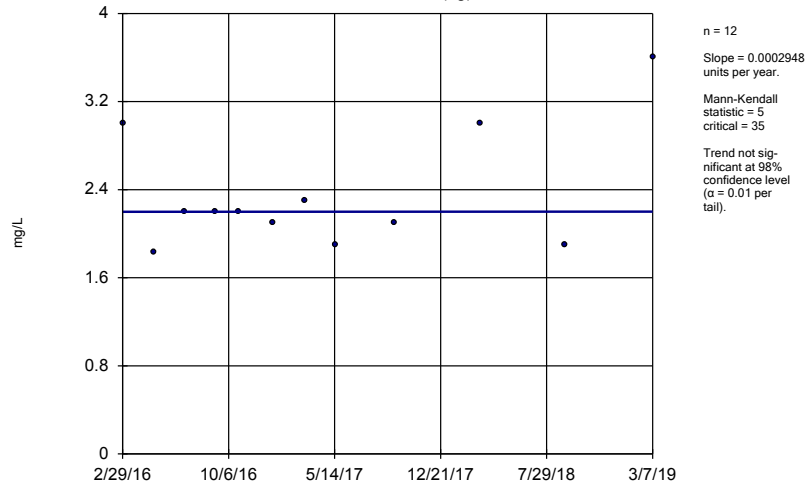
	GWA-37 (bg)
3/1/2016	1.2389
5/3/2016	1.22
7/8/2016	1.2
9/7/2016	1
10/25/2016	1.2
1/6/2017	0.97
3/14/2017	1
5/16/2017	0.9
9/15/2017	1.1
3/12/2018	1.1
9/6/2018	1
3/6/2019	<1.1

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

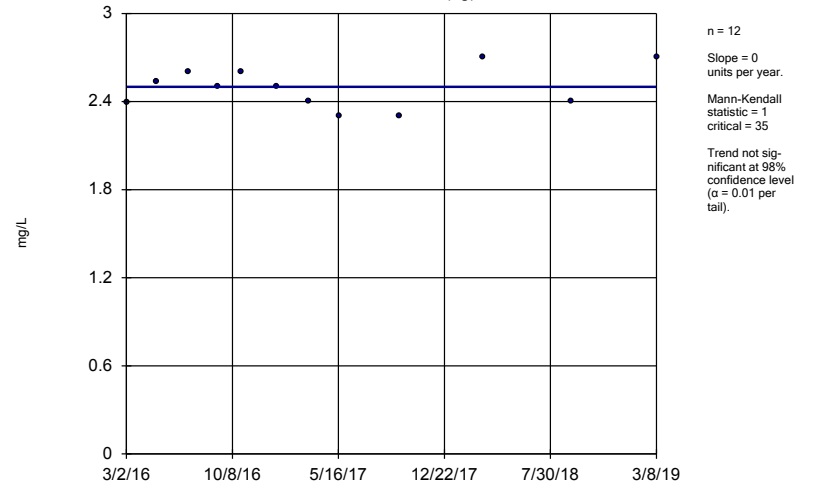
	GWA-38 (bg)
3/2/2016	2.4559
5/3/2016	2.49
7/7/2016	2.5
9/8/2016	2.2
10/25/2016	2.5
2/9/2017	2
3/23/2017	2.2
5/17/2017	2.4
9/19/2017	2.5
3/13/2018	2.4
9/6/2018	2.7
3/7/2019	2.9

Sen's Slope Estimator
GWA-52 (bg)



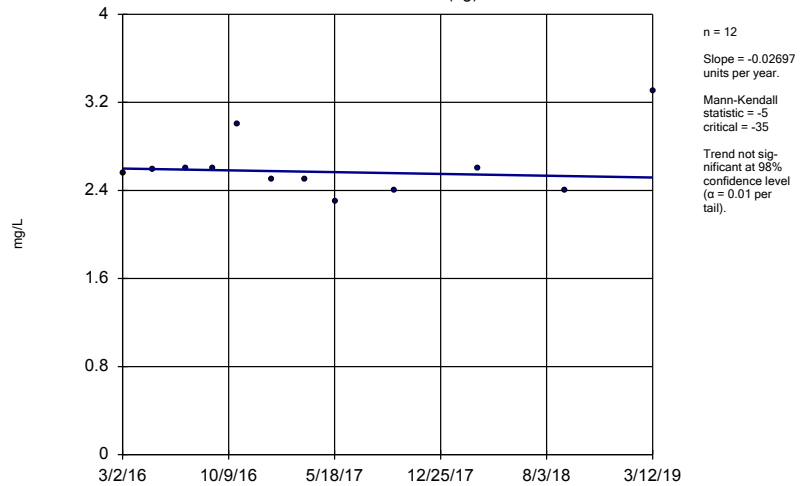
Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53 (bg)



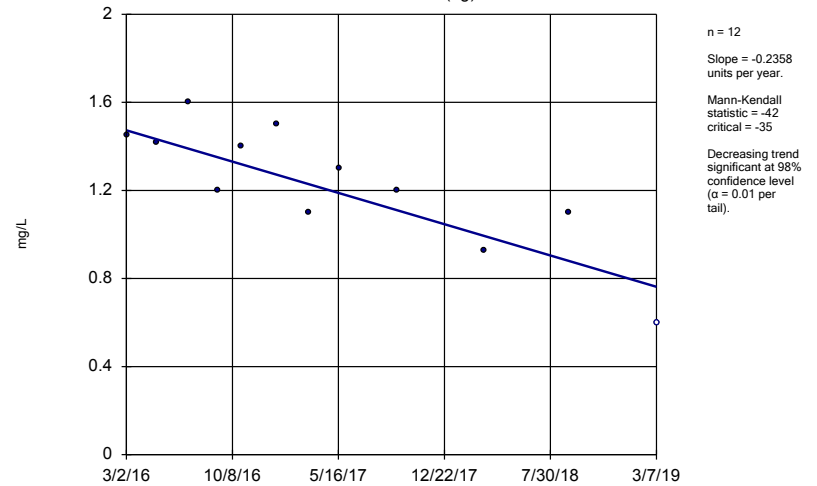
Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	2.9988
5/4/2016	1.83
7/8/2016	2.2
9/8/2016	2.2
10/26/2016	2.2
1/6/2017	2.1
3/15/2017	2.3
5/17/2017	1.9
9/15/2017	2.1
3/13/2018	3
9/6/2018	1.9
3/7/2019	3.6

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	2.3976
5/3/2016	2.54
7/8/2016	2.6
9/8/2016	2.5
10/26/2016	2.6
1/9/2017	2.5
3/16/2017	2.4
5/19/2017	2.3
9/19/2017	2.3
3/13/2018	2.7
9/11/2018	2.4
3/8/2019	2.7

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

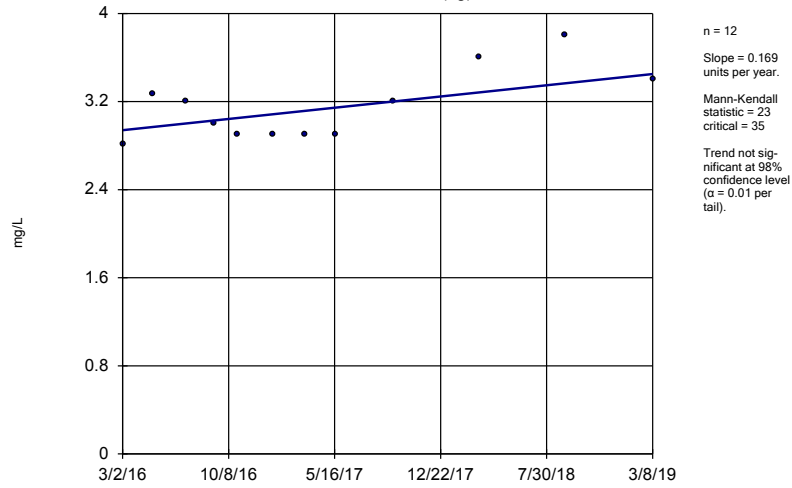
	GWA-53R (bg)
3/2/2016	2.556
5/3/2016	2.59
7/11/2016	2.6
9/7/2016	2.6
10/27/2016	3
1/6/2017	2.5
3/16/2017	2.5
5/19/2017	2.3
9/19/2017	2.4
3/13/2018	2.6
9/11/2018	2.4
3/12/2019	3.3

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

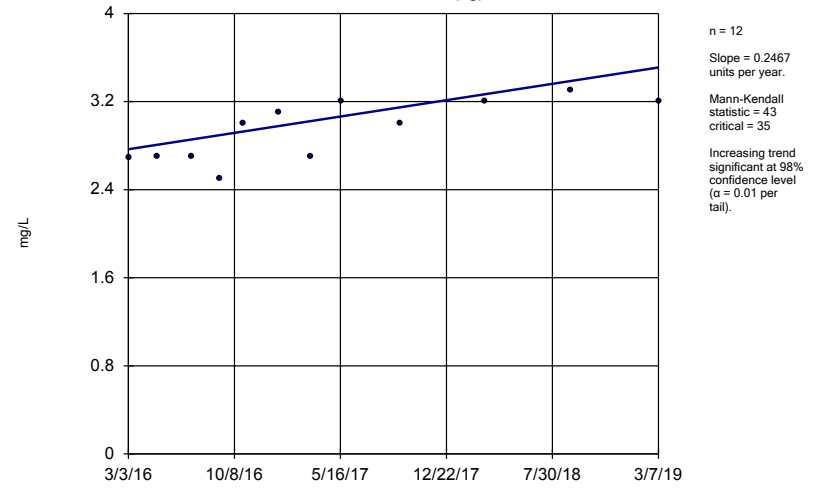
	GWA-54 (bg)
3/2/2016	1.4496
5/4/2016	1.42
7/8/2016	1.6
9/8/2016	1.2
10/26/2016	1.4
1/9/2017	1.5
3/15/2017	1.1
5/18/2017	1.3
9/15/2017	1.2
3/13/2018	0.93
9/6/2018	1.1
3/7/2019	<1.2

Sen's Slope Estimator
GWA-55 (bg)



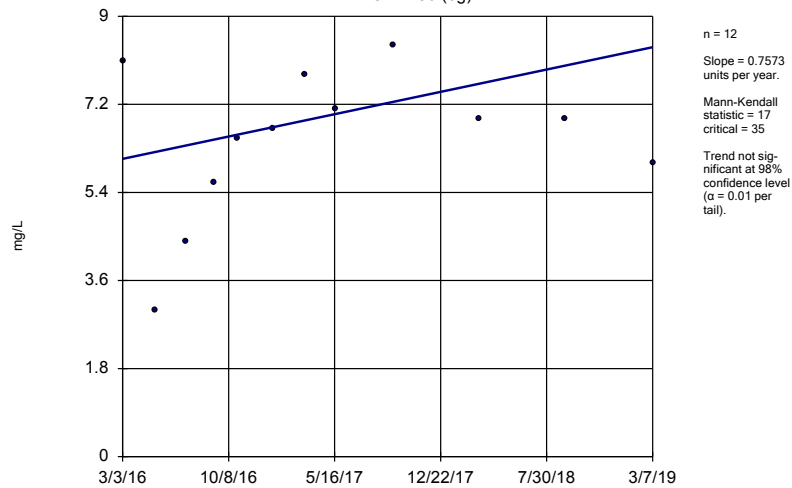
Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-55R (bg)



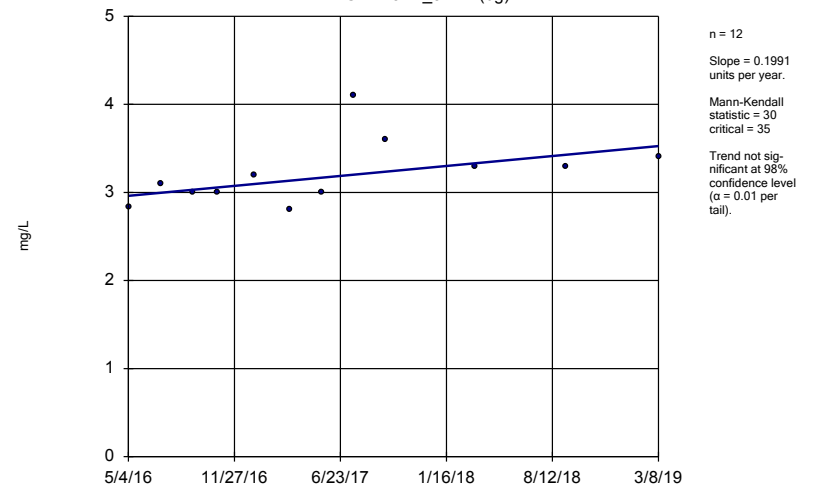
Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-56 (bg)



Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-51R_51RZ (bg)



Constituent: Chloride Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	2.815
5/3/2016	3.27
7/11/2016	3.2
9/9/2016	3
10/26/2016	2.9
1/9/2017	2.9
3/16/2017	2.9
5/18/2017	2.9
9/15/2017	3.2
3/12/2018	3.6
9/7/2018	3.8
3/8/2019	3.4

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
3/3/2016	2.6912
5/3/2016	2.7
7/11/2016	2.7
9/9/2016	2.5
10/27/2016	3
1/9/2017	3.1
3/16/2017	2.7
5/18/2017	3.2
9/18/2017	3
3/12/2018	3.2
9/7/2018	3.3
3/7/2019	3.2

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
3/3/2016	8.0925
5/9/2016	2.99
7/11/2016	4.4
9/9/2016	5.6
10/26/2016	6.5
1/9/2017	6.7
3/15/2017	7.8
5/18/2017	7.1
9/15/2017	8.4
3/13/2018	6.9
9/7/2018	6.9
3/7/2019	6

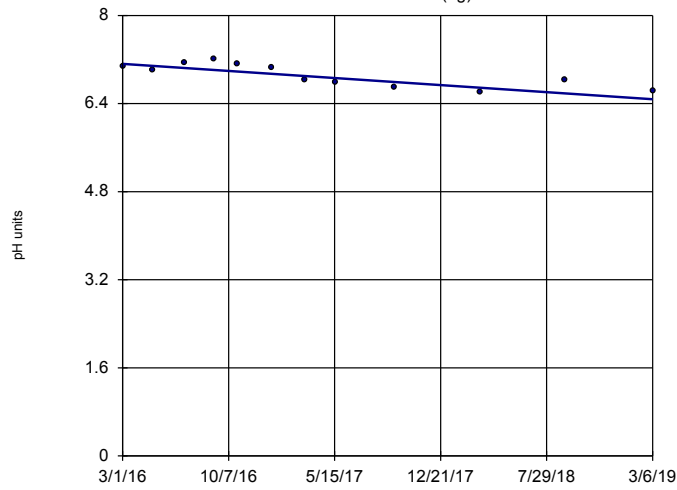
Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

5/4/2016	2.83 (D)
7/7/2016	3.1 (D)
9/8/2016	3 (D)
10/26/2016	3 (D)
1/6/2017	3.2 (D)
3/15/2017	2.8 (D)
5/18/2017	3 (D)
7/19/2017	4.1 (D)
9/19/2017	3.6 (D)
3/13/2018	3.3
9/7/2018	3.3
3/8/2019	3.4

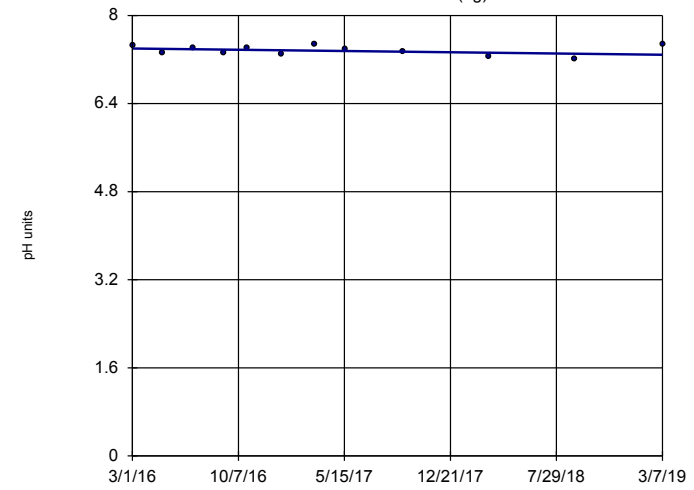
Sen's Slope Estimator
GWA-36 (bg)



n = 12
 Slope = -0.2132
 units per year.
 Mann-Kendall
 statistic = -42
 critical = -35
 Decreasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: pH Analysis Run 8/28/2019 10:40 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

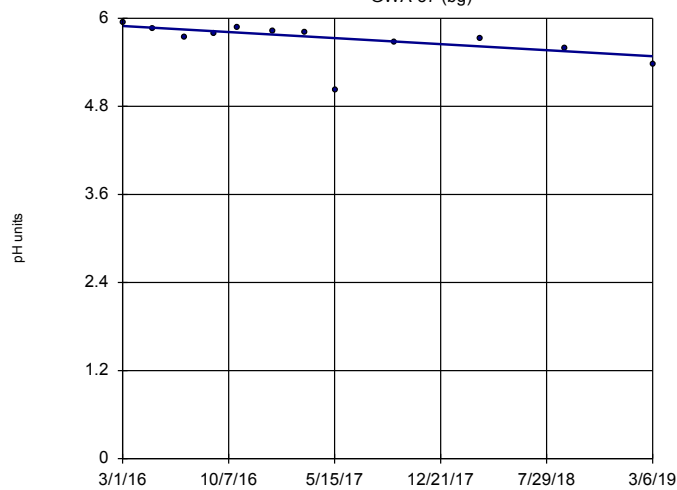
Sen's Slope Estimator
GWA-36R (bg)



n = 12
 Slope = -0.03785
 units per year.
 Mann-Kendall
 statistic = -12
 critical = -35
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

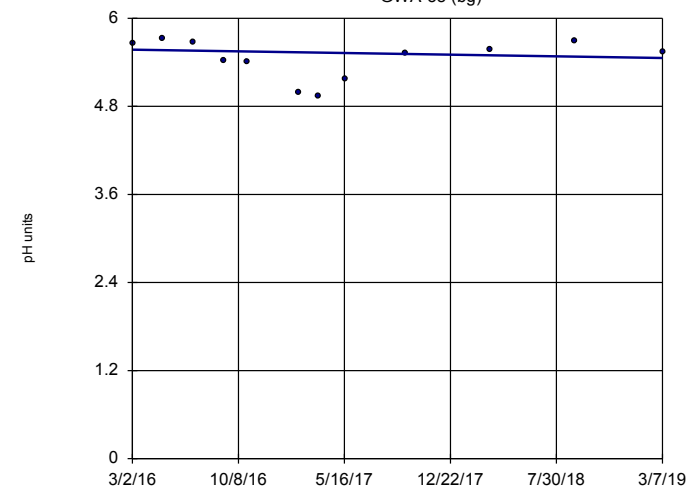
Sen's Slope Estimator
GWA-37 (bg)



n = 12
 Slope = -0.1367
 units per year.
 Mann-Kendall
 statistic = -40
 critical = -35
 Decreasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-38 (bg)



n = 12
 Slope = -0.03795
 units per year.
 Mann-Kendall
 statistic = -6
 critical = -35
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	7.07
5/2/2016	7
7/7/2016	7.15
9/7/2016	7.2
10/25/2016	7.12
1/5/2017	7.05
3/15/2017	6.84
5/17/2017	6.78
9/15/2017	6.7
3/12/2018	6.6
9/6/2018	6.83
3/6/2019	6.64

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	7.45
5/2/2016	7.31
7/6/2016	7.4
9/7/2016	7.32
10/25/2016	7.4
1/5/2017	7.29
3/14/2017	7.48
5/16/2017	7.38
9/15/2017	7.35
3/12/2018	7.26
9/6/2018	7.21
3/7/2019	7.48

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-37 (bg)

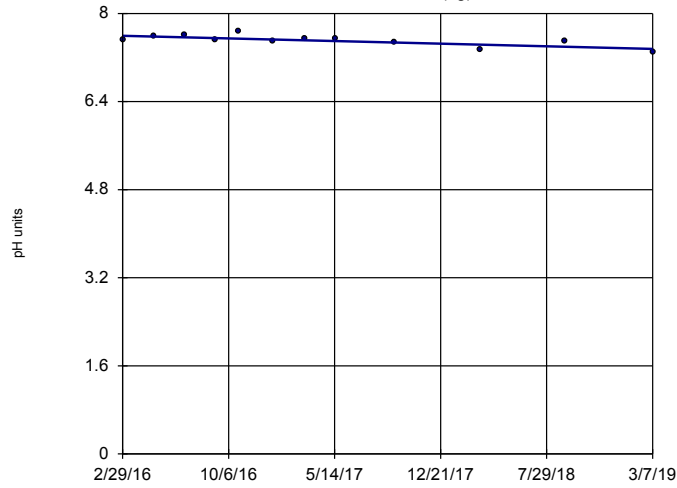
3/1/2016	5.94 (D)
5/3/2016	5.85
7/8/2016	5.74
9/7/2016	5.79
10/25/2016	5.88
1/6/2017	5.82
3/14/2017	5.8
5/16/2017	5.02
9/15/2017	5.68
3/12/2018	5.72
9/6/2018	5.59
3/6/2019	5.38

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38 (bg)
3/2/2016	5.65
5/3/2016	5.72
7/7/2016	5.68
9/8/2016	5.42
10/25/2016	5.41
2/9/2017	4.99
3/23/2017	4.94
5/17/2017	5.18
9/19/2017	5.53
3/13/2018	5.57
9/6/2018	5.69
3/7/2019	5.54

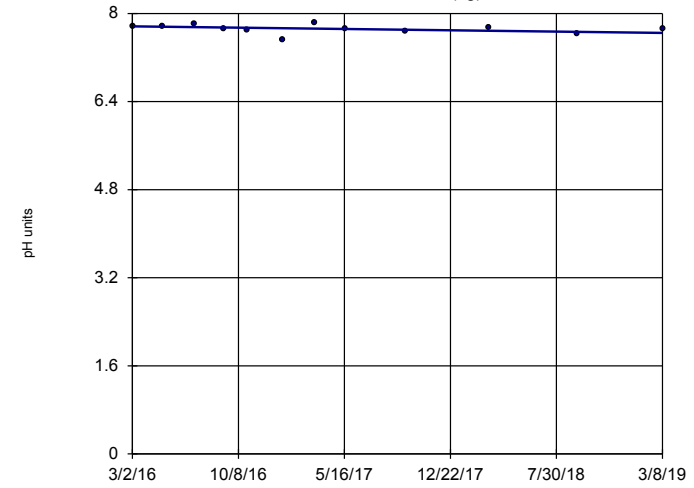
Sen's Slope Estimator
GWA-52 (bg)



n = 12
Slope = -0.07832
units per year.
Mann-Kendall
statistic = -32
critical = -35
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

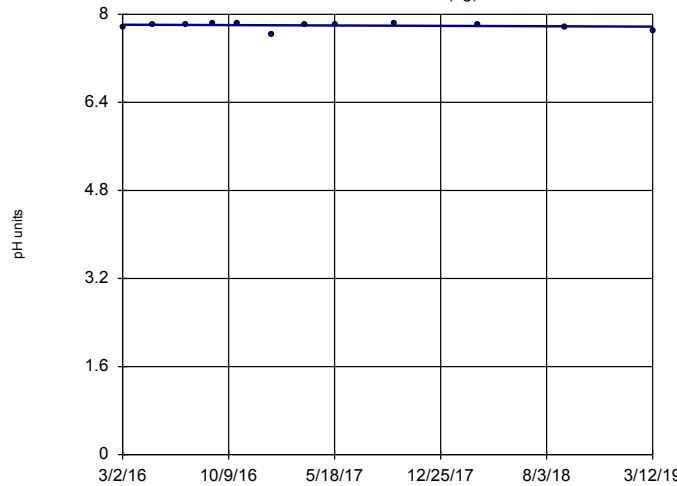
Sen's Slope Estimator
GWA-53 (bg)



n = 12
Slope = -0.03961
units per year.
Mann-Kendall
statistic = -21
critical = -35
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

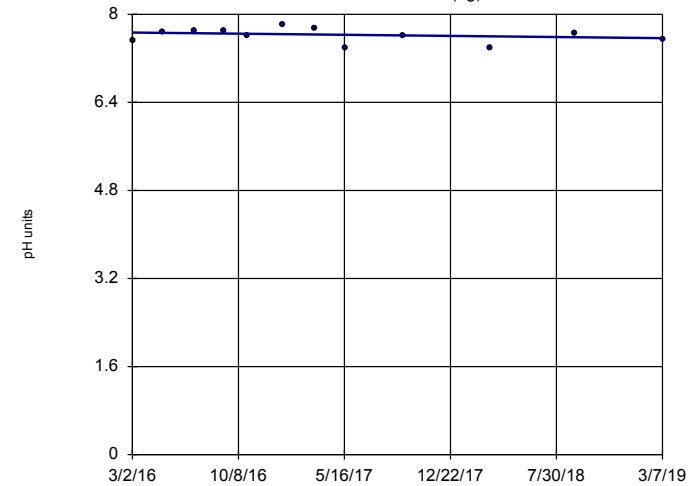
Sen's Slope Estimator
GWA-53R (bg)



n = 12
Slope = -0.01183
units per year.
Mann-Kendall
statistic = -7
critical = -35
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



n = 12
Slope = -0.03289
units per year.
Mann-Kendall
statistic = -9
critical = -35
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	7.52
5/4/2016	7.59
7/8/2016	7.61
9/8/2016	7.52
10/26/2016	7.67
1/6/2017	7.49
3/15/2017	7.55
5/17/2017	7.55
9/15/2017	7.48
3/13/2018	7.34
9/6/2018	7.5
3/7/2019	7.29

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	7.77 (D)
5/3/2016	7.76
7/8/2016	7.82
9/8/2016	7.73
10/26/2016	7.71
1/9/2017	7.52
3/16/2017	7.84
5/19/2017	7.72
9/19/2017	7.68
3/13/2018	7.74
9/11/2018	7.64
3/8/2019	7.73

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-53R (bg)

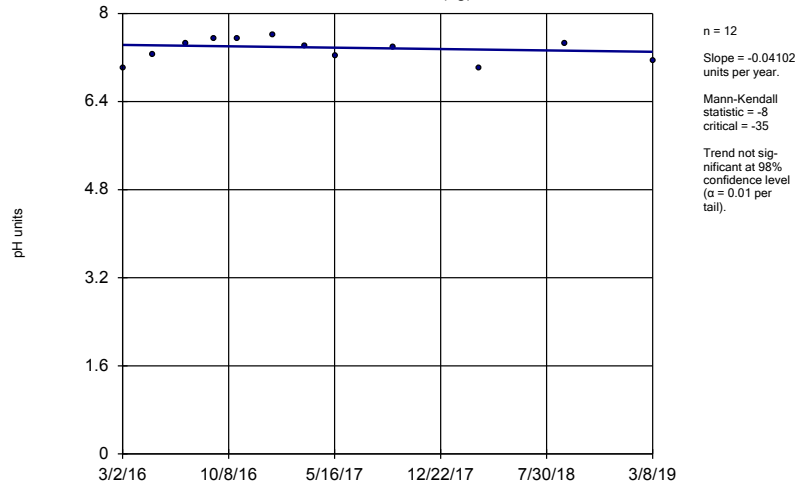
3/2/2016	7.76
5/3/2016	7.8
7/11/2016	7.82
9/7/2016	7.83
10/27/2016	7.84
1/6/2017	7.63
3/16/2017	7.8
5/19/2017	7.81
9/19/2017	7.84
3/13/2018	7.8
9/11/2018	7.76
3/12/2019	7.7

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

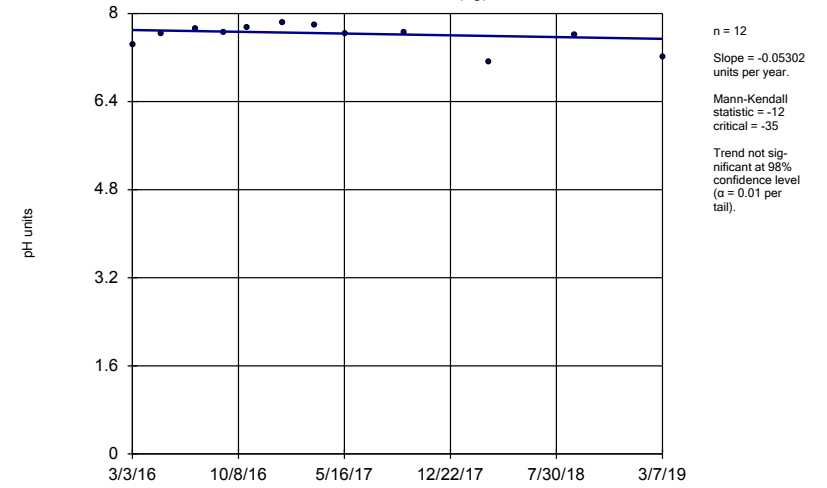
	GWA-54 (bg)
3/2/2016	7.51
5/4/2016	7.68
7/8/2016	7.7
9/8/2016	7.71
10/26/2016	7.6
1/9/2017	7.81
3/15/2017	7.74
5/18/2017	7.39
9/15/2017	7.61
3/13/2018	7.39
9/6/2018	7.66
3/7/2019	7.55

Sen's Slope Estimator
GWA-55 (bg)



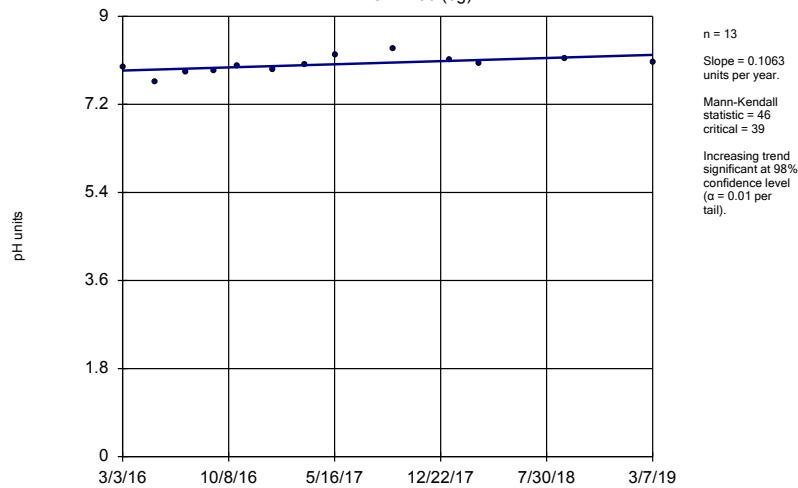
Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-55R (bg)



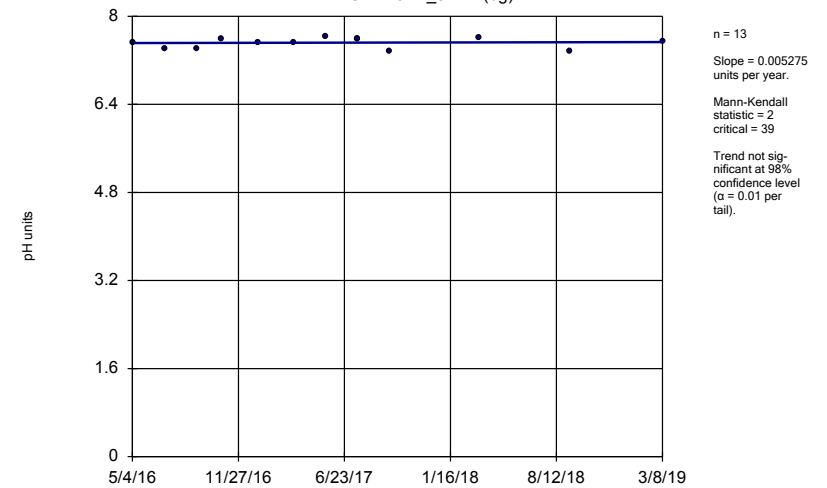
Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-56 (bg)



Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-51R_51RZ (bg)



Constituent: pH Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	7.01
5/3/2016	7.26
7/11/2016	7.45
9/9/2016	7.55
10/26/2016	7.55
1/9/2017	7.62
3/16/2017	7.4
5/18/2017	7.24
9/15/2017	7.38
3/12/2018	7
9/7/2018	7.45
3/8/2019	7.14

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-55R (bg)

3/3/2016	7.44
5/3/2016	7.64
7/11/2016	7.72
9/9/2016	7.66
10/27/2016	7.75
1/9/2017	7.83
3/16/2017	7.78
5/18/2017	7.64
9/18/2017	7.66
3/12/2018	7.11
9/7/2018	7.6
3/7/2019	7.22

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

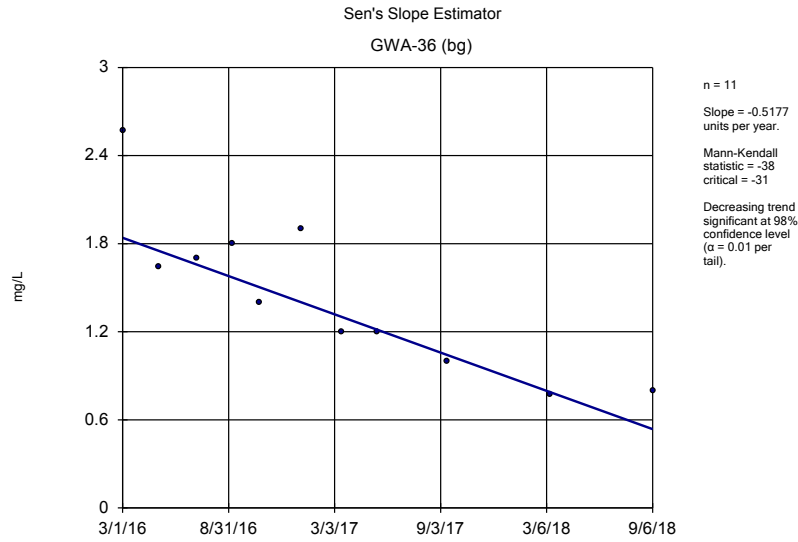
	GWA-56 (bg)
3/3/2016	7.95 (D)
5/9/2016	7.66
7/11/2016	7.86
9/9/2016	7.89
10/26/2016	7.98
1/9/2017	7.9
3/15/2017	8
5/18/2017	8.21
9/15/2017	8.34
1/9/2018	8.1 (Y)
3/13/2018	8.03
9/7/2018	8.14
3/7/2019	8.05

Sen's Slope Estimator

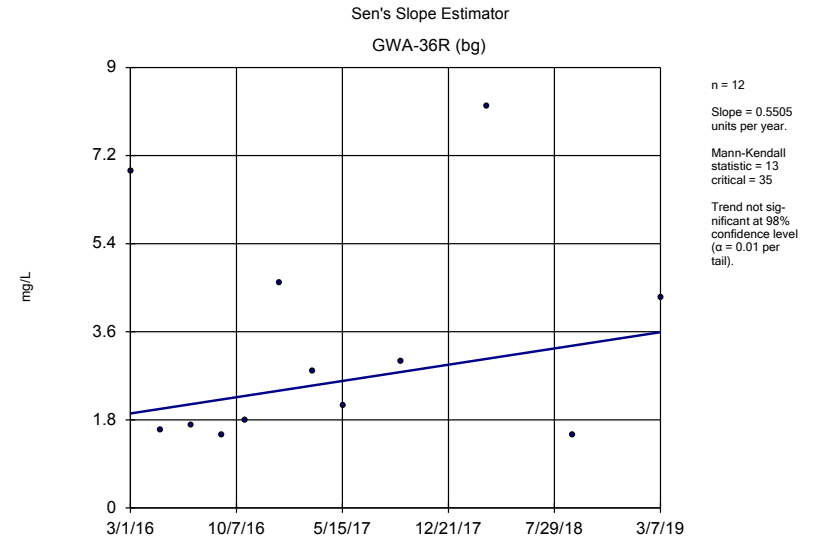
Constituent: pH (pH units) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

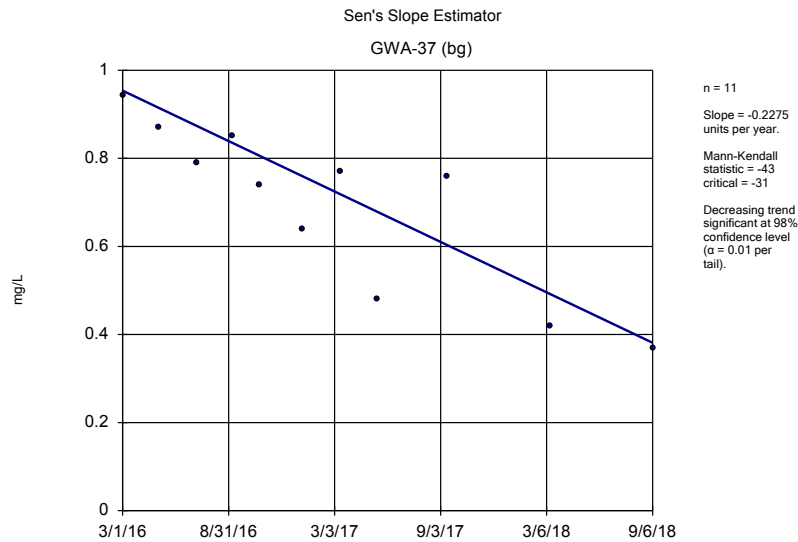
5/4/2016	7.52 (D)
7/7/2016	7.42 (D)
9/8/2016	7.4 (D)
10/26/2016	7.59 (D)
1/6/2017	7.51 (D)
3/15/2017	7.51 (D)
5/18/2017	7.64 (D)
7/18/2017	7.58
7/19/2017	7.58 (D)
9/19/2017	7.37 (D)
3/13/2018	7.62
9/7/2018	7.36
3/8/2019	7.55



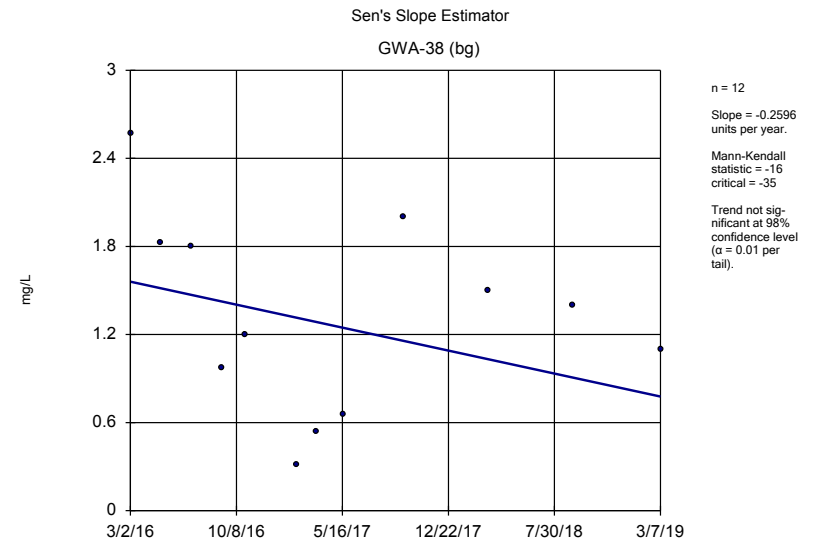
Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	2.5655
5/2/2016	1.64
7/7/2016	1.7
9/7/2016	1.8
10/25/2016	1.4
1/5/2017	1.9 (J)
3/15/2017	1.2
5/17/2017	1.2
9/15/2017	1
3/12/2018	0.77 (J)
9/6/2018	0.8 (J)
3/6/2019	0.45 (X)

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	6.8929
5/2/2016	1.6
7/6/2016	1.7
9/7/2016	1.5
10/25/2016	1.8
1/5/2017	4.6
3/14/2017	2.8
5/16/2017	2.1
9/15/2017	3
3/12/2018	8.2
9/6/2018	1.5
3/7/2019	4.3

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

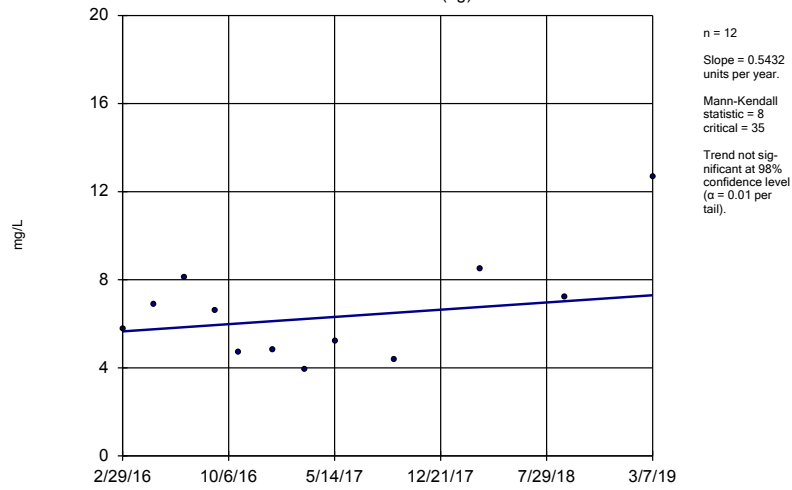
	GWA-37 (bg)
3/1/2016	0.9427 (J)
5/3/2016	0.87 (J)
7/8/2016	0.79 (J)
9/7/2016	0.85 (J)
10/25/2016	0.74 (J)
1/6/2017	0.64 (J)
3/14/2017	0.77 (J)
5/16/2017	0.48 (J)
9/15/2017	0.76 (J)
3/12/2018	0.42 (J)
9/6/2018	0.37 (J)
3/6/2019	0.46 (X)

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

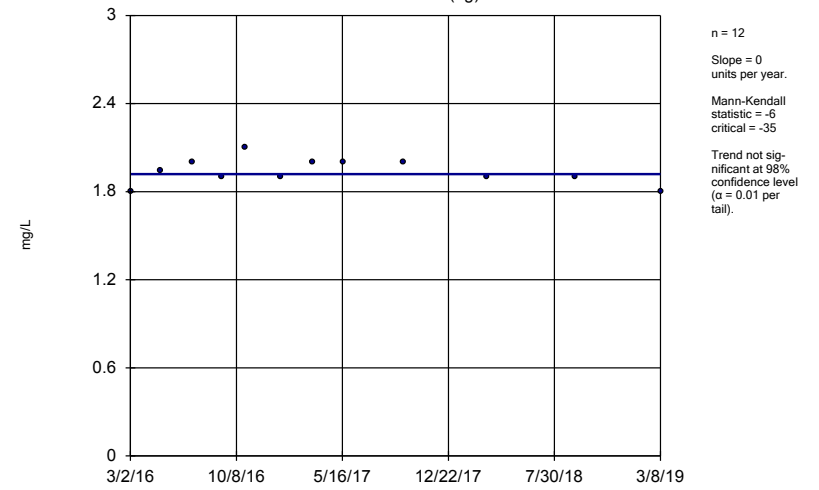
	GWA-38 (bg)
3/2/2016	2.5669
5/3/2016	1.83
7/7/2016	1.8
9/8/2016	0.97 (J)
10/25/2016	1.2
2/9/2017	0.31 (J)
3/23/2017	0.54 (J)
5/17/2017	0.66 (J)
9/19/2017	2
3/13/2018	1.5
9/6/2018	1.4
3/7/2019	1.1

Sen's Slope Estimator
GWA-52 (bg)



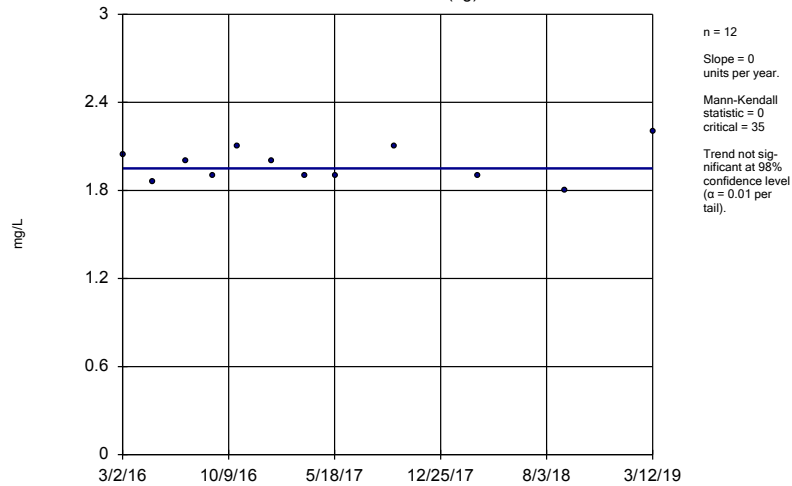
Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53 (bg)



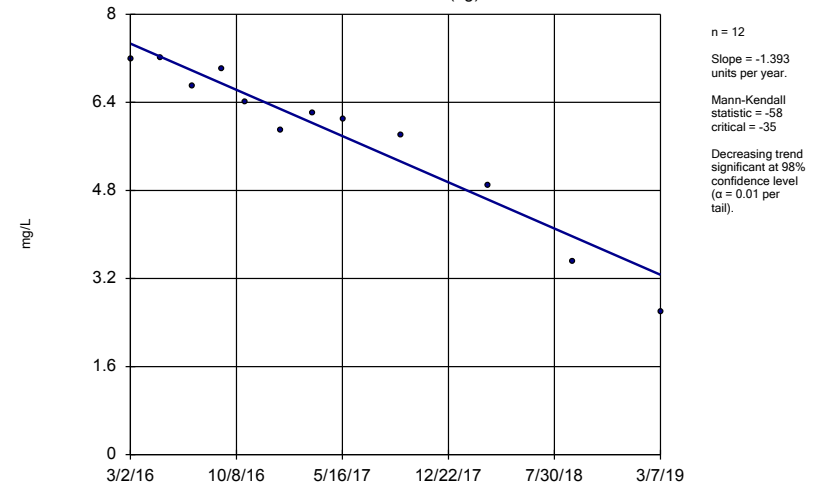
Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	5.7396
5/4/2016	6.87
7/8/2016	8.1
9/8/2016	6.6
10/26/2016	4.7
1/6/2017	4.8
3/15/2017	3.9
5/17/2017	5.2
9/15/2017	4.4
3/13/2018	8.5
9/6/2018	7.2
3/7/2019	12.7

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	1.799
5/3/2016	1.94
7/8/2016	2
9/8/2016	1.9
10/26/2016	2.1
1/9/2017	1.9
3/16/2017	2
5/19/2017	2
9/19/2017	2
3/13/2018	1.9
9/11/2018	1.9
3/8/2019	1.8

Sen's Slope Estimator

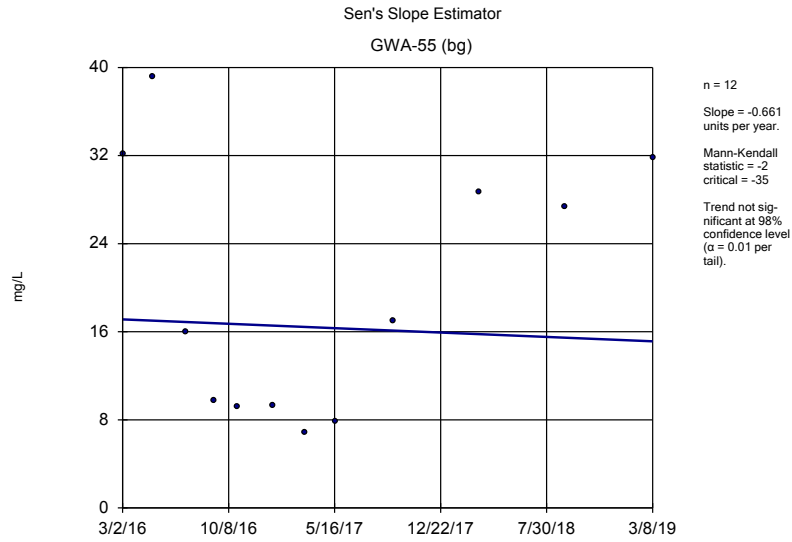
Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
3/2/2016	2.0407
5/3/2016	1.86
7/11/2016	2
9/7/2016	1.9
10/27/2016	2.1
1/6/2017	2
3/16/2017	1.9
5/19/2017	1.9
9/19/2017	2.1
3/13/2018	1.9
9/11/2018	1.8
3/12/2019	2.2

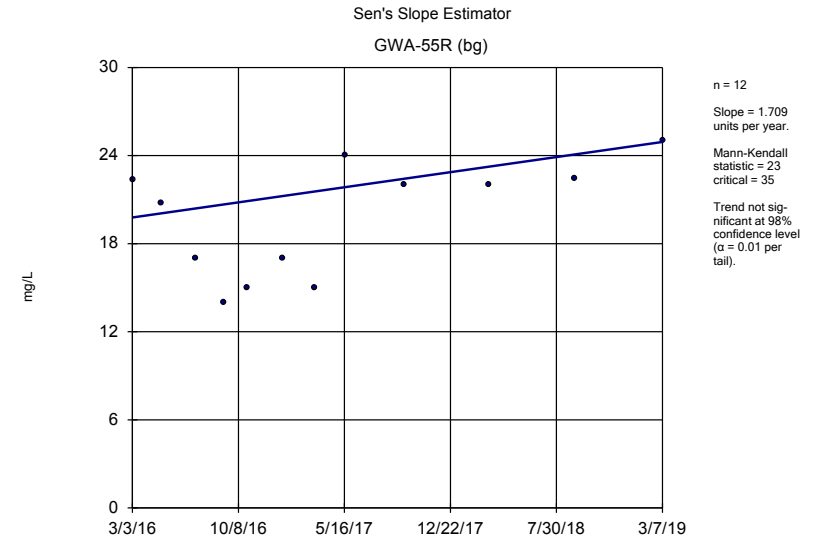
Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

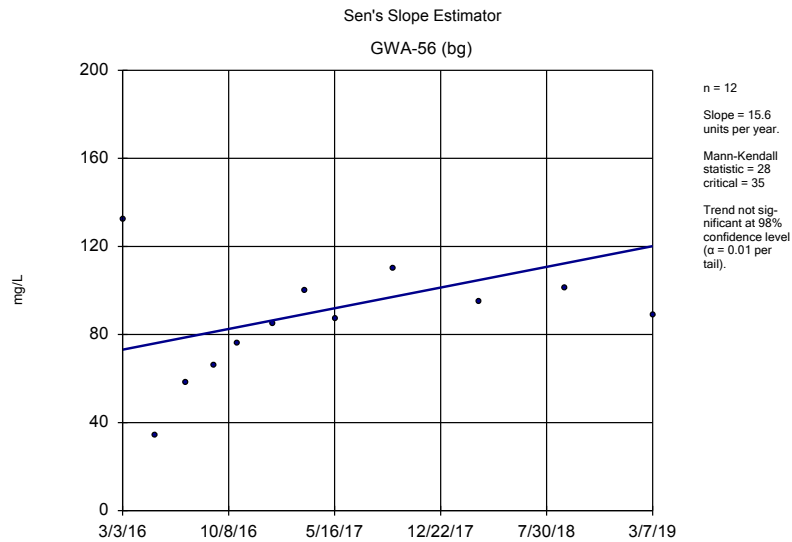
	GWA-54 (bg)
3/2/2016	7.1892
5/4/2016	7.22
7/8/2016	6.7
9/8/2016	7
10/26/2016	6.4
1/9/2017	5.9
3/15/2017	6.2
5/18/2017	6.1
9/15/2017	5.8
3/13/2018	4.9
9/6/2018	3.5
3/7/2019	2.6



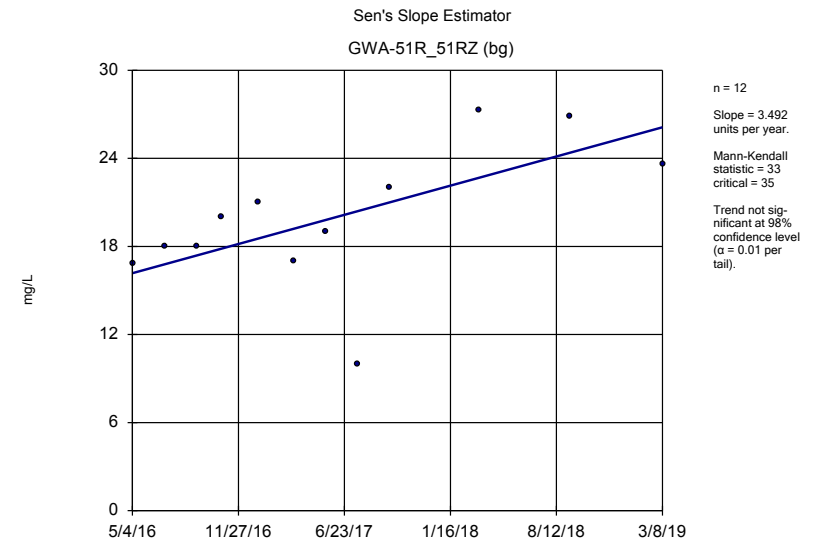
Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:41 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	32.178
5/3/2016	39.2
7/11/2016	16
9/9/2016	9.7
10/26/2016	9.2
1/9/2017	9.3
3/16/2017	6.9
5/18/2017	7.9
9/15/2017	17
3/12/2018	28.7
9/7/2018	27.4
3/8/2019	31.8

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
3/3/2016	22.316
5/3/2016	20.8
7/11/2016	17
9/9/2016	14
10/27/2016	15
1/9/2017	17
3/16/2017	15
5/18/2017	24
9/18/2017	22
3/12/2018	22
9/7/2018	22.4
3/7/2019	25

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

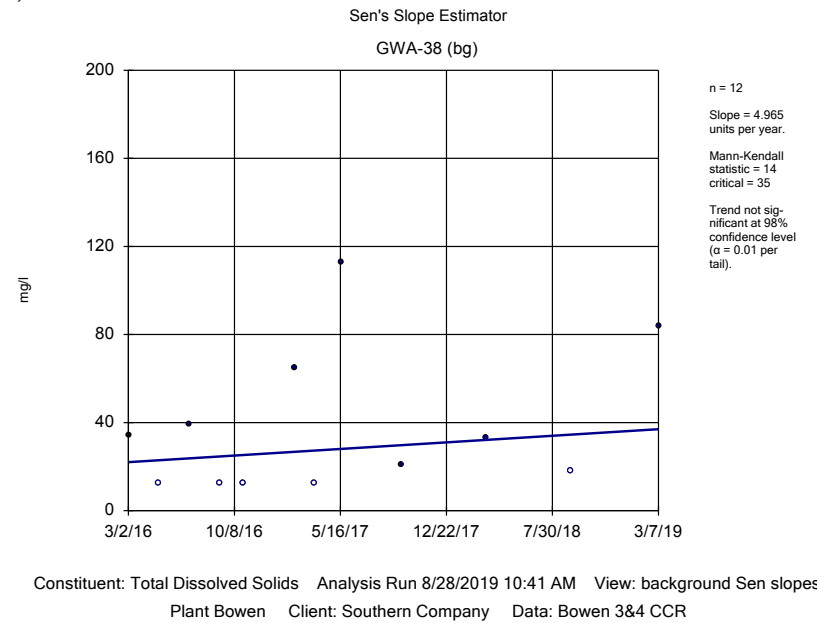
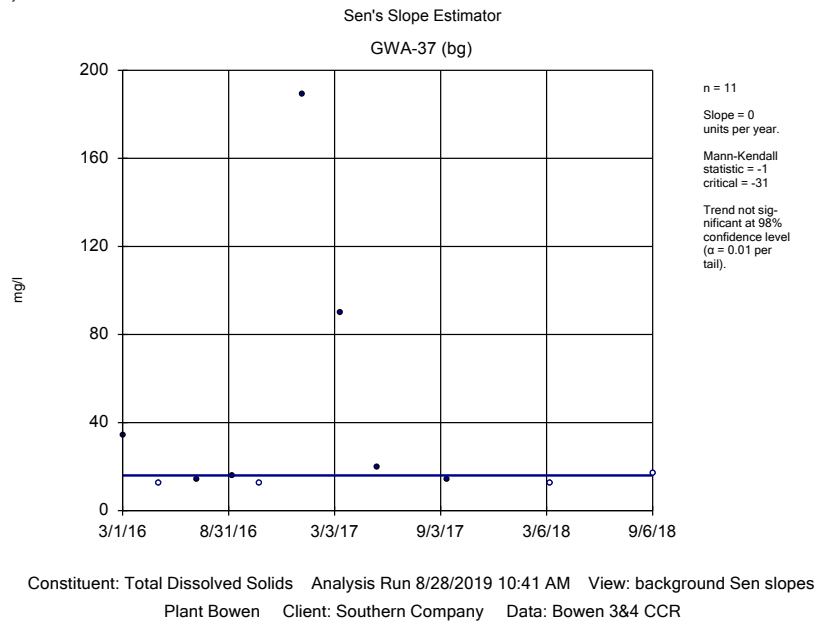
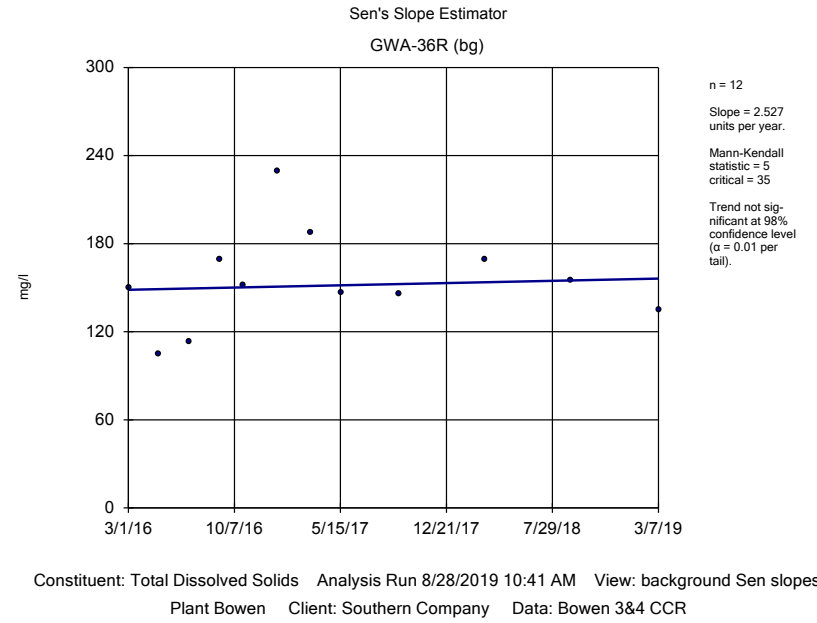
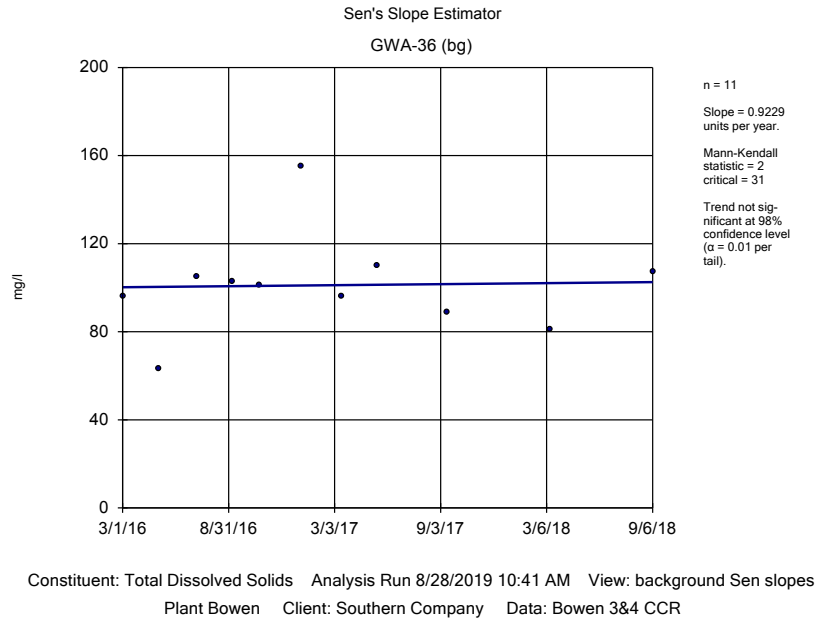
	GWA-56 (bg)
3/3/2016	132.4615
5/9/2016	34.3
7/11/2016	58
9/9/2016	66
10/26/2016	76
1/9/2017	85
3/15/2017	100
5/18/2017	87
9/15/2017	110
3/13/2018	94.8
9/7/2018	101
3/7/2019	88.7

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

5/4/2016	16.8 (D)
7/7/2016	18 (D)
9/8/2016	18 (D)
10/26/2016	20 (D)
1/6/2017	21 (D)
3/15/2017	17 (D)
5/18/2017	19 (D)
7/19/2017	10 (D)
9/19/2017	22 (D)
3/13/2018	27.3
9/7/2018	26.9
3/8/2019	23.6



Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	96 (D)
5/2/2016	63 (D)
7/7/2016	105 (D)
9/7/2016	103 (D)
10/25/2016	101 (D)
1/5/2017	155
3/15/2017	96
5/17/2017	110
9/15/2017	89
3/12/2018	81
9/6/2018	107
3/6/2019	71 (X)

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	150 (D)
5/2/2016	105 (D)
7/6/2016	113 (D)
9/7/2016	169 (D)
10/25/2016	152 (D)
1/5/2017	229
3/14/2017	188
5/16/2017	147
9/15/2017	146
3/12/2018	169
9/6/2018	155
3/7/2019	135

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes

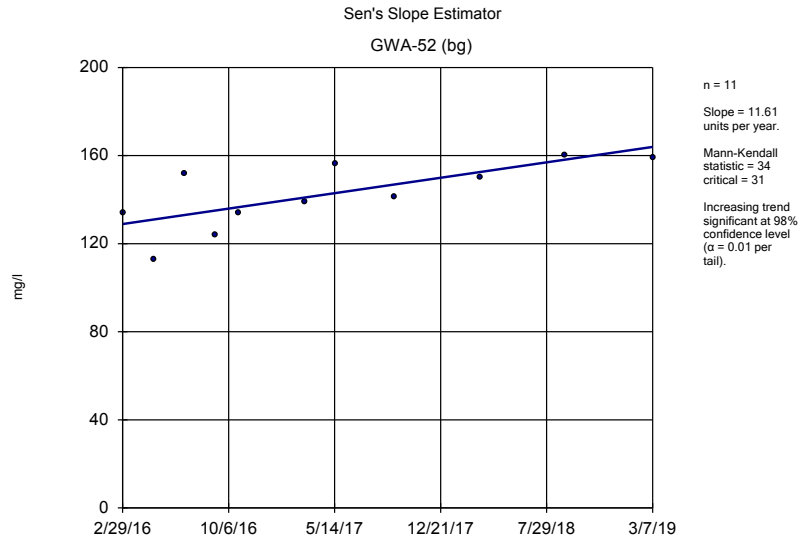
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
3/1/2016	34 (D)
5/3/2016	<25 (D)
7/8/2016	14 (JD)
9/7/2016	16 (JD)
10/25/2016	<25 (D)
1/6/2017	189
3/14/2017	90
5/16/2017	20 (J)
9/15/2017	14 (J)
3/12/2018	<25
9/6/2018	<34
3/6/2019	22 (X)

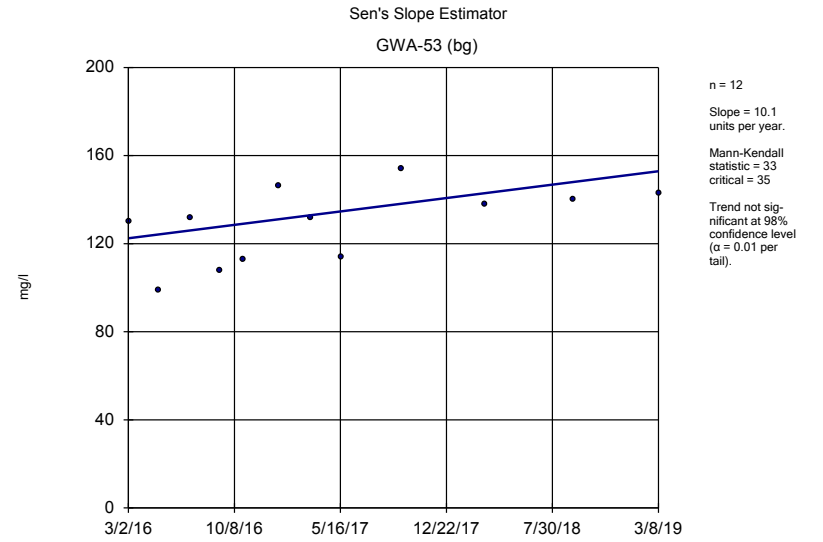
Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

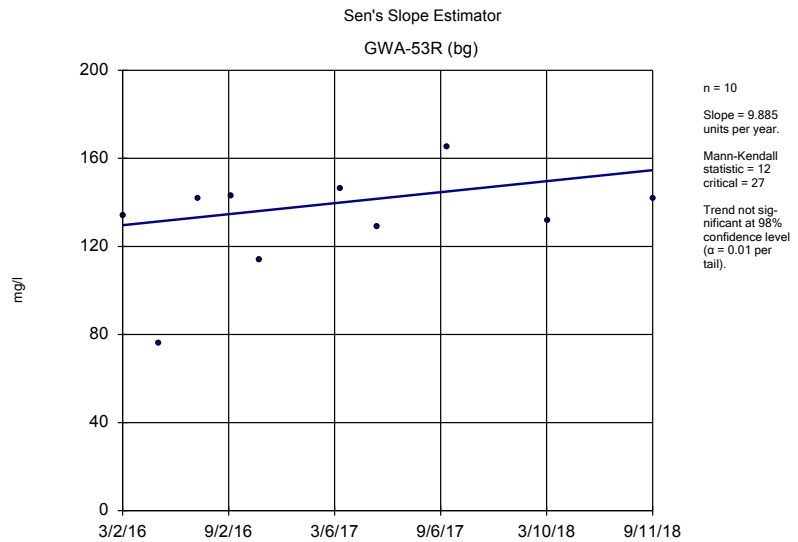
	GWA-38 (bg)
3/2/2016	34 (D)
5/3/2016	<25 (D)
7/7/2016	39 (D)
9/8/2016	<25 (D)
10/25/2016	<25 (D)
2/9/2017	65
3/23/2017	<25
5/17/2017	113
9/19/2017	21 (J)
3/13/2018	33
9/6/2018	<36
3/7/2019	84



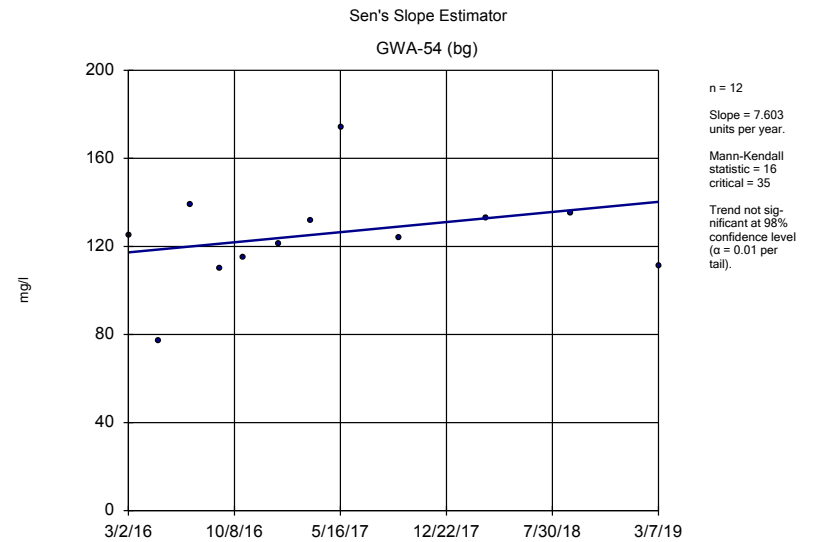
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	134 (D)
5/4/2016	113 (D)
7/8/2016	152 (D)
9/8/2016	124 (D)
10/26/2016	134 (D)
3/15/2017	139
5/17/2017	156
9/15/2017	141
3/13/2018	150
9/6/2018	160
3/7/2019	159

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	130 (D)
5/3/2016	99 (D)
7/8/2016	132 (D)
9/8/2016	108 (D)
10/26/2016	113 (D)
1/9/2017	146
3/16/2017	132
5/19/2017	114
9/19/2017	154
3/13/2018	138
9/11/2018	140
3/8/2019	143

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

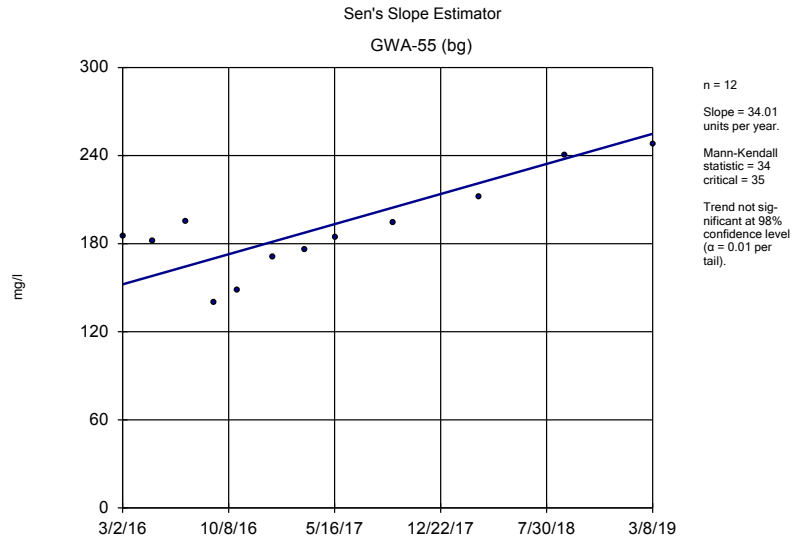
GWA-53R (bg)

3/2/2016	134 (D)
5/3/2016	76 (D)
7/11/2016	142 (D)
9/7/2016	143 (D)
10/27/2016	114 (D)
3/16/2017	146
5/19/2017	129
9/19/2017	165
3/13/2018	132
9/11/2018	142
3/12/2019	150 (X)

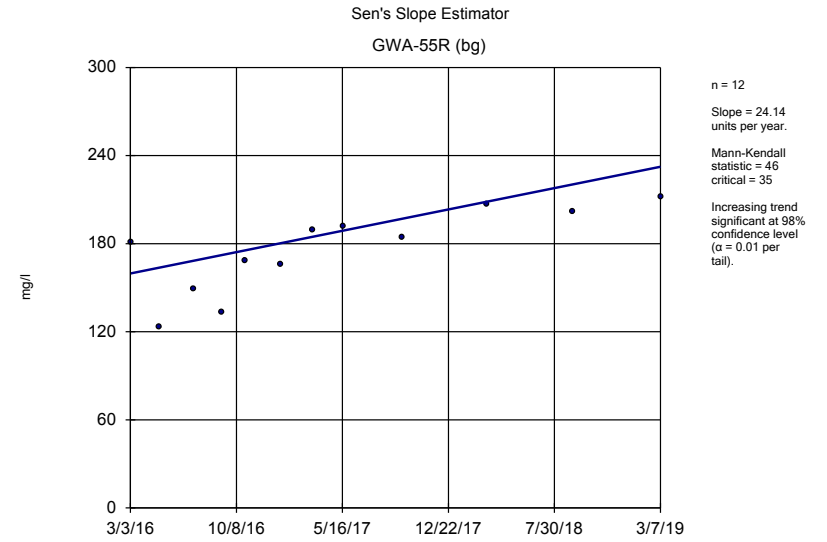
Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

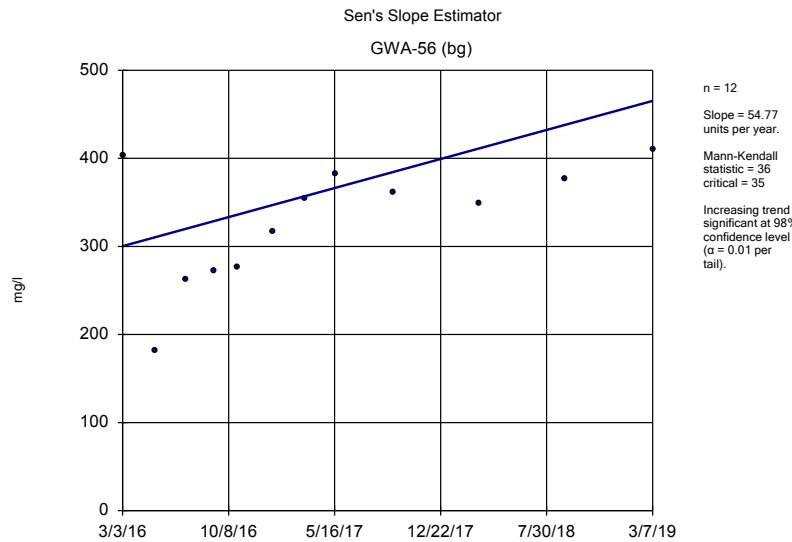
	GWA-54 (bg)
3/2/2016	125 (D)
5/4/2016	77 (D)
7/8/2016	139 (D)
9/8/2016	110 (D)
10/26/2016	115 (D)
1/9/2017	121
3/15/2017	132
5/18/2017	174
9/15/2017	124
3/13/2018	133
9/6/2018	135
3/7/2019	111



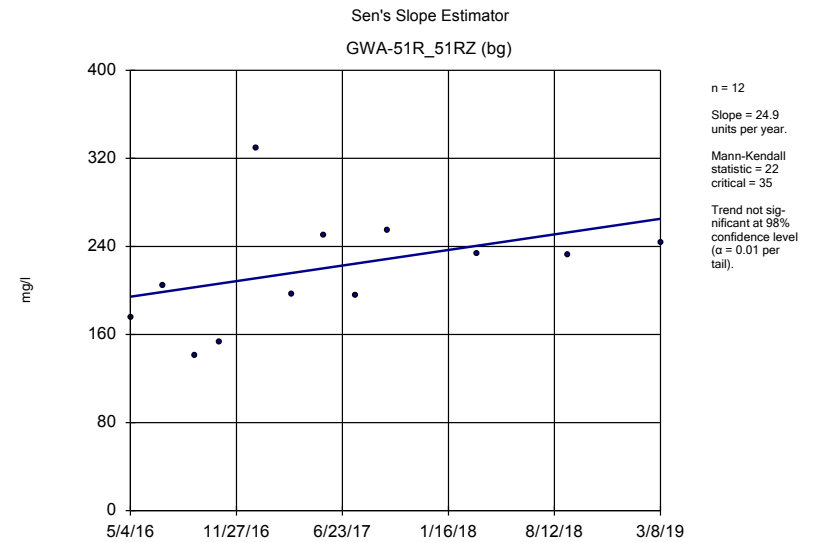
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	185 (D)
5/3/2016	182 (D)
7/11/2016	195 (D)
9/9/2016	140 (D)
10/26/2016	148 (D)
1/9/2017	171
3/16/2017	176
5/18/2017	184
9/15/2017	194
3/12/2018	212
9/7/2018	240
3/8/2019	248

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-55R (bg)

3/3/2016	181 (D)
5/3/2016	123 (D)
7/11/2016	149 (D)
9/9/2016	133 (D)
10/27/2016	168 (D)
1/9/2017	166
3/16/2017	189
5/18/2017	192
9/18/2017	184
3/12/2018	207
9/7/2018	202
3/7/2019	212

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
3/3/2016	403 (D)
5/9/2016	182 (D)
7/11/2016	262 (D)
9/9/2016	272 (D)
10/26/2016	276 (D)
1/9/2017	317
3/15/2017	355
5/18/2017	382
9/15/2017	362
3/13/2018	349
9/7/2018	377
3/7/2019	410

Sen's Slope Estimator

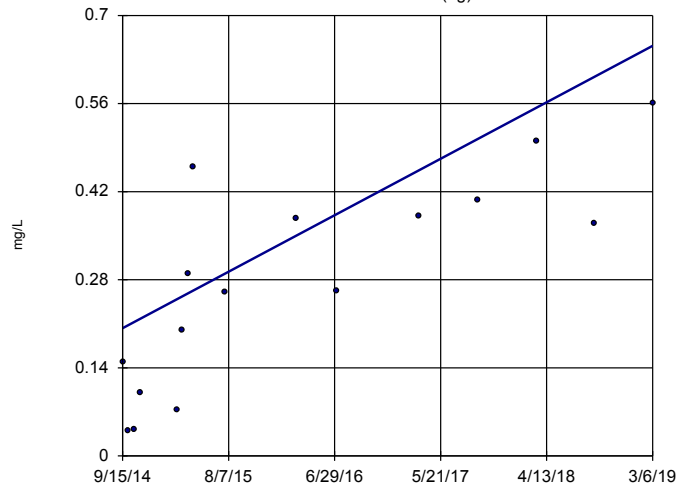
Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

5/4/2016	175 (D)
7/7/2016	204 (D)
9/8/2016	141 (D)
10/26/2016	153 (D)
1/6/2017	329 (D)
3/15/2017	197 (D)
5/18/2017	250 (D)
7/19/2017	195 (D)
9/19/2017	255 (D)
3/13/2018	233
9/7/2018	232
3/8/2019	244

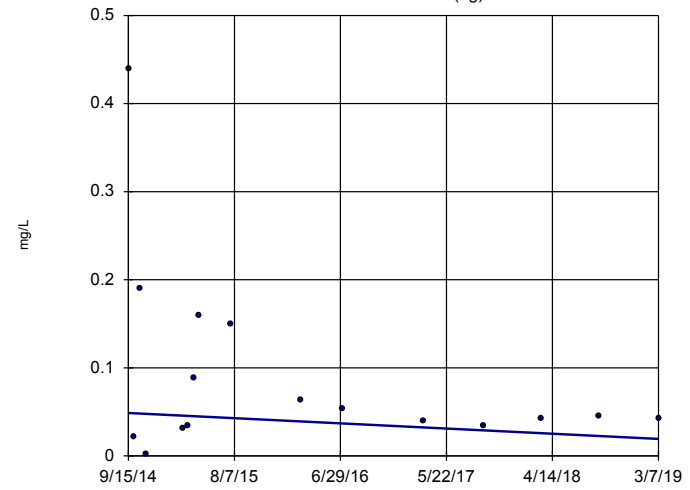
Sen's Slope Estimator
GWA-36 (bg)



n = 16
 Slope = 0.1003
 units per year.
 Mann-Kendall
 statistic = 84
 critical = 53
 Increasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

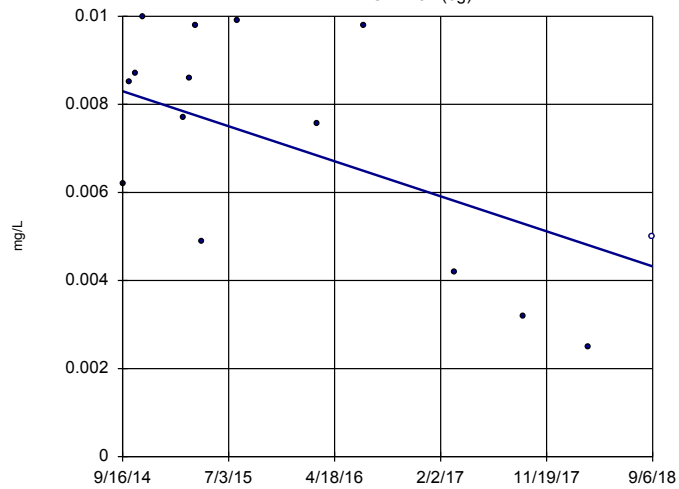
Sen's Slope Estimator
GWA-36R (bg)



n = 16
 Slope = -0.006594
 units per year.
 Mann-Kendall
 statistic = -10
 critical = -53
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

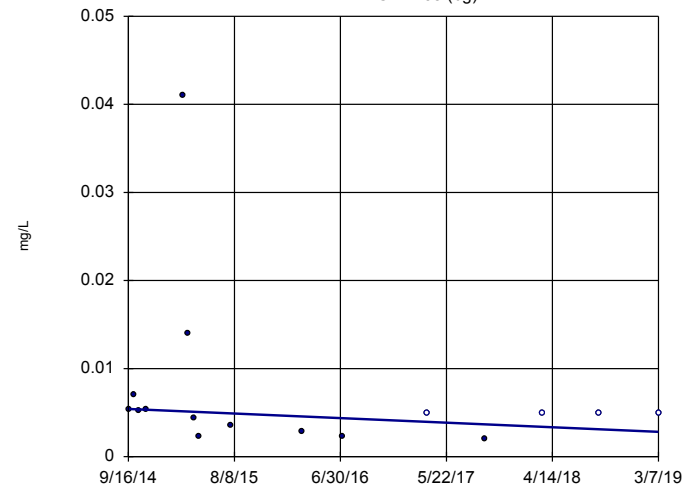
Sen's Slope Estimator
GWA-37 (bg)



n = 15
 Slope = -0.001
 units per year.
 Mann-Kendall
 statistic = -34
 critical = -48
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-38 (bg)



n = 16
 Slope = -0.0005806
 units per year.
 Mann-Kendall
 statistic = -42
 critical = -53
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	0.15
10/3/2014	0.04
10/20/2014	0.042
11/10/2014	0.1
3/2/2015	0.073
3/17/2015	0.2
4/5/2015	0.29
4/21/2015	0.46
7/28/2015	0.26
3/1/2016	0.378
7/7/2016	0.263
3/15/2017	0.382
9/15/2017	0.406
3/12/2018	0.5
9/6/2018	0.37
3/6/2019	0.56

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.44
10/3/2014	0.021
10/20/2014	0.19
11/10/2014	0.0014 (J)
3/2/2015	0.032
3/17/2015	0.034
4/5/2015	0.089
4/21/2015	0.16
7/28/2015	0.15
3/1/2016	0.0627
7/6/2016	0.0532
3/14/2017	0.0401
9/15/2017	0.0338
3/12/2018	0.042
9/6/2018	0.045
3/7/2019	0.043

Sen's Slope Estimator

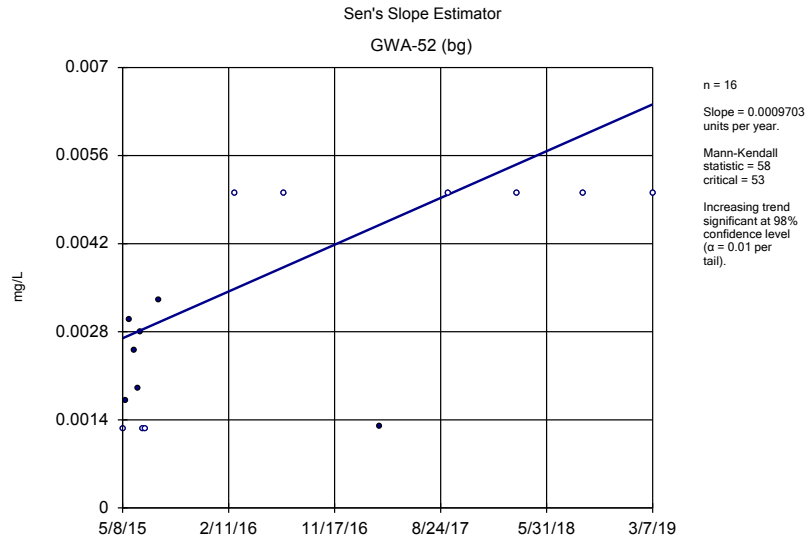
Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	0.0062
10/3/2014	0.0085
10/20/2014	0.0087
11/10/2014	0.01
3/2/2015	0.0077
3/17/2015	0.0086
4/5/2015	0.0098
4/22/2015	0.0049
7/28/2015	0.0099
3/1/2016	0.00756 (J)
7/8/2016	0.0098 (J)
3/14/2017	0.0042 (J)
9/15/2017	0.0032 (J)
3/12/2018	0.0025 (J)
9/6/2018	<0.01
3/6/2019	0.0035 (X)

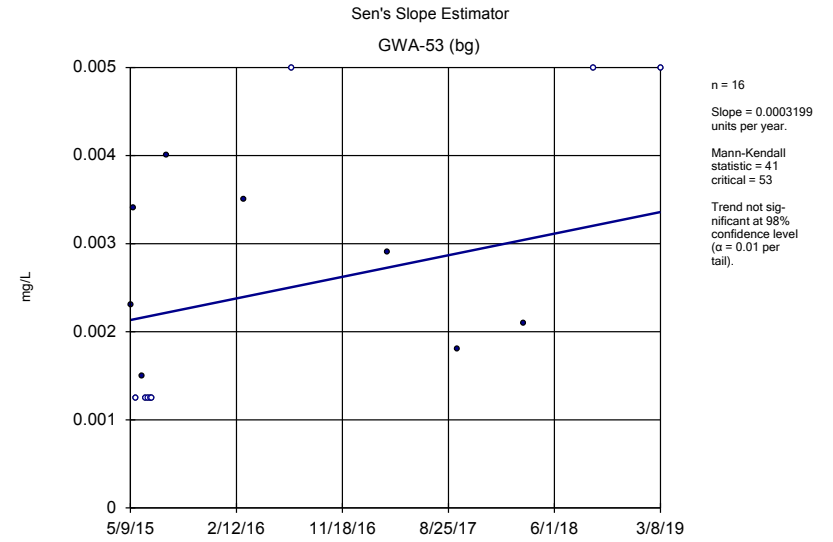
Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

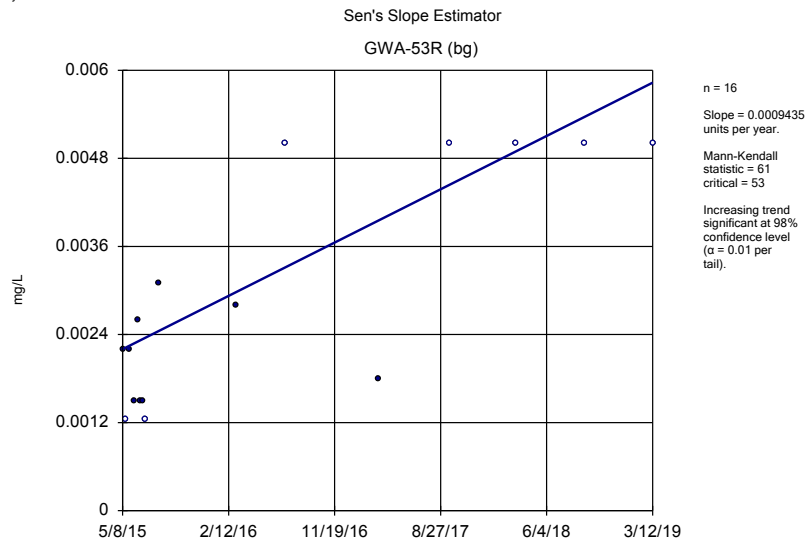
	GWA-38 (bg)
9/16/2014	0.0054
10/3/2014	0.007
10/20/2014	0.0052
11/10/2014	0.0054
3/2/2015	0.041
3/17/2015	0.014
4/6/2015	0.0044
4/22/2015	0.0023 (J)
7/28/2015	0.0035
3/2/2016	0.0029 (J)
7/7/2016	0.0023 (J)
3/23/2017	<0.01 (*)
9/19/2017	0.002 (J)
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01



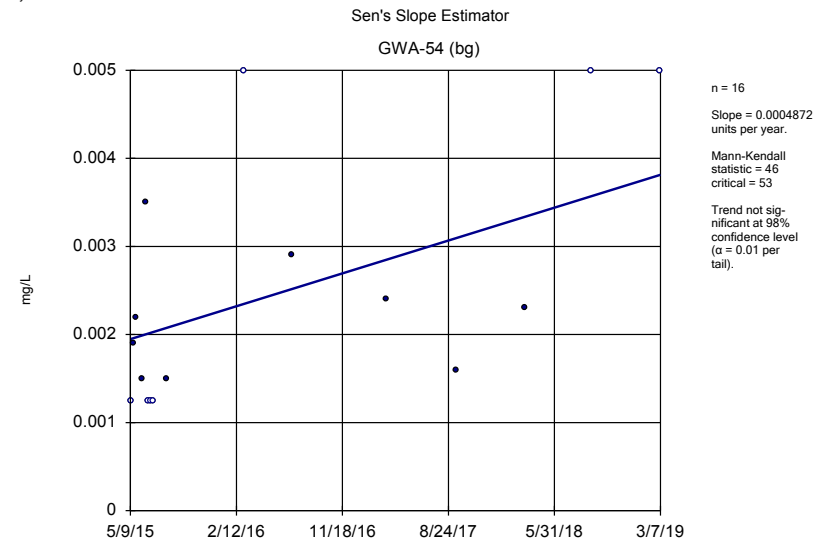
Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.0025
5/17/2015	0.0017 (J)
5/25/2015	0.003
6/8/2015	0.0025
6/18/2015	0.0019 (J)
6/24/2015	0.0028
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	0.0033 (BJ)
2/29/2016	<0.01
7/8/2016	<0.01
3/15/2017	0.0013 (J)
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	0.0023 (J)
5/18/2015	0.0034
5/25/2015	<0.0025
6/8/2015	0.0015 (J)
6/17/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	0.004 (BJ)
3/2/2016	0.0035 (J)
7/8/2016	<0.01
3/16/2017	0.0029 (J)
9/19/2017	0.0018 (J)
3/13/2018	0.0021 (J)
9/11/2018	<0.01
3/8/2019	<0.01

Sen's Slope Estimator

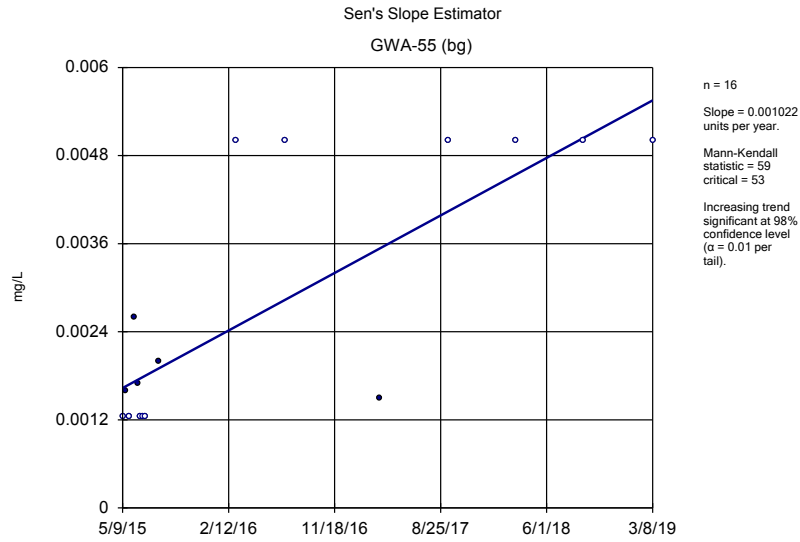
Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	0.0022 (J)
5/17/2015	<0.0025
5/25/2015	0.0022 (J)
6/8/2015	0.0015 (J)
6/18/2015	0.0026
6/24/2015	0.0015 (J)
6/30/2015	0.0015 (J)
7/6/2015	<0.0025
8/12/2015	0.0031 (BJ)
3/2/2016	0.0028 (J)
7/11/2016	<0.01
3/16/2017	0.0018 (J)
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/12/2019	<0.01

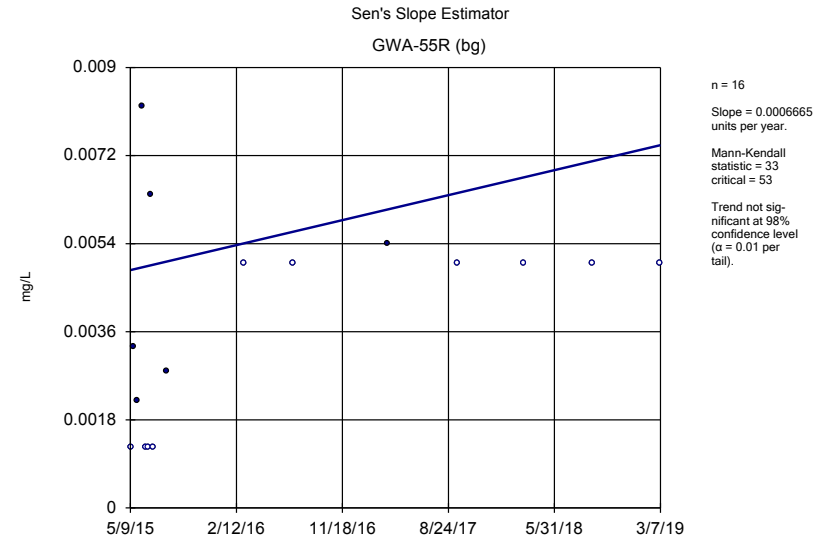
Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

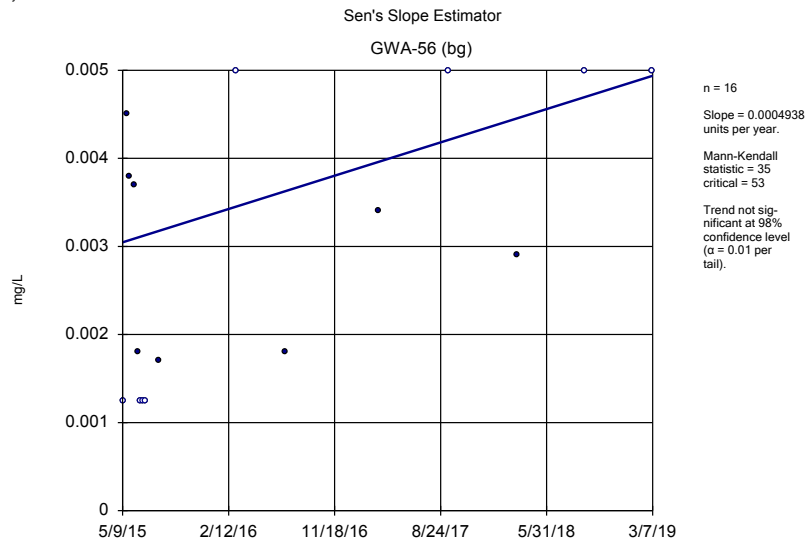
	GWA-54 (bg)
5/9/2015	<0.0025
5/18/2015	0.0019 (J)
5/25/2015	0.0022 (J)
6/9/2015	0.0015 (J)
6/17/2015	0.0035
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/12/2015	0.0015 (BJ)
3/2/2016	<0.01
7/8/2016	0.0029 (J)
3/15/2017	0.0024 (J)
9/15/2017	0.0016 (J)
3/13/2018	0.0023 (J)
9/6/2018	<0.01
3/7/2019	<0.01



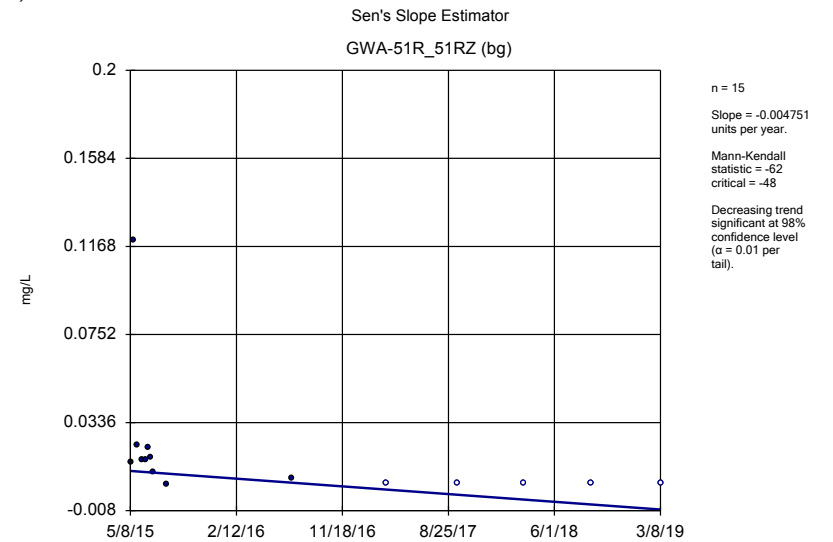
Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:42 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.0025
5/18/2015	0.0016 (J)
5/26/2015	<0.0025
6/9/2015	0.0026
6/17/2015	0.0017 (J)
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	0.002 (BJ)
3/2/2016	<0.01
7/11/2016	<0.01
3/16/2017	0.0015 (J)
9/15/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.0025
5/18/2015	0.0033
5/26/2015	0.0022 (J)
6/9/2015	0.0082
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	0.0064
7/7/2015	<0.0025
8/13/2015	0.0028 (BJ)
3/3/2016	<0.01
7/11/2016	<0.01
3/16/2017	0.0054 (J)
9/18/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.0025
5/19/2015	0.0045
5/26/2015	0.0038
6/9/2015	0.0037
6/17/2015	0.0018 (J)
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	0.0017 (BJ)
3/3/2016	<0.01
7/11/2016	0.0018 (J)
3/15/2017	0.0034 (J)
9/15/2017	<0.01
3/13/2018	0.0029 (J)
9/7/2018	<0.01
3/7/2019	<0.01

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 8/28/2019 10:47 AM View: background Sen slopes
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

5/8/2015	0.015
5/17/2015	0.12
5/25/2015	0.023
6/8/2015	0.016
6/18/2015	0.016
6/24/2015	0.022
6/30/2015	0.017
7/6/2015	0.01
8/12/2015	0.0047 (BJ)
7/7/2016	0.0073 (JD)
3/15/2017	<0.01 (D)
9/19/2017	<0.01 (D)
3/13/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01

Trend Test - Significant Results

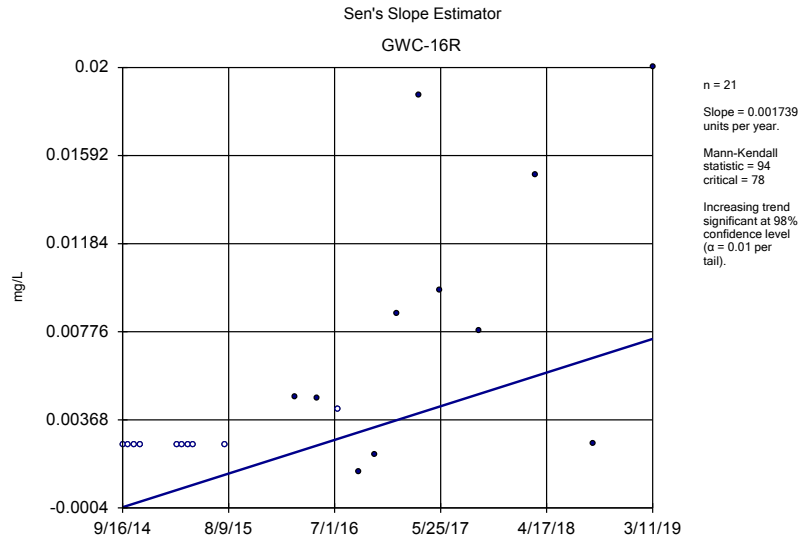
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 10:34 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-16R	0.001739	94	78	Yes	21	47.62	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-16R	4.162	37	35	Yes	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWC-20R	0.3468	39	35	Yes	12	0	n/a	n/a	0.02	NP

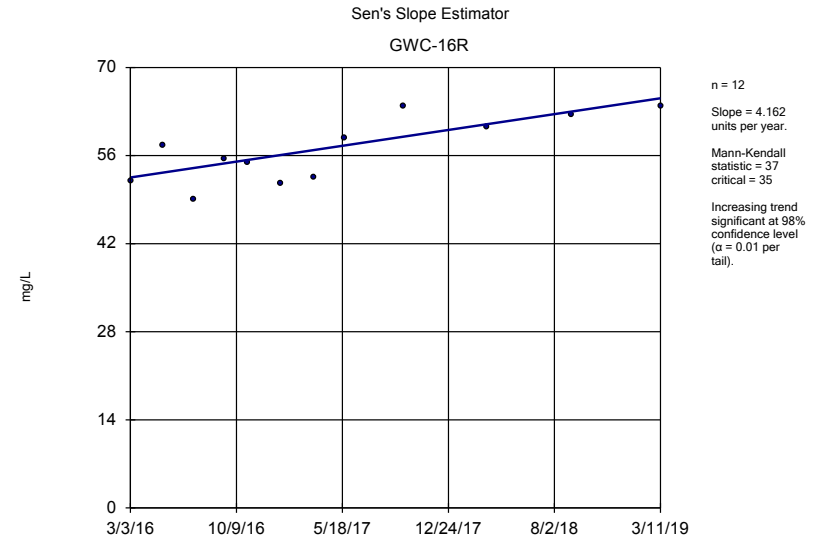
Trend Test - All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 8/28/2019, 10:34 AM

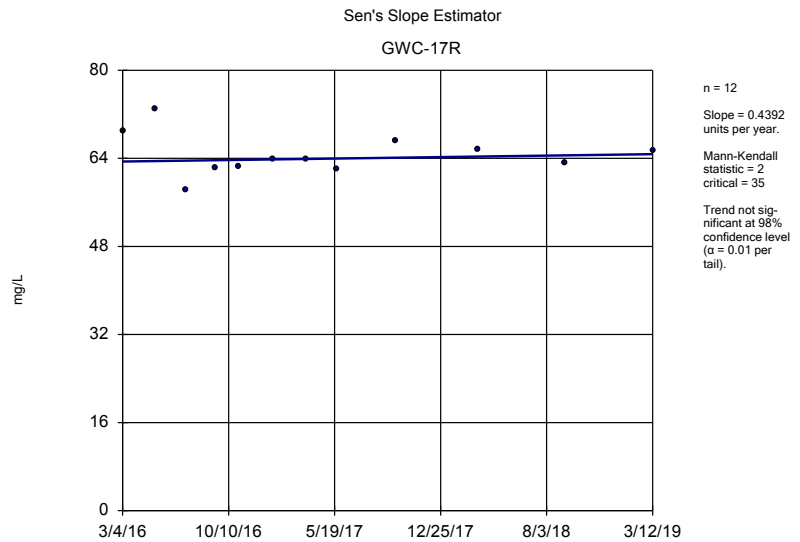
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-16R	0.001739	94	78	Yes	21	47.62	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-16R	4.162	37	35	Yes	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-17R	0.4392	2	35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-21R	4.011	34	35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-23R	2.651	28	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWC-18	0.05647	14	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWC-18R	0	-1	-35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWC-20R	0.3468	39	35	Yes	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWC-17R	0.2004	7	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWC-19R	0	4	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWC-16R	20.16	31	35	No	12	0	n/a	n/a	0.02	NP



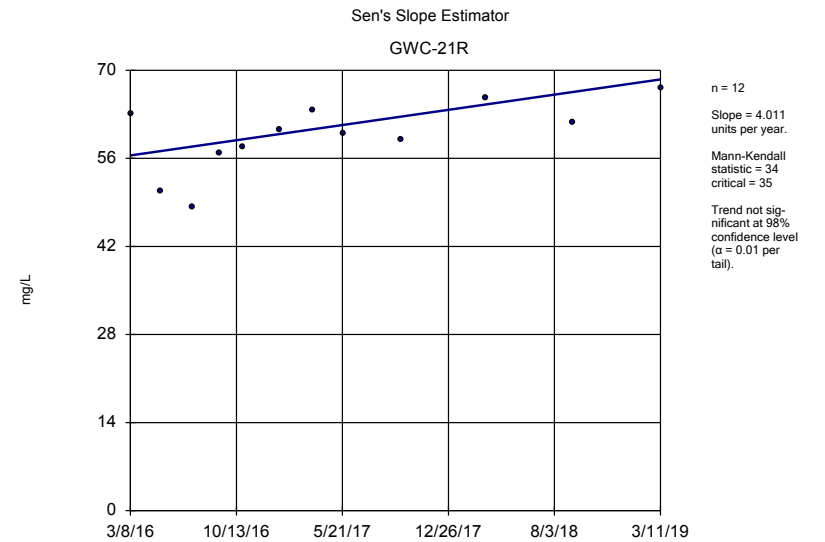
Constituent: Antimony Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R
9/16/2014	<0.005
10/4/2014	<0.005
10/21/2014	<0.005
11/11/2014	<0.005
3/3/2015	<0.005
3/18/2015	<0.005
4/6/2015	<0.005
4/23/2015	<0.005
7/29/2015	<0.005
3/3/2016	0.00472 (D)
5/10/2016	0.0047
7/13/2016	<0.0083 (*)
9/15/2016	0.0013 (J)
11/2/2016	0.0021 (J)
1/11/2017	0.0086
3/20/2017	0.0187
5/23/2017	0.0097
9/21/2017	0.0078
3/14/2018	0.015
9/7/2018	0.0026 (J)
3/11/2019	0.02

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R
3/3/2016	52 (D)
5/10/2016	57.6
7/13/2016	49
9/15/2016	55.4
11/2/2016	54.8
1/11/2017	51.6
3/20/2017	52.5
5/23/2017	58.7
9/21/2017	63.8
3/14/2018	60.6
9/7/2018	62.4
3/11/2019	63.8

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

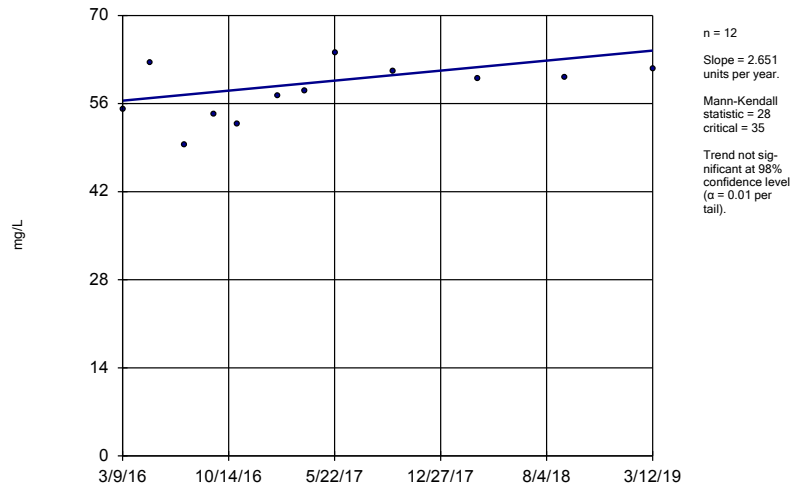
	GWC-17R
3/4/2016	69
5/10/2016	72.9
7/14/2016	58.2
9/14/2016	62.2
11/1/2016	62.5
1/11/2017	63.9
3/21/2017	63.8
5/23/2017	62
9/22/2017	67.2
3/14/2018	65.6
9/11/2018	63.2
3/12/2019	65.3

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

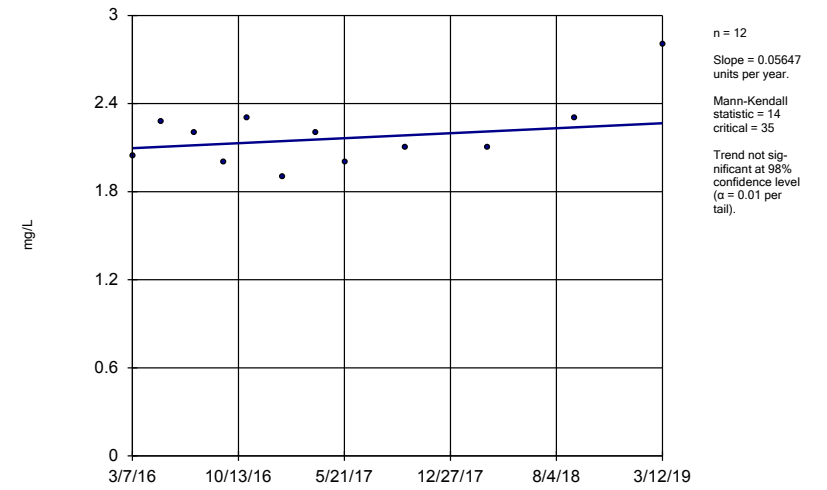
	GWC-21R
3/8/2016	63
5/9/2016	50.8
7/15/2016	48.2
9/9/2016	56.9
10/27/2016	57.9
1/12/2017	60.5
3/21/2017	63.7
5/23/2017	60
9/19/2017	58.9
3/14/2018	65.6
9/10/2018	61.7
3/11/2019	67.1

Sen's Slope Estimator GWC-23R



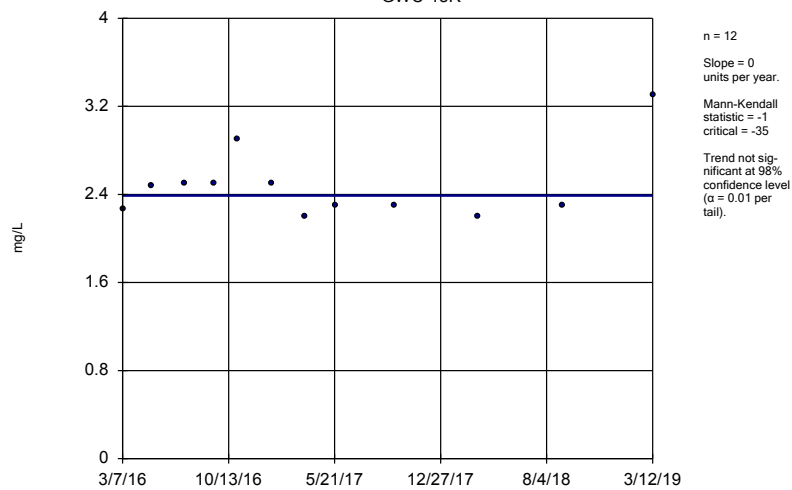
Constituent: Calcium Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator GWC-18



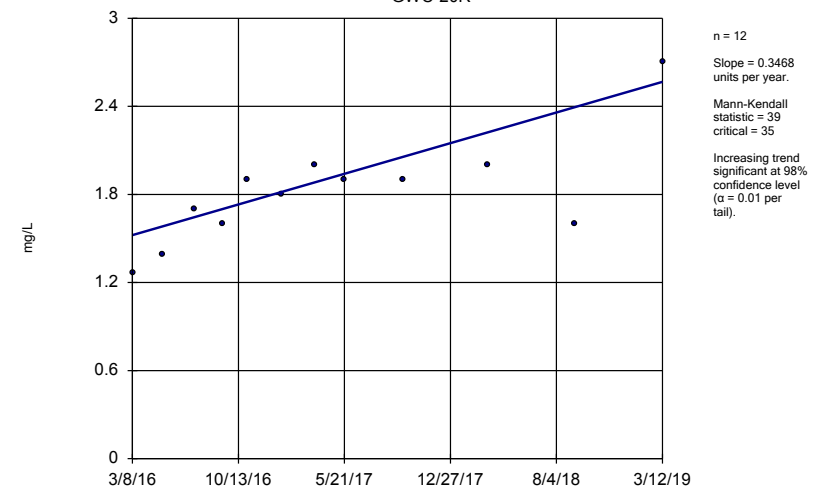
Constituent: Chloride Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator GWC-18R



Constituent: Chloride Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator GWC-20R



Constituent: Chloride Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWC-23R

3/9/2016	55
5/6/2016	62.4
7/15/2016	49.5
9/14/2016	54.4
11/1/2016	52.8
1/25/2017	57.2
3/22/2017	58.1
5/24/2017	64
9/21/2017	61.1
3/14/2018	59.9
9/11/2018	60.2
3/12/2019	61.6

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18
3/7/2016	2.0446
5/5/2016	2.28
7/13/2016	2.2
9/13/2016	2
10/31/2016	2.3
1/12/2017	1.9
3/23/2017	2.2
5/23/2017	2
9/25/2017	2.1
3/14/2018	2.1
9/11/2018	2.3
3/12/2019	2.8

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

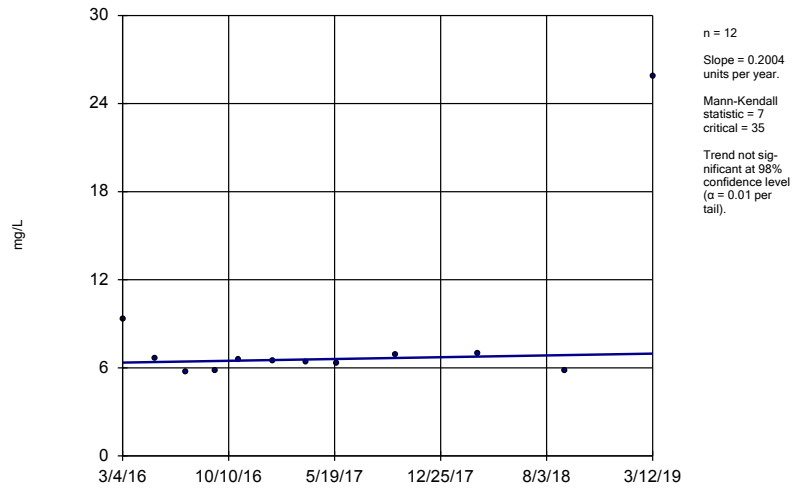
	GWC-18R
3/7/2016	2.2698
5/5/2016	2.48
7/13/2016	2.5
9/12/2016	2.5
11/1/2016	2.9
1/11/2017	2.5
3/20/2017	2.2
5/22/2017	2.3
9/21/2017	2.3
3/14/2018	2.2
9/7/2018	2.3
3/12/2019	3.3

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

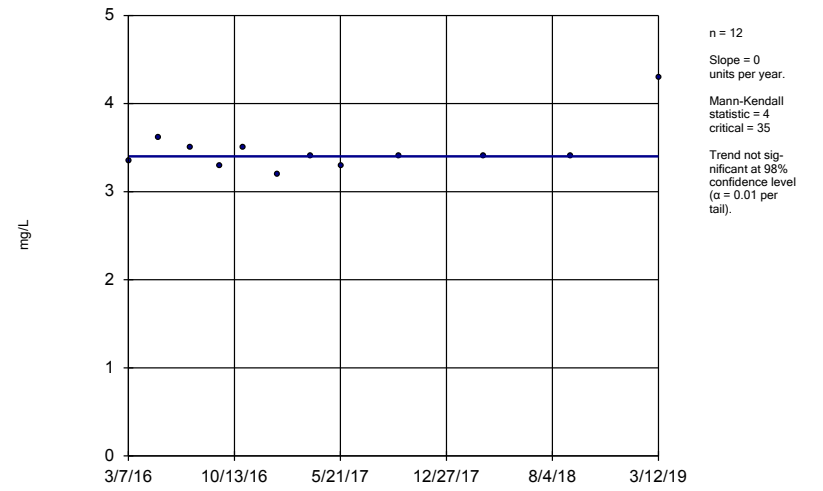
	GWC-20R
3/8/2016	1.2699
5/9/2016	1.39
7/14/2016	1.7
9/12/2016	1.6
10/31/2016	1.9
1/12/2017	1.8
3/22/2017	2
5/22/2017	1.9
9/19/2017	1.9
3/14/2018	2
9/10/2018	1.6
3/12/2019	2.7

Sen's Slope Estimator
GWC-17R



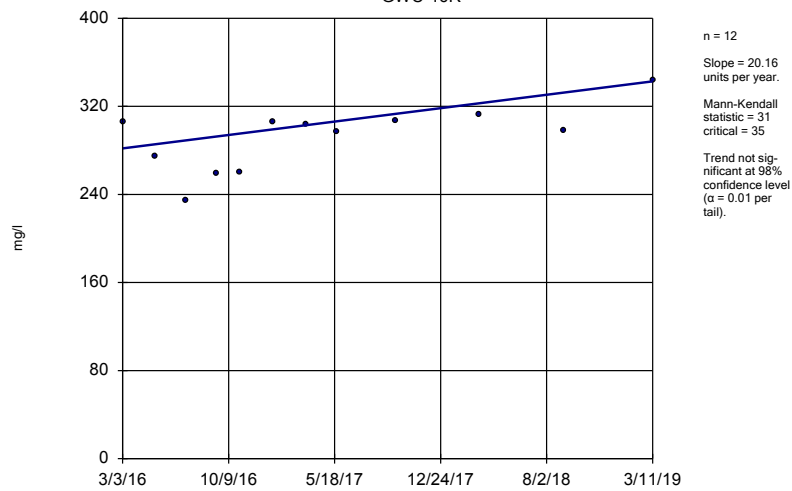
Constituent: Sulfate Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWC-19R



Constituent: Sulfate Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWC-16R



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:33 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R
3/4/2016	9.3417
5/10/2016	6.65
7/14/2016	5.7
9/14/2016	5.8
11/1/2016	6.6
1/11/2017	6.5
3/21/2017	6.4
5/23/2017	6.3
9/22/2017	6.9
3/14/2018	7
9/11/2018	5.8
3/12/2019	25.9

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R
3/7/2016	3.3556
5/9/2016	3.62
7/14/2016	3.5
9/12/2016	3.3
10/31/2016	3.5
1/11/2017	3.2
3/21/2017	3.4
5/22/2017	3.3
9/20/2017	3.4
3/14/2018	3.4
9/10/2018	3.4
3/12/2019	4.3

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 8/28/2019 10:34 AM View: Sens slope compliance wells

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R
3/3/2016	306 (D)
5/10/2016	275 (D)
7/13/2016	234 (D)
9/15/2016	259 (D)
11/2/2016	260 (D)
1/11/2017	306
3/20/2017	304
5/23/2017	297
9/21/2017	307
3/14/2018	312
9/7/2018	298
3/11/2019	344

Intrawell Prediction Limit Summary Table – Significant Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/26/2019, 10:27 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-39R_39RZ	0.0088	n/a	3/14/2019	0.014	Yes	11	18.18	No	0.000...	Param 1 of 3
Barium (mg/L)	GWC-49R	0.012	n/a	3/18/2019	0.015	Yes	11	9.091	x^3	0.000...	Param 1 of 3
Chromium (mg/L)	GWC-47R	0.0053	n/a	3/19/2019	0.018	Yes	11	0	sqrt(x)	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-47	0.045	n/a	3/15/2019	0.051	Yes	11	18.18	No	0.000...	Param 1 of 3

Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/26/2019, 10:27 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GWA-39Z	0.0032	n/a	3/15/2019	0.0015ND	No	11	27.27	No	0.000...	Param 1 of 3
Antimony (mg/L)	GWA-40	0.0050	n/a	3/13/2019	0.0015ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-41	0.0030	n/a	3/14/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-41R	0.0050	n/a	3/14/2019	0.0015ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-42	0.0050	n/a	3/14/2019	0.0015ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-43	0.0030	n/a	3/13/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-43R	0.0015	n/a	3/13/2019	0.0015ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-44	0.0030	n/a	3/14/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-45	0.011	n/a	n/a	1 future	n/a	12	41.67	n/a	0.002173	NP (xform) 1 of 3
Antimony (mg/L)	GWC-45R	0.0059	n/a	3/14/2019	0.0015ND	No	11	27.27	sqrt(x)	0.000...	Param 1 of 3
Antimony (mg/L)	GWC-46R	0.0050	n/a	3/18/2019	0.0015ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-47	0.0050	n/a	3/15/2019	0.0015ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-47R	0.0044	n/a	3/19/2019	0.0015ND	No	11	45.45	x^(1/3)	0.000...	Param 1 of 3
Antimony (mg/L)	GWC-48	0.0050	n/a	3/15/2019	0.0015ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-49R	0.0030	n/a	3/18/2019	0.0015ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-49Z	0.0050	n/a	n/a	1 future	n/a	11	54.55	n/a	0.002806	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-39R_39RZ	0.0088	n/a	3/14/2019	0.014	Yes	11	18.18	No	0.000...	Param 1 of 3
Arsenic (mg/L)	GWA-39Z	0.0025	n/a	3/15/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-40	0.0025	n/a	3/13/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-41	0.0050	n/a	3/14/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-41R	0.0025	n/a	3/14/2019	0.0025ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-42	0.0050	n/a	3/14/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-43	0.0050	n/a	3/13/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-43R	0.0025	n/a	3/13/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-44	0.066	n/a	3/14/2019	0.0025ND	No	11	63.64	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-45	0.0050	n/a	3/14/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-45R	0.0050	n/a	3/14/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-46R	0.0025	n/a	3/18/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-47	0.0025	n/a	3/15/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-47R	0.055	n/a	3/19/2019	0.0025ND	No	11	45.45	n/a	0.002806	NP (normality) 1 of 3
Arsenic (mg/L)	GWC-48	0.0050	n/a	3/15/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-49R	0.0050	n/a	3/18/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWC-49Z	0.0050	n/a	3/19/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Arsenic (mg/L)	GWA-39R_39RZ	0.0025	n/a	3/14/2019	0.0025ND	No	11	54.55	n/a	0.002806	NP (NDs) 1 of 3
Barium (mg/L)	GWA-39Z	0.037	n/a	3/15/2019	0.019	No	11	9.091	No	0.000...	Param 1 of 3
Barium (mg/L)	GWA-40	0.012	n/a	n/a	1 future	n/a	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWA-41	0.035	n/a	3/14/2019	0.028	No	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWA-41R	0.048	n/a	3/14/2019	0.04	No	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWA-42	0.0067	n/a	n/a	1 future	n/a	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWA-43	0.043	n/a	3/13/2019	0.014	No	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWA-43R	0.0091	n/a	n/a	1 future	n/a	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWC-44	0.081	n/a	3/14/2019	0.077	No	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWC-45	0.0063	n/a	n/a	1 future	n/a	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWC-45R	0.025	n/a	3/14/2019	0.024	No	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWC-46R	0.022	n/a	3/18/2019	0.014	No	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWC-47	0.018	n/a	3/15/2019	0.01	No	11	0	No	0.000...	Param 1 of 3
Barium (mg/L)	GWC-47R	0.03	n/a	n/a	1 future	n/a	11	9.091	sqrt(x)	0.000...	Param 1 of 3
Barium (mg/L)	GWC-48	0.037	n/a	3/15/2019	0.026	No	11	9.091	x^2	0.000...	Param 1 of 3
Barium (mg/L)	GWC-49R	0.012	n/a	3/18/2019	0.015	Yes	11	9.091	x^3	0.000...	Param 1 of 3
Barium (mg/L)	GWC-49Z	0.014	n/a	n/a	1 future	n/a	11	9.091	No	0.000...	Param 1 of 3

Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/26/2019, 10:27 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Barium (mg/L)	GWA-39R_39RZ	0.02	n/a	3/14/2019	0.018	No	11	0	No	0.000...	Param 1 of 3
Beryllium (mg/L)	GWA-39Z	0.0030	n/a	3/15/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWA-40	0.0030	n/a	3/13/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWA-41	0.0030	n/a	3/14/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWA-41R	0.0030	n/a	n/a	1 future	n/a	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWA-42	0.0025	n/a	n/a	1 future	n/a	11	18.18	n/a	0.002806	NP (normality) 1 of 3
Beryllium (mg/L)	GWA-43	0.0030	n/a	3/13/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWA-43R	0.0025	n/a	3/13/2019	0.0015ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-44	0.0050	n/a	n/a	1 future	n/a	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-45	0.0030	n/a	3/14/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-45R	0.0030	n/a	3/14/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-46R	0.0030	n/a	3/18/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-47	0.0030	n/a	3/15/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-47R	0.0030	n/a	3/19/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-48	0.0025	n/a	n/a	1 future	n/a	11	27.27	n/a	0.002806	NP (normality) 1 of 3
Beryllium (mg/L)	GWC-49R	0.0030	n/a	3/18/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWC-49Z	0.0030	n/a	3/19/2019	0.0015ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Beryllium (mg/L)	GWA-39R_39RZ	0.0015	n/a	3/14/2019	0.0015ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWA-39Z	0.0050	n/a	3/15/2019	0.0005ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWA-40	0.0010	n/a	3/13/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWA-41	0.0010	n/a	3/14/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWA-41R	0.0010	n/a	3/14/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWA-42	0.00050	n/a	n/a	1 future	n/a	11	18.18	n/a	0.002806	NP (normality) 1 of 3
Cadmium (mg/L)	GWA-43	0.050	n/a	3/13/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWA-43R	0.0010	n/a	3/13/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-44	0.050	n/a	3/14/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-45	0.0010	n/a	3/14/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-45R	0.017	n/a	3/14/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-46R	0.0010	n/a	3/18/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-47	0.050	n/a	n/a	1 future	n/a	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-47R	0.0010	n/a	3/19/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-48	0.020	n/a	n/a	1 future	n/a	11	9.091	n/a	0.002806	NP (normality) 1 of 3
Cadmium (mg/L)	GWC-49R	0.0010	n/a	3/18/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cadmium (mg/L)	GWC-49Z	0.050	n/a	3/19/2019	0.0005ND	No	11	36.36	n/a	0.002806	NP (normality) 1 of 3
Cadmium (mg/L)	GWA-39R_39RZ	0.00050	n/a	3/14/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-39Z	0.010	n/a	3/15/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-40	0.0050	n/a	3/13/2019	0.005ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-41	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-41R	0.0050	n/a	3/14/2019	0.005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-42	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-43	0.0050	n/a	3/13/2019	0.005ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-43R	0.0035	n/a	3/13/2019	0.005ND	No	11	45.45	sqrt(x)	0.000...	Param 1 of 3
Chromium (mg/L)	GWC-44	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWC-45	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWC-45R	0.050	n/a	3/14/2019	0.005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWC-46R	0.0045	n/a	n/a	1 future	n/a	11	27.27	No	0.000...	Param 1 of 3
Chromium (mg/L)	GWC-47	0.044	n/a	3/15/2019	0.005ND	No	11	9.091	n/a	0.002806	NP (normality) 1 of 3
Chromium (mg/L)	GWC-47R	0.0053	n/a	3/19/2019	0.018	Yes	11	0	sqrt(x)	0.000...	Param 1 of 3
Chromium (mg/L)	GWC-48	0.0029	n/a	n/a	1 future	n/a	11	45.45	No	0.000...	Param 1 of 3
Chromium (mg/L)	GWC-49R	0.0050	n/a	3/18/2019	0.005ND	No	11	54.55	n/a	0.002806	NP (NDs) 1 of 3

Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/26/2019, 10:27 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	GWC-49Z	0.017	n/a	n/a	1 future	n/a	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Chromium (mg/L)	GWA-39R_39RZ	0.0050	n/a	n/a	1 future	n/a	11	54.55	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWA-39Z	0.011	n/a	3/15/2019	0.005ND	No	11	9.091	sqrt(x)	0.000...	Param 1 of 3
Cobalt (mg/L)	GWA-40	0.010	n/a	3/13/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWA-41	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWA-41R	0.0050	n/a	3/14/2019	0.005ND	No	11	63.64	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWA-42	0.0050	n/a	3/14/2019	0.005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWA-43	0.010	n/a	3/13/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWA-43R	0.010	n/a	3/13/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-44	0.0042	n/a	n/a	1 future	n/a	11	9.091	ln(x)	0.000...	Param 1 of 3
Cobalt (mg/L)	GWC-45	0.0050	n/a	n/a	1 future	n/a	11	18.18	n/a	0.002806	NP (normality) 1 of 3
Cobalt (mg/L)	GWC-45R	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-46R	0.0050	n/a	3/18/2019	0.005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-47	0.010	n/a	3/15/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-47R	0.010	n/a	3/19/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-48	0.0050	n/a	n/a	1 future	n/a	11	9.091	n/a	0.002806	NP (normality) 1 of 3
Cobalt (mg/L)	GWC-49R	0.010	n/a	3/18/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Cobalt (mg/L)	GWC-49Z	0.0071	n/a	n/a	1 future	n/a	11	18.18	No	0.000...	Param 1 of 3
Cobalt (mg/L)	GWA-39R_39RZ	0.0057	n/a	3/14/2019	0.005ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Copper (mg/L)	GWA-39Z	0.013	n/a	3/15/2019	0.0125ND	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWA-40	0.025	n/a	3/13/2019	0.0125ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWA-41	0.013	n/a	3/14/2019	0.0125ND	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWA-41R	0.013	n/a	n/a	1 future	n/a	10	70	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWA-42	0.013	n/a	3/14/2019	0.0125ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWA-43	0.013	n/a	3/13/2019	0.0125ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWA-43R	0.013	n/a	n/a	1 future	n/a	10	90	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-44	0.013	n/a	3/14/2019	0.0125ND	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-45	0.0039	n/a	3/14/2019	0.0125ND	No	10	50	sqrt(x)	0.000...	Param 1 of 3
Copper (mg/L)	GWC-45R	0.013	n/a	3/14/2019	0.0125ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-46R	0.013	n/a	3/18/2019	0.0125ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-47	0.013	n/a	3/15/2019	0.0125ND	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-47R	0.013	n/a	3/19/2019	0.0125ND	No	10	70	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-48	0.050	n/a	3/15/2019	0.0125ND	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-49R	0.025	n/a	3/18/2019	0.0125ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWC-49Z	0.013	n/a	3/19/2019	0.0125ND	No	10	70	n/a	0.00344	NP (NDs) 1 of 3
Copper (mg/L)	GWA-39R_39RZ	0.027	n/a	3/14/2019	0.0125ND	No	7	71.43	n/a	0.008668	NP (NDs) 1 of 3
Lead (mg/L)	GWA-39Z	0.013	n/a	3/15/2019	0.0025ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWA-40	0.013	n/a	3/13/2019	0.0025ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWA-41	0.0050	n/a	3/14/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWA-41R	0.013	n/a	n/a	1 future	n/a	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWA-42	0.013	n/a	3/14/2019	0.0025ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWA-43	0.013	n/a	3/13/2019	0.0025ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWA-43R	0.013	n/a	3/13/2019	0.0025ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWC-44	0.013	n/a	n/a	1 future	n/a	11	27.27	n/a	0.002806	NP (xform) 1 of 3
Lead (mg/L)	GWC-45	0.0025	n/a	3/14/2019	0.0025ND	No	11	36.36	n/a	0.002806	NP (xform) 1 of 3
Lead (mg/L)	GWC-45R	0.013	n/a	3/14/2019	0.0025ND	No	11	63.64	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWC-46R	0.0050	n/a	3/18/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWC-47	0.013	n/a	3/15/2019	0.0025ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWC-47R	0.013	n/a	3/19/2019	0.0025ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWC-48	0.013	n/a	3/15/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3

Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/26/2019, 10:27 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Lead (mg/L)	GWC-49R	0.0050	n/a	3/18/2019	0.0025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWC-49Z	0.013	n/a	3/19/2019	0.0025ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Lead (mg/L)	GWA-39R_39RZ	0.0025	n/a	3/14/2019	0.0025ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-39Z	0.00050	n/a	3/15/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-40	0.025	n/a	3/13/2019	0.00025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-41	0.00050	n/a	3/14/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-41R	0.00050	n/a	3/14/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-42	0.025	n/a	3/14/2019	0.00025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-43	0.00050	n/a	3/13/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-43R	0.025	n/a	3/13/2019	0.00025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-44	0.00050	n/a	3/14/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-45	0.00050	n/a	3/14/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-45R	0.00050	n/a	3/14/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-46R	0.00050	n/a	3/18/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-47	0.00050	n/a	3/15/2019	0.00025ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-47R	0.00050	n/a	n/a	1 future	n/a	11	100	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-48	0.025	n/a	3/15/2019	0.00025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-49R	0.025	n/a	3/18/2019	0.00025ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWC-49Z	0.025	n/a	n/a	1 future	n/a	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Mercury (mg/L)	GWA-39R_39RZ	0.00025	n/a	3/14/2019	0.00025ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Nickel (mg/L)	GWA-39Z	0.018	n/a	3/15/2019	0.005ND	No	10	20	sqrt(x)	0.000...	Param 1 of 3
Nickel (mg/L)	GWA-40	0.010	n/a	3/13/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWA-41	0.0050	n/a	3/14/2019	0.005ND	No	10	60	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWA-41R	0.0050	n/a	n/a	1 future	n/a	10	60	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWA-42	0.0050	n/a	n/a	1 future	n/a	10	20	n/a	0.00344	NP (normality) 1 of 3
Nickel (mg/L)	GWA-43	0.0050	n/a	3/13/2019	0.005ND	No	10	40	n/a	0.00344	NP (normality) 1 of 3
Nickel (mg/L)	GWA-43R	0.0050	n/a	3/13/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-44	0.0050	n/a	3/14/2019	0.005ND	No	10	50	n/a	0.00344	NP (normality) 1 of 3
Nickel (mg/L)	GWC-45	0.0050	n/a	n/a	1 future	n/a	10	10	n/a	0.00344	NP (normality) 1 of 3
Nickel (mg/L)	GWC-45R	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-46R	0.0050	n/a	3/18/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-47	0.0050	n/a	3/15/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-47R	0.0050	n/a	n/a	1 future	n/a	10	60	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-48	0.0054	n/a	n/a	1 future	n/a	10	10	No	0.000...	Param 1 of 3
Nickel (mg/L)	GWC-49R	0.010	n/a	3/18/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Nickel (mg/L)	GWC-49Z	0.0078	n/a	n/a	1 future	n/a	10	10	No	0.000...	Param 1 of 3
Nickel (mg/L)	GWA-39R_39RZ	0.022	n/a	n/a	1 future	n/a	7	57.14	n/a	0.008668	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-39Z	0.010	n/a	3/15/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-40	0.010	n/a	3/13/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-41	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-41R	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-42	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-43	0.0050	n/a	3/13/2019	0.005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-43R	0.010	n/a	3/13/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-44	0.0067	n/a	n/a	1 future	n/a	11	45.45	No	0.000...	Param 1 of 3
Selenium (mg/L)	GWC-45	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-45R	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-46R	0.0050	n/a	3/18/2019	0.005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-47	0.010	n/a	3/15/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-47R	0.010	n/a	3/19/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3

Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/26/2019, 10:27 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	GWC-48	0.0050	n/a	3/15/2019	0.005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-49R	0.010	n/a	3/18/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-49Z	0.010	n/a	3/19/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-39R_39RZ	0.010	n/a	3/14/2019	0.005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Silver (mg/L)	GWA-39Z	0.010	n/a	3/15/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWA-40	0.010	n/a	3/13/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWA-41	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWA-41R	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWA-42	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWA-43	0.010	n/a	3/13/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWA-43R	0.010	n/a	3/13/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-44	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-45	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-45R	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-46R	0.010	n/a	3/18/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-47	0.010	n/a	3/15/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-47R	0.010	n/a	3/19/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-48	0.010	n/a	3/15/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-49R	0.010	n/a	3/18/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWC-49Z	0.010	n/a	3/19/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Silver (mg/L)	GWA-39R_39RZ	0.0050	n/a	3/14/2019	0.005ND	No	7	85.71	n/a	0.008668	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-39Z	0.0050	n/a	3/15/2019	0.0005ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-40	0.0010	n/a	3/13/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-41	0.0010	n/a	3/14/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-41R	0.0050	n/a	3/14/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-42	0.0050	n/a	3/14/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-43	0.0050	n/a	3/13/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-43R	0.0010	n/a	3/13/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-44	0.00050	n/a	3/14/2019	0.0005ND	No	11	81.82	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-45	0.0010	n/a	3/14/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-45R	0.0010	n/a	3/14/2019	0.0005ND	No	11	100	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-46R	0.0050	n/a	3/18/2019	0.0005ND	No	11	63.64	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-47	0.0050	n/a	3/15/2019	0.0005ND	No	11	72.73	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-47R	0.0011	n/a	n/a	1 future	n/a	11	0	ln(x)	0.000...	Param 1 of 3
Thallium (mg/L)	GWC-48	0.0050	n/a	3/15/2019	0.0005ND	No	11	63.64	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-49R	0.0050	n/a	3/18/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-49Z	0.0050	n/a	3/19/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-39R_39RZ	0.00050	n/a	3/14/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-39Z	0.010	n/a	3/15/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-40	0.010	n/a	3/13/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-41	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-41R	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-42	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-43	0.0050	n/a	3/13/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-43R	0.0050	n/a	3/13/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-44	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-45	0.0050	n/a	3/14/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-45R	0.010	n/a	3/14/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-46R	0.010	n/a	3/18/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-47	0.010	n/a	3/15/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3

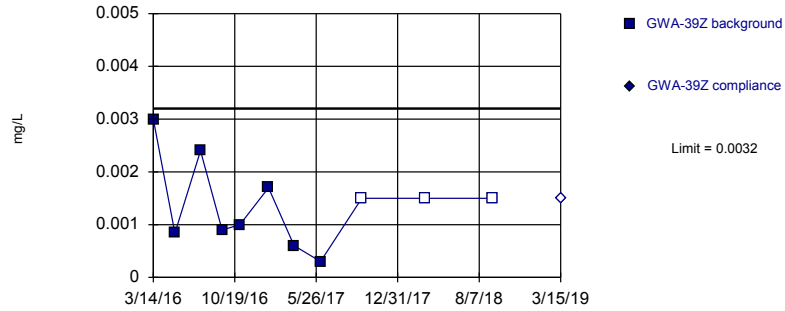
Intrawell Prediction Limit Summary Table – All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/26/2019, 10:27 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Vanadium (mg/L)	GWC-47R	0.010	n/a	3/19/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-48	0.010	n/a	3/15/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-49R	0.010	n/a	3/18/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWC-49Z	0.010	n/a	3/19/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium (mg/L)	GWA-39R_39RZ	0.0050	n/a	3/14/2019	0.005ND	No	7	85.71	n/a	0.008668	NP (NDs) 1 of 3
Zinc (mg/L)	GWA-39Z	0.0050	n/a	n/a	1 future	n/a	10	60	n/a	0.00344	NP (NDs) 1 of 3
Zinc (mg/L)	GWA-40	0.0050	n/a	3/13/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Zinc (mg/L)	GWA-41	0.0050	n/a	3/14/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Zinc (mg/L)	GWA-41R	0.0050	n/a	n/a	1 future	n/a	10	80	n/a	0.00344	NP (NDs) 1 of 3
Zinc (mg/L)	GWA-42	0.02	n/a	3/14/2019	0.01	No	10	40	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWA-43	0.0089	n/a	n/a	1 future	n/a	10	50	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWA-43R	0.0091	n/a	n/a	1 future	n/a	10	50	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-44	0.0079	n/a	n/a	1 future	n/a	10	40	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-45	0.0082	n/a	3/14/2019	0.005ND	No	10	50	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-45R	0.0061	n/a	n/a	1 future	n/a	10	40	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-46R	0.0063	n/a	3/18/2019	0.005ND	No	10	50	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-47	0.045	n/a	3/15/2019	0.051	Yes	11	18.18	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-47R	0.025	n/a	3/19/2019	0.016	No	10	20	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-48	0.011	n/a	n/a	1 future	n/a	10	50	No	0.000...	Param 1 of 3
Zinc (mg/L)	GWC-49R	0.010	n/a	3/18/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Zinc (mg/L)	GWC-49Z	0.0079	n/a	n/a	1 future	n/a	10	60	n/a	0.00344	NP (NDs) 1 of 3
Zinc (mg/L)	GWA-39R_39RZ	0.0050	n/a	n/a	1 future	n/a	7	57.14	n/a	0.008668	NP (NDs) 1 of 3

Within Limit

Prediction Limit
Intrawell Parametric

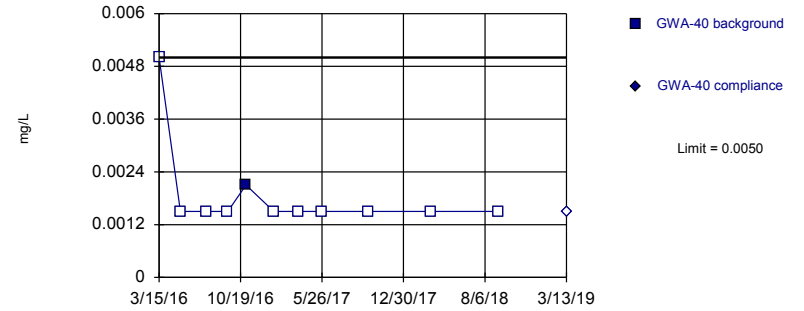


Background Data Summary (after Aitchison's Adjustment): Mean=0.0009763, Std. Dev.=0.001006, n=11, 27.27% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9398, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

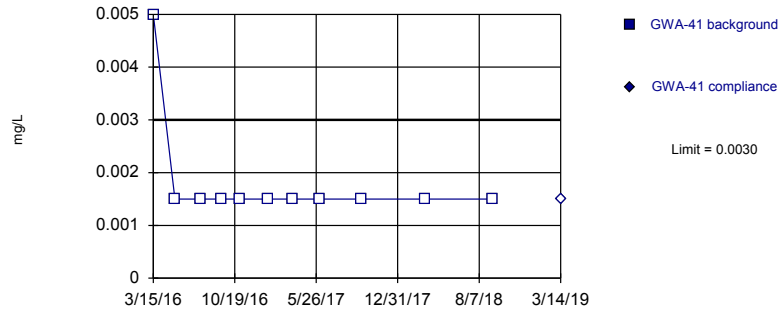


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

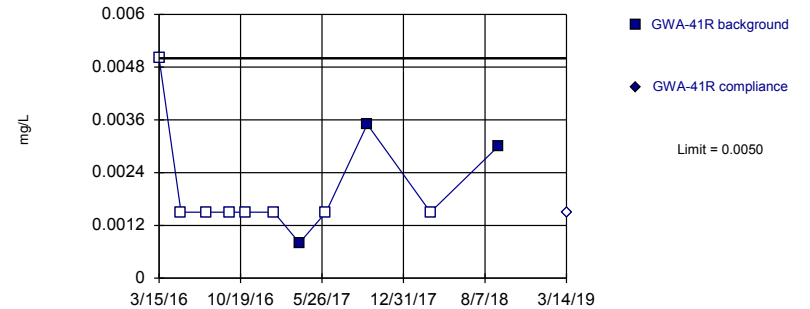


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

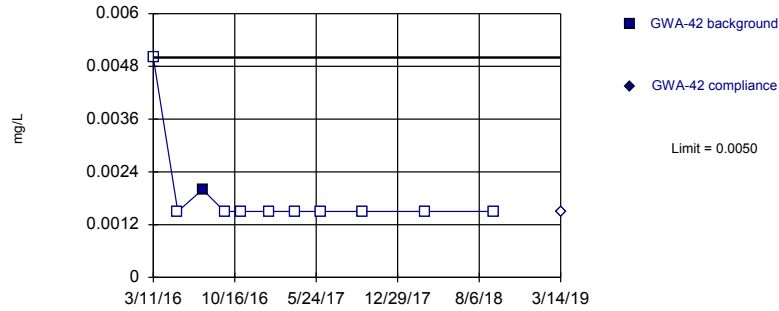
Prediction Limit

Constituent: Antimony Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41	GWA-41R	GWA-41R
3/14/2016	0.003							
3/15/2016			<0.01		<0.01		<0.01	
5/11/2016	0.000839 (J)		<0.003					
5/12/2016					<0.003			
5/13/2016							<0.003	
7/19/2016	0.0024 (J)							
7/20/2016					<0.003			
7/21/2016			<0.003				<0.003 (*)	
9/15/2016	0.0009 (J)		<0.003		<0.003			
9/21/2016							<0.003	
11/2/2016	0.001 (J)							
11/3/2016			0.0021 (J)		<0.003		<0.003	
1/17/2017			<0.003				<0.003	
1/18/2017	0.0017 (J)				<0.003			
3/24/2017			<0.003		<0.003			
3/27/2017							0.0008 (J)	
3/28/2017	0.0006 (J)							
5/24/2017			<0.003					
6/6/2017					<0.003		<0.003	
6/7/2017	0.0003 (J)							
9/25/2017					<0.003		0.0035	
9/26/2017	<0.003		<0.003					
3/14/2018	<0.003		<0.003		<0.003		<0.003	
9/12/2018	<0.003		<0.003		<0.003		0.003	
3/13/2019				<0.003				
3/14/2019						<0.003		<0.003
3/15/2019		<0.003						

Within Limit

Prediction Limit
Intrawell Non-parametric

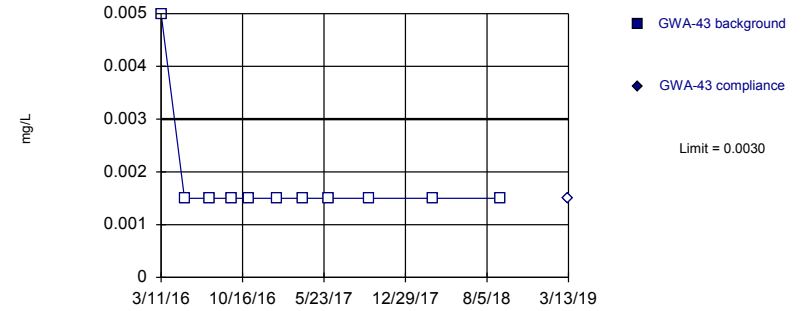


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

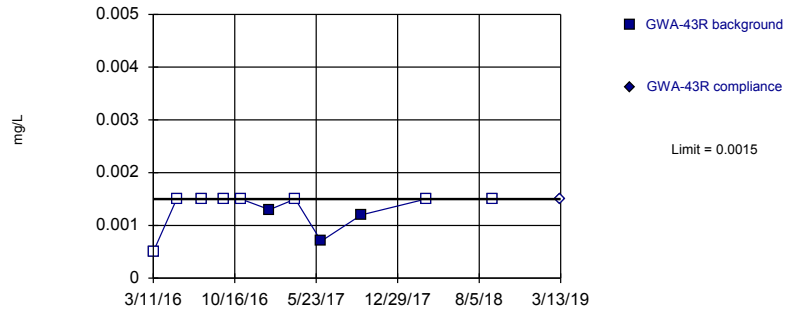


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

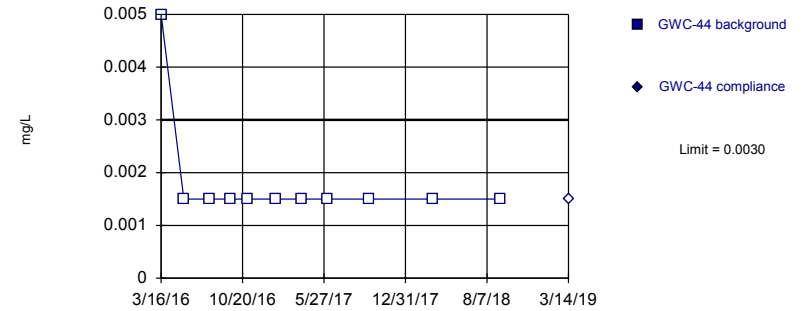


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

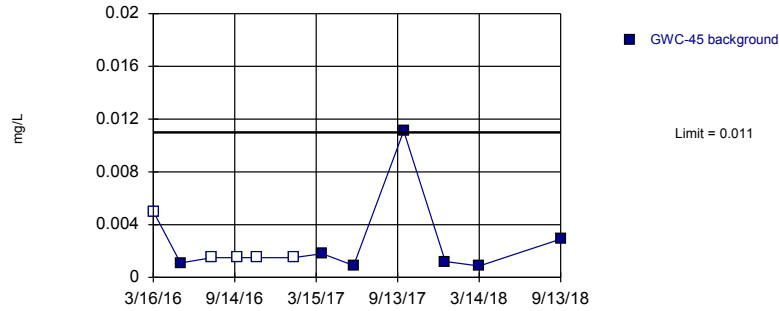
Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Antimony Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R	GWC-44	GWC-44
3/11/2016	<0.01		<0.01		<0.001			
3/16/2016							<0.01	
5/13/2016			<0.003		<0.003			
5/16/2016	<0.003						<0.003	
7/19/2016			<0.003 (*)		<0.003			
7/22/2016	0.002 (J)							
7/25/2016							<0.003 (*)	
9/16/2016			<0.003		<0.003			
9/19/2016	<0.003						<0.003	
11/2/2016			<0.003		<0.003			
11/3/2016	<0.003						<0.003	
1/17/2017	<0.003							
1/18/2017			<0.003		0.0013 (J)			
1/19/2017							<0.003	
3/27/2017	<0.003							
3/28/2017			<0.003		<0.003		<0.003	
6/5/2017							<0.003	
6/6/2017			<0.003		0.0007 (J)			
6/7/2017	<0.003							
9/22/2017			<0.003		0.0012 (J)			
9/26/2017	<0.003						<0.003	
3/14/2018	<0.003		<0.003					
3/15/2018					<0.003		<0.003	
9/12/2018			<0.003		<0.003		<0.003	
9/14/2018	<0.003							
3/13/2019				<0.003		<0.003		
3/14/2019		<0.003						<0.003

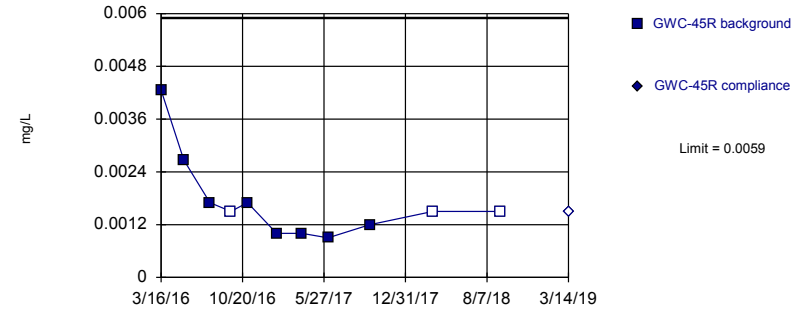
Prediction Limit
Intrawell Non-parametric, GWC-45



Non-parametric test used after natural log transformation resulted in a parametric limit of 24.66, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 12 background values. 41.67% NDs. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

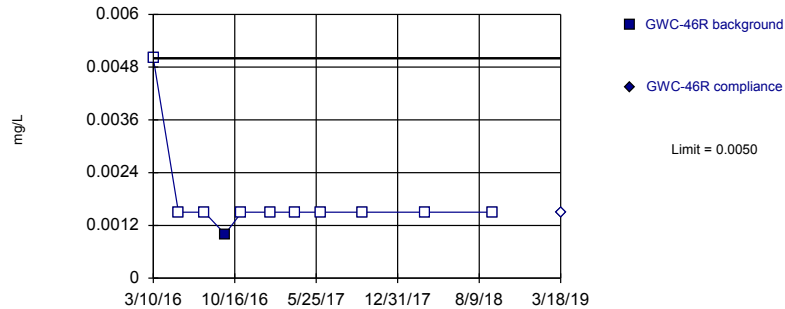
Within Limit
Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.02975, Std. Dev.=0.02166, n=11, 27.27% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8291, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

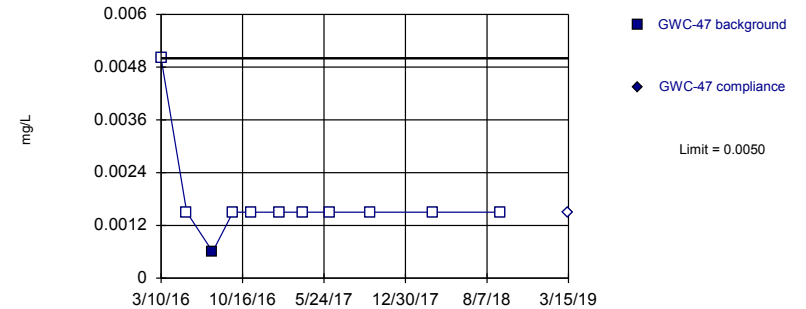
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

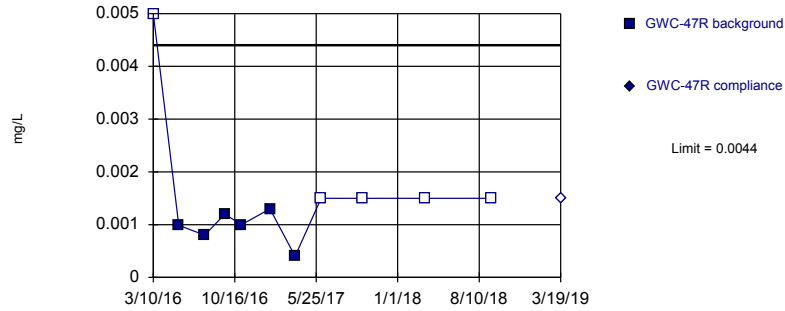
Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Antimony Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-45	GWC-45R	GWC-45R	GWC-46R	GWC-46R	GWC-47	GWC-47
3/10/2016				<0.01		<0.01	
3/16/2016	<0.01	0.00426					
5/16/2016	0.00109 (J)	0.00267 (J)					
5/17/2016				<0.003			
5/18/2016						<0.003	
7/25/2016	<0.003 (*)	0.0017 (J)					
7/26/2016				<0.003			
7/27/2016						0.0006 (J)	
9/19/2016	<0.003	<0.003					
9/20/2016				0.001 (J)		<0.003	
11/3/2016		0.0017 (J)					
11/4/2016	<0.003			<0.003			
11/7/2016						<0.003	
1/20/2017		0.001 (J)		<0.003			
1/23/2017	<0.003					<0.003	
3/28/2017				<0.003			
3/29/2017	0.0018 (J)	0.001 (J)				<0.003	
6/7/2017	0.0009 (J)	0.0009 (J)		<0.003			
6/8/2017						<0.003	
9/27/2017	0.0111	0.0012 (J)				<0.003	
9/29/2017				<0.003			
12/29/2017	0.0012 (Y)						
3/15/2018	0.00086 (J)	<0.003		<0.003		<0.003	
9/13/2018	0.0029 (J)	<0.003		<0.003		<0.003	
3/14/2019			<0.003				
3/15/2019							<0.003
3/18/2019					<0.003		

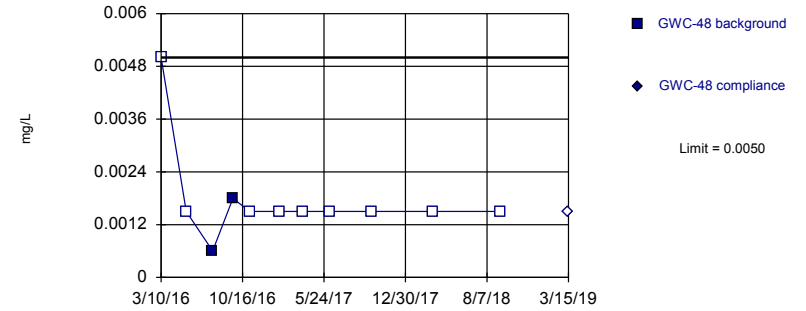
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Aitchison's Adjustment): Mean=0.05286, Std. Dev.=0.05141, n=11, 45.45% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8126, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

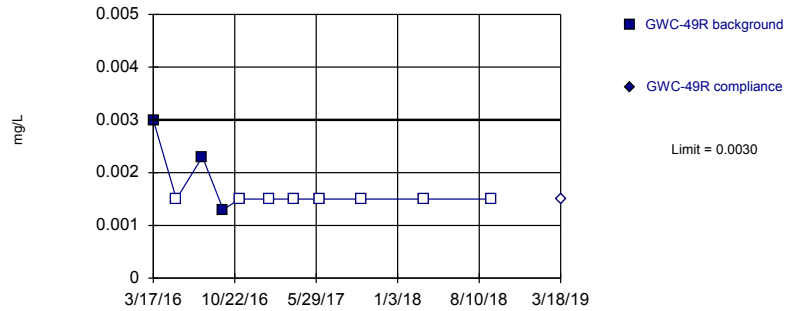
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

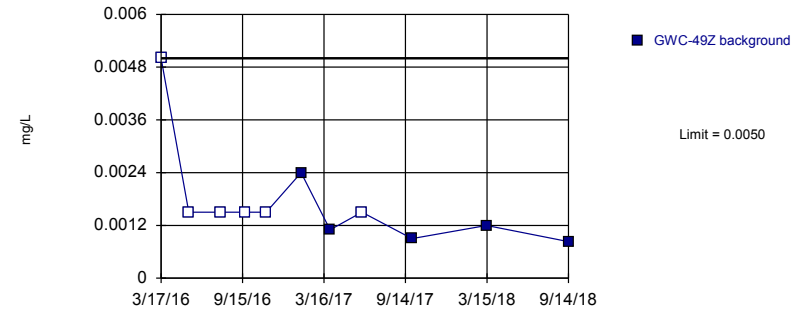
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit Prediction Limit
Intrawell Non-parametric, GWC-49Z



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

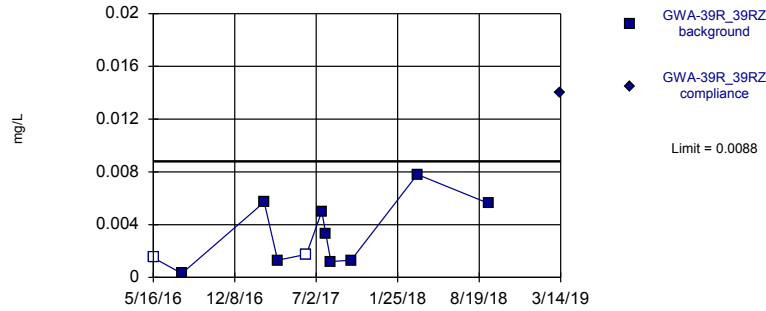
Prediction Limit

Constituent: Antimony Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z
3/10/2016	<0.01		<0.01				
3/17/2016					0.003		<0.01
5/17/2016			<0.003				
5/18/2016	0.000987 (J)				<0.003		<0.003
7/27/2016	0.0008 (J)		0.0006 (J)		0.0023 (J)		
7/28/2016							<0.003
9/20/2016	0.0012 (J)		0.0018 (J)				
9/21/2016					0.0013 (J)		<0.003
11/4/2016	0.001 (J)		<0.003		<0.003		
11/7/2016							<0.003 (*)
1/20/2017	0.0013 (J)						
1/23/2017			<0.003				
1/24/2017					<0.003		0.0024 (J)
3/28/2017			<0.003				
3/29/2017	0.0004 (J)				<0.003		
3/30/2017							0.0011 (J)
6/8/2017	<0.003 (*)		<0.003 (*)		<0.003 (*)		
6/9/2017							<0.003 (*)
9/27/2017	<0.003						
9/29/2017			<0.003		<0.003		0.0009 (J)
3/15/2018			<0.003		<0.003		0.0012 (J)
3/16/2018	<0.003						
9/13/2018	<0.003		<0.003		<0.003		
9/14/2018							0.00083 (J)
3/15/2019				<0.003			
3/18/2019						<0.003	
3/19/2019		<0.003					

Exceeds Limit

Prediction Limit
Intrawell Parametric

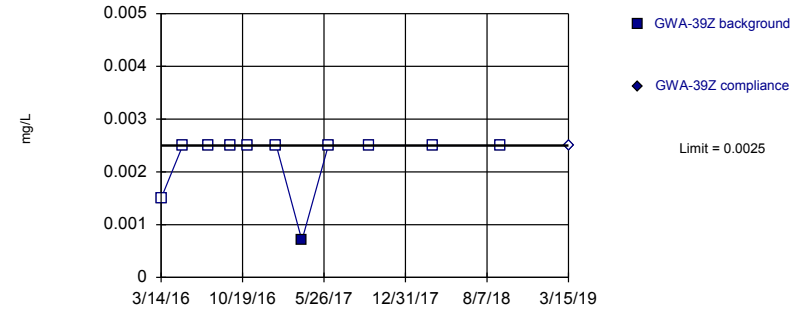


Background Data Summary (after Aitchison's Adjustment): Mean=0.002864, Std. Dev.=0.002744, n=11, 18.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8776, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Antimony Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

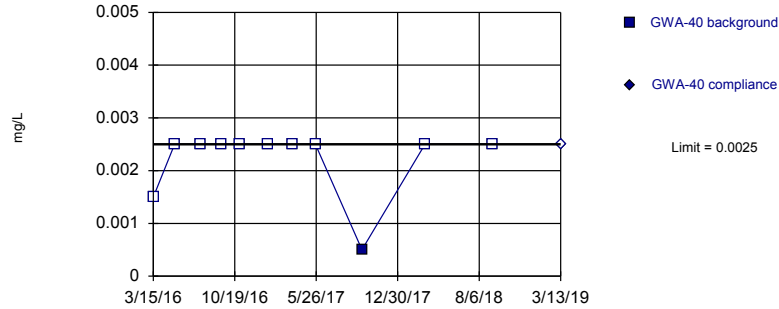


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

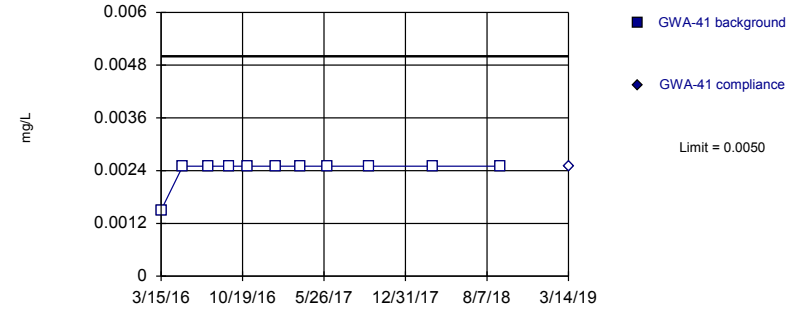


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:15 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

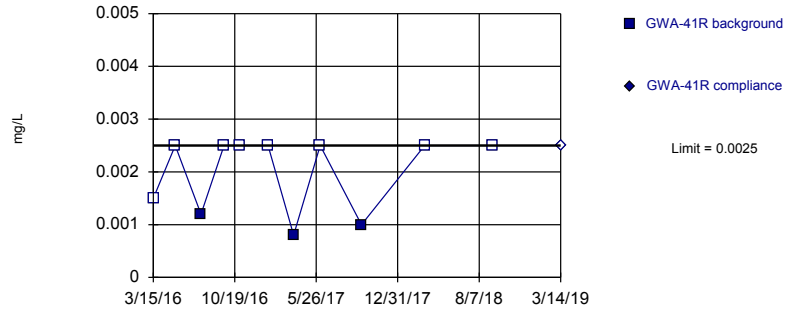
Constituent: Antimony, Arsenic Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41
3/14/2016			<0.003					
3/15/2016					<0.003		<0.003	
5/11/2016			<0.005		<0.005			
5/12/2016							<0.005	
5/16/2016	<0.003 (D)							
7/19/2016			<0.005					
7/20/2016							<0.005	
7/21/2016					<0.005			
7/27/2016	0.0003 (JD)							
9/15/2016			<0.005		<0.005		<0.005	
11/2/2016			<0.005					
11/3/2016					<0.005		<0.005	
1/17/2017					<0.005			
1/18/2017			<0.005				<0.005	
2/21/2017	0.0057							
3/24/2017					<0.005		<0.005	
3/27/2017	0.0013 (JD)							
3/28/2017			0.0007 (J)					
5/24/2017					<0.005			
6/6/2017							<0.005 (*)	
6/7/2017			<0.005					
6/8/2017	<0.0035 (*)							
7/17/2017	0.005 (D)							
7/27/2017	0.0033							
8/9/2017	0.0012 (J)							
9/25/2017							<0.005	
9/26/2017			<0.005		0.0005 (J)			
9/29/2017	0.0013 (JD)							
3/14/2018			<0.005		<0.005		<0.005	
3/16/2018	0.0078							
9/12/2018			<0.005		<0.005		<0.005	
9/14/2018	0.0056							
3/13/2019						<0.005		
3/14/2019		0.014						<0.005
3/15/2019				<0.005				

Within Limit

Prediction Limit
Intrawell Non-parametric

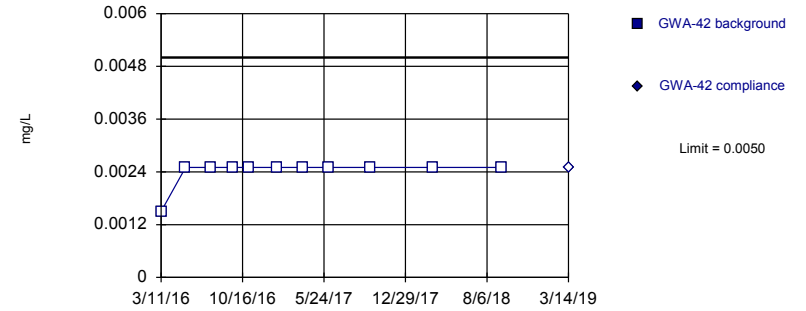


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

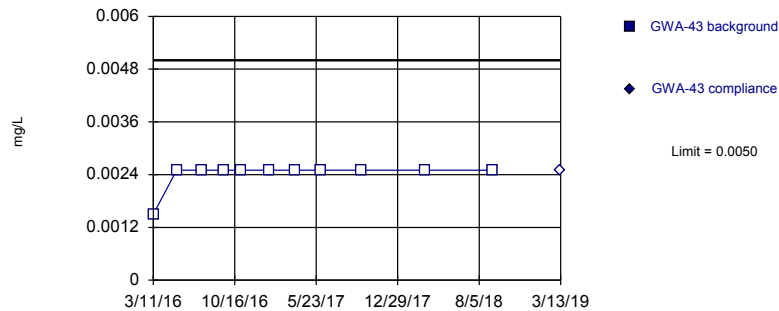


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

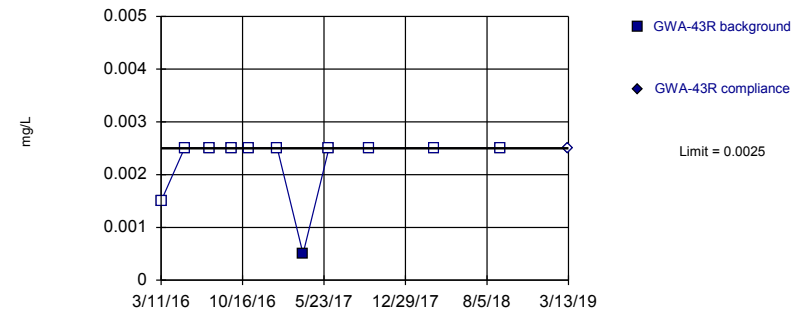


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

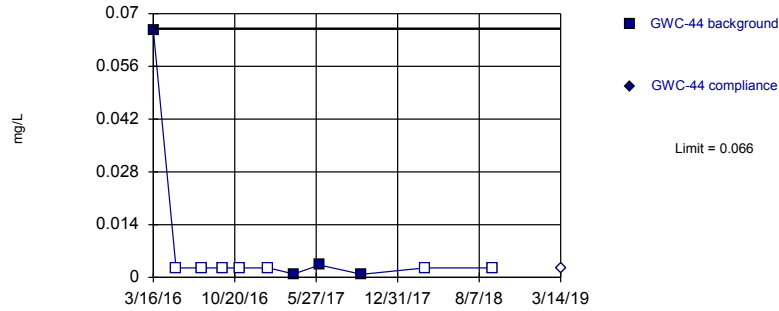
Prediction Limit

Constituent: Arsenic Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R	GWA-41R	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R
3/11/2016			<0.003		<0.003		<0.003	
3/15/2016	<0.003							
5/13/2016	<0.005				<0.005		<0.005	
5/16/2016			<0.005					
7/19/2016					<0.005		<0.005	
7/21/2016	0.0012 (J)							
7/22/2016			<0.005					
9/16/2016					<0.005		<0.005	
9/19/2016			<0.005					
9/21/2016	<0.005							
11/2/2016					<0.005		<0.005	
11/3/2016	<0.005		<0.005					
1/17/2017	<0.005		<0.005					
1/18/2017					<0.005		<0.005	
3/27/2017	0.0008 (J)		<0.005					
3/28/2017					<0.005		0.0005 (J)	
6/6/2017	<0.005 (*)				<0.005 (*)		<0.005 (*)	
6/7/2017			<0.005 (*)					
9/22/2017					<0.005		<0.005	
9/25/2017	0.001 (J)							
9/26/2017			<0.005					
3/14/2018	<0.005		<0.005		<0.005			
3/15/2018							<0.005	
9/12/2018	<0.005				<0.005		<0.005	
9/14/2018			<0.005					
3/13/2019						<0.005		<0.005
3/14/2019		<0.005		<0.005				

Within Limit

Prediction Limit
Intrawell Non-parametric

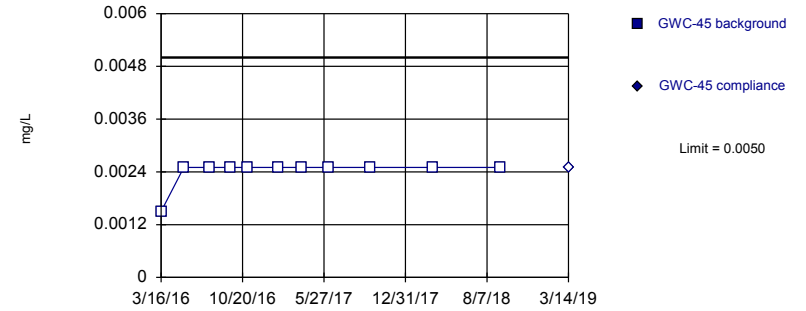


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

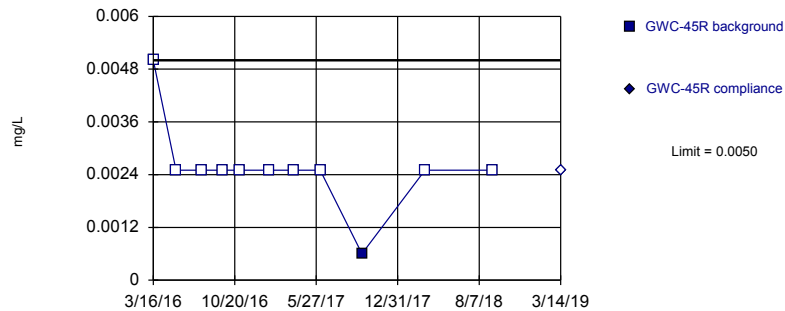


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

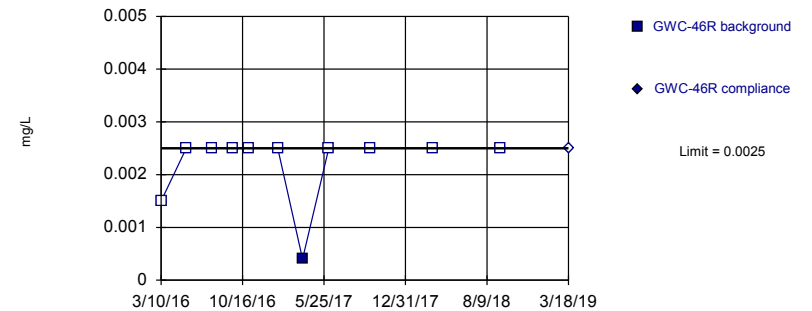


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

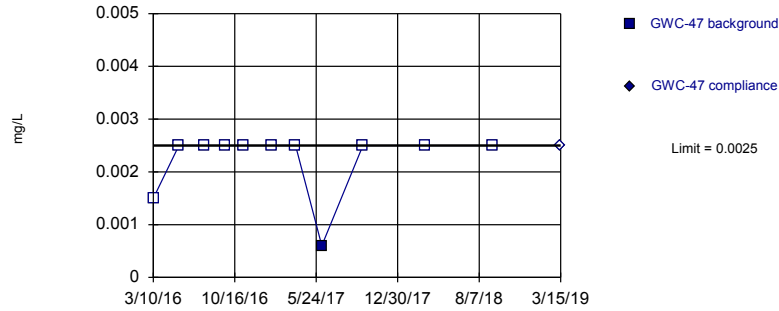


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

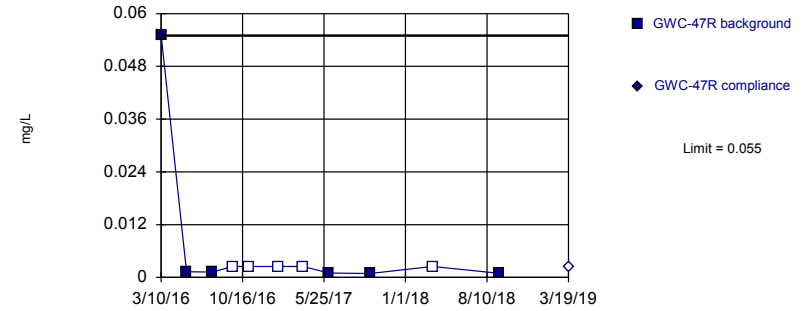


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

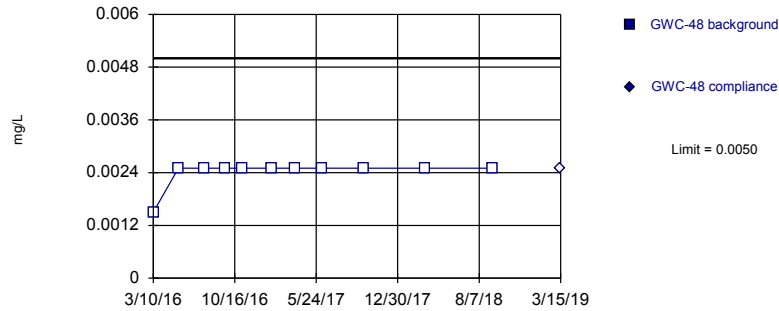


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

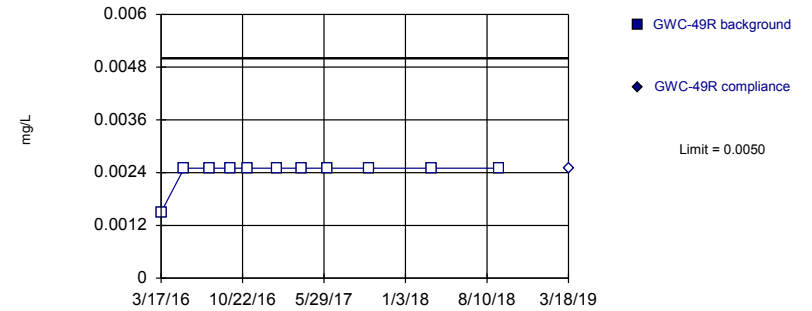


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

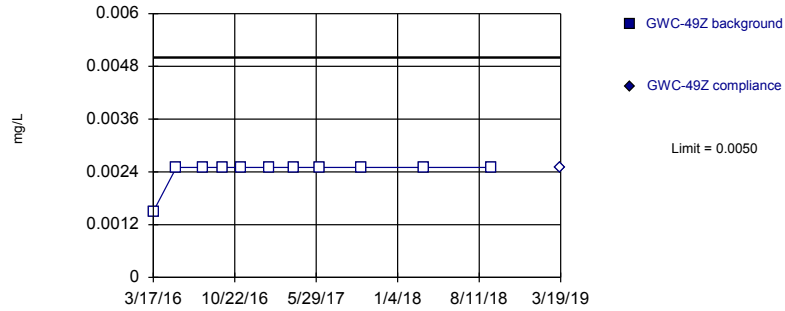
Constituent: Arsenic Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R
3/10/2016	<0.003		0.0551 (J)		<0.003			
3/17/2016							<0.003	
5/17/2016					<0.005			
5/18/2016	<0.005		0.00127 (J)				<0.005	
7/27/2016	<0.005		0.0012 (J)		<0.005		<0.005	
9/20/2016	<0.005		<0.005		<0.005			
9/21/2016							<0.005	
11/4/2016			<0.005		<0.005		<0.005	
11/7/2016	<0.005							
1/20/2017			<0.005					
1/23/2017	<0.005				<0.005			
1/24/2017							<0.005	
3/28/2017					<0.005			
3/29/2017	<0.005		<0.005				<0.005	
6/8/2017	0.0006 (J)		0.001 (J)		<0.005		<0.005	
9/27/2017	<0.005		0.0009 (J)					
9/29/2017					<0.005		<0.005	
3/15/2018	<0.005				<0.005		<0.005	
3/16/2018			<0.005					
9/13/2018	<0.005		0.00091 (J)		<0.005		<0.005	
3/15/2019		<0.005				<0.005		
3/18/2019								<0.005
3/19/2019				<0.005				

Within Limit

Prediction Limit
Intrawell Non-parametric

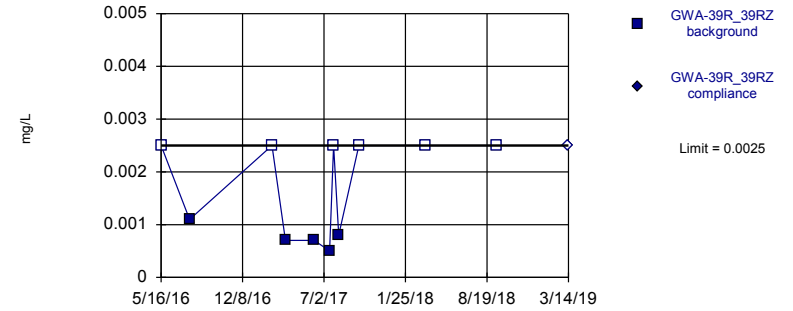


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

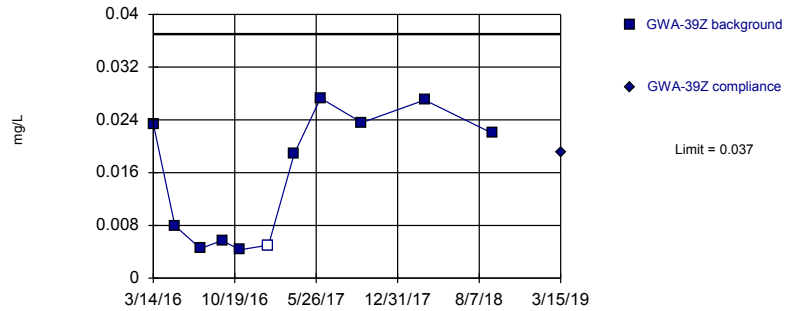


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

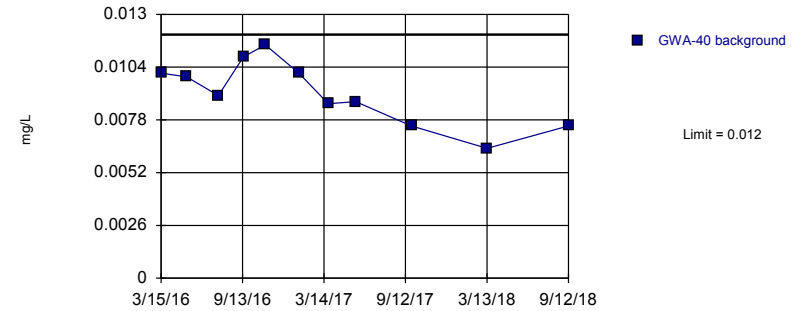


Background Data Summary: Mean=0.01541, Std. Dev.=0.009811, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8175, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric, GWA-40 (bg)



Background Data Summary: Mean=0.009111, Std. Dev.=0.001565, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9681, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

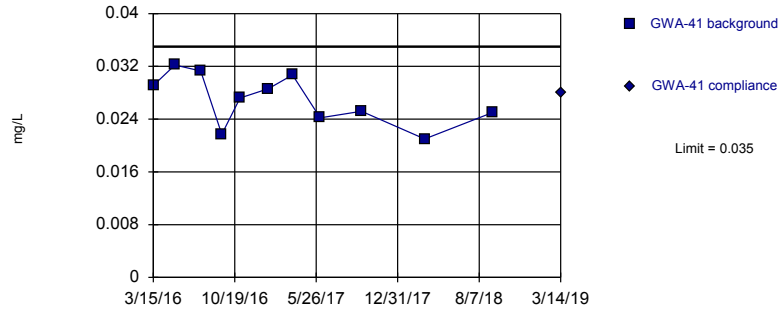
Prediction Limit

Constituent: Arsenic, Barium Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z	GWA-40
3/14/2016					0.0234		
3/15/2016							0.0101
3/17/2016	<0.003						
5/11/2016					0.00793 (J)		0.00992 (J)
5/16/2016			<0.005 (D)				
5/18/2016	<0.005						
7/19/2016					0.0045 (J)		
7/21/2016							0.009 (J)
7/27/2016			0.0011 (JD)				
7/28/2016	<0.005						
9/15/2016					0.0057 (J)		0.0109
9/21/2016	<0.005						
11/2/2016					0.0043 (J)		
11/3/2016							0.0115
11/7/2016	<0.005						
1/17/2017							0.0101
1/18/2017					<0.01 (*)		
1/24/2017	<0.005						
2/21/2017			<0.005				
3/24/2017							0.0086 (J)
3/27/2017			0.0007 (JD)				
3/28/2017					0.0188		
3/30/2017	<0.005						
5/24/2017							0.0087 (J)
6/7/2017					0.0273		
6/8/2017			0.0007 (JD)				
6/9/2017	<0.005						
7/17/2017			0.0005 (JD)				
7/27/2017			<0.005				
8/9/2017			0.0008 (J)				
9/26/2017					0.0236		0.0075 (J)
9/29/2017	<0.005		<0.005 (D)				
3/14/2018					0.027		0.0064 (J)
3/15/2018	<0.005						
3/16/2018			<0.005				
9/12/2018					0.022		0.0075 (J)
9/14/2018	<0.005		<0.005				
3/14/2019				<0.005			
3/15/2019						0.019	
3/19/2019		<0.005					

Within Limit

Prediction Limit
Intrawell Parametric

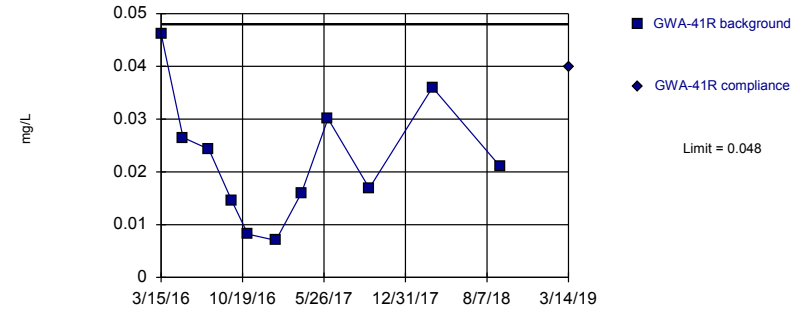


Background Data Summary: Mean=0.02693, Std. Dev.=0.003812, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9494, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

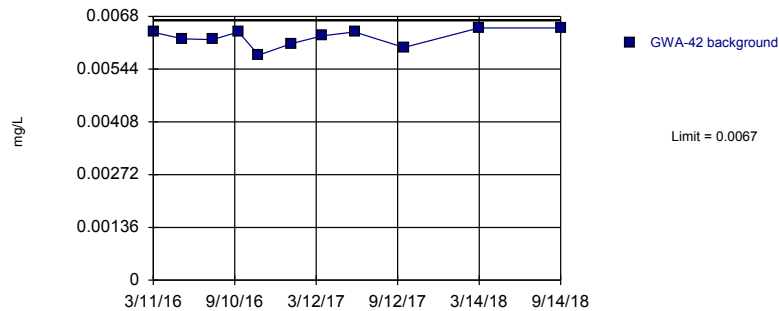
Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02243, Std. Dev.=0.01186, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9589, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Parametric, GWA-42 (bg)

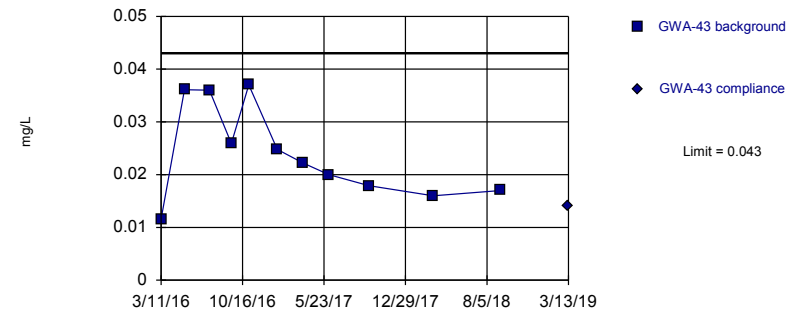


Background Data Summary: Mean=0.006255, Std. Dev.=0.0002197, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.919, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02405, Std. Dev.=0.00887, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9033, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

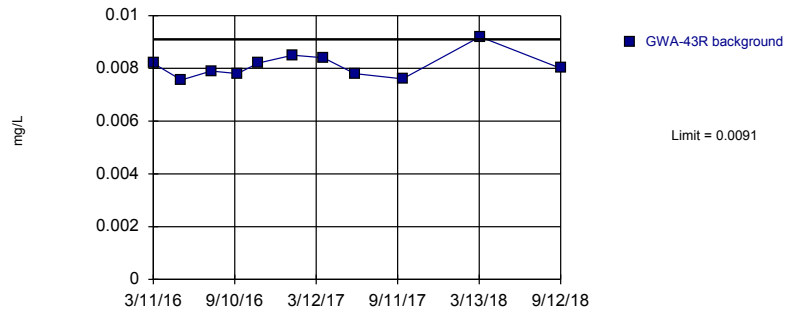
Prediction Limit

Constituent: Barium Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41	GWA-41	GWA-41R	GWA-41R	GWA-42	GWA-43	GWA-43
3/11/2016					0.00639 (J)	0.0116	
3/15/2016	0.0291		0.0462				
5/12/2016	0.0322						
5/13/2016			0.0265			0.0361	
5/16/2016					0.00622 (J)		
7/19/2016						0.036	
7/20/2016	0.0313						
7/21/2016			0.0243				
7/22/2016					0.0062 (J)		
9/15/2016	0.0217						
9/16/2016						0.0259	
9/19/2016					0.0064 (J)		
9/21/2016			0.0145				
11/2/2016						0.037	
11/3/2016	0.0272		0.0082 (J)		0.0058 (J)		
1/17/2017			0.007 (J)		0.0061 (J)		
1/18/2017	0.0286 (J)					0.0248	
3/24/2017	0.0307						
3/27/2017			0.016		0.0063 (J)		
3/28/2017						0.0222	
6/6/2017	0.0242		0.0301			0.02	
6/7/2017					0.0064 (J)		
9/22/2017						0.0179	
9/25/2017	0.0252		0.0169				
9/26/2017					0.006 (J)		
3/14/2018	0.021		0.036		0.0065 (J)	0.016	
9/12/2018	0.025		0.021			0.017	
9/14/2018					0.0065 (J)		
3/13/2019							0.014
3/14/2019		0.028		0.04			

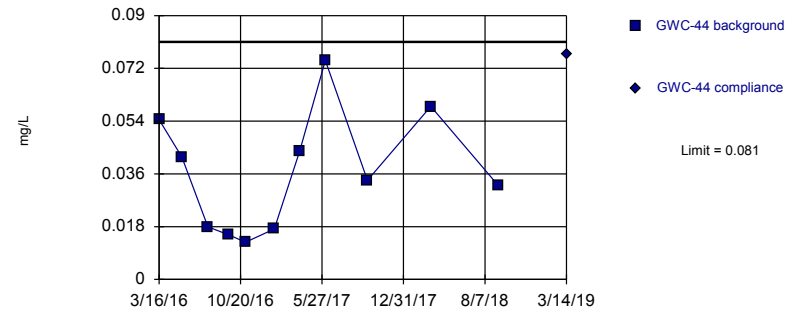
Prediction Limit
Intrawell Parametric, GWA-43R (bg)



Background Data Summary: Mean=0.008105, Std. Dev.=0.0004743, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9088, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

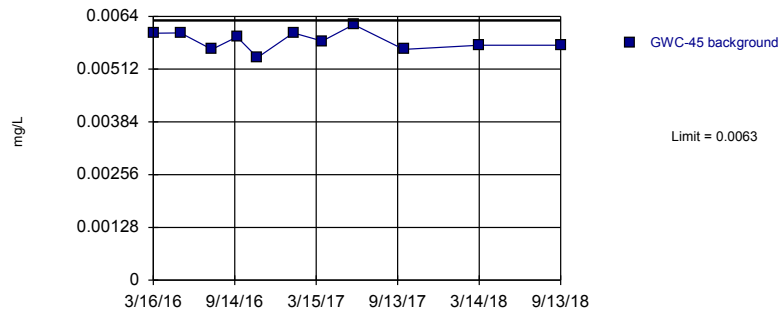
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.03659, Std. Dev.=0.02034, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9308, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

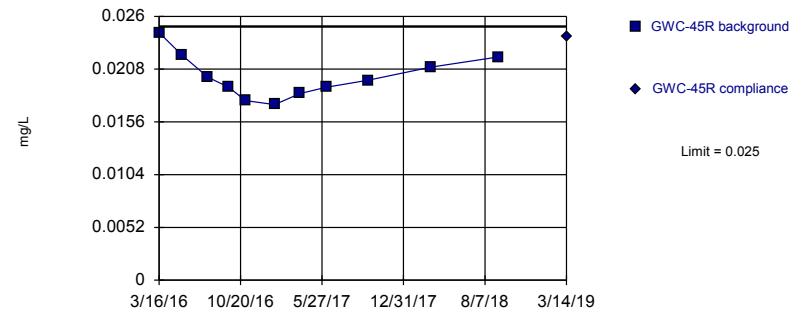
Prediction Limit
Intrawell Parametric, GWC-45



Background Data Summary: Mean=0.005808, Std. Dev.=0.0002335, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9676, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02006, Std. Dev.=0.002154, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9497, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:16 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

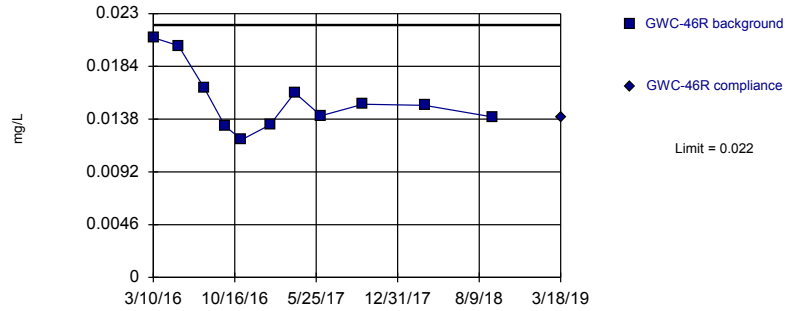
Prediction Limit

Constituent: Barium Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-43R	GWC-44	GWC-44	GWC-45	GWC-45R	GWC-45R
3/11/2016	0.00819 (J)					
3/16/2016		0.0545		0.00599 (J)	0.0244	
5/13/2016	0.00756 (J)					
5/16/2016		0.0418		0.006 (J)	0.0222	
7/19/2016	0.0079 (J)					
7/25/2016		0.0179		0.0056 (J)	0.02	
9/16/2016	0.0078 (J)					
9/19/2016		0.0152		0.0059 (J)	0.019	
11/2/2016	0.0082 (J)					
11/3/2016		0.0127			0.0177	
11/4/2016				0.0054 (J)		
1/18/2017	0.0085 (J)					
1/19/2017		0.0172				
1/20/2017					0.0173	
1/23/2017				0.006 (J)		
3/28/2017	0.0084 (J)	0.0437				
3/29/2017				0.0058 (J)	0.0184	
6/5/2017		0.0747				
6/6/2017	0.0078 (J)					
6/7/2017				0.0062 (J)	0.019	
9/22/2017	0.0076 (J)					
9/26/2017		0.0338				
9/27/2017				0.0056 (J)	0.0197	
3/15/2018	0.0092 (J)	0.059		0.0057 (J)	0.021	
9/12/2018	0.008 (J)	0.032				
9/13/2018				0.0057 (J)	0.022	
3/14/2019			0.077			0.024

Within Limit

Prediction Limit
Intrawell Parametric

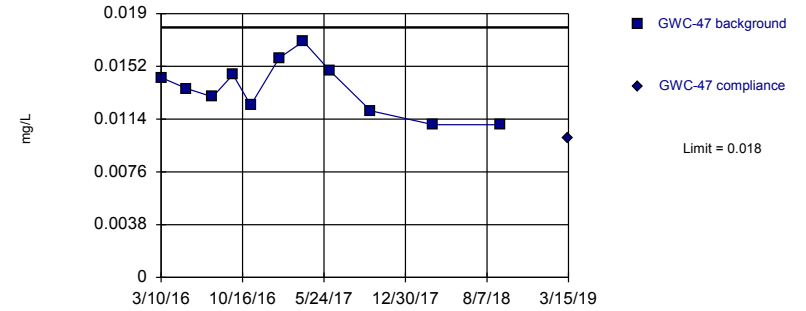


Background Data Summary: Mean=0.01549, Std. Dev.=0.002822, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8859, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

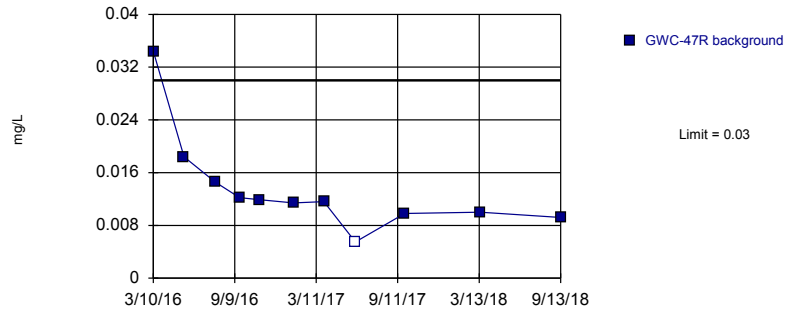
Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.01361, Std. Dev.=0.001939, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9632, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Parametric, GWC-47R

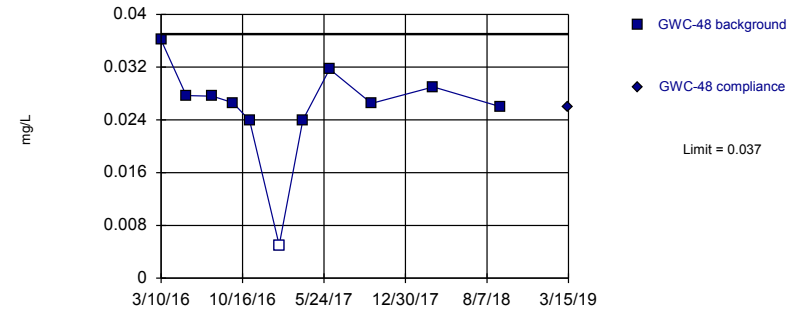


Background Data Summary (based on square root transformation): Mean=0.1132, Std. Dev.=0.02843, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8343, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Barium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square transformation): Mean=0.0007215, Std. Dev.=0.0003112, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9063, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

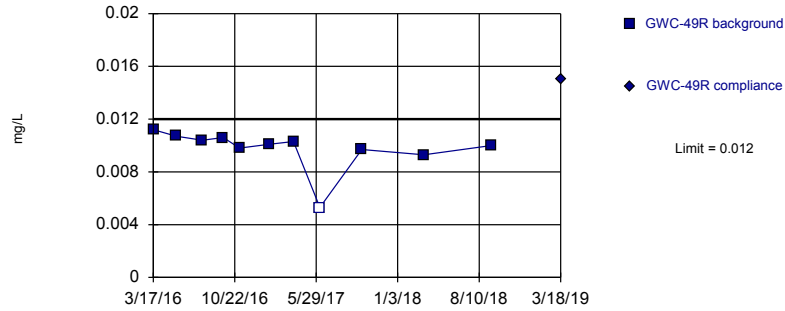
Prediction Limit

Constituent: Barium Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-46R	GWC-47	GWC-47	GWC-47R	GWC-48	GWC-48
3/10/2016	0.0209		0.0144		0.0344	0.0361	
5/17/2016	0.0202					0.0277	
5/18/2016			0.0136		0.0184		
7/26/2016	0.0165						
7/27/2016			0.013		0.0146	0.0276	
9/20/2016	0.0132		0.0146		0.0122	0.0266	
11/4/2016	0.012				0.0119	0.0239	
11/7/2016			0.0124				
1/20/2017	0.0133				0.0114		
1/23/2017			0.0158			<0.01	
3/28/2017	0.0161					0.024	
3/29/2017			0.017		0.0116		
6/7/2017	0.0141						
6/8/2017			0.0149		<0.011 (*)	0.0317	
9/27/2017			0.012		0.0098 (J)		
9/29/2017	0.0151					0.0265	
3/15/2018	0.015		0.011			0.029	
3/16/2018					0.01		
9/13/2018	0.014		0.011		0.0092 (J)	0.026	
3/15/2019				0.01			0.026
3/18/2019		0.014					

Exceeds Limit

Prediction Limit
Intrawell Parametric

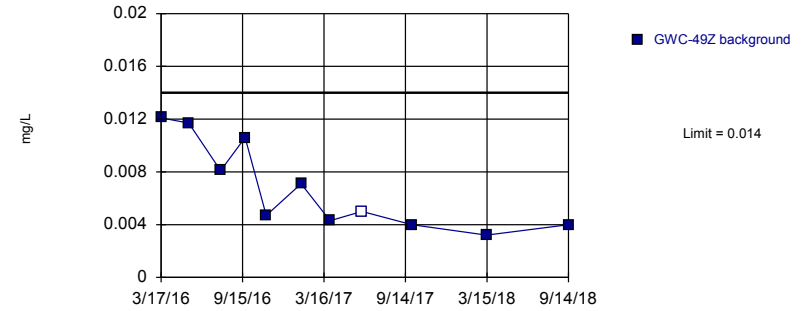


Background Data Summary (based on cube transformation): Mean=9.9e-7, Std. Dev.=3.2e-7, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8401, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric, GWC-49Z

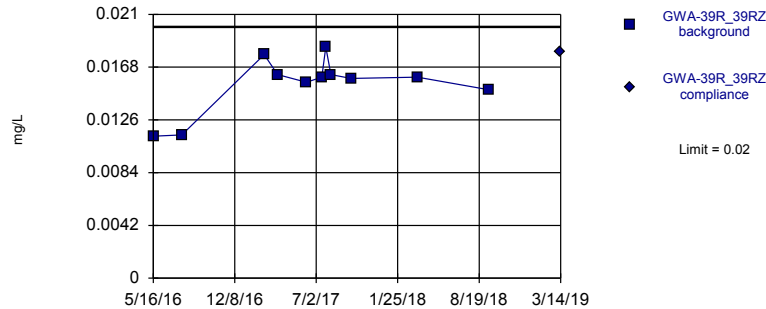


Background Data Summary: Mean=0.0068, Std. Dev.=0.00333, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8555, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Barium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

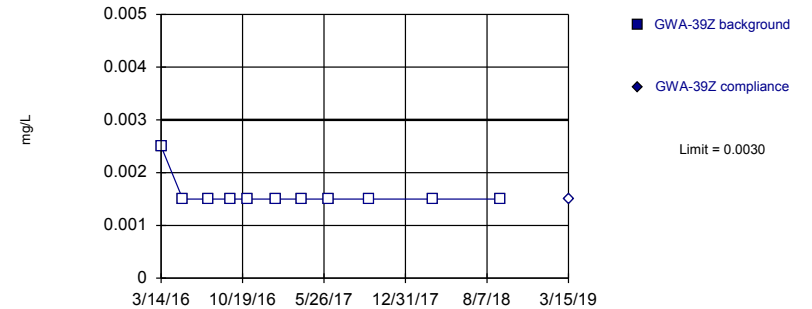


Background Data Summary: Mean=0.01544, Std. Dev.=0.002236, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8351, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

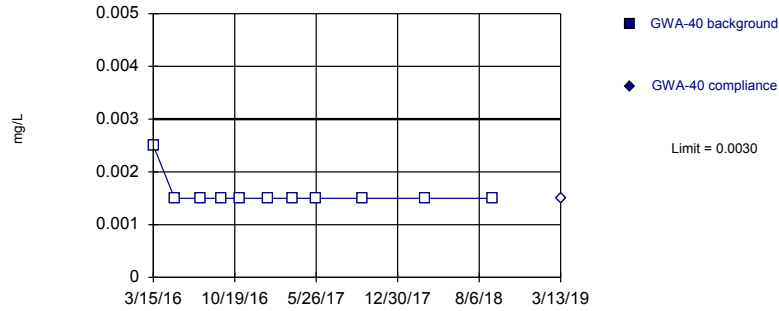
Prediction Limit

Constituent: Barium, Beryllium Analysis Run 8/26/2019 10:27 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49R	GWC-49R	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z
3/14/2016						<0.005	
3/17/2016	0.0112		0.0121				
5/11/2016						<0.003	
5/16/2016				0.0113 (D)			
5/18/2016	0.0107		0.0117				
7/19/2016						<0.003	
7/27/2016	0.0104			0.0114 (D)			
7/28/2016			0.0081 (J)				
9/15/2016						<0.003	
9/21/2016	0.0106		0.0106				
11/2/2016						<0.003	
11/4/2016	0.0098 (J)						
11/7/2016			0.0047 (J)				
1/18/2017						<0.003	
1/24/2017	0.0101		0.0071 (J)				
2/21/2017				0.0178			
3/27/2017				0.0162 (D)			
3/28/2017						<0.003	
3/29/2017	0.0103						
3/30/2017			0.0043 (J)				
6/7/2017						<0.003	
6/8/2017	<0.0106 (*)			0.0156 (D)			
6/9/2017			<0.01 (*)				
7/17/2017				0.016 (D)			
7/27/2017				0.0184			
8/9/2017				0.0162			
9/26/2017						<0.003	
9/29/2017	0.0097 (J)		0.004 (J)	0.0159 (D)			
3/14/2018						<0.003	
3/15/2018	0.0093 (J)		0.0032 (J)				
3/16/2018				0.016			
9/12/2018						<0.003	
9/13/2018	0.01						
9/14/2018			0.004 (J)	0.015			
3/14/2019					0.018		
3/15/2019						<0.003	
3/18/2019		0.015					

Within Limit

Prediction Limit
Intrawell Non-parametric

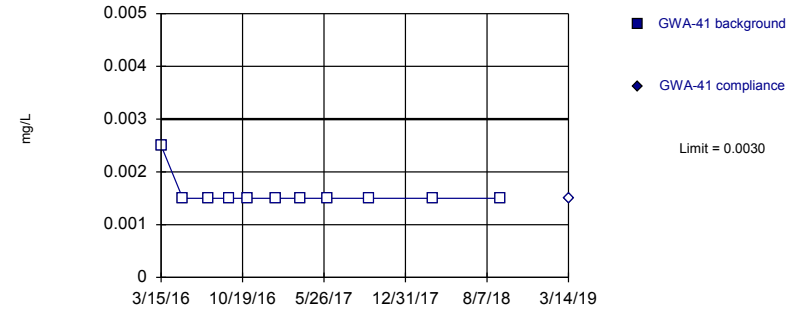


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

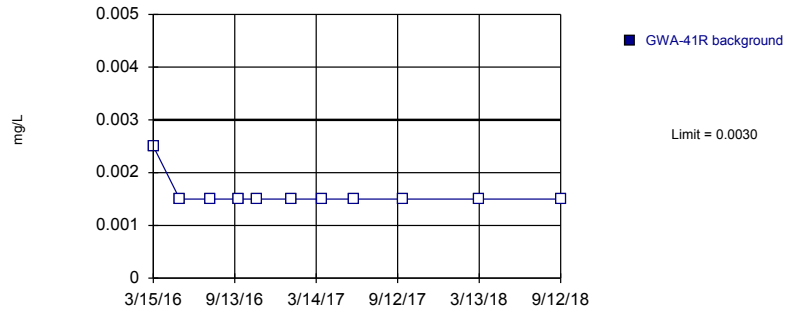
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

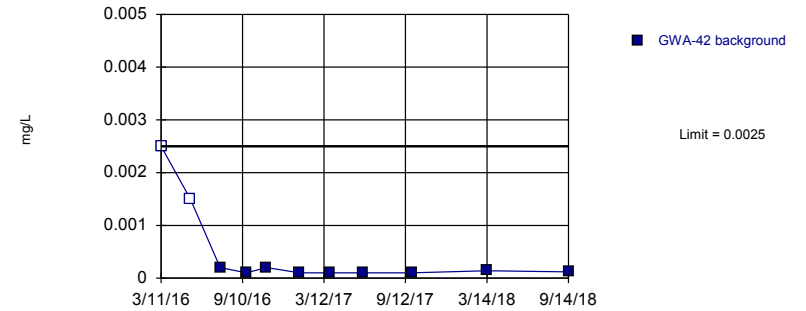
Prediction Limit
Intrawell Non-parametric, GWA-41R (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is highest of 11 background values. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWA-42 (bg)



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 18.18% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

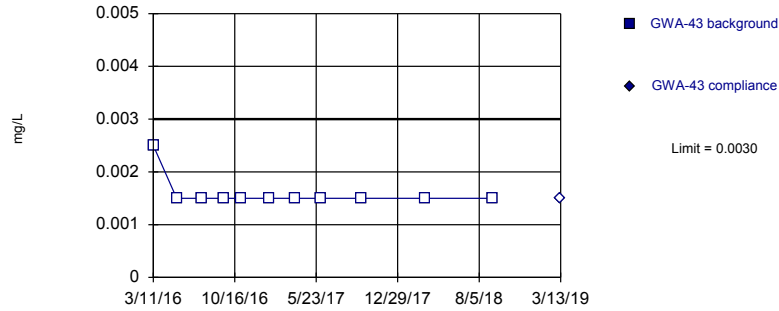
Prediction Limit

Constituent: Beryllium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-40	GWA-40	GWA-41	GWA-41	GWA-41R	GWA-42
3/11/2016						<0.005
3/15/2016	<0.005		<0.005		<0.005	
5/11/2016	<0.003					
5/12/2016			<0.003			
5/13/2016					<0.003	
5/16/2016						<0.003
7/20/2016			<0.003			
7/21/2016	<0.003				<0.003	
7/22/2016						0.0002 (J)
9/15/2016	<0.003		<0.003			
9/19/2016						0.0001 (J)
9/21/2016					<0.003	
11/3/2016	<0.003		<0.003		<0.003	0.0002 (J)
1/17/2017	<0.003				<0.003	0.0001 (J)
1/18/2017			<0.003			
3/24/2017	<0.003		<0.003			
3/27/2017					<0.003	0.0001 (J)
5/24/2017	<0.003					
6/6/2017			<0.003		<0.003	
6/7/2017						0.0001 (J)
9/25/2017			<0.003		<0.003	
9/26/2017	<0.003					0.0001 (J)
3/14/2018	<0.003		<0.003		<0.003	0.00014 (J)
9/12/2018	<0.003		<0.003		<0.003	
9/14/2018						0.00012 (J)
3/13/2019		<0.003				
3/14/2019				<0.003		

Within Limit

Prediction Limit
Intrawell Non-parametric

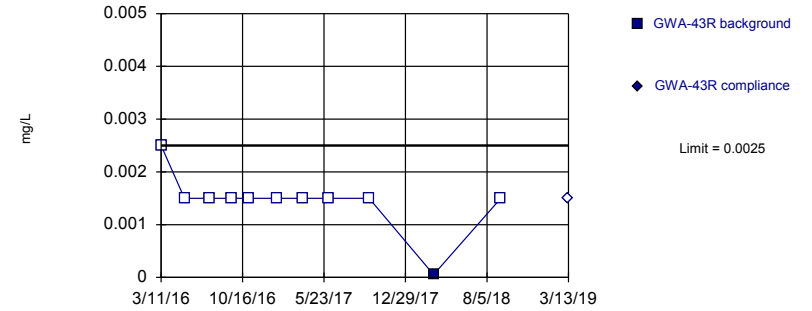


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

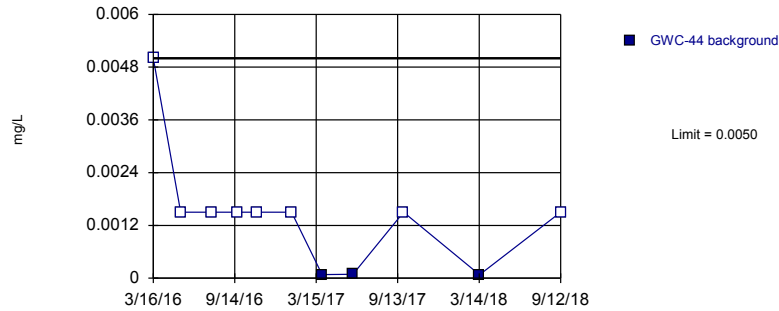
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWC-44

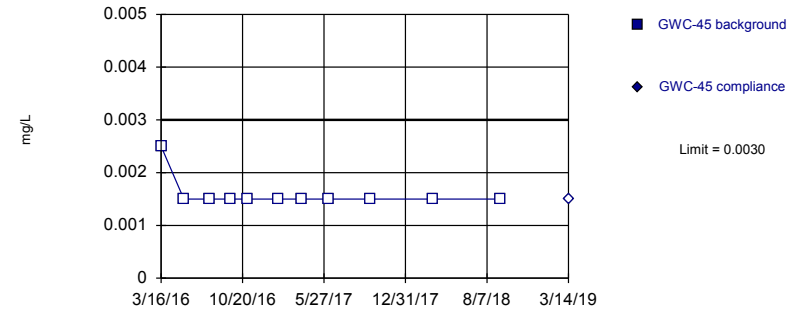


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

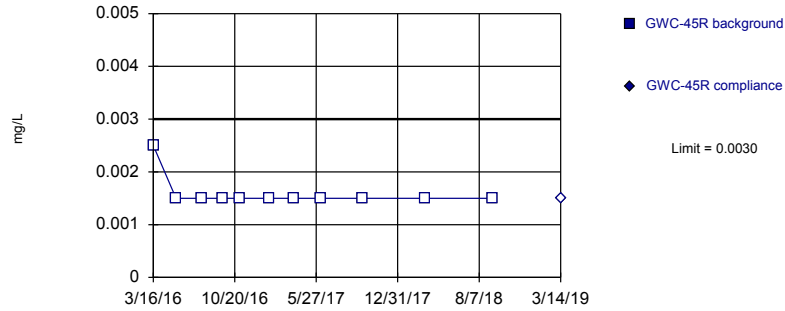


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

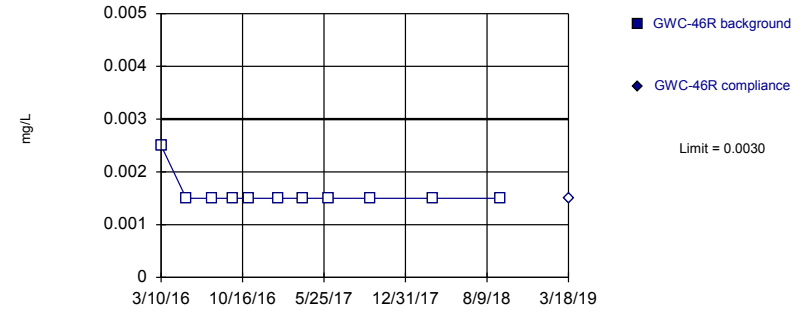


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

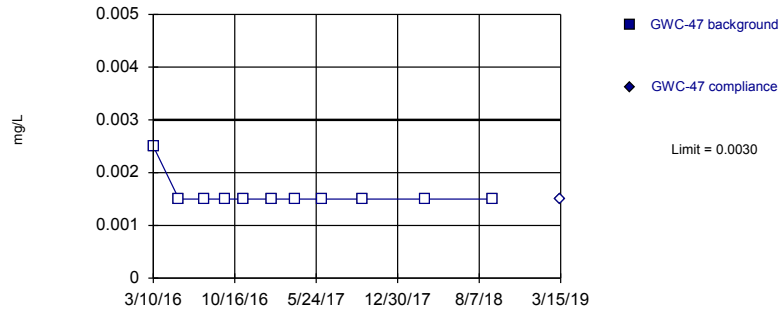


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

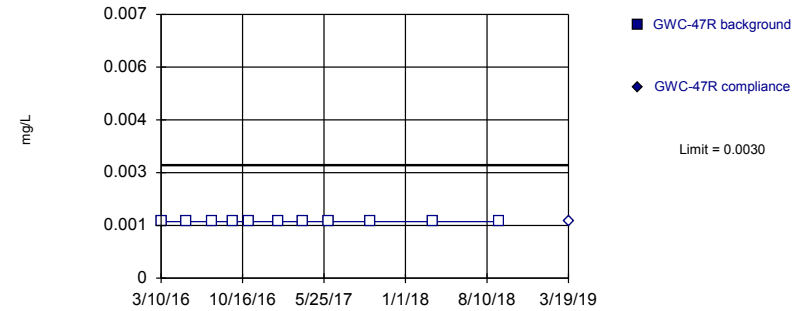


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

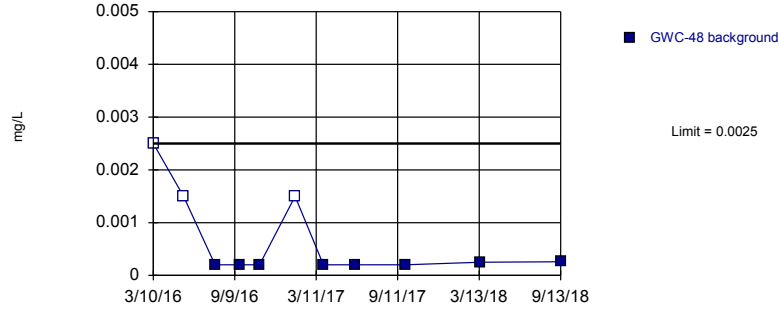
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

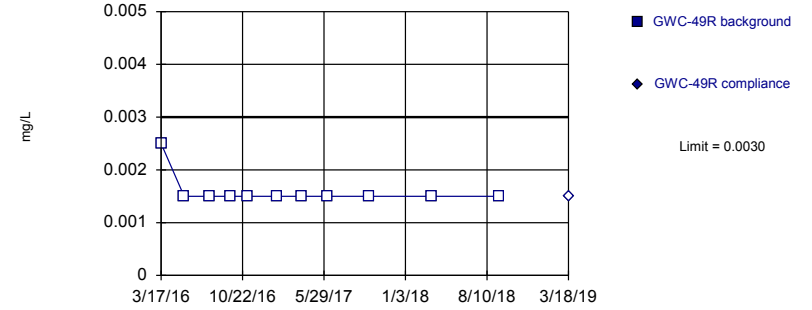
Prediction Limit
Intrawell Non-parametric, GWC-48



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 27.27% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

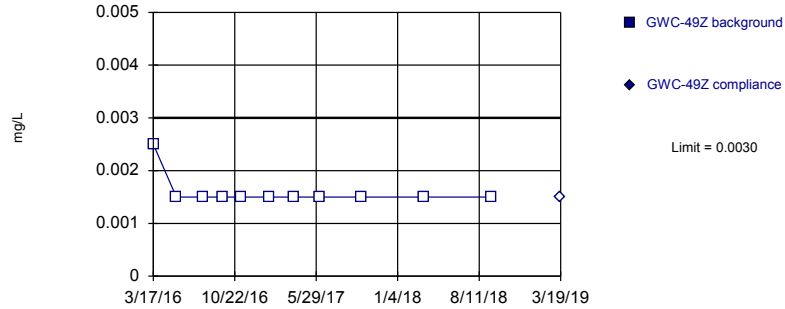
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:17 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

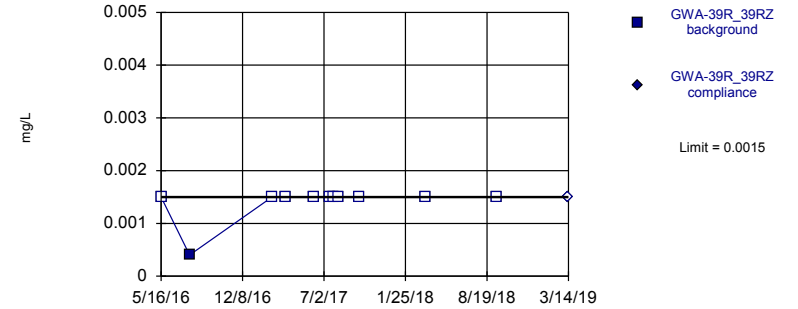
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

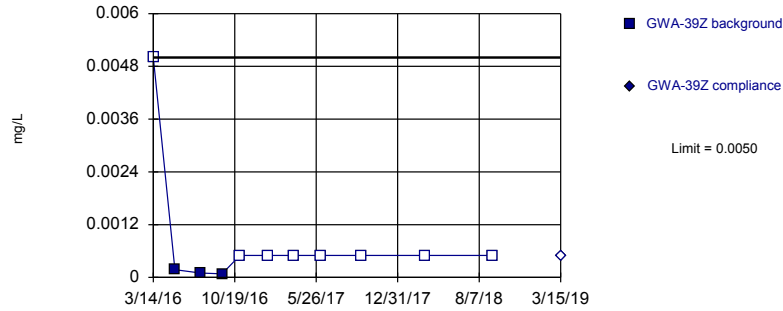
Constituent: Beryllium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ
3/10/2016	<0.005						
3/17/2016		<0.005		<0.005			
5/16/2016						<0.003 (D)	
5/17/2016	<0.003						
5/18/2016		<0.003		<0.003			
7/27/2016	0.0002 (J)	<0.003				0.0004 (JD)	
7/28/2016				<0.003			
9/20/2016	0.0002 (J)						
9/21/2016		<0.003		<0.003			
11/4/2016	0.0002 (J)	<0.003					
11/7/2016				<0.003			
1/23/2017	<0.003						
1/24/2017		<0.003		<0.003			
2/21/2017						<0.003	
3/27/2017						<0.003 (D)	
3/28/2017	0.0002 (J)						
3/29/2017		<0.003					
3/30/2017				<0.003			
6/8/2017	0.0002 (J)	<0.003				<0.003 (D)	
6/9/2017				<0.003			
7/17/2017						<0.003 (D)	
7/27/2017						<0.003	
8/9/2017						<0.003	
9/29/2017	0.0002 (J)	<0.003		<0.003		<0.003 (D)	
3/15/2018	0.00025 (J)	<0.003		<0.003			
3/16/2018						<0.003	
9/13/2018	0.00026 (J)	<0.003					
9/14/2018				<0.003		<0.003	
3/14/2019							<0.003
3/18/2019			<0.003				
3/19/2019				<0.003			

Within Limit

Prediction Limit
Intrawell Non-parametric

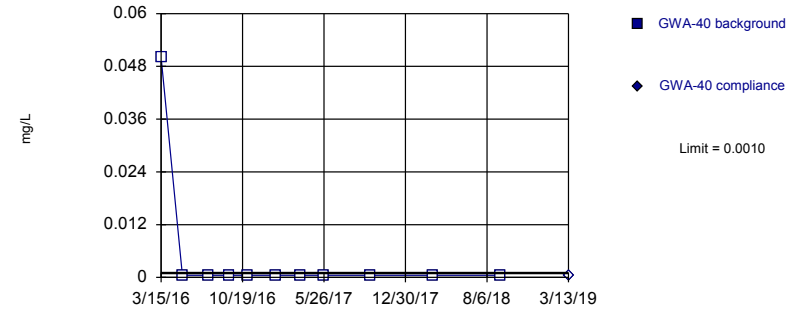


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

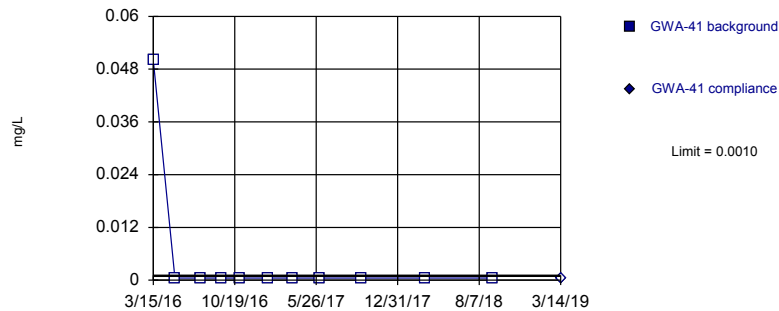


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

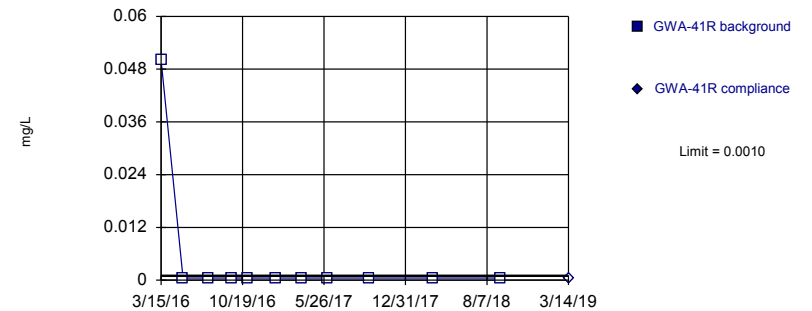


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



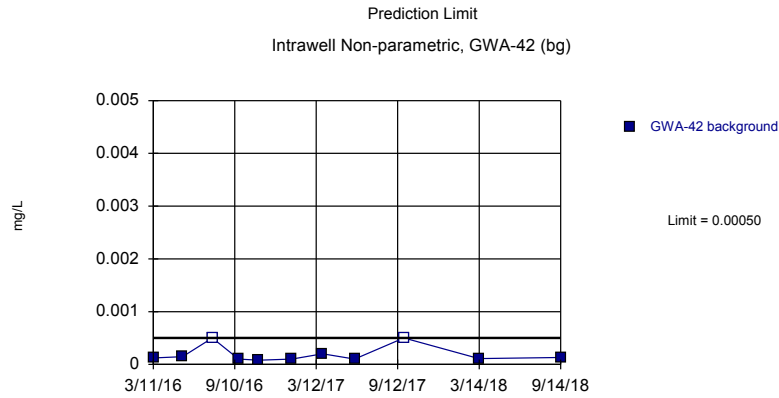
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

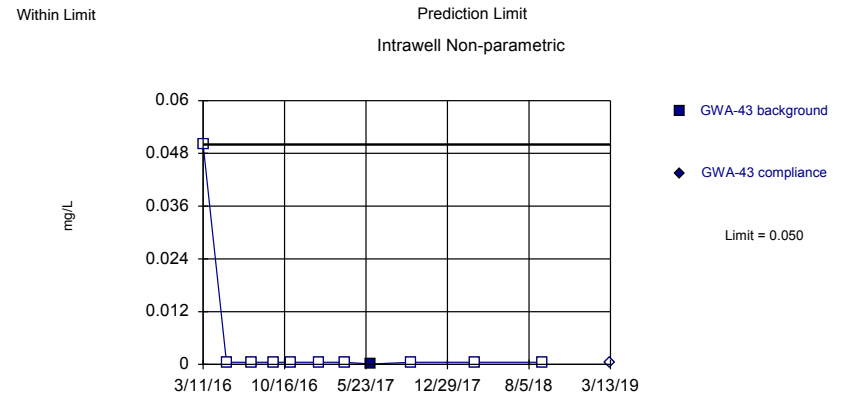
Constituent: Cadmium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41	GWA-41R	GWA-41R
3/14/2016	<0.01							
3/15/2016			<0.1		<0.1		<0.1	
5/11/2016	0.000177 (J)		<0.001					
5/12/2016					<0.001			
5/13/2016							<0.001	
7/19/2016	0.0001 (J)							
7/20/2016					<0.001			
7/21/2016			<0.001				<0.001	
9/15/2016	8E-05 (J)		<0.001		<0.001			
9/21/2016							<0.001	
11/2/2016	<0.001							
11/3/2016			<0.001		<0.001		<0.001	
1/17/2017			<0.001				<0.001	
1/18/2017	<0.001				<0.001			
3/24/2017			<0.001		<0.001			
3/27/2017							<0.001	
3/28/2017	<0.001							
5/24/2017			<0.001					
6/6/2017					<0.001		<0.001	
6/7/2017	<0.001							
9/25/2017					<0.001		<0.001	
9/26/2017	<0.001		<0.001					
3/14/2018	<0.001		<0.001		<0.001		<0.001	
9/12/2018	<0.001		<0.001		<0.001		<0.001	
3/13/2019				<0.001				
3/14/2019						<0.001		<0.001
3/15/2019		<0.001						



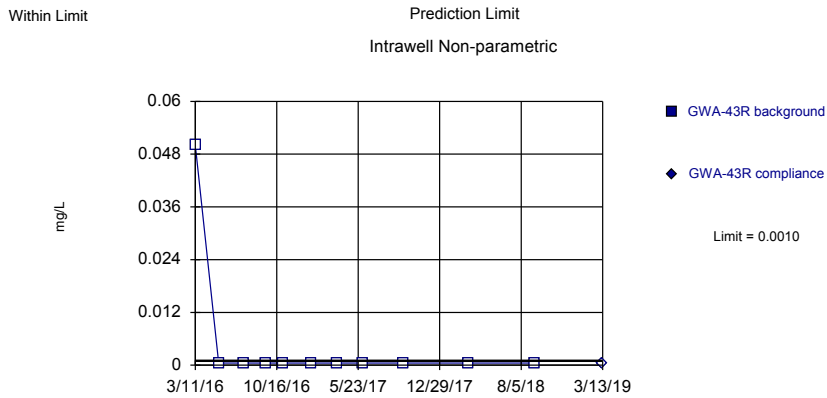
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 18.18% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



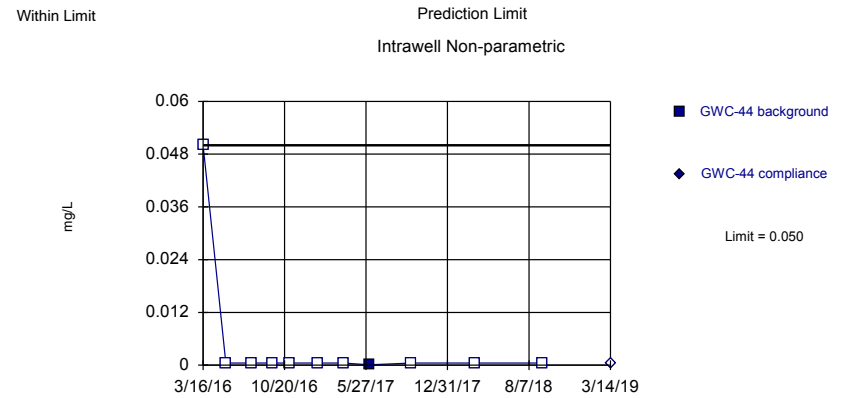
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

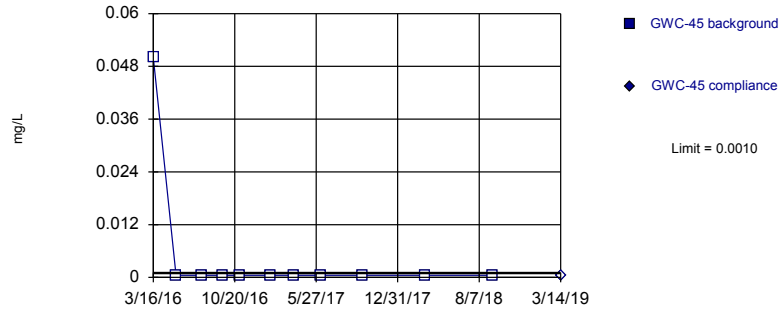


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

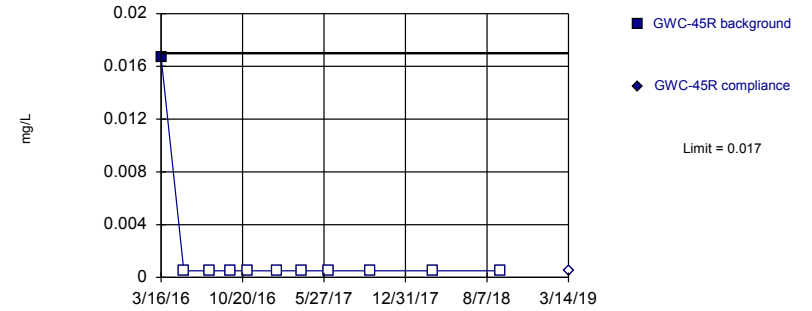


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

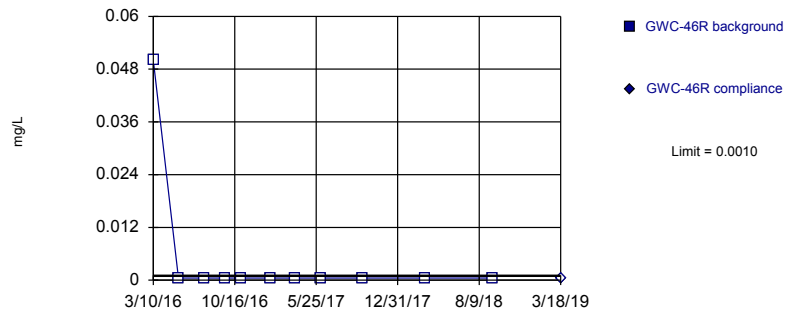


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

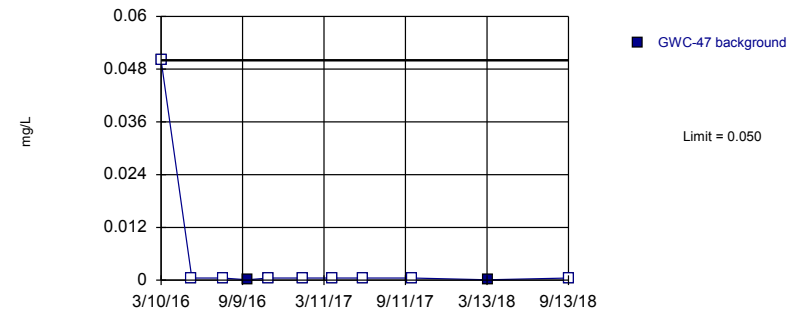


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-47



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

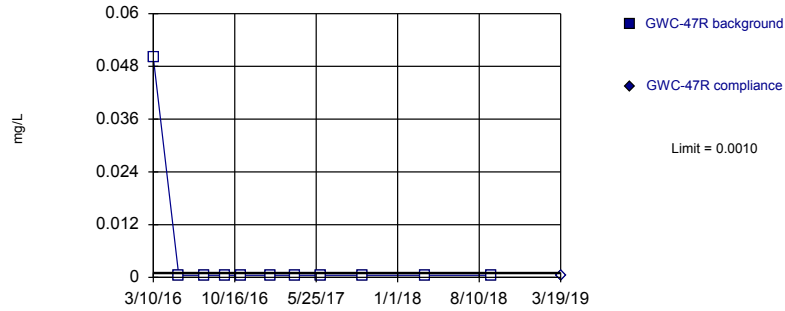
Prediction Limit

Constituent: Cadmium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-45	GWC-45	GWC-45R	GWC-45R	GWC-46R	GWC-46R	GWC-47
3/10/2016					<0.1		<0.1
3/16/2016	<0.1		0.0167 (J)				
5/16/2016	<0.001		<0.001				
5/17/2016					<0.001		
5/18/2016							<0.001
7/25/2016	<0.001		<0.001				
7/26/2016					<0.001		
7/27/2016							<0.001
9/19/2016	<0.001		<0.001				
9/20/2016					<0.001		8E-05 (J)
11/3/2016			<0.001				
11/4/2016	<0.001				<0.001		
11/7/2016							<0.001
1/20/2017			<0.001		<0.001		
1/23/2017	<0.001						<0.001
3/28/2017					<0.001		
3/29/2017	<0.001		<0.001				<0.001
6/7/2017	<0.001		<0.001		<0.001		
6/8/2017							<0.001
9/27/2017	<0.001		<0.001				<0.001
9/29/2017					<0.001		
3/15/2018	<0.001		<0.001		<0.001		9.3E-05 (J)
9/13/2018	<0.001		<0.001		<0.001		<0.001
3/14/2019		<0.001		<0.001			
3/18/2019						<0.001	

Within Limit

Prediction Limit
Intrawell Non-parametric

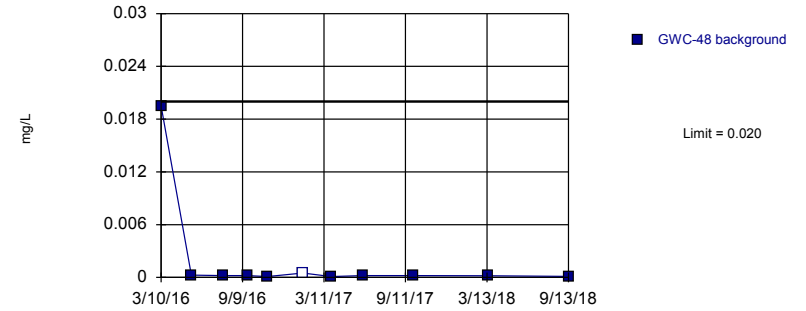


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-48

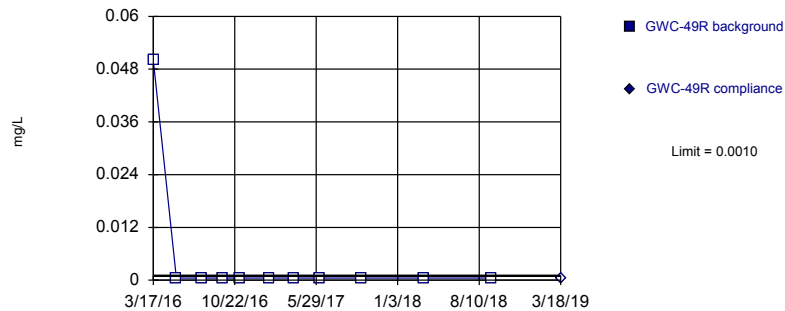


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 9.091% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

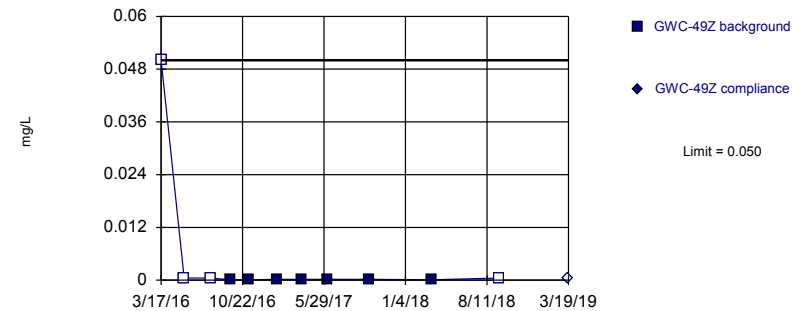


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 36.36% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

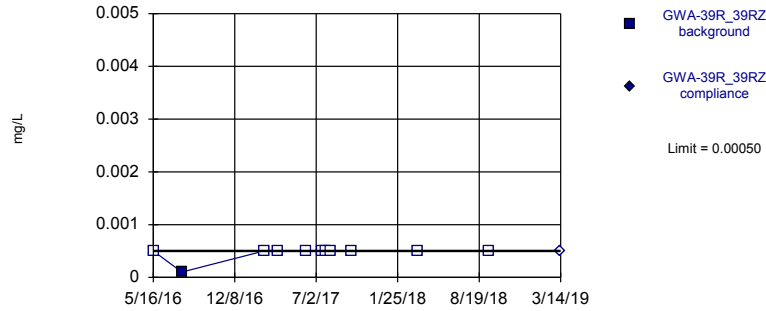
Prediction Limit

Constituent: Cadmium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-47R	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z
3/10/2016	<0.1		0.0195 (J)				
3/17/2016				<0.1		<0.1	
5/17/2016			0.000251 (J)				
5/18/2016	<0.001			<0.001		<0.001	
7/27/2016	<0.001		0.0002 (J)	<0.001			
7/28/2016						<0.001	
9/20/2016	<0.001		0.0002 (J)				
9/21/2016				<0.001		9E-05 (J)	
11/4/2016	<0.001		0.0001 (J)	<0.001			
11/7/2016						0.0001 (J)	
1/20/2017	<0.001						
1/23/2017			<0.001				
1/24/2017				<0.001		0.0002 (J)	
3/28/2017			0.0001 (J)				
3/29/2017	<0.001			<0.001			
3/30/2017						0.0002 (J)	
6/8/2017	<0.001		0.0002 (J)	<0.001			
6/9/2017						0.0002 (J)	
9/27/2017	<0.001						
9/29/2017			0.0002 (J)	<0.001		0.0002 (J)	
3/15/2018			0.00018 (J)	<0.001		0.0001 (J)	
3/16/2018	<0.001						
9/13/2018	<0.001		0.00012 (J)	<0.001			
9/14/2018						<0.001	
3/18/2019					<0.001		
3/19/2019		<0.001					<0.001

Within Limit

Prediction Limit
Intrawell Non-parametric

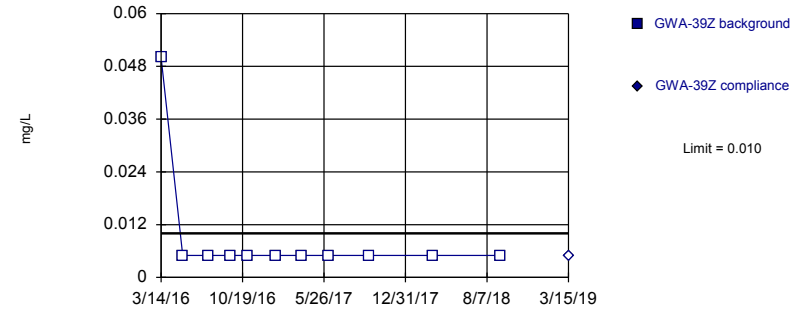


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

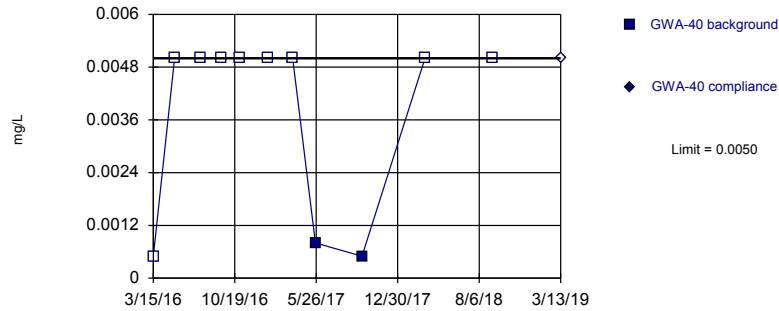


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

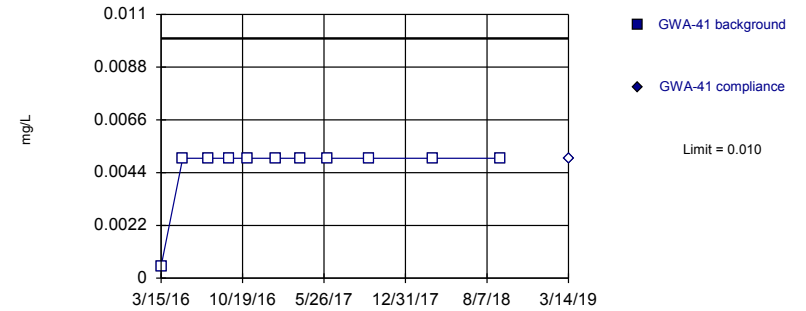


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

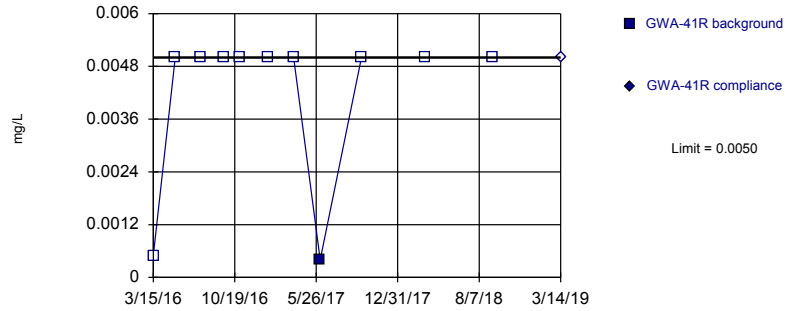
Constituent: Cadmium, Chromium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41
3/14/2016			<0.1					
3/15/2016					<0.001		<0.001	
5/11/2016			<0.01		<0.01			
5/12/2016							<0.01	
5/16/2016	<0.001 (D)							
7/19/2016			<0.01					
7/20/2016							<0.01	
7/21/2016					<0.01			
7/27/2016	0.0001 (JD)							
9/15/2016			<0.01		<0.01		<0.01	
11/2/2016			<0.01					
11/3/2016					<0.01		<0.01	
1/17/2017					<0.01			
1/18/2017			<0.01				<0.01	
2/21/2017	<0.001							
3/24/2017					<0.01 (*)		<0.01 (*)	
3/27/2017	<0.001 (D)							
3/28/2017			<0.01 (*)					
5/24/2017					0.0008 (J)			
6/6/2017							<0.01	
6/7/2017			<0.01					
6/8/2017	<0.001 (D)							
7/17/2017	<0.001 (D)							
7/27/2017	<0.001							
8/9/2017	<0.001							
9/25/2017							<0.01	
9/26/2017			<0.01		0.0005 (J)			
9/29/2017	<0.001 (D)							
3/14/2018			<0.01		<0.01		<0.01	
3/16/2018	<0.001							
9/12/2018			<0.01		<0.01		<0.01	
9/14/2018	<0.001							
3/13/2019						<0.01		
3/14/2019		<0.001						<0.01
3/15/2019				<0.01				

Within Limit

Prediction Limit
Intrawell Non-parametric

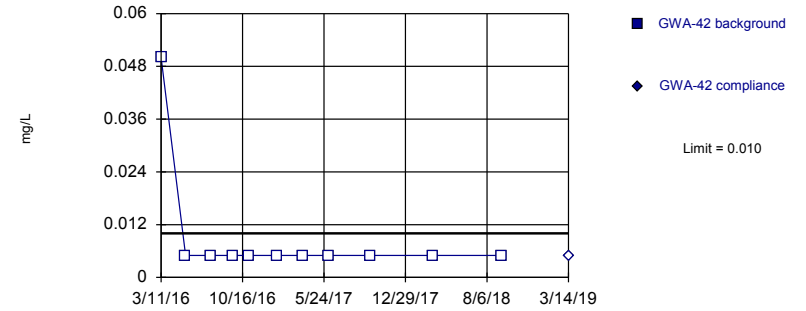


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

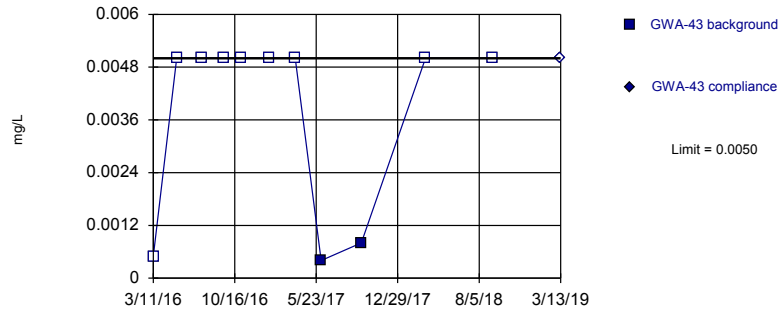


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:18 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

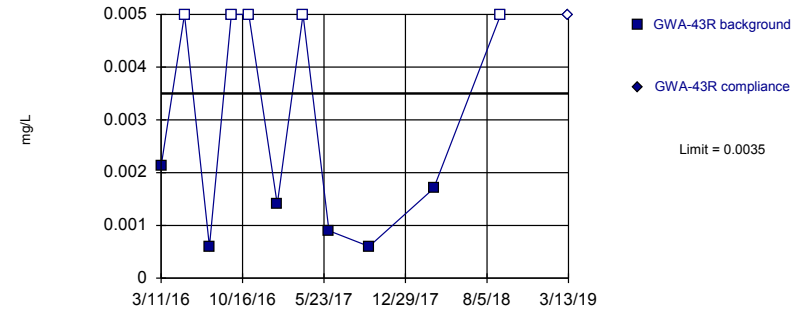


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.01852, Std. Dev.=0.01884, n=11, 45.45% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

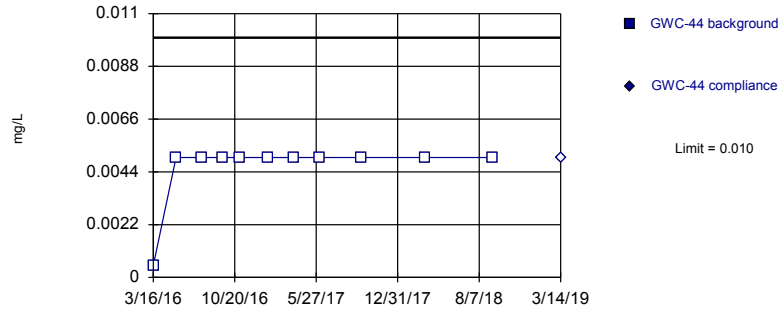
Prediction Limit

Constituent: Chromium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R	GWA-41R	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R
3/11/2016			<0.1		<0.001		0.00212 (J)	
3/15/2016	<0.001							
5/13/2016	<0.01				<0.01		<0.01	
5/16/2016			<0.01					
7/19/2016					<0.01		0.0006 (J)	
7/21/2016	<0.01							
7/22/2016			<0.01					
9/16/2016					<0.01		<0.01	
9/19/2016			<0.01					
9/21/2016	<0.01							
11/2/2016					<0.01		<0.01	
11/3/2016	<0.01		<0.01					
1/17/2017	<0.01		<0.01					
1/18/2017					<0.01		0.0014 (J)	
3/27/2017	<0.01		<0.01					
3/28/2017					<0.01 (*)		<0.01 (*)	
6/6/2017	0.0004 (J)				0.0004 (J)		0.0009 (J)	
6/7/2017			<0.01					
9/22/2017					0.0008 (J)		0.0006 (J)	
9/25/2017	<0.01							
9/26/2017			<0.01					
3/14/2018	<0.01		<0.01		<0.01			
3/15/2018							0.0017 (J)	
9/12/2018	<0.01				<0.01		<0.01	
9/14/2018			<0.01					
3/13/2019						<0.01		<0.01
3/14/2019		<0.01		<0.01				

Within Limit

Prediction Limit
Intrawell Non-parametric

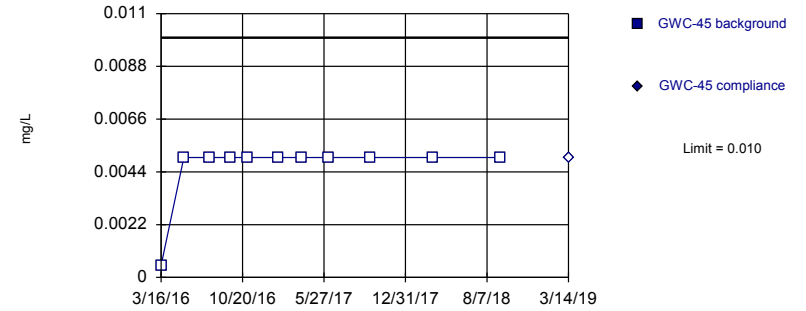


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

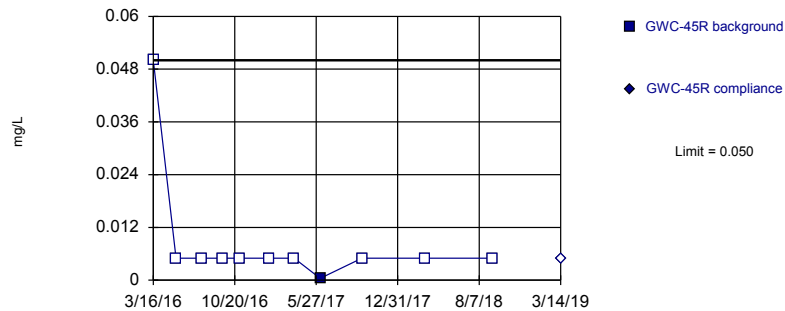


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

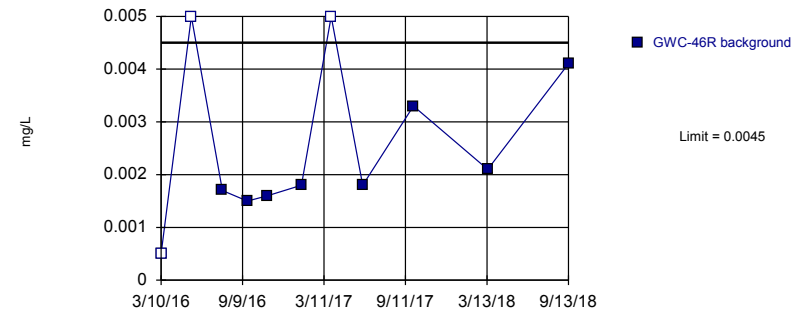


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric, GWC-46R



Background Data Summary (after Aitchison's Adjustment): Mean=0.001627, Std. Dev.=0.00131, n=11, 27.27% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8704, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

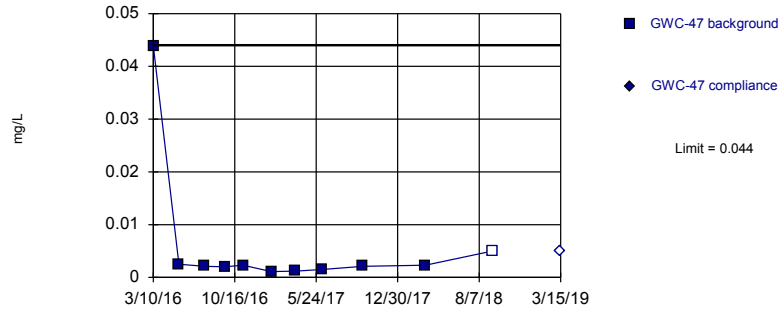
Prediction Limit

Constituent: Chromium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-44	GWC-44	GWC-45	GWC-45	GWC-45R	GWC-45R	GWC-46R
3/10/2016							<0.001
3/16/2016	<0.001		<0.001		<0.1		
5/16/2016	<0.01		<0.01		<0.01		
5/17/2016							<0.01
7/25/2016	<0.01		<0.01		<0.01		
7/26/2016							0.0017 (J)
9/19/2016	<0.01		<0.01		<0.01		
9/20/2016							0.0015 (J)
11/3/2016	<0.01				<0.01		
11/4/2016			<0.01				0.0016 (J)
1/19/2017	<0.01						
1/20/2017					<0.01		0.0018 (J)
1/23/2017			<0.01				
3/28/2017	<0.01						<0.01 (*)
3/29/2017			<0.01		<0.01		
6/5/2017	<0.01						
6/7/2017			<0.01		0.0004 (J)		0.0018 (J)
9/26/2017	<0.01						
9/27/2017			<0.01		<0.01		
9/29/2017							0.0033 (J)
3/15/2018	<0.01		<0.01		<0.01		0.0021 (J)
9/12/2018	<0.01						
9/13/2018			<0.01		<0.01		0.0041 (J)
3/14/2019		<0.01		<0.01		<0.01	

Within Limit

Prediction Limit
Intrawell Non-parametric

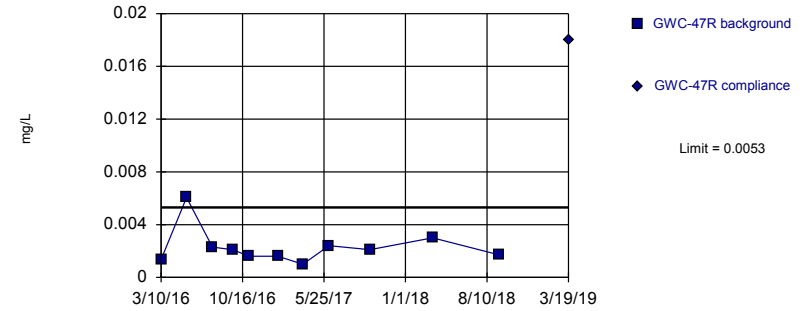


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 9.091% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limit

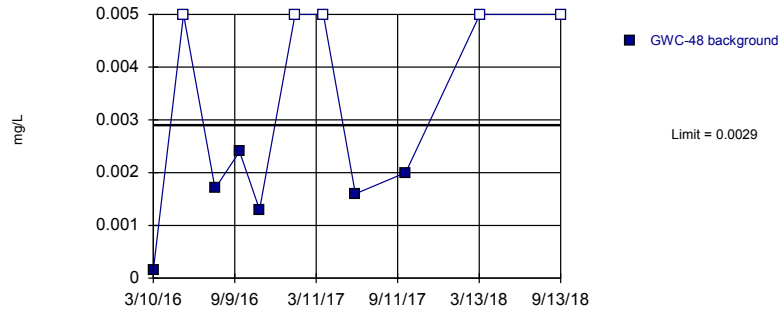
Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.04645, Std. Dev.=0.01219, n=11.
Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8388, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Parametric, GWC-48

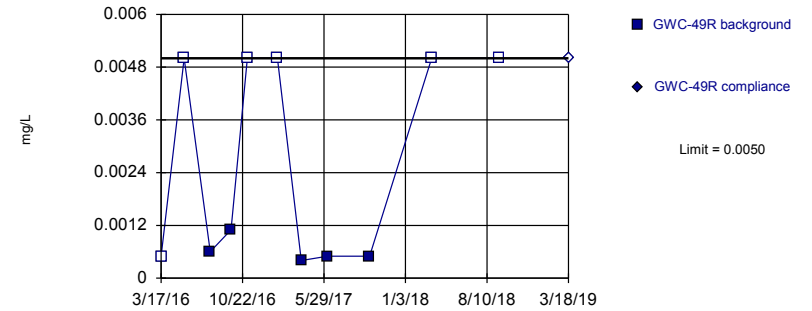


Background Data Summary (after Aitchison's Adjustment): Mean=0.0008316, Std. Dev.=0.0009651, n=11, 45.45% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8097, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

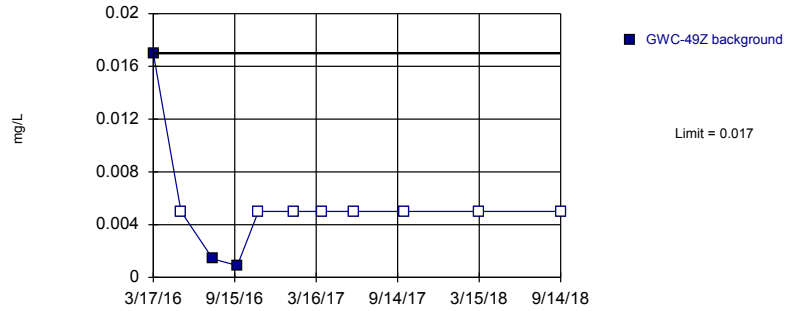
Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Chromium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-49R	GWC-49R
3/10/2016	0.0439 (J)		0.00136 (J)		0.000148 (J)		
3/17/2016						<0.001	
5/17/2016					<0.01		
5/18/2016	0.00248 (J)		0.00606 (J)			<0.01	
7/27/2016	0.0021 (J)		0.0023 (J)		0.0017 (J)	0.0006 (J)	
9/20/2016	0.002 (J)		0.0021 (J)		0.0024 (J)		
9/21/2016						0.0011 (J)	
11/4/2016			0.0016 (J)		0.0013 (J)	<0.01	
11/7/2016	0.0023 (J)						
1/20/2017			0.0016 (J)				
1/23/2017	0.0011 (J)				<0.01		
1/24/2017						<0.01	
3/28/2017					<0.01 (*)		
3/29/2017	0.0012 (J)		0.001 (J)			0.0004 (J)	
6/8/2017	0.0015 (J)		0.0024 (J)		0.0016 (J)	0.0005 (J)	
9/27/2017	0.0021 (J)		0.0021 (J)				
9/29/2017					0.002 (J)	0.0005 (J)	
3/15/2018	0.0023 (J)				<0.01	<0.01	
3/16/2018			0.003 (J)				
9/13/2018	<0.01		0.0017 (J)		<0.01	<0.01	
3/15/2019		<0.01					
3/18/2019							<0.01
3/19/2019				0.018			

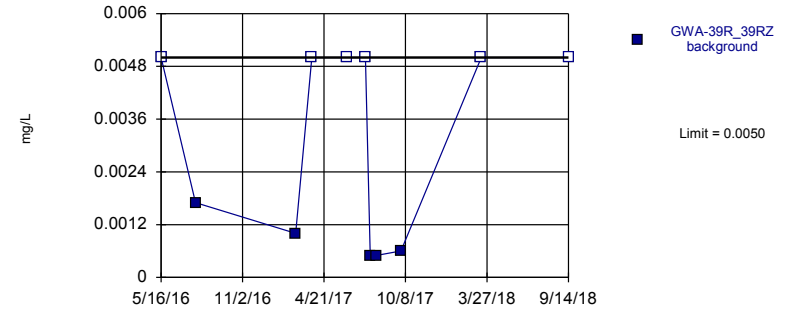
Prediction Limit
Intrawell Non-parametric, GWC-49Z



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

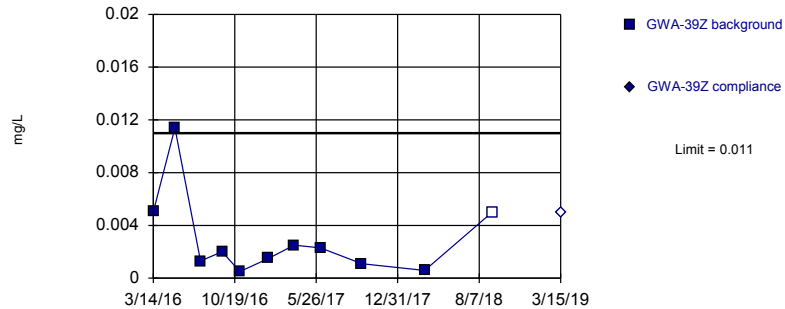
Prediction Limit
Intrawell Non-parametric, GWA-39R_39RZ (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Chromium Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

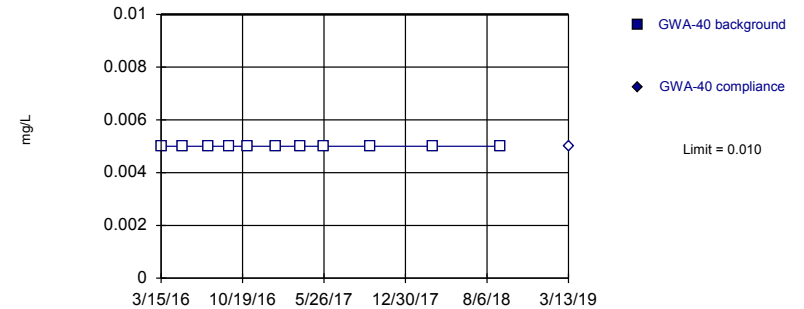
Within Limit
Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.04959, Std. Dev.=0.02482, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8871, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

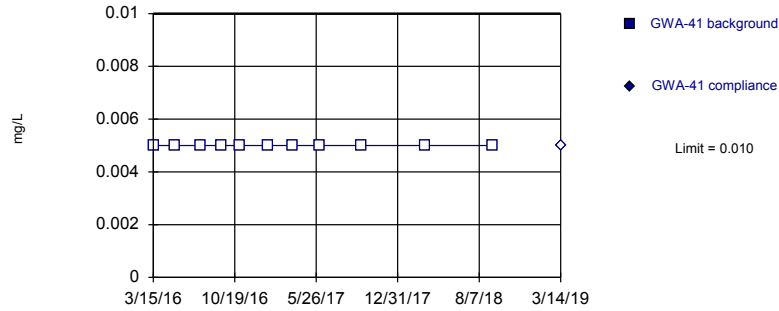
Constituent: Chromium, Cobalt Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z	GWA-39R_39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40
3/14/2016			0.00503 (J)			
3/15/2016					<0.01	
3/17/2016	0.017 (J)					
5/11/2016			0.0114		<0.01	
5/16/2016		<0.01 (D)				
5/18/2016	<0.01					
7/19/2016			0.0013 (J)			
7/21/2016					<0.01	
7/27/2016		0.0017 (JD)				
7/28/2016	0.0014 (J)					
9/15/2016			0.002 (J)		<0.01	
9/21/2016	0.0009 (J)					
11/2/2016			0.0005 (J)			
11/3/2016					<0.01	
11/7/2016	<0.01					
1/17/2017					<0.01	
1/18/2017			0.0015 (J)			
1/24/2017	<0.01					
2/21/2017		0.001 (J)				
3/24/2017					<0.01	
3/27/2017		<0.01 (D)				
3/28/2017			0.0025 (J)			
3/30/2017	<0.01					
5/24/2017					<0.01	
6/7/2017			0.0023 (J)			
6/8/2017		<0.01 (D)				
6/9/2017	<0.01					
7/17/2017		<0.01 (D)				
7/27/2017		0.0005 (J)				
8/9/2017		0.0005 (J)				
9/26/2017			0.0011 (J)		<0.01	
9/29/2017	<0.01	0.0006 (JD)				
3/14/2018			0.00058 (J)		<0.01	
3/15/2018	<0.01					
3/16/2018		<0.01				
9/12/2018			<0.01		<0.01	
9/14/2018	<0.01	<0.01				
3/13/2019						<0.01
3/15/2019				<0.01		

Within Limit

Prediction Limit
Intrawell Non-parametric

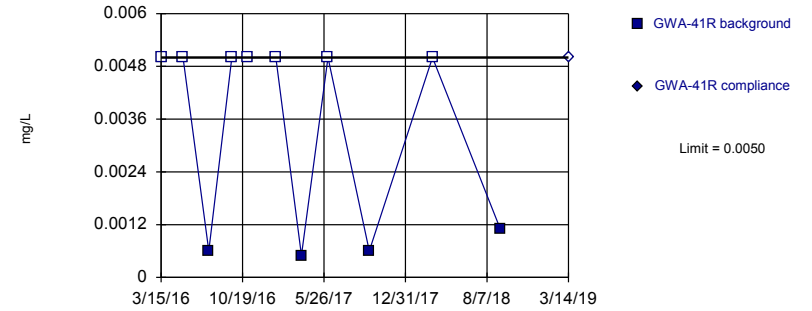


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

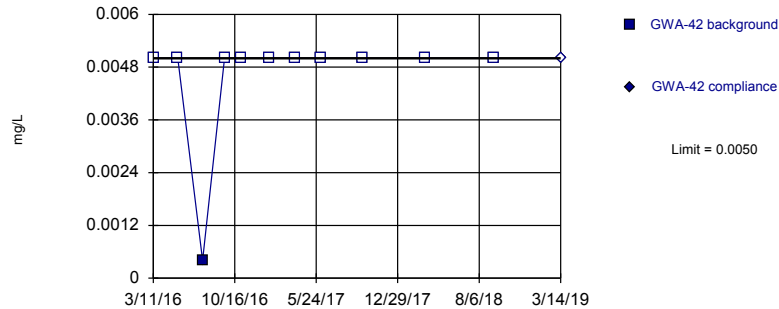


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

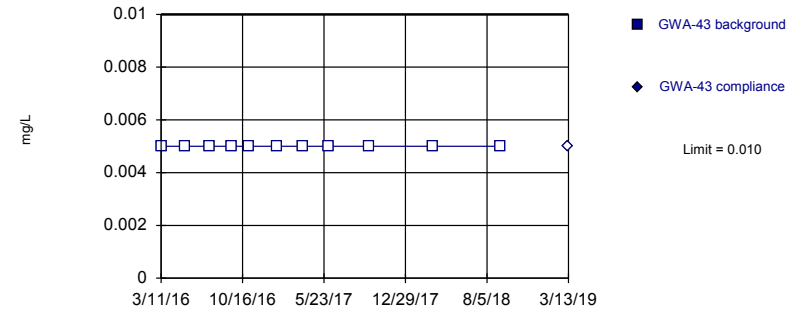


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

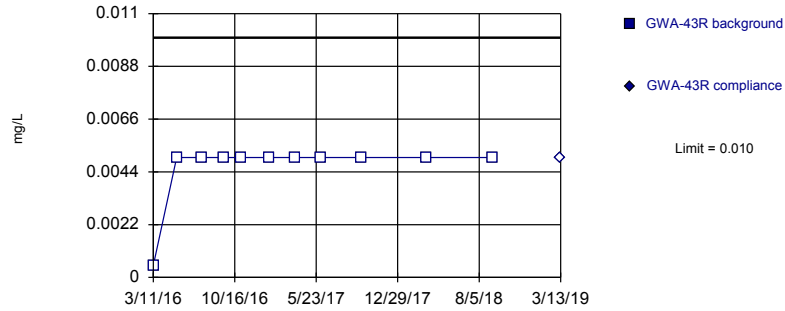
Prediction Limit

Constituent: Cobalt Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41	GWA-41	GWA-41R	GWA-41R	GWA-42	GWA-42	GWA-43	GWA-43
3/11/2016					<0.01		<0.01	
3/15/2016	<0.01		<0.01					
5/12/2016	<0.01							
5/13/2016			<0.01				<0.01	
5/16/2016					<0.01			
7/19/2016							<0.01	
7/20/2016	<0.01							
7/21/2016			0.0006 (J)					
7/22/2016					0.0004 (J)			
9/15/2016	<0.01							
9/16/2016							<0.01	
9/19/2016					<0.01			
9/21/2016			<0.01					
11/2/2016							<0.01	
11/3/2016	<0.01		<0.01		<0.01			
1/17/2017			<0.01		<0.01			
1/18/2017	<0.01						<0.01	
3/24/2017	<0.01							
3/27/2017			0.0005 (J)		<0.01			
3/28/2017							<0.01	
6/6/2017	<0.01		<0.01				<0.01	
6/7/2017					<0.01			
9/22/2017							<0.01	
9/25/2017	<0.01		0.0006 (J)					
9/26/2017					<0.01			
3/14/2018	<0.01		<0.01		<0.01		<0.01	
9/12/2018	<0.01		0.0011 (J)				<0.01	
9/14/2018					<0.01			
3/13/2019								<0.01
3/14/2019		<0.01		<0.01		<0.01		

Within Limit

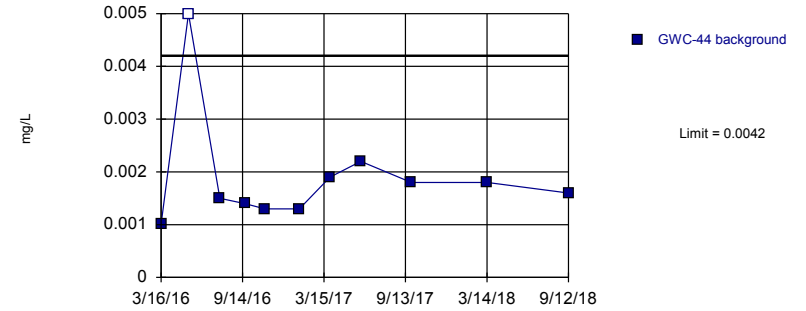
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

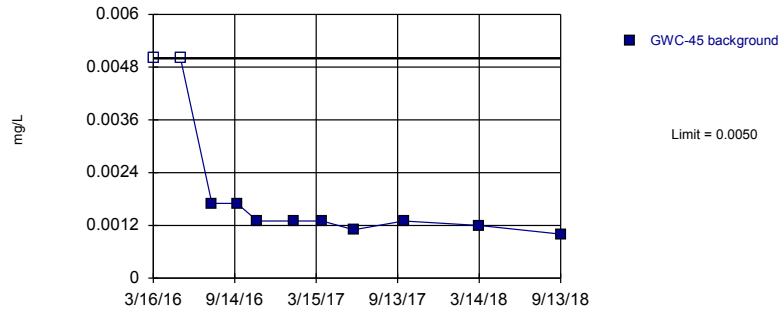
Prediction Limit
Intrawell Parametric, GWC-44



Background Data Summary (based on natural log transformation): Mean=-6.366, Std. Dev.=0.4147, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8437, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWC-45

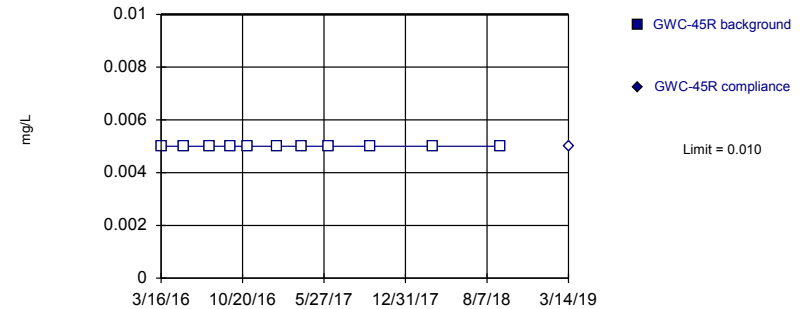


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 18.18% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

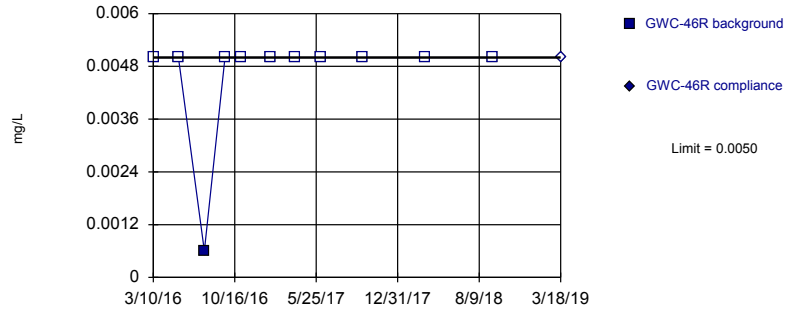
Prediction Limit

Constituent: Cobalt Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-43R	GWA-43R	GWC-44	GWC-45	GWC-45R	GWC-45R
3/11/2016	<0.001					
3/16/2016			0.00101 (J)	<0.01	<0.01	
5/13/2016	<0.01					
5/16/2016			<0.01	<0.01	<0.01	
7/19/2016	<0.01					
7/25/2016			0.0015 (J)	0.0017 (J)	<0.01	
9/16/2016	<0.01					
9/19/2016			0.0014 (J)	0.0017 (J)	<0.01	
11/2/2016	<0.01					
11/3/2016			0.0013 (J)		<0.01	
11/4/2016				0.0013 (J)		
1/18/2017	<0.01					
1/19/2017			0.0013 (J)			
1/20/2017					<0.01	
1/23/2017				0.0013 (J)		
3/28/2017	<0.01		0.0019 (J)			
3/29/2017				0.0013 (J)	<0.01	
6/5/2017			0.0022 (J)			
6/6/2017	<0.01					
6/7/2017				0.0011 (J)	<0.01	
9/22/2017	<0.01					
9/26/2017			0.0018 (J)			
9/27/2017				0.0013 (J)	<0.01	
3/15/2018	<0.01		0.0018 (J)	0.0012 (J)	<0.01	
9/12/2018	<0.01		0.0016 (J)			
9/13/2018				0.001 (J)	<0.01	
3/13/2019		<0.01				
3/14/2019						<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

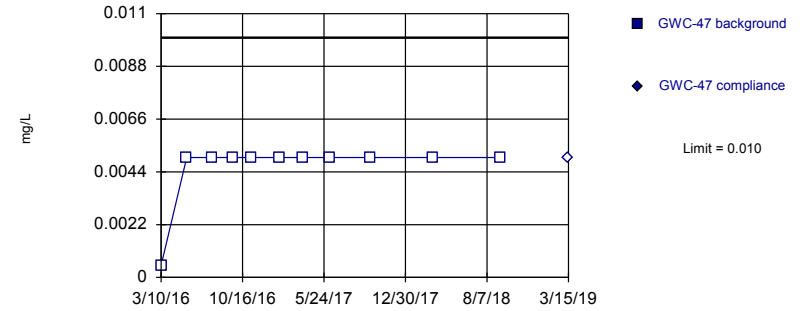


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

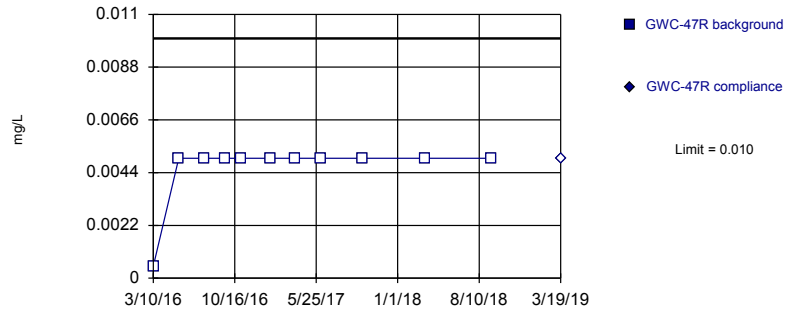


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

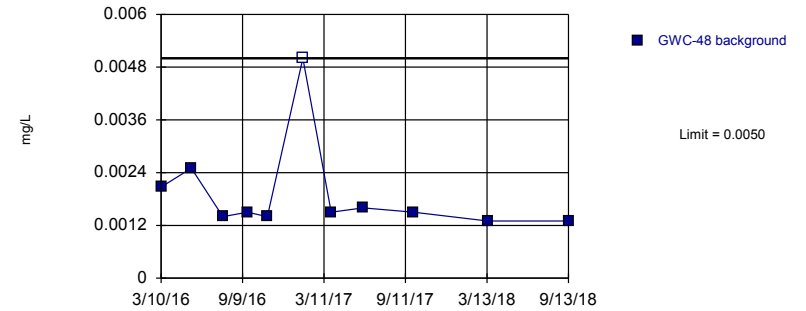


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:19 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-48



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 9.091% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

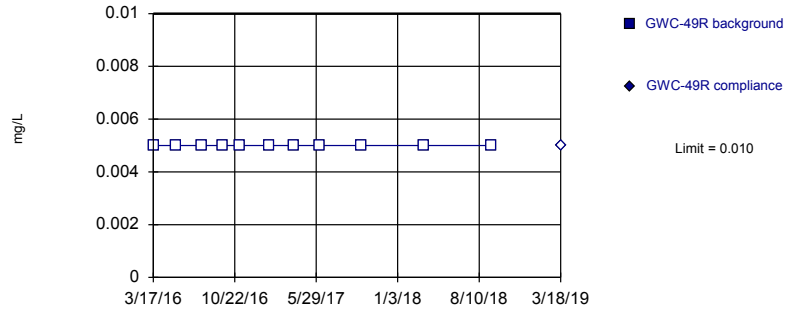
Prediction Limit

Constituent: Cobalt Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-46R	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48
3/10/2016	<0.01		<0.001		<0.001		0.00207 (J)
5/17/2016	<0.01						0.0025 (J)
5/18/2016			<0.01		<0.01		
7/26/2016	0.0006 (J)						
7/27/2016			<0.01		<0.01		0.0014 (J)
9/20/2016	<0.01		<0.01		<0.01		0.0015 (J)
11/4/2016	<0.01				<0.01		0.0014 (J)
11/7/2016			<0.01				
1/20/2017	<0.01				<0.01		
1/23/2017			<0.01				<0.01
3/28/2017	<0.01						0.0015 (J)
3/29/2017			<0.01		<0.01		
6/7/2017	<0.01						
6/8/2017			<0.01		<0.01		0.0016 (J)
9/27/2017			<0.01		<0.01		
9/29/2017	<0.01						0.0015 (J)
3/15/2018	<0.01		<0.01				0.0013 (J)
3/16/2018					<0.01		
9/13/2018	<0.01		<0.01		<0.01		0.0013 (J)
3/15/2019				<0.01			
3/18/2019		<0.01					
3/19/2019						<0.01	

Within Limit

Prediction Limit
Intrawell Non-parametric

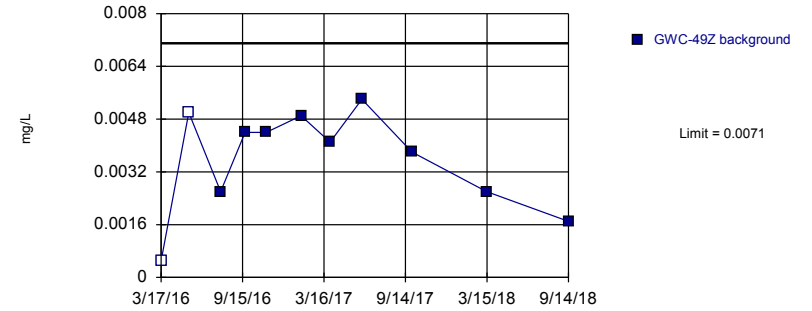


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric, GWC-49Z

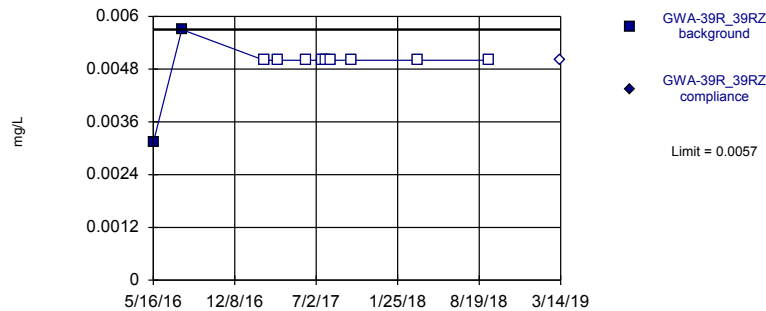


Background Data Summary (after Aitchison's Adjustment): Mean=0.003082, Std. Dev.=0.001873, n=11, 18.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9161, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Cobalt Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

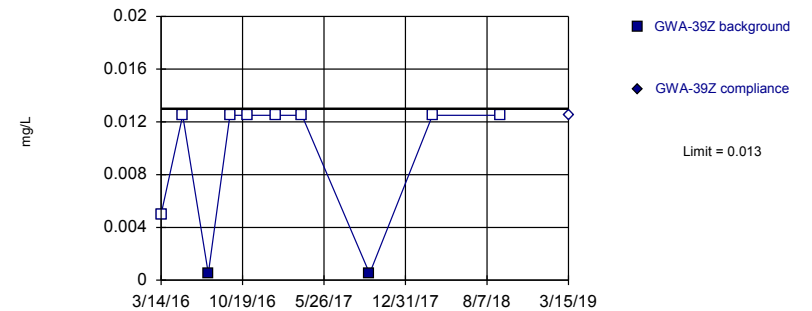


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

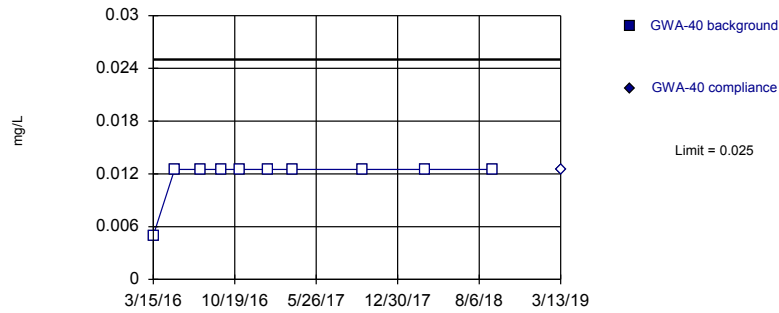
Prediction Limit

Constituent: Cobalt, Copper Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49R	GWC-49R	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z
3/14/2016						<0.01	
3/17/2016	<0.01		<0.001				
5/11/2016						<0.025	
5/16/2016				0.00313 (JD)			
5/18/2016	<0.01		<0.01				
7/19/2016						0.0005 (J)	
7/27/2016	<0.01			0.0057 (JD)			
7/28/2016			0.0026 (J)				
9/15/2016						<0.025	
9/21/2016	<0.01		0.0044 (J)				
11/2/2016						<0.025	
11/4/2016	<0.01						
11/7/2016			0.0044 (J)				
1/18/2017						<0.025	
1/24/2017	<0.01		0.0049 (J)				
2/21/2017				<0.01			
3/27/2017				<0.01 (D)			
3/28/2017						<0.025 (*)	
3/29/2017	<0.01						
3/30/2017			0.0041 (J)				
6/8/2017	<0.01			<0.01 (D)			
6/9/2017			0.0054 (J)				
7/17/2017				<0.01 (D)			
7/27/2017				<0.01			
8/9/2017				<0.01			
9/26/2017						0.0005 (J)	
9/29/2017	<0.01		0.0038 (J)	<0.01 (D)			
3/14/2018						<0.025	
3/15/2018	<0.01		0.0026 (J)				
3/16/2018				<0.01			
9/12/2018						<0.025	
9/13/2018	<0.01						
9/14/2018			0.0017 (J)	<0.01			
3/14/2019					<0.01		
3/15/2019							<0.025
3/18/2019		<0.01					

Within Limit

Prediction Limit
Intrawell Non-parametric

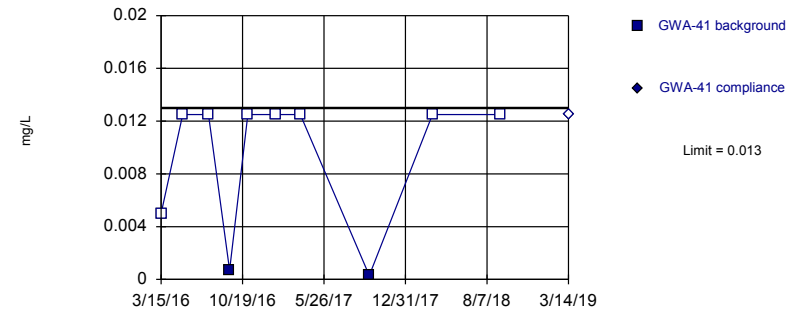


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

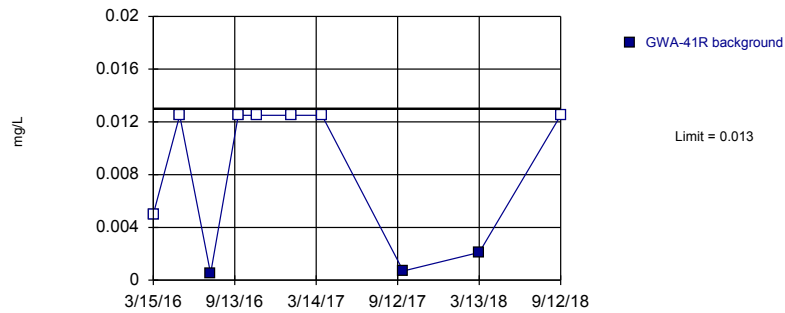
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWA-41R (bg)

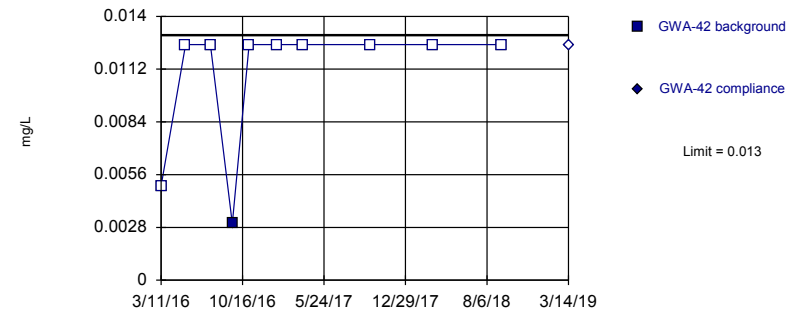


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

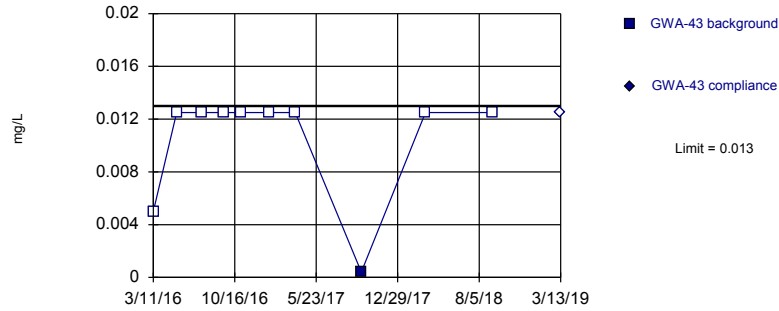
Prediction Limit

Constituent: Copper Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-40	GWA-40	GWA-41	GWA-41	GWA-41R	GWA-42	GWA-42
3/11/2016						<0.01	
3/15/2016	<0.01		<0.01		<0.01		
5/11/2016	<0.025						
5/12/2016			<0.025				
5/13/2016					<0.025		
5/16/2016						<0.025	
7/20/2016			<0.025				
7/21/2016	<0.025				0.0005 (J)		
7/22/2016						<0.025	
9/15/2016	<0.025		0.0007 (J)				
9/19/2016						0.003 (J)	
9/21/2016					<0.025		
11/3/2016	<0.025		<0.025		<0.025	<0.025	
1/17/2017	<0.025				<0.025	<0.025	
1/18/2017			<0.025				
3/24/2017	<0.025		<0.025				
3/27/2017					<0.025	<0.025	
9/25/2017			0.0003 (J)		0.0007 (J)		
9/26/2017	<0.025					<0.025	
3/14/2018	<0.025		<0.025		0.0021 (J)	<0.025	
9/12/2018	<0.025		<0.025		<0.025		
9/14/2018						<0.025	
3/13/2019		<0.025					
3/14/2019				<0.025			<0.025

Within Limit

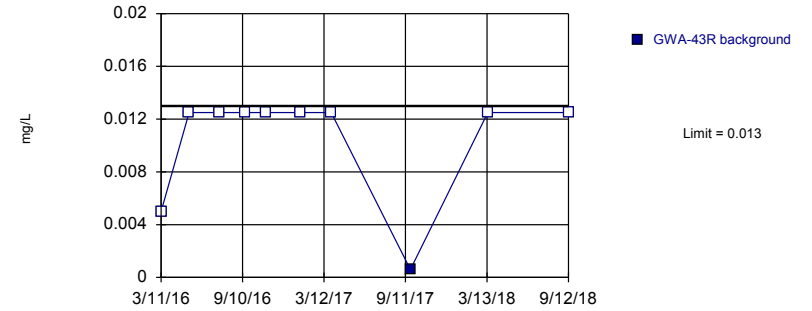
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWA-43R (bg)

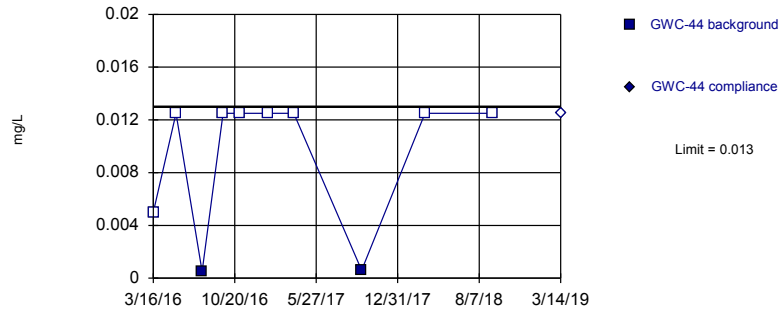


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

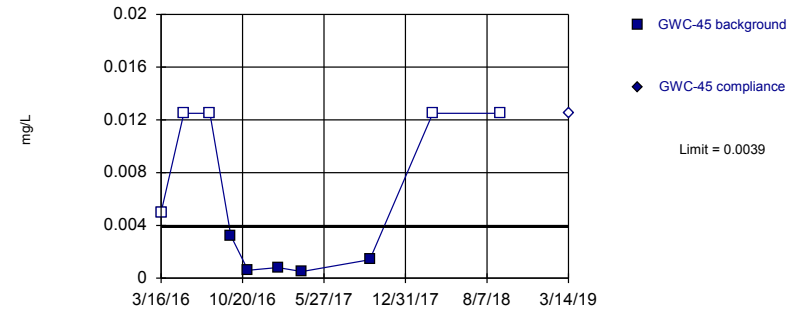


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.01691, Std. Dev.=0.02011, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8101, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

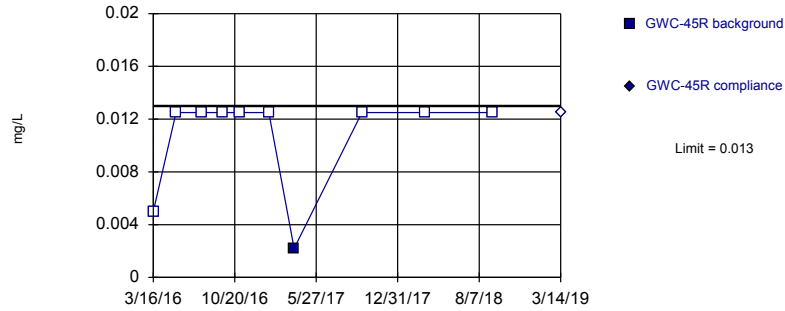
Prediction Limit

Constituent: Copper Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-43	GWA-43	GWA-43R	GWC-44	GWC-44	GWC-45	GWC-45
3/11/2016	<0.01		<0.01				
3/16/2016				<0.01		<0.01	
5/13/2016	<0.025		<0.025				
5/16/2016				<0.025		<0.025	
7/19/2016	<0.025		<0.025				
7/25/2016				0.0005 (J)		<0.025	
9/16/2016	<0.025		<0.025				
9/19/2016				<0.025		0.0032 (J)	
11/2/2016	<0.025		<0.025				
11/3/2016				<0.025			
11/4/2016						0.0006 (J)	
1/18/2017	<0.025		<0.025				
1/19/2017				<0.025			
1/23/2017						0.0008 (J)	
3/28/2017	<0.025 (*)		<0.025 (*)	<0.025 (*)			
3/29/2017						0.0005 (J)	
9/22/2017	0.0004 (J)		0.0006 (J)				
9/26/2017				0.0006 (J)			
9/27/2017						0.0014 (J)	
3/14/2018	<0.025						
3/15/2018			<0.025	<0.025		<0.025	
9/12/2018	<0.025		<0.025	<0.025			
9/13/2018						<0.025	
3/13/2019		<0.025					
3/14/2019					<0.025		<0.025

Within Limit

Prediction Limit
Intrawell Non-parametric

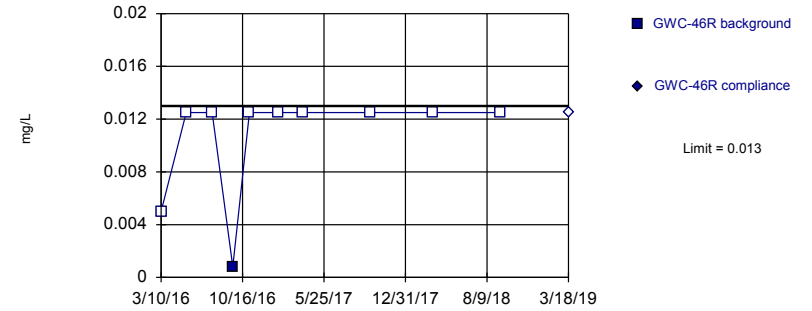


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

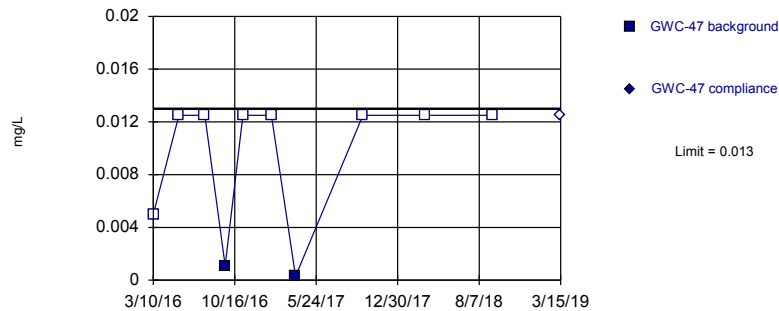


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

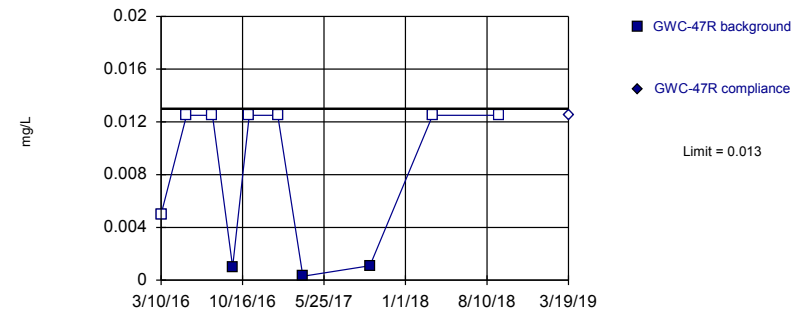


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

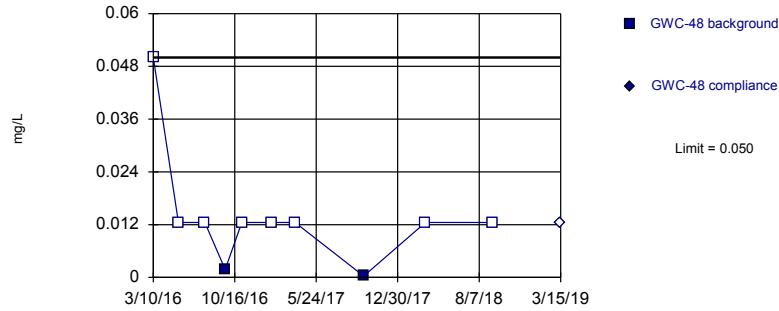


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

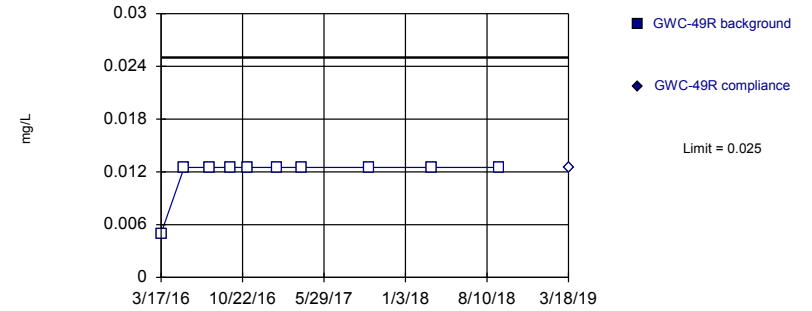


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

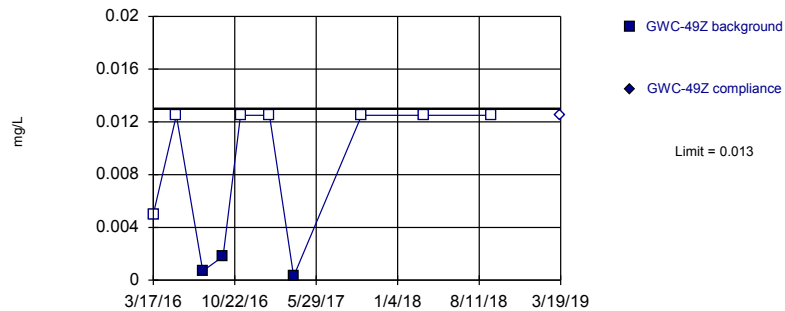


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

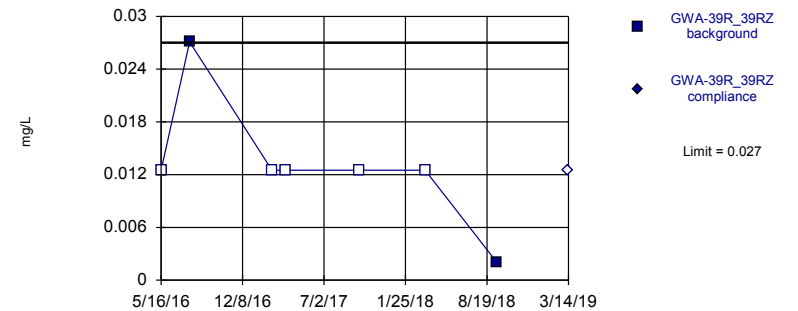


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3).

Constituent: Copper Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

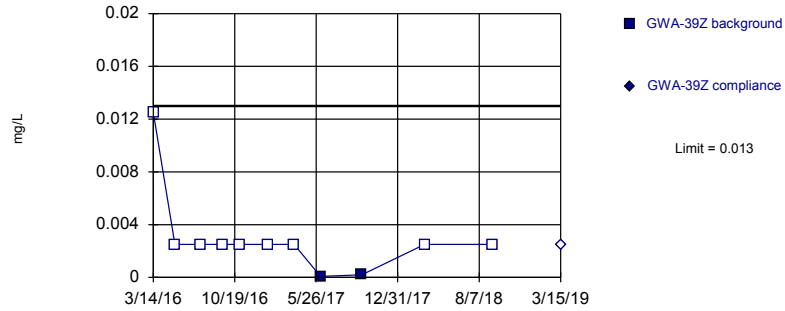
Constituent: Copper Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ
3/10/2016	<0.1							
3/17/2016			<0.01		<0.01			
5/16/2016							<0.025 (D)	
5/17/2016	<0.025							
5/18/2016			<0.025		<0.025			
7/27/2016	<0.025		<0.025				0.0271 (D)	
7/28/2016					0.0007 (J)			
9/20/2016	0.0018 (J)							
9/21/2016			<0.025		0.0018 (J)			
11/4/2016	<0.025		<0.025					
11/7/2016					<0.025			
1/23/2017	<0.025							
1/24/2017			<0.025		<0.025			
2/21/2017							<0.025	
3/27/2017							<0.025 (D)	
3/28/2017	<0.025 (*)							
3/29/2017			<0.025					
3/30/2017					0.0003 (J)			
9/29/2017	0.0003 (J)		<0.025		<0.025		<0.025 (D)	
3/15/2018	<0.025		<0.025		<0.025			
3/16/2018							<0.025	
9/13/2018	<0.025		<0.025					
9/14/2018					<0.025		0.002 (J)	
3/14/2019								<0.025
3/15/2019		<0.025						
3/18/2019				<0.025				
3/19/2019						<0.025		

Within Limit

Prediction Limit
Intrawell Non-parametric

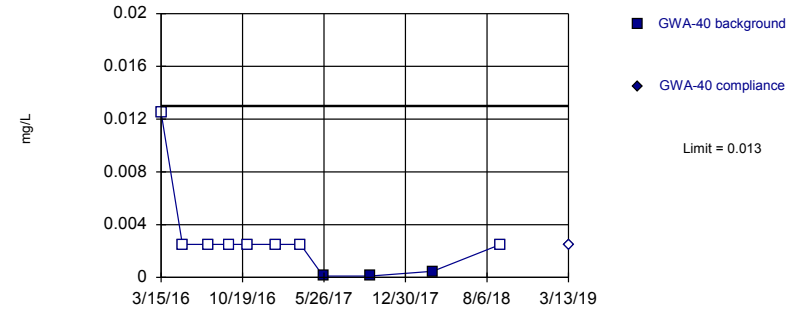


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

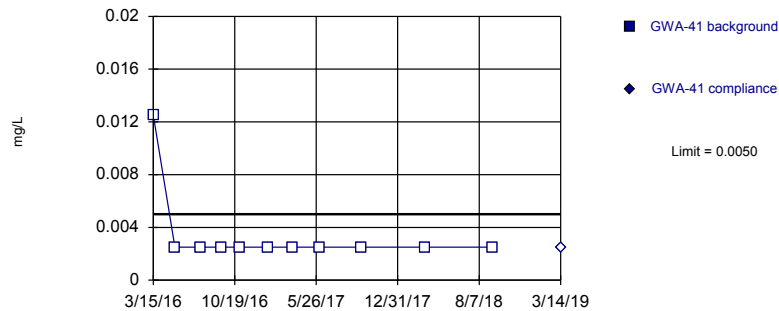


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

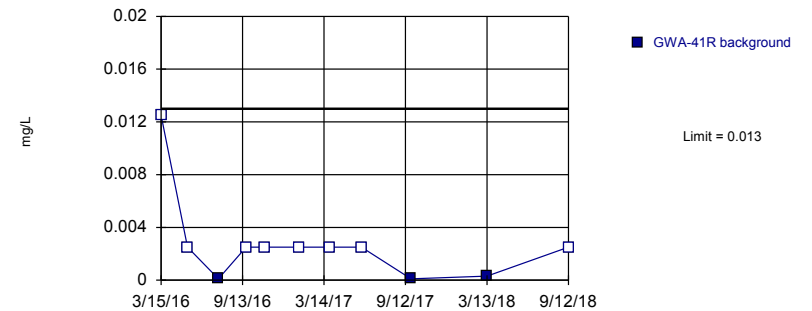


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-41R (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Lead Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

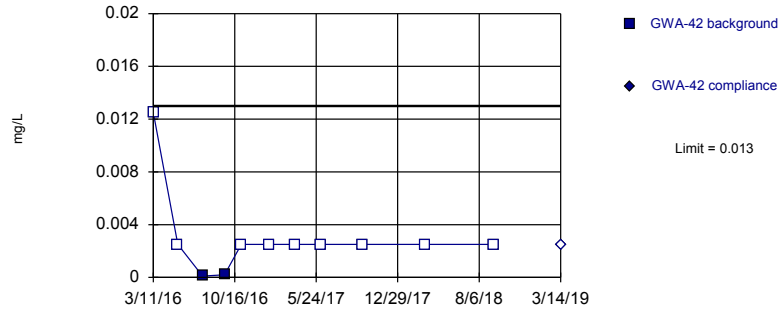
Prediction Limit

Constituent: Lead Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41	GWA-41R
3/14/2016	<0.025						
3/15/2016			<0.025		<0.025		<0.025
5/11/2016	<0.005		<0.005				
5/12/2016					<0.005		
5/13/2016							<0.005
7/19/2016	<0.005						
7/20/2016					<0.005		
7/21/2016			<0.005				0.0001 (J)
9/15/2016	<0.005		<0.005		<0.005		
9/21/2016							<0.005
11/2/2016	<0.005						
11/3/2016			<0.005		<0.005		<0.005
1/17/2017			<0.005				<0.005
1/18/2017	<0.005				<0.005		
3/24/2017			<0.005 (*)		<0.005		
3/27/2017							<0.005
3/28/2017	<0.005 (*)						
5/24/2017			0.0001 (J)				
6/6/2017					<0.005		<0.005
6/7/2017	8E-05 (J)						
9/25/2017					<0.005		0.0001 (J)
9/26/2017	0.0002 (J)		0.0001 (J)				
3/14/2018	<0.005		0.00046 (J)		<0.005		0.00031 (J)
9/12/2018	<0.005		<0.005		<0.005		<0.005
3/13/2019				<0.005			
3/14/2019						<0.005	
3/15/2019		<0.005					

Within Limit

Prediction Limit
Intrawell Non-parametric

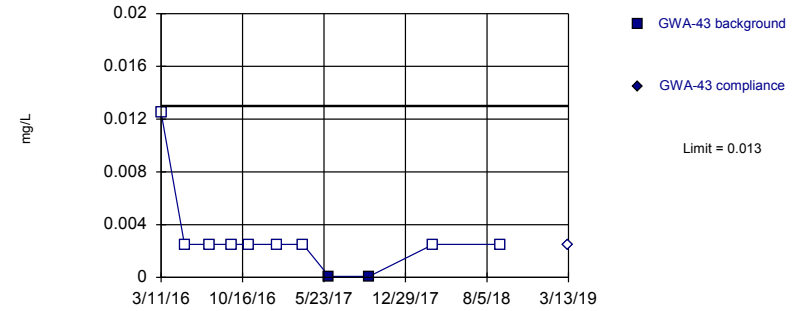


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

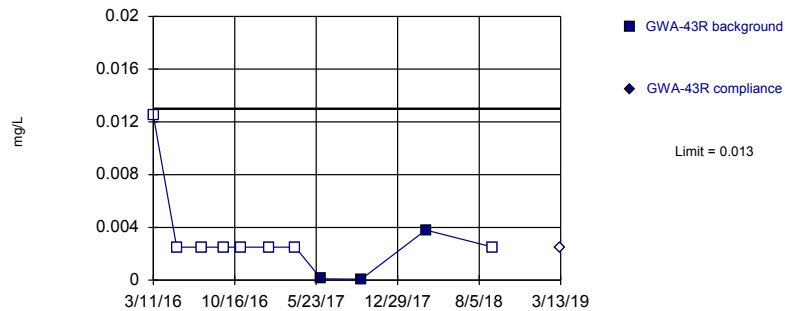


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

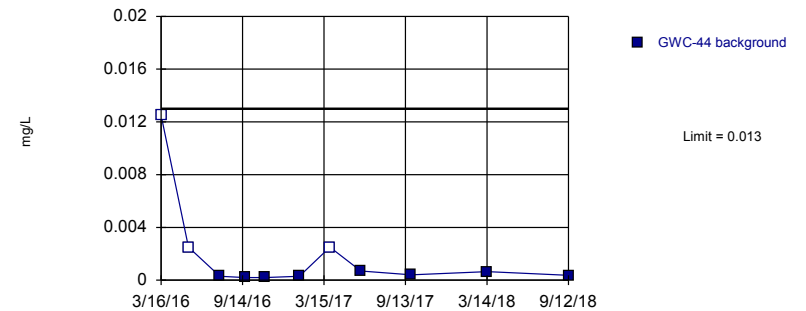


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:20 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-44



Non-parametric test used after natural log transformation resulted in a parametric limit of 9.889, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 11 background values. 27.27% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

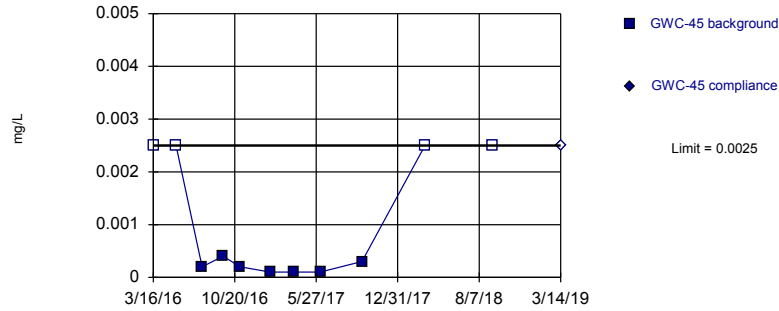
Constituent: Lead Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R	GWC-44
3/11/2016	<0.025		<0.025		<0.025		
3/16/2016							<0.025
5/13/2016			<0.005		<0.005		
5/16/2016	<0.005						<0.005
7/19/2016			<0.005		<0.005		
7/22/2016	0.0001 (J)						
7/25/2016							0.0003 (J)
9/16/2016			<0.005		<0.005		
9/19/2016	0.0002 (J)						0.0002 (J)
11/2/2016			<0.005		<0.005		
11/3/2016	<0.005						0.0002 (J)
1/17/2017	<0.005						
1/18/2017			<0.005		<0.005		
1/19/2017							0.0003 (J)
3/27/2017	<0.005						
3/28/2017			<0.005		<0.005		<0.005 (*)
6/5/2017							0.0007 (J)
6/6/2017			7E-05 (J)		0.0001 (J)		
6/7/2017	<0.005						
9/22/2017			8E-05 (J)		7E-05 (J)		
9/26/2017	<0.005						0.0004 (J)
3/14/2018	<0.005		<0.005				
3/15/2018					0.0038 (J)		0.00064 (J)
9/12/2018			<0.005		<0.005		0.00037 (J)
9/14/2018	<0.005						
3/13/2019				<0.005		<0.005	
3/14/2019		<0.005					

Within Limit

Prediction Limit
Intrawell Non-parametric

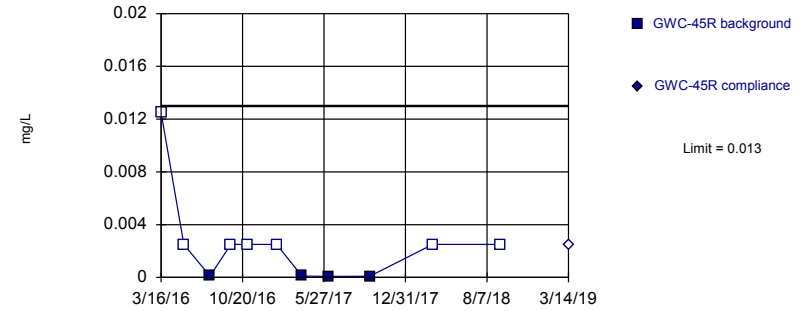


Non-parametric test used after natural log transformation resulted in a parametric limit of 53.63, which exceeds 10 times the highest background value (user-adjustable cutoff). Limit is highest of 11 background values. 36.36% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

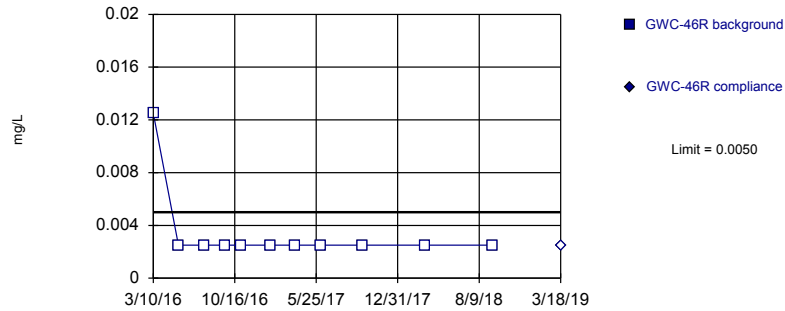


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

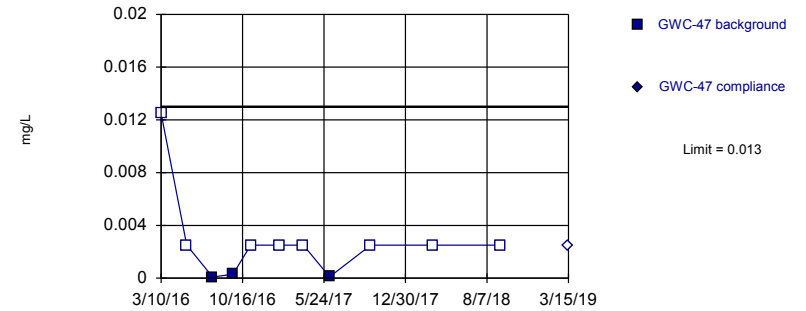


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

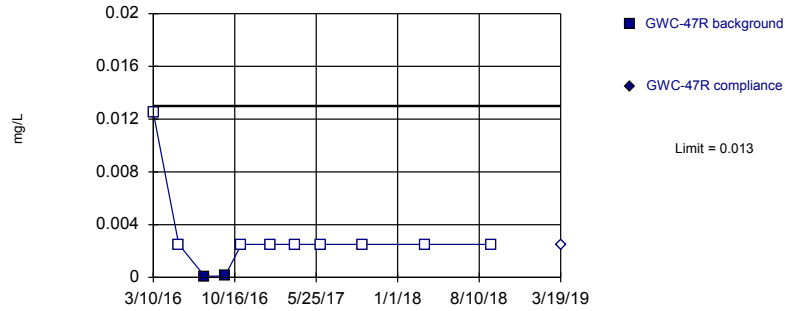
Prediction Limit

Constituent: Lead Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-45	GWC-45	GWC-45R	GWC-45R	GWC-46R	GWC-46R	GWC-47	GWC-47
3/10/2016					<0.025		<0.025	
3/16/2016	<0.005 (U)		<0.025					
5/16/2016	<0.005		<0.005					
5/17/2016					<0.005			
5/18/2016							<0.005	
7/25/2016	0.0002 (J)		0.0001 (J)					
7/26/2016					<0.005			
7/27/2016							9E-05 (J)	
9/19/2016	0.0004 (J)		<0.005					
9/20/2016					<0.005		0.0003 (J)	
11/3/2016			<0.005					
11/4/2016	0.0002 (J)				<0.005			
11/7/2016							<0.005	
1/20/2017			<0.005		<0.005			
1/23/2017	0.0001 (J)						<0.005	
3/28/2017					<0.005			
3/29/2017	0.0001 (J)		0.0001 (J)				<0.005	
6/7/2017	0.0001 (J)		8E-05 (J)		<0.005			
6/8/2017							0.0001 (J)	
9/27/2017	0.0003 (J)		9E-05 (J)				<0.005	
9/29/2017					<0.005			
3/15/2018	<0.005		<0.005		<0.005		<0.005	
9/13/2018	<0.005		<0.005		<0.005		<0.005	
3/14/2019		<0.005		<0.005				
3/15/2019								<0.005
3/18/2019						<0.005		

Within Limit

Prediction Limit
Intrawell Non-parametric

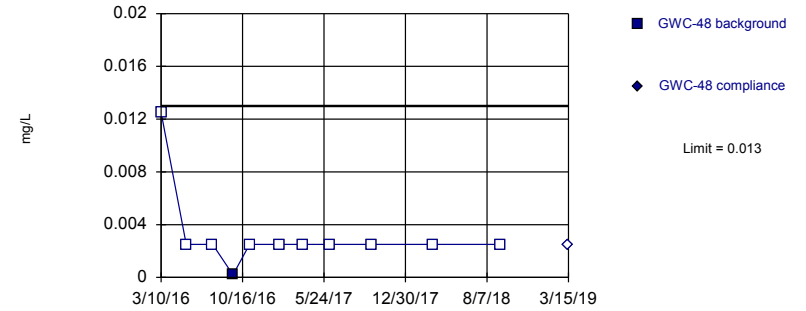


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

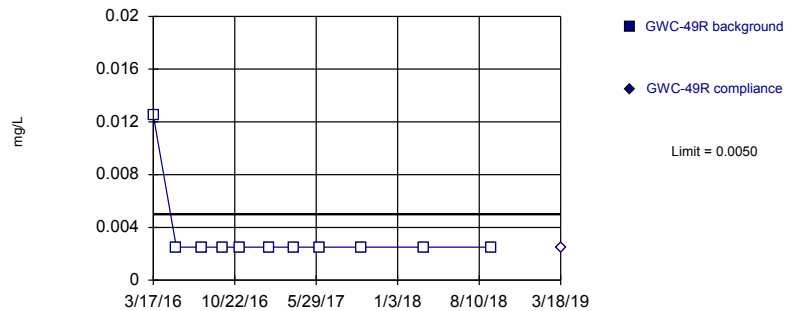


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

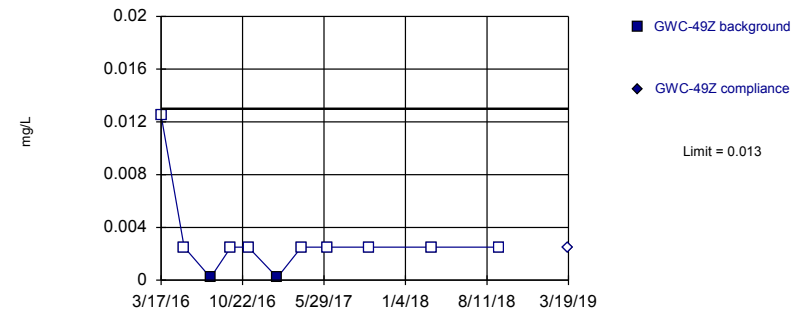


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

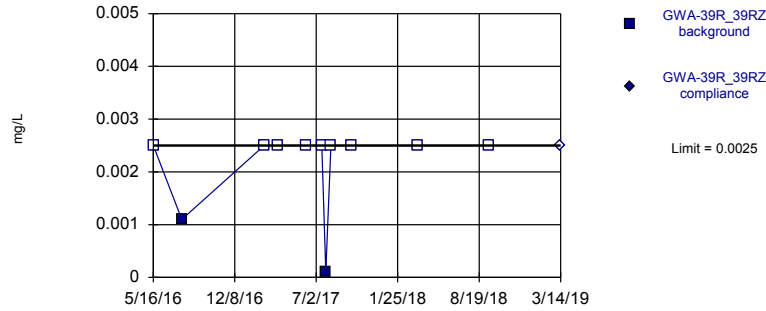
Prediction Limit

Constituent: Lead Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z
3/10/2016	<0.025		<0.025					
3/17/2016					<0.025		<0.025	
5/17/2016			<0.005					
5/18/2016	<0.005				<0.005		<0.005	
7/27/2016	9E-05 (J)		<0.005		<0.005			
7/28/2016							0.0002 (J)	
9/20/2016	0.0001 (J)		0.0002 (J)					
9/21/2016					<0.005		<0.005 (*)	
11/4/2016	<0.005		<0.005		<0.005			
11/7/2016							<0.005	
1/20/2017	<0.005							
1/23/2017			<0.005					
1/24/2017					<0.005		0.0002 (J)	
3/28/2017			<0.005 (*)					
3/29/2017	<0.005				<0.005			
3/30/2017							<0.005	
6/8/2017	<0.005		<0.005		<0.005			
6/9/2017							<0.005	
9/27/2017	<0.005							
9/29/2017			<0.005		<0.005		<0.005	
3/15/2018			<0.005		<0.005		<0.005	
3/16/2018	<0.005							
9/13/2018	<0.005		<0.005		<0.005			
9/14/2018							<0.005	
3/15/2019				<0.005				
3/18/2019						<0.005		
3/19/2019		<0.005						<0.005

Within Limit

Prediction Limit
Intrawell Non-parametric

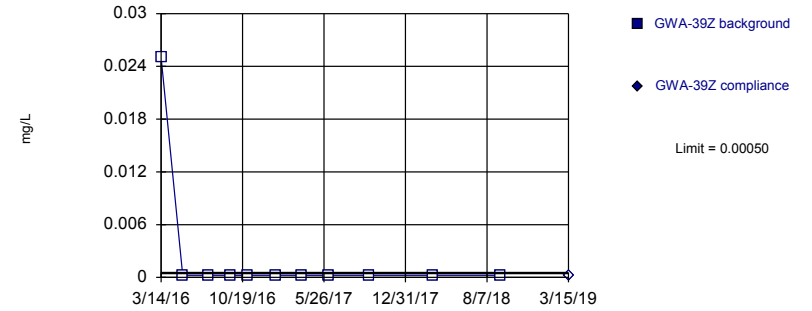


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

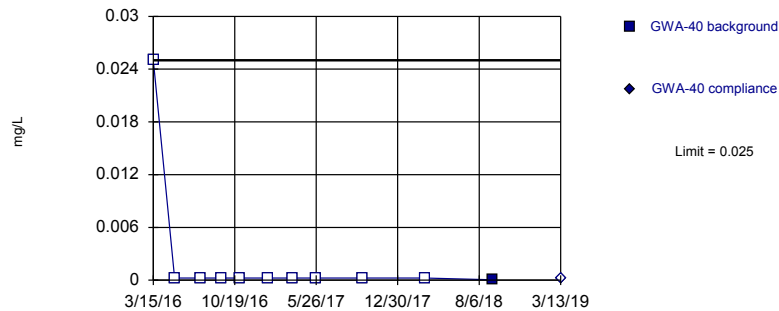


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

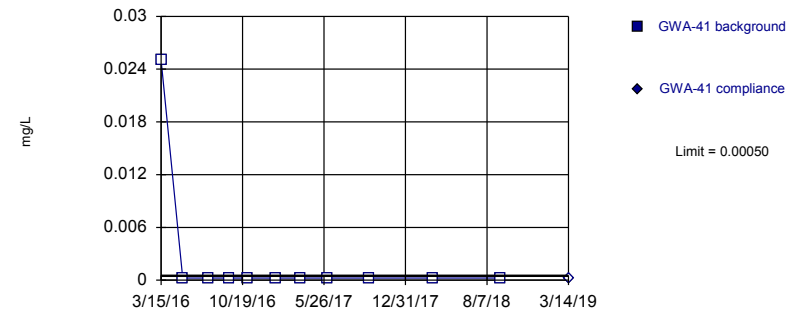


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

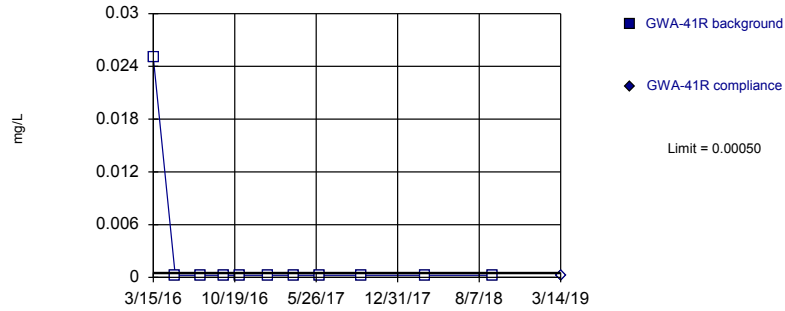
Prediction Limit

Constituent: Lead, Mercury Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41
3/14/2016			<0.05					
3/15/2016					<0.05		<0.05	
5/11/2016			<0.0005		<0.0005			
5/12/2016							<0.0005	
5/16/2016	<0.005 (D)							
7/19/2016			<0.0005					
7/20/2016							<0.0005	
7/21/2016					<0.0005			
7/27/2016	0.0011 (JD)							
9/15/2016			<0.0005		<0.0005		<0.0005	
11/2/2016			<0.0005					
11/3/2016					<0.0005		<0.0005	
1/17/2017					<0.0005			
1/18/2017			<0.0005				<0.0005	
2/21/2017	<0.005							
3/24/2017					<0.0005		<0.0005	
3/27/2017	<0.005 (D)							
3/28/2017			<0.0005					
5/24/2017					<0.0005			
6/6/2017							<0.0005	
6/7/2017			<0.0005					
6/8/2017	<0.005 (D)							
7/17/2017	<0.005 (D)							
7/27/2017	0.0001 (J)							
8/9/2017	<0.005							
9/25/2017							<0.0005	
9/26/2017			<0.0005		<0.0005			
9/29/2017	<0.005 (D)							
3/14/2018			<0.0005		<0.0005		<0.0005	
3/16/2018	<0.005							
9/12/2018			<0.0005		3.8E-05 (J)		<0.0005	
9/14/2018	<0.005							
3/13/2019						<0.0005		
3/14/2019		<0.005						<0.0005
3/15/2019				<0.0005				

Within Limit

Prediction Limit
Intrawell Non-parametric

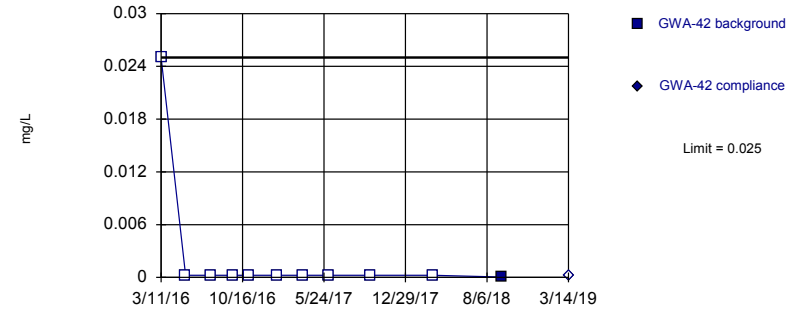


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

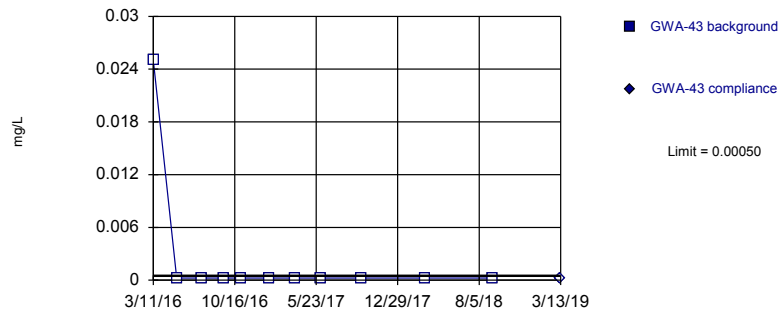


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

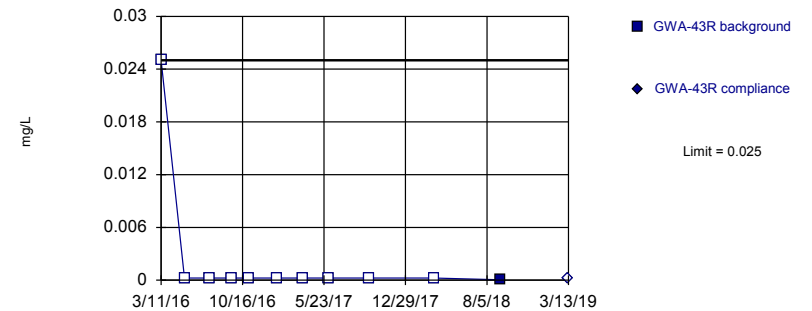


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

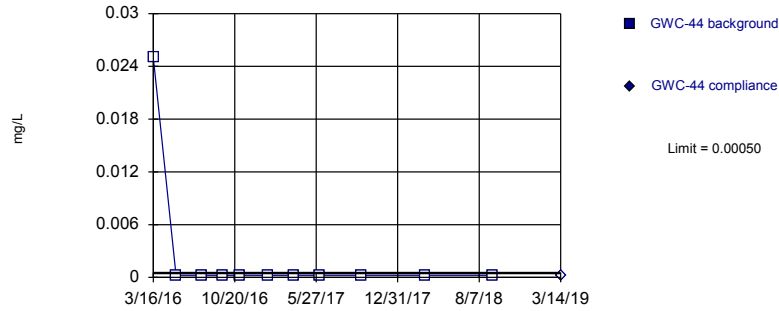
Prediction Limit

Constituent: Mercury Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R	GWA-41R	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R
3/11/2016			<0.05		<0.05		<0.05	
3/15/2016	<0.05							
5/13/2016	<0.0005				<0.0005		<0.0005	
5/16/2016			<0.0005					
7/19/2016					<0.0005		<0.0005	
7/21/2016	<0.0005							
7/22/2016			<0.0005					
9/16/2016					<0.0005		<0.0005	
9/19/2016			<0.0005					
9/21/2016	<0.0005							
11/2/2016					<0.0005		<0.0005	
11/3/2016	<0.0005		<0.0005					
1/17/2017	<0.0005		<0.0005					
1/18/2017					<0.0005		<0.0005	
3/27/2017	<0.0005		<0.0005					
3/28/2017					<0.0005		<0.0005	
6/6/2017	<0.0005				<0.0005		<0.0005	
6/7/2017			<0.0005					
9/22/2017					<0.0005		<0.0005	
9/25/2017	<0.0005							
9/26/2017			<0.0005					
3/14/2018	<0.0005		<0.0005		<0.0005			
3/15/2018							<0.0005	
9/12/2018	<0.0005				<0.0005		3.9E-05 (J)	
9/14/2018			3.8E-05 (J)					
3/13/2019						<0.0005		<0.0005
3/14/2019		<0.0005		<0.0005				

Within Limit

Prediction Limit
Intrawell Non-parametric

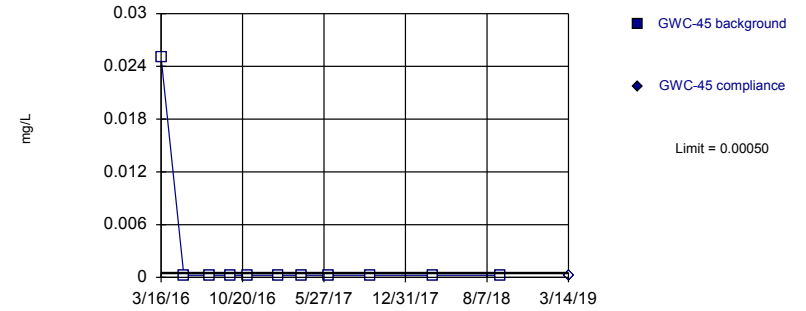


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

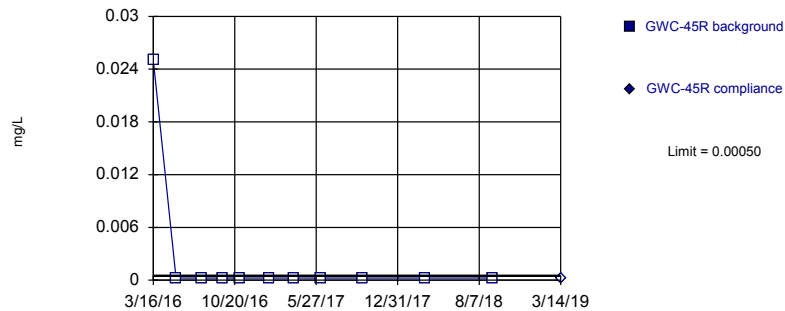


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

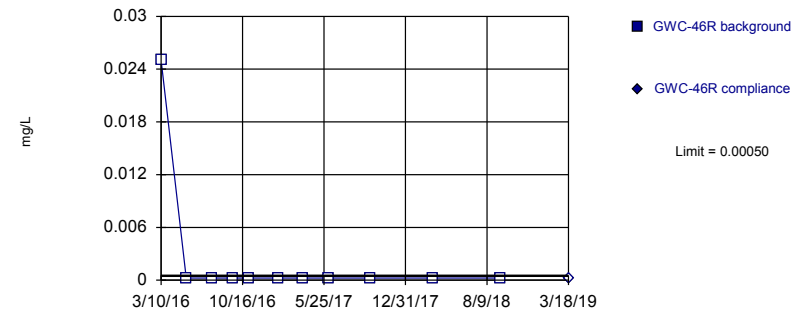


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

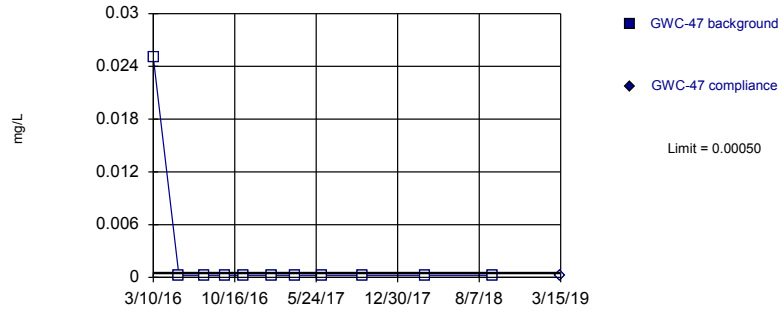


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

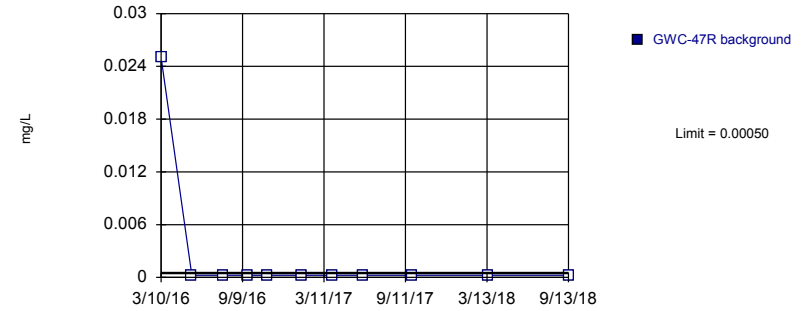


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-47R

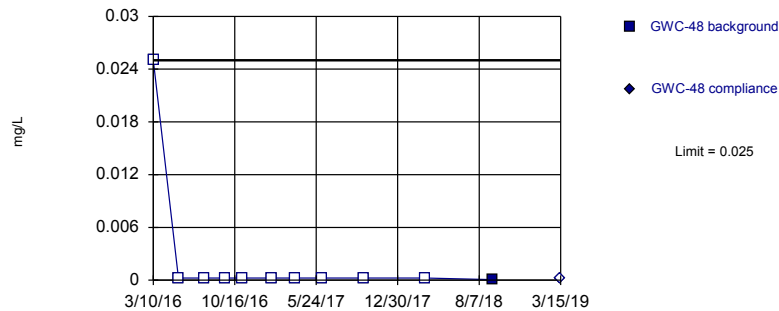


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

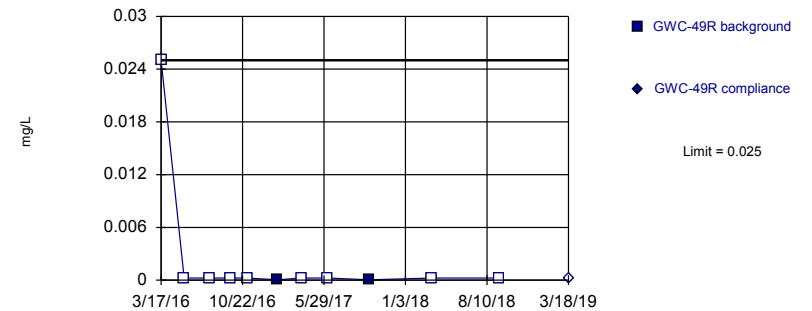


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

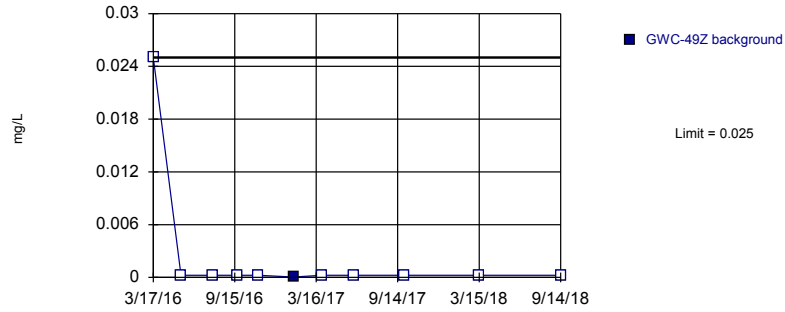
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

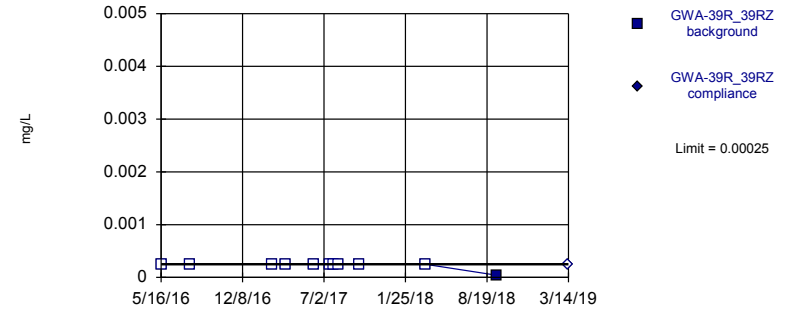
Prediction Limit
Intrawell Non-parametric, GWC-49Z



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Assumes 1 future value.

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

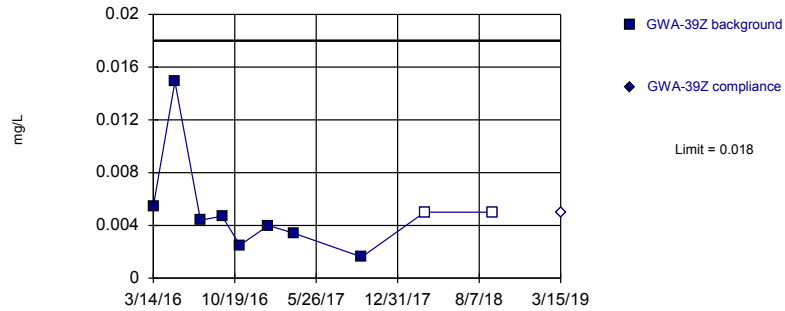
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Mercury Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

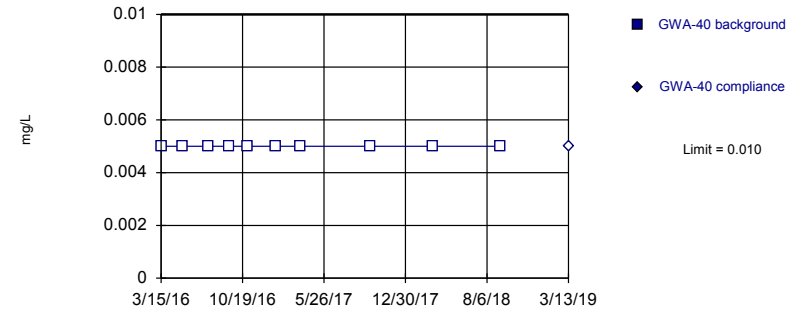
Within Limit
Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=0.05423, Std. Dev.=0.0358, n=10, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8174, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Nickel Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:21 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

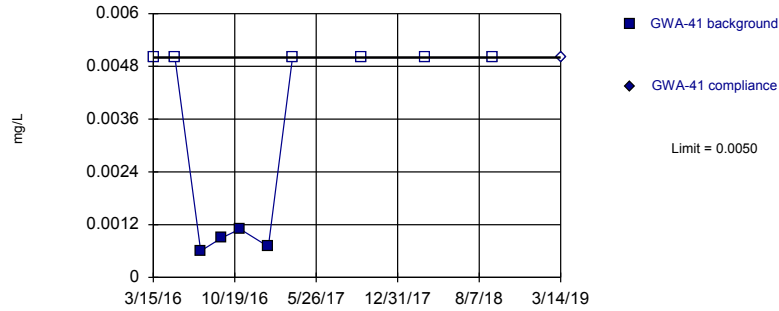
Prediction Limit

Constituent: Mercury, Nickel Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40
3/14/2016				0.00544 (J)			
3/15/2016						<0.01	
3/17/2016	<0.05						
5/11/2016				0.0149		<0.01	
5/16/2016		<0.0005 (D)					
5/18/2016	<0.0005						
7/19/2016				0.0044 (J)			
7/21/2016						<0.01	
7/27/2016		<0.0005 (D)					
7/28/2016	<0.0005						
9/15/2016				0.0047 (J)		<0.01	
9/21/2016	<0.0005						
11/2/2016				0.0025 (J)			
11/3/2016						<0.01	
11/7/2016	<0.0005						
1/17/2017						<0.01	
1/18/2017				0.004 (J)			
1/24/2017	5E-05 (J)						
2/21/2017		<0.0005					
3/24/2017						<0.01 (*)	
3/27/2017		<0.0005 (D)					
3/28/2017				0.0034 (J)			
3/30/2017	<0.0005 (*)						
6/8/2017		<0.0005 (D)					
6/9/2017	<0.0005						
7/17/2017		<0.0005 (D)					
7/27/2017		<0.0005					
8/9/2017		<0.0005					
9/26/2017				0.0016 (J)		<0.01	
9/29/2017	<0.0005	<0.0005 (D)					
3/14/2018				<0.01		<0.01	
3/15/2018	<0.0005						
3/16/2018		<0.0005					
9/12/2018				<0.01		<0.01	
9/14/2018	<0.0005	4.1E-05 (J)					
3/13/2019							<0.01
3/14/2019			<0.0005				
3/15/2019					<0.01		

Within Limit

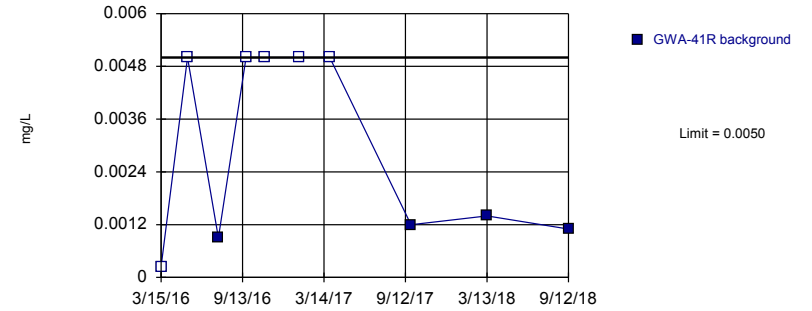
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

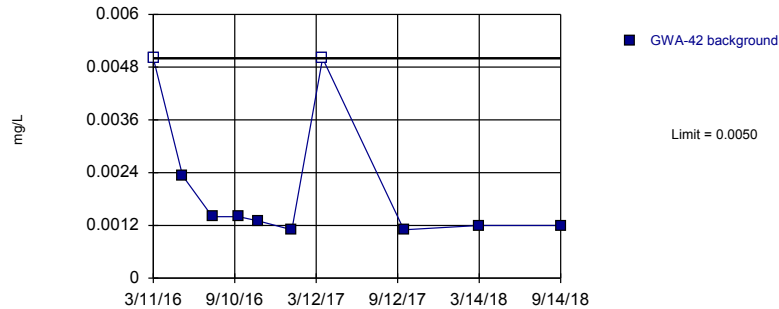
Prediction Limit
Intrawell Non-parametric, GWA-41R (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWA-42 (bg)

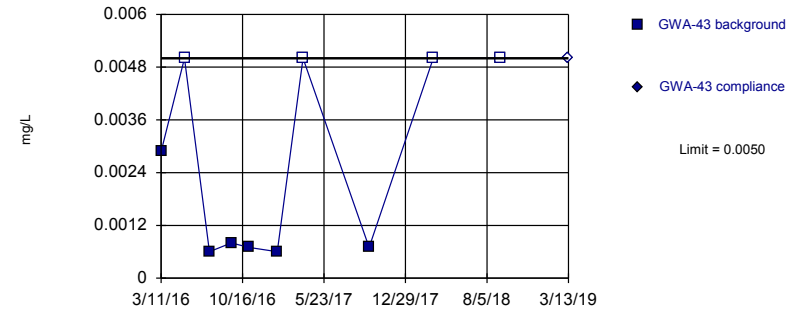


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 20% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 40% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

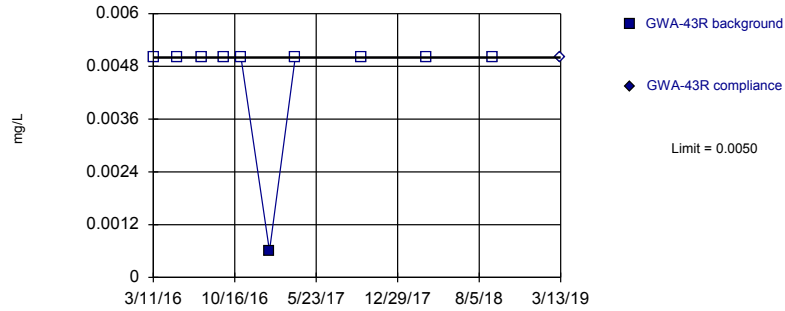
Constituent: Nickel Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41	GWA-41	GWA-41R	GWA-42	GWA-43	GWA-43
3/11/2016				<0.01	0.00288 (J)	
3/15/2016	<0.01		<0.0005			
5/12/2016	<0.01					
5/13/2016			<0.01		<0.01	
5/16/2016				0.00233 (J)		
7/19/2016					0.0006 (J)	
7/20/2016	0.0006 (J)					
7/21/2016			0.0009 (J)			
7/22/2016				0.0014 (J)		
9/15/2016	0.0009 (J)					
9/16/2016					0.0008 (J)	
9/19/2016				0.0014 (J)		
9/21/2016			<0.01			
11/2/2016					0.0007 (J)	
11/3/2016	0.0011 (J)		<0.01	0.0013 (J)		
1/17/2017			<0.01	0.0011 (J)		
1/18/2017	0.0007 (J)				0.0006 (J)	
3/24/2017	<0.01 (*)					
3/27/2017			<0.01 (*)	<0.01 (*)		
3/28/2017					<0.01 (*)	
9/22/2017					0.0007 (J)	
9/25/2017	<0.01		0.0012 (J)			
9/26/2017				0.0011 (J)		
3/14/2018	<0.01		0.0014 (J)	0.0012 (J)	<0.01	
9/12/2018	<0.01		0.0011 (J)		<0.01	
9/14/2018				0.0012 (J)		
3/13/2019						<0.01
3/14/2019		<0.01				

Within Limit

Prediction Limit
Intrawell Non-parametric

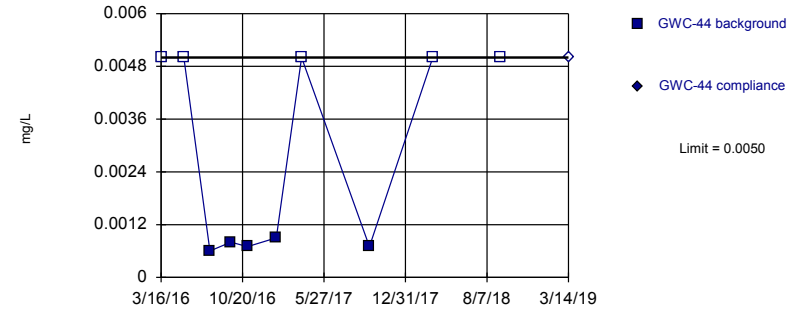


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

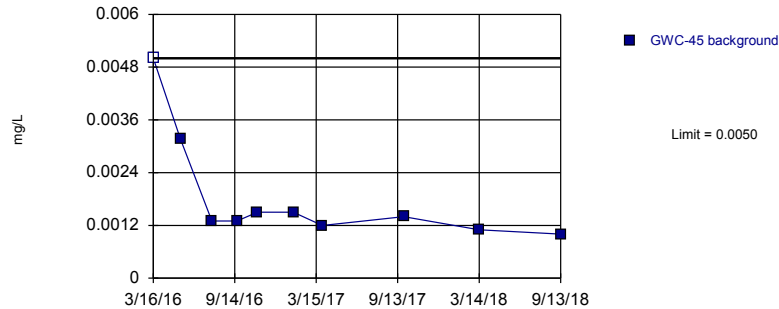
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 50% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWC-45

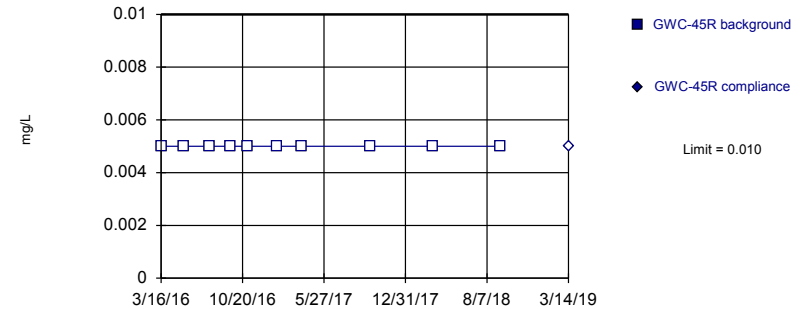


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 10% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

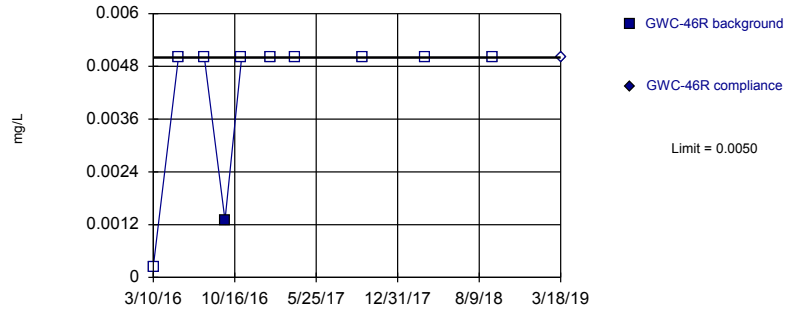
Prediction Limit

Constituent: Nickel Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-43R	GWA-43R	GWC-44	GWC-44	GWC-45	GWC-45R	GWC-45R
3/11/2016	<0.01						
3/16/2016			<0.01		<0.01	<0.01	
5/13/2016	<0.01						
5/16/2016			<0.01		0.00316 (J)	<0.01	
7/19/2016	<0.01						
7/25/2016			0.0006 (J)		0.0013 (J)	<0.01	
9/16/2016	<0.01						
9/19/2016			0.0008 (J)		0.0013 (J)	<0.01	
11/2/2016	<0.01						
11/3/2016			0.0007 (J)			<0.01	
11/4/2016					0.0015 (J)		
1/18/2017	0.0006 (J)						
1/19/2017			0.0009 (J)				
1/20/2017						<0.01	
1/23/2017					0.0015 (J)		
3/28/2017	<0.01 (*)		<0.01 (*)				
3/29/2017					0.0012 (J)	<0.01	
9/22/2017	<0.01						
9/26/2017			0.0007 (J)				
9/27/2017					0.0014 (J)	<0.01	
3/15/2018	<0.01		<0.01		0.0011 (J)	<0.01	
9/12/2018	<0.01		<0.01				
9/13/2018					0.001 (J)	<0.01	
3/13/2019		<0.01					
3/14/2019				<0.01			<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

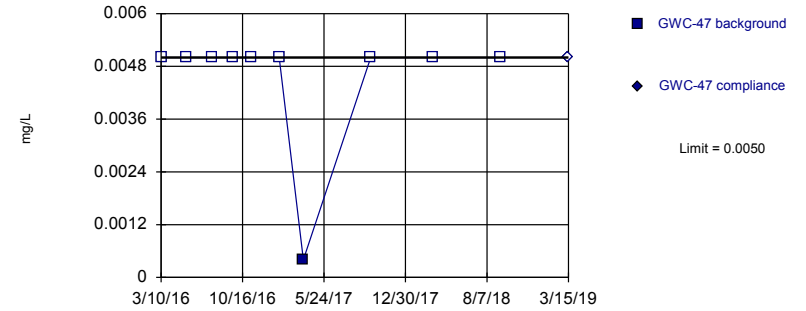


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

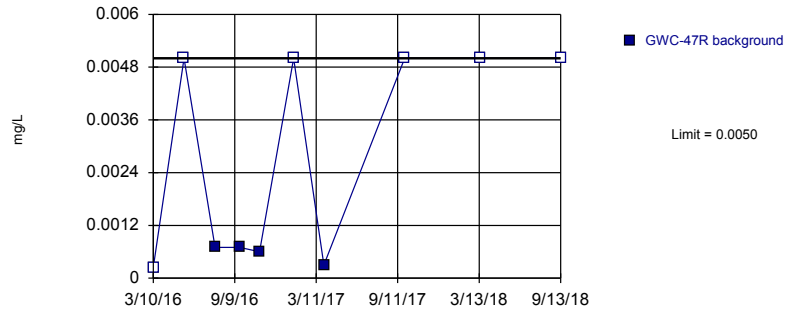
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

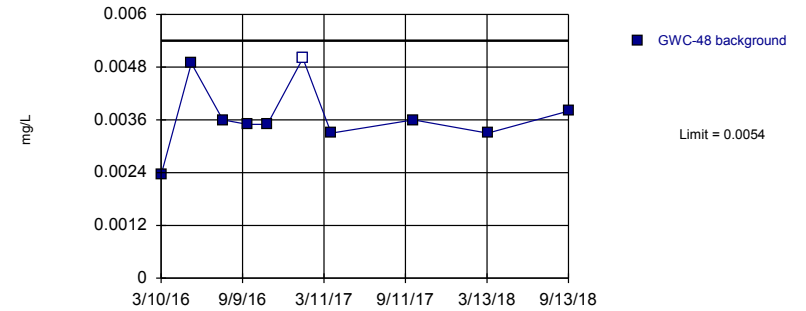
Prediction Limit
Intrawell Non-parametric, GWC-47R



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Parametric, GWC-48



Background Data Summary: Mean=0.003684, Std. Dev.=0.0007714, n=10, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8771, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

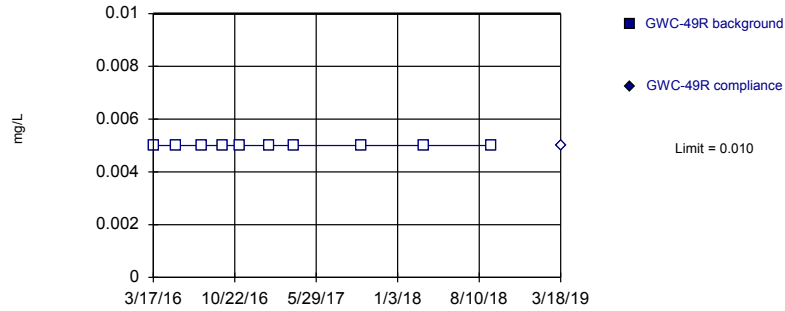
Constituent: Nickel Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-46R	GWC-47	GWC-47	GWC-47R	GWC-48
3/10/2016	<0.0005		<0.01		<0.0005	0.00235 (J)
5/17/2016	<0.01					0.00489 (J)
5/18/2016			<0.01		<0.01	
7/26/2016	<0.01					
7/27/2016			<0.01		0.0007 (J)	0.0036 (J)
9/20/2016	0.0013 (J)		<0.01		0.0007 (J)	0.0035 (J)
11/4/2016	<0.01				0.0006 (J)	0.0035 (J)
11/7/2016			<0.01			
1/20/2017	<0.01				<0.01	
1/23/2017			<0.01			<0.01
3/28/2017	<0.01					0.0033 (J)
3/29/2017			0.0004 (J)		0.0003 (J)	
9/27/2017			<0.01		<0.01	
9/29/2017	<0.01					0.0036 (J)
3/15/2018	<0.01		<0.01			0.0033 (J)
3/16/2018					<0.01	
9/13/2018	<0.01		<0.01		<0.01	0.0038 (J)
3/15/2019				<0.01		
3/18/2019		<0.01				

Within Limit

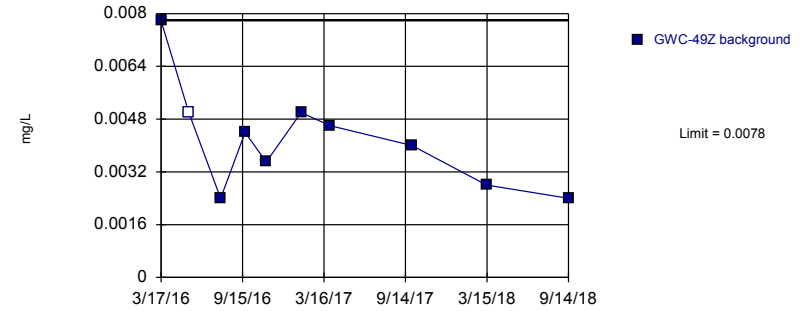
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

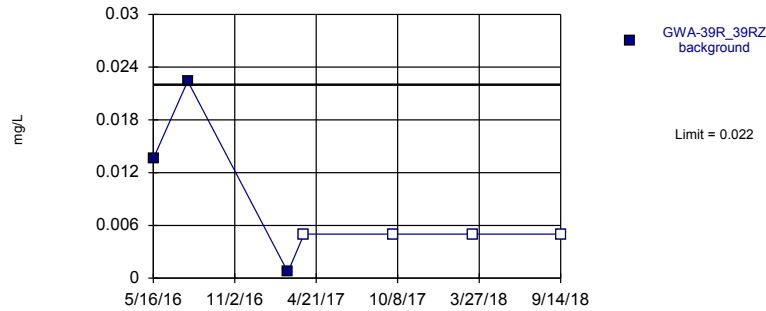
Prediction Limit
Intrawell Parametric, GWC-49Z



Background Data Summary: Mean=0.004188, Std. Dev.=0.001608, n=10, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8957, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

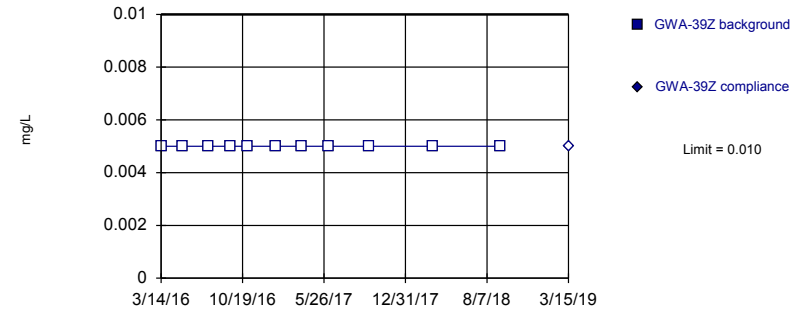
Prediction Limit
Intrawell Non-parametric, GWA-39R_39RZ (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3). Assumes 1 future value.

Constituent: Nickel Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

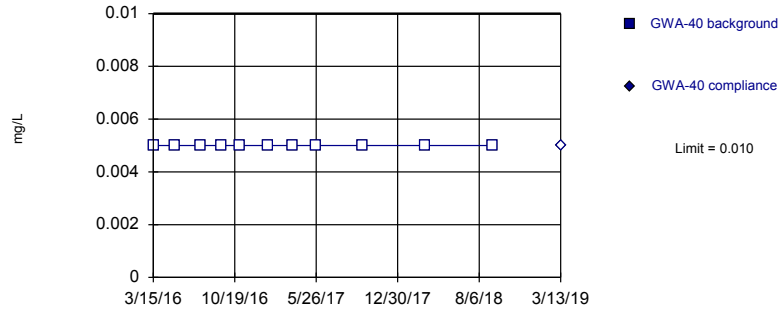
Constituent: Nickel, Selenium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49R	GWC-49R	GWC-49Z	GWA-39R_39RZ	GWA-39Z	GWA-39Z
3/14/2016					<0.01	
3/17/2016	<0.01		0.00778 (J)			
5/11/2016					<0.01	
5/16/2016				0.0136 (D)		
5/18/2016	<0.01		<0.01			
7/19/2016					<0.01	
7/27/2016	<0.01			0.0224 (D)		
7/28/2016			0.0024 (J)			
9/15/2016					<0.01	
9/21/2016	<0.01		0.0044 (J)			
11/2/2016					<0.01	
11/4/2016	<0.01					
11/7/2016			0.0035 (J)			
1/18/2017					<0.01	
1/24/2017	<0.01		0.005 (J)			
2/21/2017				0.0007 (J)		
3/27/2017				<0.01 (D)		
3/28/2017					<0.01	
3/29/2017	<0.01					
3/30/2017			0.0046 (J)			
6/7/2017					<0.01	
9/26/2017					<0.01	
9/29/2017	<0.01		0.004 (J)	<0.01 (D)		
3/14/2018					<0.01	
3/15/2018	<0.01		0.0028 (J)			
3/16/2018				<0.01		
9/12/2018					<0.01	
9/13/2018	<0.01					
9/14/2018			0.0024 (J)	<0.01		
3/15/2019						<0.01
3/18/2019		<0.01				

Within Limit

Prediction Limit
Intrawell Non-parametric

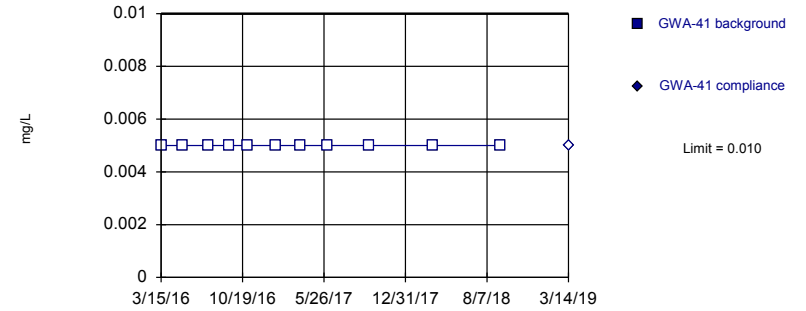


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

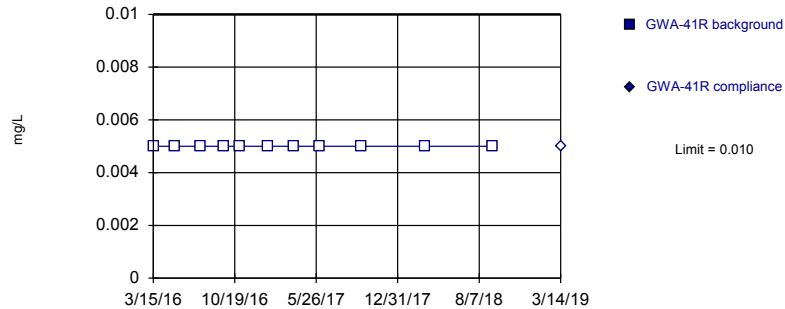


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

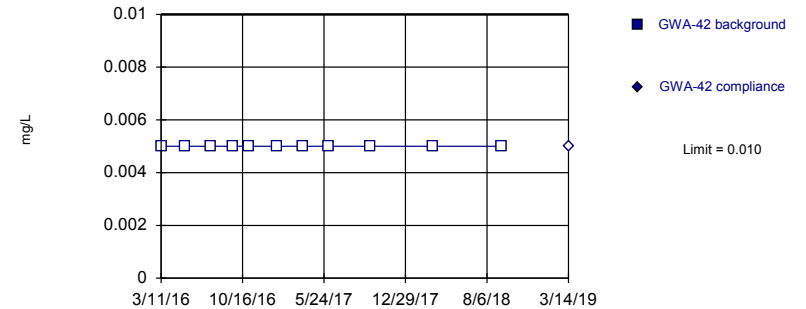


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

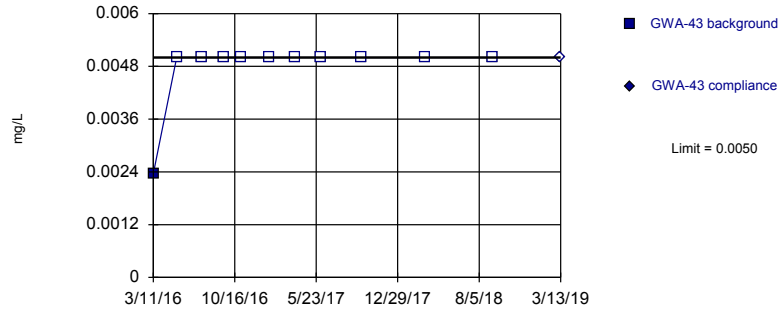
Prediction Limit

Constituent: Selenium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-40	GWA-40	GWA-41	GWA-41	GWA-41R	GWA-41R	GWA-42	GWA-42
3/11/2016							<0.01	
3/15/2016	<0.01		<0.01		<0.01			
5/11/2016	<0.01							
5/12/2016			<0.01					
5/13/2016					<0.01			
5/16/2016							<0.01	
7/20/2016			<0.01					
7/21/2016	<0.01				<0.01			
7/22/2016							<0.01	
9/15/2016	<0.01		<0.01					
9/19/2016							<0.01	
9/21/2016					<0.01			
11/3/2016	<0.01		<0.01		<0.01		<0.01	
1/17/2017	<0.01				<0.01		<0.01	
1/18/2017			<0.01					
3/24/2017	<0.01		<0.01					
3/27/2017					<0.01		<0.01	
5/24/2017	<0.01							
6/6/2017			<0.01		<0.01			
6/7/2017							<0.01	
9/25/2017			<0.01		<0.01			
9/26/2017	<0.01						<0.01	
3/14/2018	<0.01		<0.01		<0.01		<0.01	
9/12/2018	<0.01		<0.01		<0.01			
9/14/2018							<0.01	
3/13/2019		<0.01						
3/14/2019				<0.01		<0.01		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

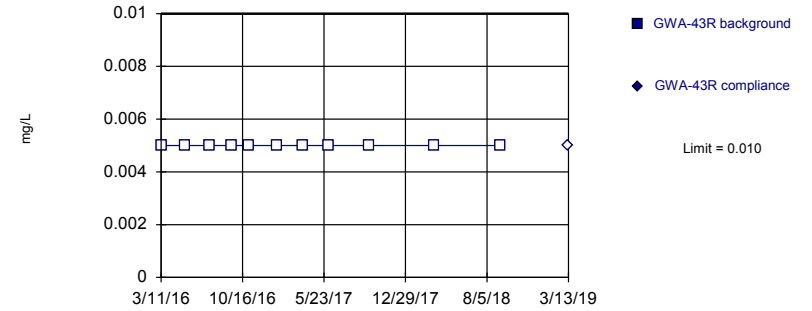


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

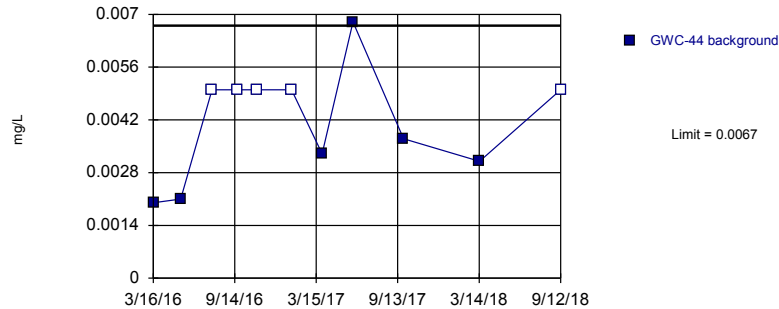
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Parametric, GWC-44

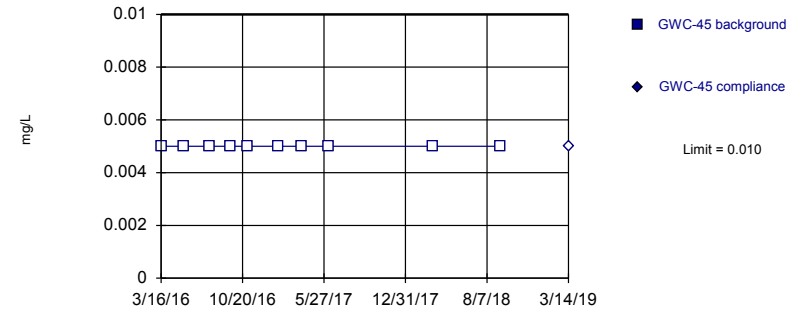


Background Data Summary (after Aitchison's Adjustment): Mean=0.001909, Std. Dev.=0.002208, n=11, 45.45% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9066, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

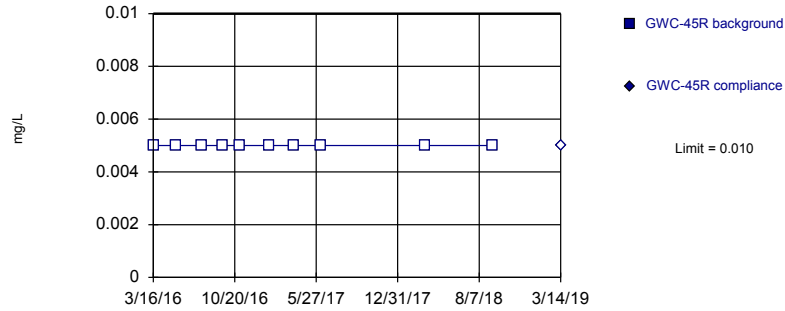


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:22 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

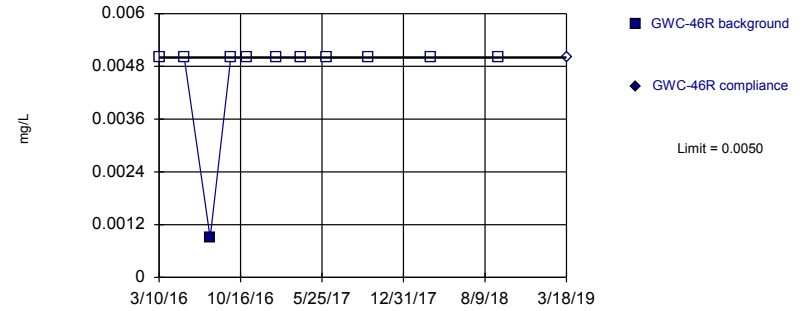


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

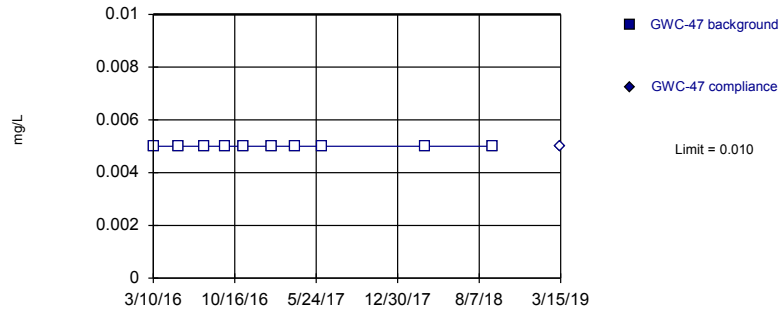


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

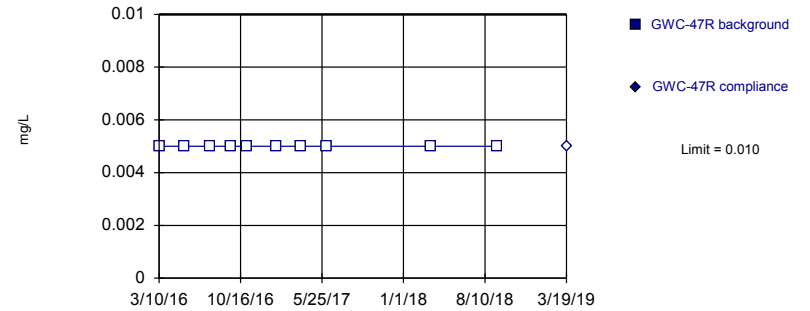


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

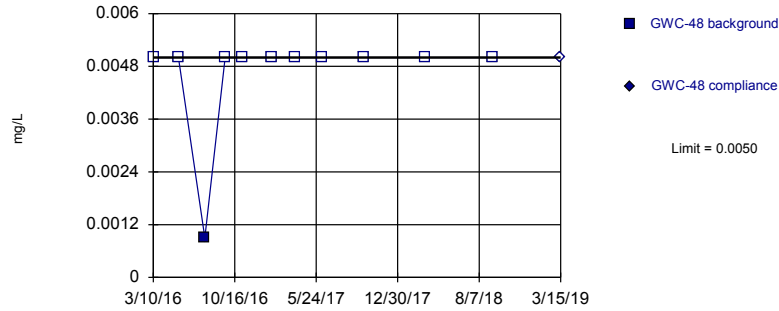


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

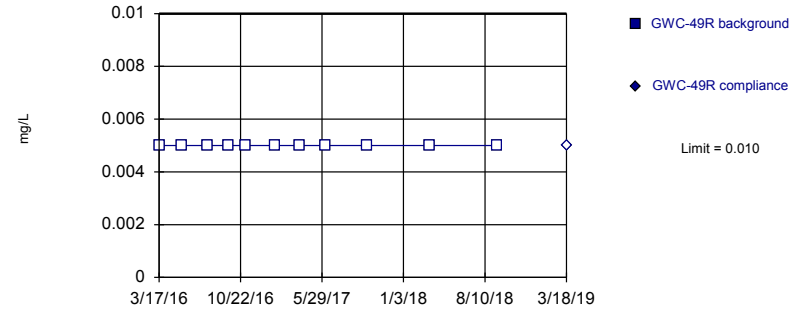


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

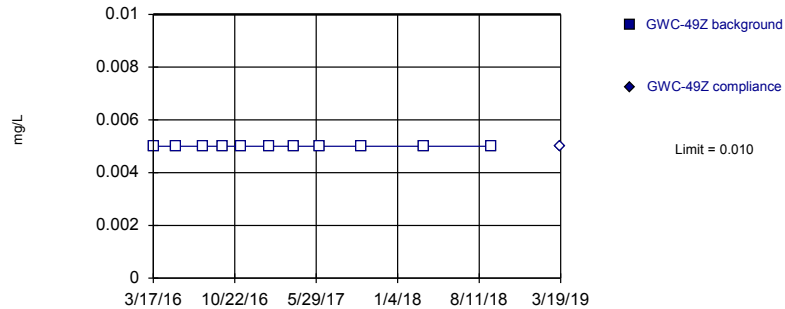


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

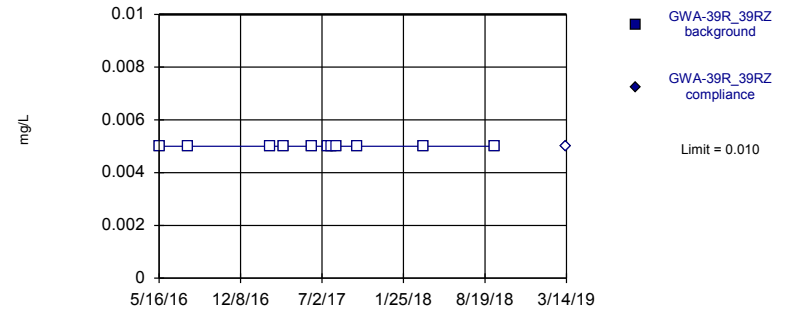


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

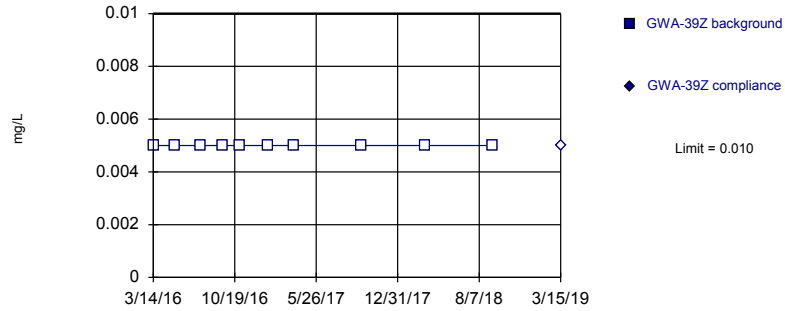
Constituent: Selenium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ
3/10/2016	<0.01							
3/17/2016			<0.01		<0.01			
5/16/2016							<0.01 (D)	
5/17/2016	<0.01							
5/18/2016			<0.01		<0.01			
7/27/2016	0.0009 (J)		<0.01				<0.01 (D)	
7/28/2016					<0.01			
9/20/2016	<0.01							
9/21/2016			<0.01		<0.01			
11/4/2016	<0.01		<0.01					
11/7/2016					<0.01			
1/23/2017	<0.01							
1/24/2017			<0.01		<0.01			
2/21/2017							<0.01	
3/27/2017							<0.01 (D)	
3/28/2017	<0.01							
3/29/2017			<0.01					
3/30/2017					<0.01			
6/8/2017	<0.01		<0.01				<0.01 (D)	
6/9/2017					<0.01			
7/17/2017							<0.01 (D)	
7/27/2017							<0.01	
8/9/2017							<0.01	
9/29/2017	<0.01		<0.01		<0.01		<0.01 (D)	
3/15/2018	<0.01		<0.01		<0.01			
3/16/2018							<0.01	
9/13/2018	<0.01		<0.01					
9/14/2018					<0.01		<0.01	
3/14/2019								<0.01
3/15/2019		<0.01						
3/18/2019				<0.01				
3/19/2019						<0.01		

Within Limit

Prediction Limit
Intrawell Non-parametric

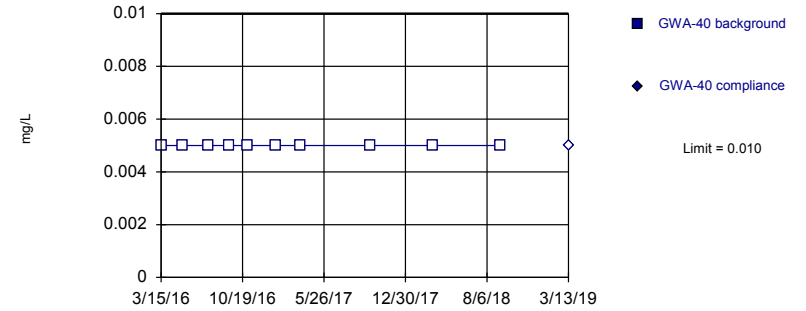


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

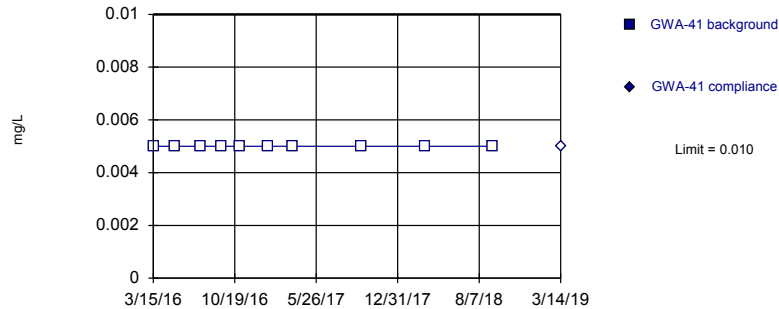


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

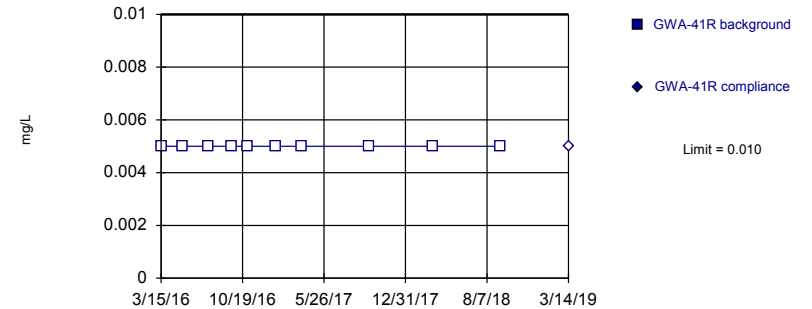


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

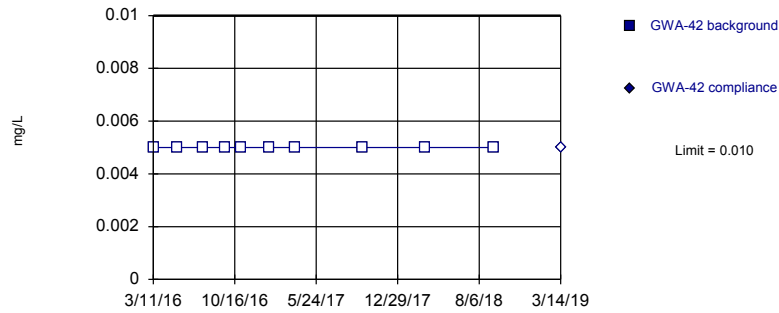
Prediction Limit

Constituent: Silver Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41	GWA-41R	GWA-41R
3/14/2016	<0.01							
3/15/2016			<0.01		<0.01		<0.01	
5/11/2016	<0.01		<0.01					
5/12/2016					<0.01			
5/13/2016							<0.01	
7/19/2016	<0.01							
7/20/2016					<0.01			
7/21/2016			<0.01				<0.01	
9/15/2016	<0.01		<0.01		<0.01			
9/21/2016							<0.01	
11/2/2016	<0.01							
11/3/2016			<0.01		<0.01		<0.01	
1/17/2017			<0.01				<0.01	
1/18/2017	<0.01				<0.01			
3/24/2017			<0.01		<0.01			
3/27/2017							<0.01	
3/28/2017	<0.01							
9/25/2017					<0.01		<0.01	
9/26/2017	<0.01		<0.01					
3/14/2018	<0.01		<0.01		<0.01		<0.01	
9/12/2018	<0.01		<0.01		<0.01		<0.01	
3/13/2019				<0.01				
3/14/2019						<0.01		<0.01
3/15/2019		<0.01						

Within Limit

Prediction Limit
Intrawell Non-parametric

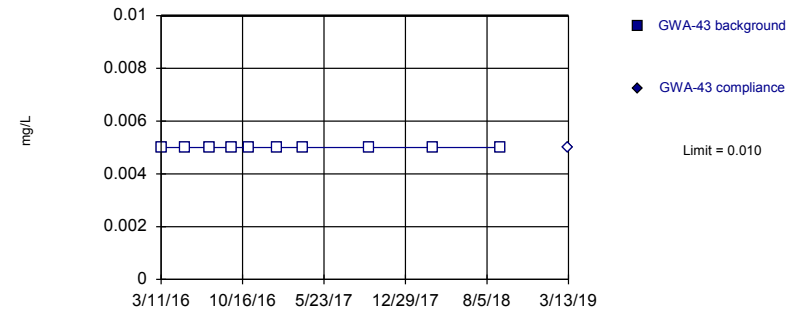


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

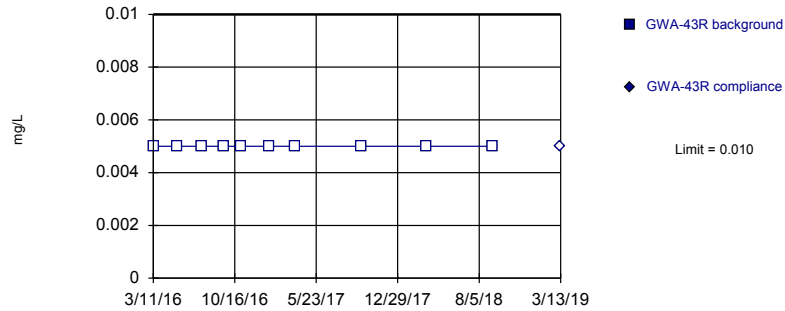


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

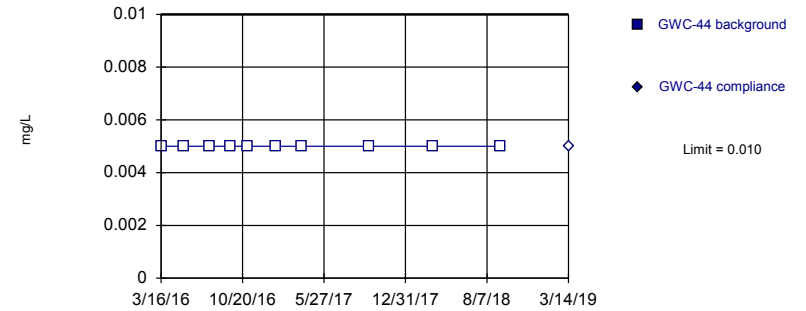


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

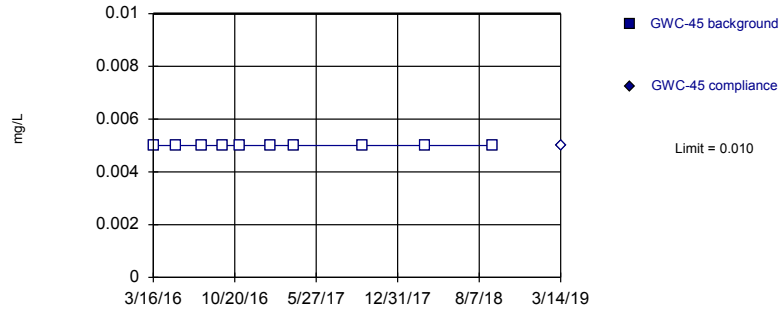
Prediction Limit

Constituent: Silver Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R	GWC-44	GWC-44
3/11/2016	<0.01		<0.01		<0.01			
3/16/2016							<0.01	
5/13/2016			<0.01		<0.01			
5/16/2016	<0.01						<0.01	
7/19/2016			<0.01		<0.01			
7/22/2016	<0.01							
7/25/2016							<0.01	
9/16/2016			<0.01		<0.01			
9/19/2016	<0.01						<0.01	
11/2/2016			<0.01		<0.01			
11/3/2016	<0.01						<0.01	
1/17/2017	<0.01							
1/18/2017			<0.01		<0.01			
1/19/2017							<0.01	
3/27/2017	<0.01							
3/28/2017			<0.01		<0.01		<0.01	
9/22/2017			<0.01		<0.01			
9/26/2017	<0.01						<0.01	
3/14/2018	<0.01		<0.01					
3/15/2018					<0.01		<0.01	
9/12/2018			<0.01		<0.01		<0.01	
9/14/2018	<0.01							
3/13/2019				<0.01		<0.01		
3/14/2019		<0.01						<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

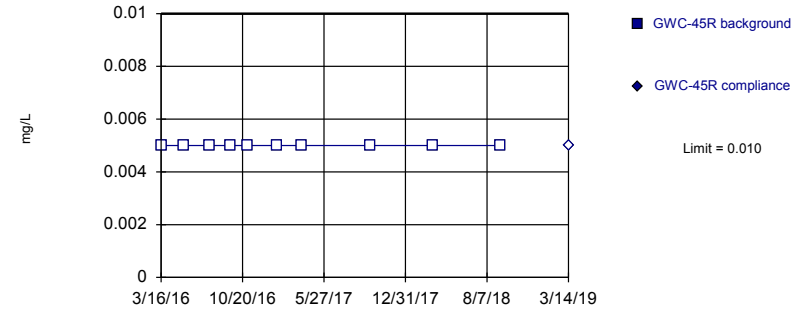


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

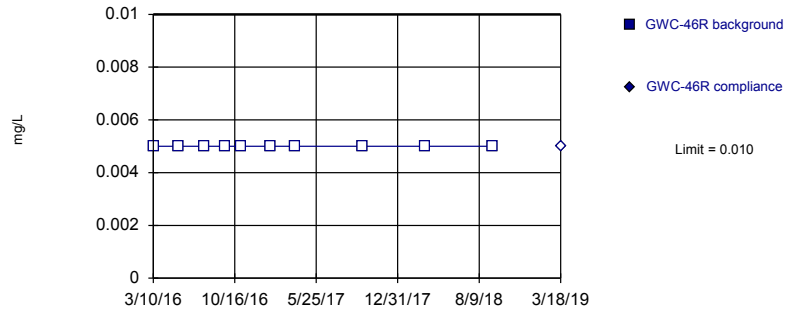


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

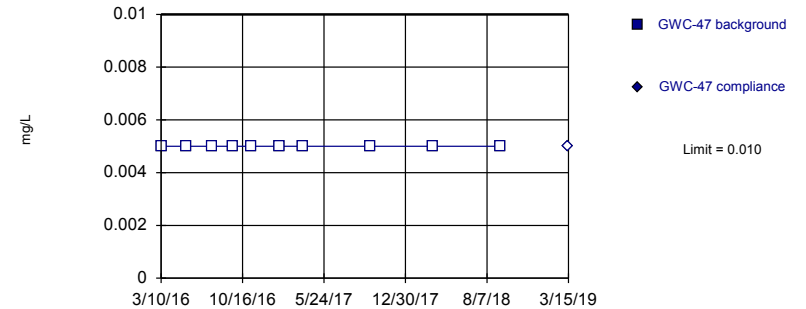


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

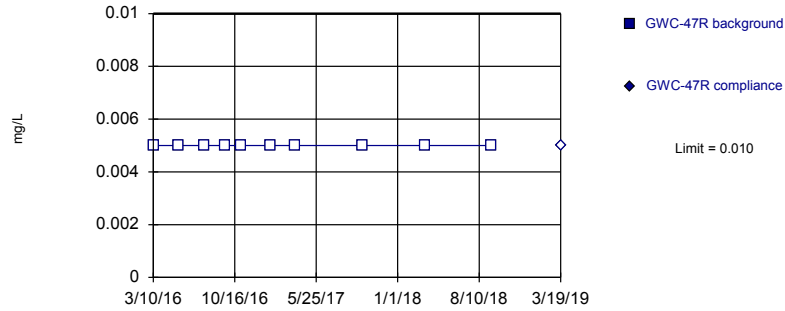
Prediction Limit

Constituent: Silver Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-45	GWC-45	GWC-45R	GWC-45R	GWC-46R	GWC-46R	GWC-47	GWC-47
3/10/2016					<0.01		<0.01	
3/16/2016	<0.01		<0.01					
5/16/2016	<0.01		<0.01					
5/17/2016					<0.01			
5/18/2016							<0.01	
7/25/2016	<0.01		<0.01					
7/26/2016					<0.01			
7/27/2016							<0.01	
9/19/2016	<0.01		<0.01					
9/20/2016					<0.01		<0.01	
11/3/2016			<0.01					
11/4/2016	<0.01				<0.01			
11/7/2016							<0.01	
1/20/2017			<0.01		<0.01			
1/23/2017	<0.01						<0.01	
3/28/2017					<0.01			
3/29/2017	<0.01		<0.01				<0.01	
9/27/2017	<0.01		<0.01				<0.01	
9/29/2017					<0.01			
3/15/2018	<0.01		<0.01		<0.01		<0.01	
9/13/2018	<0.01		<0.01		<0.01		<0.01	
3/14/2019		<0.01		<0.01				
3/15/2019								<0.01
3/18/2019						<0.01		

Within Limit

Prediction Limit
Intrawell Non-parametric

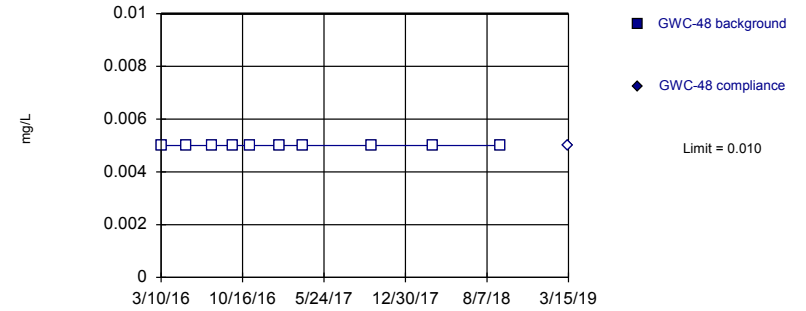


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

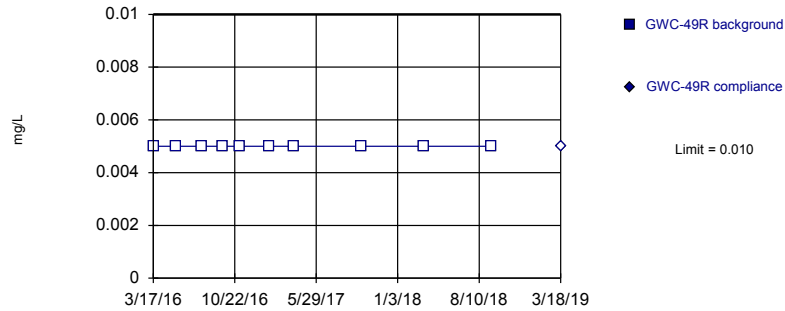


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

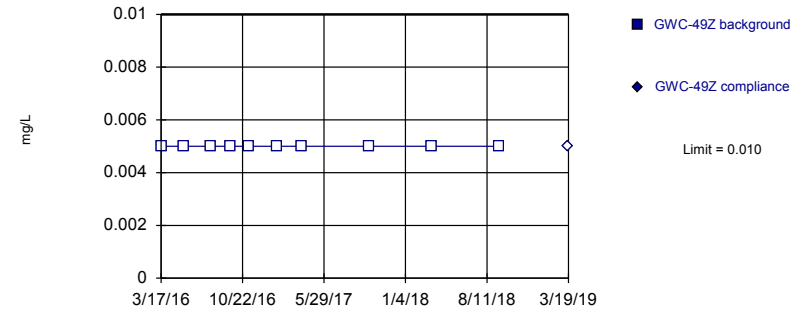


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

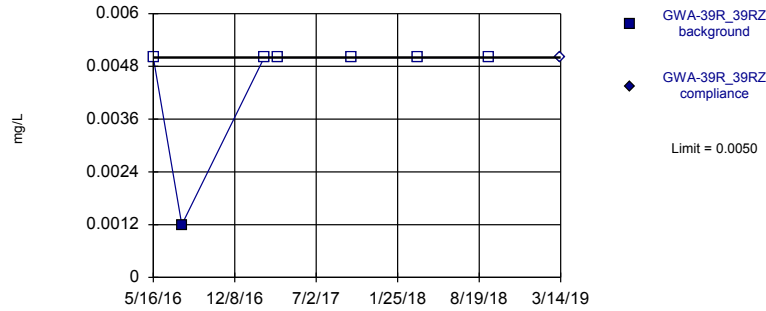
Prediction Limit

Constituent: Silver Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z
3/10/2016	<0.01		<0.01					
3/17/2016					<0.01		<0.01	
5/17/2016			<0.01					
5/18/2016	<0.01				<0.01		<0.01	
7/27/2016	<0.01		<0.01		<0.01			
7/28/2016							<0.01	
9/20/2016	<0.01		<0.01					
9/21/2016					<0.01		<0.01	
11/4/2016	<0.01		<0.01		<0.01			
11/7/2016							<0.01	
1/20/2017	<0.01							
1/23/2017			<0.01					
1/24/2017					<0.01		<0.01	
3/28/2017			<0.01					
3/29/2017	<0.01				<0.01			
3/30/2017							<0.01	
9/27/2017	<0.01							
9/29/2017			<0.01		<0.01		<0.01	
3/15/2018			<0.01		<0.01		<0.01	
3/16/2018	<0.01							
9/13/2018	<0.01		<0.01		<0.01			
9/14/2018							<0.01	
3/15/2019				<0.01				
3/18/2019						<0.01		
3/19/2019		<0.01						<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

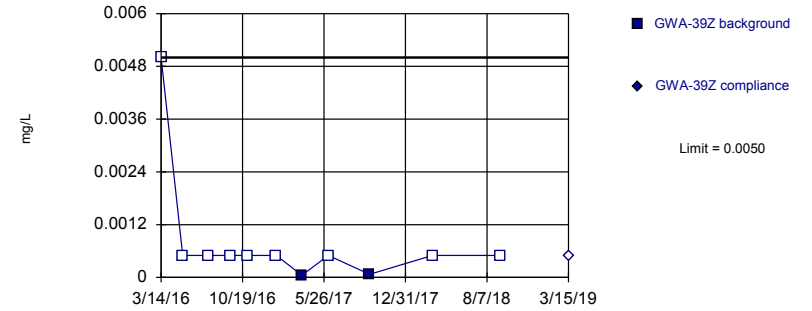


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3).

Constituent: Silver Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

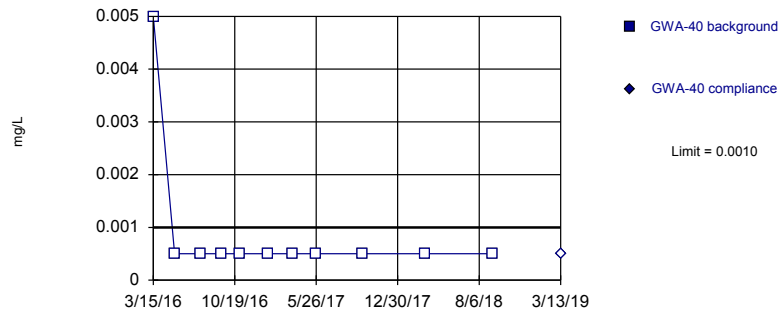


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

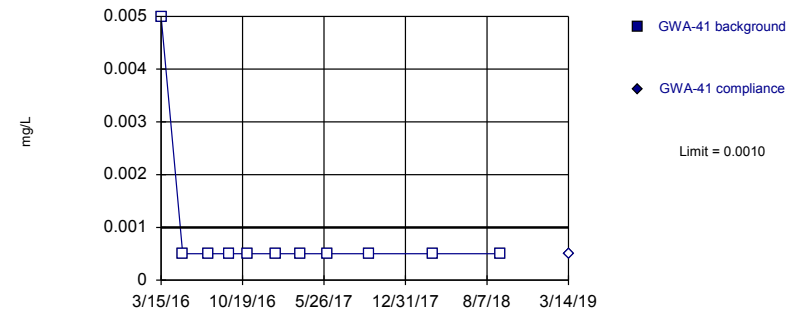


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

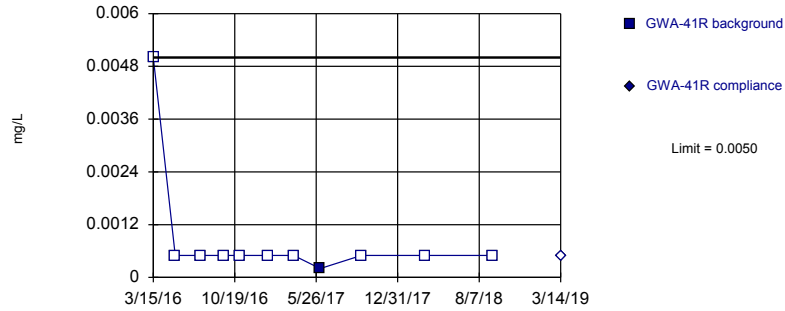
Prediction Limit

Constituent: Silver, Thallium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40	GWA-41	GWA-41
3/14/2016			<0.01					
3/15/2016					<0.01		<0.01	
5/11/2016			<0.001		<0.001			
5/12/2016							<0.001	
5/16/2016	<0.01 (D)							
7/19/2016			<0.001 (*)					
7/20/2016							<0.001	
7/21/2016					<0.001			
7/27/2016	0.0012 (JD)							
9/15/2016			<0.001		<0.001		<0.001	
11/2/2016			<0.001					
11/3/2016					<0.001		<0.001	
1/17/2017					<0.001			
1/18/2017			<0.001				<0.001	
2/21/2017	<0.01							
3/24/2017					<0.001		<0.001	
3/27/2017	<0.01 (D)							
3/28/2017			5E-05 (J)					
5/24/2017					<0.001			
6/6/2017							<0.001	
6/7/2017			<0.001					
9/25/2017							<0.001	
9/26/2017			7E-05 (J)		<0.001			
9/29/2017	<0.01 (D)							
3/14/2018			<0.001		<0.001		<0.001	
3/16/2018	<0.01							
9/12/2018			<0.001		<0.001		<0.001	
9/14/2018	<0.01							
3/13/2019						<0.001		
3/14/2019		<0.01						<0.001
3/15/2019				<0.001				

Within Limit

Prediction Limit
Intrawell Non-parametric

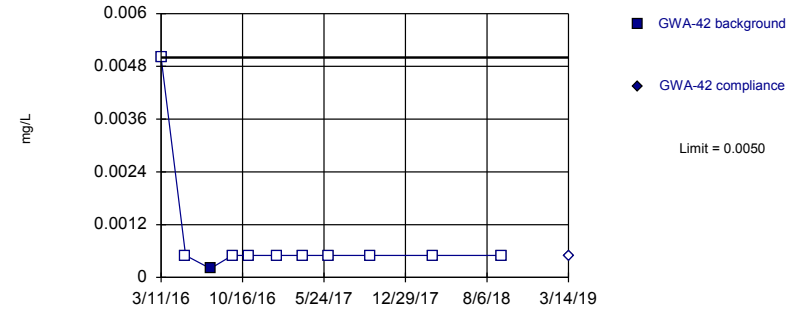


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

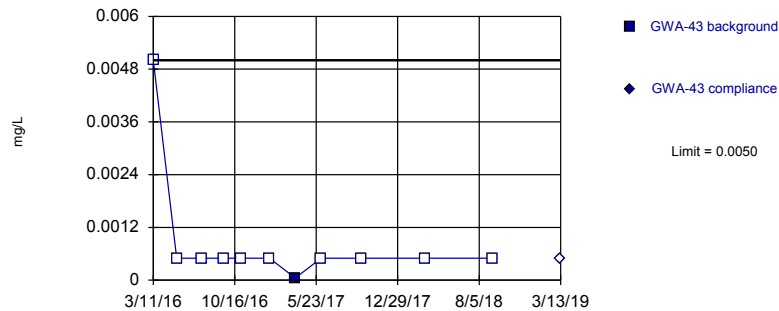


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:23 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

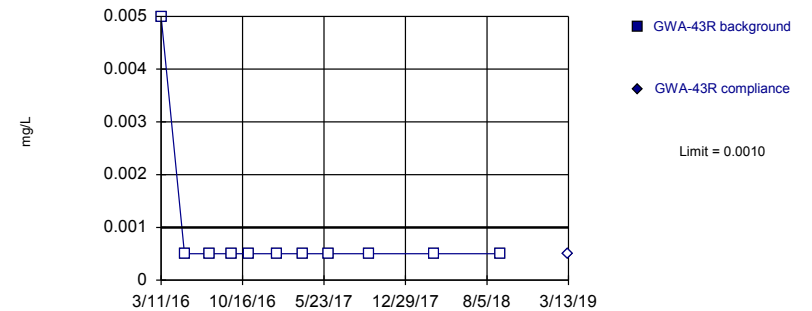


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

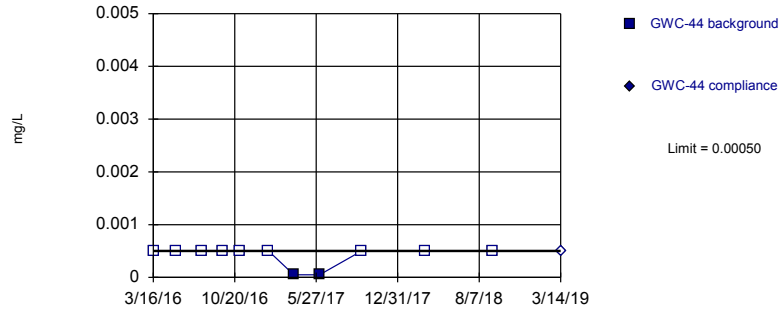
Prediction Limit

Constituent: Thallium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R	GWA-41R	GWA-42	GWA-42	GWA-43	GWA-43	GWA-43R	GWA-43R
3/11/2016			<0.01		<0.01		<0.01	
3/15/2016	<0.01							
5/13/2016	<0.001				<0.001		<0.001	
5/16/2016			<0.001					
7/19/2016					<0.001 (*)		<0.001	
7/21/2016	<0.001							
7/22/2016			0.0002 (J)					
9/16/2016					<0.001		<0.001	
9/19/2016			<0.001					
9/21/2016	<0.001							
11/2/2016					<0.001		<0.001	
11/3/2016	<0.001		<0.001					
1/17/2017	<0.001		<0.001					
1/18/2017					<0.001		<0.001	
3/27/2017	<0.001		<0.001					
3/28/2017					5E-05 (J)		<0.001	
6/6/2017	0.0002 (J)				<0.001		<0.001	
6/7/2017			<0.001					
9/22/2017					<0.001		<0.001	
9/25/2017	<0.001							
9/26/2017			<0.001					
3/14/2018	<0.001		<0.001		<0.001			
3/15/2018							<0.001	
9/12/2018	<0.001				<0.001		<0.001	
9/14/2018			<0.001					
3/13/2019						<0.001		<0.001
3/14/2019		<0.001		<0.001				

Within Limit

Prediction Limit
Intrawell Non-parametric

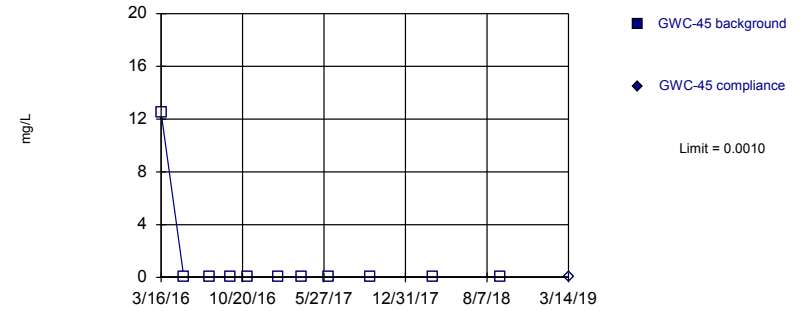


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

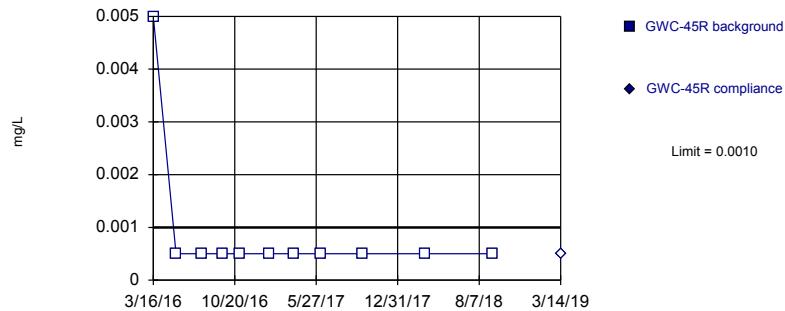


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

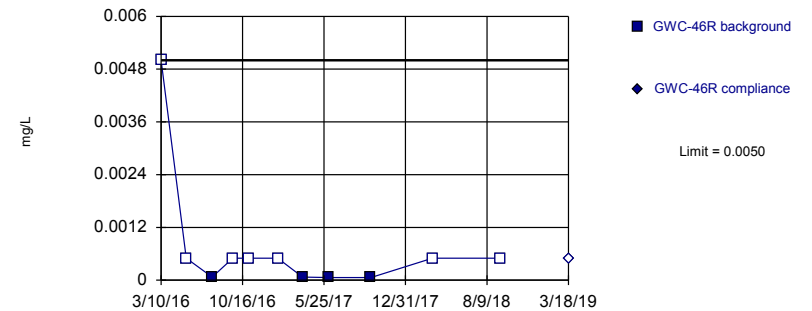


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

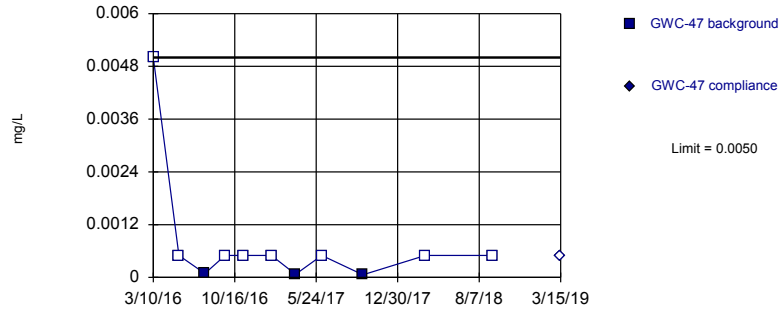


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

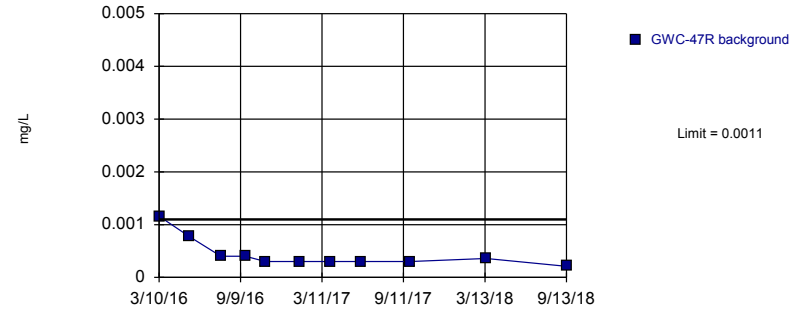
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Parametric, GWC-47R

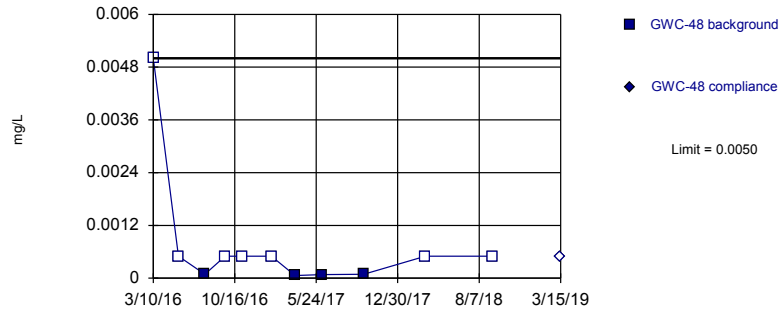


Background Data Summary (based on natural log transformation): Mean=-7.867, Std. Dev.=0.4878, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8094, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

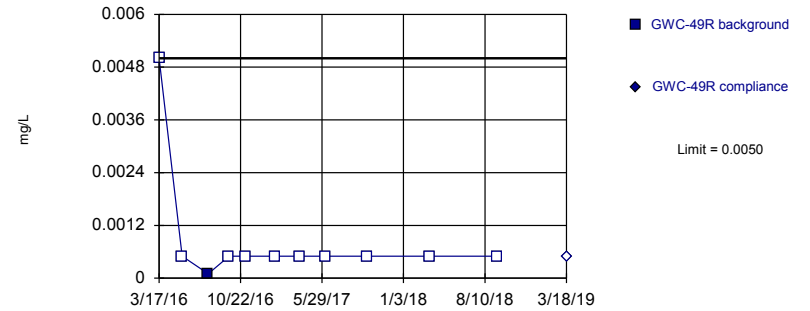


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

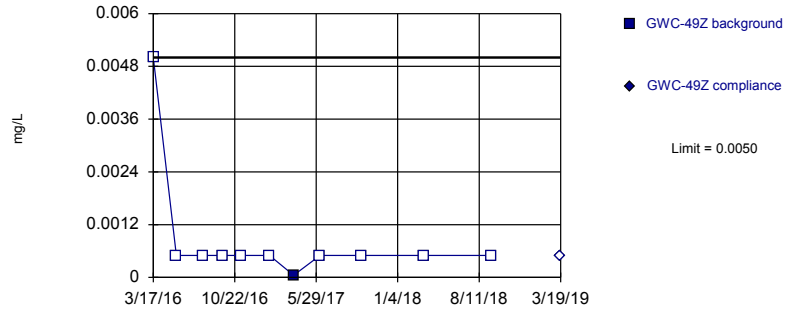


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

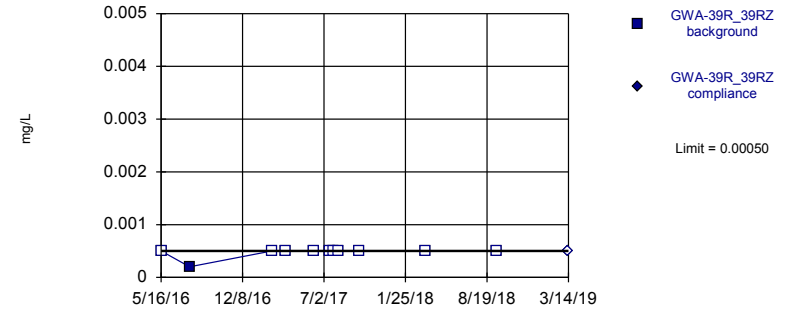


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

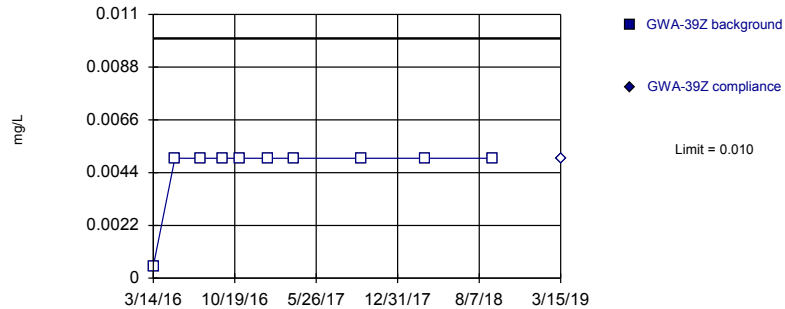


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

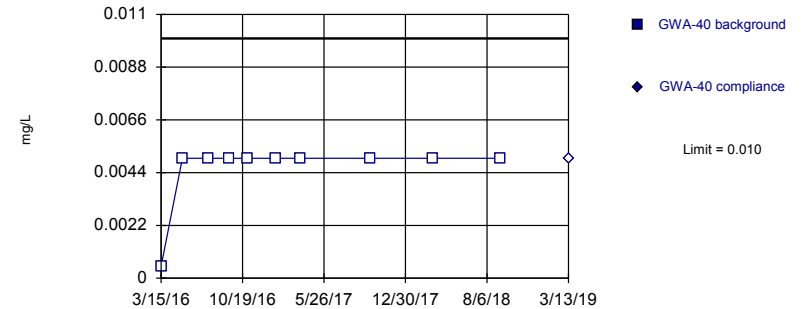


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

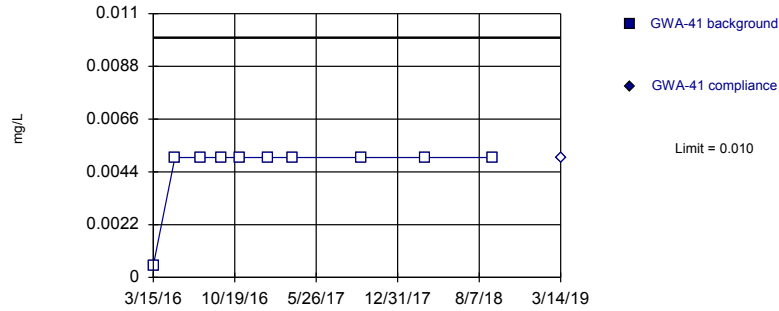
Constituent: Thallium, Vanadium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z	GWA-39Z	GWA-40	GWA-40
3/14/2016					<0.001			
3/15/2016							<0.001	
3/17/2016	<0.01							
5/11/2016					<0.01		<0.01	
5/16/2016			<0.001 (D)					
5/18/2016	<0.001							
7/19/2016					<0.01			
7/21/2016							<0.01	
7/27/2016			0.0002 (JD)					
7/28/2016	<0.001							
9/15/2016					<0.01		<0.01	
9/21/2016	<0.001							
11/2/2016					<0.01			
11/3/2016							<0.01	
11/7/2016	<0.001							
1/17/2017							<0.01	
1/18/2017					<0.01			
1/24/2017	<0.001							
2/21/2017			<0.001					
3/24/2017							<0.01	
3/27/2017			<0.001 (D)					
3/28/2017					<0.01			
3/30/2017	5E-05 (J)							
6/8/2017			<0.001 (D)					
6/9/2017	<0.001							
7/17/2017			<0.001 (D)					
7/27/2017			<0.001					
8/9/2017			<0.001					
9/26/2017					<0.01		<0.01	
9/29/2017	<0.001		<0.001 (D)					
3/14/2018					<0.01		<0.01	
3/15/2018	<0.001							
3/16/2018			<0.001					
9/12/2018					<0.01		<0.01	
9/14/2018	<0.001		<0.001					
3/13/2019								<0.01
3/14/2019				<0.001				
3/15/2019						<0.01		
3/19/2019		<0.001						

Within Limit

Prediction Limit
Intrawell Non-parametric

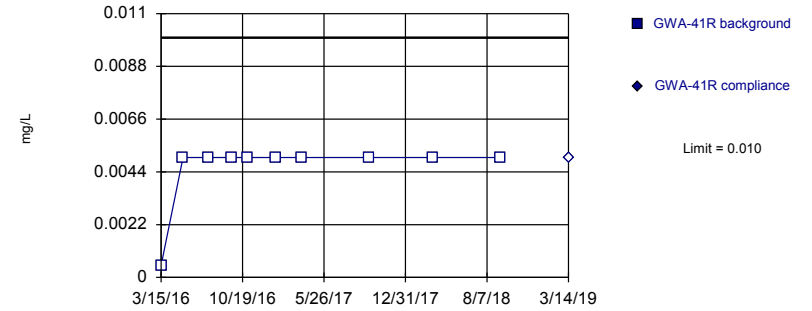


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

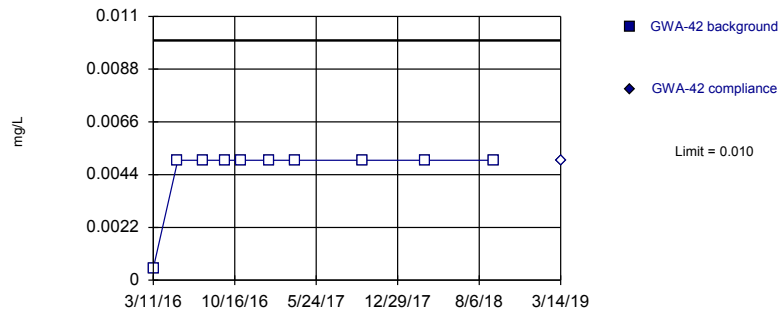


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

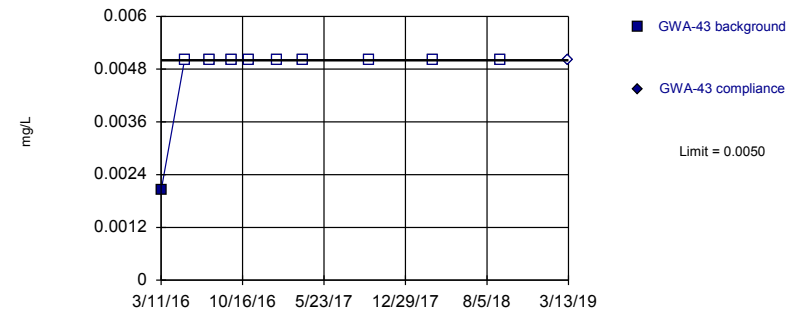


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

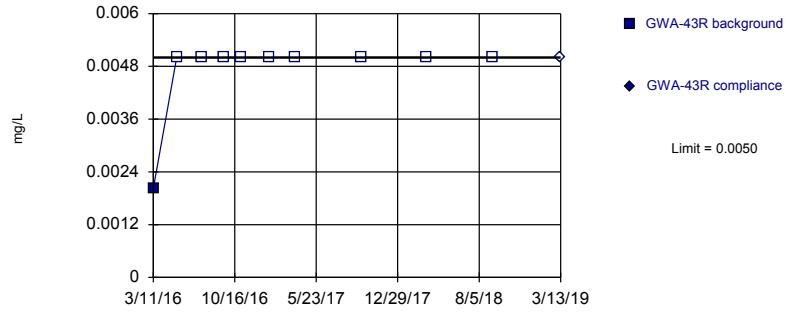
Prediction Limit

Constituent: Vanadium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41	GWA-41	GWA-41R	GWA-41R	GWA-42	GWA-42	GWA-43	GWA-43
3/11/2016					<0.001		0.00204 (J)	
3/15/2016	<0.001		<0.001					
5/12/2016	<0.01							
5/13/2016			<0.01				<0.01	
5/16/2016					<0.01			
7/19/2016							<0.01	
7/20/2016	<0.01							
7/21/2016			<0.01					
7/22/2016					<0.01			
9/15/2016	<0.01							
9/16/2016							<0.01	
9/19/2016					<0.01			
9/21/2016			<0.01					
11/2/2016							<0.01	
11/3/2016	<0.01		<0.01		<0.01			
1/17/2017			<0.01		<0.01			
1/18/2017	<0.01						<0.01	
3/24/2017	<0.01							
3/27/2017			<0.01		<0.01			
3/28/2017							<0.01	
9/22/2017							<0.01	
9/25/2017	<0.01		<0.01					
9/26/2017					<0.01			
3/14/2018	<0.01		<0.01		<0.01		<0.01	
9/12/2018	<0.01		<0.01				<0.01	
9/14/2018					<0.01			
3/13/2019								<0.01
3/14/2019		<0.01		<0.01		<0.01		

Within Limit

Prediction Limit
Intrawell Non-parametric

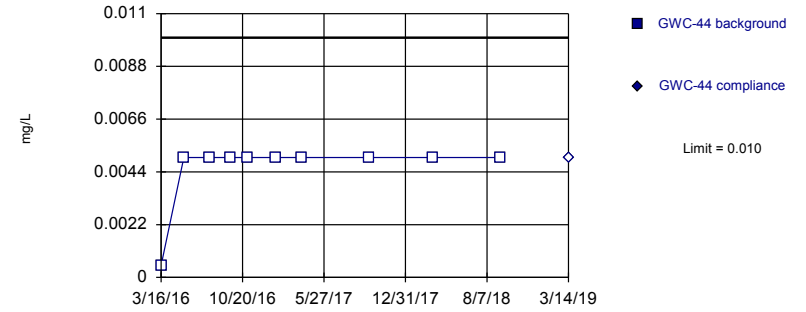


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

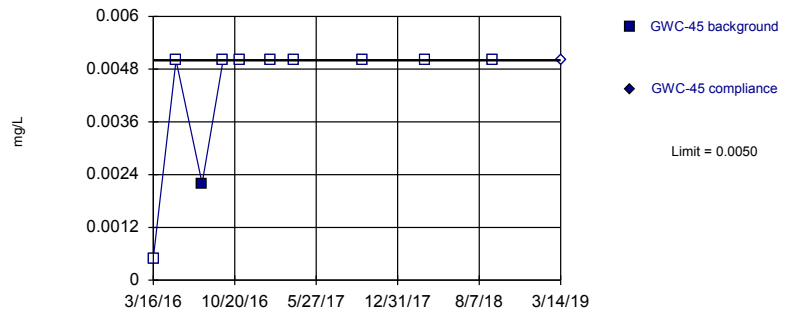


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

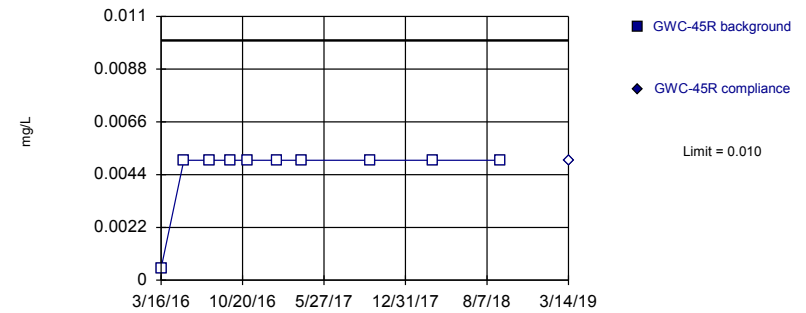


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

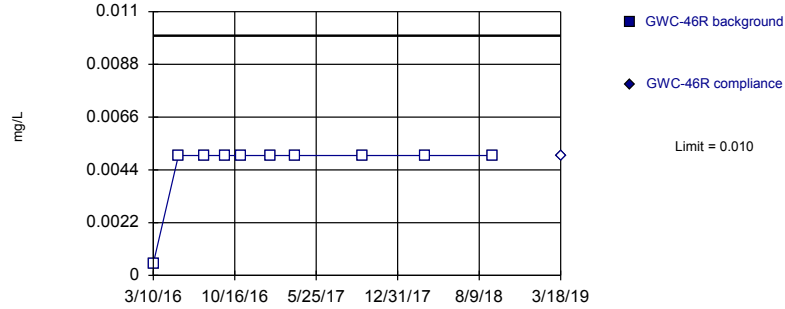
Prediction Limit

Constituent: Vanadium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-43R	GWA-43R	GWC-44	GWC-44	GWC-45	GWC-45	GWC-45R	GWC-45R
3/11/2016	0.00202 (J)							
3/16/2016			<0.001		<0.001		<0.001	
5/13/2016	<0.01							
5/16/2016			<0.01		<0.01		<0.01	
7/19/2016	<0.01							
7/25/2016			<0.01		0.0022 (J)		<0.01	
9/16/2016	<0.01							
9/19/2016			<0.01		<0.01		<0.01	
11/2/2016	<0.01							
11/3/2016			<0.01				<0.01	
11/4/2016					<0.01			
1/18/2017	<0.01							
1/19/2017			<0.01					
1/20/2017							<0.01	
1/23/2017					<0.01			
3/28/2017	<0.01		<0.01					
3/29/2017					<0.01		<0.01	
9/22/2017	<0.01							
9/26/2017			<0.01					
9/27/2017					<0.01		<0.01	
3/15/2018	<0.01		<0.01		<0.01		<0.01	
9/12/2018	<0.01		<0.01					
9/13/2018					<0.01		<0.01	
3/13/2019		<0.01						
3/14/2019				<0.01		<0.01		<0.01

Within Limit

Prediction Limit
Intrawell Non-parametric

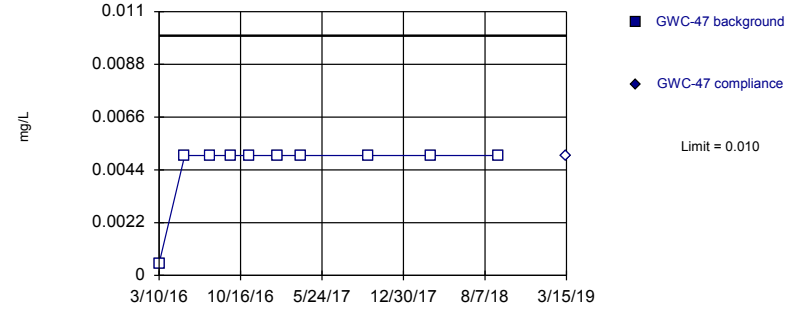


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

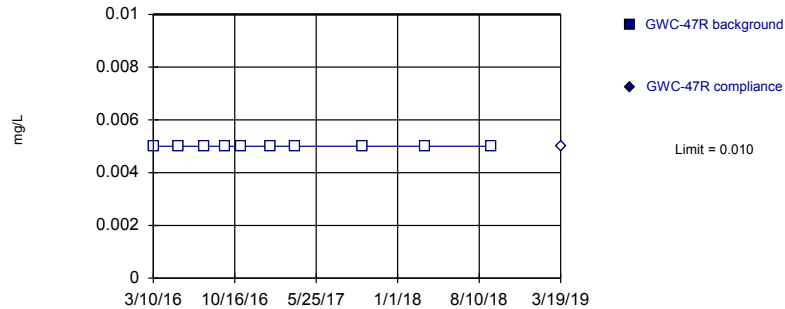


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

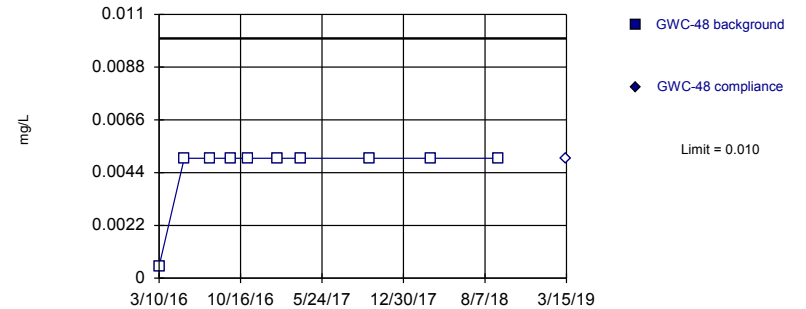


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

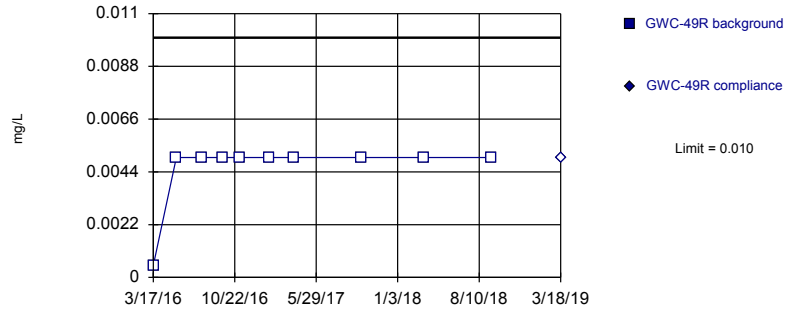
Prediction Limit

Constituent: Vanadium Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-46R	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-48
3/10/2016	<0.001		<0.001		<0.01		<0.001	
5/17/2016	<0.01						<0.01	
5/18/2016			<0.01		<0.01			
7/26/2016	<0.01							
7/27/2016			<0.01		<0.01		<0.01	
9/20/2016	<0.01		<0.01		<0.01		<0.01	
11/4/2016	<0.01				<0.01		<0.01	
11/7/2016			<0.01					
1/20/2017	<0.01				<0.01			
1/23/2017			<0.01				<0.01	
3/28/2017	<0.01						<0.01	
3/29/2017			<0.01		<0.01			
9/27/2017			<0.01		<0.01			
9/29/2017	<0.01						<0.01	
3/15/2018	<0.01		<0.01				<0.01	
3/16/2018					<0.01			
9/13/2018	<0.01		<0.01		<0.01		<0.01	
3/15/2019				<0.01				<0.01
3/18/2019		<0.01						
3/19/2019						<0.01		

Within Limit

Prediction Limit
Intrawell Non-parametric

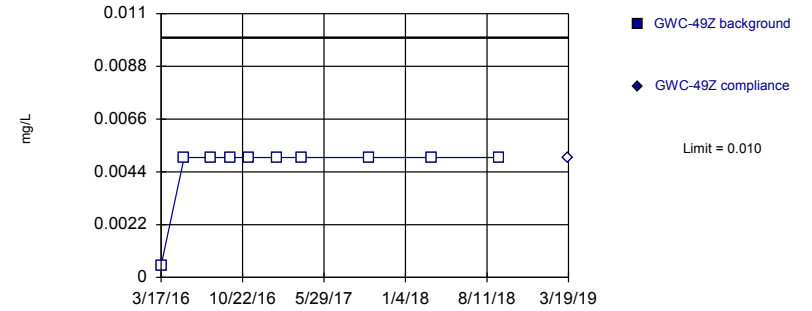


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

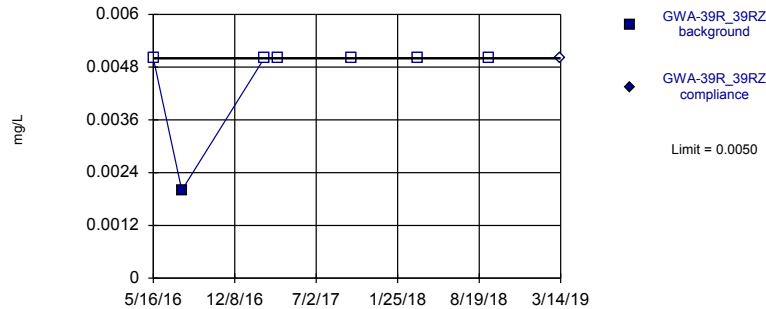


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

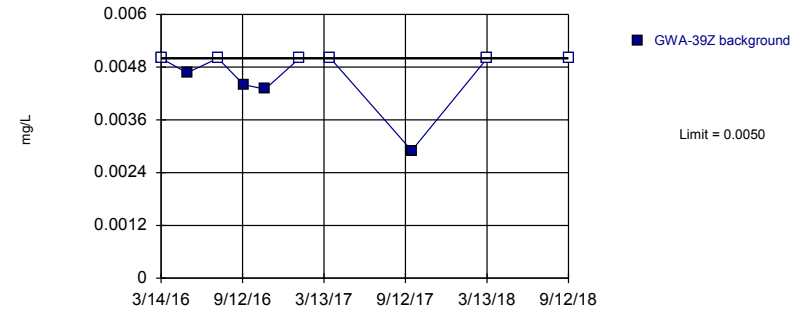


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3).

Constituent: Vanadium Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWA-39Z (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:24 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

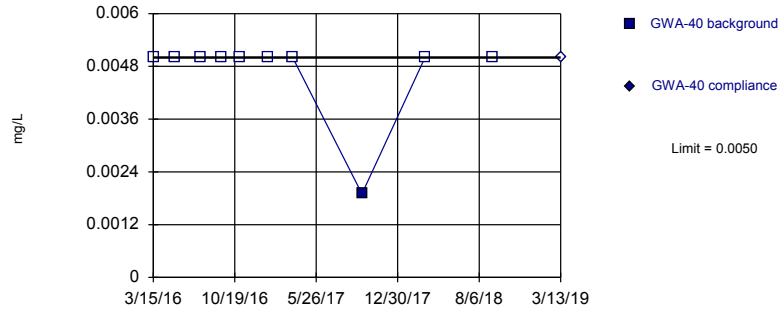
Prediction Limit

Constituent: Vanadium, Zinc Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z	GWA-39R_39RZ	GWA-39R_39RZ	GWA-39Z
3/14/2016							<0.01
3/17/2016	<0.001		<0.001				
5/11/2016							0.00467 (J)
5/16/2016					<0.01 (D)		
5/18/2016	<0.01		<0.01				
7/19/2016							<0.01 (*)
7/27/2016	<0.01				0.002 (JD)		
7/28/2016			<0.01				
9/15/2016							0.0044 (J)
9/21/2016	<0.01		<0.01				
11/2/2016							0.0043 (J)
11/4/2016	<0.01						
11/7/2016			<0.01				
1/18/2017							<0.01 (*)
1/24/2017	<0.01		<0.01				
2/21/2017					<0.01		
3/27/2017					<0.01 (D)		
3/28/2017							<0.01 (*)
3/29/2017	<0.01						
3/30/2017			<0.01				
9/26/2017							0.0029 (J)
9/29/2017	<0.01		<0.01		<0.01 (D)		
3/14/2018							<0.01
3/15/2018	<0.01		<0.01				
3/16/2018					<0.01		
9/12/2018							<0.01
9/13/2018	<0.01						
9/14/2018			<0.01		<0.01		
3/14/2019						<0.01	
3/18/2019		<0.01					
3/19/2019				<0.01			

Within Limit

Prediction Limit
Intrawell Non-parametric

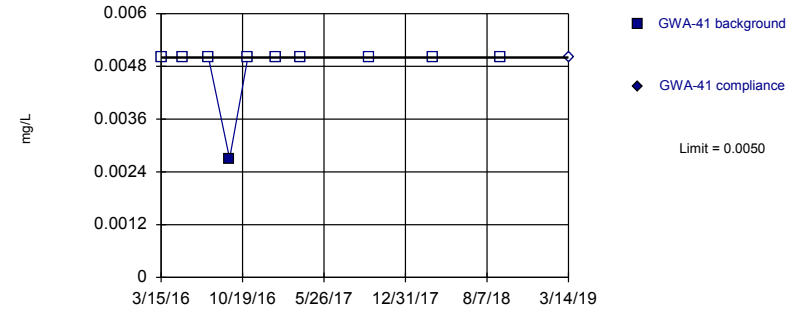


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

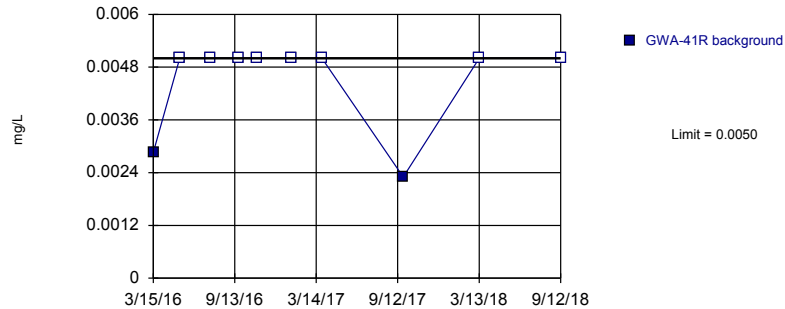
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWA-41R (bg)

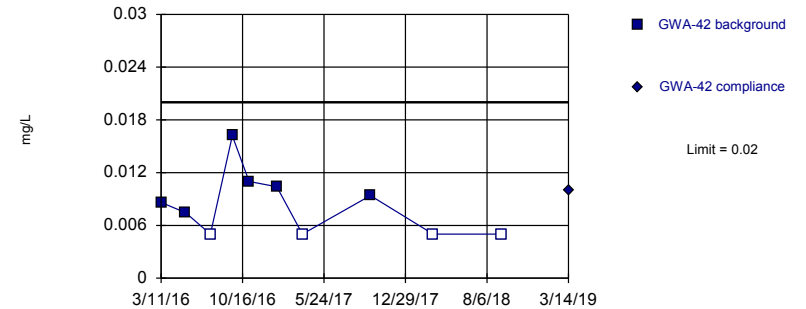


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.006306, Std. Dev.=0.005887, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8595, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

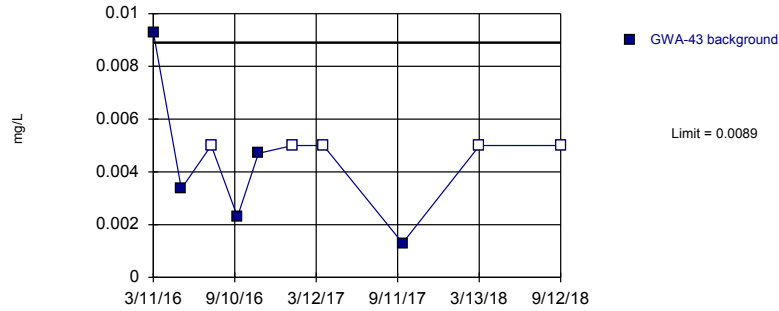
Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Zinc Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-40	GWA-40	GWA-41	GWA-41	GWA-41R	GWA-42	GWA-42
3/11/2016						0.00862 (J)	
3/15/2016	<0.01		<0.01		0.00286 (J)		
5/11/2016	<0.01						
5/12/2016			<0.01				
5/13/2016					<0.01		
5/16/2016						0.00744 (J)	
7/20/2016			<0.01				
7/21/2016	<0.01 (*)				<0.01 (*)		
7/22/2016						<0.01 (*)	
9/15/2016	<0.01		0.0027 (J)				
9/19/2016						0.0162	
9/21/2016					<0.01		
11/3/2016	<0.01		<0.01		<0.01	0.011	
1/17/2017	<0.01				<0.01	0.0104	
1/18/2017			<0.01 (*)				
3/24/2017	<0.01 (*)		<0.01 (*)				
3/27/2017					<0.01 (*)	<0.01 (*)	
9/25/2017			<0.01		0.0023 (J)		
9/26/2017	0.0019 (J)					0.0094 (J)	
3/14/2018	<0.01		<0.01		<0.01	<0.01	
9/12/2018	<0.01		<0.01		<0.01		
9/14/2018						<0.01	
3/13/2019		<0.01					
3/14/2019				<0.01			0.01

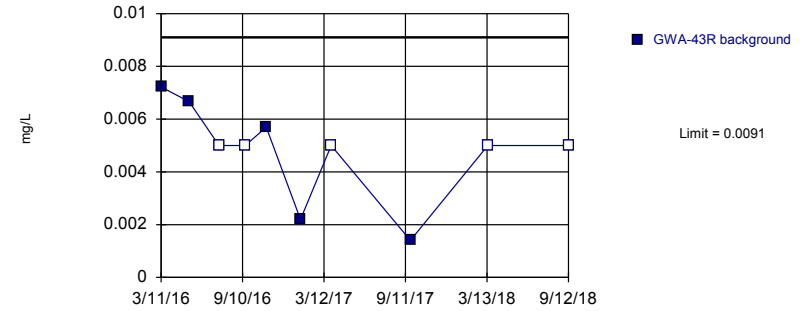
Prediction Limit
Intrawell Parametric, GWA-43 (bg)



Background Data Summary (after Aitchison's Adjustment): Mean=0.002096, Std. Dev.=0.003035, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8476, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

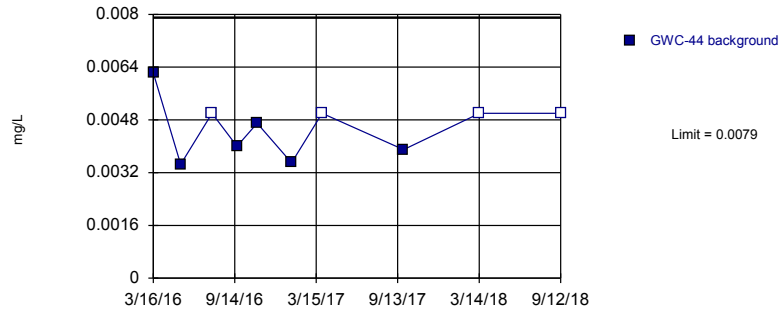
Prediction Limit
Intrawell Parametric, GWA-43R (bg)



Background Data Summary (after Aitchison's Adjustment): Mean=0.002318, Std. Dev.=0.003019, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8581, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

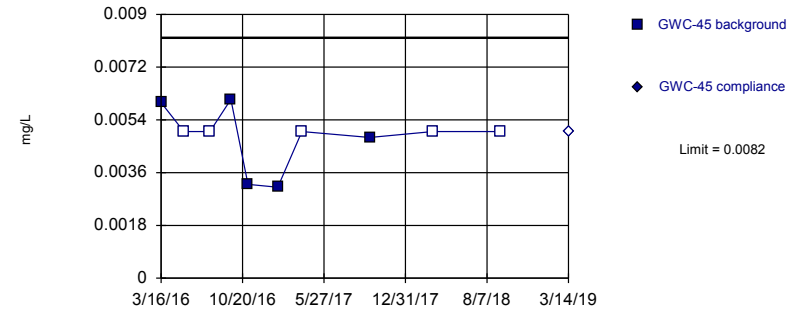
Prediction Limit
Intrawell Parametric, GWC-44



Background Data Summary (after Aitchison's Adjustment): Mean=0.002577, Std. Dev.=0.002351, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9048, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit
Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.002319, Std. Dev.=0.002629, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8223, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

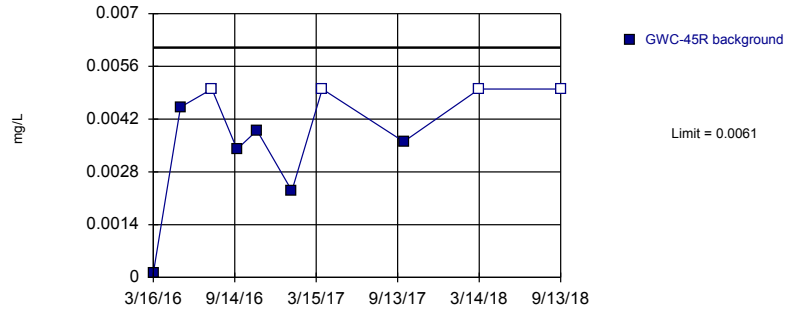
Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Zinc Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-43	GWA-43R	GWC-44	GWC-45	GWC-45
3/11/2016	0.0093 (J)	0.00722 (J)			
3/16/2016			0.00622 (J)	0.00599 (J)	
5/13/2016	0.00336 (J)	0.00666 (J)			
5/16/2016			0.00345 (J)	<0.01	
7/19/2016	<0.01 (*)	<0.01 (*)			
7/25/2016			<0.01 (*)	<0.01 (*)	
9/16/2016	0.0023 (J)	<0.01			
9/19/2016			0.004 (J)	0.0061 (J)	
11/2/2016	0.0047 (J)	0.0057 (J)			
11/3/2016			0.0047 (J)		
11/4/2016				0.0032 (J)	
1/18/2017	<0.01	0.0022 (J)			
1/19/2017			0.0035 (J)		
1/23/2017				0.0031 (J)	
3/28/2017	<0.01 (*)	<0.01	<0.01 (*)		
3/29/2017				<0.01 (*)	
9/22/2017	0.0013 (J)	0.0014 (J)			
9/26/2017			0.0039 (J)		
9/27/2017				0.0048 (J)	
3/14/2018	<0.01				
3/15/2018		<0.01	<0.01	<0.01	
9/12/2018	<0.01	<0.01	<0.01		
9/13/2018				<0.01	
3/14/2019					<0.01

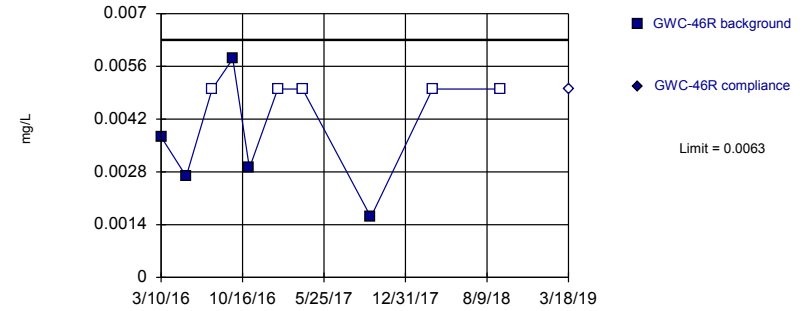
Prediction Limit
Intrawell Parametric, GWC-45R



Background Data Summary (after Aitchison's Adjustment): Mean=0.001783, Std. Dev.=0.001934, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.802, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

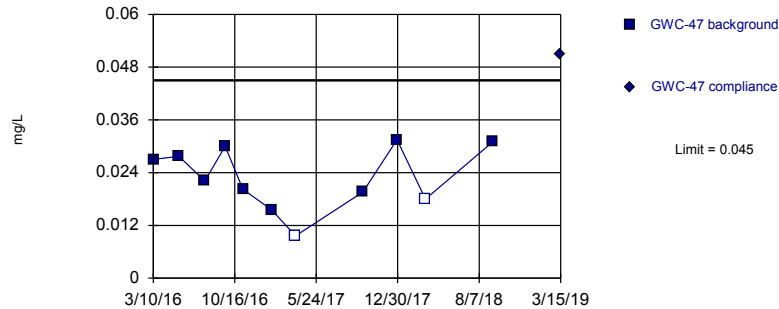
Within Limit
Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.001671, Std. Dev.=0.002049, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8534, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

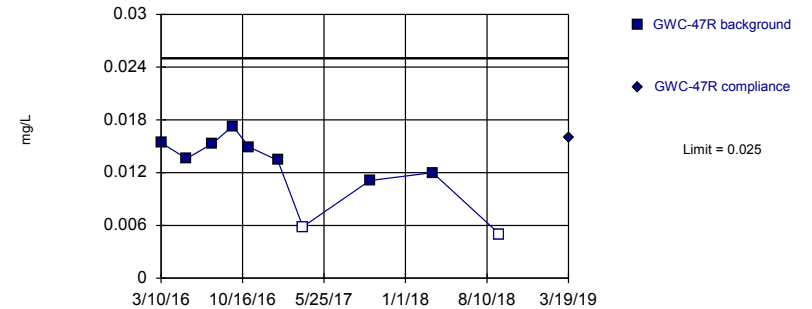
Exceeds Limit
Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.02043, Std. Dev.=0.01133, n=11, 18.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9376, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

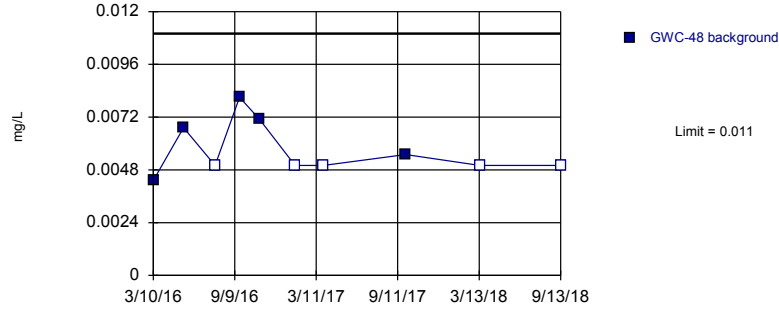
Within Limit
Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=0.0113, Std. Dev.=0.006213, n=10, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8784, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

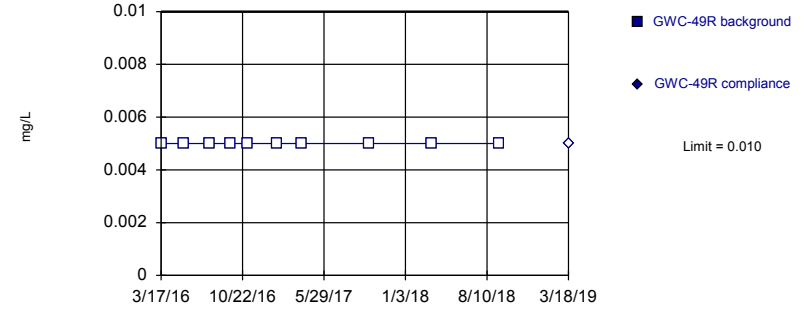
Prediction Limit
Intrawell Parametric, GWC-48



Background Data Summary (after Aitchison's Adjustment): Mean=0.003174, Std. Dev.=0.003486, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8232, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658. Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

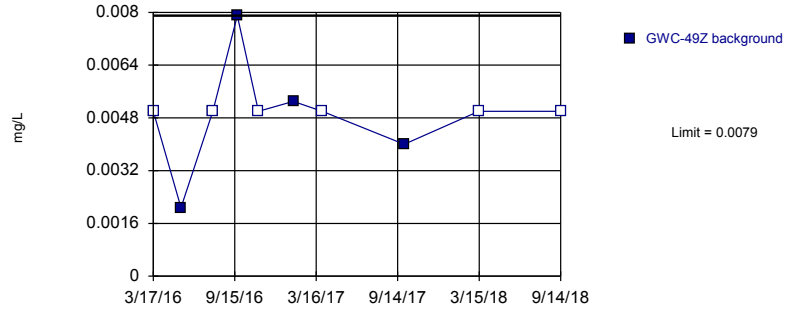
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

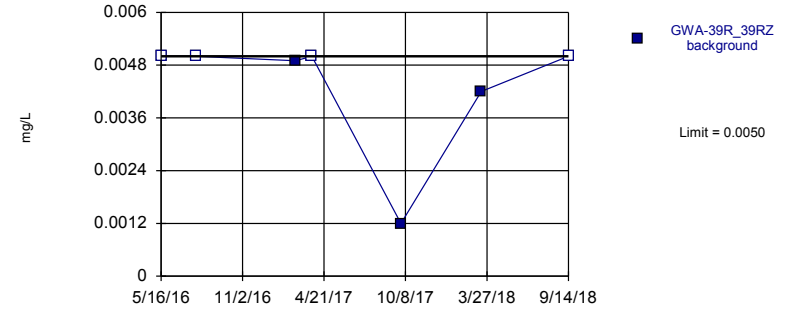
Prediction Limit
Intrawell Non-parametric, GWC-49Z



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit
Intrawell Non-parametric, GWA-39R_39RZ (bg)



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3). Assumes 1 future value.

Constituent: Zinc Analysis Run 8/26/2019 10:25 AM View: cell 9&10 OB&BR metals
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Zinc Analysis Run 8/26/2019 10:28 AM View: cell 9&10 OB&BR metals

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWA-39R_39RZ
3/10/2016	0.00432 (J)				
3/17/2016		<0.01		<0.01	
5/16/2016					<0.01 (D)
5/17/2016	0.00672 (J)				
5/18/2016		<0.01		0.00208 (J)	
7/27/2016	<0.01 (*)	<0.01 (*)			<0.01 (*)
7/28/2016				<0.01 (*)	
9/20/2016	0.0081 (J)				
9/21/2016		<0.01		0.0079 (J)	
11/4/2016	0.0071 (J)	<0.01			
11/7/2016				<0.01 (*)	
1/23/2017	<0.01				
1/24/2017		<0.01		0.0053 (J)	
2/21/2017					0.0049 (J)
3/27/2017					<0.01 (*)
3/28/2017	<0.01 (*)				
3/29/2017		<0.01 (*)			
3/30/2017				<0.01 (*)	
9/29/2017	0.0055 (J)	<0.01		0.004 (J)	0.0012 (JD)
3/15/2018	<0.01	<0.01		<0.01	
3/16/2018					0.0042 (J)
9/13/2018	<0.01	<0.01			
9/14/2018				<0.01	<0.01
3/18/2019			<0.01		

Interwell Prediction Limits AppIII - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 1:11 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (pH units)	GWC-44	7.9	5.6	3/14/2019	4.41	Yes	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-45	7.9	5.6	3/14/2019	5.01	Yes	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-47R	7.9	5.6	3/19/2019	7.93	Yes	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-48	7.9	5.6	3/15/2019	5.28	Yes	101	0	n/a	0.000...	NP (normality) 1 of 2

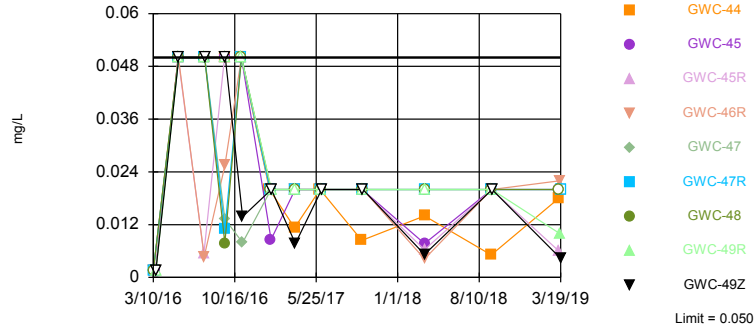
Interwell Prediction Limits AppIII - All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 1:11 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWC-44	0.050	n/a	3/14/2019	0.018	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-45	0.050	n/a	3/14/2019	0.02ND	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-45R	0.050	n/a	3/14/2019	0.006	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-46R	0.050	n/a	3/18/2019	0.022	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-47	0.050	n/a	3/15/2019	0.02ND	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-47R	0.050	n/a	3/19/2019	0.02ND	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-48	0.050	n/a	3/15/2019	0.02ND	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-49R	0.050	n/a	3/18/2019	0.0099	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-49Z	0.050	n/a	3/19/2019	0.0043	No	96	66.67	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-44	0.27	n/a	3/14/2019	0.13	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-45	0.27	n/a	3/14/2019	0.15ND	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-45R	0.27	n/a	3/14/2019	0.039	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-46R	0.27	n/a	3/18/2019	0.15ND	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-47	0.27	n/a	3/15/2019	0.15ND	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-47R	0.27	n/a	3/19/2019	0.15ND	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-48	0.27	n/a	3/15/2019	0.15ND	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-49R	0.27	n/a	3/18/2019	0.15ND	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-49Z	0.27	n/a	3/19/2019	0.15ND	No	96	48.96	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-44	7.9	5.6	3/14/2019	4.41	Yes	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-45	7.9	5.6	3/14/2019	5.01	Yes	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-45R	7.9	5.6	3/14/2019	7.14	No	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-46R	7.9	5.6	3/18/2019	7.39	No	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-47	7.9	5.6	3/15/2019	7.45	No	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-47R	7.9	5.6	3/19/2019	7.93	Yes	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-48	7.9	5.6	3/15/2019	5.28	Yes	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-49R	7.9	5.6	3/18/2019	7.89	No	101	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-49Z	7.9	5.6	3/19/2019	5.6	No	101	0	n/a	0.000...	NP (normality) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

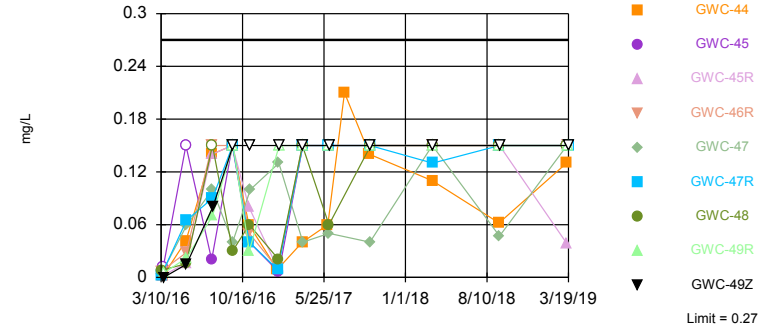


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 96 background values. 66.67% NDs. Annual per-constituent alpha = 0.003776. Individual comparison alpha = 0.0002102 (1 of 2). Comparing 9 points to limit.

Constituent: Boron Analysis Run 8/28/2019 1:10 PM View: cells9&10_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Interwell Non-parametric

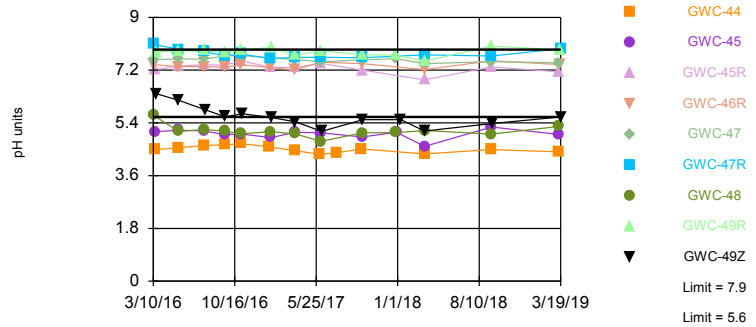


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 96 background values. 48.96% NDs. Annual per-constituent alpha = 0.003776. Individual comparison alpha = 0.0002102 (1 of 2). Comparing 9 points to limit.

Constituent: Fluoride Analysis Run 8/28/2019 1:10 PM View: cells9&10_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limits: GWC-44, GWC-45, GWC-47R, GWC-48

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 101 background values. Annual per-constituent alpha = 0.006818. Individual comparison alpha = 0.0003794 (1 of 2). Comparing 9 points to limit.

Constituent: pH Analysis Run 8/28/2019 1:10 PM View: cells9&10_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 1:11 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-40 (bg)	GWC-45	GWC-45R	GWC-44	GWC-49Z	GWC-49R	GWA-39R_39RZ ...
3/10/2016								
3/11/2016								
3/14/2016								
3/15/2016	<0.003	<0.003						
3/16/2016			<0.003	<0.003	<0.003			
3/17/2016						<0.003	<0.003	
5/11/2016		<0.1						
5/12/2016								
5/13/2016	<0.1							
5/16/2016			<0.1	<0.1	<0.1			<0.1 (D)
5/17/2016								
5/18/2016						<0.1	<0.1	
7/19/2016								
7/20/2016								
7/21/2016	<0.1 (*)	<0.1						
7/22/2016								
7/25/2016			<0.1	0.0054 (J)	<0.1			
7/26/2016								
7/27/2016							<0.1 (*)	<0.1 (*)
7/28/2016						<0.1 (*)		
9/15/2016		<0.1						
9/16/2016								
9/19/2016			<0.1	<0.1	<0.1			
9/20/2016								
9/21/2016	<0.1 (*)					<0.1 (*)	<0.1 (*)	
11/2/2016								
11/3/2016	<0.1	<0.1 (*)		<0.1	<0.1			
11/4/2016			<0.1				<0.1	
11/7/2016						0.0138 (J)		
1/17/2017	<0.04	<0.04						
1/18/2017								
1/19/2017					<0.04			
1/20/2017				<0.04				
1/23/2017			0.0086 (J)					
1/24/2017						<0.04	<0.04	
2/21/2017								0.0218 (JD)
3/24/2017		<0.04						
3/27/2017	0.0173 (J)							0.0262 (JD)
3/28/2017					0.0113 (J)			
3/29/2017			<0.04	<0.04			<0.04	
3/30/2017						0.0077 (J)		
5/24/2017		<0.04						
6/5/2017					<0.04 (*)			
6/6/2017	<0.04 (*)							
6/7/2017			<0.04 (*)	<0.04 (*)				
6/8/2017							<0.04	0.0067 (JD)
6/9/2017						<0.04		
7/17/2017								0.0165 (JD)
7/27/2017								0.0138 (JD)
8/9/2017								0.0069 (JD)
9/22/2017								
9/25/2017	0.0141 (J)							

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 8/28/2019 1:11 PM View: cells9&10_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41R (bg)	GWA-40 (bg)	GWC-45	GWC-45R	GWC-44	GWC-49Z	GWC-49R	GWA-39R_39RZ ...
9/26/2017		0.0075 (J)			0.0084 (J)			
9/27/2017			<0.04	<0.04				
9/29/2017						<0.04	<0.04	0.0066 (JD)
3/14/2018	0.014 (J)	0.0093 (J)						
3/15/2018			0.0077 (J)	0.0063 (J)	0.014 (J)	0.0052 (J)	<0.04	
3/16/2018								0.0067 (J)
9/12/2018	0.013 (J)	<0.04			0.0051 (J)			
9/13/2018			<0.04	<0.04			<0.04	
9/14/2018						<0.04		0.0059 (J)
3/13/2019		<0.04						
3/14/2019	0.015 (X)		<0.04	0.006 (X)	0.018 (X)			0.0059 (X)
3/15/2019								
3/18/2019							0.0099 (X)	
3/19/2019						0.0043 (X)		

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 1:11 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-46R	GWC-47	GWC-48	GWA-43R (bg)	GWA-43 (bg)	GWA-42 (bg)	GWA-39Z (bg)	GWA-41R (bg)
3/10/2016	0.00202 (J)	0.00697 (J)	0.00337 (J)	0.00797 (J)					
3/11/2016					0.0141 (J)	0.0329 (J)	0.0296 (J)		
3/14/2016								0.0657 (J)	
3/15/2016									0.0394 (J)
3/16/2016									
3/17/2016									
5/11/2016								0.0401 (J)	
5/12/2016									
5/13/2016					0.0141 (J)	0.0459 (J)			0.0234 (J)
5/16/2016							0.0287 (J)		
5/17/2016		0.0281 (J)		0.0156 (J)					
5/18/2016	0.065 (J)		0.059 (J)						
7/19/2016					<0.3	<0.3		<0.3	
7/20/2016									
7/21/2016									<0.3
7/22/2016							0.04 (J)		
7/25/2016									
7/26/2016		<0.3							
7/27/2016	0.09 (J)		0.1 (J)	<0.3					
7/28/2016									
9/15/2016								<0.3	
9/16/2016					<0.3	<0.3			
9/19/2016							<0.3		
9/20/2016	<0.3	<0.3	0.04 (J)	0.03 (J)					
9/21/2016									<0.3
11/2/2016					0.04 (J)	0.04 (J)		0.04 (J)	
11/3/2016							0.04 (J)		0.12 (J)
11/4/2016	0.04 (J)	0.05 (J)		0.06 (J)					
11/7/2016			0.1 (J)						
1/17/2017							0.02 (J)		0.01 (J)
1/18/2017					0.02 (J)	<0.3		0.03 (J)	
1/19/2017									
1/20/2017	0.009 (J)	0.01 (J)							
1/23/2017			0.13 (J)	0.02 (J)					
1/24/2017									
2/21/2017									
3/24/2017									
3/27/2017							<0.3		<0.3
3/28/2017		<0.3		<0.3	<0.3	<0.3		0.06 (J)	
3/29/2017	<0.3		0.04 (J)						
3/30/2017									
5/24/2017									
6/5/2017									
6/6/2017					<0.3	<0.3			<0.3
6/7/2017		<0.3					<0.3	0.06 (J)	
6/8/2017	<0.3 (*)		0.05 (J)	0.06 (J)					
6/9/2017									
7/17/2017									
7/20/2017									
7/27/2017									
8/9/2017									
9/22/2017					<0.3	<0.3			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 8/28/2019 1:11 PM View: cells9&10_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41 (bg)	GWA-40 (bg)	GWC-45R	GWC-44	GWC-45	GWC-49Z	GWC-49R	GWA-39R_39RZ ...
9/25/2017	<0.3							
9/26/2017		<0.3		0.14 (J)				
9/27/2017			<0.3		<0.3			
9/29/2017						<0.3	<0.3	0.04 (JD)
3/14/2018	<0.3	0.055 (J)						
3/15/2018			<0.3	0.11 (J)	<0.3	<0.3	<0.3	
3/16/2018								0.27 (J)
9/12/2018	<0.3	<0.3		0.062 (J)				
9/13/2018			<0.3		<0.3		<0.3	
9/14/2018						<0.3		0.1 (J)
3/13/2019		0.045 (X)						
3/14/2019	0.039 (X)		0.039 (X)	0.13 (X)	<0.3			0.066 (X)
3/15/2019								
3/18/2019							<0.3	
3/19/2019						<0.3		

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:11 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-47	GWC-47R	GWC-48	GWA-43R (bg)	GWA-43 (bg)	GWA-42 (bg)	GWA-39Z (bg)	GWA-41R (bg)
8/9/2017									
9/22/2017					7.8	5.77			
9/25/2017									6.88
9/26/2017							7.59	7.05	
9/27/2017		7.55	7.62						
9/29/2017	7.42			5.06					
12/28/2017		7.59 (Y)		5.07 (Y)	7.78 (Y)			6.79 (Y)	
12/29/2017									
1/10/2018									
3/14/2018						5.85	7.6	7.42	7.04
3/15/2018	7.22	7.42		5.14	7.66				
3/16/2018			7.72						
9/12/2018					7.75	5.65		6.86	7.02
9/13/2018	7.52	7.49	7.68	5.02					
9/14/2018							7.37		
3/13/2019					7.84	5.63			
3/14/2019							7.57		6.93
3/15/2019		7.45		5.28				6.78	
3/18/2019	7.39								
3/19/2019			7.93						

Prediction Limit

Constituent: pH (pH units) Analysis Run 8/28/2019 1:11 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41 (bg)	GWA-40 (bg)	GWC-44	GWC-45	GWC-45R	GWC-49Z	GWC-49R	GWA-39R_39RZ ...
8/9/2017								7.73
9/22/2017								
9/25/2017	6.63							
9/26/2017		7.66	4.51					
9/27/2017				4.92	7.2			
9/29/2017						5.51	7.72	7.7 (D)
12/28/2017		7.34 (Y)					7.71 (Y)	
12/29/2017				5.08 (Y)				
1/10/2018						5.51 (Y)		
3/14/2018	7.08	7.56						
3/15/2018			4.34	4.6	6.87	5.12	7.51	
3/16/2018								7.49
9/12/2018	6.54	7.12	4.49					
9/13/2018				5.26	7.31		8.02	
9/14/2018						5.38		7.32
3/13/2019		7.12						
3/14/2019	6.58		4.41	5.01	7.14			7.46
3/15/2019								
3/18/2019							7.89	
3/19/2019						5.6		

Intrawell Prediction Limits AppIII - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 1:16 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GWC-44	10	n/a	3/14/2019	17.2	Yes	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-49R	30	n/a	3/18/2019	31	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-45R	3.3	n/a	3/14/2019	4.3	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-48	3	n/a	3/15/2019	3.3	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-49R	1.8	n/a	3/18/2019	2.7	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-44	49	n/a	3/14/2019	79.7	Yes	9	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-45R	3.4	n/a	3/14/2019	4.3	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-47R	11	n/a	3/19/2019	14.8	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-49R	3.7	n/a	3/18/2019	5.8	Yes	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-45	31	n/a	3/14/2019	39	Yes	8	37.5	No	0.000...	Param 1 of 3

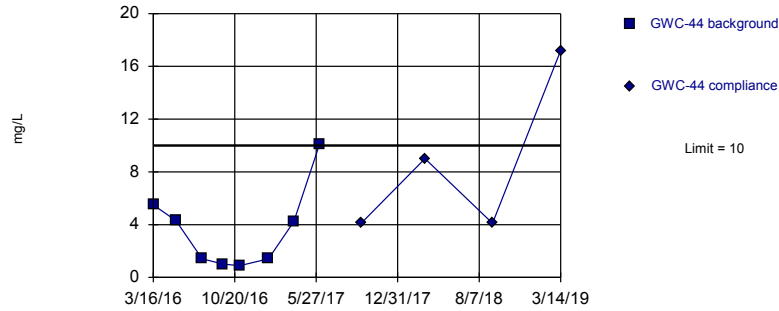
Intrawell Prediction Limits AppIII - All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 1:16 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GWC-44	10	n/a	3/14/2019	17.2	Yes	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-45	0.95	n/a	3/14/2019	0.9	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-45R	40	n/a	3/14/2019	37	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-46R	55	n/a	3/18/2019	46.1	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-47	31	n/a	3/15/2019	20.4	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-47R	38	n/a	3/19/2019	28.4	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-48	12	n/a	3/15/2019	4.4	No	8	12.5	sqrt(x)	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-49R	30	n/a	3/18/2019	31	Yes	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-49Z	6.7	n/a	3/19/2019	1.1	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-44	9.7	n/a	3/14/2019	6.4	No	9	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-45	1.3	n/a	3/14/2019	0.65ND	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-45R	3.3	n/a	3/14/2019	4.3	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-46R	2.8	n/a	3/18/2019	1.8	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-47	2.9	n/a	3/15/2019	2.8	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-47R	3	n/a	3/19/2019	2.6	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-48	3	n/a	3/15/2019	3.3	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-49R	1.8	n/a	3/18/2019	2.7	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-49Z	1.8	n/a	3/19/2019	0.55ND	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-44	49	n/a	3/14/2019	79.7	Yes	9	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-45	1.6	n/a	3/14/2019	0.72	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-45R	3.4	n/a	3/14/2019	4.3	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-46R	8.9	n/a	3/18/2019	4.4	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-47	5.6	n/a	3/15/2019	4.2	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-47R	11	n/a	3/19/2019	14.8	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-48	3.3	n/a	3/15/2019	1.7	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-49R	3.7	n/a	3/18/2019	5.8	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-49Z	9.9	n/a	3/19/2019	2.2	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-44	200	n/a	3/14/2019	110	No	9	22.22	sqrt(x)	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-45	31	n/a	3/14/2019	39	Yes	8	37.5	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-45R	210	n/a	3/14/2019	195	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-46R	280	n/a	3/18/2019	251	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-47	170	n/a	3/15/2019	125	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-47R	180	n/a	3/19/2019	154	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-48	90	n/a	3/15/2019	41	No	8	25	sqrt(x)	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-49R	190	n/a	3/18/2019	170	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-49Z	81	n/a	3/19/2019	35	No	8	25	No	0.000...	Param 1 of 3

Exceeds Limit

Prediction Limit
Intrawell Parametric

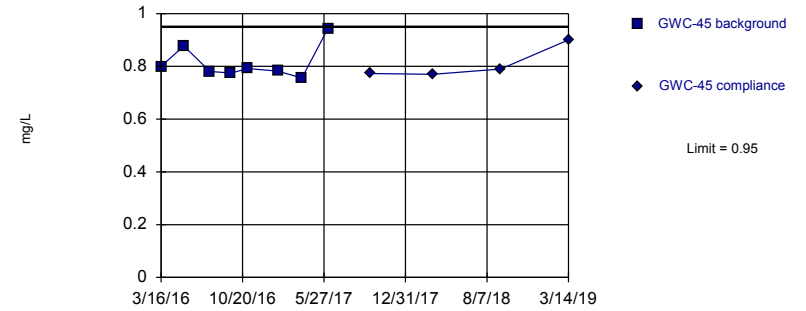


Background Data Summary: Mean=3.606, Std. Dev.=3.172, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8332, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

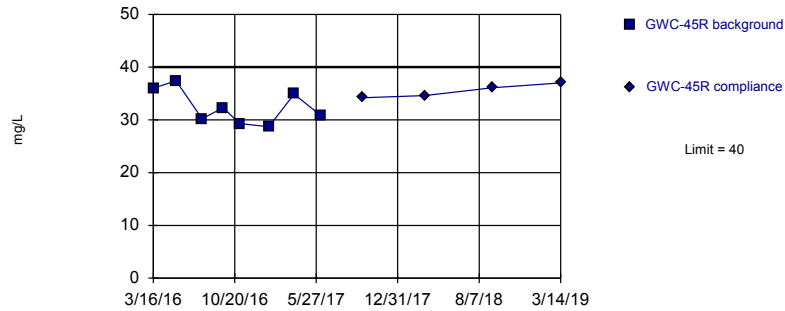


Background Data Summary: Mean=0.8134, Std. Dev.=0.06386, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7875, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

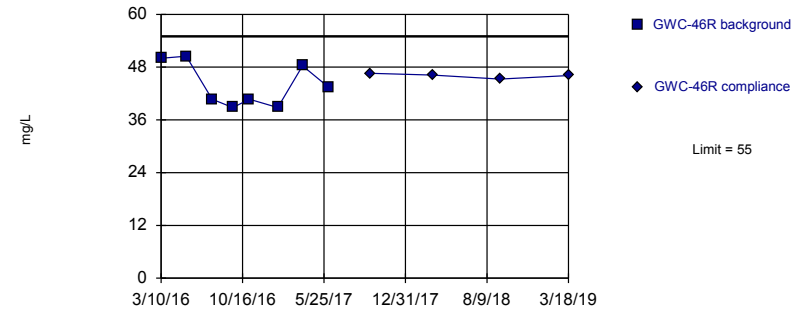


Background Data Summary: Mean=32.46, Std. Dev.=3.264, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9199, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

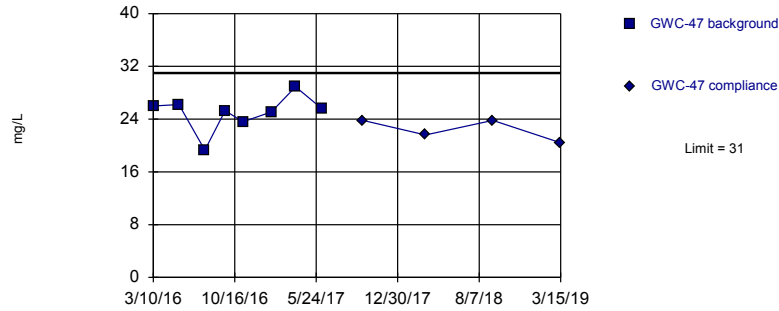


Background Data Summary: Mean=43.9, Std. Dev.=4.97, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.847, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

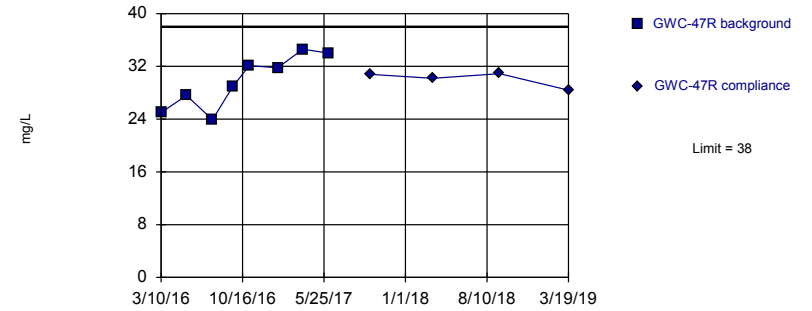


Background Data Summary: Mean=25, Std. Dev.=2.74, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8814, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

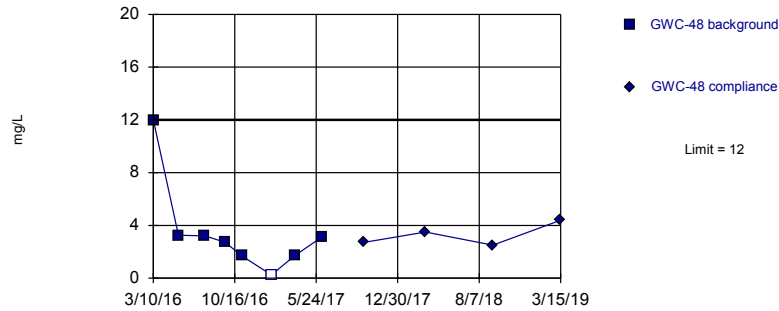


Background Data Summary: Mean=29.74, Std. Dev.=4.026, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9298, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

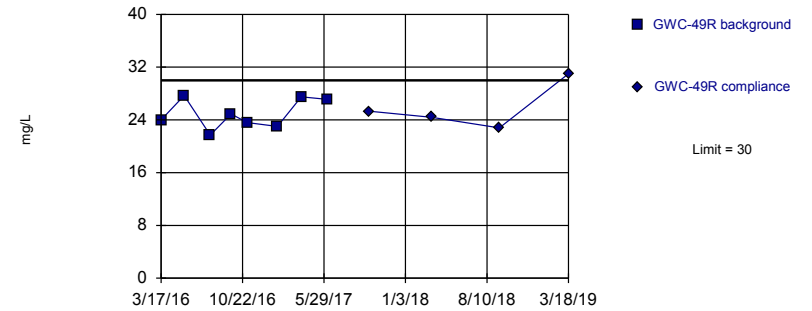


Background Data Summary (based on square root transformation): Mean=1.697, Std. Dev.=0.8356, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8535, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=24.94, Std. Dev.=2.261, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.913, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

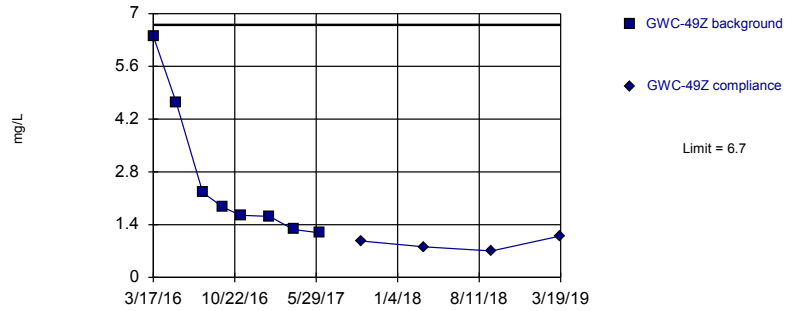
Prediction Limit

Constituent: Calcium Analysis Run 8/28/2019 1:16 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R
3/10/2016	26		25		12			
3/17/2016							24	
5/17/2016					3.25			
5/18/2016	26.2		27.6				27.7	
7/27/2016	19.3		23.9		3.2		21.7	
9/20/2016	25.3		28.9		2.72			
9/21/2016							24.9	
11/4/2016			32.1		1.69		23.6	
11/7/2016	23.6							
1/20/2017			31.8					
1/23/2017	25.1				<0.5			
1/24/2017							23	
3/28/2017					1.72			
3/29/2017	28.9		34.6				27.5	
6/8/2017	25.6		34		3.11		27.1	
9/27/2017		23.8		30.8				
9/29/2017						2.71		25.3
3/15/2018		21.6 (J)				3.5		24.4 (J)
3/16/2018				30.2				
9/13/2018		23.8 (J)		30.9		2.5		22.8 (J)
3/15/2019		20.4 (X)				4.4		
3/18/2019								31
3/19/2019				28.4				

Within Limit

Prediction Limit
Intrawell Parametric

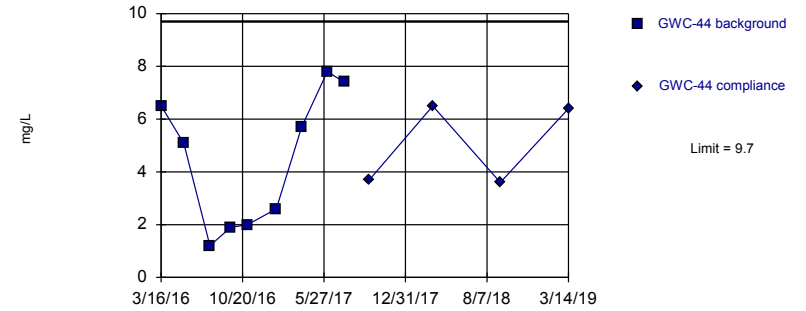


Background Data Summary: Mean=2.608, Std. Dev.=1.885, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7584, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 8/28/2019 1:12 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

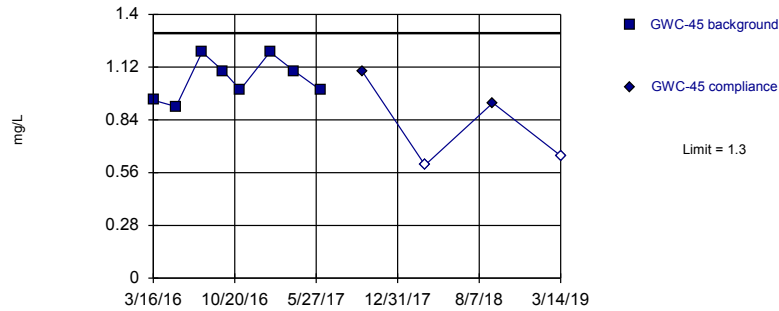


Background Data Summary: Mean=4.465, Std. Dev.=2.564, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8932, critical = 0.764. Kappa = 2.048 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

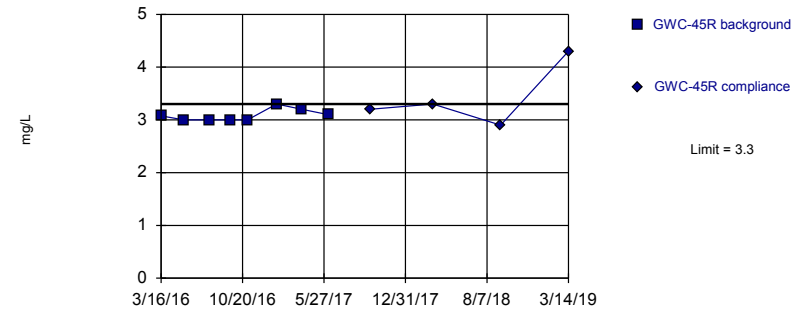


Background Data Summary: Mean=1.057, Std. Dev.=0.1104, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9141, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=3.085, Std. Dev.=0.1125, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.802, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

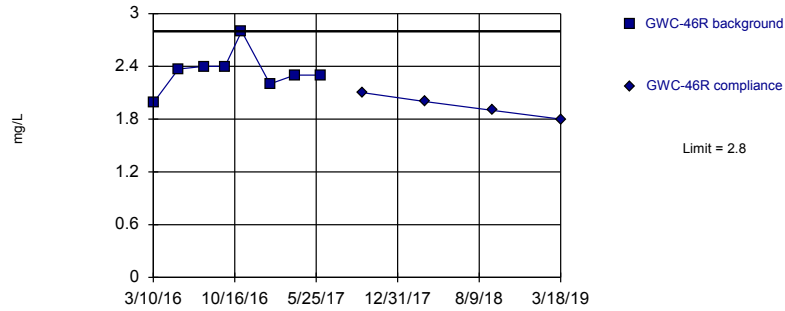
Prediction Limit

Constituent: Calcium, Chloride Analysis Run 8/28/2019 1:16 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z	GWC-49Z	GWC-44	GWC-44	GWC-45	GWC-45	GWC-45R	GWC-45R
3/16/2016			6.505		0.9445		3.0774	
3/17/2016	6.4							
5/16/2016			5.08		0.9104		3	
5/18/2016	4.63							
7/25/2016			1.2		1.2		3	
7/28/2016	2.25							
9/19/2016			1.9		1.1		3	
9/21/2016	1.86							
11/3/2016			2				3	
11/4/2016					1			
11/7/2016	1.65							
1/19/2017			2.6					
1/20/2017							3.3	
1/23/2017					1.2			
1/24/2017	1.62							
3/28/2017			5.7					
3/29/2017					1.1		3.2	
3/30/2017	1.27							
6/5/2017			7.8					
6/7/2017					1		3.1	
6/9/2017	1.18							
7/20/2017			7.4					
9/26/2017				3.7				
9/27/2017						1.1		3.2
9/29/2017		0.967						
3/15/2018		0.81		6.5		<1.2		3.3
9/12/2018				3.6				
9/13/2018						0.93		2.9
9/14/2018		0.7						
3/14/2019				6.4		<1.3		4.3
3/19/2019		1.1						

Within Limit

Prediction Limit
Intrawell Parametric

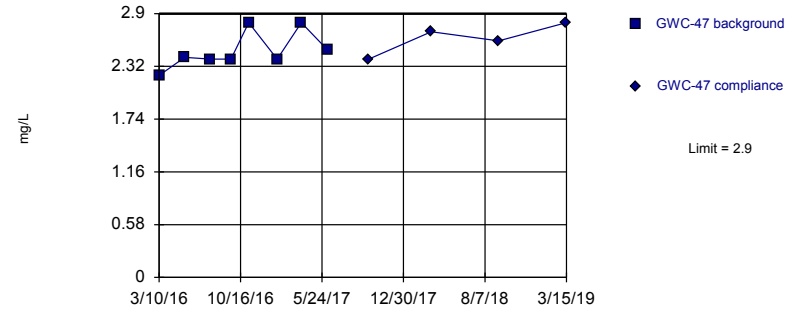


Background Data Summary: Mean=2.344, Std. Dev.=0.2292, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9064, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

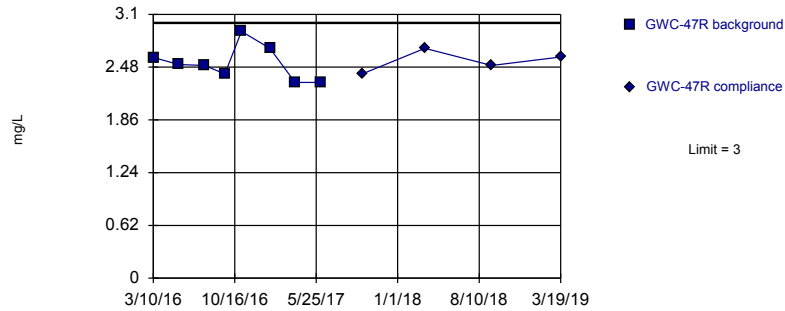


Background Data Summary: Mean=2.493, Std. Dev.=0.2049, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8359, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

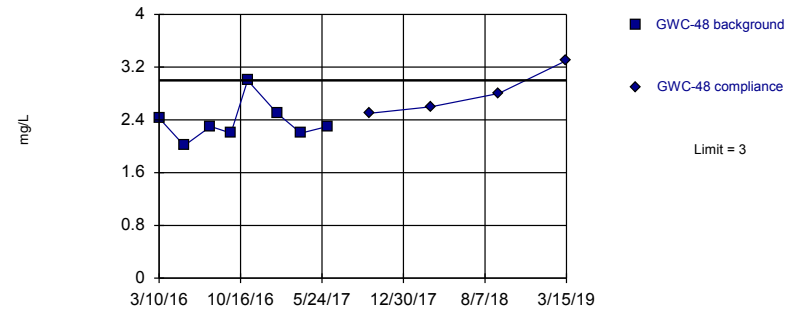


Background Data Summary: Mean=2.525, Std. Dev.=0.2048, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9349, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.367, Std. Dev.=0.2962, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8762, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

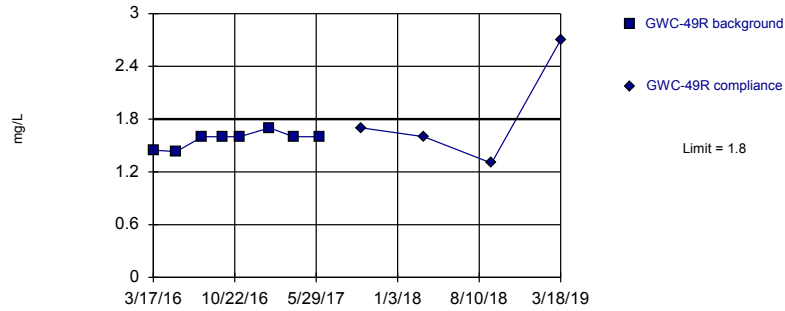
Prediction Limit

Constituent: Chloride Analysis Run 8/28/2019 1:16 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-46R	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-48
3/10/2016	1.9859		2.2206		2.5934		2.4266	
5/17/2016	2.37						2.01	
5/18/2016			2.42		2.51			
7/26/2016	2.4							
7/27/2016			2.4		2.5		2.3	
9/20/2016	2.4		2.4		2.4		2.2	
11/4/2016	2.8				2.9		3	
11/7/2016			2.8					
1/20/2017	2.2				2.7			
1/23/2017			2.4				2.5	
3/28/2017	2.3						2.2	
3/29/2017			2.8		2.3			
6/7/2017	2.3							
6/8/2017			2.5		2.3		2.3	
9/27/2017				2.4		2.4		
9/29/2017		2.1						2.5
3/15/2018		2		2.7				2.6
3/16/2018						2.7		
9/13/2018		1.9		2.6		2.5		2.8
3/15/2019				2.8				3.3
3/18/2019		1.8						
3/19/2019						2.6		

Exceeds Limit

Prediction Limit
Intrawell Parametric

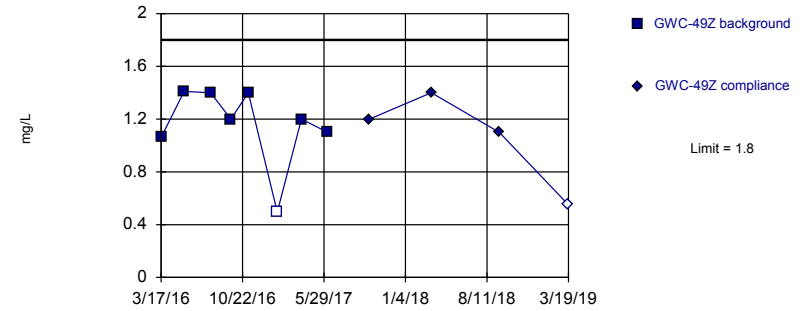


Background Data Summary: Mean=1.572, Std. Dev.=0.0894, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8005, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

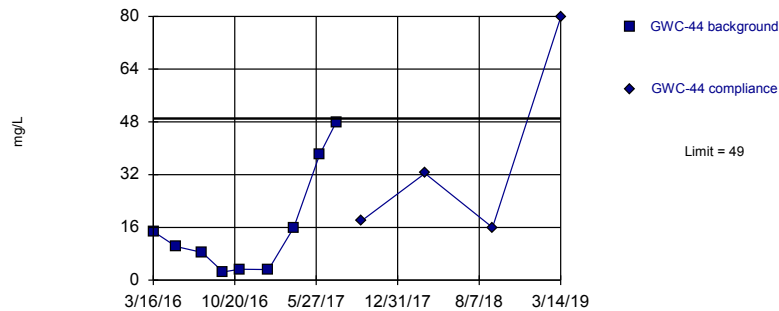


Background Data Summary: Mean=1.158, Std. Dev.=0.3015, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7987, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

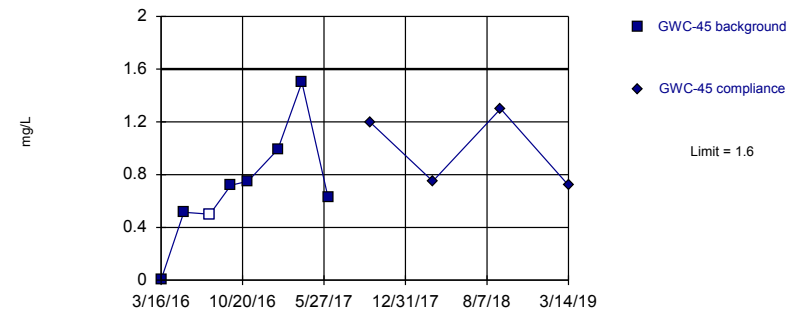


Background Data Summary: Mean=16.04, Std. Dev.=16.23, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8049, critical = 0.764. Kappa = 2.048 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.7012, Std. Dev.=0.4293, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9486, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

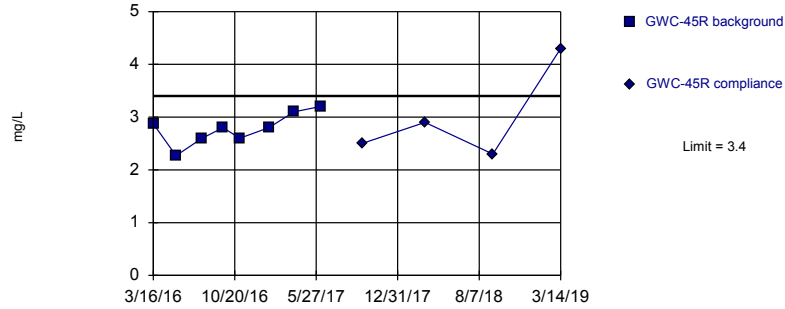
Prediction Limit

Constituent: Chloride, Sulfate Analysis Run 8/28/2019 1:16 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z	GWC-44	GWC-44	GWC-45	GWC-45
3/16/2016					14.7828		0.00424 (J)	
3/17/2016	1.4476		1.0624					
5/16/2016					10.2		0.5151 (J)	
5/18/2016	1.43		1.41					
7/25/2016					8.4		<1 (*)	
7/27/2016	1.6							
7/28/2016			1.4					
9/19/2016					2.5		0.72 (J)	
9/21/2016	1.6		1.2					
11/3/2016					3.3			
11/4/2016	1.6						0.75 (J)	
11/7/2016			1.4					
1/19/2017					3.2			
1/23/2017							0.99 (J)	
1/24/2017	1.7		<0.99 (*)					
3/28/2017					16 (J)			
3/29/2017	1.6						1.5	
3/30/2017			1.2					
6/5/2017					38			
6/7/2017							0.63 (J)	
6/8/2017	1.6							
6/9/2017			1.1					
7/20/2017					48			
9/26/2017						18		
9/27/2017								1.2
9/29/2017		1.7		1.2				
3/15/2018		1.6		1.4		32.4		0.75 (J)
9/12/2018						16		
9/13/2018		1.3						1.3
9/14/2018				1.1				
3/14/2019						79.7		0.72 (X)
3/18/2019		2.7						
3/19/2019				<1.1				

Exceeds Limit

Prediction Limit
Intrawell Parametric

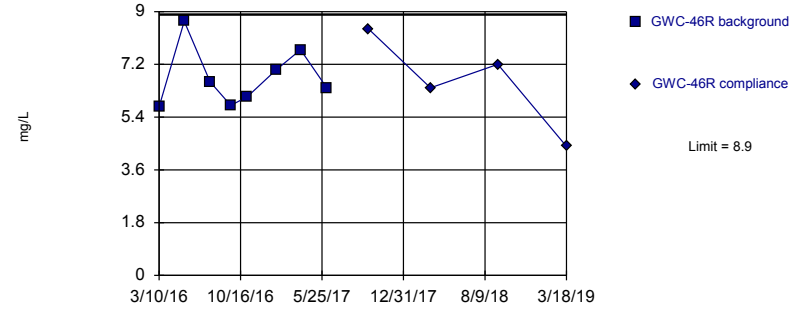


Background Data Summary: Mean=2.78, Std. Dev.=0.2959, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9634, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

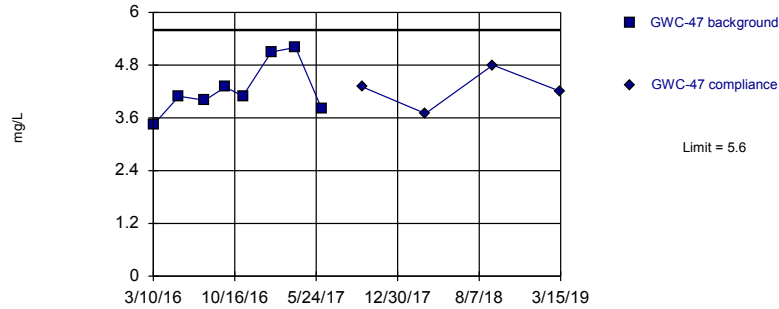


Background Data Summary: Mean=6.753, Std. Dev.=1.008, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9025, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

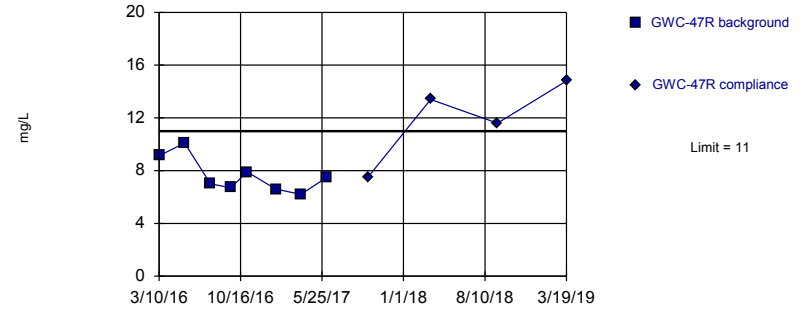


Background Data Summary: Mean=4.254, Std. Dev.=0.6089, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9006, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

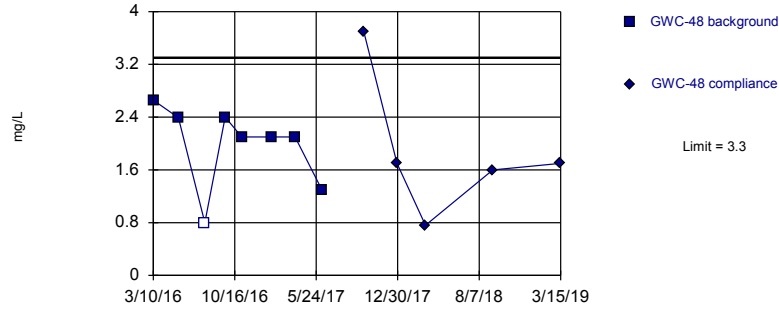


Background Data Summary: Mean=7.641, Std. Dev.=1.352, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9016, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

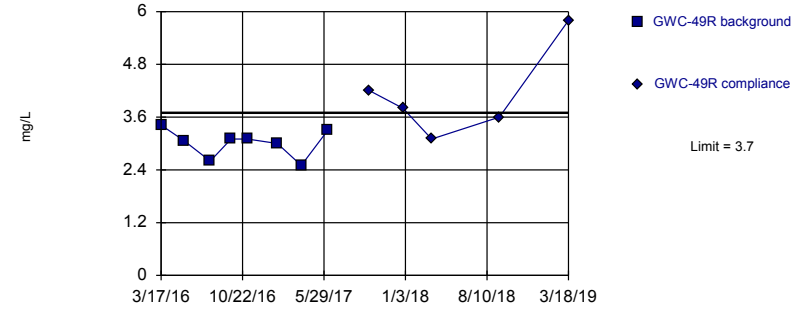


Background Data Summary: Mean=1.981, Std. Dev.=0.6211, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8582, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

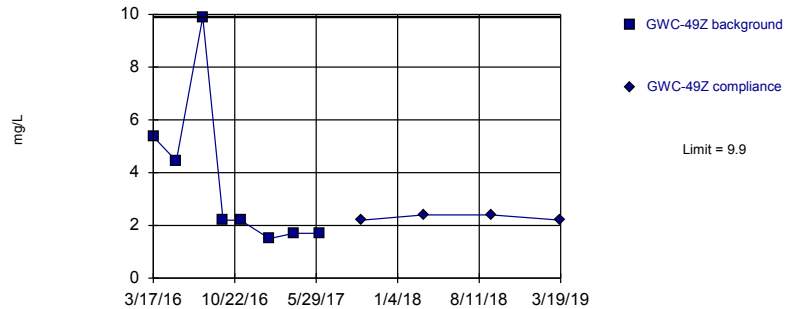


Background Data Summary: Mean=3.01, Std. Dev.=0.316, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9105, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

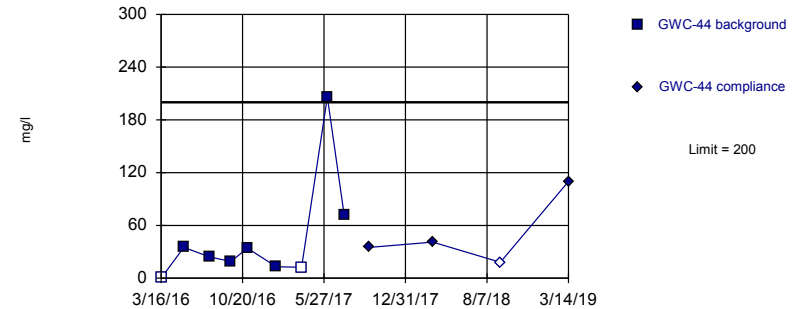


Background Data Summary: Mean=3.626, Std. Dev.=2.905, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7649, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=5.272, Std. Dev.=4.371, n=9, 22.22% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8944, critical = 0.764. Kappa = 2.048 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

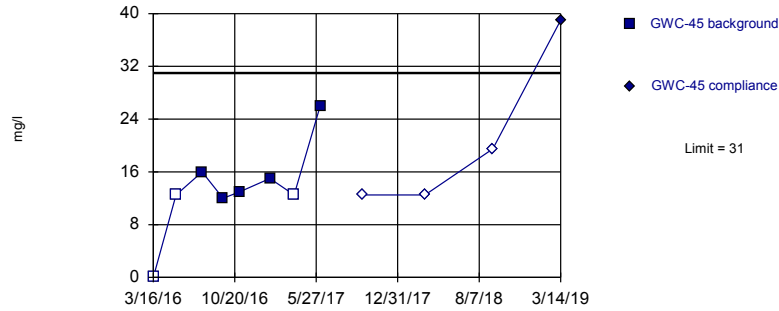
Constituent: Sulfate, Total Dissolved Solids Analysis Run 8/28/2019 1:16 PM View: cells9&10_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z	GWC-44	GWC-44
3/10/2016	2.6569							
3/16/2016							<0.01	
3/17/2016			3.4197		5.3658			
5/16/2016							35	
5/17/2016	2.39							
5/18/2016			3.06		4.44			
7/25/2016							24 (J)	
7/27/2016	<1.6 (*)		2.6					
7/28/2016					9.9			
9/19/2016							19 (J)	
9/20/2016	2.4							
9/21/2016			3.1		2.2			
11/3/2016							34	
11/4/2016	2.1		3.1					
11/7/2016					2.2			
1/19/2017							13 (J)	
1/23/2017	2.1							
1/24/2017			3		1.5			
3/28/2017	2.1						<25	
3/29/2017			2.5					
3/30/2017					1.7			
6/5/2017							206	
6/8/2017	1.3		3.3					
6/9/2017					1.7			
7/20/2017							72	
9/26/2017								35
9/29/2017		3.7		4.2		2.2		
12/28/2017		1.7 (Y)		3.8 (Y)				
3/15/2018		0.76 (J)		3.1		2.4		41
9/12/2018								<36
9/13/2018		1.6		3.6				
9/14/2018						2.4		
3/14/2019								110
3/15/2019		1.7						
3/18/2019				5.8				
3/19/2019						2.2		

Exceeds Limit

Prediction Limit
Intrawell Parametric

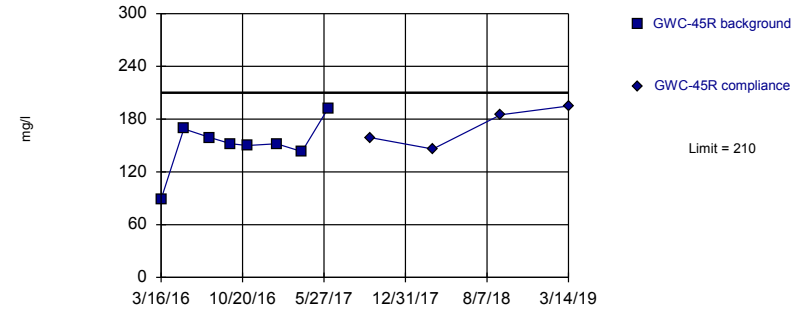


Background Data Summary (after Aitchison's Adjustment): Mean=10.25, Std. Dev.=9.483, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8681, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

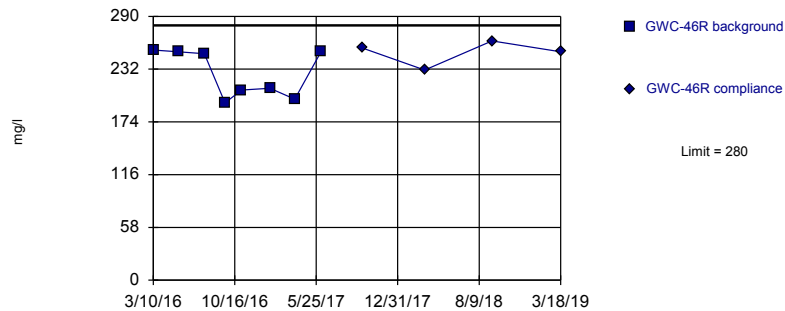


Background Data Summary: Mean=150.8, Std. Dev.=29.23, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8701, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

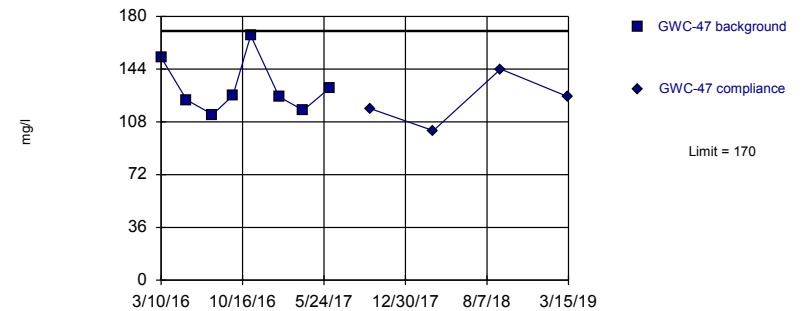


Background Data Summary: Mean=227.3, Std. Dev.=25.91, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.792, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=131.6, Std. Dev.=18.55, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8606, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

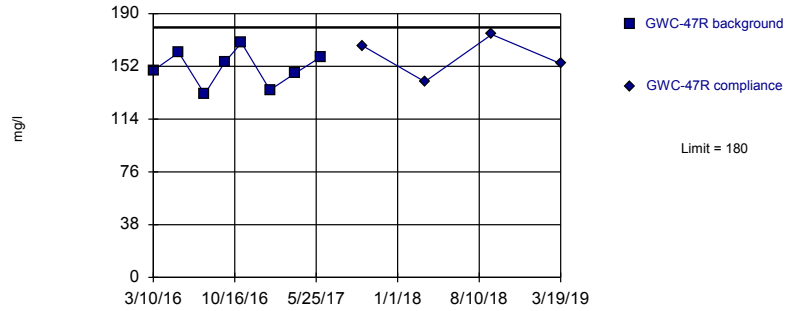
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:16 PM View: cells9&10_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-45	GWC-45	GWC-45R	GWC-45R	GWC-46R	GWC-46R	GWC-47	GWC-47
3/10/2016					253		152	
3/16/2016	<0.01		89					
5/16/2016	<25		169					
5/17/2016					251			
5/18/2016							123	
7/25/2016	16 (J)		159					
7/26/2016					249			
7/27/2016							113	
9/19/2016	12 (J)		152					
9/20/2016					195		126	
11/3/2016			150					
11/4/2016	13 (J)				209			
11/7/2016							167	
1/20/2017			152		211			
1/23/2017	15 (J)						125	
3/28/2017					199			
3/29/2017	<25		143				116	
6/7/2017	26		192		251			
6/8/2017							131	
9/27/2017		<25		159				117
9/29/2017						255		
3/15/2018		<25		146		231		102
9/13/2018		<39		185		263		144
3/14/2019		39 (X)		195				
3/15/2019								125
3/18/2019						251		

Within Limit

Prediction Limit
Intrawell Parametric

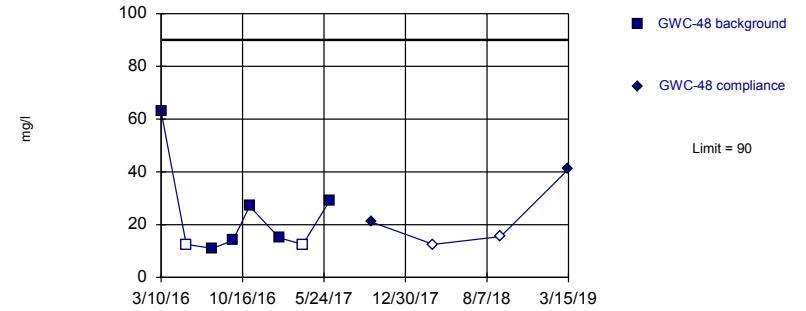


Background Data Summary: Mean=151, Std. Dev.=12.88, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9579, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

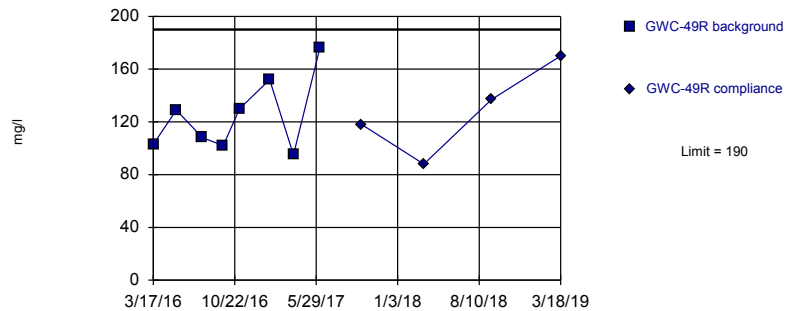


Background Data Summary (based on square root transformation) (after Aitchison's Adjustment): Mean=3.681, Std. Dev.=2.688, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7831, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

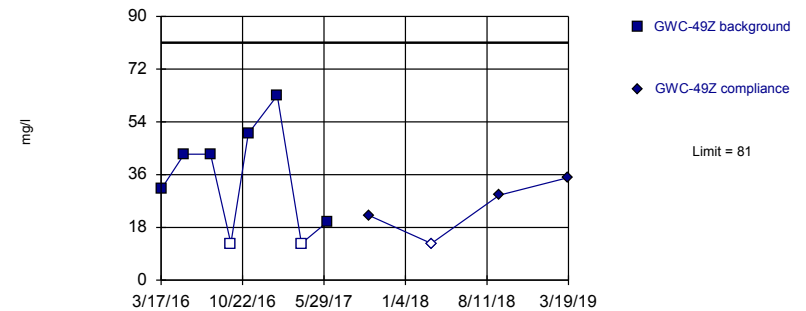


Background Data Summary: Mean=124.4, Std. Dev.=28.21, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8981, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (after Aitchison's Adjustment): Mean=31.25, Std. Dev.=23.04, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9296, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:13 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Total Dissolved Solids Analysis Run 8/28/2019 1:16 PM View: cells9&10_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z
3/10/2016	149		63					
3/17/2016					103		31	
5/17/2016			<25					
5/18/2016	162				129		43	
7/27/2016	132		11 (J)		108			
7/28/2016							43	
9/20/2016	155		14 (J)					
9/21/2016					102		<25	
11/4/2016	169		27		130			
11/7/2016							50	
1/20/2017	135							
1/23/2017			15 (J)					
1/24/2017					152		63	
3/28/2017			<25					
3/29/2017	147				95			
3/30/2017							<25	
6/8/2017	159		29		176			
6/9/2017							20 (J)	
9/27/2017		167						
9/29/2017				21 (J)		118		22 (J)
3/15/2018				<25		88		<25
3/16/2018		141						
9/13/2018		175		<31		137		
9/14/2018								29
3/15/2019				41				
3/18/2019						170		
3/19/2019		154						35

Trend Test - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 10:58 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	GWA-43 (bg)	-0.00682	-36	-35	Yes	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-43 (bg)	-4.155	-60	-35	Yes	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-42 (bg)	0.3456	39	35	Yes	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-43 (bg)	-0.3515	-56	-35	Yes	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-43 (bg)	-0.5018	-45	-31	Yes	11	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-43 (bg)	-20.2	-38	-35	Yes	12	25	n/a	n/a	0.02	NP

Trend Test - All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 10:58 AM

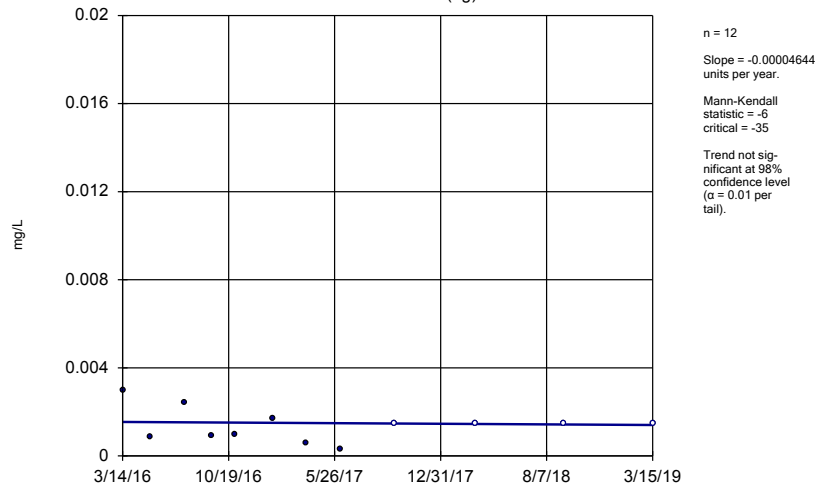
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Antimony (mg/L)	GWA-39Z (bg)	-0.00...	-6	-35	No	12	33.33	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-40 (bg)	0	-15	-35	No	12	91.67	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-41 (bg)	0	-11	-35	No	12	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-41R (bg)	0	-2	-35	No	12	75	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-42 (bg)	0	-19	-35	No	12	91.67	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-43 (bg)	0	-11	-35	No	12	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-43R (bg)	0	6	35	No	12	75	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-39R_3...	0.002367	25	35	No	12	16.67	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-39Z (bg)	0.005395	18	35	No	12	8.333	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-40 (bg)	-0.00...	-31	-31	No	11	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-41 (bg)	-0.00...	-24	-35	No	12	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-41R (bg)	0.003109	6	35	No	12	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-42 (bg)	0.000...	13	31	No	11	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-43 (bg)	-0.00682	-36	-35	Yes	12	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-43R (bg)	0.000...	10	31	No	11	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-39R_3...	0.001049	14	35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-39Z (bg)	10.19	34	35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-40 (bg)	0.8512	8	31	No	11	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-41 (bg)	1.53	11	31	No	11	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-41R (bg)	-1.696	-15	-35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-42 (bg)	0.8307	21	35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-43 (bg)	-4.155	-60	-35	Yes	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-43R (bg)	0.8701	19	39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-39R_3...	0.7842	10	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-39Z (bg)	-0.1351	-28	-35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-40 (bg)	0.487	31	39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-41 (bg)	0	-2	-35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-41R (bg)	-0.4173	-13	-35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-42 (bg)	0.3456	39	35	Yes	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-43 (bg)	0.03941	16	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-43R (bg)	0.2927	7	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-39R_3...	0.1517	11	35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-39Z (bg)	0.2602	30	39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-40 (bg)	-0.00...	-2	-44	No	14	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-41 (bg)	0.05563	9	31	No	11	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-41R (bg)	-0.1083	-34	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-42 (bg)	0.02938	23	35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-43 (bg)	-0.3515	-56	-35	Yes	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-43R (bg)	-0.03591	-18	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-39R_3...	-0.06547	-20	-44	No	14	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-39Z (bg)	-1.199	-30	-35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-40 (bg)	0.4519	30	39	No	13	7.692	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-41 (bg)	0.3437	9	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-41R (bg)	0.7468	10	35	No	12	8.333	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-42 (bg)	0.2575	34	35	No	12	8.333	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-43 (bg)	-0.5018	-45	-31	Yes	11	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-43R (bg)	0.2733	9	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-39R_3...	3.5	15	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-39Z (bg)	16.04	12	31	No	11	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-40 (bg)	13.09	26	35	No	12	0	n/a	n/a	0.02	NP

Trend Test - All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 10:58 AM

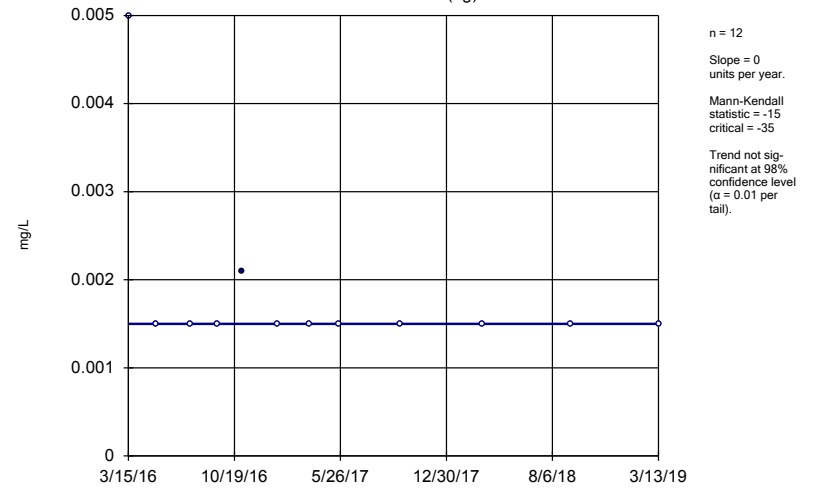
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/l)	GWA-41 (bg)	20.57	23	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-41R (bg)	6.121	9	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-42 (bg)	8.696	19	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-43 (bg)	-20.2	-38	-35	Yes	12	25	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-43R (bg)	3.298	10	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-39R_3...	-12.99	-8	-35	No	12	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-39Z (bg)	0	0	27	No	10	60	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-40 (bg)	0	-4	-31	No	11	90.91	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-41 (bg)	0	4	31	No	11	90.91	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-41R (bg)	0	3	27	No	10	80	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-42 (bg)	-0.00...	-9	-31	No	11	36.36	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-43 (bg)	0	-1	-27	No	10	50	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-43R (bg)	-0.00...	-21	-27	No	10	50	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-39R_3...	0	-5	-17	No	7	57.14	n/a	n/a	0.02	NP

Sen's Slope Estimator
GWA-39Z (bg)



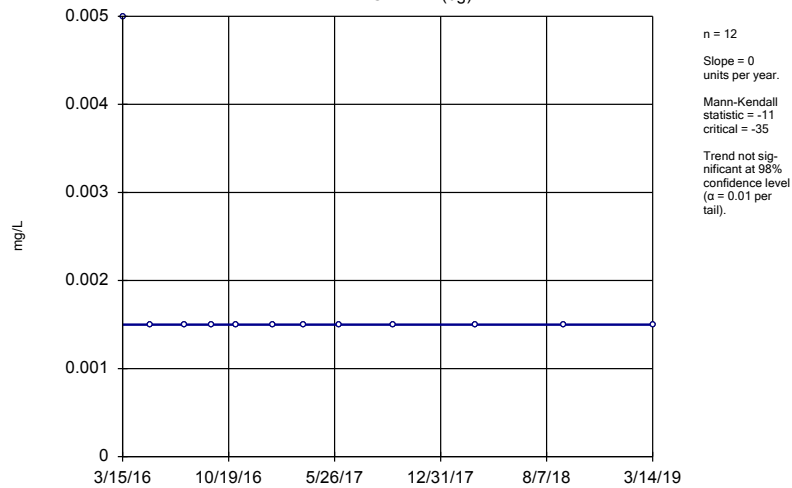
Constituent: Antimony Analysis Run 8/28/2019 10:55 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-40 (bg)



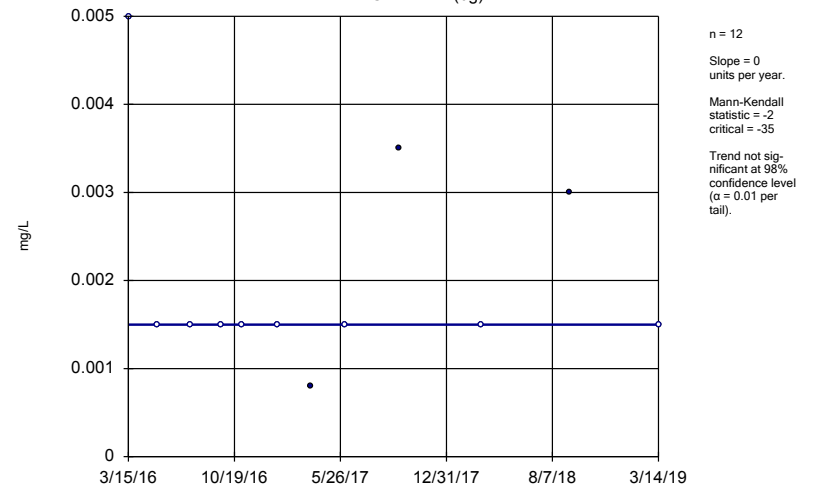
Constituent: Antimony Analysis Run 8/28/2019 10:55 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41 (bg)



Constituent: Antimony Analysis Run 8/28/2019 10:55 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41R (bg)



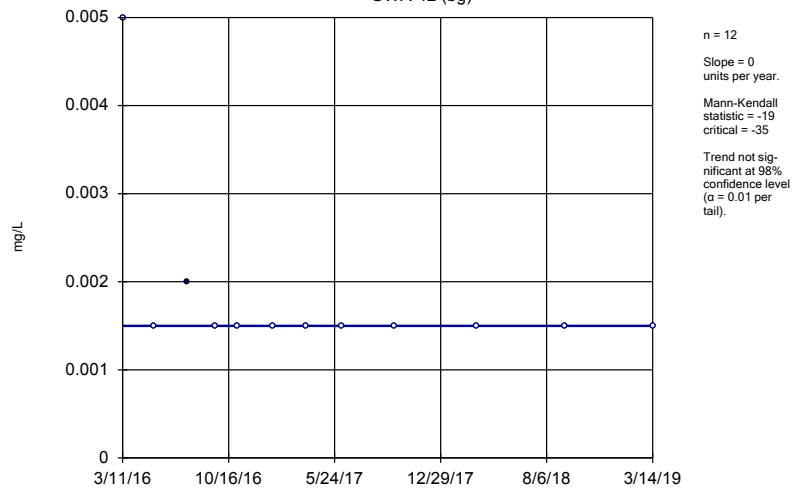
Constituent: Antimony Analysis Run 8/28/2019 10:55 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: Antimony Analysis Run 8/28/2019 10:58 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

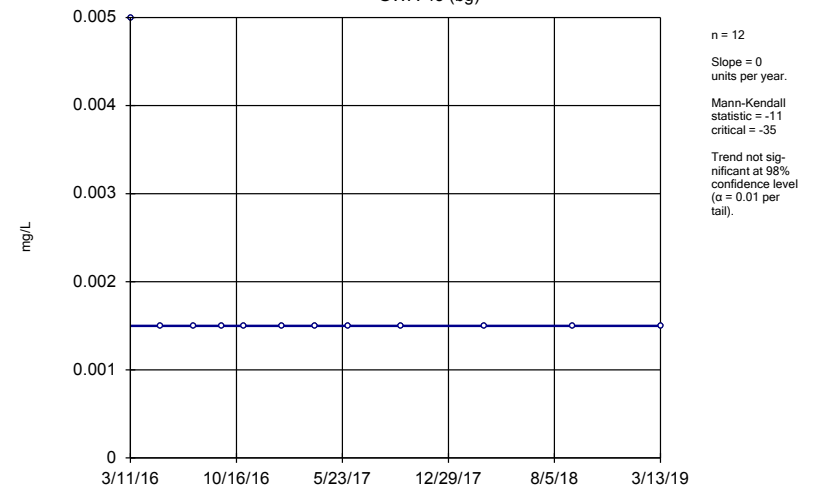
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	0.003			
3/15/2016		<0.01	<0.01	<0.01
5/11/2016	0.000839 (J)	<0.003		
5/12/2016			<0.003	
5/13/2016				<0.003
7/19/2016	0.0024 (J)			
7/20/2016			<0.003	
7/21/2016		<0.003		<0.003 (*)
9/15/2016	0.0009 (J)	<0.003	<0.003	
9/21/2016				<0.003
11/2/2016	0.001 (J)			
11/3/2016		0.0021 (J)	<0.003	<0.003
1/17/2017		<0.003		<0.003
1/18/2017	0.0017 (J)		<0.003	
3/24/2017		<0.003	<0.003	
3/27/2017				0.0008 (J)
3/28/2017	0.0006 (J)			
5/24/2017		<0.003		
6/6/2017			<0.003	<0.003
6/7/2017	0.0003 (J)			
9/25/2017			<0.003	0.0035
9/26/2017	<0.003	<0.003		
3/14/2018	<0.003	<0.003	<0.003	<0.003
9/12/2018	<0.003	<0.003	<0.003	0.003
3/13/2019		<0.003		
3/14/2019			<0.003	<0.003
3/15/2019	<0.003			

Sen's Slope Estimator
GWA-42 (bg)



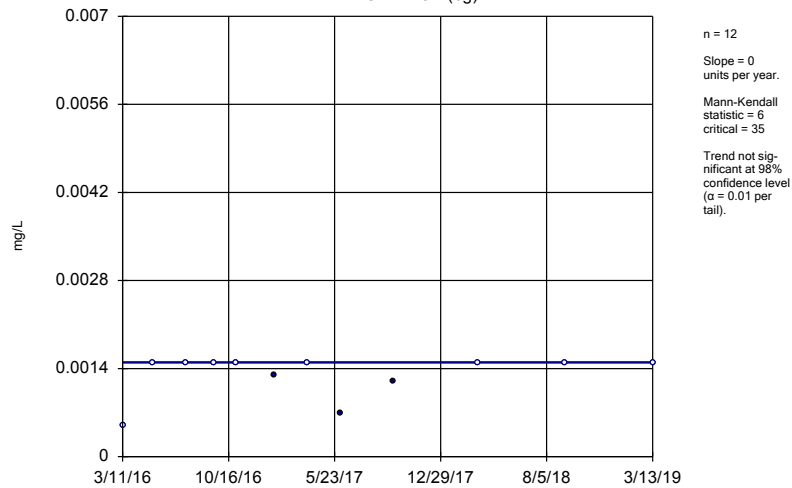
Constituent: Antimony Analysis Run 8/28/2019 10:55 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43 (bg)



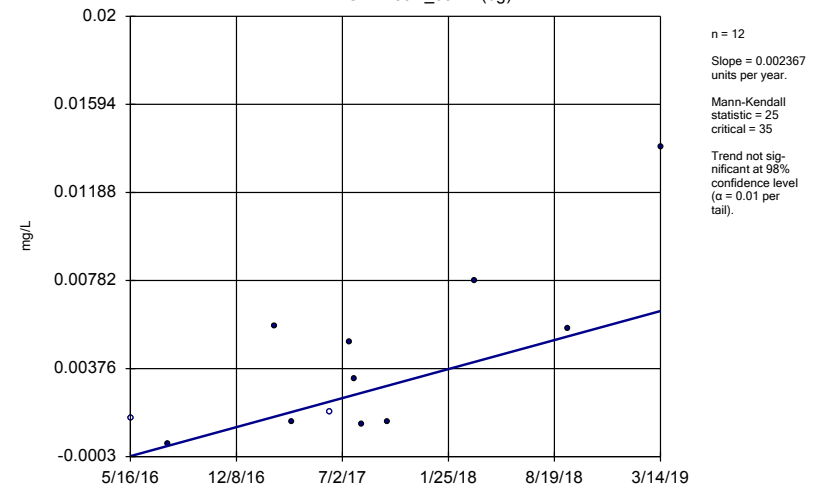
Constituent: Antimony Analysis Run 8/28/2019 10:55 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43R (bg)



Constituent: Antimony Analysis Run 8/28/2019 10:55 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-39R_39RZ (bg)

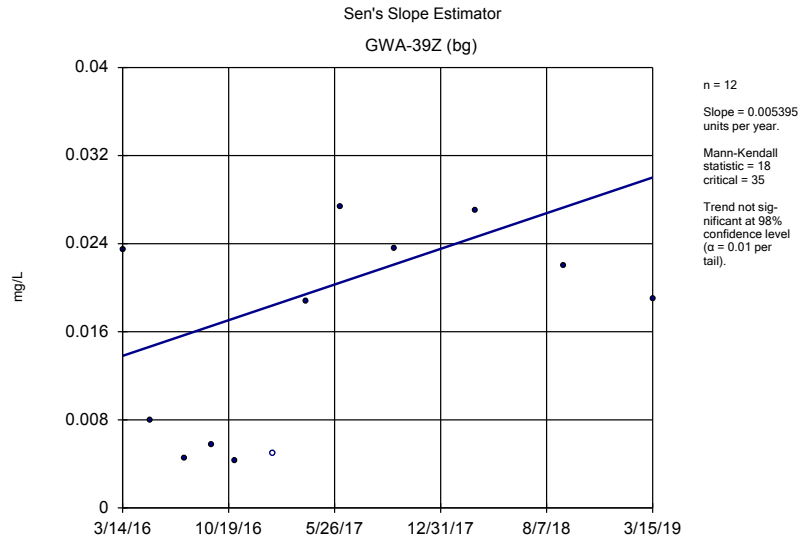


Constituent: Antimony Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

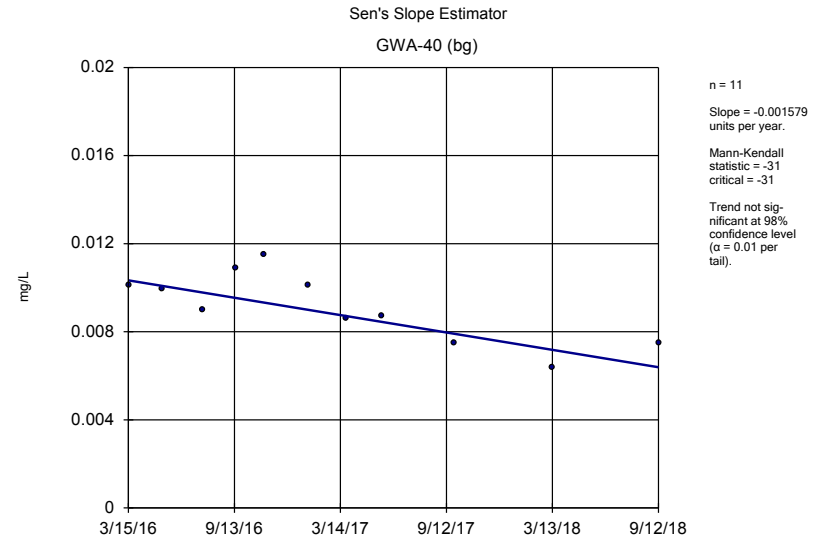
Sen's Slope Estimator

Constituent: Antimony Analysis Run 8/28/2019 10:58 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

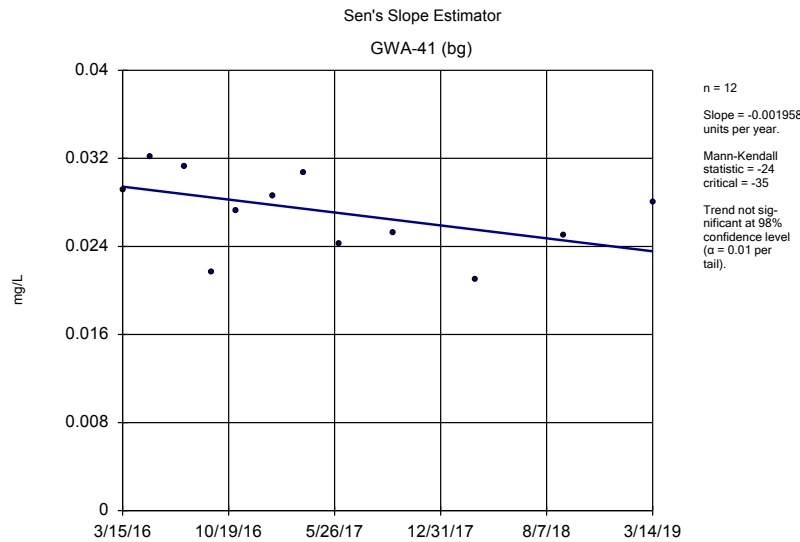
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
3/11/2016	<0.01	<0.01	<0.001	
5/13/2016		<0.003	<0.003	
5/16/2016	<0.003			<0.003 (D)
7/19/2016		<0.003 (*)	<0.003	
7/22/2016	0.002 (J)			
7/27/2016				0.0003 (JD)
9/16/2016		<0.003	<0.003	
9/19/2016	<0.003			
11/2/2016		<0.003	<0.003	
11/3/2016	<0.003			
1/17/2017	<0.003			
1/18/2017		<0.003	0.0013 (J)	
2/21/2017				0.0057
3/27/2017	<0.003			0.0013 (JD)
3/28/2017		<0.003	<0.003	
6/6/2017		<0.003	0.0007 (J)	
6/7/2017	<0.003			
6/8/2017				<0.0035 (*)
7/17/2017				0.005 (D)
7/27/2017				0.0033
8/9/2017				0.0012 (J)
9/22/2017		<0.003	0.0012 (J)	
9/26/2017	<0.003			
9/29/2017				0.0013 (JD)
3/14/2018	<0.003	<0.003		
3/15/2018			<0.003	
3/16/2018				0.0078
9/12/2018		<0.003	<0.003	
9/14/2018	<0.003			0.0056
3/13/2019		<0.003	<0.003	
3/14/2019	<0.003			0.014



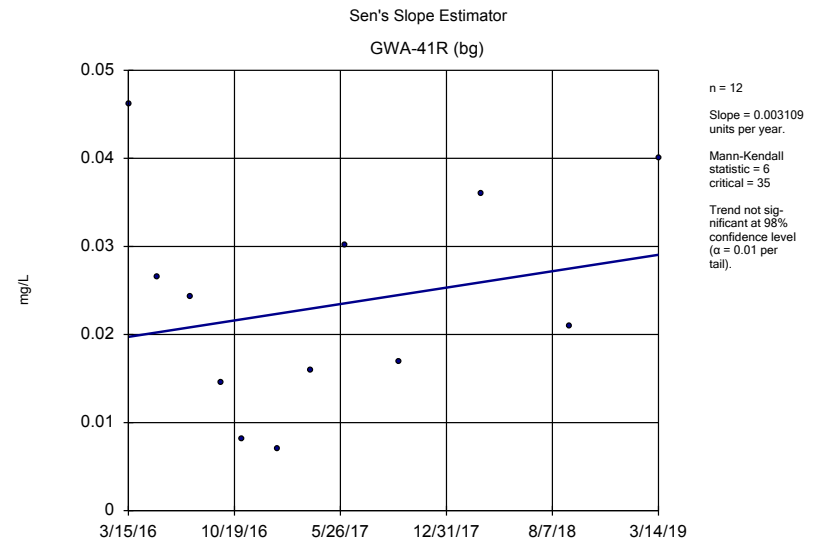
Constituent: Barium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

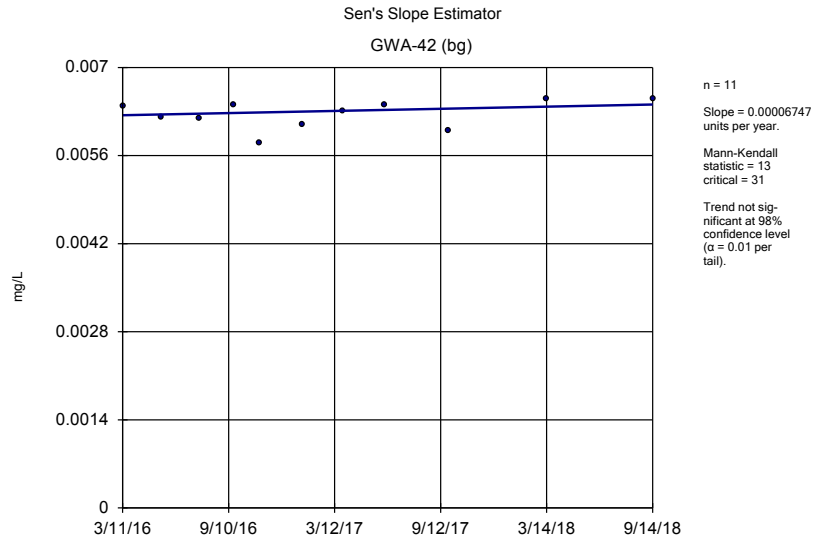


Constituent: Barium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

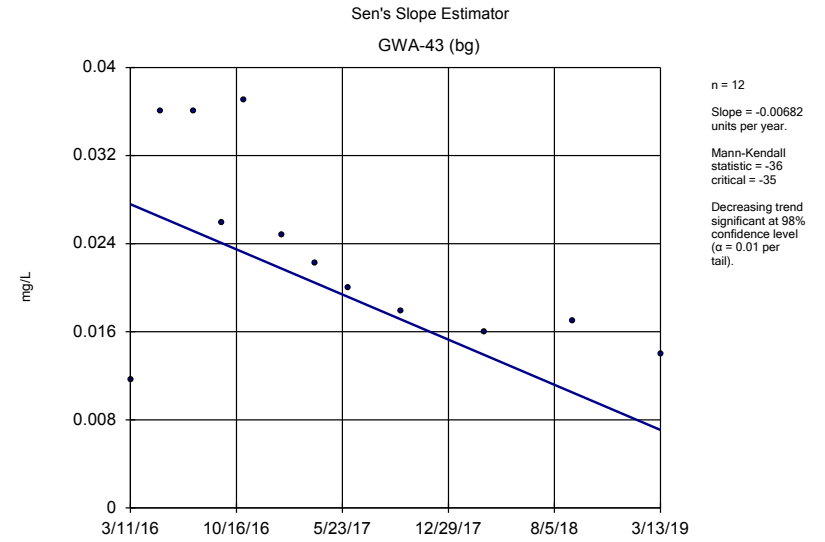
Sen's Slope Estimator

Constituent: Barium Analysis Run 8/28/2019 10:58 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

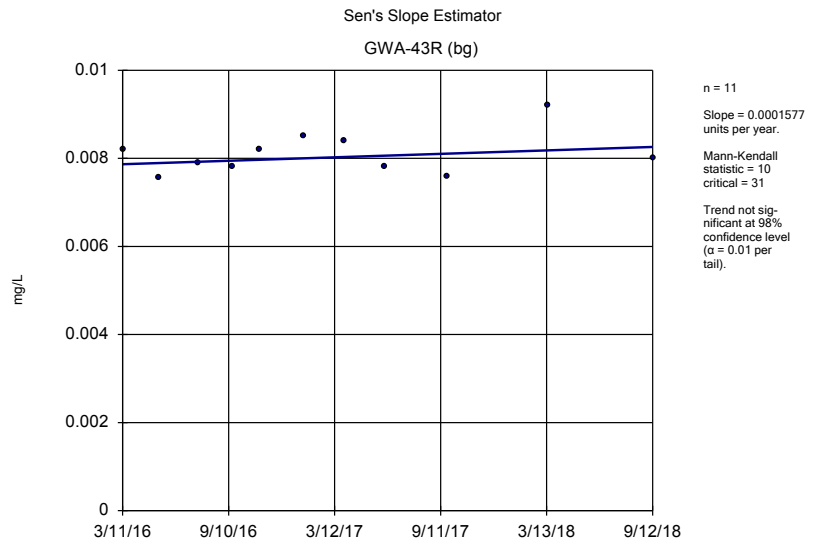
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	0.0234			
3/15/2016		0.0101	0.0291	0.0462
5/11/2016	0.00793 (J)	0.00992 (J)		
5/12/2016			0.0322	
5/13/2016				0.0265
7/19/2016	0.0045 (J)			
7/20/2016			0.0313	
7/21/2016		0.009 (J)		0.0243
9/15/2016	0.0057 (J)	0.0109	0.0217	
9/21/2016				0.0145
11/2/2016	0.0043 (J)			
11/3/2016		0.0115	0.0272	0.0082 (J)
1/17/2017		0.0101		0.007 (J)
1/18/2017	<0.01 (*)		0.0286 (J)	
3/24/2017		0.0086 (J)	0.0307	
3/27/2017				0.016
3/28/2017	0.0188			
5/24/2017		0.0087 (J)		
6/6/2017			0.0242	0.0301
6/7/2017	0.0273			
9/25/2017			0.0252	0.0169
9/26/2017	0.0236	0.0075 (J)		
3/14/2018	0.027	0.0064 (J)	0.021	0.036
9/12/2018	0.022	0.0075 (J)	0.025	0.021
3/14/2019			0.028	0.04
3/15/2019	0.019			



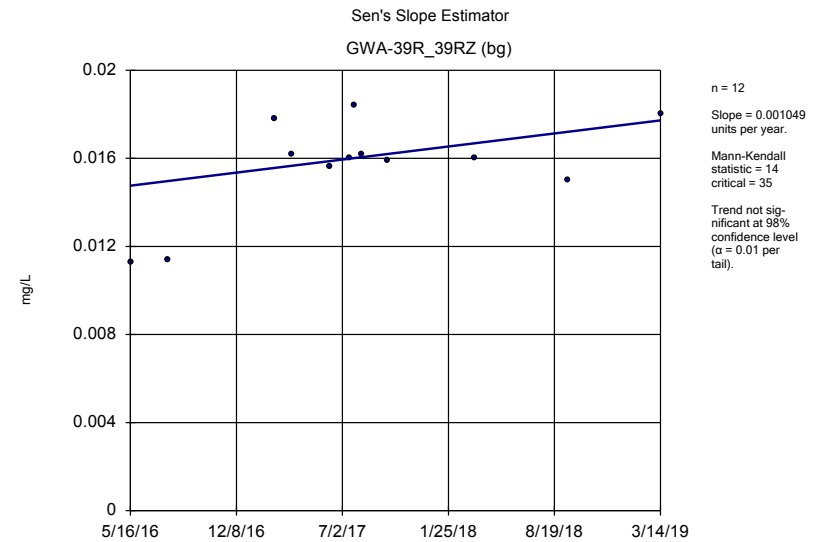
Constituent: Barium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



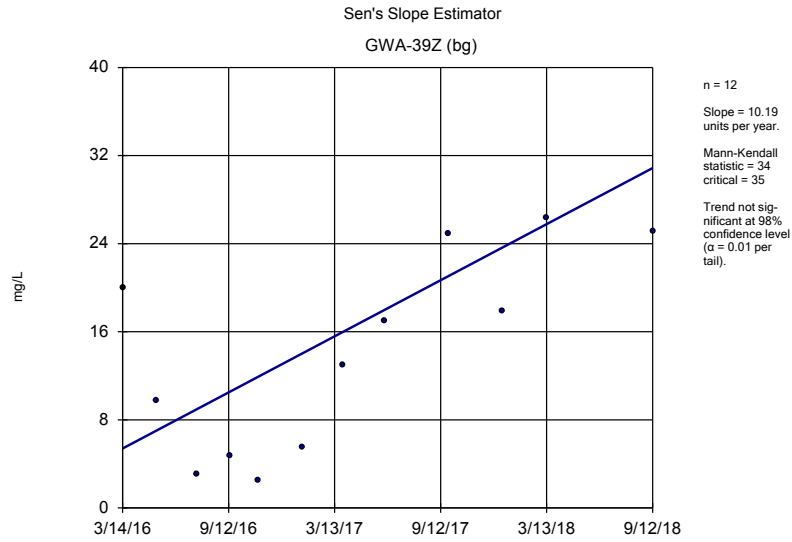
Constituent: Barium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

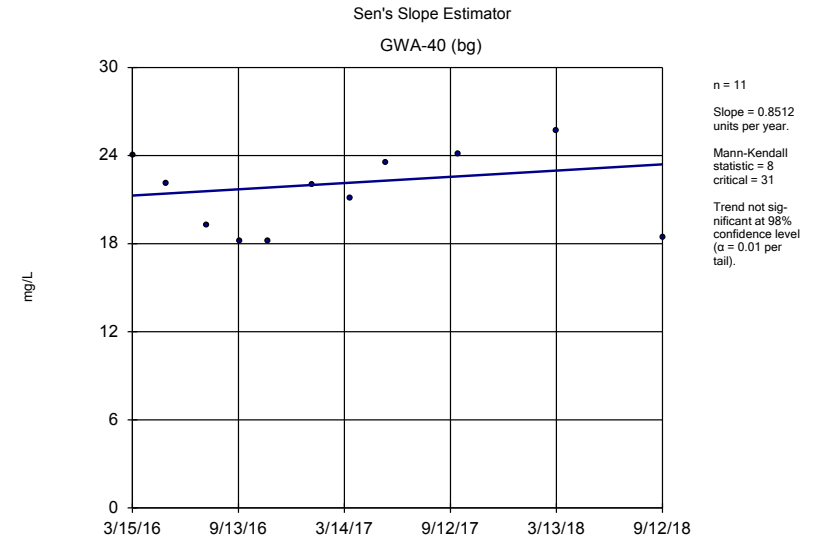
Constituent: Barium Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

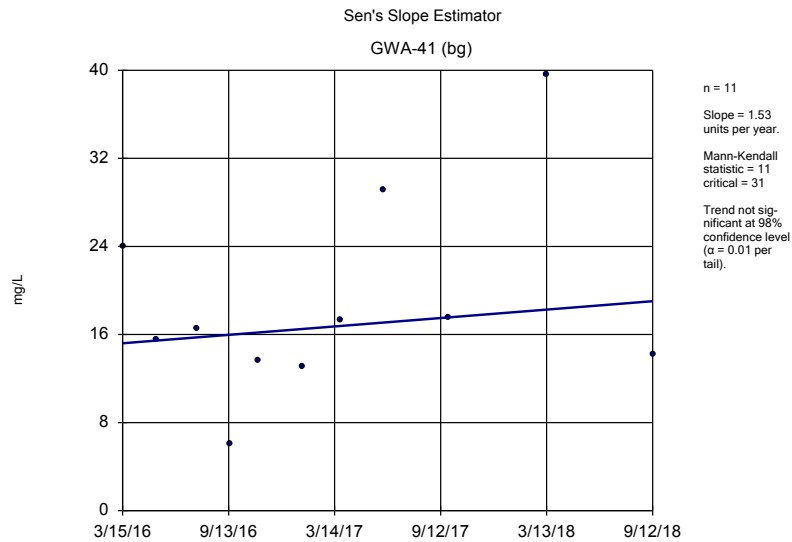
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
3/11/2016	0.00639 (J)	0.0116	0.00819 (J)	
5/13/2016		0.0361	0.00756 (J)	
5/16/2016	0.00622 (J)			0.0113 (D)
7/19/2016		0.036	0.0079 (J)	
7/22/2016	0.0062 (J)			
7/27/2016				0.0114 (D)
9/16/2016		0.0259	0.0078 (J)	
9/19/2016	0.0064 (J)			
11/2/2016		0.037	0.0082 (J)	
11/3/2016	0.0058 (J)			
1/17/2017	0.0061 (J)			
1/18/2017		0.0248	0.0085 (J)	
2/21/2017				0.0178
3/27/2017	0.0063 (J)			0.0162 (D)
3/28/2017		0.0222	0.0084 (J)	
6/6/2017		0.02	0.0078 (J)	
6/7/2017	0.0064 (J)			
6/8/2017				0.0156 (D)
7/17/2017				0.016 (D)
7/27/2017				0.0184
8/9/2017				0.0162
9/22/2017		0.0179	0.0076 (J)	
9/26/2017	0.006 (J)			
9/29/2017				0.0159 (D)
3/14/2018	0.0065 (J)	0.016		
3/15/2018			0.0092 (J)	
3/16/2018				0.016
9/12/2018		0.017	0.008 (J)	
9/14/2018	0.0065 (J)			0.015
3/13/2019		0.014		
3/14/2019				0.018



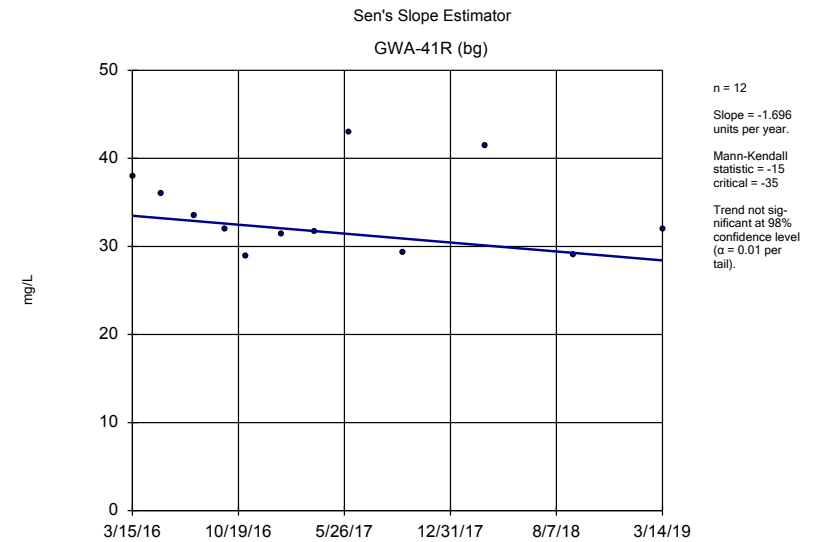
Constituent: Calcium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



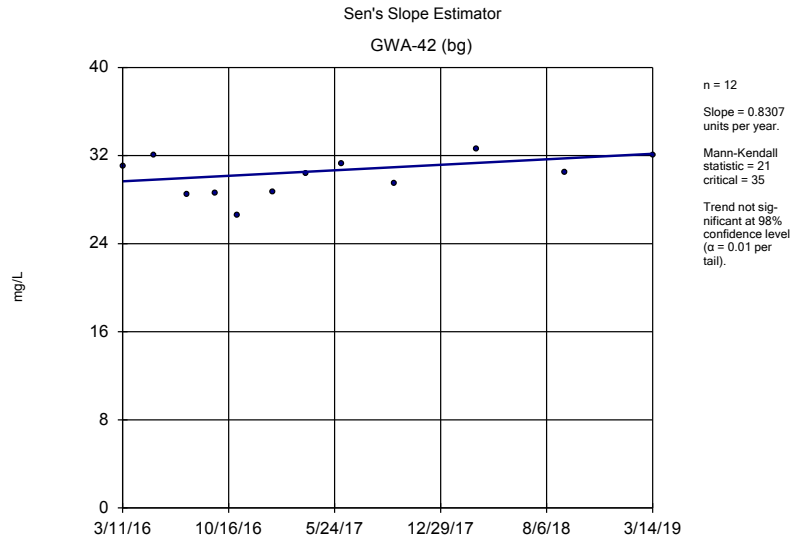
Constituent: Calcium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

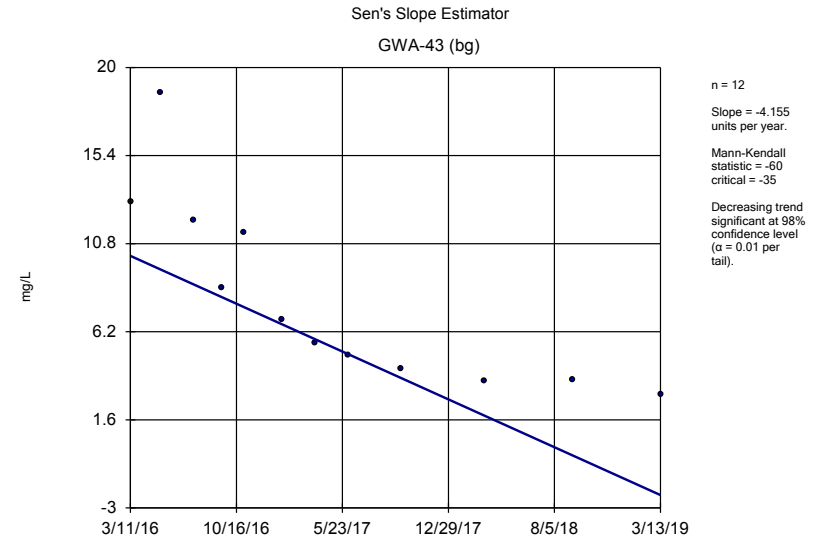
Constituent: Calcium Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

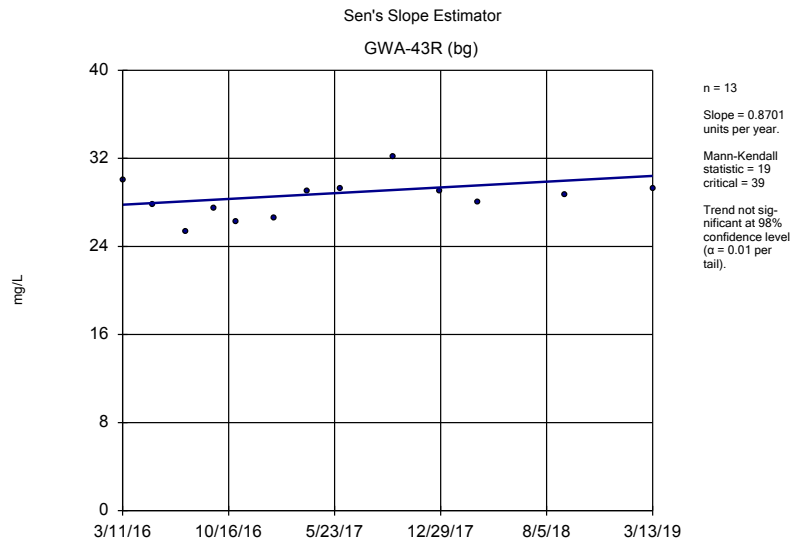
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	20			
3/15/2016		24	24	38
5/11/2016	9.76	22.1		
5/12/2016			15.5	
5/13/2016				36
7/19/2016	3.04			
7/20/2016			16.5	
7/21/2016		19.3		33.5
9/15/2016	4.78	18.2	6.1	
9/21/2016				31.9
11/2/2016	2.46			
11/3/2016		18.2	13.7	28.9
1/17/2017		22		31.4
1/18/2017	5.46		13.1	
3/24/2017		21.1	17.3	
3/27/2017				31.7
3/28/2017	13			
5/24/2017		23.5		
6/6/2017			29.1	42.9
6/7/2017	17			
9/25/2017			17.6	29.3
9/26/2017	24.9	24.1		
12/28/2017	17.9 (Y)			
3/14/2018	26.4	25.7	39.6	41.4
9/12/2018	25.1	18.4 (J)	14.2 (J)	29
3/14/2019				31.9



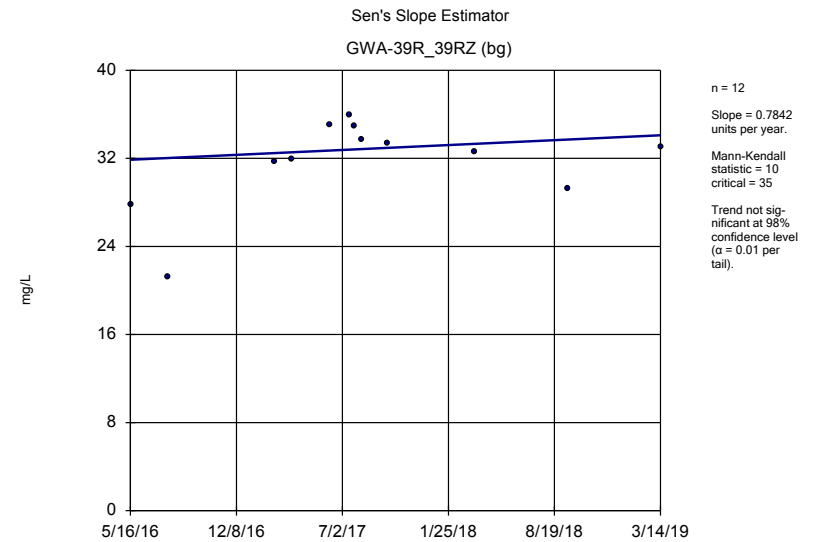
Constituent: Calcium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Calcium Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

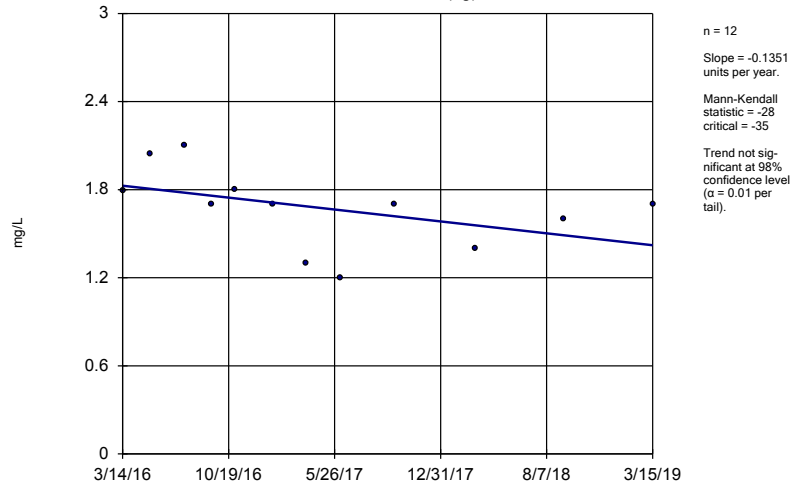
Sen's Slope Estimator

Constituent: Calcium Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

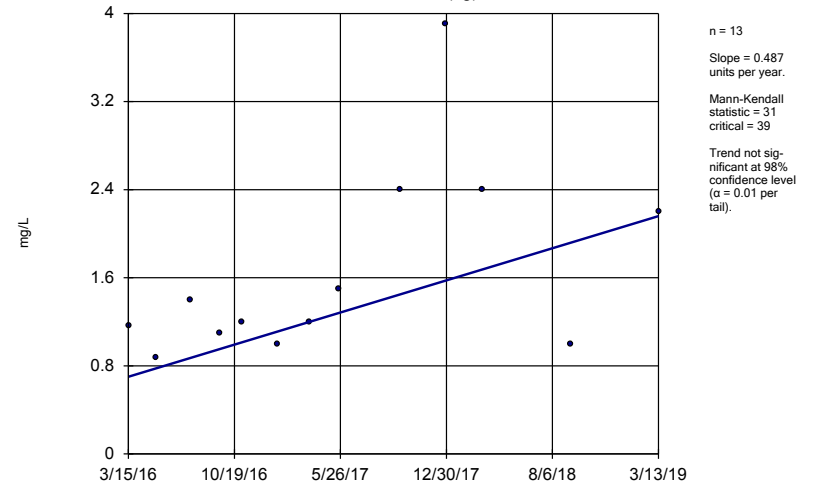
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
3/11/2016	31	13	30	
5/13/2016		18.7	27.8	
5/16/2016	32			27.8 (D)
7/19/2016		12	25.3	
7/22/2016	28.5			
7/27/2016				21.2 (D)
9/16/2016		8.48	27.5	
9/19/2016	28.6			
11/2/2016		11.4	26.2	
11/3/2016	26.6			
1/17/2017	28.7			
1/18/2017		6.81	26.6	
2/21/2017				31.7 (D)
3/27/2017	30.4			31.9 (D)
3/28/2017		5.61	29	
6/6/2017		4.99	29.3	
6/7/2017	31.3			
6/8/2017				35 (D)
7/17/2017				35.9 (D)
7/27/2017				34.9 (D)
8/9/2017				33.7 (D)
9/22/2017		4.24	32.2	
9/26/2017	29.5			
9/29/2017				33.4 (D)
12/28/2017			29 (Y)	
3/14/2018	32.6	3.6		
3/15/2018			28	
3/16/2018				32.6
9/12/2018		3.7	28.7	
9/14/2018	30.5			29.2
3/13/2019		2.9	29.2	
3/14/2019	32			33

Sen's Slope Estimator
GWA-39Z (bg)



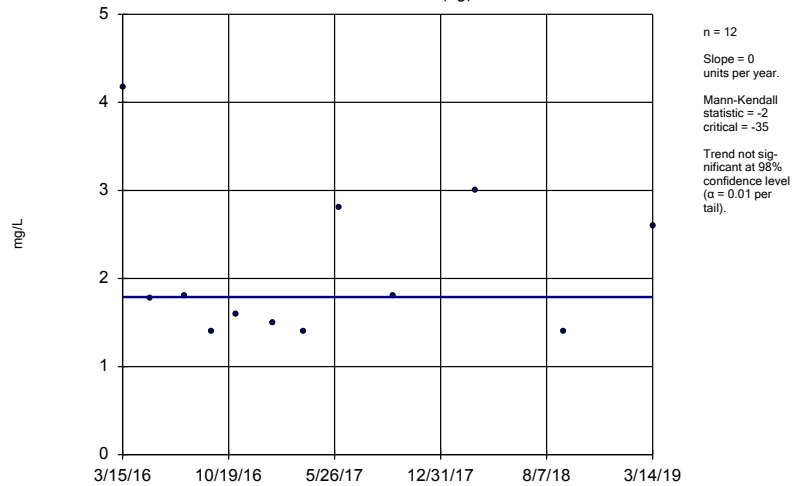
Constituent: Chloride Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-40 (bg)



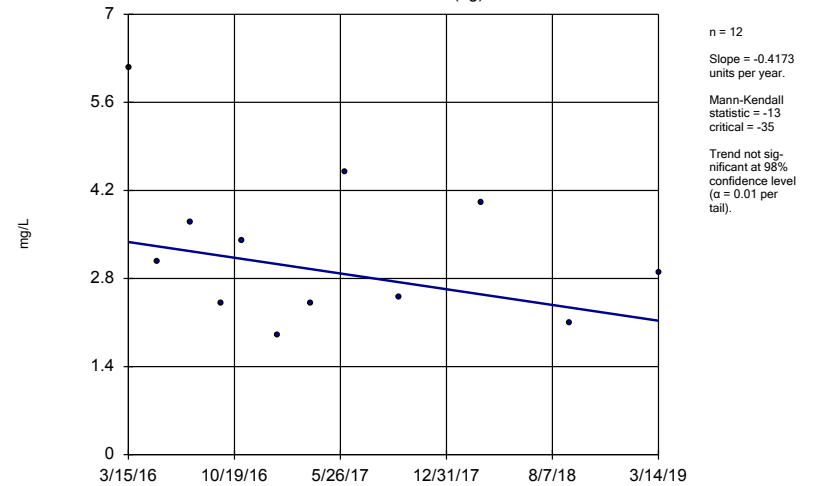
Constituent: Chloride Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41 (bg)



Constituent: Chloride Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41R (bg)



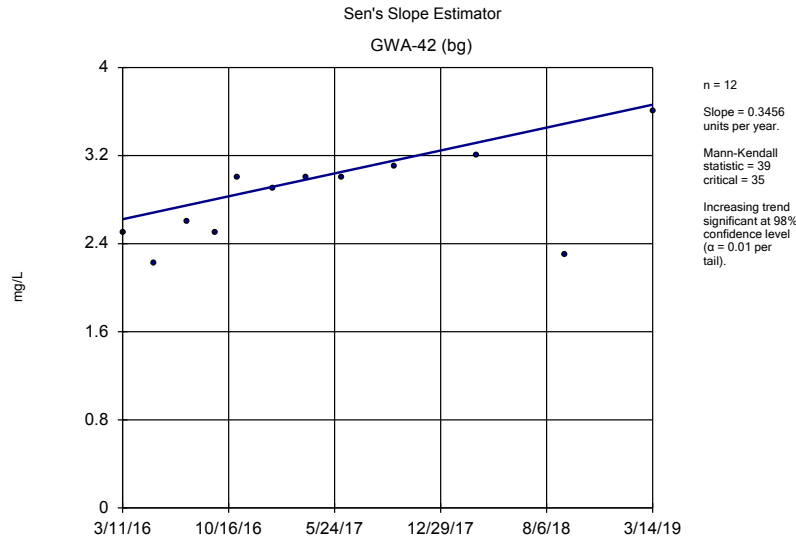
Constituent: Chloride Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

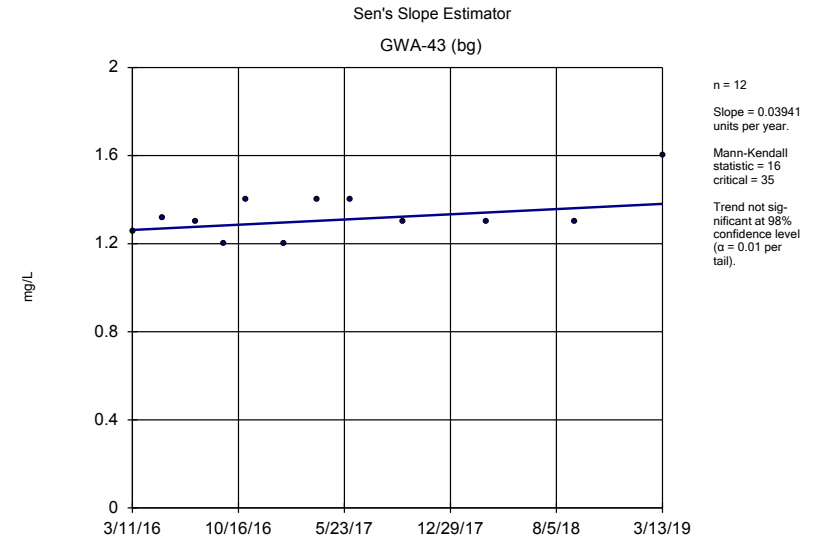
Constituent: Chloride Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

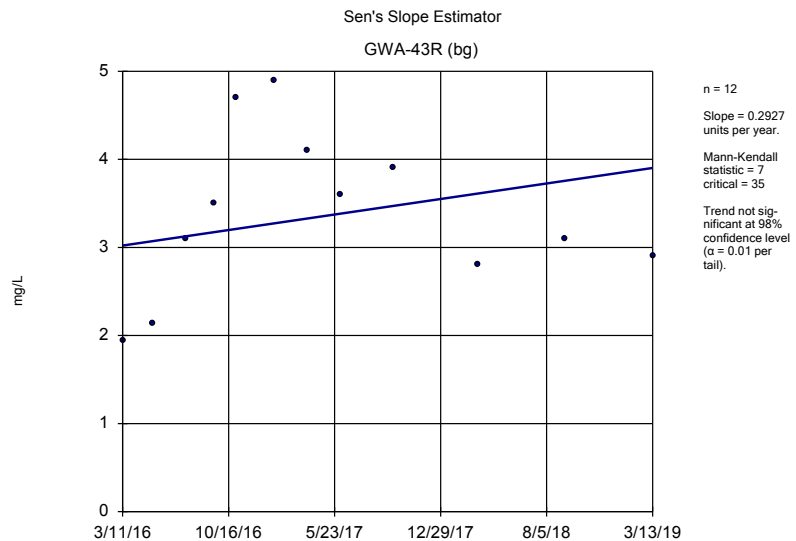
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	1.795			
3/15/2016		1.1671	4.1666	6.1465
5/11/2016	2.04	0.8763		
5/12/2016			1.78	
5/13/2016				3.08
7/19/2016	2.1			
7/20/2016			1.8	
7/21/2016		1.4		3.7
9/15/2016	1.7		1.4	
9/19/2016		1.1		
9/21/2016				2.4
11/2/2016	1.8			
11/3/2016		1.2	1.6	3.4
1/17/2017		1		1.9
1/18/2017	1.7		1.5	
3/24/2017		1.2	1.4	
3/27/2017				2.4
3/28/2017	1.3			
5/24/2017		1.5		
6/6/2017			2.8	4.5
6/7/2017	1.2			
9/25/2017			1.8	2.5
9/26/2017	1.7	2.4		
12/28/2017		3.9 (Y)		
3/14/2018	1.4	2.4	3	4 (J)
9/12/2018	1.6	1	1.4	2.1
3/13/2019		2.2		
3/14/2019			2.6	2.9
3/15/2019	1.7			



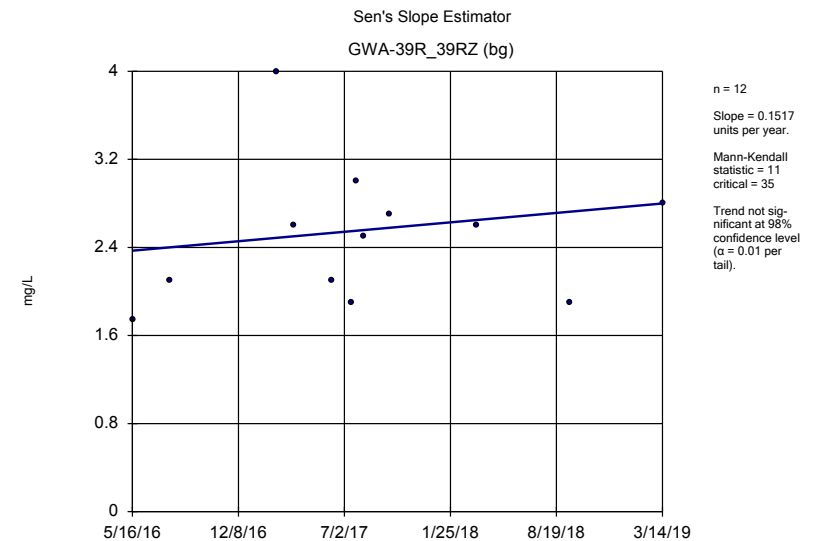
Constituent: Chloride Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Chloride Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Chloride Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Chloride Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

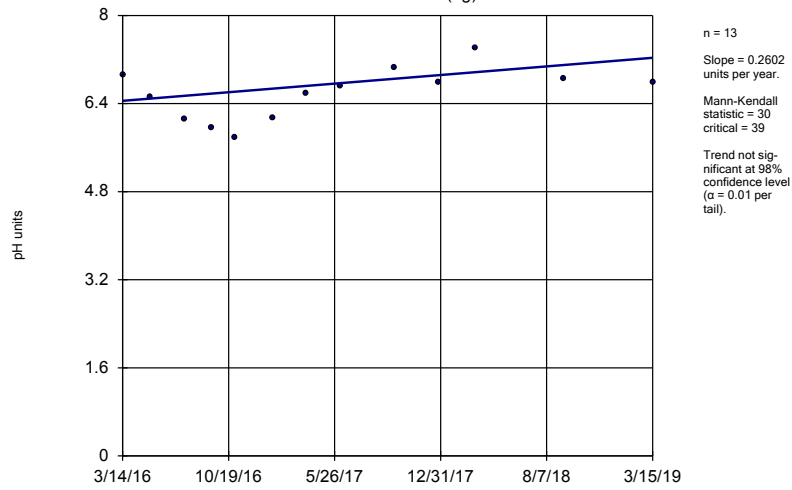
Sen's Slope Estimator

Constituent: Chloride Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

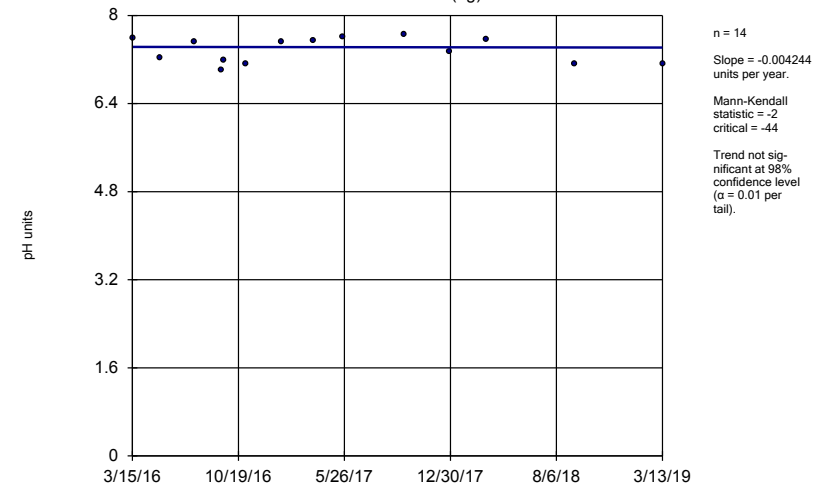
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
3/11/2016	2.4984	1.2562	1.9467	
5/13/2016		1.32	2.14	
5/16/2016	2.22			1.74 (D)
7/19/2016		1.3	3.1	
7/22/2016	2.6			
7/27/2016				2.1 (D)
9/16/2016		1.2	3.5	
9/19/2016	2.5			
11/2/2016		1.4	4.7	
11/3/2016	3			
1/17/2017	2.9			
1/18/2017		1.2	4.9	
2/21/2017				4 (D)
3/27/2017	3			2.6 (D)
3/28/2017		1.4	4.1	
6/6/2017		1.4	3.6	
6/7/2017	3			
6/8/2017				2.1 (D)
7/17/2017				1.9 (D)
7/27/2017				3 (D)
8/9/2017				2.5 (D)
9/22/2017		1.3	3.9	
9/26/2017	3.1			
9/29/2017				2.7 (D)
3/14/2018	3.2	1.3		
3/15/2018			2.8	
3/16/2018				2.6
9/12/2018		1.3	3.1	
9/14/2018	2.3			1.9
3/13/2019		1.6	2.9	
3/14/2019	3.6			2.8

Sen's Slope Estimator
GWA-39Z (bg)



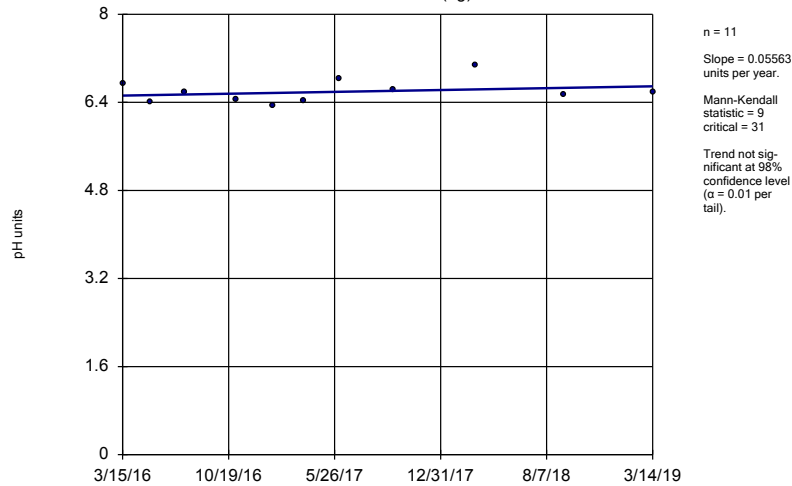
Constituent: pH Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-40 (bg)



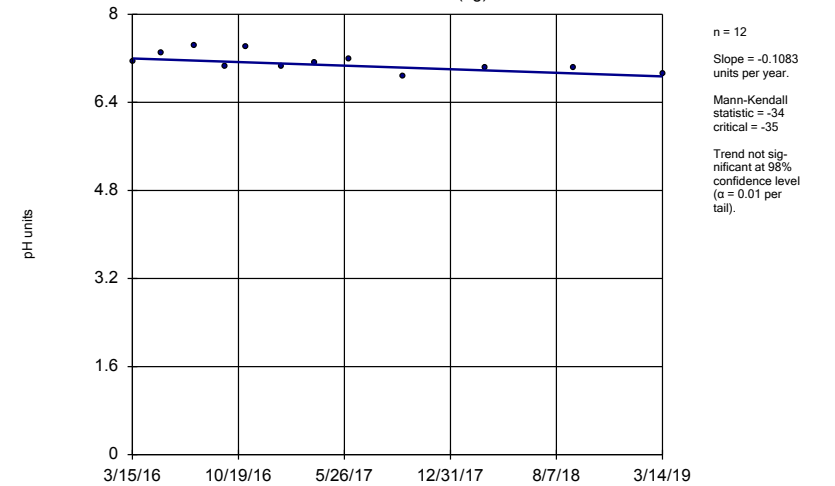
Constituent: pH Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41 (bg)



Constituent: pH Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41R (bg)



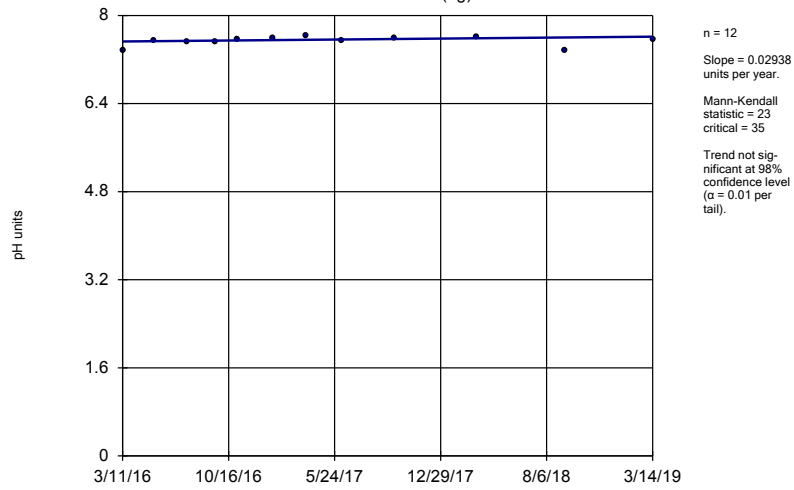
Constituent: pH Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: pH Analysis Run 8/28/2019 10:58 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

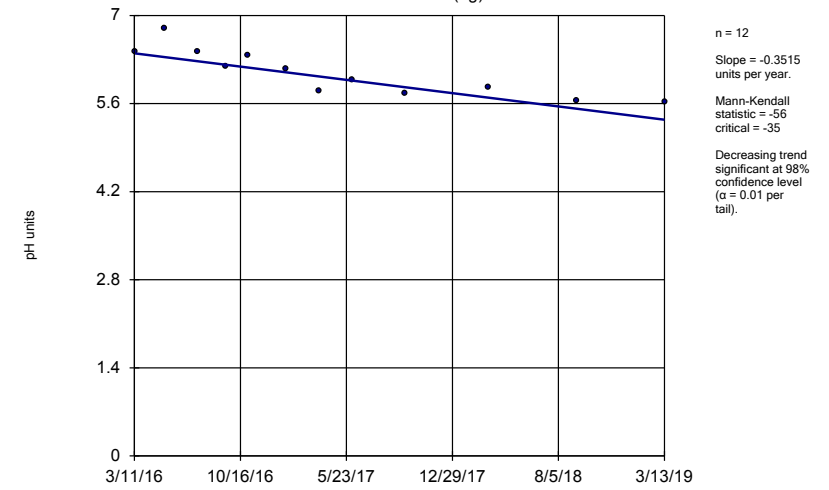
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	6.91			
3/15/2016		7.58	6.74	7.15
5/11/2016	6.51	7.24		
5/12/2016			6.41	
5/13/2016				7.29
7/19/2016	6.12			
7/20/2016			6.59	
7/21/2016		7.53		7.43
9/15/2016	5.96	7		
9/19/2016		7.19		
9/21/2016				7.05
11/2/2016	5.78			
11/3/2016		7.13	6.45	7.4
1/17/2017		7.51		7.06
1/18/2017	6.13		6.34	
3/24/2017		7.55	6.42	
3/27/2017				7.13
3/28/2017	6.59			
5/24/2017		7.6		
6/6/2017			6.82	7.18
6/7/2017	6.72			
9/25/2017			6.63	6.88
9/26/2017	7.05	7.66		
12/28/2017	6.79 (Y)	7.34 (Y)		
3/14/2018	7.42	7.56	7.08	7.04
9/12/2018	6.86	7.12	6.54	7.02
3/13/2019		7.12		
3/14/2019			6.58	6.93
3/15/2019	6.78			

Sen's Slope Estimator
GWA-42 (bg)



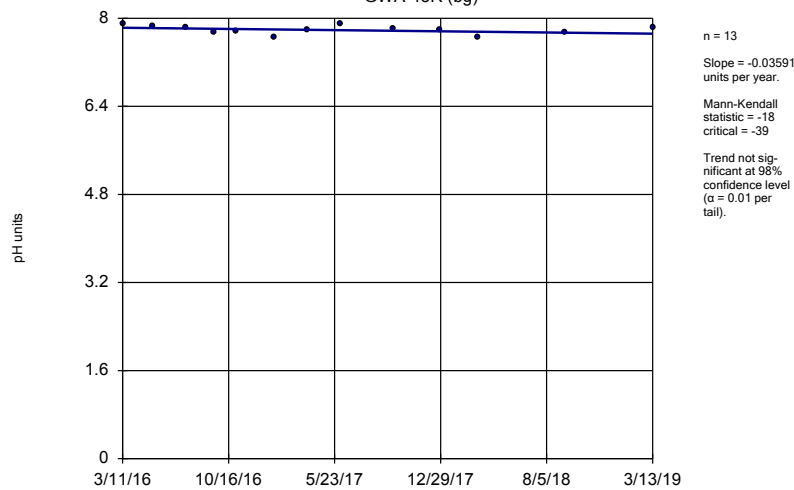
Constituent: pH Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43 (bg)



Constituent: pH Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43R (bg)



Constituent: pH Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-39R_39RZ (bg)

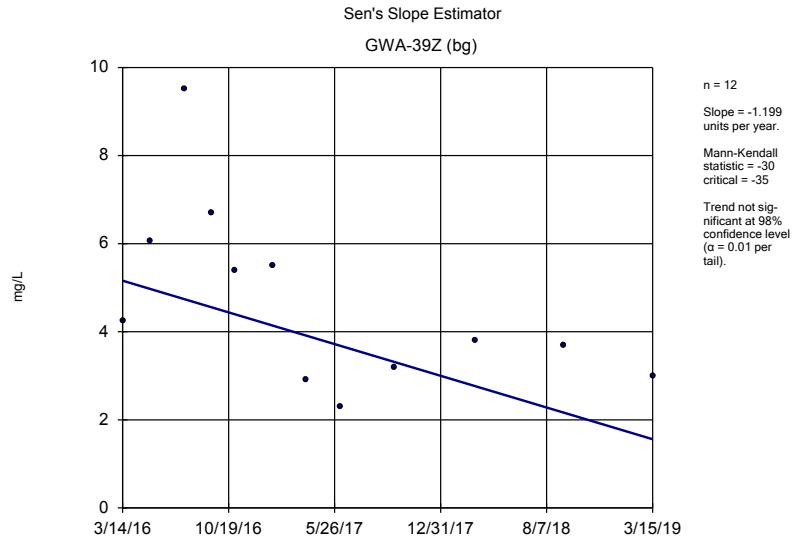


Constituent: pH Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

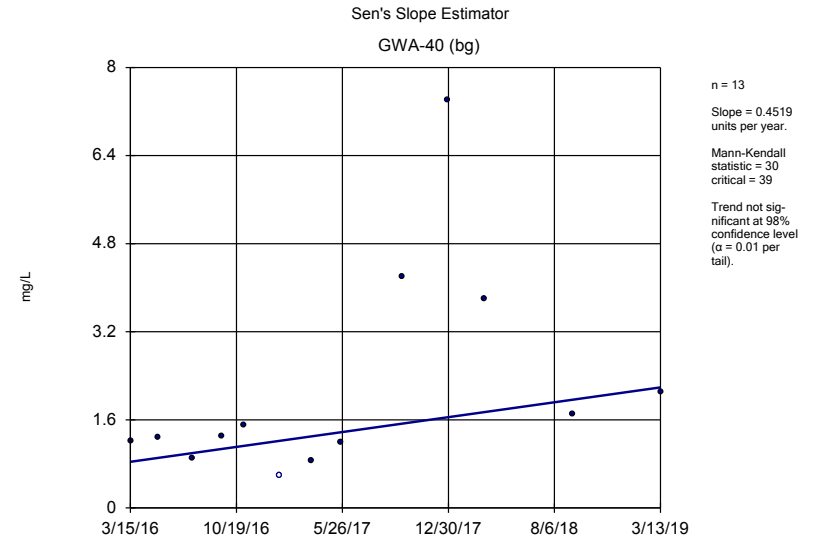
Sen's Slope Estimator

Constituent: pH Analysis Run 8/28/2019 10:58 AM View: background Sen's slope
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

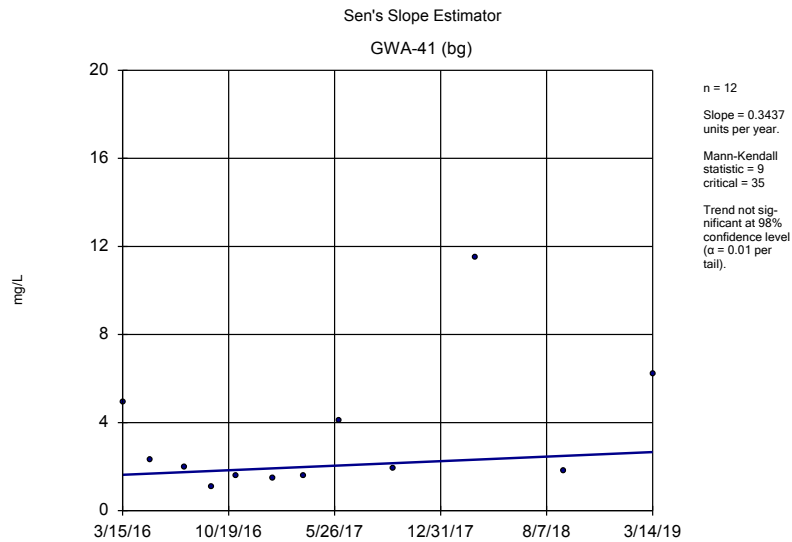
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
3/11/2016	7.37	6.43	7.89	
5/13/2016		6.8	7.86	
5/16/2016	7.55			7.61 (D)
7/19/2016		6.42	7.83	
7/22/2016	7.51			
7/27/2016				7.51 (D)
9/16/2016		6.19	7.75	
9/19/2016	7.52			
11/2/2016		6.36	7.77	
11/3/2016	7.56			
1/17/2017	7.59			
1/18/2017		6.16	7.65	
2/21/2017				7.76 (D)
3/27/2017	7.63			7.7 (D)
3/28/2017		5.8	7.79	
6/6/2017		5.97	7.89	
6/7/2017	7.55			
6/8/2017				7.69 (D)
7/17/2017				7.57 (D)
7/26/2017				7.63
7/27/2017				7.63
8/8/2017				7.73
8/9/2017				7.73
9/22/2017		5.77	7.8	
9/26/2017	7.59			
9/29/2017				7.7 (D)
12/28/2017			7.78 (Y)	
3/14/2018	7.6	5.85		
3/15/2018			7.66	
3/16/2018				7.49
9/12/2018		5.65	7.75	
9/14/2018	7.37			7.32
3/13/2019		5.63	7.84	
3/14/2019	7.57			7.46



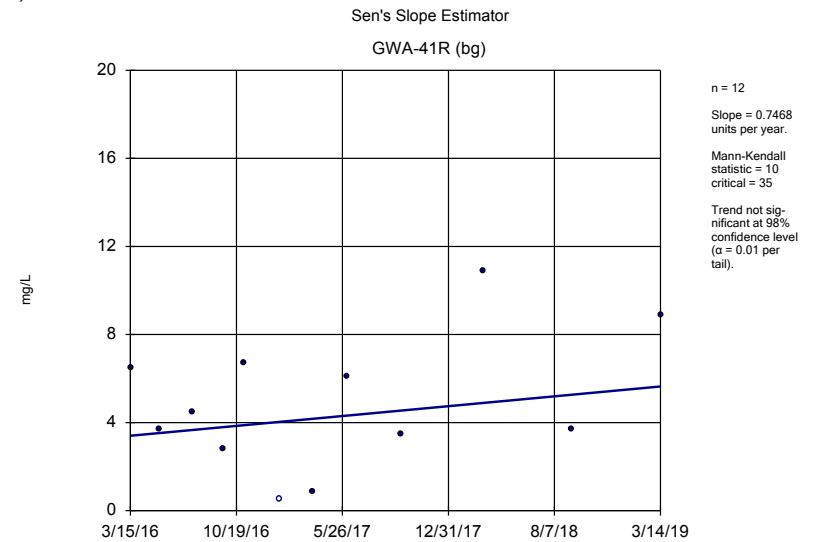
Constituent: Sulfate Analysis Run 8/28/2019 10:56 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



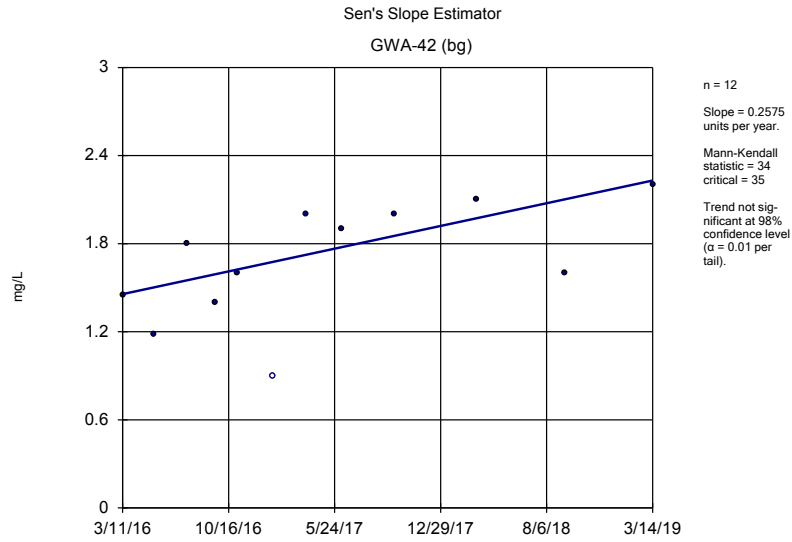
Constituent: Sulfate Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

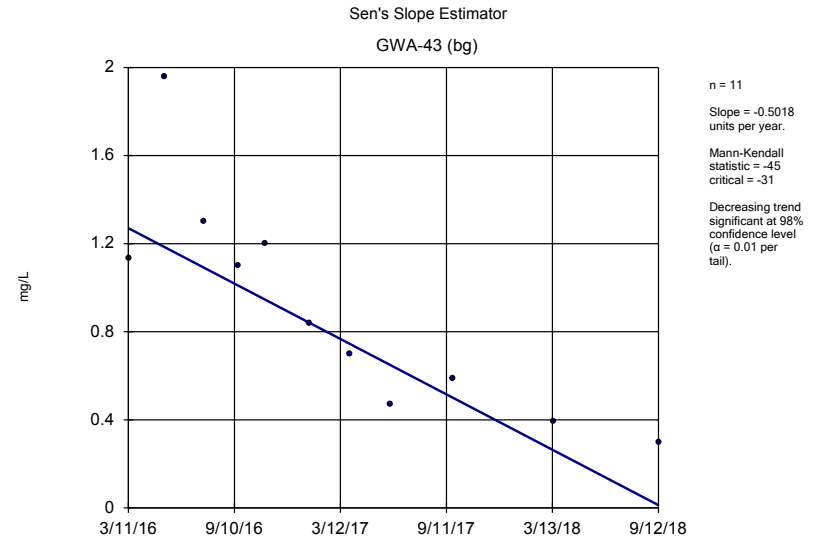
Constituent: Sulfate Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

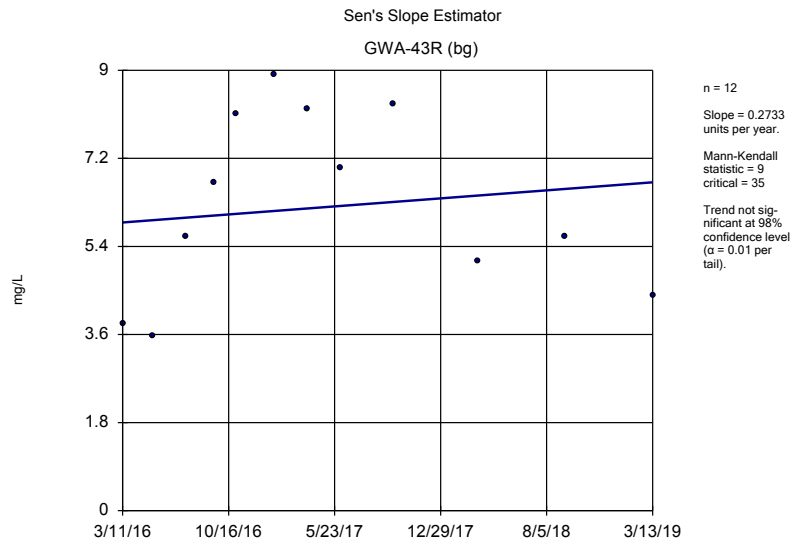
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	4.2598			
3/15/2016		1.2104	4.9347	6.4987
5/11/2016	6.05	1.28		
5/12/2016			2.3	
5/13/2016				3.68
7/19/2016	9.5			
7/20/2016			2	
7/21/2016		0.91 (J)		4.5
9/15/2016	6.7		1.1	
9/19/2016		1.3		
9/21/2016				2.8
11/2/2016	5.4			
11/3/2016		1.5	1.6	6.7
1/17/2017		<1.2 (*)		<1.1 (*)
1/18/2017	5.5		1.5	
3/24/2017		0.86 (J)	1.6	
3/27/2017				0.85 (J)
3/28/2017	2.9			
5/24/2017		1.2		
6/6/2017			4.1	6.1
6/7/2017	2.3			
9/25/2017			1.9	3.5
9/26/2017	3.2	4.2		
12/28/2017		7.4 (Y)		
3/14/2018	3.8	3.8	11.5	10.9 (J)
9/12/2018	3.7	1.7	1.8	3.7
3/13/2019		2.1		
3/14/2019			6.2	8.9
3/15/2019	3			



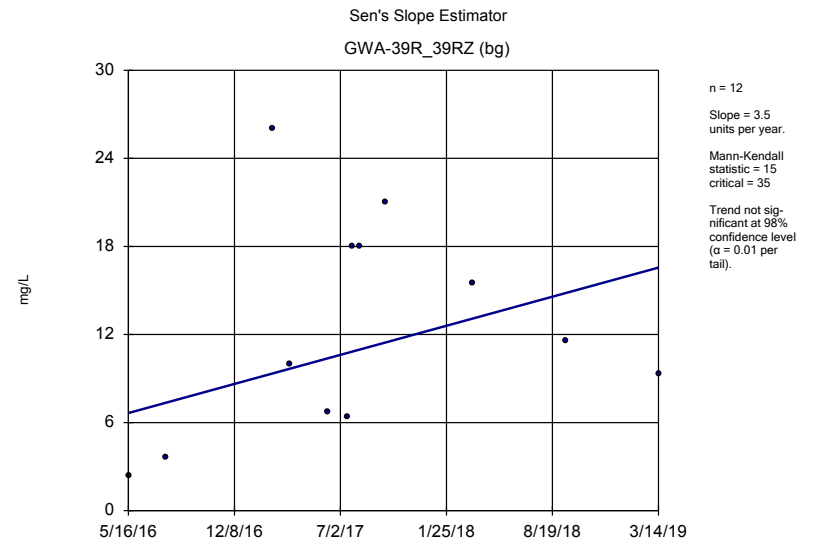
Constituent: Sulfate Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



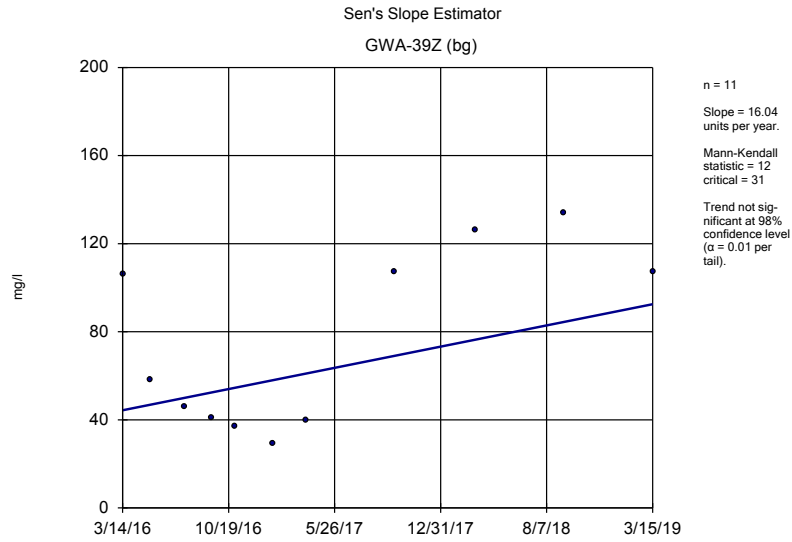
Constituent: Sulfate Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

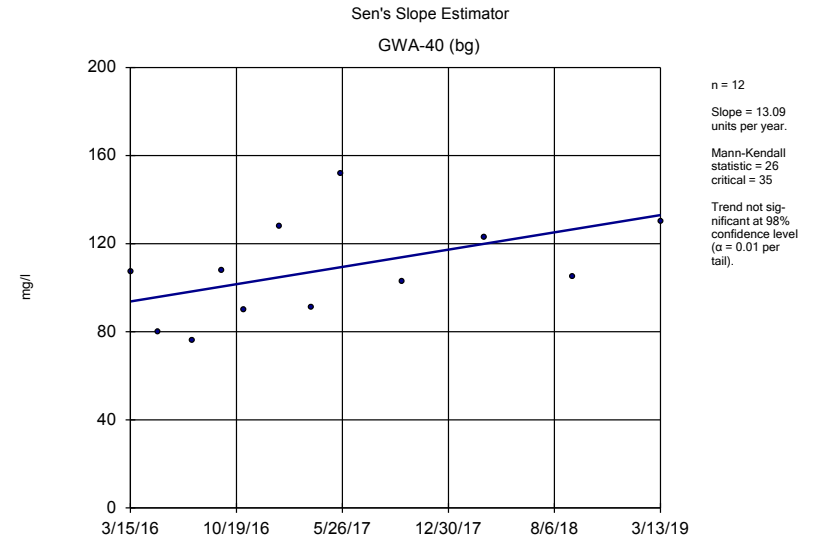
Constituent: Sulfate Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

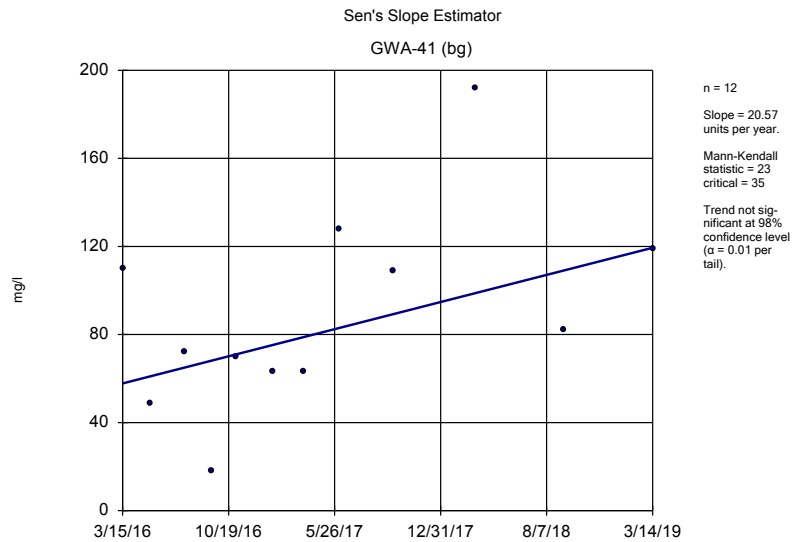
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
3/11/2016	1.4538	1.1313	3.8282	
5/13/2016		1.96	3.56	
5/16/2016	1.18			2.4 (D)
7/19/2016		1.3	5.6	
7/22/2016	1.8			
7/27/2016				3.6 (D)
9/16/2016		1.1	6.7	
9/19/2016	1.4			
11/2/2016		1.2	8.1	
11/3/2016	1.6			
1/17/2017	<1.8 (*)			
1/18/2017		0.84 (J)	8.9	
2/21/2017				26 (D)
3/27/2017	2			10 (D)
3/28/2017		0.7 (J)	8.2	
6/6/2017		0.47 (J)	7	
6/7/2017	1.9			
6/8/2017				6.7 (D)
7/17/2017				6.4 (D)
7/27/2017				18 (D)
8/9/2017				18 (D)
9/22/2017		0.59 (J)	8.3	
9/26/2017	2			
9/29/2017				21 (D)
3/14/2018	2.1	0.39 (J)		
3/15/2018			5.1	
3/16/2018				15.5
9/12/2018		0.3 (J)	5.6	
9/14/2018	1.6			11.6
3/13/2019			4.4	
3/14/2019	2.2			9.3



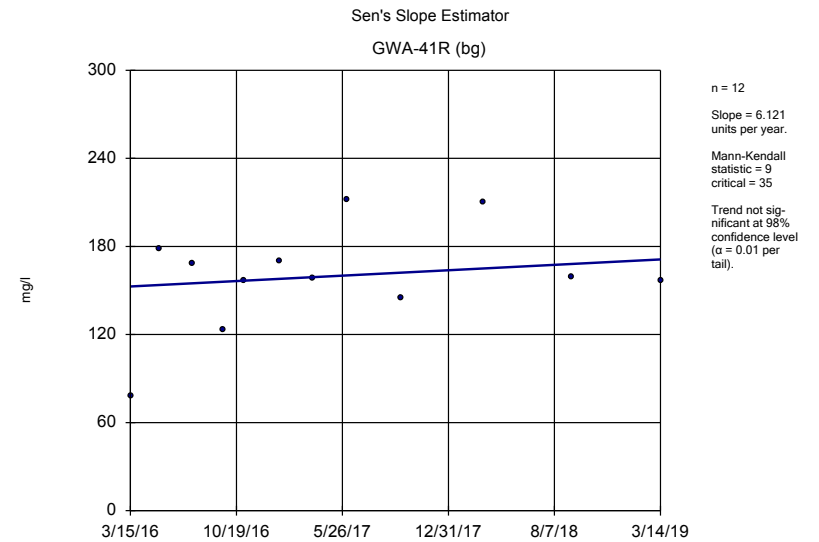
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



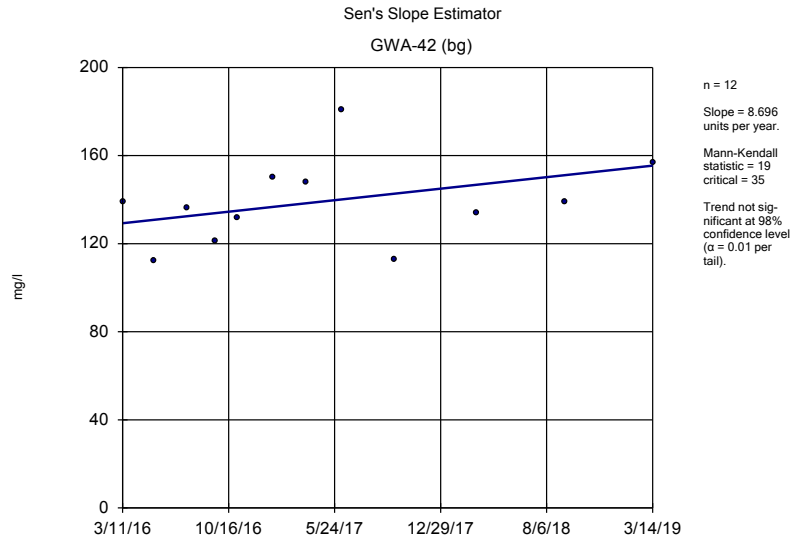
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

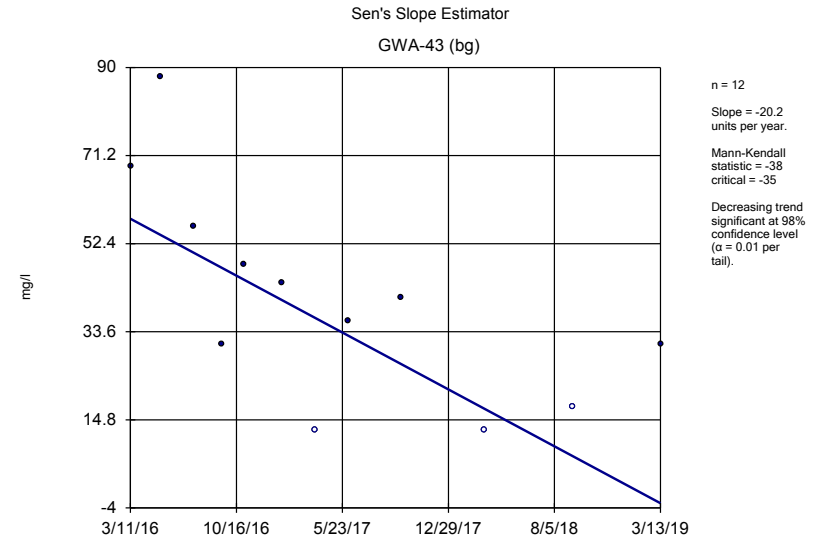
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

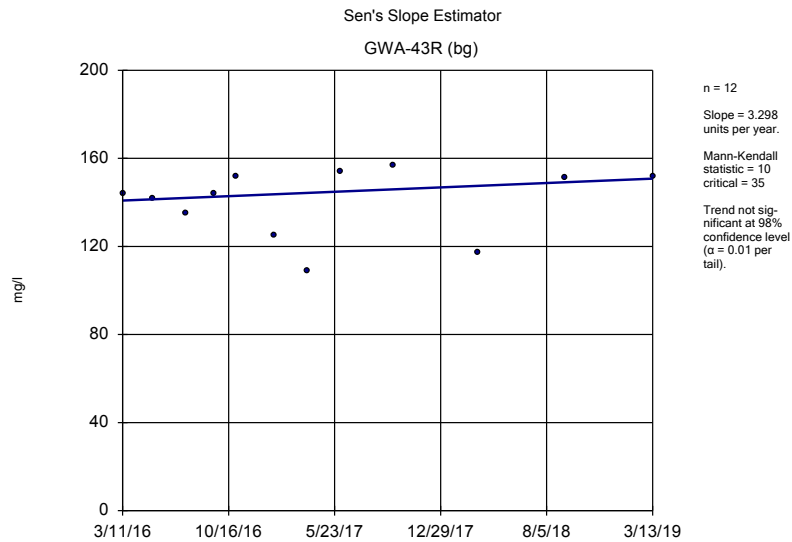
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	106			
3/15/2016		107	110	78
5/11/2016	58	80		
5/12/2016			49	
5/13/2016				178
7/19/2016	46			
7/20/2016			72	
7/21/2016		76		168
9/15/2016	41		18 (J)	
9/19/2016		108		
9/21/2016				123
11/2/2016	37			
11/3/2016		90	70	157
1/17/2017		128		170
1/18/2017	29		63	
3/24/2017		91	63	
3/27/2017				158
3/28/2017	40			
5/24/2017		152		
6/6/2017			128	212
9/25/2017			109	145
9/26/2017	107	103		
3/14/2018	126	123	192	210
9/12/2018	134	105	82	159
3/13/2019		130		
3/14/2019			119	157
3/15/2019	107			



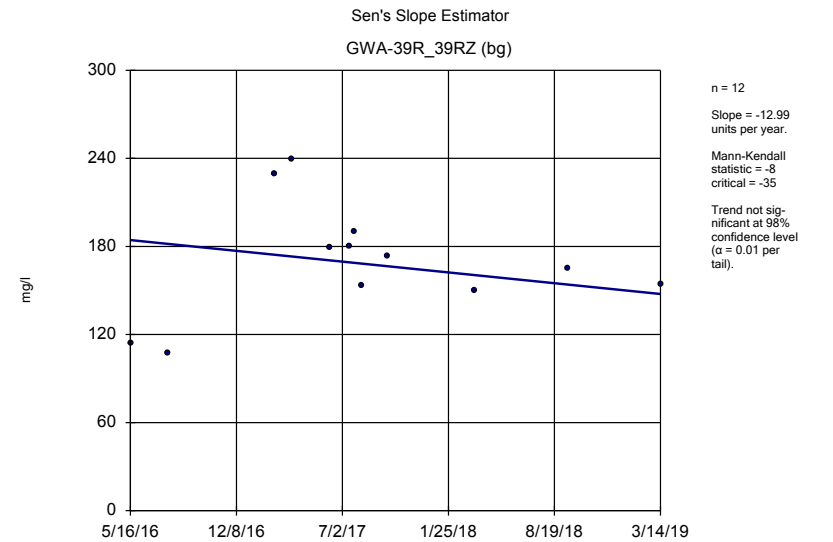
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



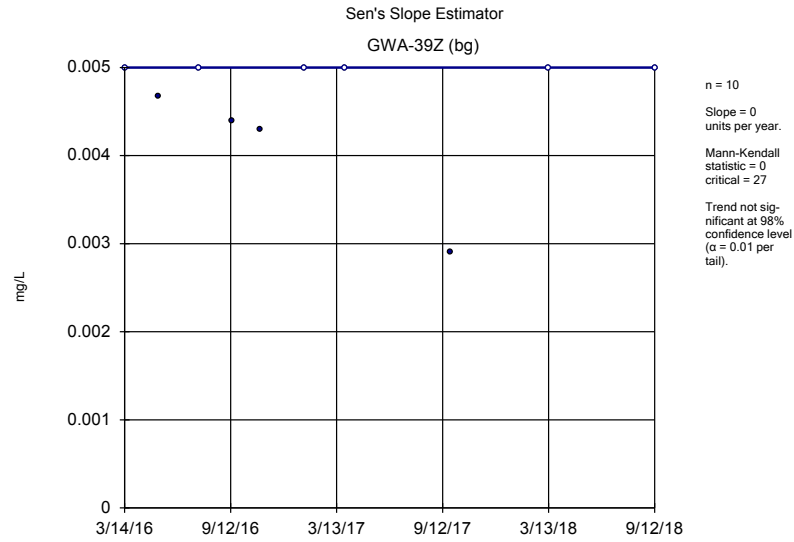
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

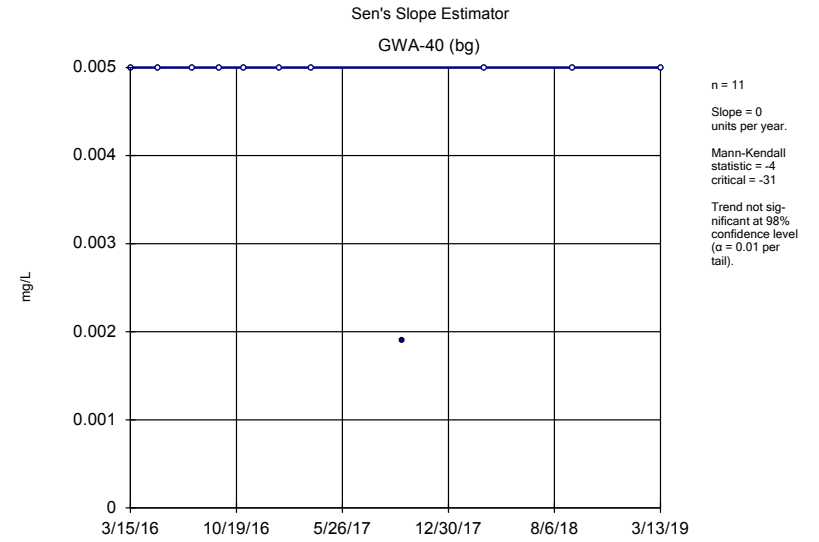
Constituent: Total Dissolved Solids Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

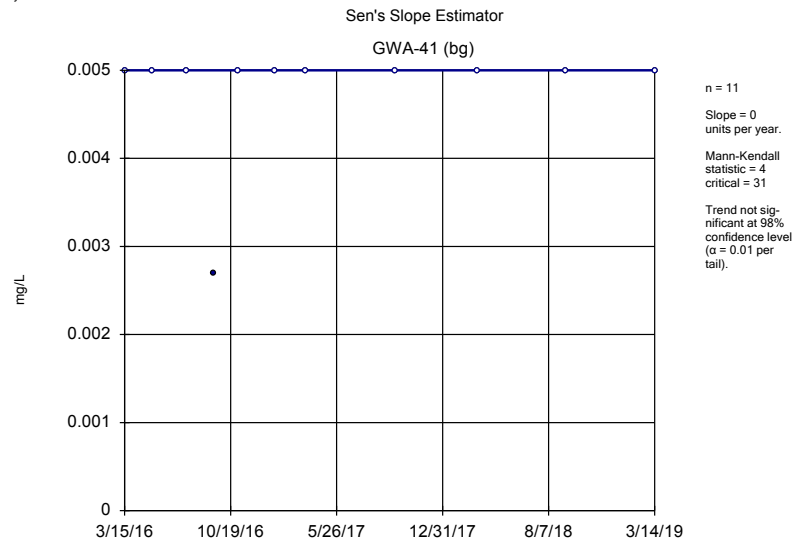
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
3/11/2016	139	69	144	
5/13/2016		88	142	
5/16/2016	112			114 (D)
7/19/2016		56	135	
7/22/2016	136			
7/27/2016				107 (D)
9/16/2016		31	144	
9/19/2016	121			
11/2/2016		48	152	
11/3/2016	132			
1/17/2017	150			
1/18/2017		44	125	
2/21/2017				229 (D)
3/27/2017	148			239 (D)
3/28/2017		<25	109	
6/6/2017		36	154	
6/7/2017	181			
6/8/2017				179 (D)
7/17/2017				180 (D)
7/27/2017				190 (D)
8/9/2017				153 (D)
9/22/2017		41	157	
9/26/2017	113			
9/29/2017				173 (D)
3/14/2018	134	<25		
3/15/2018			117	
3/16/2018				150
9/12/2018		<35	151	
9/14/2018	139			165
3/13/2019		31	152	
3/14/2019	157			154



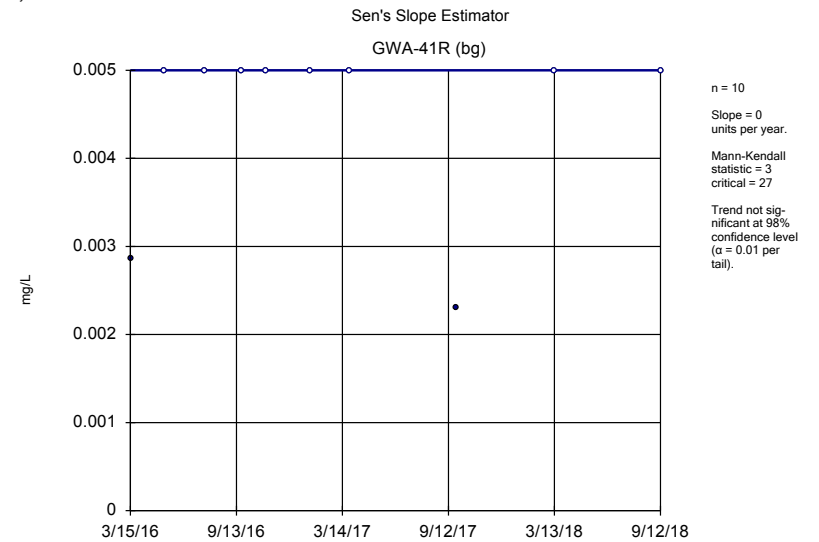
Constituent: Zinc Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Zinc Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

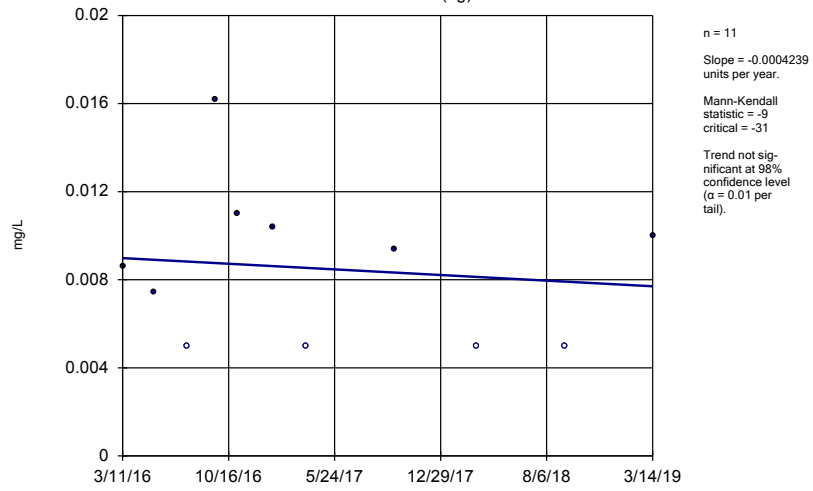
Sen's Slope Estimator

Constituent: Zinc Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

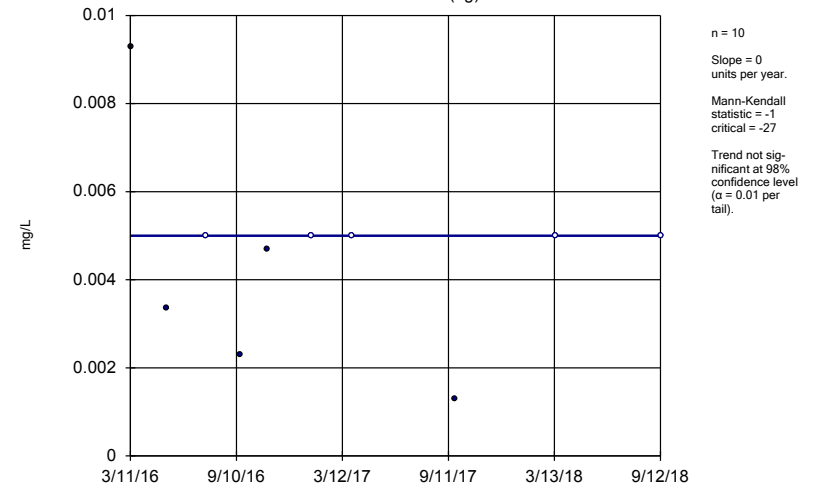
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	<0.01			
3/15/2016		<0.01	<0.01	0.00286 (J)
5/11/2016	0.00467 (J)	<0.01		
5/12/2016			<0.01	
5/13/2016				<0.01
7/19/2016	<0.01 (*)			
7/20/2016			<0.01	
7/21/2016		<0.01 (*)		<0.01 (*)
9/15/2016	0.0044 (J)	<0.01	0.0027 (J)	
9/21/2016				<0.01
11/2/2016	0.0043 (J)			
11/3/2016		<0.01	<0.01	<0.01
1/17/2017		<0.01		<0.01
1/18/2017	<0.01 (*)		<0.01 (*)	
3/24/2017		<0.01 (*)	<0.01 (*)	
3/27/2017				<0.01 (*)
3/28/2017	<0.01 (*)			
9/25/2017			<0.01	0.0023 (J)
9/26/2017	0.0029 (J)	0.0019 (J)		
3/14/2018	<0.01	<0.01	<0.01	<0.01
9/12/2018	<0.01	<0.01	<0.01	<0.01
3/13/2019		<0.01		
3/14/2019			<0.01	

Sen's Slope Estimator
GWA-42 (bg)



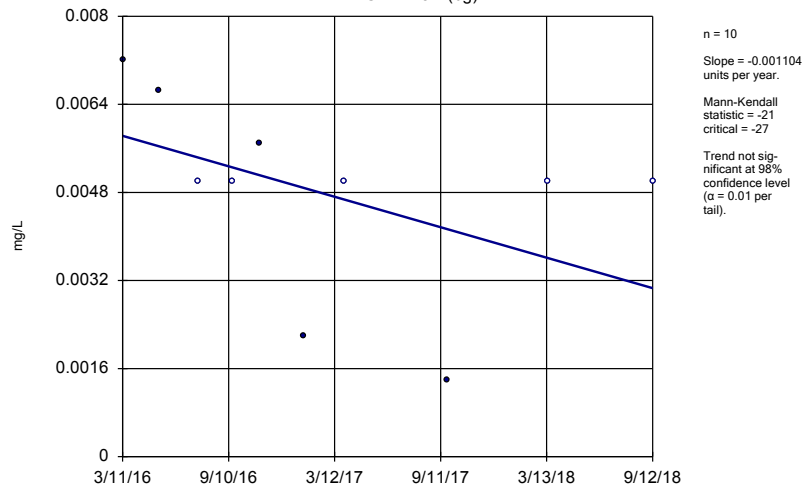
Constituent: Zinc Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43 (bg)



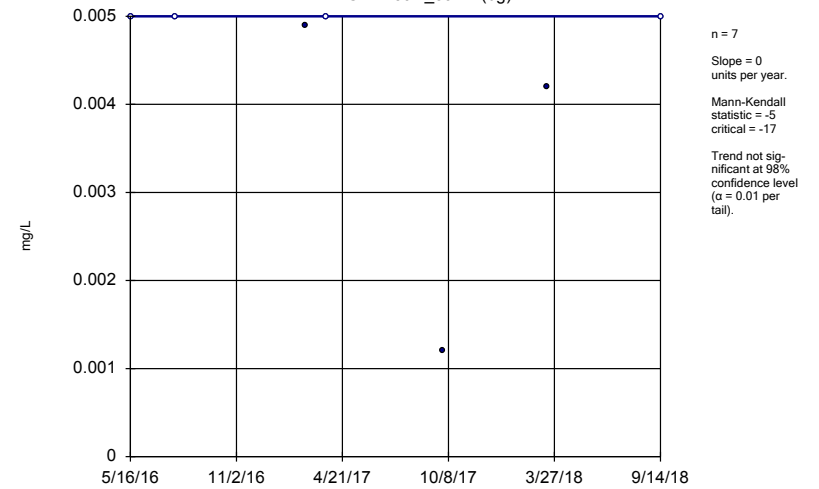
Constituent: Zinc Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43R (bg)



Constituent: Zinc Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-39R_39RZ (bg)



Constituent: Zinc Analysis Run 8/28/2019 10:57 AM View: background Sen's slope
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: Zinc Analysis Run 8/28/2019 10:58 AM View: background Sen's slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
3/11/2016	0.00862 (J)	0.0093 (J)	0.00722 (J)	
5/13/2016		0.00336 (J)	0.00666 (J)	
5/16/2016	0.00744 (J)			<0.01 (D)
7/19/2016		<0.01 (*)	<0.01 (*)	
7/22/2016	<0.01 (*)			
7/27/2016				<0.01 (*)
9/16/2016		0.0023 (J)	<0.01	
9/19/2016	0.0162			
11/2/2016		0.0047 (J)	0.0057 (J)	
11/3/2016	0.011			
1/17/2017	0.0104			
1/18/2017		<0.01	0.0022 (J)	
2/21/2017				0.0049 (J)
3/27/2017	<0.01 (*)			<0.01 (*)
3/28/2017		<0.01 (*)	<0.01	
9/22/2017		0.0013 (J)	0.0014 (J)	
9/26/2017	0.0094 (J)			
9/29/2017				0.0012 (JD)
3/14/2018	<0.01	<0.01		
3/15/2018			<0.01	
3/16/2018				0.0042 (J)
9/12/2018		<0.01	<0.01	
9/14/2018	<0.01			<0.01
3/14/2019	0.01			

Trend Test - Significant Results

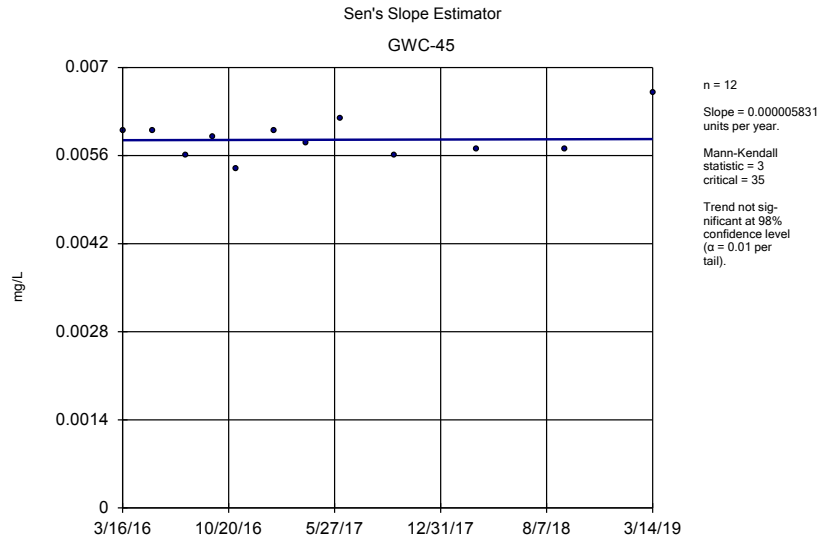
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 3:26 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
--------------------	-------------	--------------	--------------	-----------------	-------------	----------	-------------	------------------	--------------	--------------	---------------

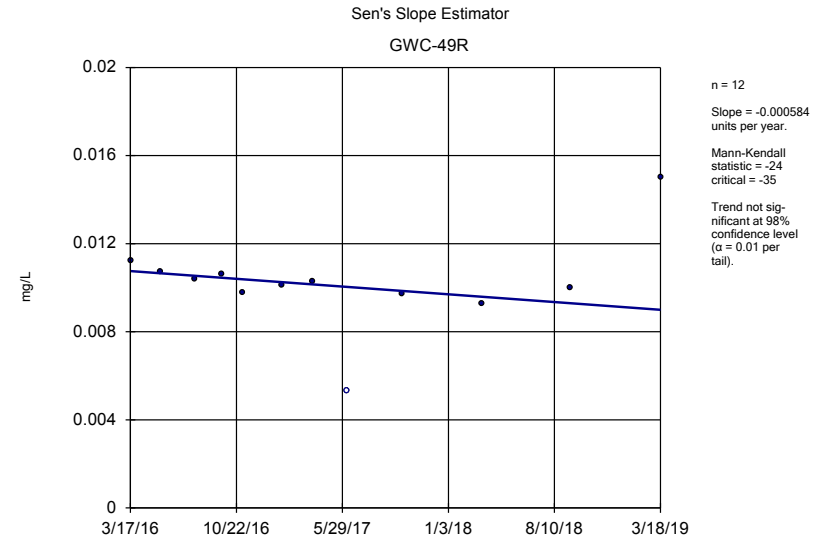
Trend Test - All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 8/28/2019, 3:26 PM

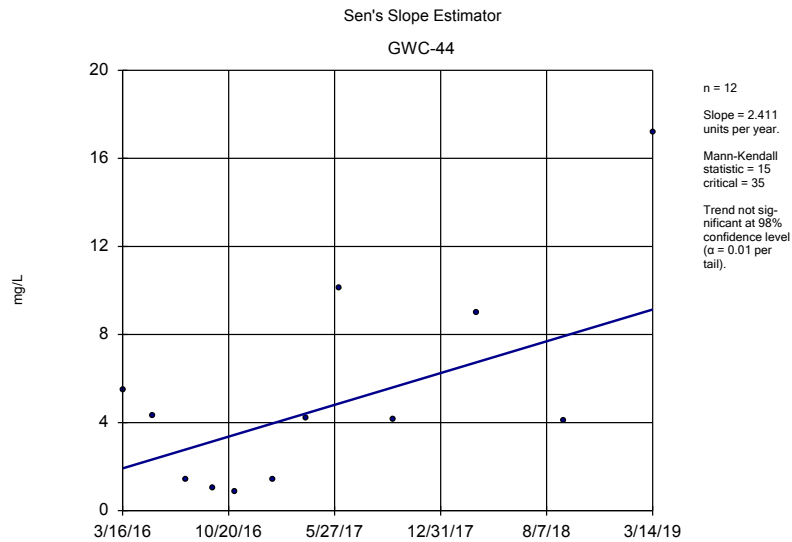
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	GWC-45	0.000...	3	35	No	12	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWC-49R	-0.00...	-24	-35	No	12	8.333	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-44	2.411	15	35	No	12	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-49R	0.5524	6	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWC-45	-0.09522	-17	-35	No	12	16.67	n/a	n/a	0.02	NP
Chloride (mg/L)	GWC-48	0.2817	33	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWC-49R	0.08912	20	35	No	12	0	n/a	n/a	0.02	NP
Chromium (mg/L)	GWC-47R	0.000...	12	35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-44	-0.07996	-27	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-45	-0.03945	-17	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-48	-0.03901	-17	-39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWC-44	13.39	35	39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWC-45R	0.2202	16	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWC-47R	1.351	15	35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWC-49R	0.3221	29	39	No	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWC-45	5.525	28	35	No	12	50	n/a	n/a	0.02	NP
Zinc (mg/L)	GWC-47	0.001506	6	35	No	12	16.67	n/a	n/a	0.02	NP



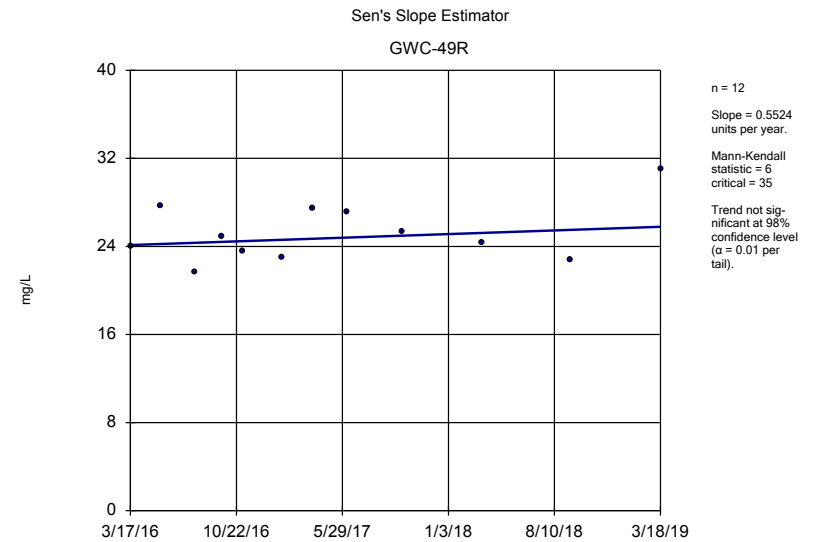
Constituent: Barium Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Calcium Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



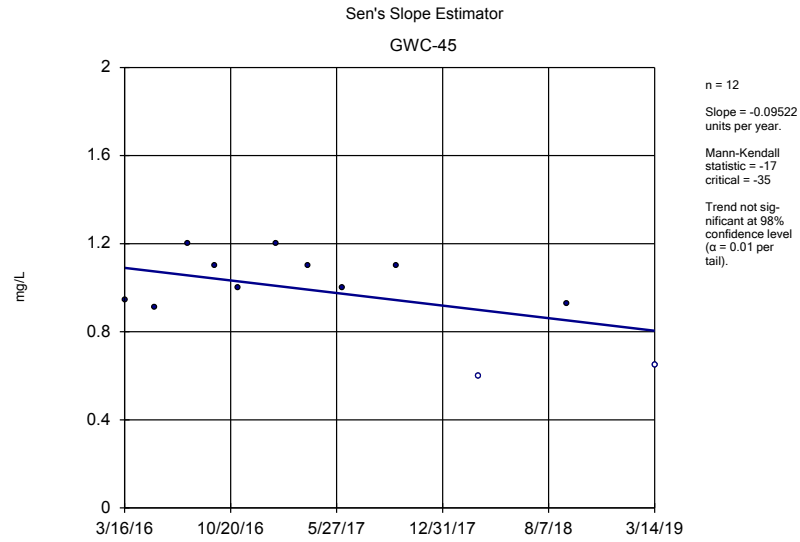
Constituent: Calcium Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

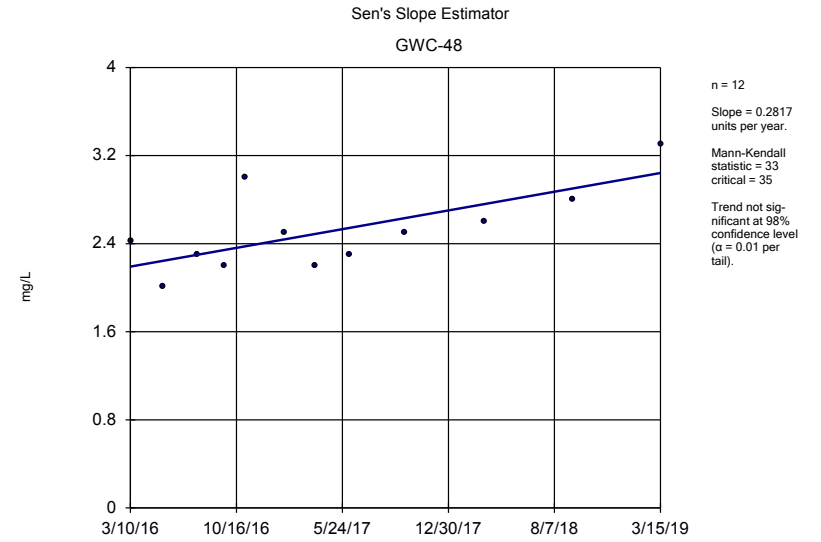
Constituent: Barium, Calcium Analysis Run 8/28/2019 3:26 PM View: Sens slope compliance wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

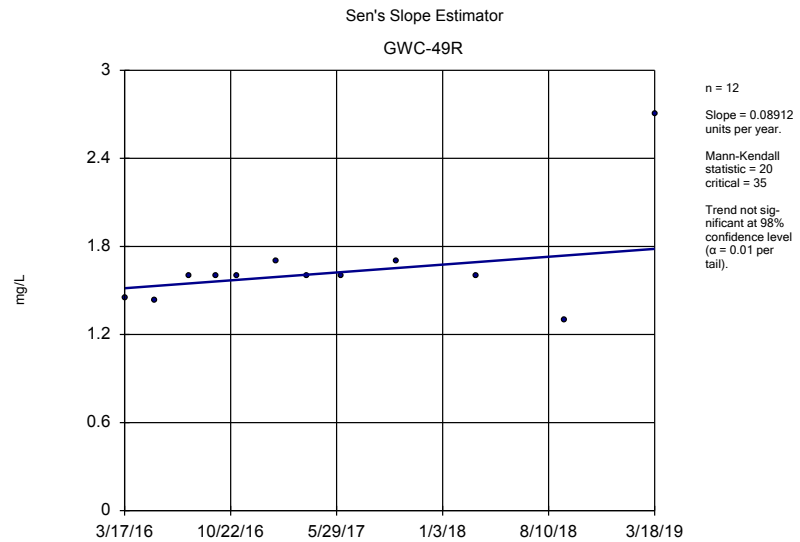
	GWC-45	GWC-49R	GWC-44	GWC-49R
3/16/2016	0.00599 (J)		5.5	
3/17/2016		0.0112		24
5/16/2016	0.006 (J)		4.3	
5/18/2016		0.0107		27.7
7/25/2016	0.0056 (J)		1.41	
7/27/2016		0.0104		21.7
9/19/2016	0.0059 (J)		1.01	
9/21/2016		0.0106		24.9
11/3/2016			0.884	
11/4/2016	0.0054 (J)	0.0098 (J)		23.6
1/19/2017			1.41	
1/23/2017	0.006 (J)			
1/24/2017		0.0101		23
3/28/2017			4.23	
3/29/2017	0.0058 (J)	0.0103		27.5
6/5/2017			10.1	
6/7/2017	0.0062 (J)			
6/8/2017		<0.0106 (*)		27.1
9/26/2017			4.14	
9/27/2017	0.0056 (J)			
9/29/2017		0.0097 (J)		25.3
3/15/2018	0.0057 (J)	0.0093 (J)	9	24.4 (J)
9/12/2018			4.1	
9/13/2018	0.0057 (J)	0.01		22.8 (J)
3/14/2019	0.0066 (X)		17.2 (X)	
3/18/2019		0.015		31



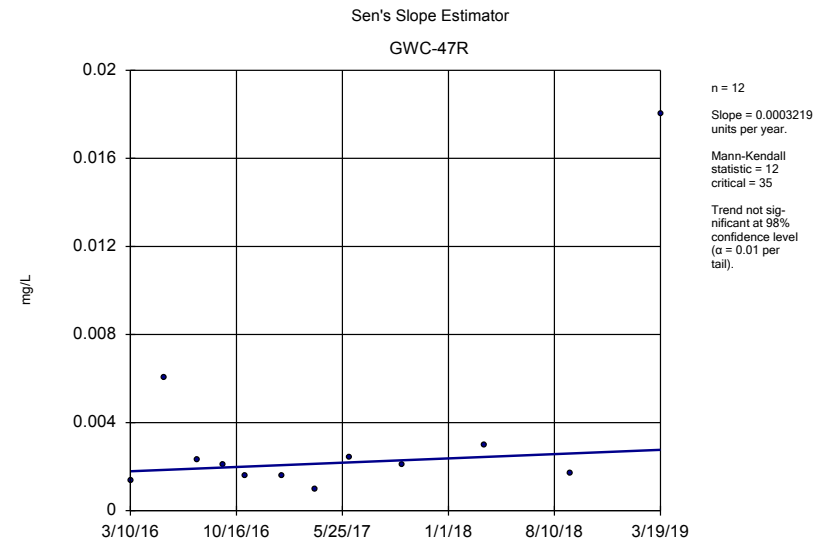
Constituent: Chloride Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Chloride Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Chloride Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Chromium Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

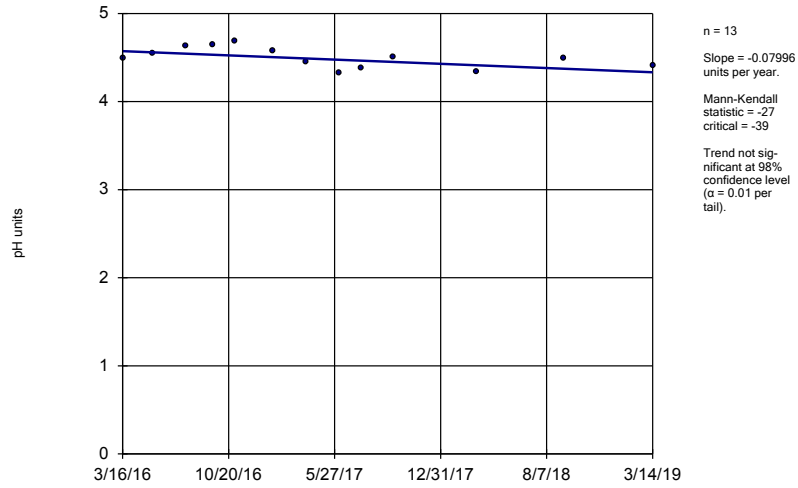
Sen's Slope Estimator

Constituent: Chloride, Chromium Analysis Run 8/28/2019 3:26 PM View: Sens slope compliance wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

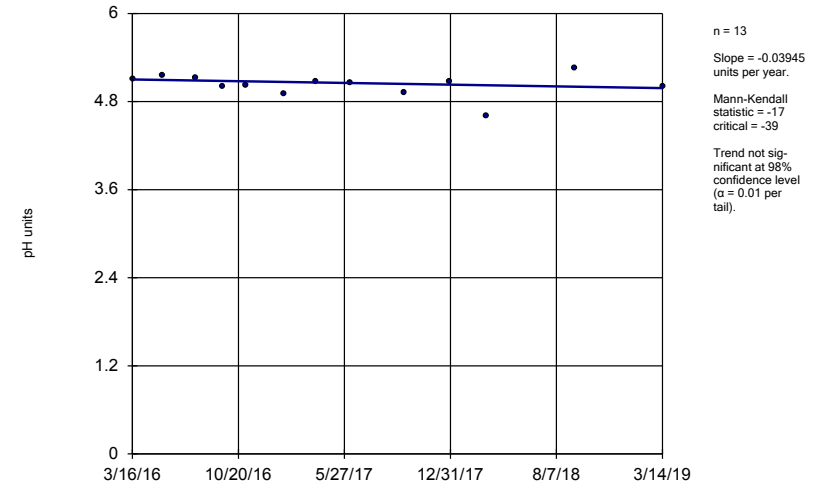
	GWC-45	GWC-48	GWC-49R	GWC-47R
3/10/2016		2.4266		0.00136 (J)
3/16/2016	0.9445			
3/17/2016			1.4476	
5/16/2016	0.9104			
5/17/2016		2.01		
5/18/2016			1.43	0.00606 (J)
7/25/2016	1.2			
7/27/2016		2.3	1.6	0.0023 (J)
9/19/2016	1.1			
9/20/2016		2.2		0.0021 (J)
9/21/2016			1.6	
11/4/2016	1	3	1.6	0.0016 (J)
1/20/2017				0.0016 (J)
1/23/2017	1.2	2.5		
1/24/2017			1.7	
3/28/2017		2.2		
3/29/2017	1.1		1.6	0.001 (J)
6/7/2017	1			
6/8/2017		2.3	1.6	0.0024 (J)
9/27/2017	1.1			0.0021 (J)
9/29/2017		2.5	1.7	
3/15/2018	<1.2	2.6	1.6	
3/16/2018				0.003 (J)
9/13/2018	0.93	2.8	1.3	0.0017 (J)
3/14/2019	<1.3			
3/15/2019		3.3		
3/18/2019			2.7	
3/19/2019				0.018

Sen's Slope Estimator
GWC-44



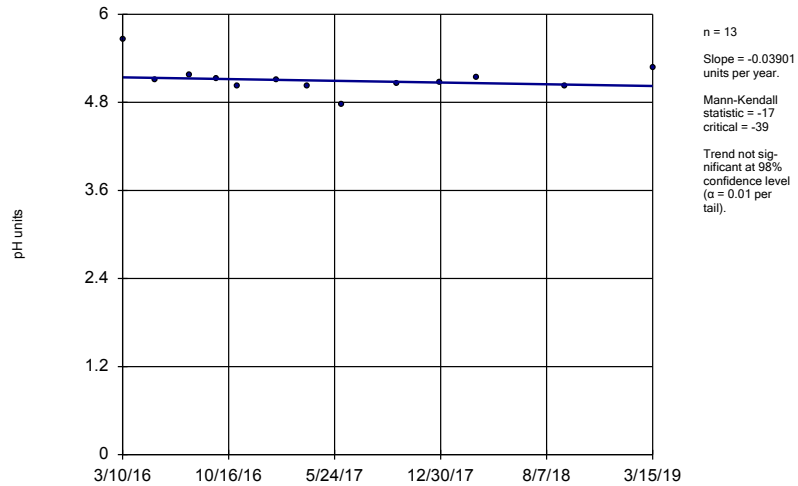
Constituent: pH Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-45



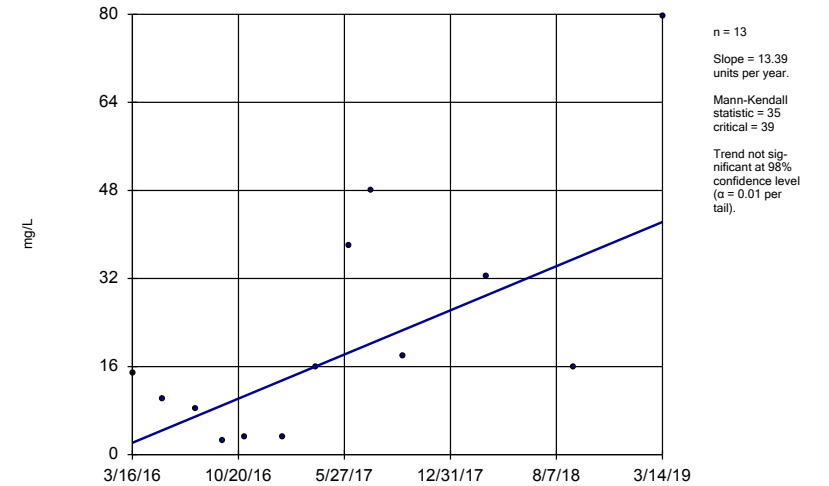
Constituent: pH Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-48



Constituent: pH Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-44

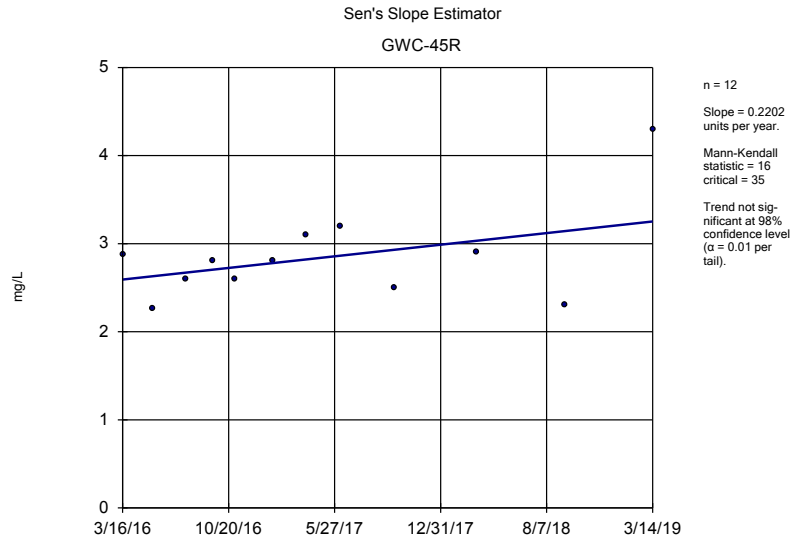


Constituent: Sulfate Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

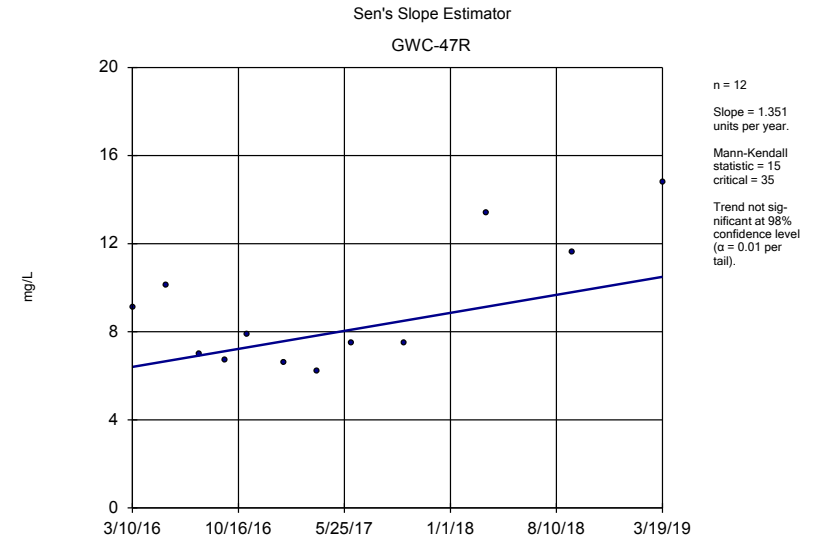
Sen's Slope Estimator

Constituent: pH, Sulfate Analysis Run 8/28/2019 3:26 PM View: Sens slope compliance wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

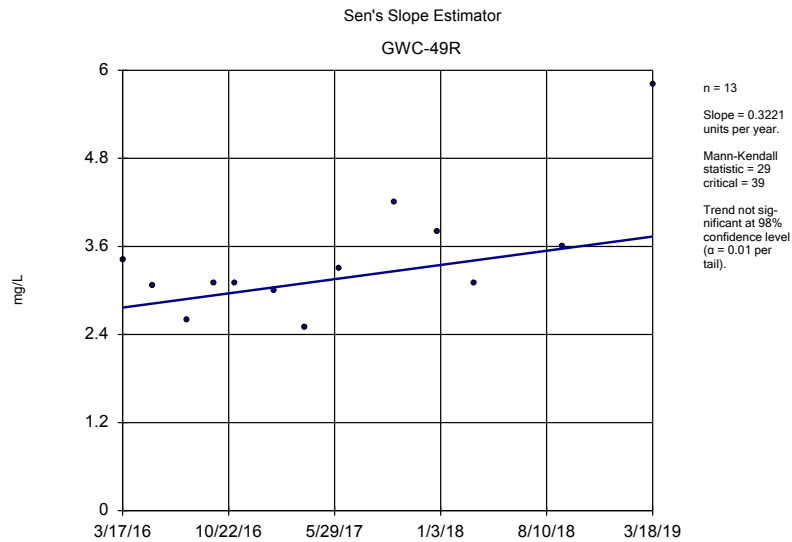
	GWC-44	GWC-45	GWC-48	GWC-44
3/10/2016			5.66	
3/16/2016	4.49	5.1		14.7828
5/16/2016	4.55	5.15		10.2
5/17/2016			5.11	
7/25/2016	4.63	5.13		8.4
7/27/2016			5.17	
9/19/2016	4.65	5		2.5
9/20/2016			5.12	
11/3/2016	4.69			3.3
11/4/2016		5.02	5.03	
1/19/2017	4.58			3.2
1/23/2017		4.9	5.1	
3/28/2017	4.45		5.03	16 (J)
3/29/2017		5.08		
6/5/2017	4.33			38
6/7/2017		5.06		
6/8/2017			4.77	
7/20/2017	4.38			48
9/26/2017	4.51			18
9/27/2017		4.92		
9/29/2017			5.06	
12/28/2017			5.07 (Y)	
12/29/2017		5.08 (Y)		
3/15/2018	4.34	4.6	5.14	32.4
9/12/2018	4.49			16
9/13/2018		5.26	5.02	
3/14/2019	4.41	5.01		79.7
3/15/2019			5.28	



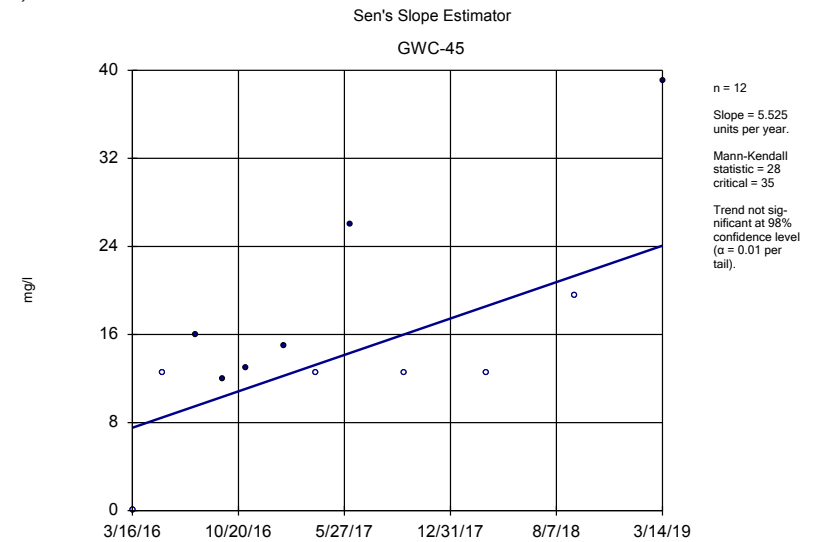
Constituent: Sulfate Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 8/28/2019 3:23 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 8/28/2019 3:24 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Total Dissolved Solids Analysis Run 8/28/2019 3:24 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

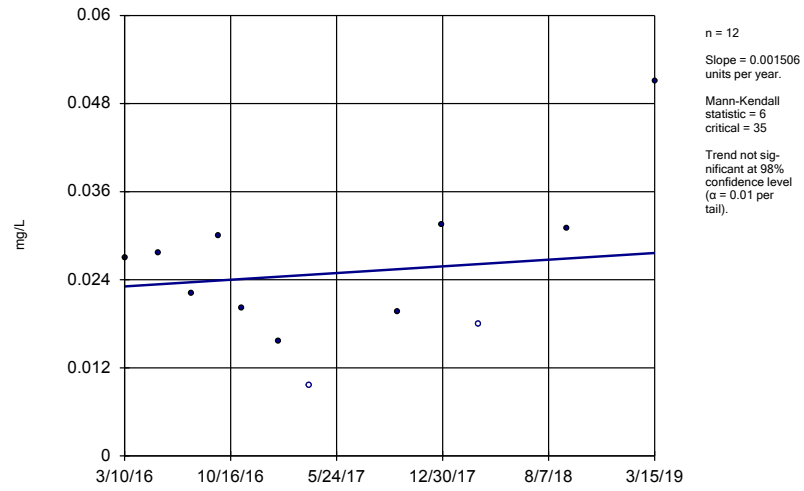
Sen's Slope Estimator

Constituent: Sulfate, Total Dissolved Solids Analysis Run 8/28/2019 3:26 PM View: Sens slope compliance wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-45R	GWC-47R	GWC-49R	GWC-45
3/10/2016		9.1279		
3/16/2016	2.8721			<0.01
3/17/2016			3.4197	
5/16/2016	2.27			<25
5/18/2016		10.1	3.06	
7/25/2016	2.6			16 (J)
7/27/2016		7	2.6	
9/19/2016	2.8			12 (J)
9/20/2016		6.7		
9/21/2016			3.1	
11/3/2016	2.6			
11/4/2016		7.9	3.1	13 (J)
1/20/2017	2.8	6.6		
1/23/2017				15 (J)
1/24/2017			3	
3/29/2017	3.1	6.2	2.5	<25
6/7/2017	3.2			26
6/8/2017		7.5	3.3	
9/27/2017	2.5	7.5		<25
9/29/2017			4.2	
12/28/2017			3.8 (Y)	
3/15/2018	2.9		3.1	<25
3/16/2018		13.4		
9/13/2018	2.3	11.6	3.6	<39
3/14/2019	4.3			39 (X)
3/18/2019			5.8	
3/19/2019		14.8		

Sen's Slope Estimator
GWC-47



Constituent: Zinc Analysis Run 8/28/2019 3:24 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: Zinc Analysis Run 8/28/2019 3:26 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47
3/10/2016	0.027
5/18/2016	0.0277
7/27/2016	0.0221
9/20/2016	0.03
11/7/2016	0.0202
1/23/2017	0.0156
3/29/2017	<0.0192 (*)
9/27/2017	0.0196
12/28/2017	0.0315 (Y)
3/15/2018	<0.036
9/13/2018	0.031
3/15/2019	0.051

Intrawell Prediction Limit Summary - Overburden (No Significant)

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/15/2020, 9:15 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-3	0.0068	n/a	9/13/2019	0.0013	No	32	n/a	n/a	68.75	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-50	0.003	n/a	9/13/2019	0.003ND	No	26	n/a	n/a	92.31	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-11	0.003	n/a	9/17/2019	0.00041	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-14_14Z	0.005	n/a	3/22/2019	0.003ND	No	32	n/a	n/a	87.5	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-15_15Z	0.0053	n/a	3/22/2019	0.003ND	No	31	n/a	n/a	83.87	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-5	0.003	n/a	9/16/2019	0.003ND	No	31	n/a	n/a	96.77	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-6	0.0035	n/a	9/16/2019	0.003ND	No	32	n/a	n/a	93.75	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-7Z	0.003	n/a	9/13/2019	0.002	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-9	0.003	n/a	9/16/2019	0.003ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-10	0.0079	n/a	9/17/2019	0.005ND	No	31	n/a	n/a	90.32	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-11	0.005	n/a	9/17/2019	0.005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-12	0.012	n/a	9/17/2019	0.00465	No	31	n/a	n/a	29.03	n/a	n/a	0.0001701	NP Intra (normality) 1 of 3
Arsenic (mg/L)	GWC-13	0.0096	n/a	9/18/2019	0.00052	No	32	n/a	n/a	78.13	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-14_14Z	0.0079	n/a	3/22/2019	0.005ND	No	31	n/a	n/a	87.1	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-15_15Z	0.0077	n/a	3/22/2019	0.005ND	No	32	n/a	n/a	75	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-5	0.005	n/a	9/16/2019	0.005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-6	0.005	n/a	9/16/2019	0.00071	No	31	n/a	n/a	93.55	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-7Z	0.003663	n/a	9/13/2019	0.0017	No	11	0.002522	0.0005101	18.18	Kaplan-Meier	No	0.0002993	Param Intra 1 of 3
Arsenic (mg/L)	GWC-8Z	0.005	n/a	9/16/2019	0.00043	No	15	n/a	n/a	93.33	n/a	n/a	0.001313	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-9	0.0086	n/a	9/16/2019	0.00044	No	31	n/a	n/a	93.55	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Barium (mg/L)	GWA-3	0.007921	n/a	9/13/2019	0.0042	No	23	0.005815	0.001177	4.348	None	No	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWA-50	0.01571	n/a	9/13/2019	0.0088	No	25	0.009848	0.003336	4	None	No	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-10	0.02966	n/a	9/17/2019	0.016	No	29	-4.024	0.2943	0	None	ln(x)	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-11	0.036	n/a	9/17/2019	0.011	No	31	n/a	n/a	3.226	n/a	n/a	0.0001701	NP Intra (normality) 1 of 3
Barium (mg/L)	GWC-12	0.07	n/a	9/17/2019	0.0245	No	28	n/a	n/a	0	n/a	n/a	0.0002317	NP Intra (normality) 1 of 3
Barium (mg/L)	GWC-13	0.04922	n/a	9/18/2019	0.033	No	30	0.02845	0.01216	0	None	No	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-14_14Z	0.03815	n/a	3/22/2019	0.014	No	21	0.2446	0.05056	9.524	None	x^(1/3)	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-15_15Z	0.01987	n/a	3/22/2019	0.014	No	31	0.0106	0.00545	3.226	None	No	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-5	0.02443	n/a	9/16/2019	0.022	No	31	0.01764	0.003992	0	None	No	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-6	0.02458	n/a	9/16/2019	0.0075	No	29	0.1134	0.02526	3.448	None	sqrt(x)	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-7Z	0.03969	n/a	9/13/2019	0.031	No	11	0.0267	0.005812	0	None	No	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-8Z	0.05253	n/a	9/16/2019	0.026	No	15	0.1761	0.02662	0	None	sqrt(x)	0.0002993	Param Intra 1 of 3
Barium (mg/L)	GWC-9	0.04876	n/a	9/16/2019	0.035	No	28	0.03862	0.005872	0	None	No	0.0002993	Param Intra 1 of 3
Beryllium (mg/L)	GWC-10	0.003	n/a	9/17/2019	0.003ND	No	14	n/a	n/a	71.43	n/a	n/a	0.0016	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-13	0.003	n/a	9/18/2019	0.000074	No	14	n/a	n/a	57.14	n/a	n/a	0.0016	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-14_14Z	0.003	n/a	3/22/2019	0.000094	No	14	n/a	n/a	78.57	n/a	n/a	0.0016	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-5	0.003	n/a	9/16/2019	0.00051	No	14	n/a	n/a	14.29	n/a	n/a	0.0016	NP Intra (normality) 1 of 3
Beryllium (mg/L)	GWC-6	0.003	n/a	9/16/2019	0.003ND	No	14	n/a	n/a	78.57	n/a	n/a	0.0016	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-8Z	0.003	n/a	9/16/2019	0.003ND	No	15	n/a	n/a	93.33	n/a	n/a	0.001313	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-9	0.003	n/a	9/16/2019	0.0001	No	14	n/a	n/a	35.71	n/a	n/a	0.0016	NP Intra (normality) 1 of 3
Cadmium (mg/L)	GWA-50	0.0025	n/a	9/13/2019	0.0025ND	No	26	n/a	n/a	96.15	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-12	0.001	n/a	9/17/2019	0.000575	No	32	n/a	n/a	68.75	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-14_14Z	0.001	n/a	3/22/2019	0.001ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-5	0.0025	n/a	9/16/2019	0.0025ND	No	31	n/a	n/a	80.65	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-6	0.0025	n/a	9/16/2019	0.0025ND	No	32	n/a	n/a	93.75	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-7Z	0.0025	n/a	9/13/2019	0.0025ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-8Z	0.0025	n/a	9/16/2019	0.0025ND	No	15	n/a	n/a	86.67	n/a	n/a	0.001313	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-3	0.027	n/a	9/13/2019	0.00073	No	29	n/a	n/a	86.21	n/a	n/a	0.0002074	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-50	0.01	n/a	9/13/2019	0.01ND	No	26	n/a	n/a	88.46	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWC-10	0.042	n/a	9/17/2019	0.0009	No	32	n/a	n/a	46.88	n/a	n/a	0.0001572	NP Intra (normality) 1 of 3

Intrawell Prediction Limit Summary - Overburden (No Significant)

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/15/2020, 9:15 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GWC-11	0.025	n/a	9/17/2019	0.0079	No	32	n/a	n/a	28.13	n/a	n/a	0.0001572	NP Intra (normality) 1 of 3
Chromium (mg/L)	GWC-12	0.039	n/a	9/17/2019	0.0058	No	32	n/a	n/a	71.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWC-13	0.02017	n/a	9/18/2019	0.0063	No	32	-4.769	0.511	0	None	ln(x)	0.0002993	Param Intra 1 of 3
Chromium (mg/L)	GWC-14_14Z	0.01856	n/a	3/22/2019	0.01ND	No	31	0.07182	0.03787	25.81	Kaplan-Meier	sqrt(x)	0.0002993	Param Intra 1 of 3
Chromium (mg/L)	GWC-15_15Z	0.027	n/a	3/22/2019	0.01ND	No	26	n/a	n/a	57.69	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWC-5	0.032	n/a	9/16/2019	0.01ND	No	32	n/a	n/a	53.13	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWC-6	0.027	n/a	9/16/2019	0.002	No	31	n/a	n/a	32.26	n/a	n/a	0.0001701	NP Intra (normality) 1 of 3
Chromium (mg/L)	GWC-8Z	0.01	n/a	9/16/2019	0.002	No	14	n/a	n/a	42.86	n/a	n/a	0.0016	NP Intra (normality) 1 of 3
Chromium (mg/L)	GWC-9	0.018	n/a	9/16/2019	0.01ND	No	30	n/a	n/a	80	n/a	n/a	0.0001831	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWA-3	0.01	n/a	9/13/2019	0.00046	No	32	n/a	n/a	37.5	n/a	n/a	0.0001572	NP Intra (normality) 1 of 3
Cobalt (mg/L)	GWC-10	0.013	n/a	9/17/2019	0.0025ND	No	32	n/a	n/a	65.63	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-11	0.016	n/a	9/17/2019	0.0025ND	No	32	n/a	n/a	78.13	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-12	0.01	n/a	9/17/2019	0.00305	No	31	n/a	n/a	9.677	n/a	n/a	0.0001701	NP Intra (normality) 1 of 3
Cobalt (mg/L)	GWC-13	0.011	n/a	9/18/2019	0.0005	No	32	n/a	n/a	87.5	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-14_14Z	0.011	n/a	3/22/2019	0.01ND	No	32	n/a	n/a	78.13	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-15_15Z	0.01	n/a	3/22/2019	0.01ND	No	31	n/a	n/a	93.55	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-5	0.0073	n/a	9/16/2019	0.0025ND	No	32	n/a	n/a	53.13	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-6	0.0047	n/a	9/16/2019	0.0025ND	No	32	n/a	n/a	87.5	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-7Z	0.001751	n/a	9/13/2019	0.00099	No	10	0.02867	0.005656	0	None	sqrt(x)	0.0002993	Param Intra 1 of 3
Cobalt (mg/L)	GWC-8Z	0.0025	n/a	9/16/2019	0.0025ND	No	15	n/a	n/a	80	n/a	n/a	0.001313	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-9	0.0067	n/a	9/16/2019	0.0025ND	No	31	n/a	n/a	70.97	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWA-3	0.0509	n/a	9/13/2019	0.026	No	27	0.03618	0.008473	0	None	No	0.0002993	Param Intra 1 of 3
Copper (mg/L)	GWA-50	0.01497	n/a	9/13/2019	0.0023	No	21	0.1825	0.03515	19.05	Kaplan-Meier	x^(1/3)	0.0002993	Param Intra 1 of 3
Copper (mg/L)	GWC-10	0.025	n/a	9/17/2019	0.025ND	No	27	n/a	n/a	74.07	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-11	0.025	n/a	9/17/2019	0.025ND	No	27	n/a	n/a	85.19	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-12	0.025	n/a	9/17/2019	0.025ND	No	27	n/a	n/a	70.37	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-13	0.025	n/a	9/18/2019	0.00057	No	27	n/a	n/a	85.19	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-14_14Z	0.025	n/a	3/22/2019	0.025ND	No	27	n/a	n/a	66.67	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-15_15Z	0.025	n/a	3/22/2019	0.025ND	No	26	n/a	n/a	69.23	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-5	0.05566	n/a	9/16/2019	0.016	No	26	0.02693	0.01643	0	None	No	0.0002993	Param Intra 1 of 3
Copper (mg/L)	GWC-6	0.025	n/a	9/16/2019	0.025ND	No	27	n/a	n/a	59.26	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-7Z	0.025	n/a	9/13/2019	0.00025	No	5	n/a	n/a	60	n/a	n/a	0.01896	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-8Z	0.025	n/a	9/16/2019	0.025ND	No	10	n/a	n/a	70	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-9	0.025	n/a	9/16/2019	0.00021	No	27	n/a	n/a	66.67	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-50	0.005	n/a	9/13/2019	0.005ND	No	26	n/a	n/a	92.31	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-11	0.005	n/a	9/17/2019	0.000046	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-13	0.005	n/a	9/18/2019	0.0002	No	32	n/a	n/a	84.38	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-14_14Z	0.005	n/a	3/22/2019	0.005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-6	0.005	n/a	9/16/2019	0.0001	No	32	n/a	n/a	93.75	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-7Z	0.005	n/a	9/13/2019	0.005ND	No	11	n/a	n/a	45.45	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Lead (mg/L)	GWC-8Z	0.005	n/a	9/16/2019	0.000054	No	15	n/a	n/a	46.67	n/a	n/a	0.001313	NP Intra (normality) 1 of 3
Lead (mg/L)	GWC-9	0.005	n/a	9/16/2019	0.000061	No	32	n/a	n/a	78.13	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-50	0.0005	n/a	9/13/2019	0.0005ND	No	26	n/a	n/a	96.15	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-11	0.0005	n/a	9/17/2019	0.0005ND	No	32	n/a	n/a	93.75	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-12	0.0005	n/a	9/17/2019	0.0005ND	No	32	n/a	n/a	93.75	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-13	0.0005	n/a	9/18/2019	0.0005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-15_15Z	0.0005	n/a	3/22/2019	0.0005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-5	0.0005	n/a	9/16/2019	0.0005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-6	0.0005	n/a	9/16/2019	0.0005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWA-3	0.05803	n/a	9/13/2019	0.012	No	25	-3.684	0.4762	0	None	ln(x)	0.0002993	Param Intra 1 of 3

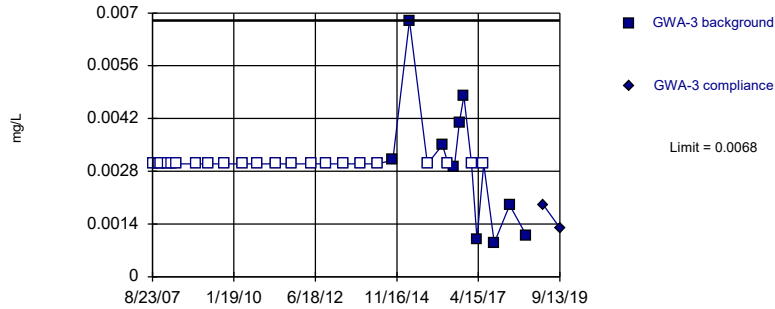
Intrawell Prediction Limit Summary - Overburden (No Significant) Page 3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/15/2020, 9:15 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Nickel (mg/L)	GWA-50	0.01	n/a	9/13/2019	0.00063	No	21	n/a	n/a	47.62	n/a	n/a	0.000511	NP Intra (normality) 1 of 3
Nickel (mg/L)	GWC-10	0.032	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	51.85	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-11	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	85.19	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-12	0.029	n/a	9/17/2019	0.0033	No	27	n/a	n/a	48.15	n/a	n/a	0.000256	NP Intra (normality) 1 of 3
Nickel (mg/L)	GWC-13	0.015	n/a	9/18/2019	0.00046	No	27	n/a	n/a	74.07	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-14_14Z	0.011	n/a	3/22/2019	0.01ND	No	27	n/a	n/a	62.96	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-15_15Z	0.019	n/a	3/22/2019	0.01ND	No	26	n/a	n/a	80.77	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-5	0.04631	n/a	9/16/2019	0.008	No	27	0.02419	0.01273	0	None	No	0.0002993	Param Intra 1 of 3
Nickel (mg/L)	GWC-6	0.022	n/a	9/16/2019	0.01ND	No	26	n/a	n/a	46.15	n/a	n/a	0.0002803	NP Intra (normality) 1 of 3
Nickel (mg/L)	GWC-7Z	0.001363	n/a	9/13/2019	0.00061	No	5	0.001133	0.0000471440		Kaplan-Meier	No	0.0002993	Param Intra 1 of 3
Nickel (mg/L)	GWC-8Z	0.01	n/a	9/16/2019	0.01ND	No	10	n/a	n/a	60	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-9	0.014	n/a	9/16/2019	0.00062	No	25	n/a	n/a	40	n/a	n/a	0.0003046	NP Intra (normality) 1 of 3
Selenium (mg/L)	GWC-13	0.01	n/a	9/18/2019	0.0018	No	32	n/a	n/a	62.5	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-5	0.01	n/a	9/16/2019	0.01ND	No	31	n/a	n/a	90.32	n/a	n/a	0.0001701	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-9	0.01	n/a	9/16/2019	0.01ND	No	32	n/a	n/a	96.88	n/a	n/a	0.0001572	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-50	0.01	n/a	9/13/2019	0.00045	No	21	n/a	n/a	80.95	n/a	n/a	0.000511	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-12	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	96.3	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-15_15Z	0.001	n/a	3/22/2019	0.001ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-6	0.001	n/a	9/16/2019	0.001ND	No	12	n/a	n/a	91.67	n/a	n/a	0.002173	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-8Z	0.001	n/a	9/16/2019	0.001ND	No	12	n/a	n/a	83.33	n/a	n/a	0.002173	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWA-3	0.01	n/a	9/13/2019	0.01ND	No	27	n/a	n/a	92.59	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-10	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	85.19	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-11	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	88.89	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-12	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	74.07	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-13	0.01	n/a	9/18/2019	0.01ND	No	26	n/a	n/a	53.85	n/a	n/a	0.0002803	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-14_14Z	0.012	n/a	3/22/2019	0.01ND	No	27	n/a	n/a	66.67	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-15_15Z	0.0165	n/a	3/22/2019	0.01ND	No	26	0.006028	0.005988	34.62	Kaplan-Meier	No	0.0002993	Param Intra 1 of 3
Vanadium (mg/L)	GWC-5	0.01	n/a	9/16/2019	0.01ND	No	27	n/a	n/a	88.89	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-6	0.01	n/a	9/16/2019	0.01ND	No	27	n/a	n/a	66.67	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-8Z	0.01	n/a	9/16/2019	0.01ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-9	0.01	n/a	9/16/2019	0.01ND	No	27	n/a	n/a	81.48	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Zinc (mg/L)	GWA-3	0.1185	n/a	9/13/2019	0.036	No	27	-2.766	0.3644	3.704	None	ln(x)	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWA-50	0.007874	n/a	9/13/2019	0.0061	No	20	0.004272	0.001962	25	Kaplan-Meier	No	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWC-10	0.03989	n/a	9/17/2019	0.0052	No	27	-5.18	1.127	29.63	Kaplan-Meier	ln(x)	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWC-11	0.015	n/a	9/17/2019	0.0056	No	27	n/a	n/a	62.96	n/a	n/a	0.000256	NP Intra (NDs) 1 of 3
Zinc (mg/L)	GWC-12	0.05749	n/a	9/17/2019	0.018	No	27	-4.541	0.9693	14.81	None	ln(x)	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWC-13	0.01707	n/a	9/18/2019	0.007	No	23	0.008189	0.004965	26.09	Kaplan-Meier	No	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWC-14_14Z	0.015	n/a	3/22/2019	0.01ND	No	22	n/a	n/a	27.27	n/a	n/a	0.0004594	NP Intra (normality) 1 of 3
Zinc (mg/L)	GWC-15_15Z	0.01298	n/a	3/22/2019	0.01ND	No	23	0.1578	0.04314	43.48	Kaplan-Meier	x^(1/3)	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWC-5	0.1443	n/a	9/16/2019	0.035	No	27	0.07538	0.03964	3.704	None	No	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWC-6	0.01677	n/a	9/16/2019	0.0058	No	22	0.08853	0.0227	36.36	Kaplan-Meier	sqrt(x)	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWC-8Z	0.00618	n/a	9/16/2019	0.0065	No	10	0.1413	0.01813	50	Kaplan-Meier	x^(1/3)	0.0002993	Param Intra 1 of 3
Zinc (mg/L)	GWC-9	0.01646	n/a	9/16/2019	0.0062	No	23	0.08051	0.0267	17.39	Kaplan-Meier	sqrt(x)	0.0002993	Param Intra 1 of 3

Within Limit

Prediction Limit
 Intrawell Non-parametric

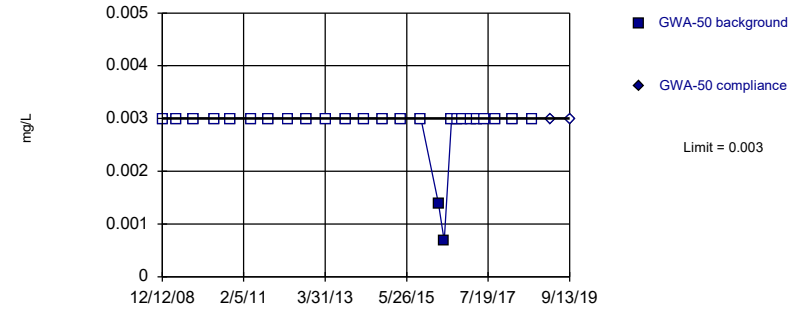


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

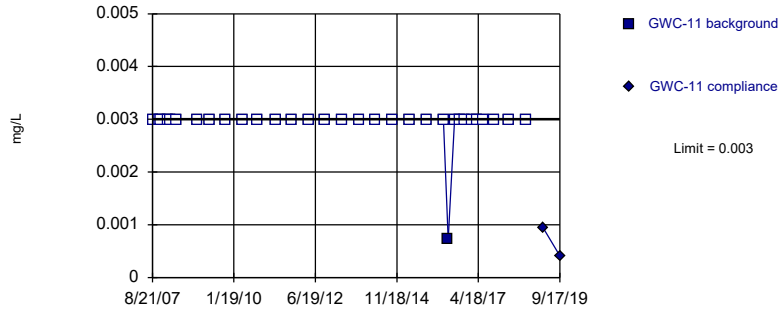


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

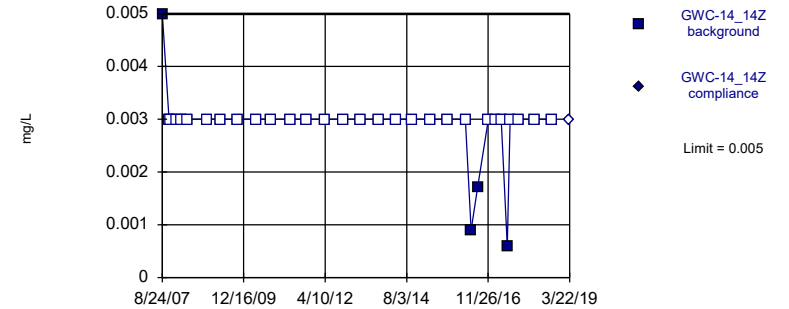


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

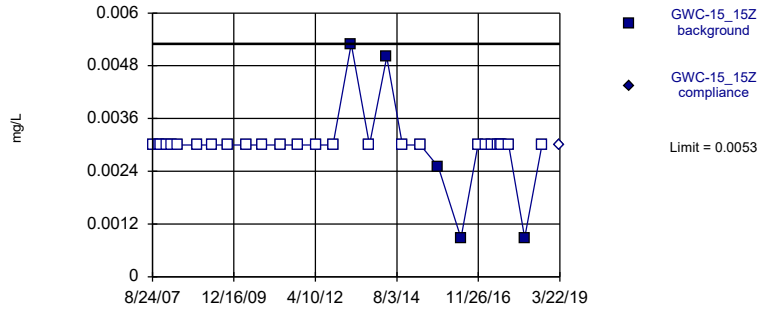


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

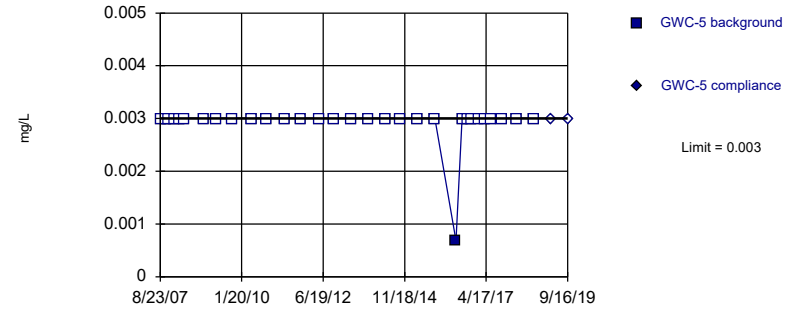


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 83.87% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

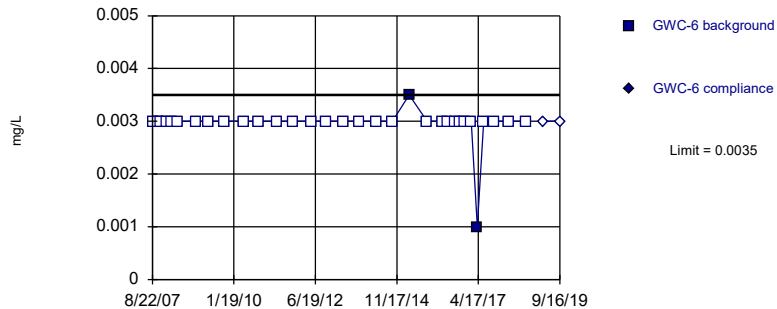


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

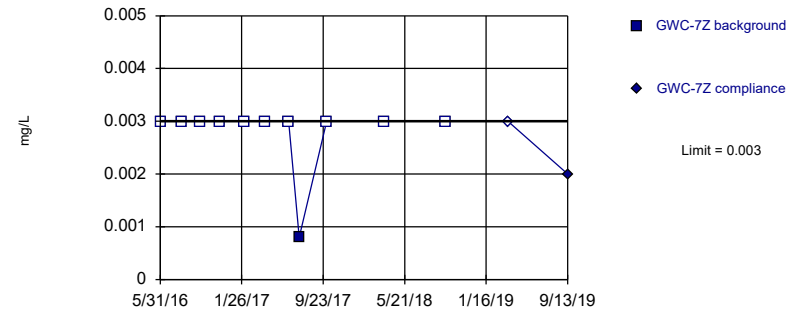


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

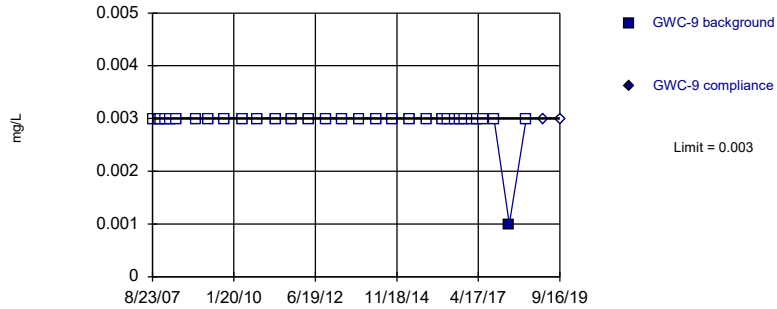


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

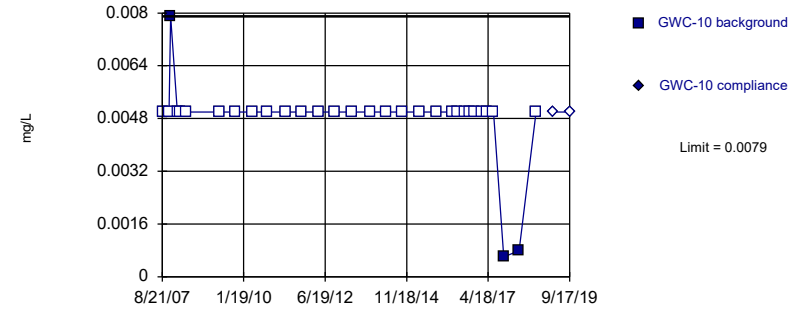


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

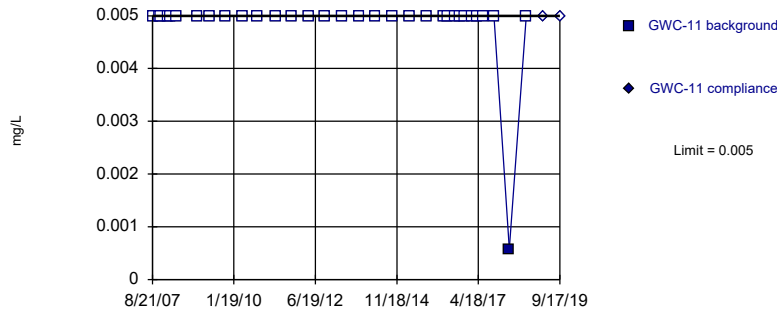


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 90.32% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

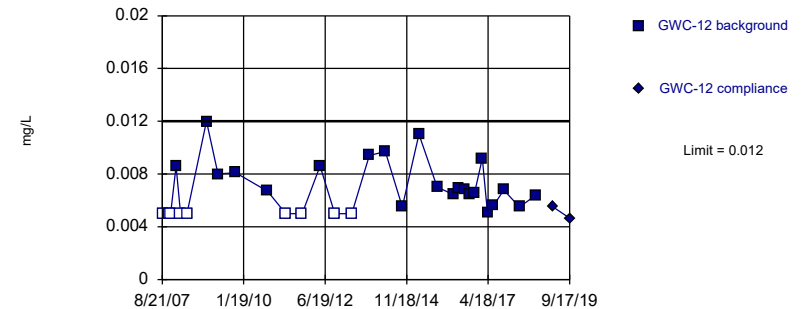


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

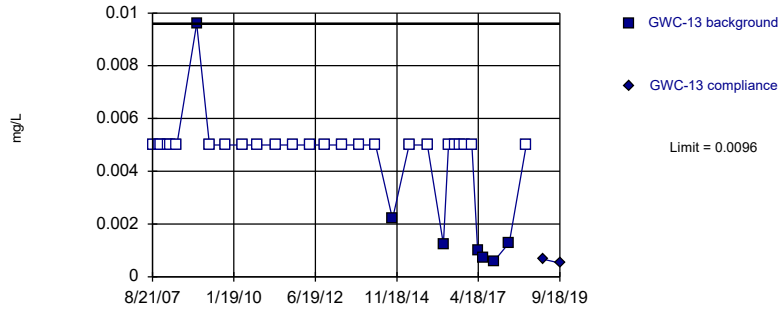


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. 29.03% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

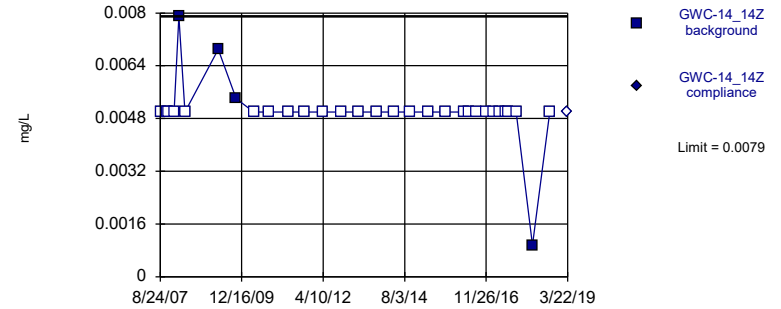


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

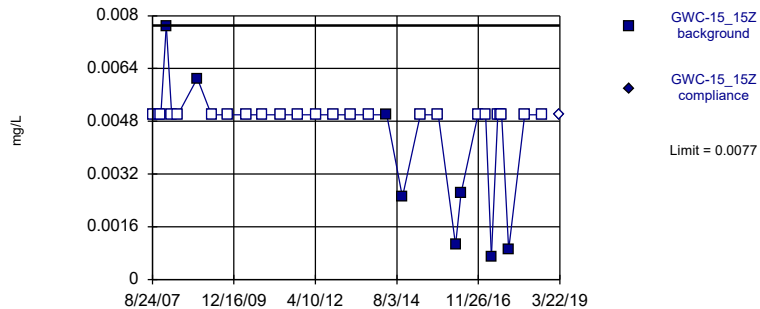


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 87.1% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

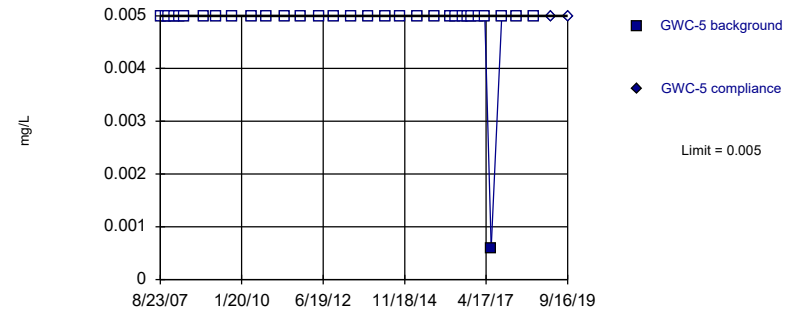


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

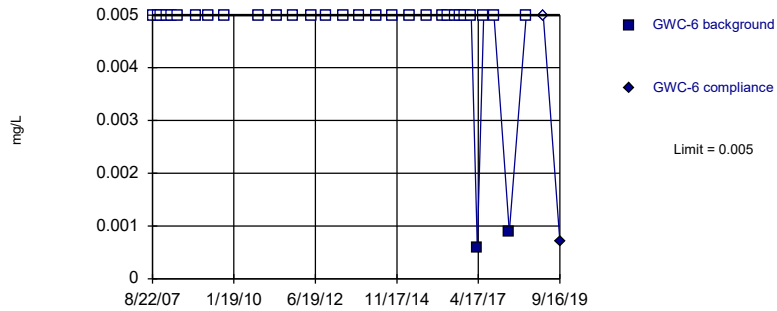


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

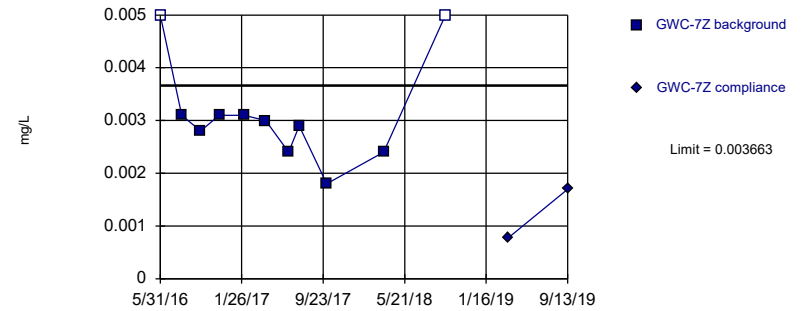


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

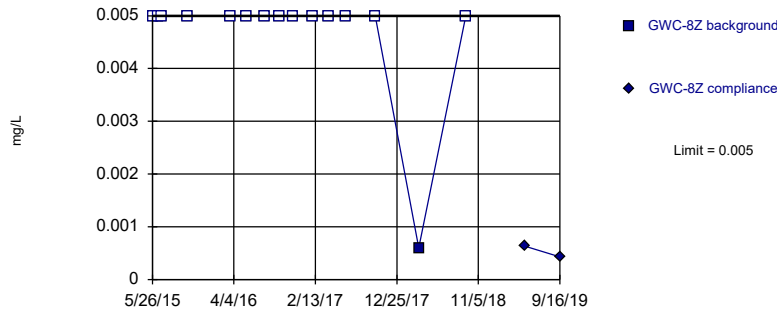


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002522, Std. Dev.=0.0005101, n=11, 18.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8226, critical = 0.792. Kappa = 2.236 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

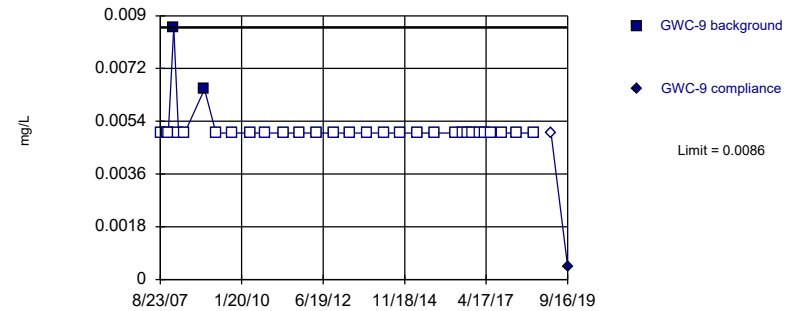


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

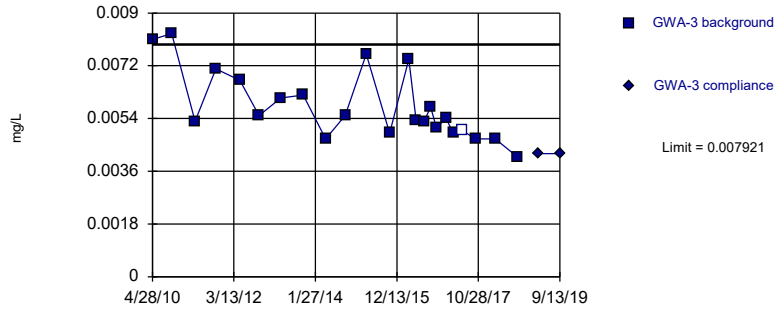


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

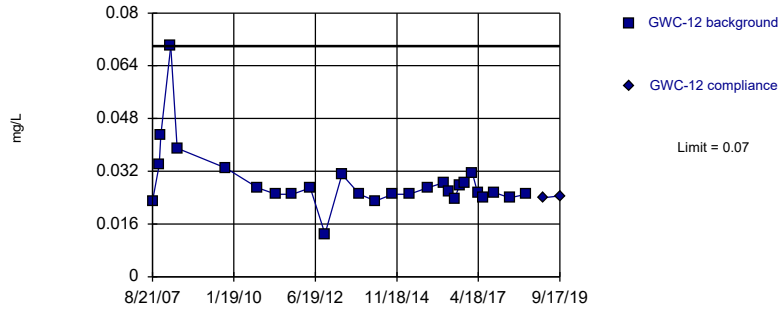
Constituent: Arsenic Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



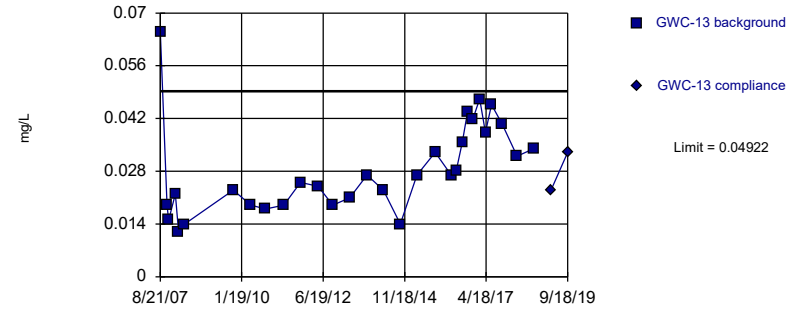
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 28 background values. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Barium Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

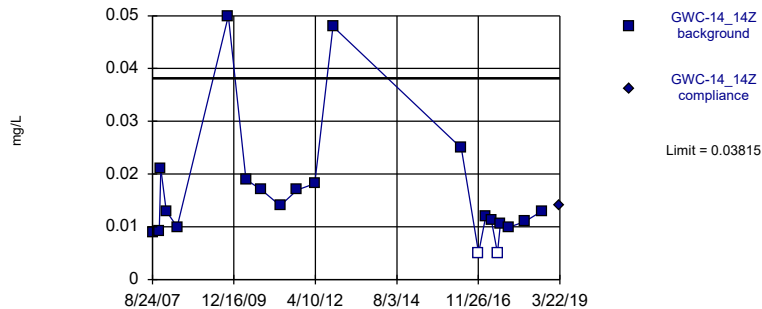
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02845, Std. Dev.=0.01216, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9232, critical = 0.9. Kappa = 1.708 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

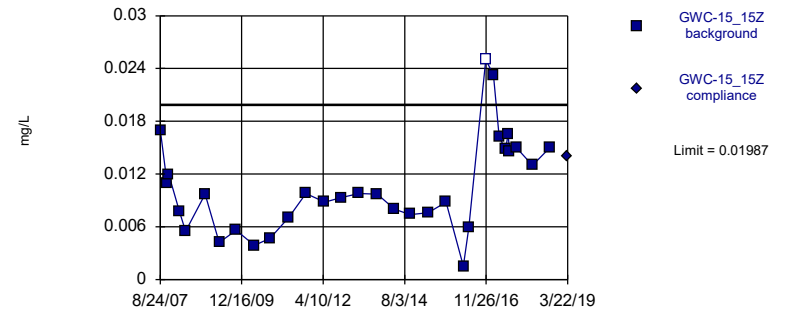
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.2446, Std. Dev.=0.05056, n=21, 9.524% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8857, critical = 0.873. Kappa = 1.82 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Parametric

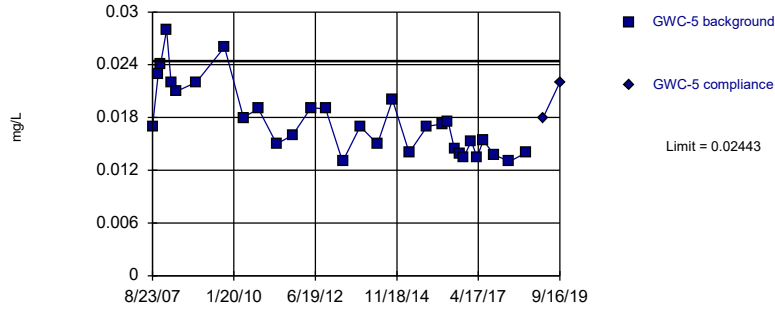


Background Data Summary: Mean=0.0106, Std. Dev.=0.00545, n=31, 3.226% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.939, critical = 0.902. Kappa = 1.701 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

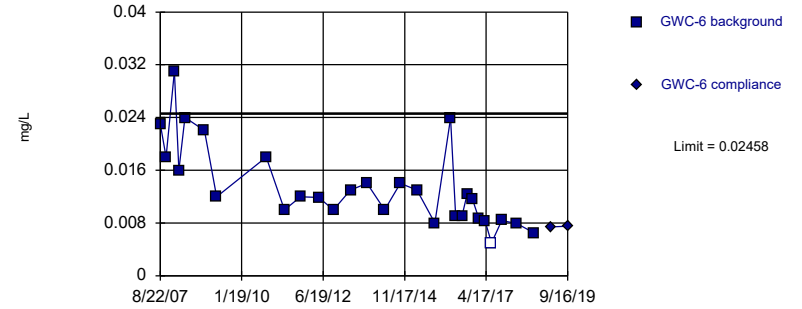


Background Data Summary: Mean=0.01764, Std. Dev.=0.003992, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9058, critical = 0.902. Kappa = 1.701 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 9:06 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

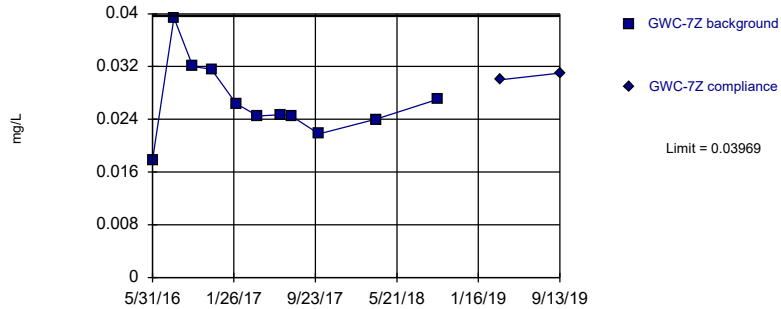


Background Data Summary (based on square root transformation): Mean=0.1134, Std. Dev.=0.02526, n=29, 3.448% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9406, critical = 0.898. Kappa = 1.718 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

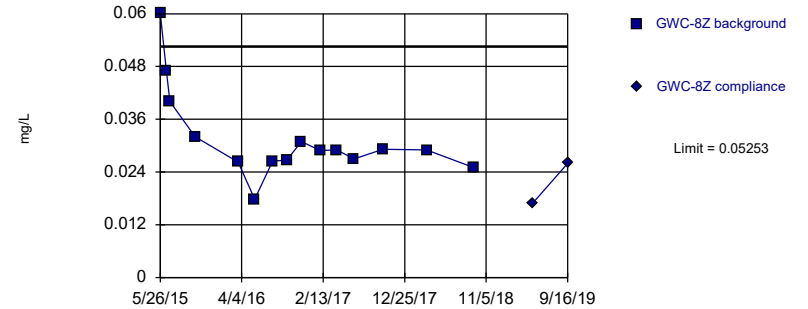


Background Data Summary: Mean=0.0267, Std. Dev.=0.005812, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9261, critical = 0.792. Kappa = 2.236 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

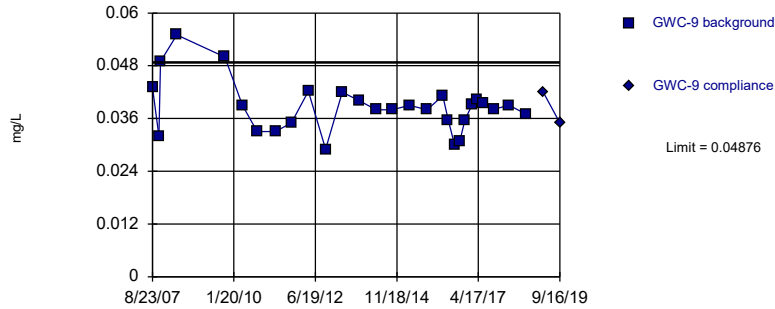


Background Data Summary (based on square root transformation): Mean=0.1761, Std. Dev.=0.02662, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8449, critical = 0.835. Kappa = 1.993 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

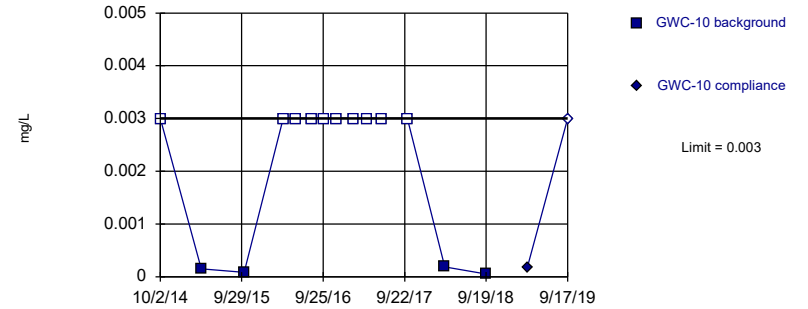


Background Data Summary: Mean=0.03862, Std. Dev.=0.005872, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9314, critical = 0.896. Kappa = 1.728 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



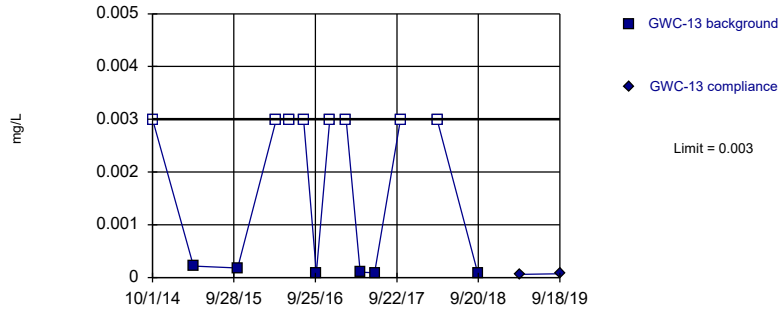
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



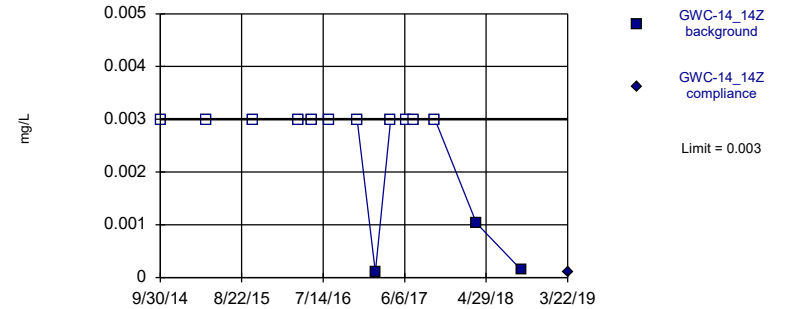
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

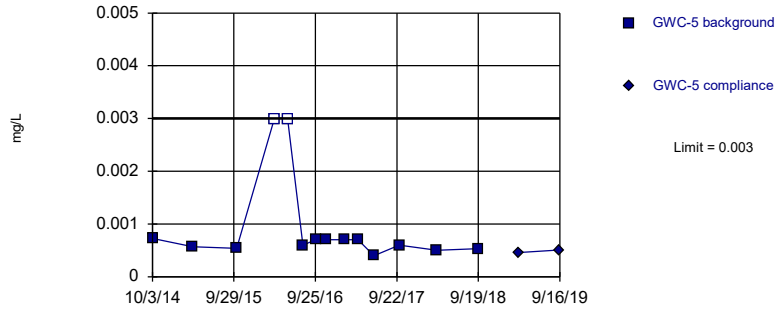


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

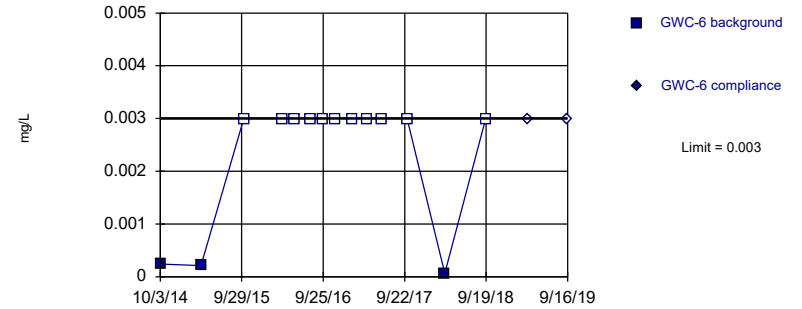


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 14.29% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

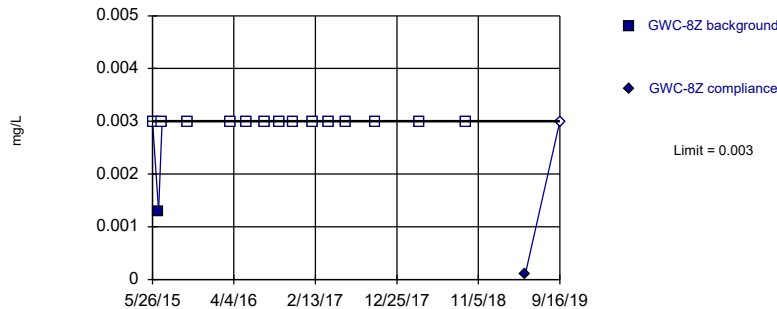


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 78.57% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

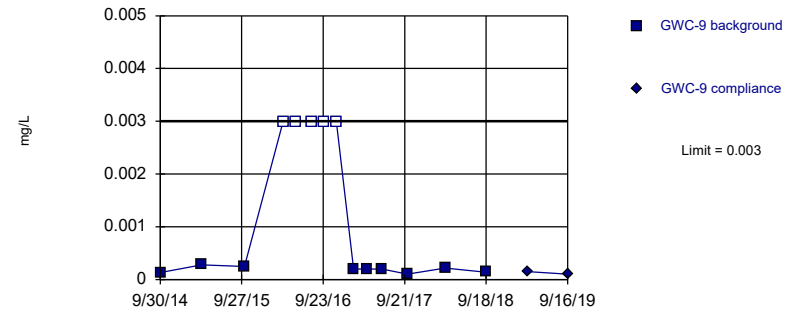


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Beryllium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

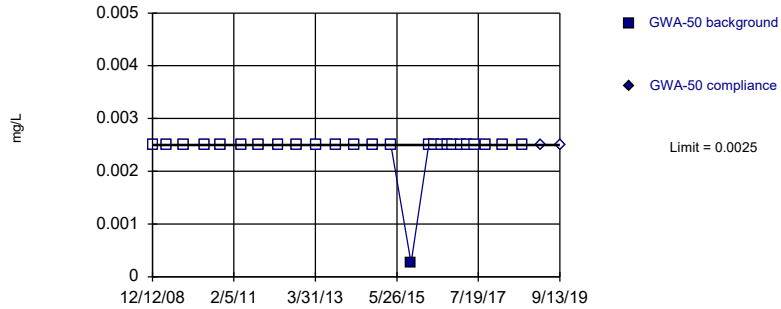


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 35.71% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Beryllium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

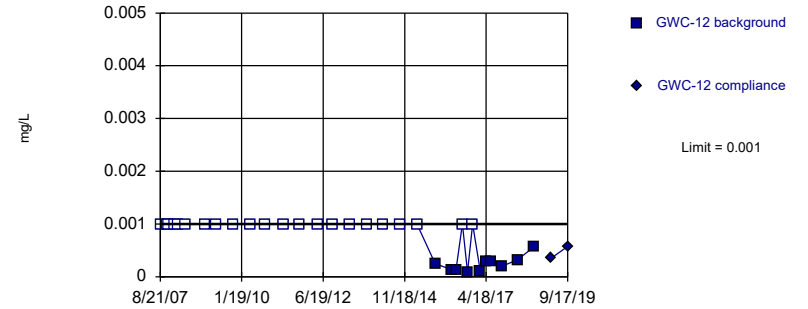


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Cadmium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

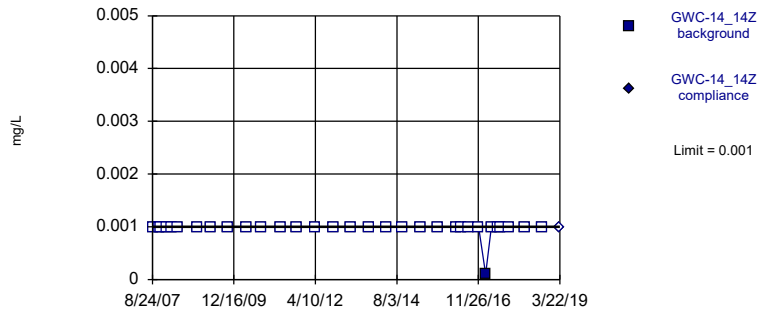


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

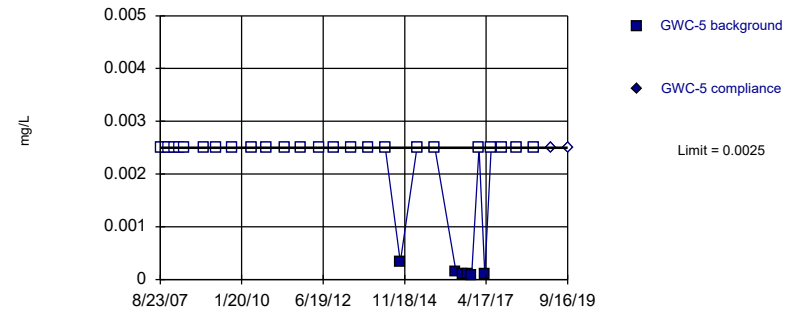


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

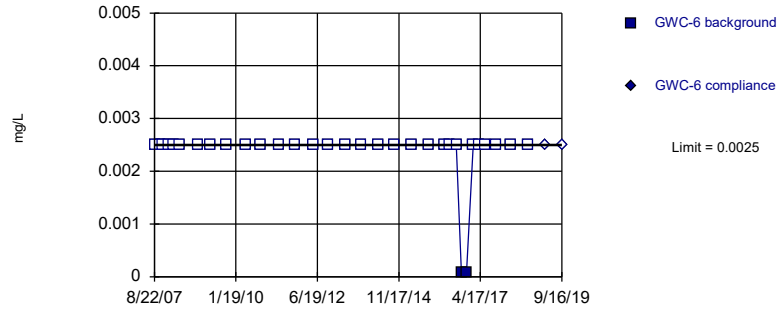


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 80.65% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

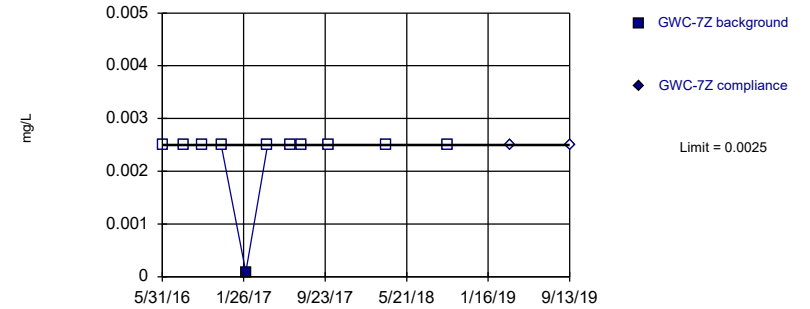


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

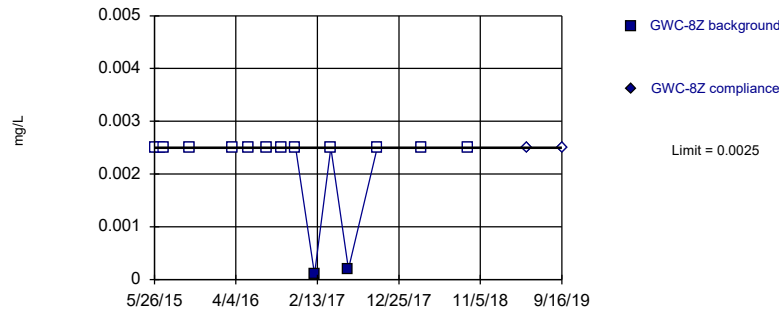


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

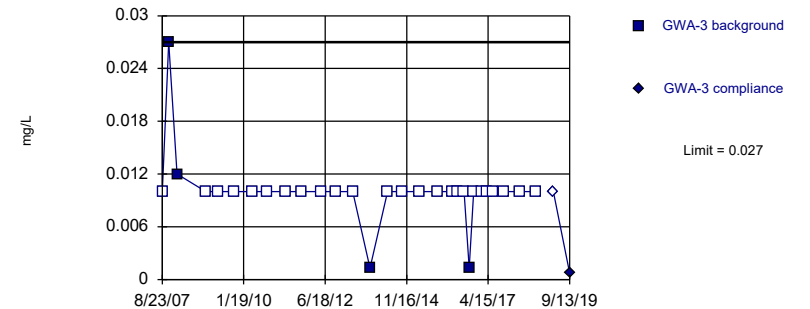


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Cadmium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

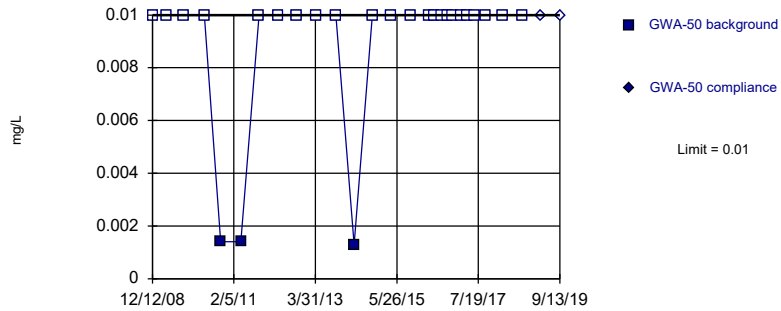


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 86.21% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

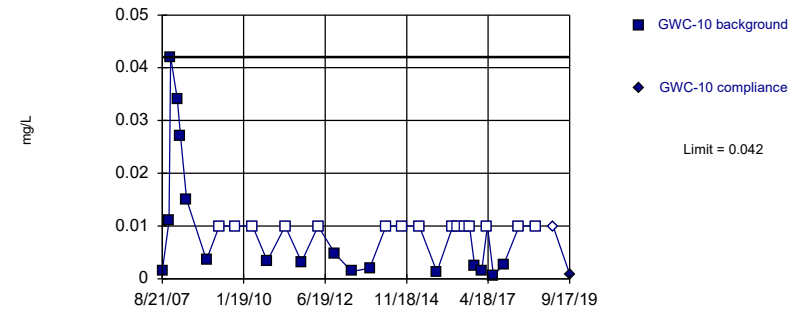


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 88.46% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

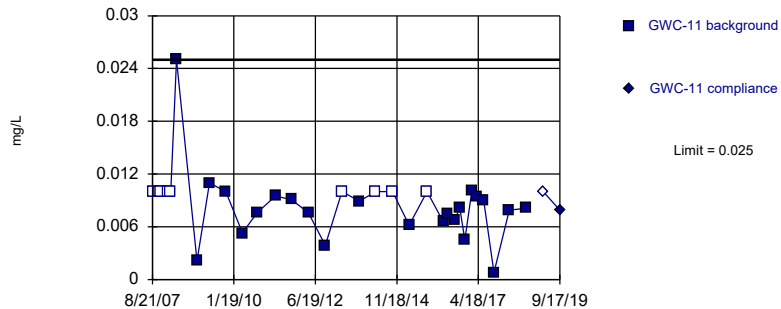


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 46.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

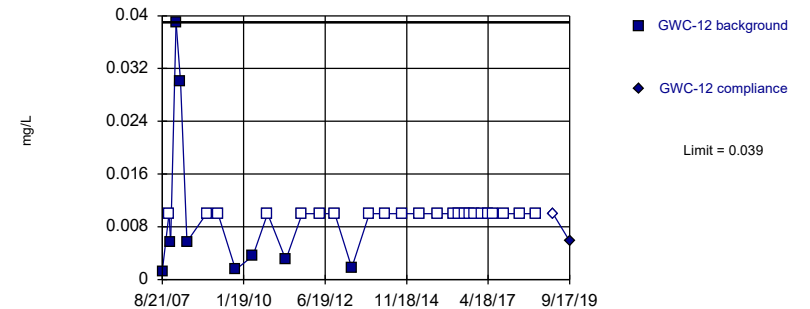


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 28.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

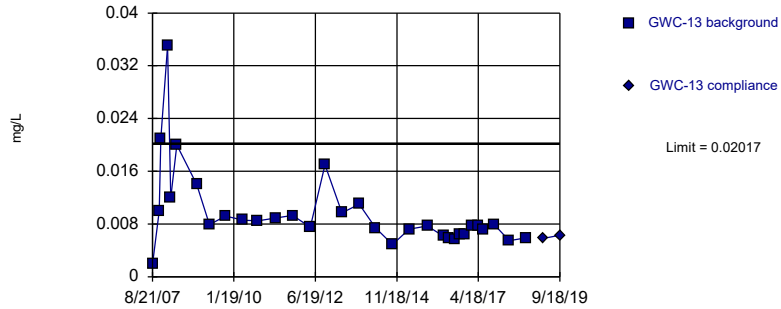


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 71.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

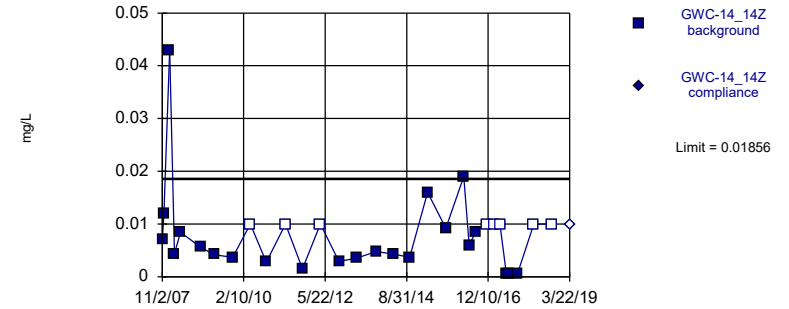


Background Data Summary (based on natural log transformation): Mean=-4.769, Std. Dev.=0.511, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9189, critical = 0.904. Kappa = 1.694 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

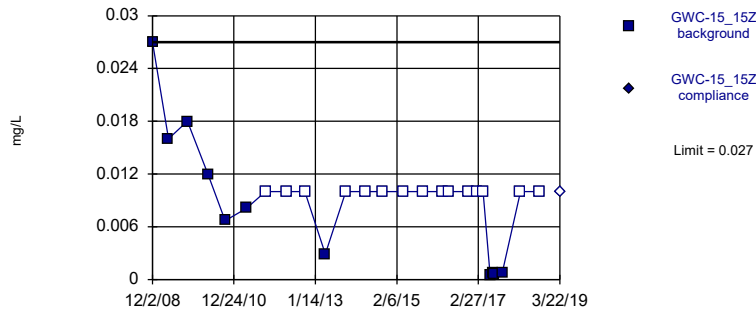


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.07182, Std. Dev.=0.03787, n=31, 25.81% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9098, critical = 0.902. Kappa = 1.701 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

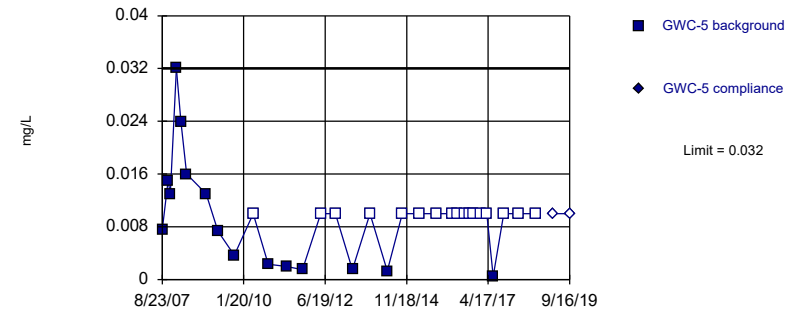


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 57.69% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

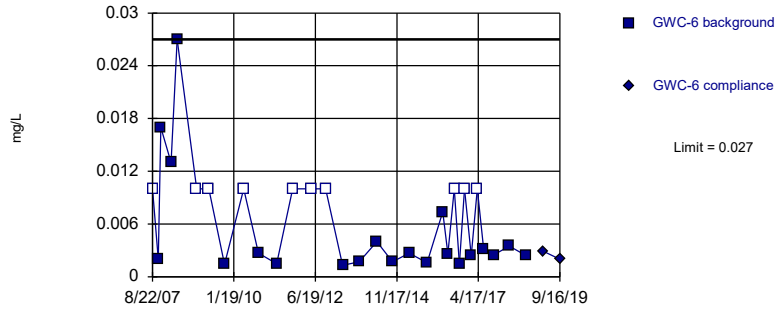


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 53.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

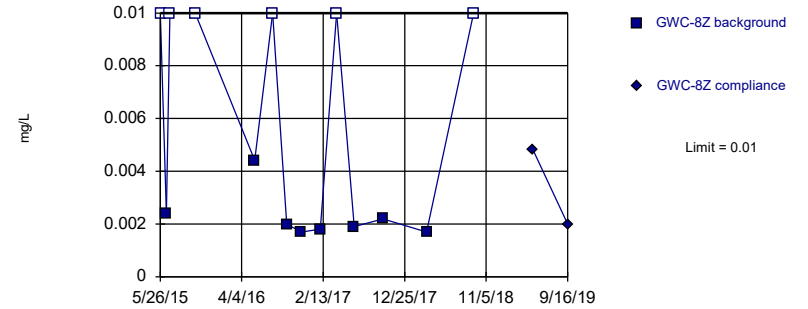


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. 32.26% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

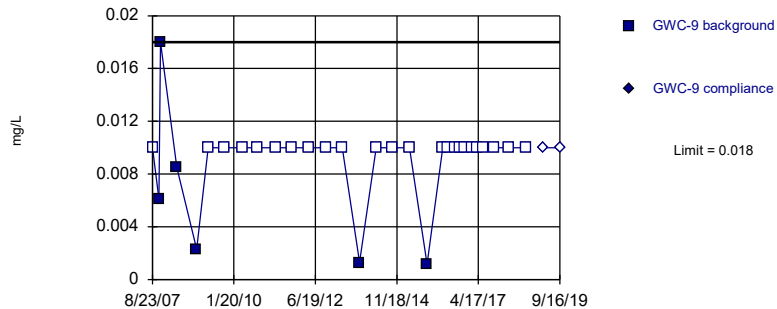


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 42.86% NDs. Well-constituent pair annual alpha = 0.003197. Individual comparison alpha = 0.0016 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

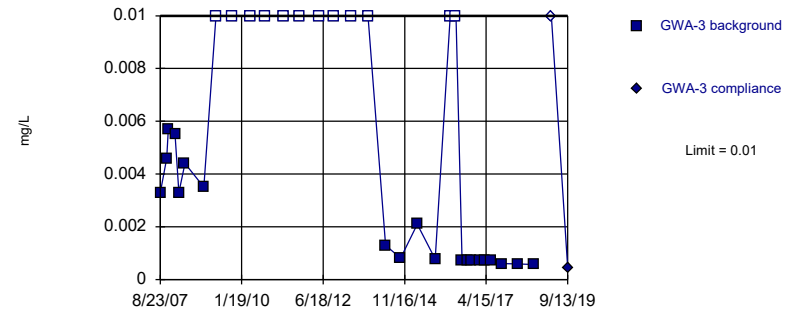


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 80% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Chromium Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

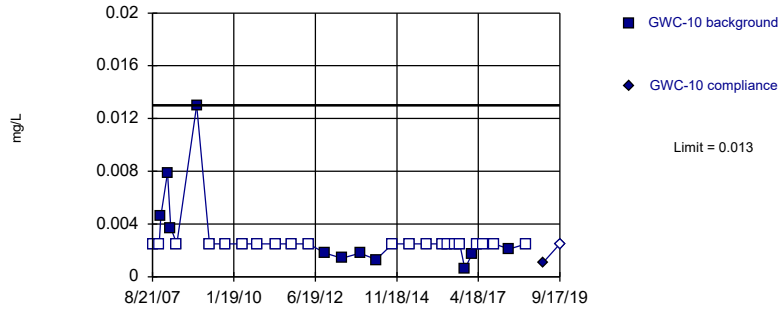


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 37.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

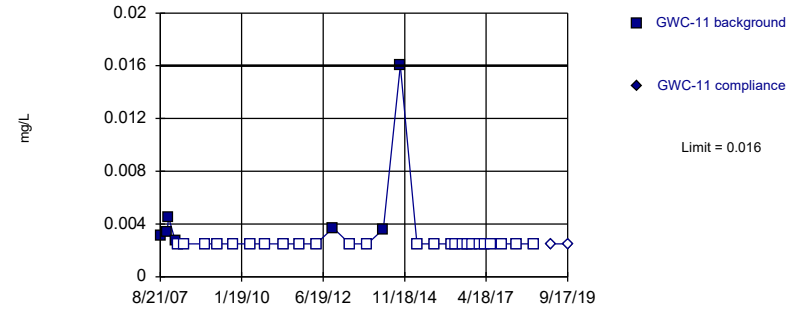


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 65.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

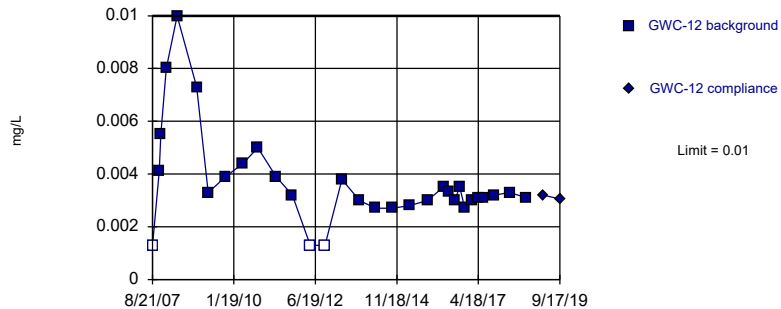


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

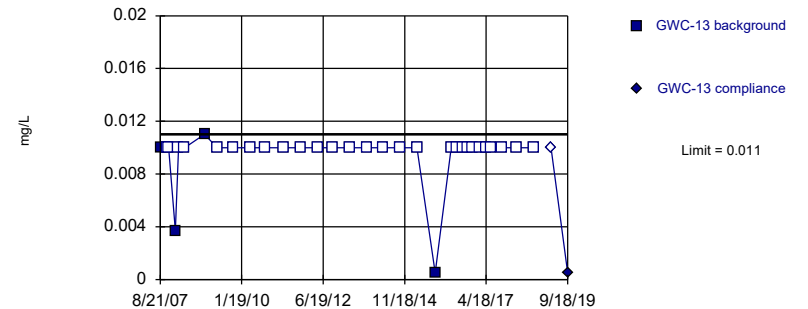


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. 9.677% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

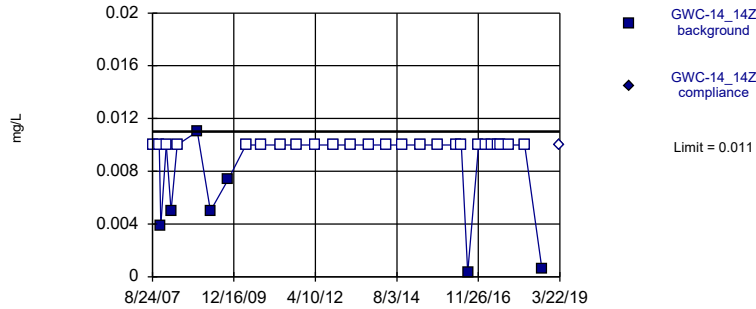


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

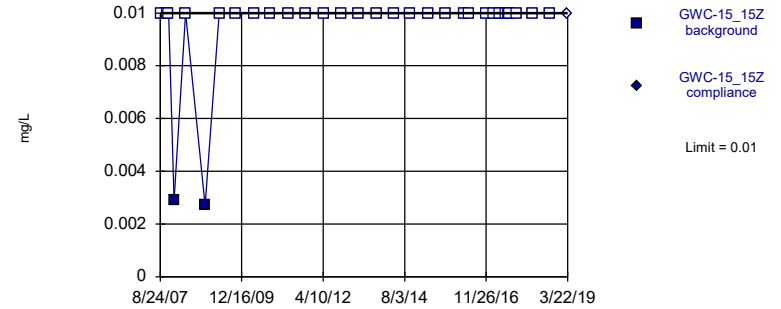


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

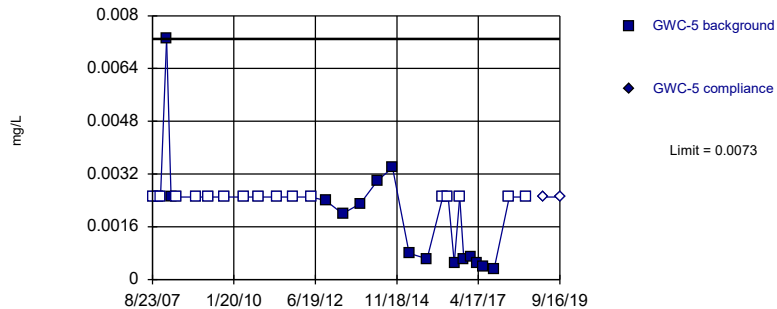


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

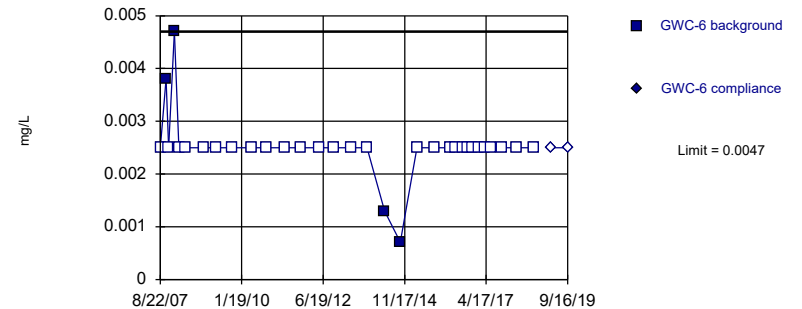


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 53.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

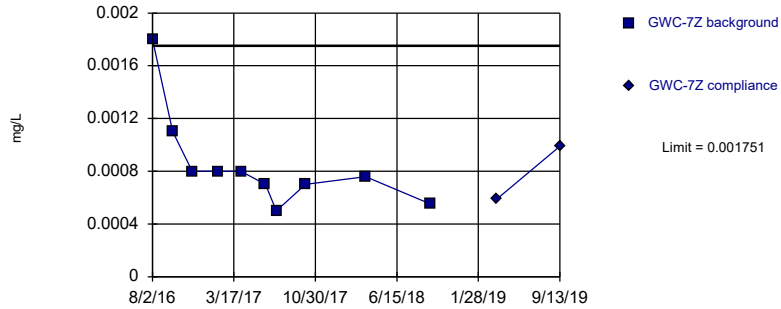


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:07 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

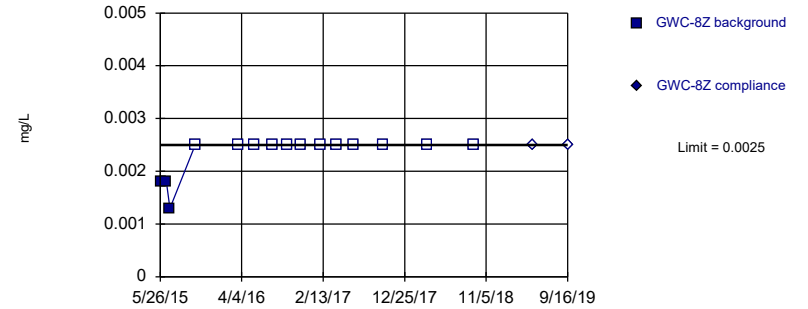


Background Data Summary (based on square root transformation): Mean=0.02867, Std. Dev.=0.005656, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8189, critical = 0.781. Kappa = 2.329 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Cobalt Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



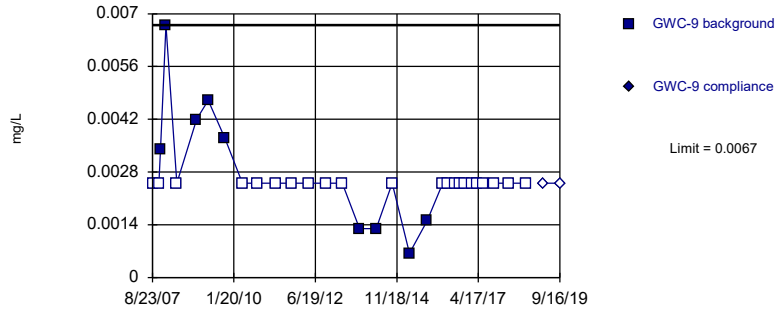
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

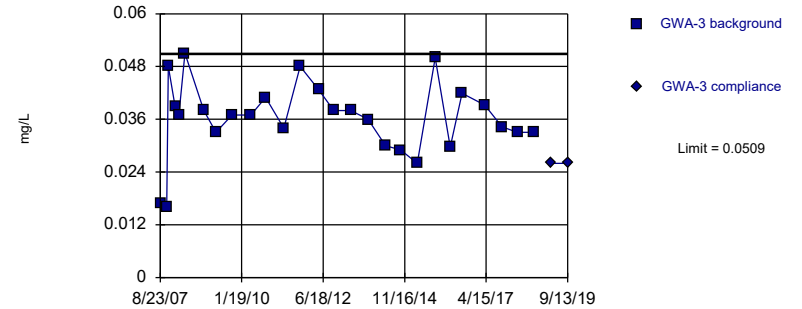


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 70.97% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

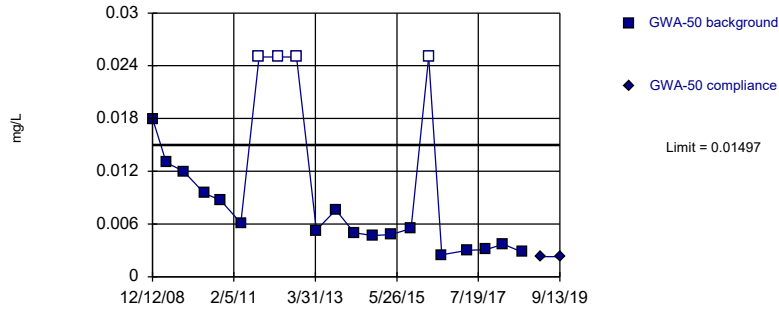


Background Data Summary: Mean=0.03618, Std. Dev.=0.008473, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9476, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

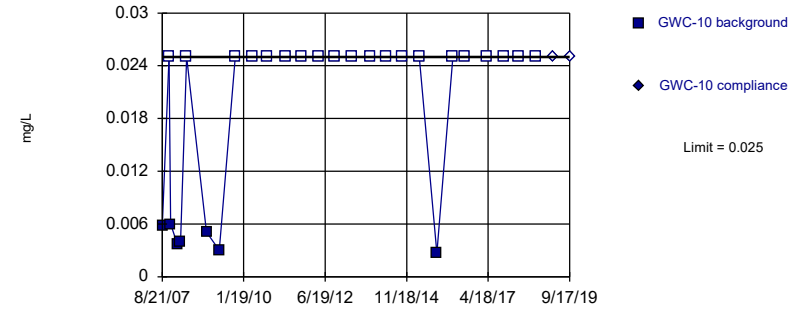


Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.1825, Std. Dev.=0.03515, n=21, 19.05% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.883, critical = 0.873. Kappa = 1.82 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

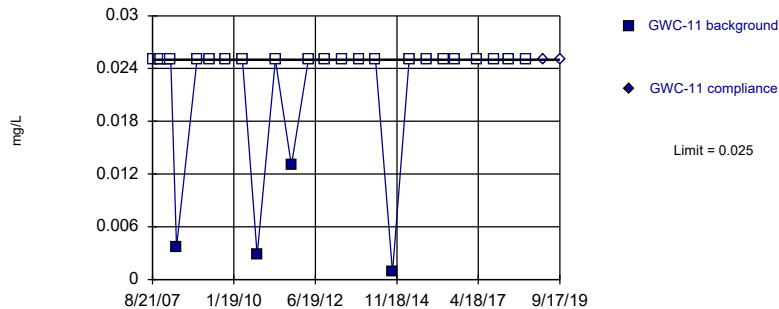


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

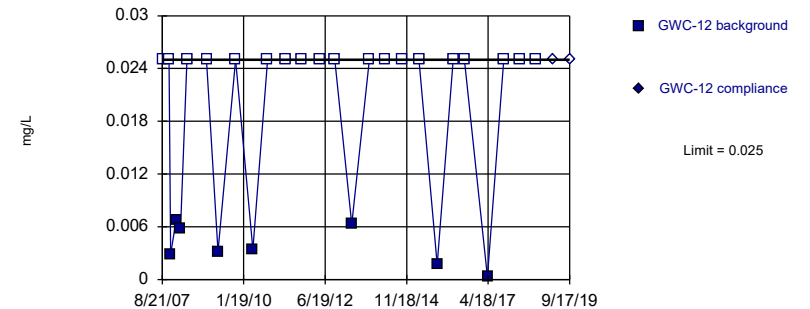


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

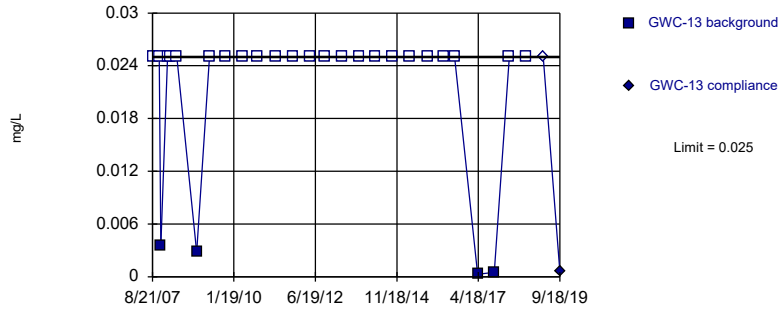


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 70.37% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

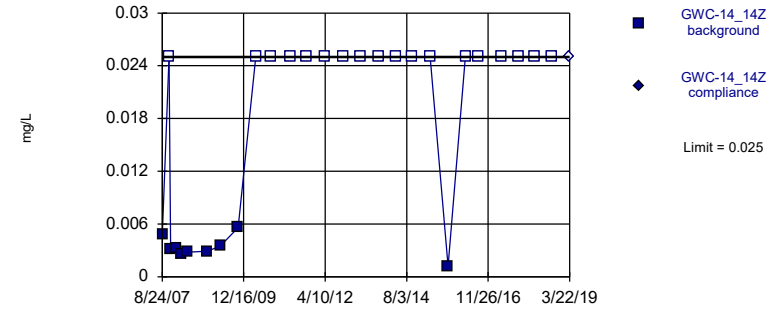


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

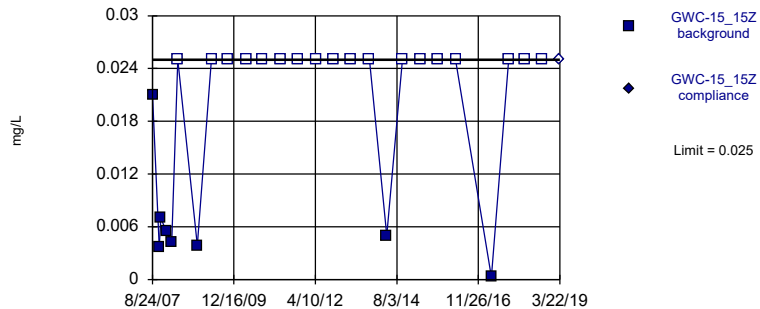


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

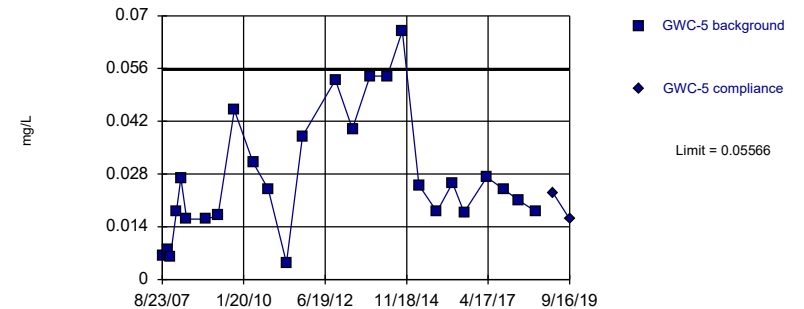


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

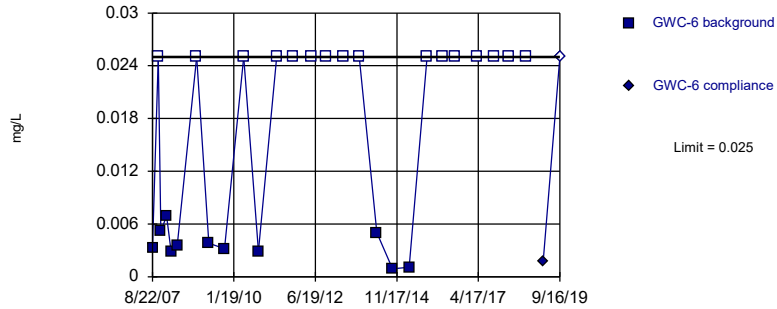


Background Data Summary: Mean=0.02693, Std. Dev.=0.01643, n=26. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9164, critical = 0.891. Kappa = 1.748 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

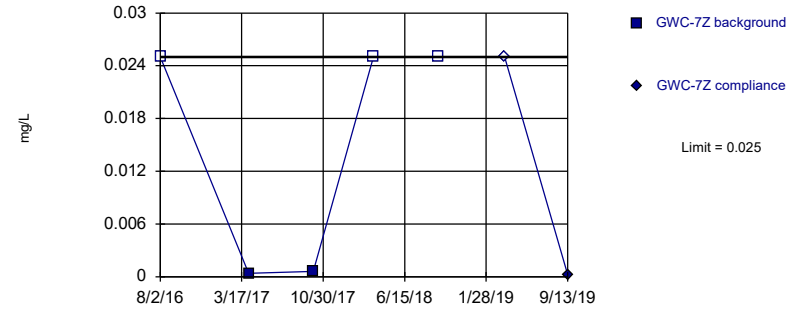


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 59.26% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

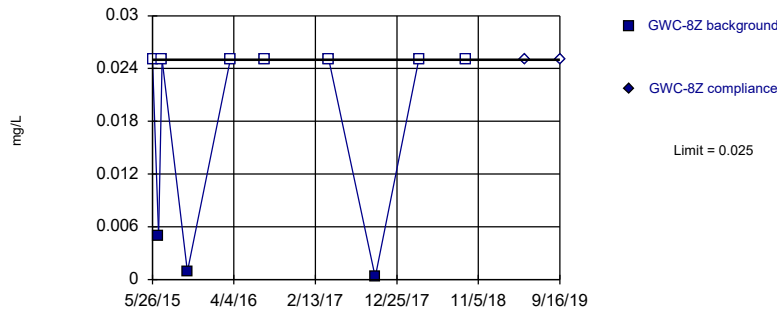


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 60% NDs. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

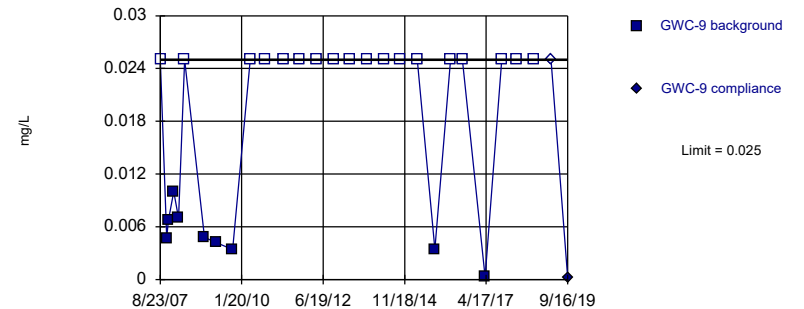


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

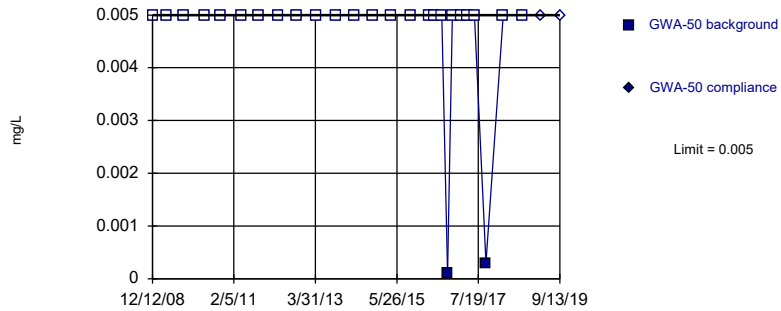


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Copper Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

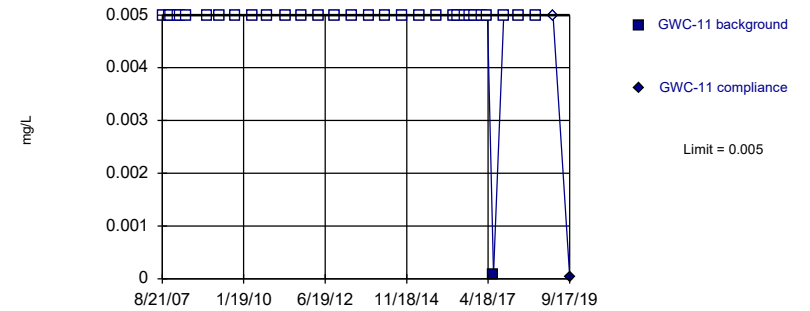


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Lead Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

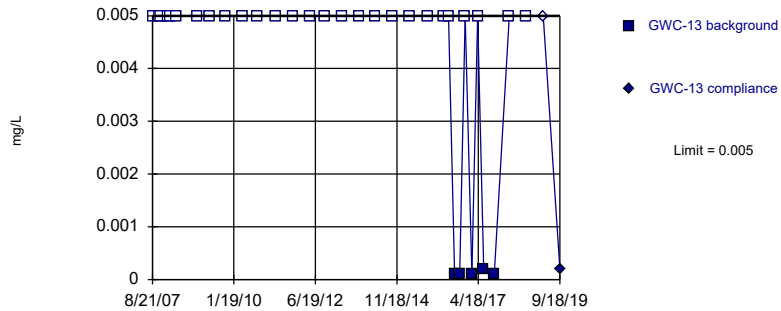


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

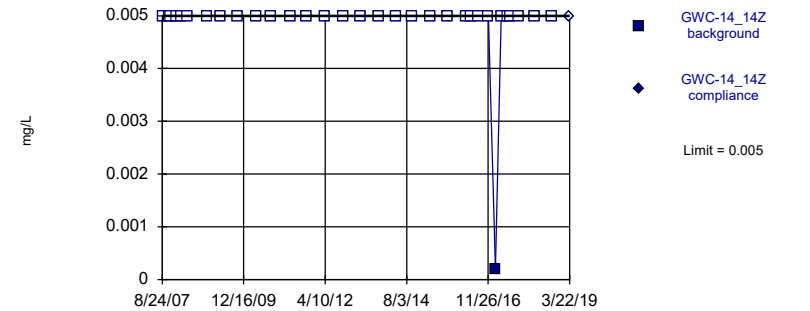


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 84.38% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

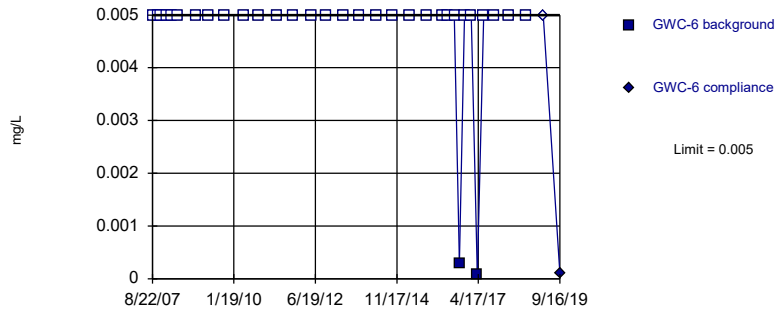


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

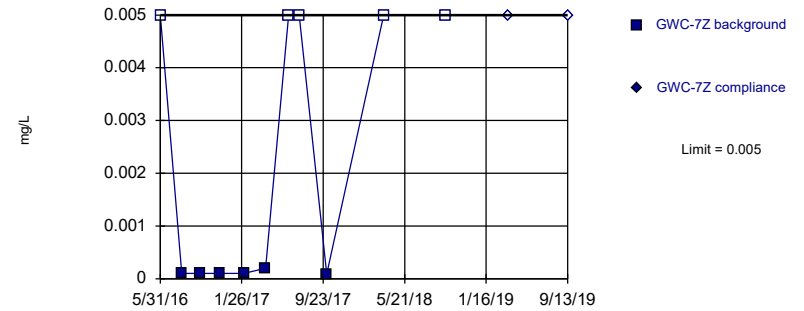


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

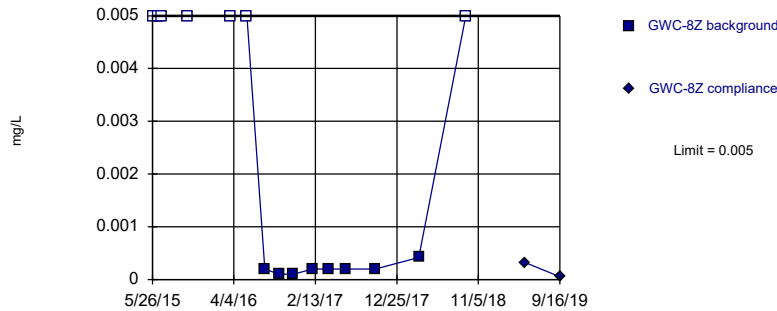


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

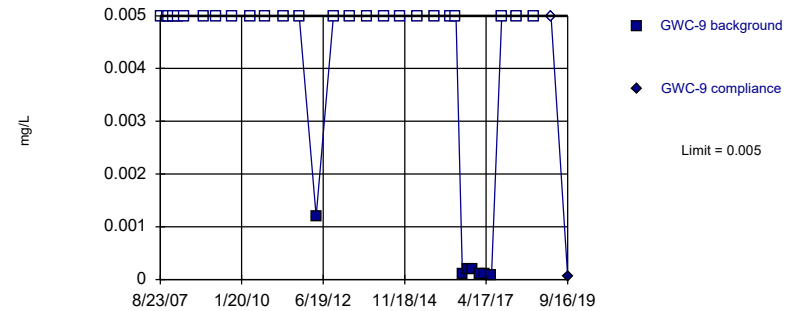


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 46.67% NDs. Well-constituent pair annual alpha = 0.002624. Individual comparison alpha = 0.001313 (1 of 3).

Constituent: Lead Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

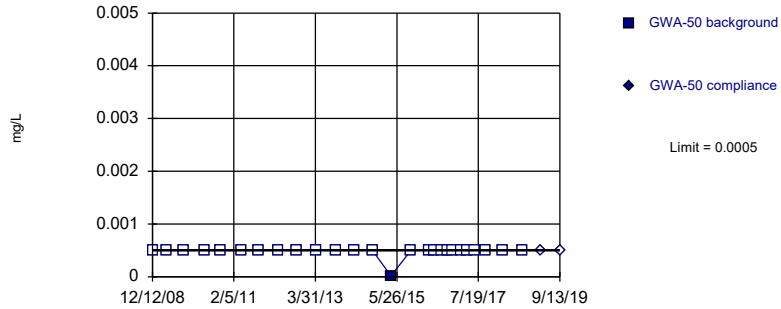


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

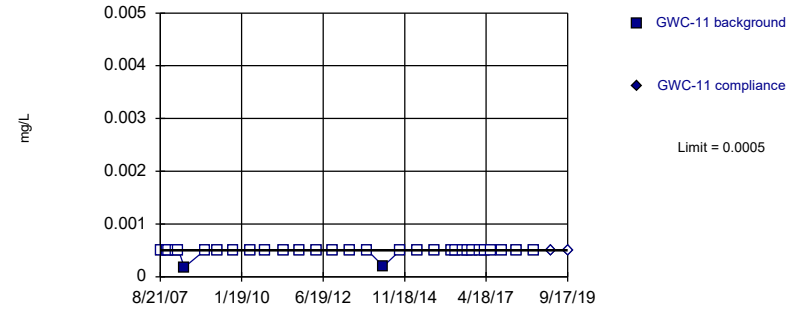


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Mercury Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

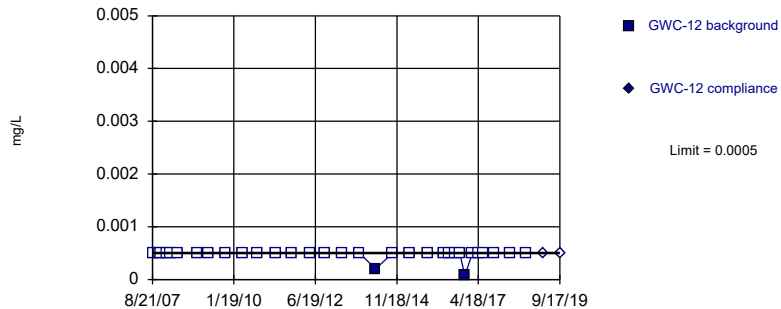


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

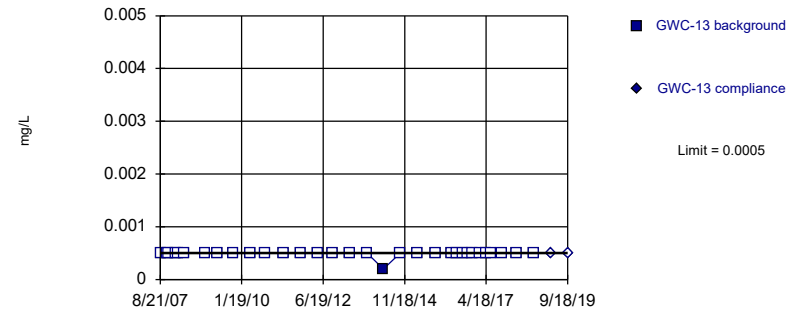


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

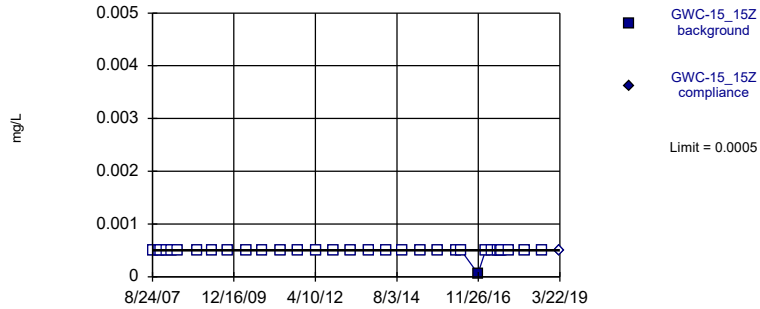
Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

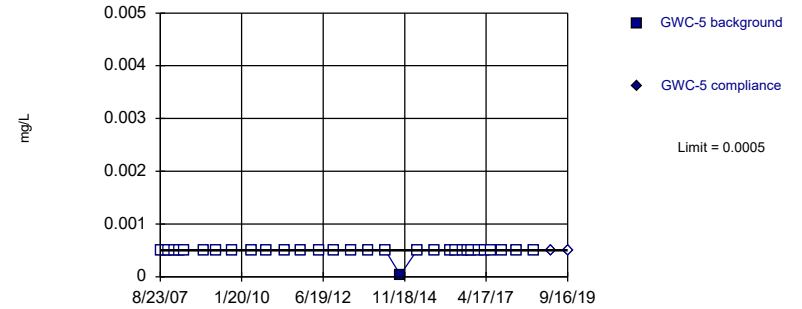
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

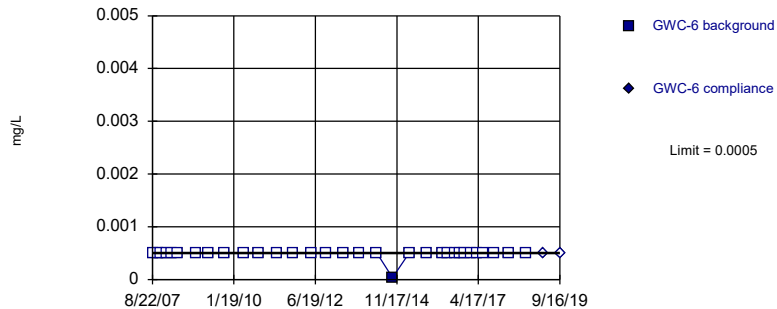
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

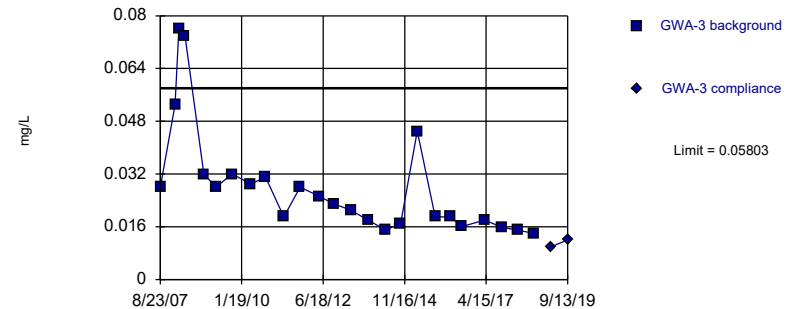
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Mercury Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Parametric

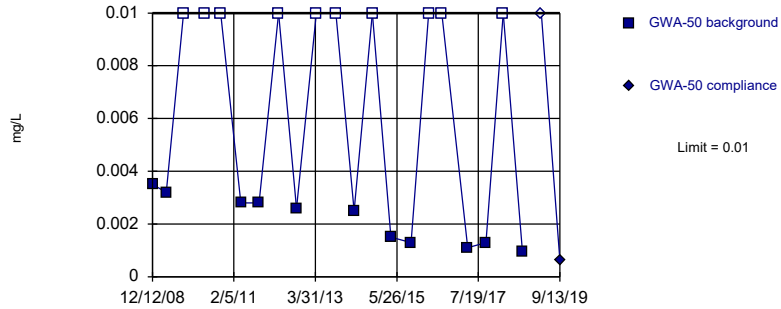


Background Data Summary (based on natural log transformation): Mean=-3.684, Std. Dev.=0.4762, n=25. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8937, critical = 0.888. Kappa = 1.758 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

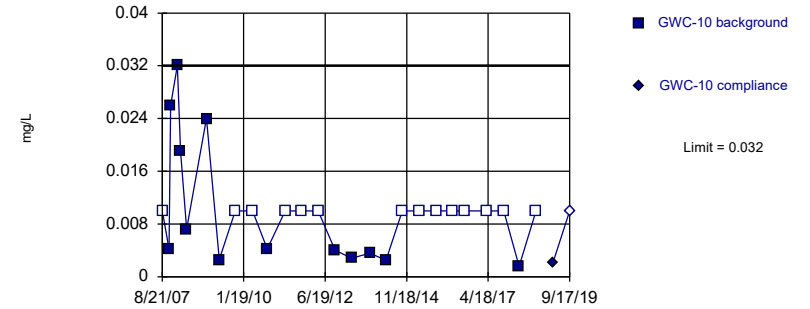


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 47.62% NDs. Well-constituent pair annual alpha = 0.001022. Individual comparison alpha = 0.000511 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

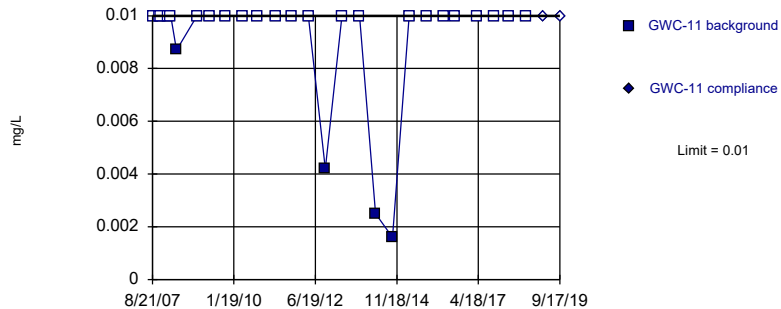


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 51.85% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

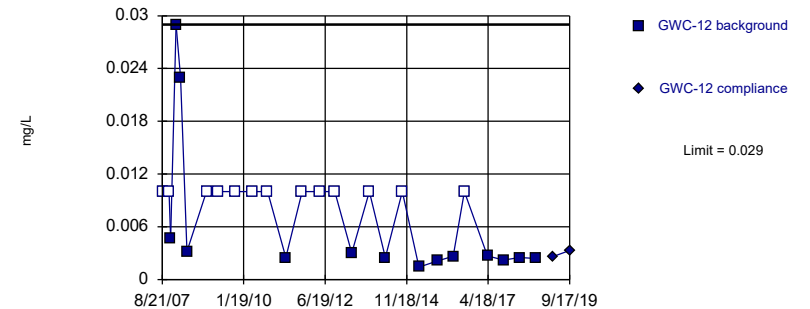


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

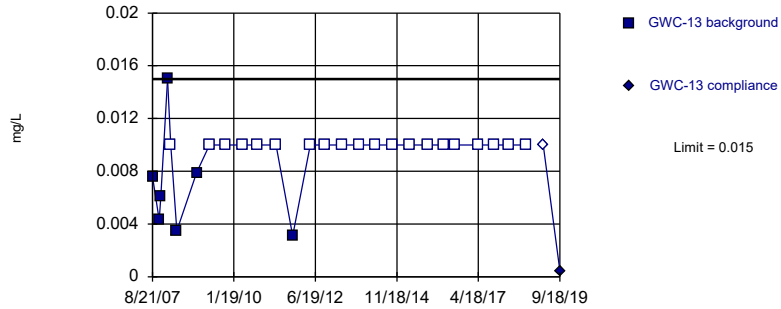


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 48.15% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

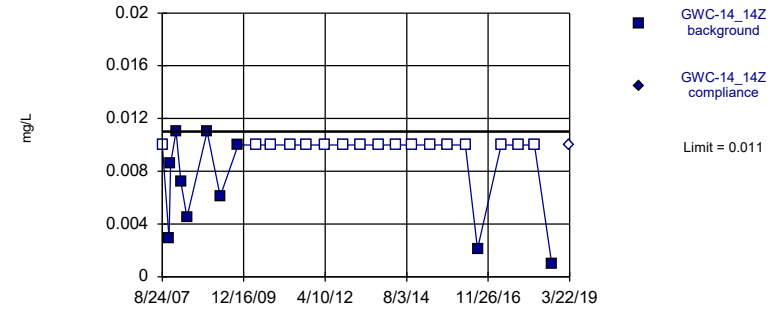


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

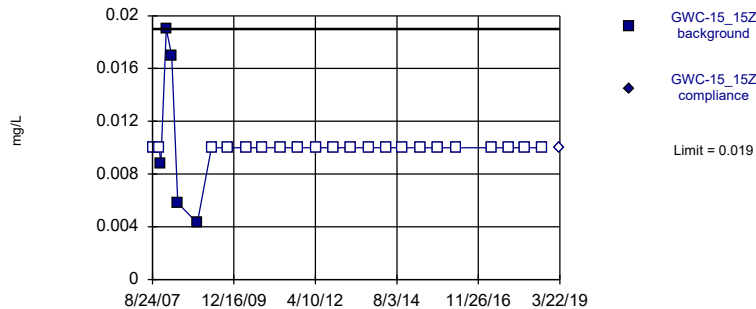


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 62.96% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

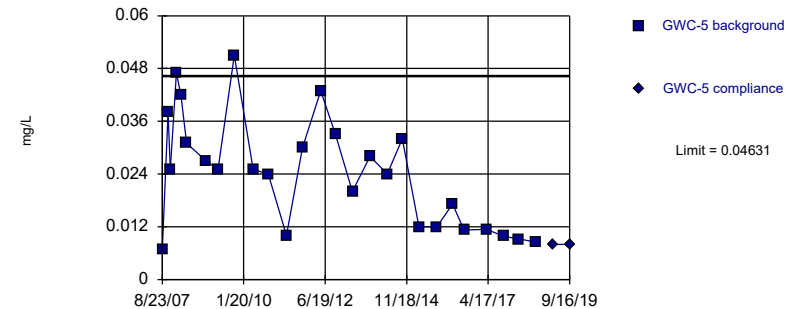


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 80.77% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

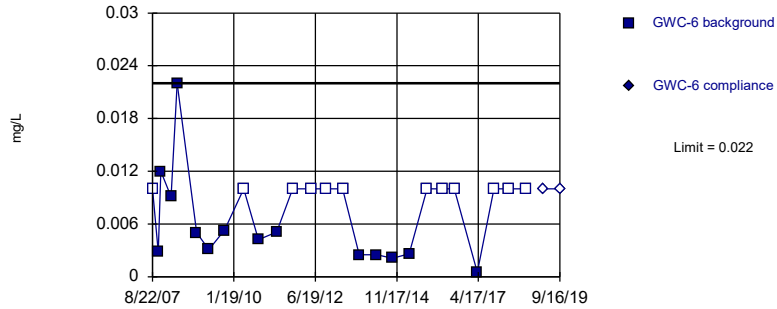


Background Data Summary: Mean=0.02419, Std. Dev.=0.01273, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9337, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Nickel Analysis Run 1/15/2020 9:08 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

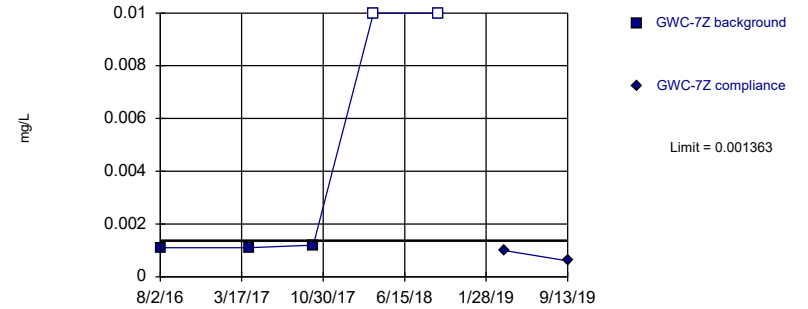


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. 46.15% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

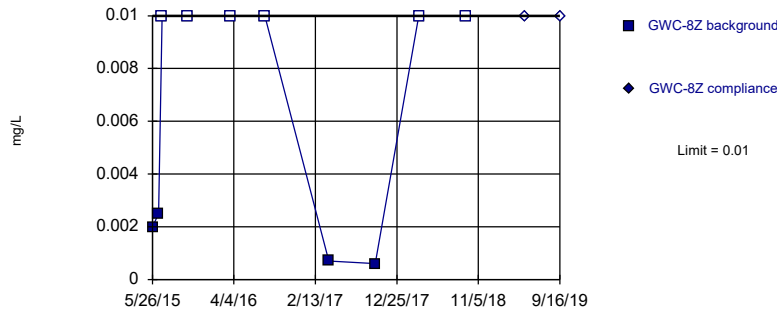


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001133, Std. Dev.=0.00004714, n=5, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.689, critical = 0.686. Kappa = 4.875 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Nickel Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

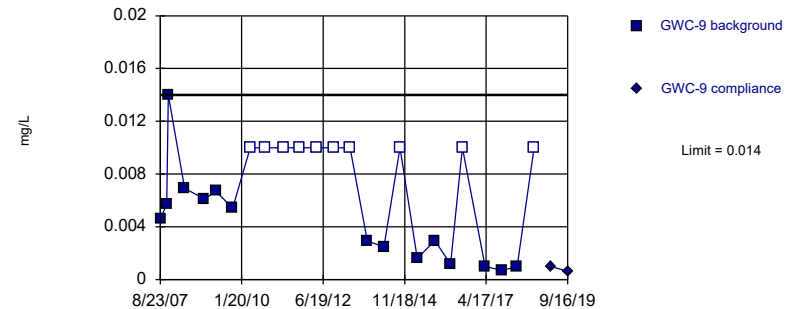


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



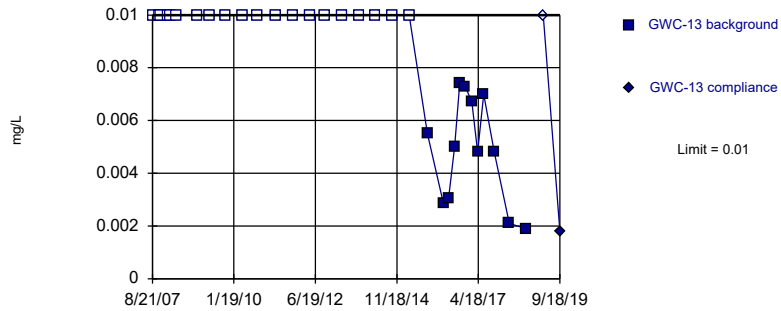
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 25 background values. 40% NDs. Well-constituent pair annual alpha = 0.0006091. Individual comparison alpha = 0.0003046 (1 of 3).

Constituent: Nickel Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



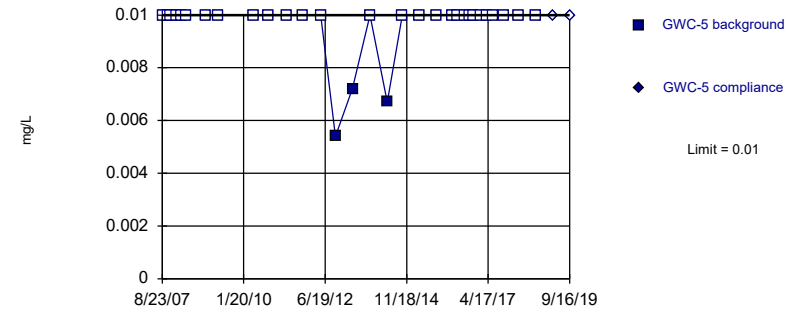
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



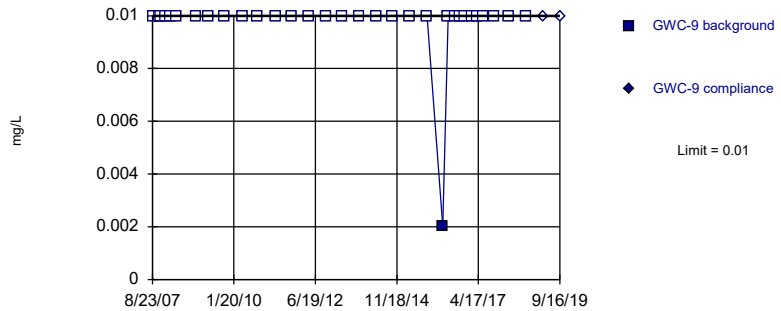
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 90.32% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



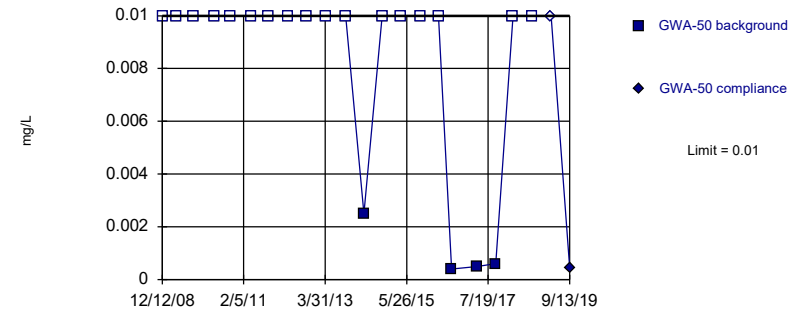
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

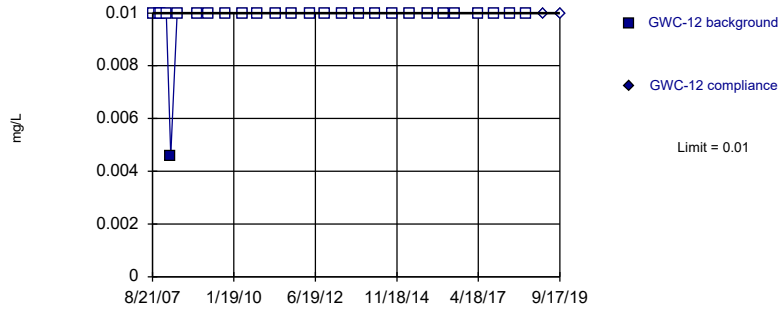


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 80.95% NDs. Well-constituent pair annual alpha = 0.001022. Individual comparison alpha = 0.000511 (1 of 3).

Constituent: Silver Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

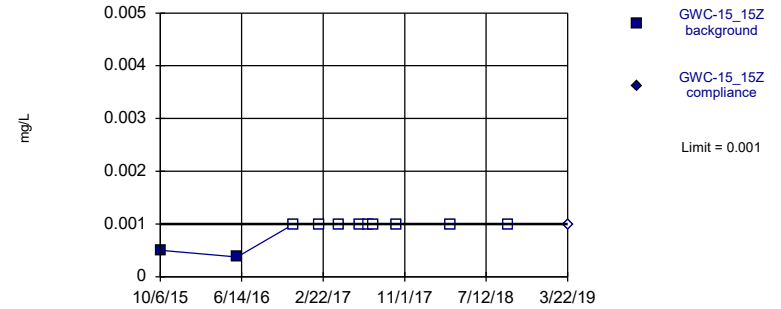


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 96.3% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Silver Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

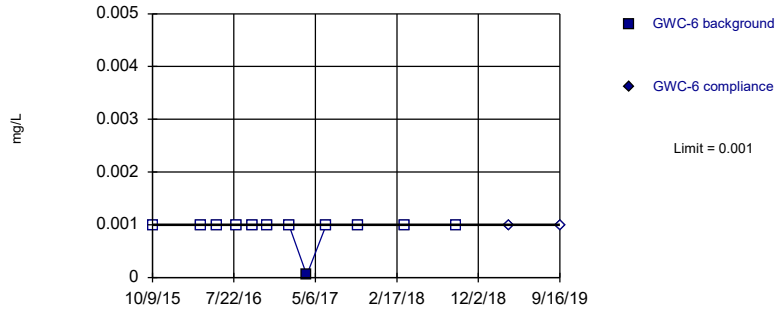


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

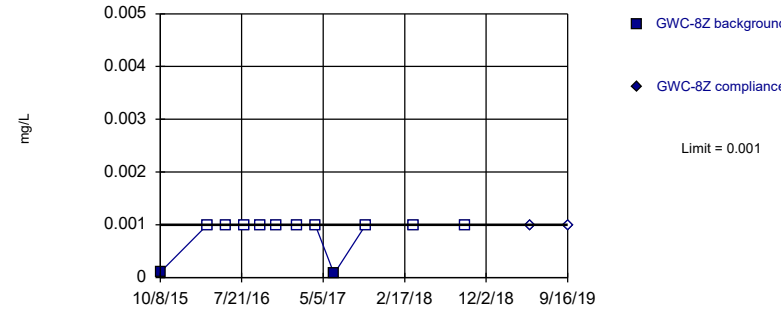


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

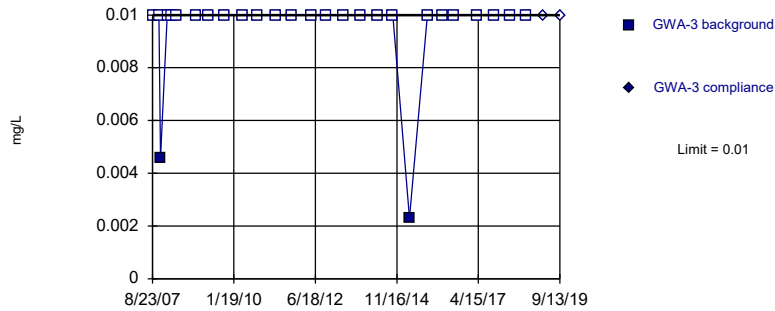


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Thallium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

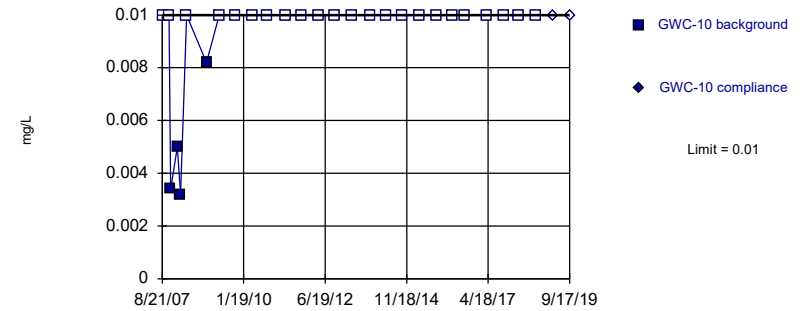


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 92.59% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

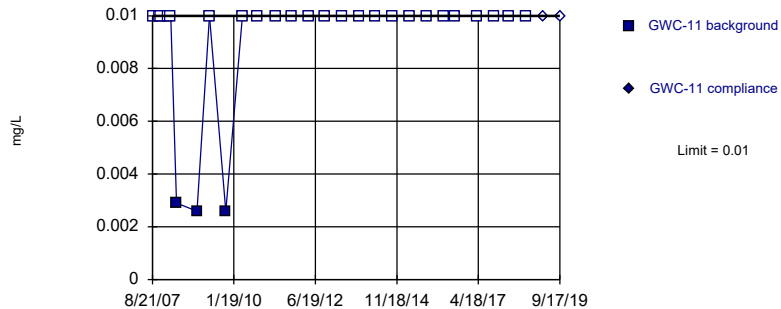


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 85.19% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

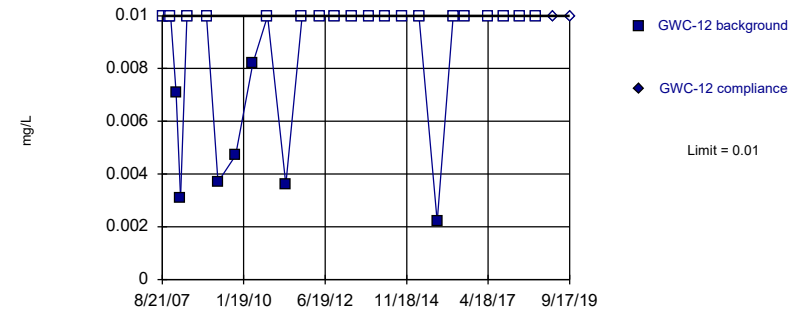


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

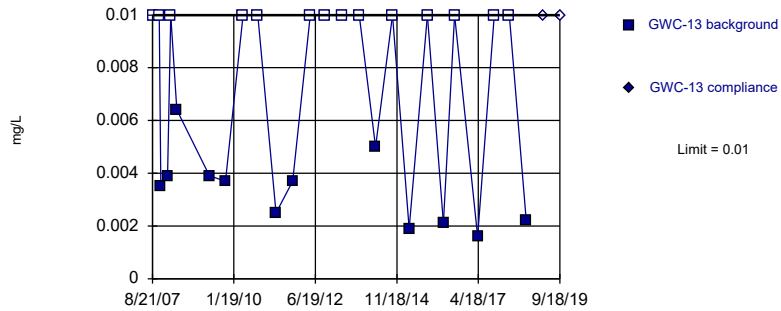


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

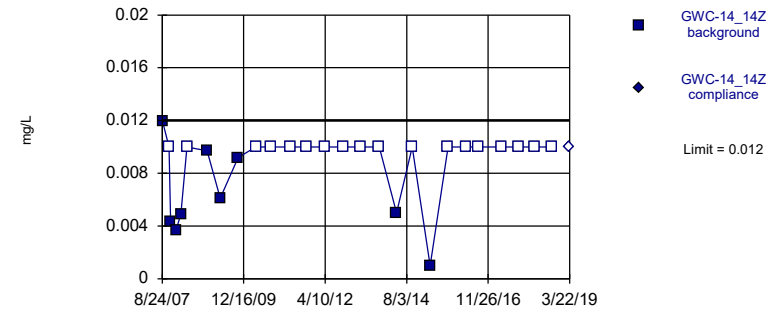


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.0005605. Individual comparison alpha = 0.0002803 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

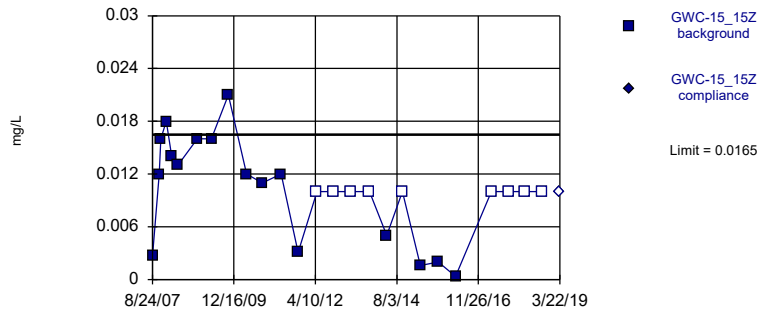


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

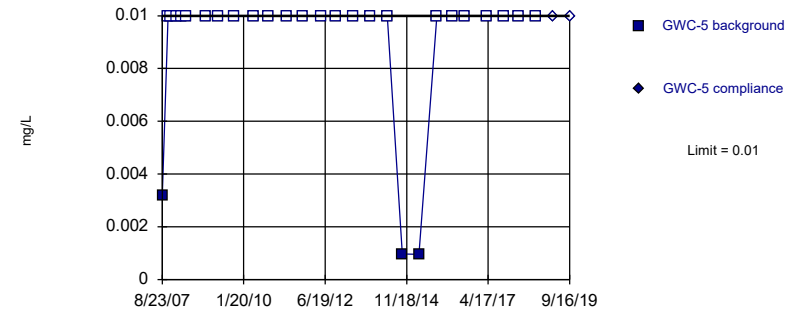


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.006028, Std. Dev.=0.005988, n=26, 34.62% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9325, critical = 0.891. Kappa = 1.748 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

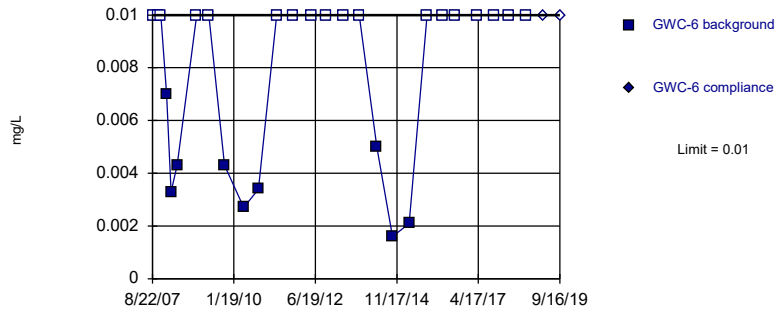


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

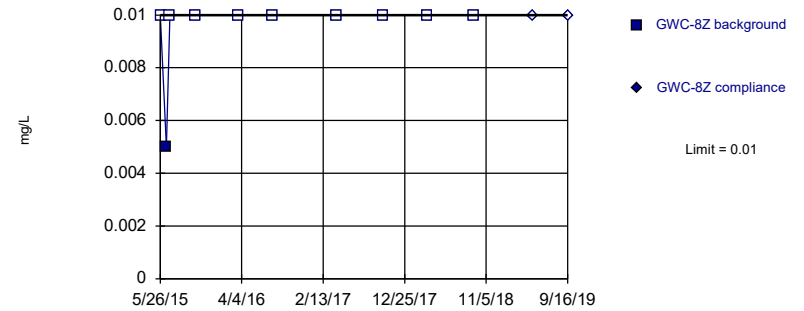


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

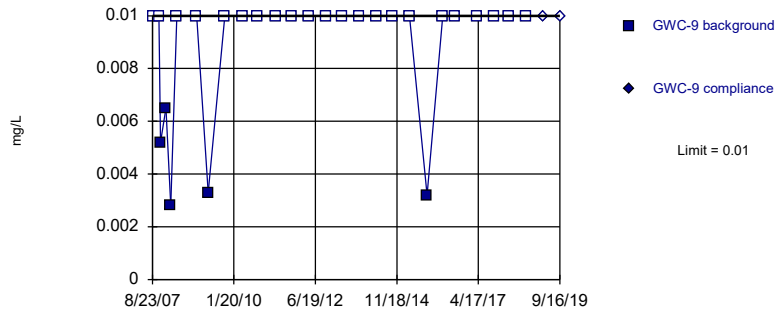


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

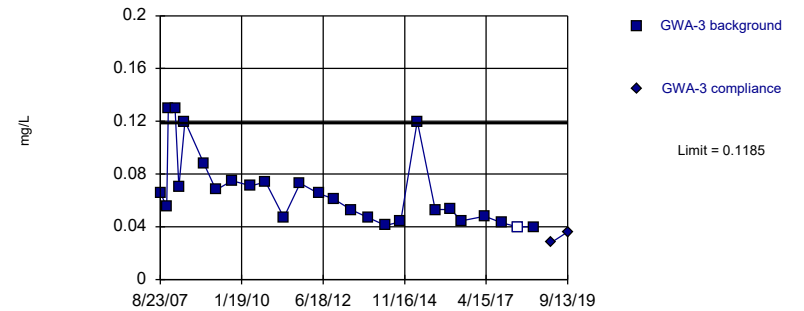


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Vanadium Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

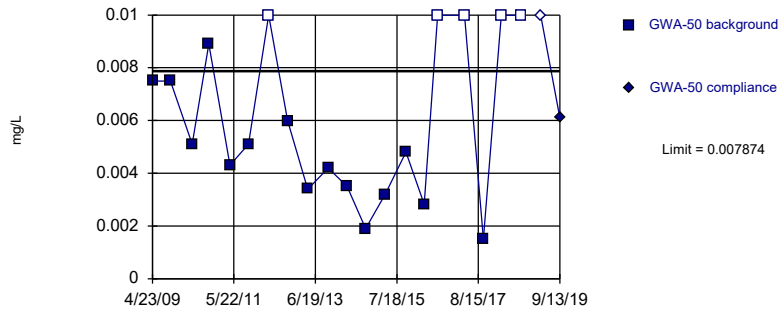


Background Data Summary (based on natural log transformation): Mean=-2.766, Std. Dev.=0.3644, n=27, 3.704% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.902, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

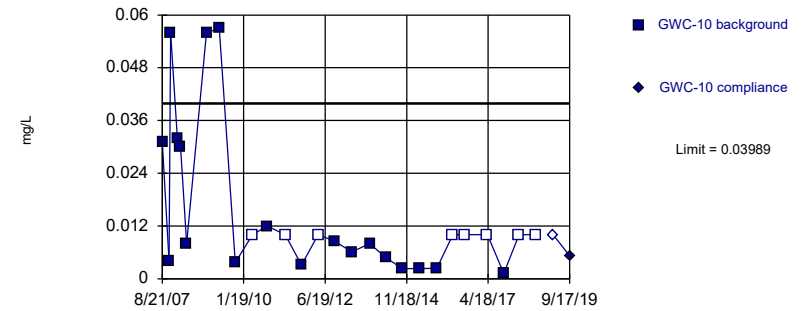


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.004272, Std. Dev.=0.001962, n=20, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8936, critical = 0.868. Kappa = 1.836 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

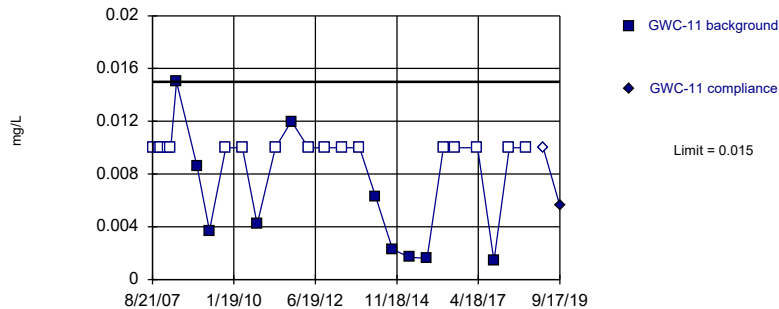


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.18, Std. Dev.=1.127, n=27, 29.63% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9368, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

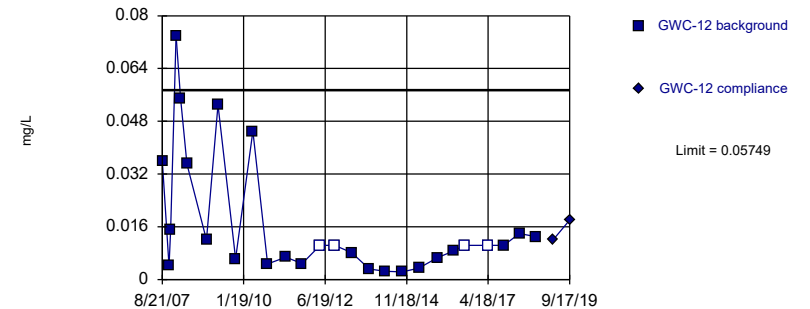


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 62.96% NDs. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

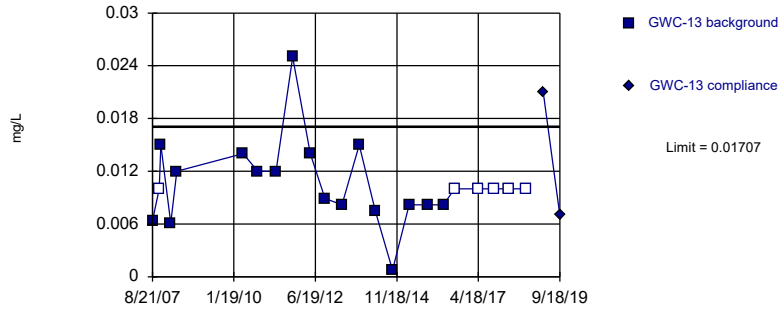


Background Data Summary (based on natural log transformation): Mean=-4.541, Std. Dev.=0.9693, n=27, 14.81% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9405, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

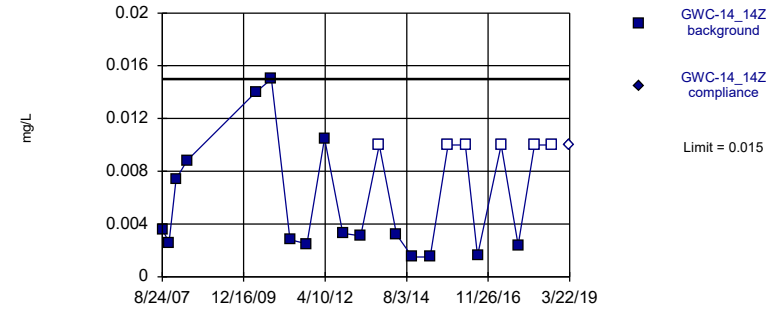


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.008189, Std. Dev.=0.004965, n=23, 26.09% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8841, critical = 0.881. Kappa = 1.789 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

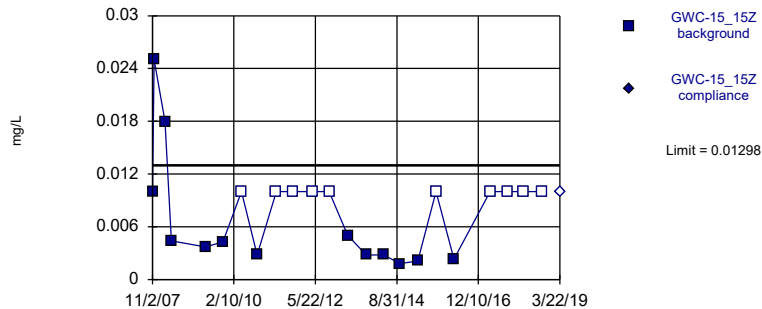


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. 27.27% NDs. Well-constituent pair annual alpha = 0.0009186. Individual comparison alpha = 0.0004594 (1 of 3).

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

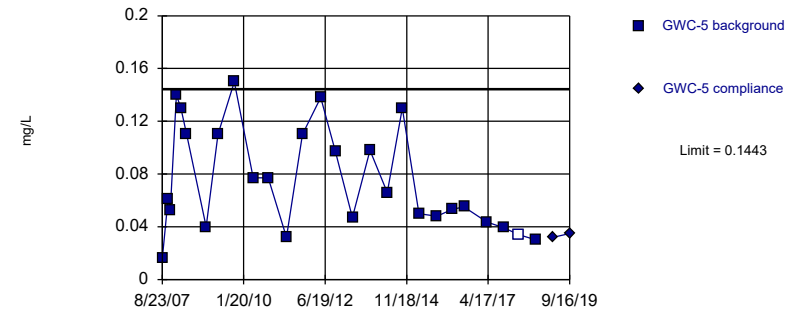


Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.1578, Std. Dev.=0.04314, n=23, 43.48% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8815, critical = 0.881. Kappa = 1.789 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

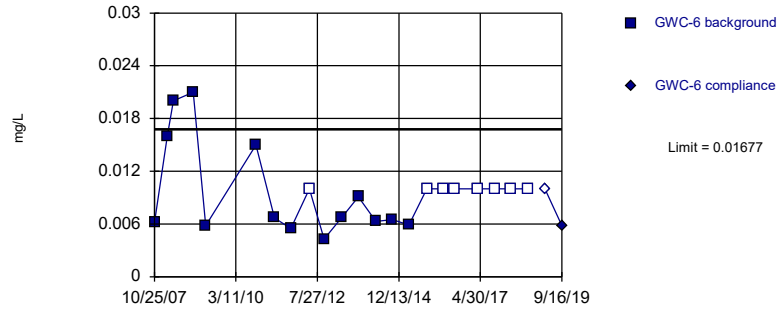
Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.07538, Std. Dev.=0.03964, n=27, 3.704% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9153, critical = 0.894. Kappa = 1.738 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

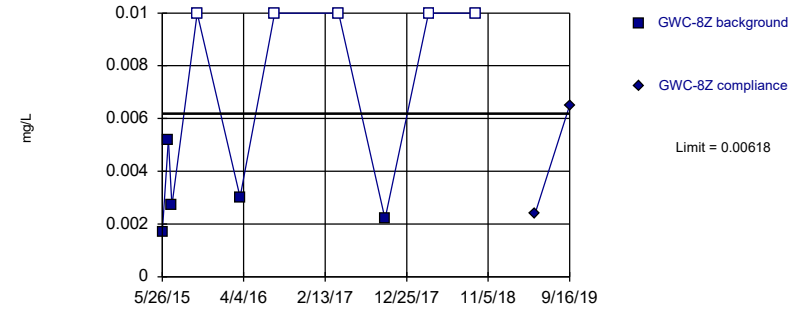
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.08853, Std. Dev.=0.0227, n=22, 36.36% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8863, critical = 0.878. Kappa = 1.805 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

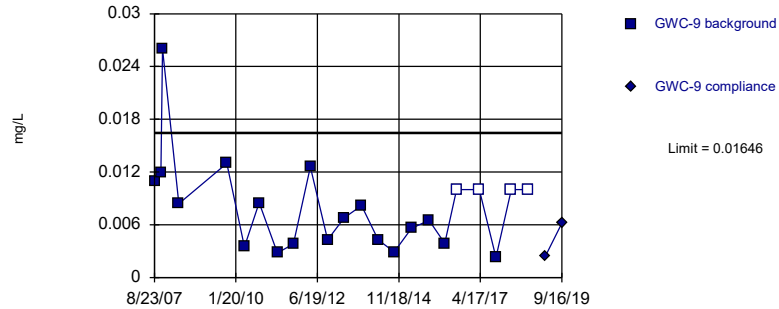
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.1413, Std. Dev.=0.01813, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7851, critical = 0.781. Kappa = 2.329 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.08051, Std. Dev.=0.0267, n=23, 17.39% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.881. Kappa = 1.789 (c=16, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 9:09 AM View: PL's Intrawell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Intrawell Prediction Limit Summary - Bedrock Wells (No Significant)

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/15/2020, 9:22 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-1	0.0097	n/a	9/12/2019	0.0037	No	30	n/a	n/a	50	n/a	n/a	0.002008	NP Intra (normality) 1 of 2
Antimony (mg/L)	GWA-2	0.003	n/a	9/12/2019	0.003ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWA-2R	0.0081	n/a	9/13/2019	0.0044	No	30	n/a	n/a	56.67	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWA-4RZ	0.003	n/a	9/12/2019	0.00052	No	11	n/a	n/a	63.64	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWA-50R	0.003	n/a	9/12/2019	0.003ND	No	26	n/a	n/a	100	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-10R	0.003	n/a	9/17/2019	0.003ND	No	31	n/a	n/a	96.77	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-11R	0.0044	n/a	9/17/2019	0.0013	No	30	n/a	n/a	83.33	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-13R_13RZ	0.00447	n/a	n/a	1 future	n/a	26	n/a	n/a	61.54	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-15R	0.0106	n/a	9/17/2019	0.0017	No	32	n/a	n/a	53.13	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-6RZ	0.003	n/a	9/16/2019	0.003ND	No	14	n/a	n/a	85.71	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-8RR	0.003	n/a	9/16/2019	0.003ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-1	0.005	n/a	9/12/2019	0.0004	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-2	0.005	n/a	9/12/2019	0.005ND	No	31	n/a	n/a	100	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-2R	0.0056	n/a	9/13/2019	0.00051	No	32	n/a	n/a	78.13	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-4RZ	0.002431	n/a	9/12/2019	0.0006	No	11	0.0969	0.01324	27.27	Kaplan-Meier	x^(1/3)	0.0005486	Param Intra 1 of 2
Arsenic (mg/L)	GWA-50R	0.005	n/a	9/12/2019	0.005ND	No	25	n/a	n/a	100	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-10R	0.005	n/a	9/17/2019	0.005ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-11R	0.0077	n/a	9/17/2019	0.0016	No	32	n/a	n/a	50	n/a	n/a	0.001803	NP Intra (normality) 1 of 2
Arsenic (mg/L)	GWC-13R_13RZ	0.0066	n/a	n/a	1 future	n/a	30	n/a	n/a	66.67	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-15R	0.005	n/a	9/17/2019	0.005ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-6RZ	0.005	n/a	9/16/2019	0.00038	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-8RR	0.005	n/a	9/16/2019	0.0004	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-1	0.04054	n/a	9/12/2019	0.018	No	31	0.1451	0.02538	0	None	sqrt(x)	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWA-2	0.04842	n/a	9/12/2019	0.0058	No	30	0.02121	0.01224	0	None	No	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWA-2R	0.02539	n/a	9/13/2019	0.012	No	30	0.2153	0.03537	0	None	x^(1/3)	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWA-4RZ	0.03461	n/a	9/12/2019	0.034	No	11	0.02799	0.002333	0	None	No	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWA-50R	0.02185	n/a	9/12/2019	0.011	No	23	0.01499	0.002959	0	None	No	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWC-10R	0.03543	n/a	9/17/2019	0.03	No	32	0.02388	0.005231	0	None	No	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWC-11R	0.02192	n/a	9/17/2019	0.018	No	32	0.01259	0.004227	0	None	No	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWC-13R_13RZ	0.0932	n/a	n/a	1 future	n/a	30	n/a	n/a	0	n/a	n/a	0.002008	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-15R	0.03156	n/a	9/17/2019	0.023	No	31	0.0244	0.003233	0	None	No	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWC-6RZ	0.01917	n/a	9/16/2019	0.0072	No	15	0.009456	0.003803	6.667	None	No	0.0005486	Param Intra 1 of 2
Barium (mg/L)	GWC-8RR	0.024	n/a	9/16/2019	0.015	No	20	n/a	n/a	0	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWA-1	0.003	n/a	9/12/2019	0.003ND	No	14	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-2	0.003	n/a	9/12/2019	0.003ND	No	14	n/a	n/a	100	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-2R	0.003	n/a	9/13/2019	0.003ND	No	14	n/a	n/a	100	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-4RZ	0.003	n/a	9/12/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-50R	0.003	n/a	9/12/2019	0.003ND	No	14	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-10R	0.003	n/a	9/17/2019	0.003ND	No	14	n/a	n/a	100	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-11R	0.003	n/a	9/17/2019	0.003ND	No	14	n/a	n/a	100	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-13R_13RZ	0.003	n/a	n/a	1 future	n/a	14	n/a	n/a	100	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-15R	0.003	n/a	9/17/2019	0.003ND	No	14	n/a	n/a	100	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-6RZ	0.003	n/a	9/16/2019	0.003ND	No	15	n/a	n/a	80	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-8RR	0.003	n/a	9/16/2019	0.003ND	No	14	n/a	n/a	92.86	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWA-1	0.0025	n/a	9/12/2019	0.0025ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWA-2	0.0025	n/a	9/12/2019	0.0025ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWA-2R	0.0025	n/a	9/13/2019	0.0025ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWA-4RZ	0.0025	n/a	9/12/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWA-50R	0.0025	n/a	9/12/2019	0.0025ND	No	26	n/a	n/a	100	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-10R	0.0025	n/a	9/17/2019	0.0025ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2

Intrawell Prediction Limit Summary - Bedrock Wells (No Significant)

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/15/2020, 9:22 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	GWC-11R	0.0025	n/a	9/17/2019	0.0025ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-13R_13RZ	0.001	n/a	n/a	1 future	n/a	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-15R	0.0025	n/a	9/17/2019	0.0025ND	No	31	n/a	n/a	87.1	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-6RZ	0.0025	n/a	9/16/2019	0.0025ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-8RR	0.0025	n/a	9/16/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-1	0.038	n/a	9/12/2019	0.01ND	No	30	n/a	n/a	70	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-2	0.01	n/a	9/12/2019	0.01ND	No	29	n/a	n/a	65.52	n/a	n/a	0.002172	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-2R	0.012	n/a	9/13/2019	0.01ND	No	31	n/a	n/a	83.87	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-4RZ	0.01	n/a	9/12/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-50R	0.01	n/a	9/12/2019	0.01ND	No	26	n/a	n/a	61.54	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-10R	0.01	n/a	9/17/2019	0.00067	No	30	n/a	n/a	80	n/a	n/a	0.002008	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-11R	0.02073	n/a	9/17/2019	0.0042	No	21	0.009791	0.004649	4.762	None	No	0.0005486	Param Intra 1 of 2
Chromium (mg/L)	GWC-13R_13RZ	0.01	n/a	n/a	1 future	n/a	31	n/a	n/a	74.19	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-15R	0.014	n/a	9/17/2019	0.00044	No	31	n/a	n/a	64.52	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-6RZ	0.01	n/a	9/16/2019	0.002	No	15	n/a	n/a	33.33	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Chromium (mg/L)	GWC-8RR	0.01	n/a	9/16/2019	0.000465	No	19	n/a	n/a	68.42	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-1	0.01	n/a	9/12/2019	0.00047	No	32	n/a	n/a	87.5	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-2	0.013	n/a	9/12/2019	0.0025ND	No	32	n/a	n/a	90.63	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-2R	0.0025	n/a	9/13/2019	0.0025ND	No	31	n/a	n/a	100	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-4RZ	0.02221	n/a	9/12/2019	0.02	No	11	0.0078	0.005078	9.091	None	No	0.0005486	Param Intra 1 of 2
Cobalt (mg/L)	GWA-50R	0.0029	n/a	9/12/2019	0.0025ND	No	26	n/a	n/a	76.92	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-10R	0.0025	n/a	9/17/2019	0.0025ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-11R	0.0026	n/a	9/17/2019	0.0025ND	No	31	n/a	n/a	93.55	n/a	n/a	0.001905	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-13R_13RZ	0.01	n/a	n/a	1 future	n/a	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-15R	0.0025	n/a	9/17/2019	0.0025ND	No	32	n/a	n/a	93.75	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-6RZ	0.0025	n/a	9/16/2019	0.0025ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-8RR	0.0025	n/a	9/16/2019	0.0025ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-1	0.025	n/a	9/12/2019	0.025ND	No	27	n/a	n/a	55.56	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-2	0.025	n/a	9/12/2019	0.01273	No	27	n/a	n/a	70.37	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-2R	0.025	n/a	9/13/2019	0.00055	No	27	n/a	n/a	66.67	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-4RZ	0.025	n/a	9/12/2019	0.00045	No	4	n/a	n/a	75	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-50R	0.01777	n/a	9/12/2019	0.0028	No	10	0.005944	0.004014	0	None	No	0.0005486	Param Intra 1 of 2
Copper (mg/L)	GWC-10R	0.025	n/a	9/17/2019	0.00029	No	27	n/a	n/a	81.48	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-11R	0.025	n/a	9/17/2019	0.00031	No	27	n/a	n/a	74.07	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-13R_13RZ	0.025	n/a	n/a	1 future	n/a	26	n/a	n/a	80.77	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-15R	0.025	n/a	9/17/2019	0.025ND	No	27	n/a	n/a	70.37	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-6RZ	0.025	n/a	9/16/2019	0.025ND	No	10	n/a	n/a	100	n/a	n/a	0.01476	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-8RR	0.025	n/a	9/16/2019	0.025ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-1	0.005	n/a	9/12/2019	0.005ND	No	32	n/a	n/a	81.25	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-2	0.005	n/a	9/12/2019	0.002536	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-2R	0.005	n/a	9/13/2019	0.005ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-4RZ	0.005	n/a	9/12/2019	0.000065	No	11	n/a	n/a	90.91	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-50R	0.005	n/a	9/12/2019	0.005ND	No	26	n/a	n/a	96.15	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-10R	0.005	n/a	9/17/2019	0.00017	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-11R	0.005	n/a	9/17/2019	0.000082	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-13R_13RZ	0.005	n/a	n/a	1 future	n/a	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-15R	0.005	n/a	9/17/2019	0.00016	No	32	n/a	n/a	81.25	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-6RZ	0.005	n/a	9/16/2019	0.005ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-8RR	0.005	n/a	9/16/2019	0.005ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-1	0.0005	n/a	9/12/2019	0.0005ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2

Intrawell Prediction Limit Summary - Bedrock Wells (No Significant) Page 3

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/15/2020, 9:22 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	GWA-2	0.0005	n/a	9/12/2019	0.0005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-2R	0.0005	n/a	9/13/2019	0.0005ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-4RZ	0.0005	n/a	9/12/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-50R	0.0005	n/a	9/12/2019	0.0005ND	No	26	n/a	n/a	100	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-10R	0.0005	n/a	9/17/2019	0.0005ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-11R	0.0005	n/a	9/17/2019	0.0005ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-13R_13RZ	0.0005	n/a	n/a	1 future	n/a	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-15R	0.0005	n/a	9/17/2019	0.0005ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-6RZ	0.0005	n/a	9/16/2019	0.0005ND	No	16	n/a	n/a	100	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-8RR	0.0005	n/a	9/16/2019	0.0005ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-1	0.024	n/a	9/12/2019	0.00038	No	26	n/a	n/a	73.08	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-2	0.02	n/a	9/12/2019	0.00518	No	25	n/a	n/a	68	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-2R	0.01	n/a	9/13/2019	0.01ND	No	26	n/a	n/a	84.62	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-4RZ	0.01	n/a	9/12/2019	0.00032	No	4	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-50R	0.01209	n/a	9/12/2019	0.0015	No	10	0.05305	0.01932	10	None	sqrt(x)	0.0005486	Param Intra 1 of 2
Nickel (mg/L)	GWC-10R	0.01	n/a	9/17/2019	0.01ND	No	26	n/a	n/a	88.46	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-11R	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	92.59	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-13R_13RZ	0.01	n/a	n/a	1 future	n/a	25	n/a	n/a	80	n/a	n/a	0.002832	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-15R	0.01	n/a	9/17/2019	0.00057	No	24	n/a	n/a	75	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-6RZ	0.01	n/a	9/16/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.01476	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-8RR	0.01	n/a	9/16/2019	0.01ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-1	0.01	n/a	9/12/2019	0.01ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-2	0.01	n/a	9/12/2019	0.01ND	No	32	n/a	n/a	90.63	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-2R	0.01	n/a	9/13/2019	0.01ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-4RZ	0.01	n/a	9/12/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-50R	0.01	n/a	9/12/2019	0.01ND	No	26	n/a	n/a	100	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-10R	0.01	n/a	9/17/2019	0.01ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-11R	0.01	n/a	9/17/2019	0.01ND	No	32	n/a	n/a	100	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-13R_13RZ	0.01	n/a	n/a	1 future	n/a	32	n/a	n/a	87.5	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-15R	0.01	n/a	9/17/2019	0.01ND	No	32	n/a	n/a	96.88	n/a	n/a	0.001803	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-6RZ	0.01	n/a	9/16/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-8RR	0.01	n/a	9/16/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWA-1	0.01	n/a	9/12/2019	0.01ND	No	27	n/a	n/a	100	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWA-2	0.01	n/a	9/12/2019	0.01ND	No	27	n/a	n/a	100	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWA-2R	0.01	n/a	9/13/2019	0.01ND	No	27	n/a	n/a	100	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWA-4RZ	0.01	n/a	9/12/2019	0.01ND	No	4	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWA-50R	0.004299	n/a	9/12/2019	0.0028	No	21	0.002202	0.0008907	38.1	Kaplan-Meier	No	0.0005486	Param Intra 1 of 2
Silver (mg/L)	GWC-10R	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	100	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-11R	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	100	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-13R_13RZ	0.01	n/a	n/a	1 future	n/a	26	n/a	n/a	96.15	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-15R	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	100	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-6RZ	0.01	n/a	9/16/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.01476	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-8RR	0.01	n/a	9/16/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-1	0.001	n/a	9/12/2019	0.001ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-2	0.001	n/a	9/12/2019	0.001ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-2R	0.001	n/a	9/13/2019	0.000062	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-4RZ	0.001	n/a	9/12/2019	0.001ND	No	11	n/a	n/a	100	n/a	n/a	0.01276	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-50R	0.001	n/a	9/12/2019	0.001ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-10R	0.001	n/a	9/17/2019	0.001ND	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-11R	0.001	n/a	9/17/2019	0.001ND	No	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2

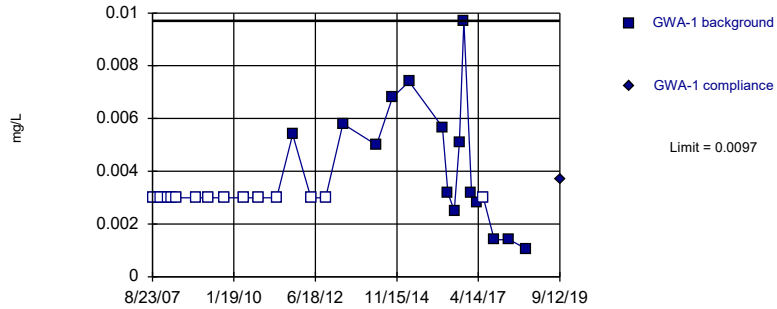
Intrawell Prediction Limit Summary - Bedrock Wells (No Significant)

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/15/2020, 9:22 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Thallium (mg/L)	GWC-13R_13RZ	0.001	n/a	n/a	1 future	n/a	12	n/a	n/a	91.67	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-15R	0.001	n/a	9/17/2019	0.001ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-6RZ	0.001	n/a	9/16/2019	0.001ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-8RR	0.001	n/a	9/16/2019	0.001ND	No	12	n/a	n/a	100	n/a	n/a	0.01077	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-1	0.01	n/a	9/12/2019	0.01ND	No	27	n/a	n/a	88.89	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-2	0.01	n/a	9/12/2019	0.01ND	No	26	n/a	n/a	80.77	n/a	n/a	0.002667	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-2R	0.01	n/a	9/13/2019	0.001	No	27	n/a	n/a	88.89	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-4RZ	0.01	n/a	9/12/2019	0.00084	No	4	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-50R	0.01	n/a	9/12/2019	0.01ND	No	21	n/a	n/a	66.67	n/a	n/a	0.003999	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-10R	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	100	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-11R	0.01	n/a	9/17/2019	0.01ND	No	26	n/a	n/a	46.15	n/a	n/a	0.002667	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWC-13R_13RZ	0.011	n/a	n/a	1 future	n/a	24	n/a	n/a	62.5	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-15R	0.01	n/a	9/17/2019	0.01ND	No	27	n/a	n/a	100	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-6RZ	0.01	n/a	9/16/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.01476	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-8RR	0.01	n/a	9/16/2019	0.01ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-1	0.01366	n/a	9/12/2019	0.0047	No	24	0.005745	0.003444	29.17	Kaplan-Meier	No	0.0005486	Param Intra 1 of 2
Zinc (mg/L)	GWA-2	0.0199	n/a	9/12/2019	0.00505	No	25	0.06488	0.03341	48	Kaplan-Meier	sqrt(x)	0.0005486	Param Intra 1 of 2
Zinc (mg/L)	GWA-2R	0.01285	n/a	9/13/2019	0.0078	No	26	0.000044540	0.000531046	16.15	Kaplan-Meier	x^2	0.0005486	Param Intra 1 of 2
Zinc (mg/L)	GWA-4RZ	0.01	n/a	9/12/2019	0.0072	No	4	n/a	n/a	100	n/a	n/a	0.06138	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-50R	0.02139	n/a	9/12/2019	0.0058	No	17	0.008728	0.005133	23.53	Kaplan-Meier	No	0.0005486	Param Intra 1 of 2
Zinc (mg/L)	GWC-10R	0.01	n/a	9/17/2019	0.0048	No	27	n/a	n/a	40.74	n/a	n/a	0.002502	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-11R	0.017	n/a	9/17/2019	0.0075	No	26	n/a	n/a	50	n/a	n/a	0.002667	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-13R_13RZ	0.01057	n/a	n/a	1 future	n/a	23	0.06716	0.0154	30.43	Kaplan-Meier	sqrt(x)	0.0005486	Param Intra 1 of 2
Zinc (mg/L)	GWC-15R	0.01063	n/a	9/17/2019	0.0066	No	25	0.004906	0.002508	20	Kaplan-Meier	No	0.0005486	Param Intra 1 of 2
Zinc (mg/L)	GWC-6RZ	0.01081	n/a	9/16/2019	0.0057	No	10	0.05354	0.01713	40	Kaplan-Meier	sqrt(x)	0.0005486	Param Intra 1 of 2
Zinc (mg/L)	GWC-8RR	0.01242	n/a	9/16/2019	0.00525	No	15	0.004691	0.003024	46.67	Kaplan-Meier	No	0.0005486	Param Intra 1 of 2

Within Limit

Prediction Limit
Intrawell Non-parametric

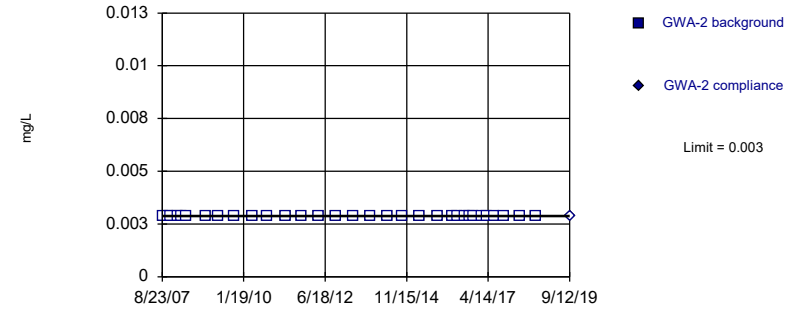


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 50% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:17 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

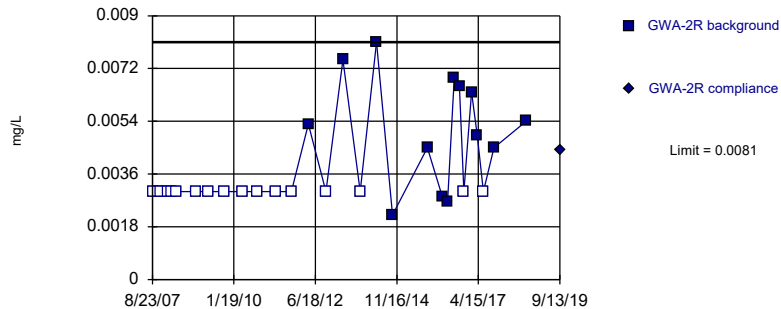


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:17 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

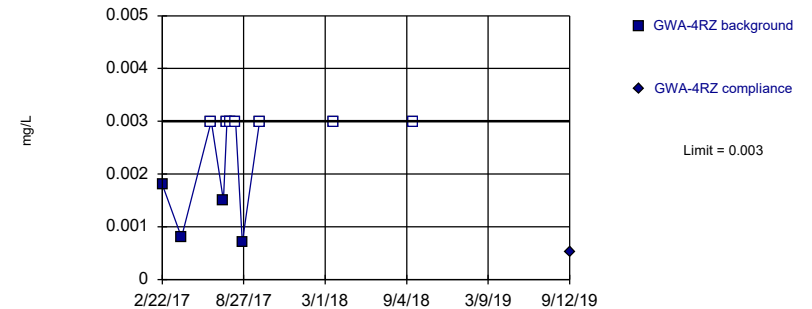


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 56.67% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:17 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

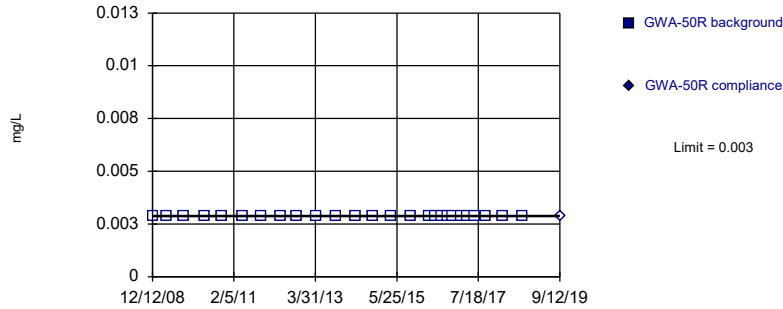


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:17 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

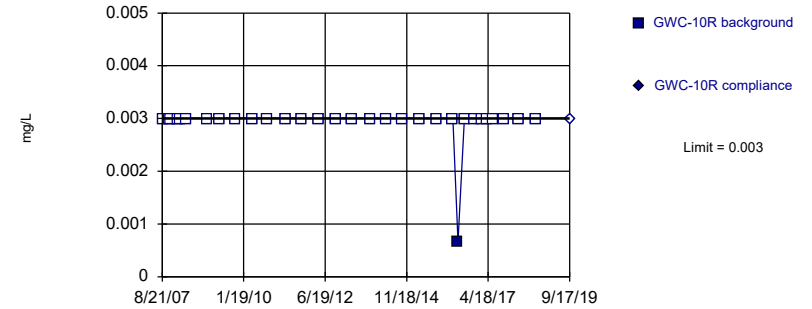


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:17 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

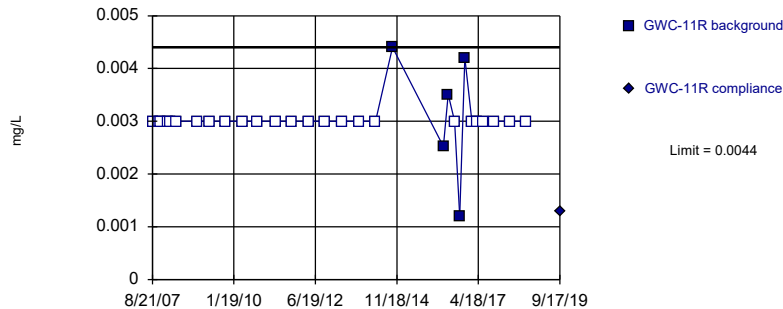


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:17 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

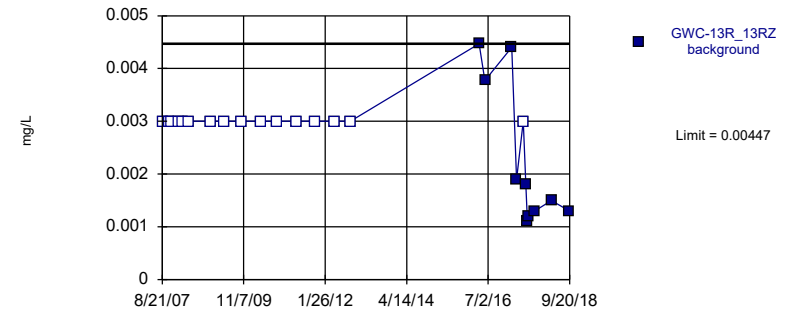


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:17 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric, GWC-13R_13RZ

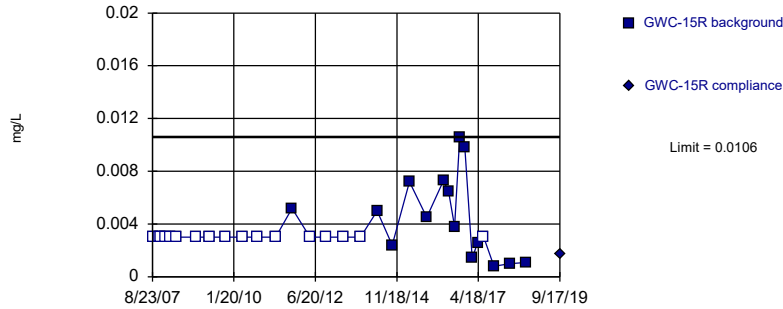


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2). Assumes 1 future value.

Constituent: Antimony Analysis Run 1/15/2020 9:17 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

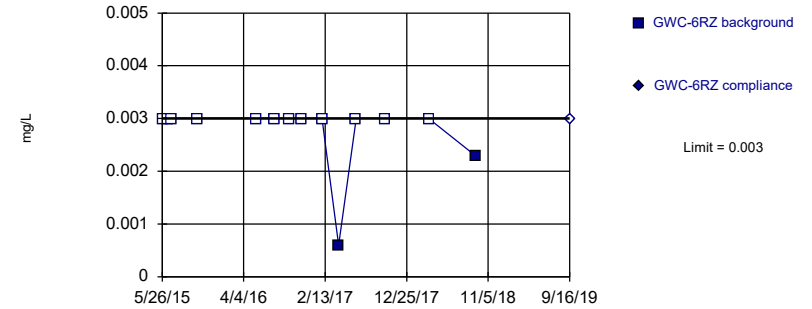


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 53.13% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

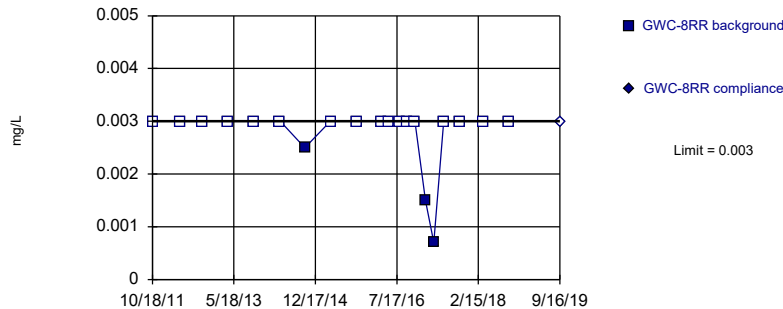


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

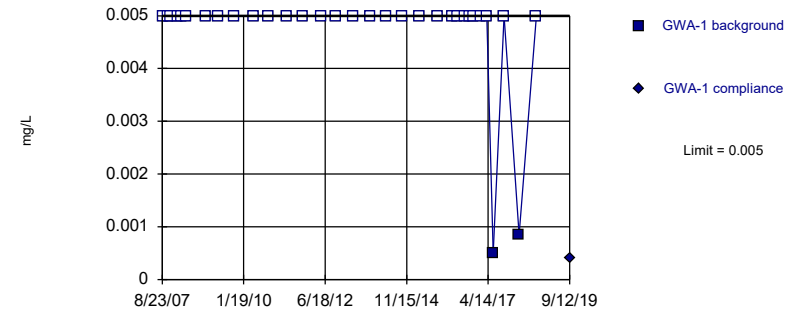


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

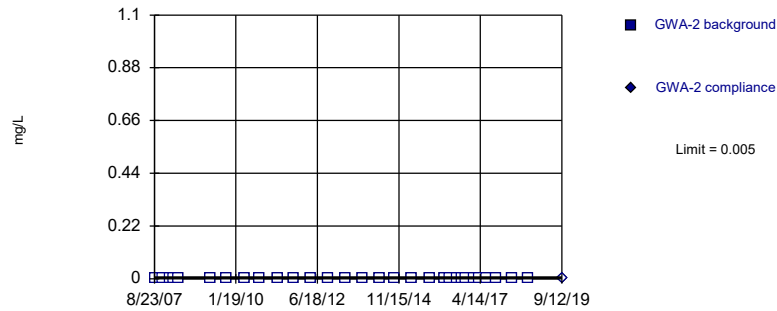


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

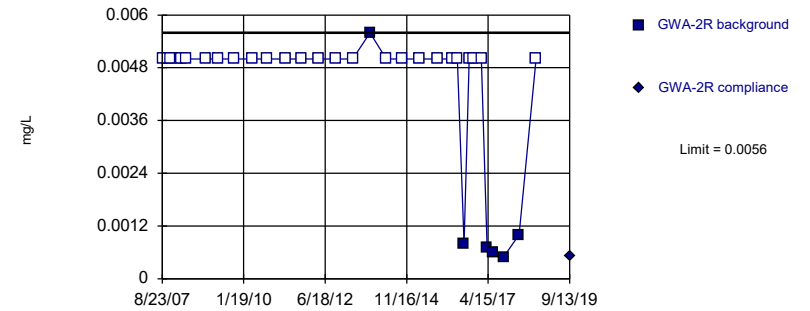


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

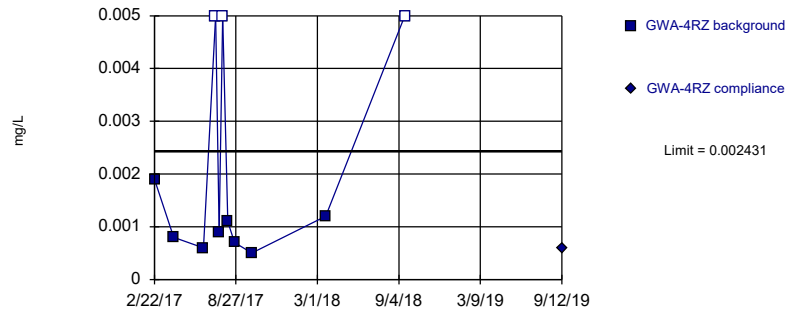


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

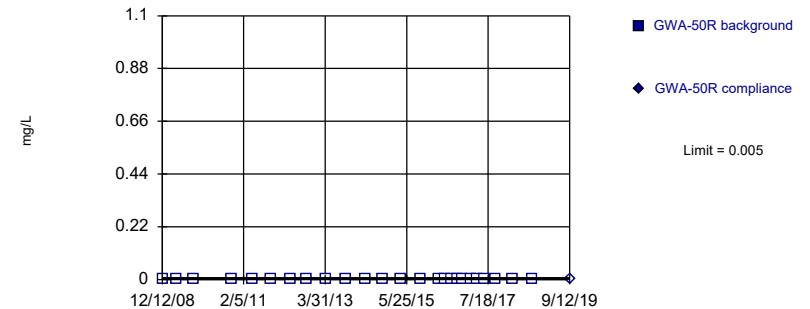


Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.0969, Std. Dev.=0.01324, n=11, 27.27% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8043, critical = 0.792. Kappa = 2.837 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

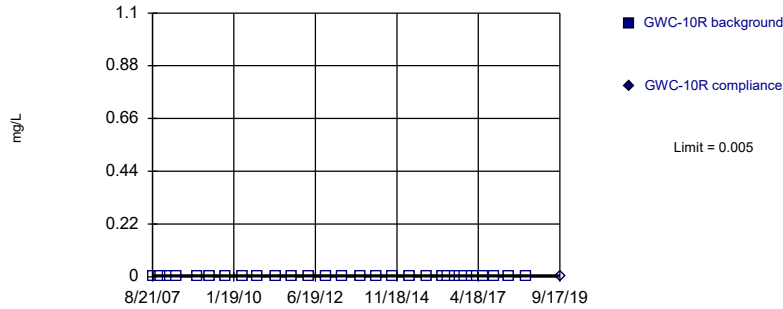


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 25) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

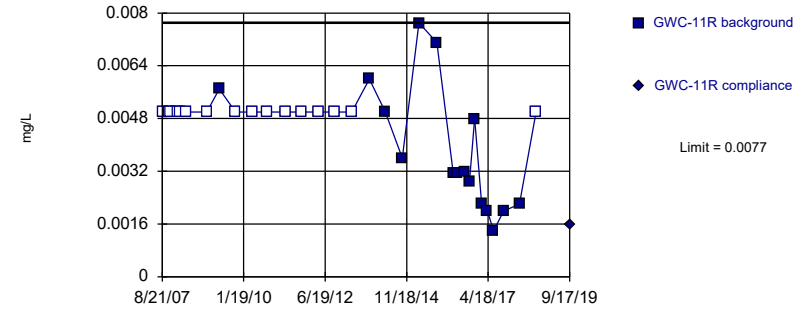


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

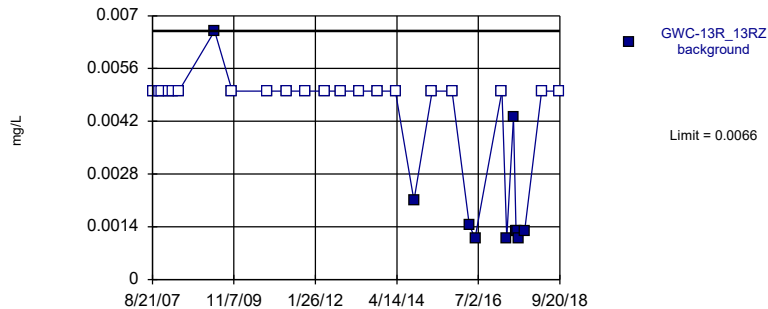


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 50% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ

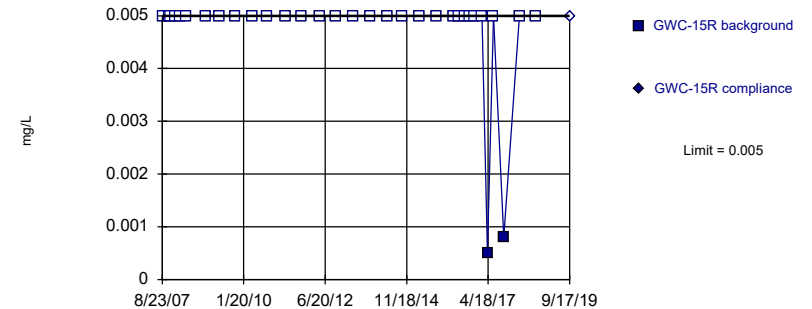


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2). Assumes 1 future value.

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

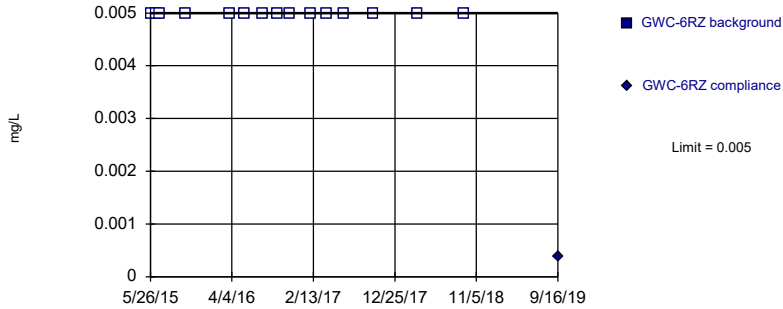
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

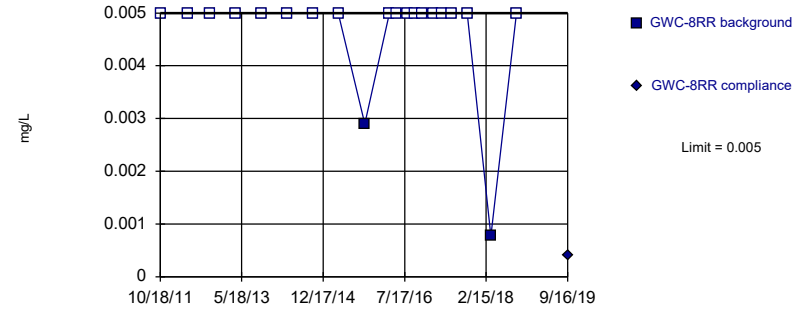
Within Limit
 Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

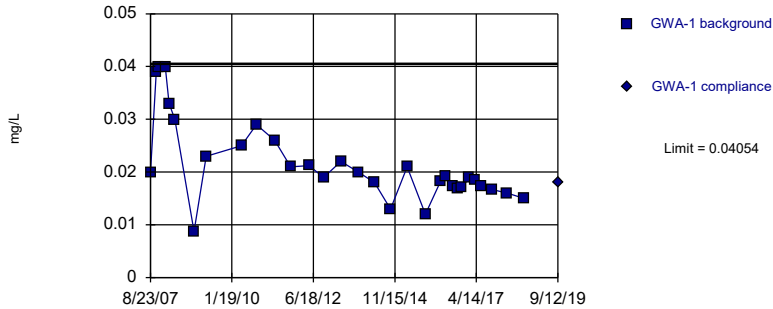
Within Limit
 Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

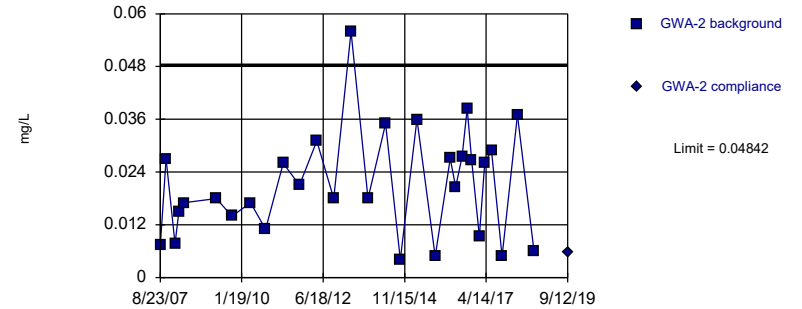
Within Limit
 Prediction Limit
 Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1451, Std. Dev.=0.02538, n=31.
 Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9267, critical = 0.902. Kappa = 2.215 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

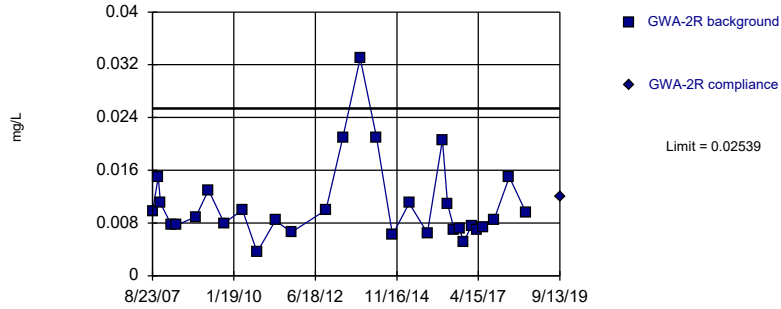
Within Limit
 Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=0.02121, Std. Dev.=0.01224, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9464, critical = 0.9. Kappa = 2.223 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

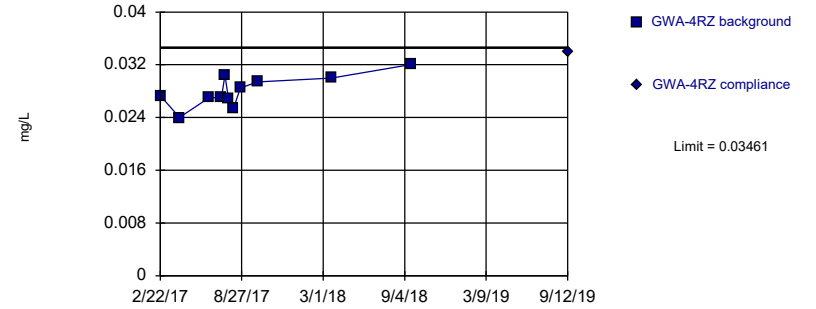
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (based on cube root transformation): Mean=0.2153, Std. Dev.=0.03537, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.904, critical = 0.9. Kappa = 2.223 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

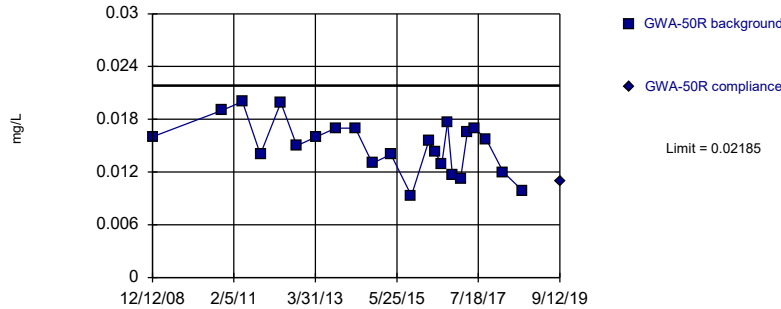
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02799, Std. Dev.=0.002333, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9753, critical = 0.792. Kappa = 2.837 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

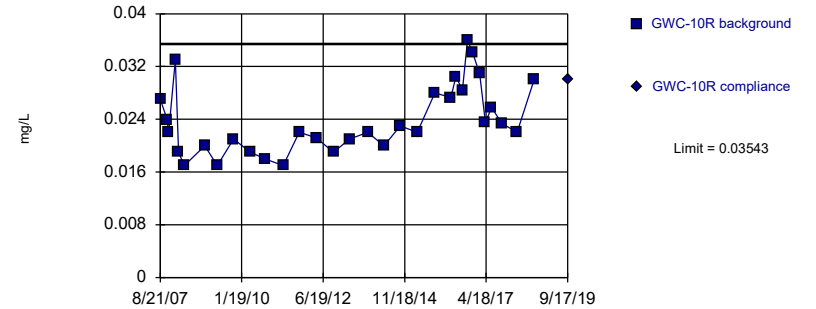
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.01499, Std. Dev.=0.002959, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9748, critical = 0.881. Kappa = 2.317 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Parametric

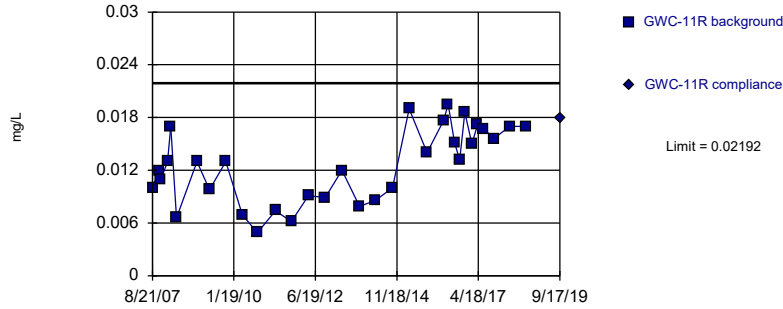


Background Data Summary: Mean=0.02388, Std. Dev.=0.005231, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.904. Kappa = 2.208 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

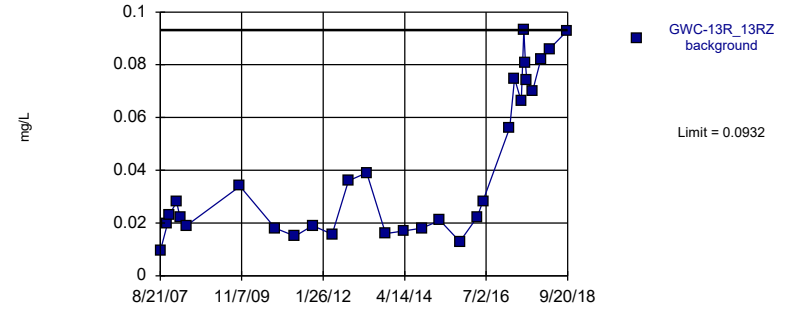
Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.01259, Std. Dev.=0.004227, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9503, critical = 0.904. Kappa = 2.208 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ

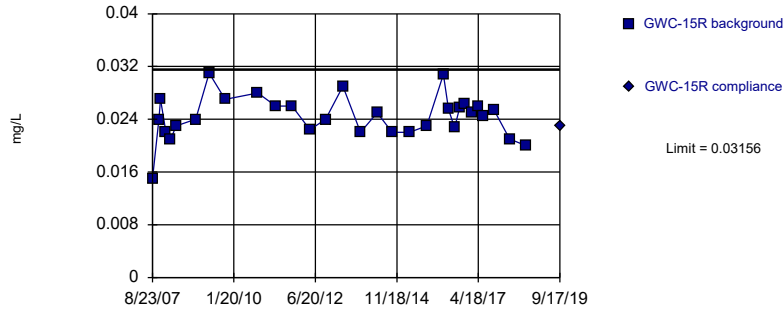


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2). Assumes 1 future value.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

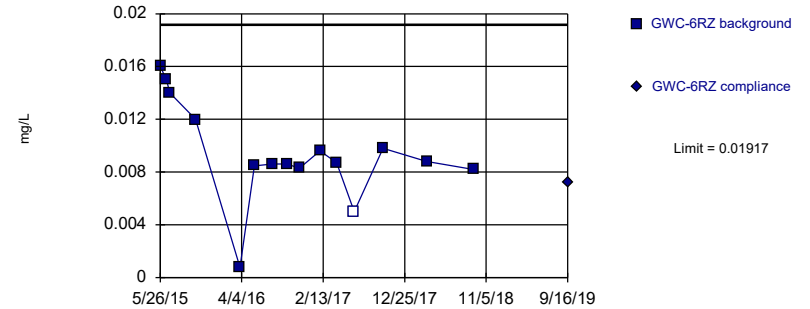


Background Data Summary: Mean=0.0244, Std. Dev.=0.003233, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9654, critical = 0.902. Kappa = 2.215 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

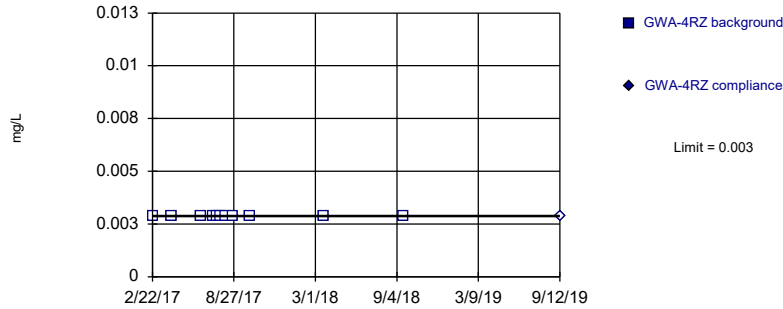


Background Data Summary: Mean=0.009456, Std. Dev.=0.003803, n=15, 6.667% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9092, critical = 0.835. Kappa = 2.555 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Barium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

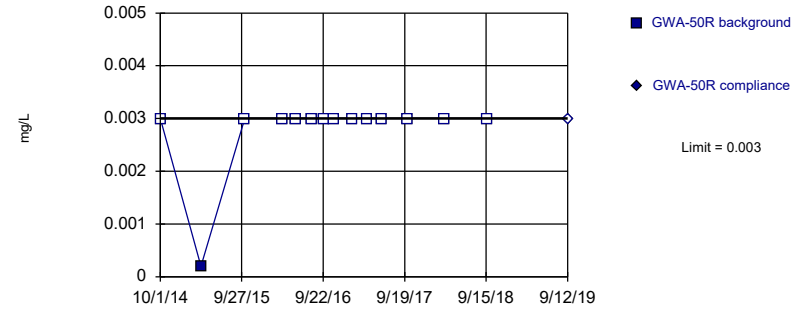


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

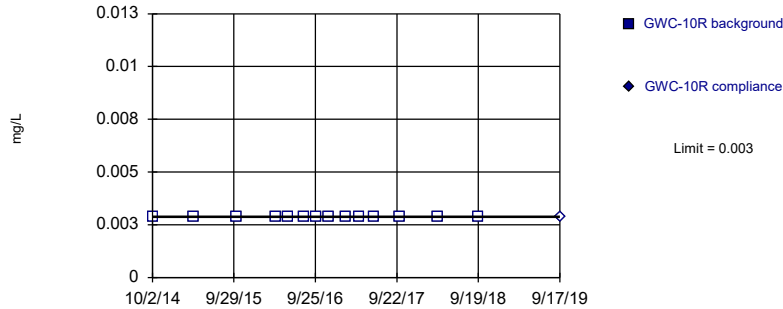


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

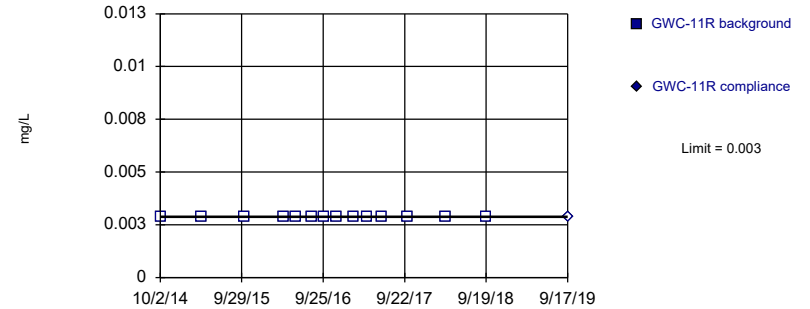


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

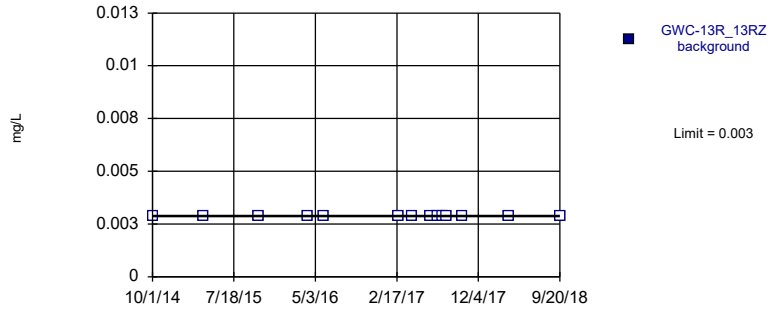
Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

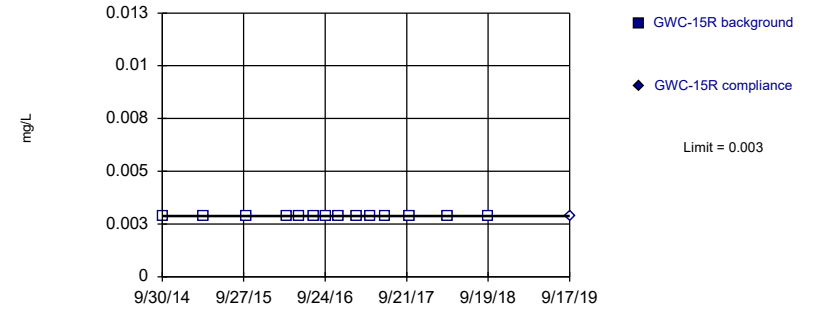
Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2). Assumes 1 future value.

Constituent: Beryllium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

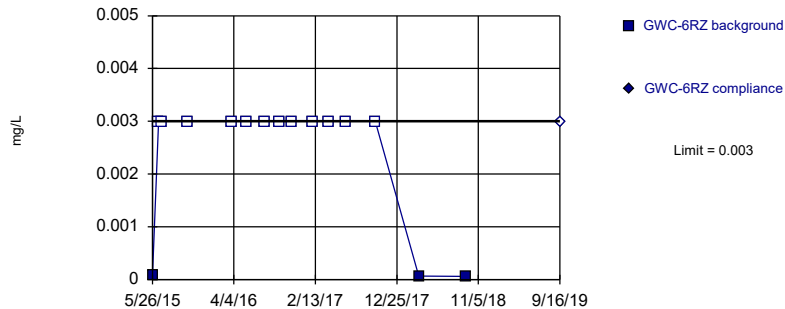
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

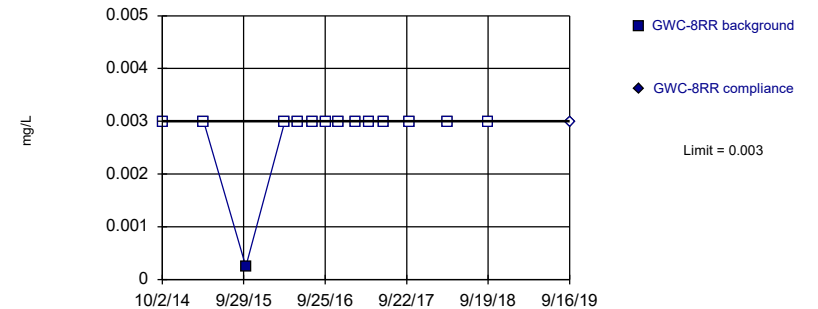
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Non-parametric

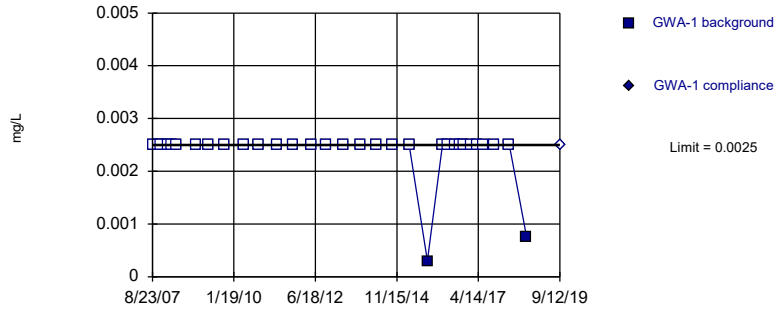


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 92.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

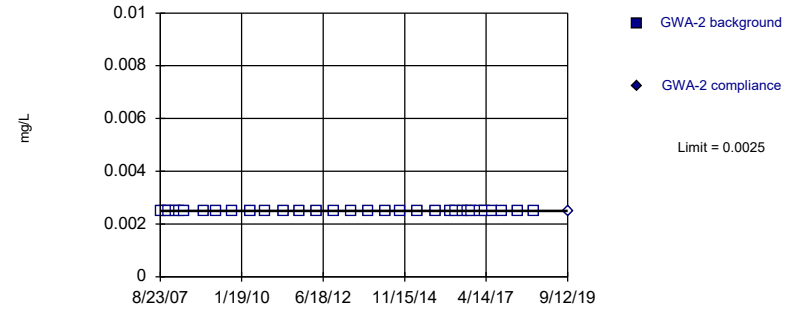


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

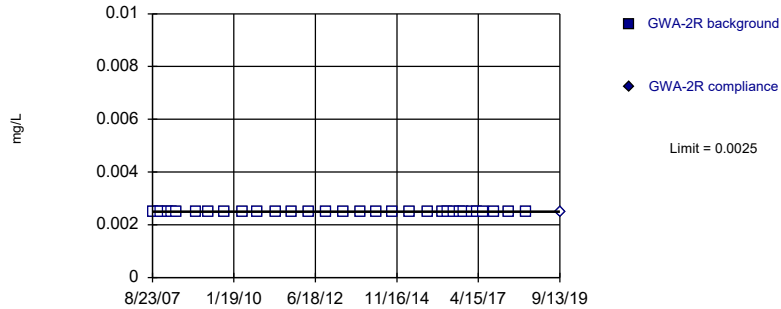


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

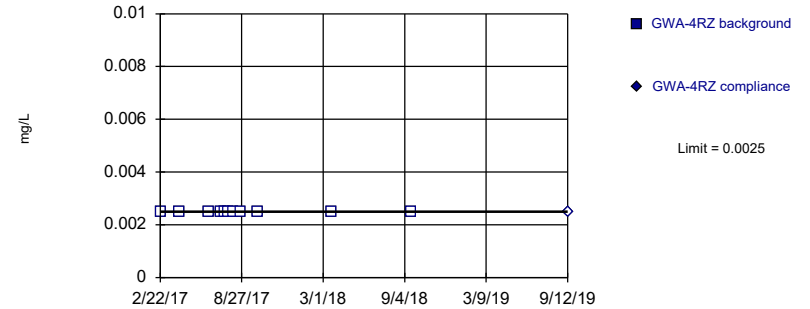


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

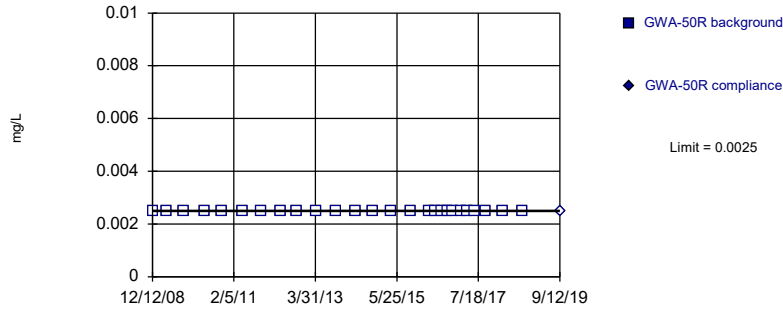


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

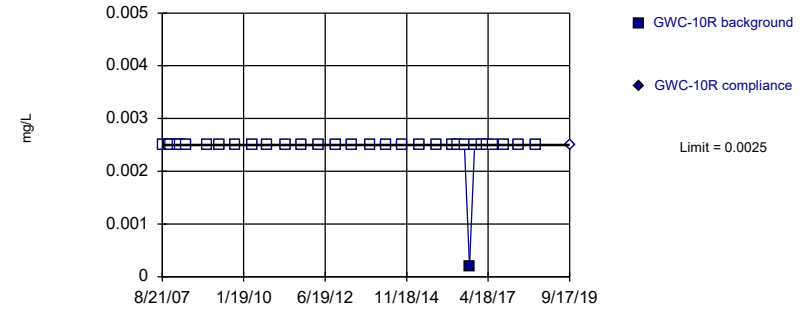


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

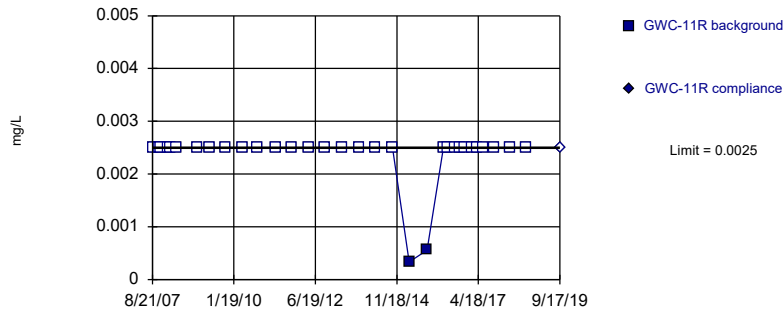


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

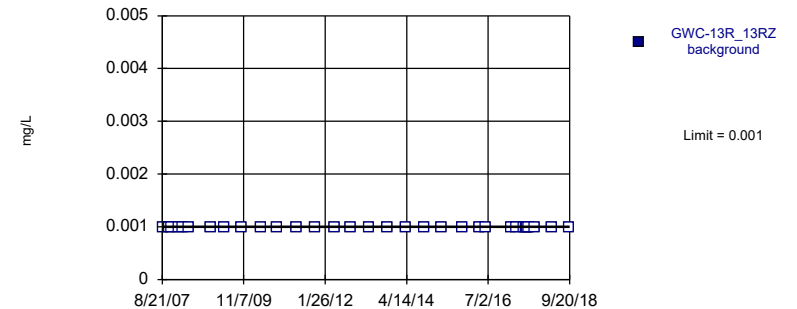


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric, GWC-13R_13RZ

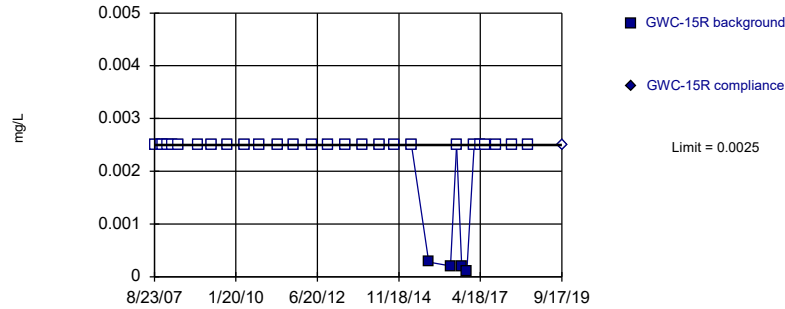


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

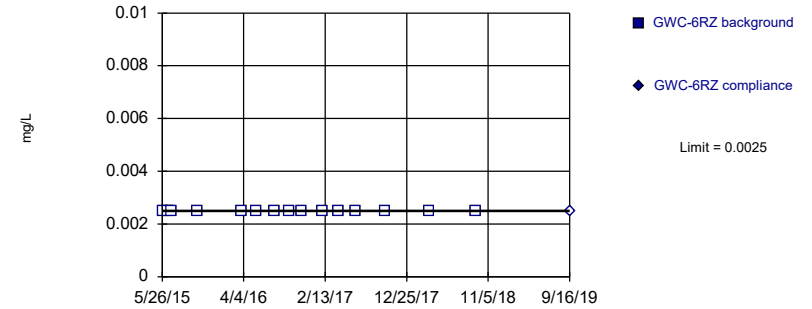


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 87.1% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

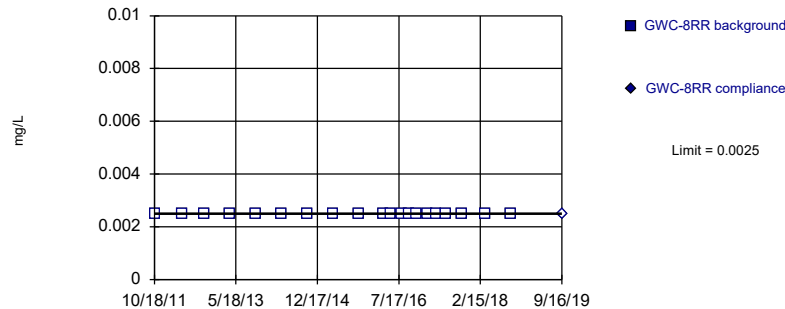


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

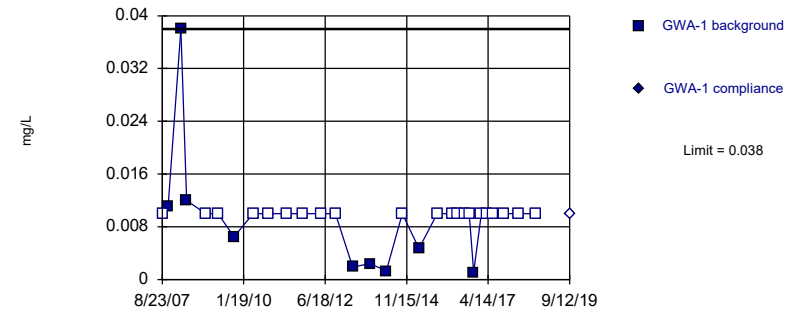


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

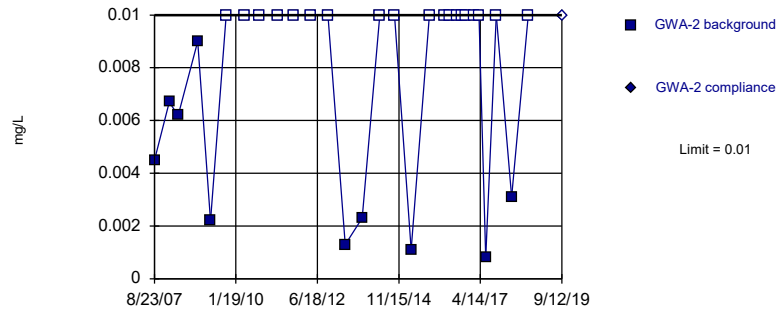


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 70% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

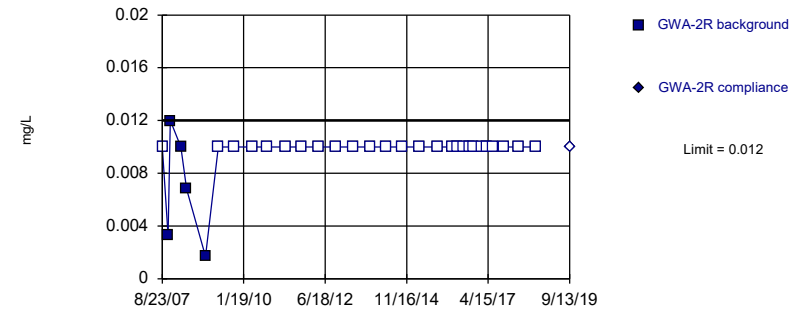


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 65.52% NDs. Well-constituent pair annual alpha = 0.00434. Individual comparison alpha = 0.002172 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

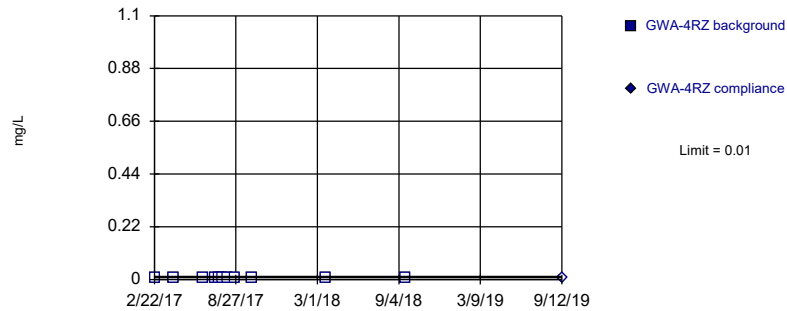


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 83.87% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

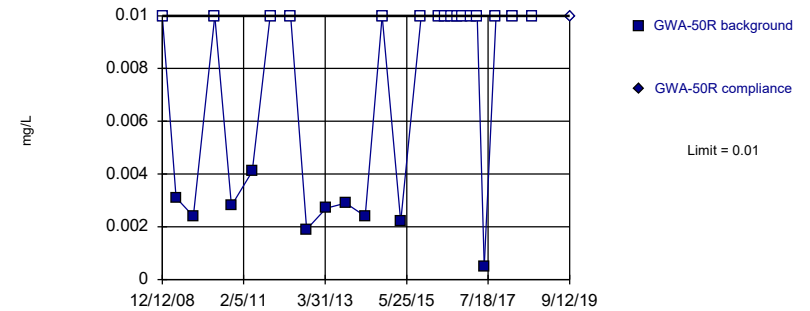


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

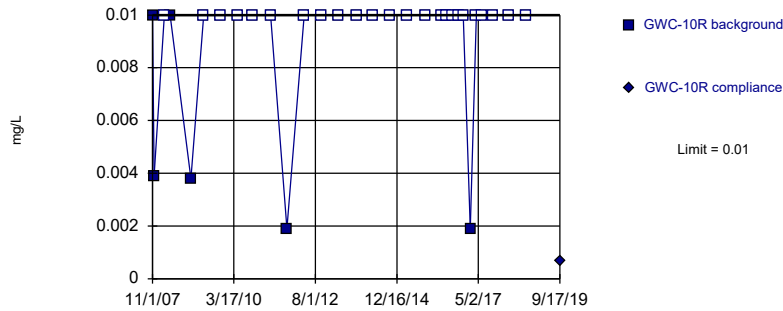


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 61.54% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

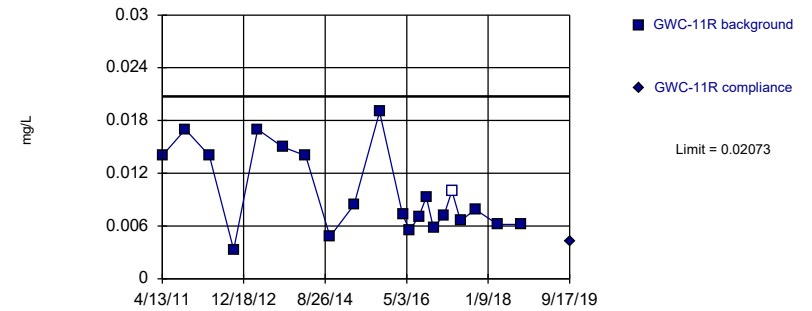


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 80% NDs. Well-constituent pair annual alpha = 0.004011. Individual comparison alpha = 0.002008 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Parametric

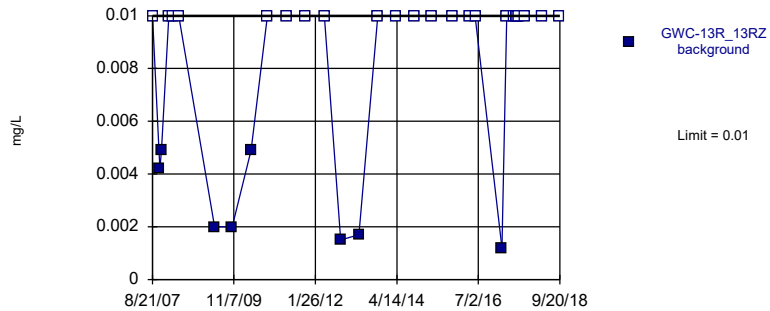


Background Data Summary: Mean=0.009791, Std. Dev.=0.004649, n=21, 4.762% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8988, critical = 0.873. Kappa = 2.354 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Chromium Analysis Run 1/15/2020 9:18 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric, GWC-13R_13RZ

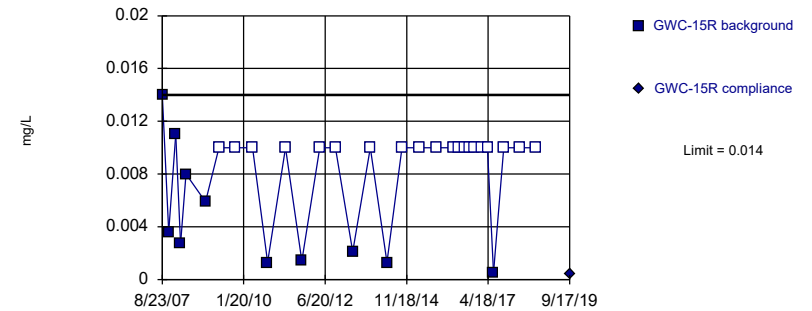


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 74.19% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2). Assumes 1 future value.

Constituent: Chromium Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

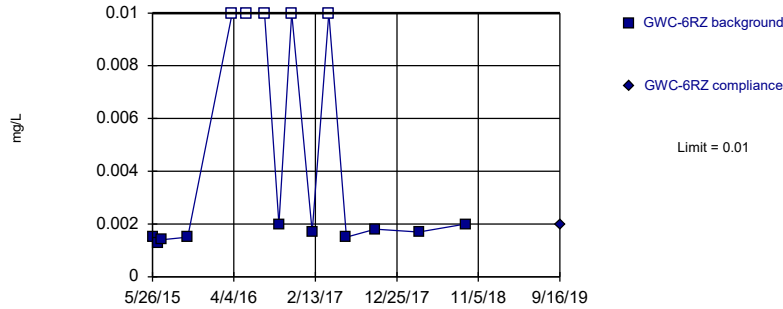


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

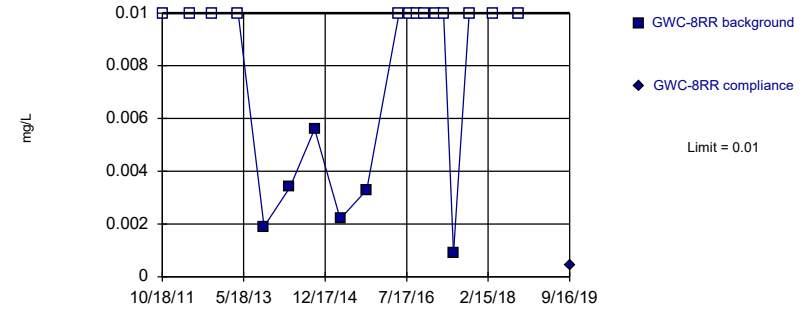


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

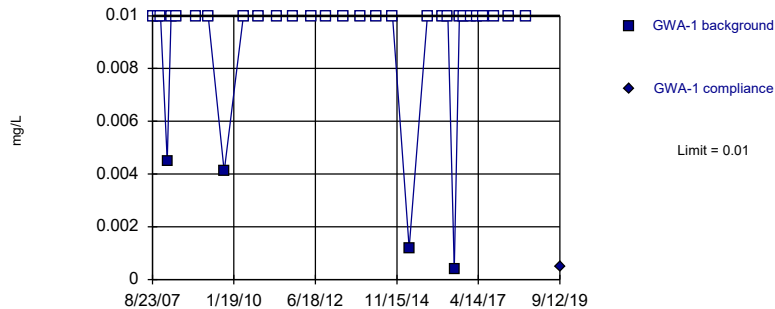


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

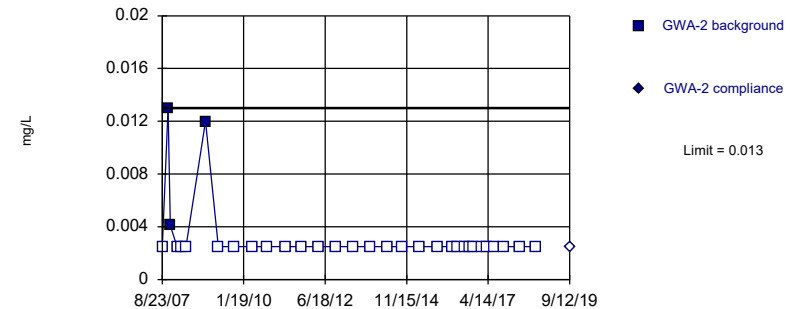


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

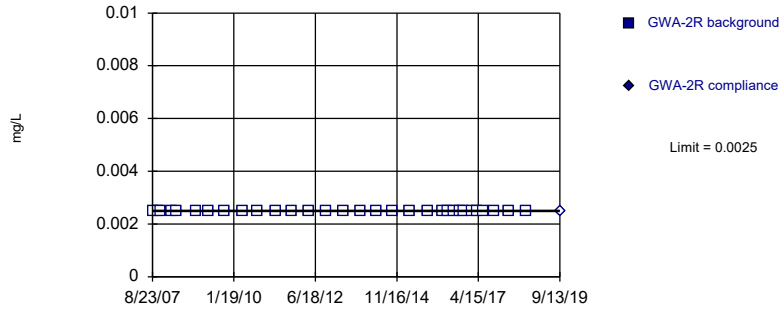


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

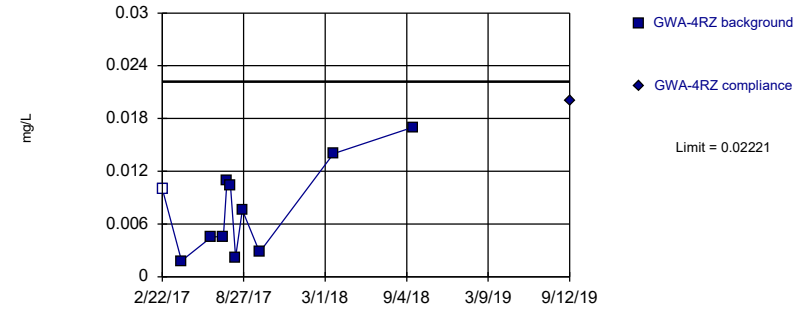


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

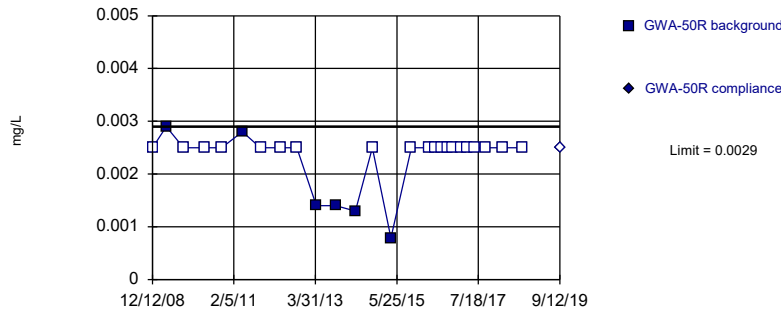


Background Data Summary: Mean=0.0078, Std. Dev.=0.005078, n=11, 9.091% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9288, critical = 0.792. Kappa = 2.837 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

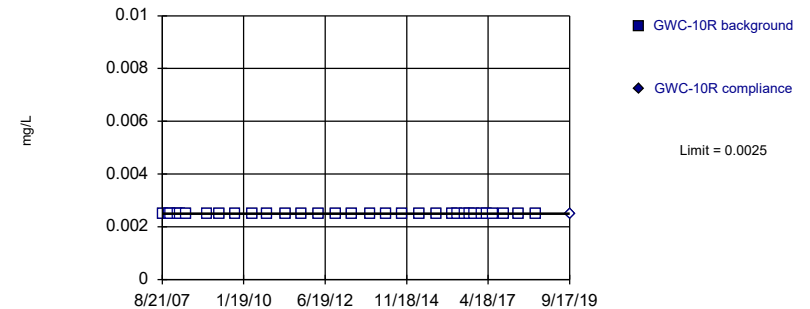


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 76.92% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

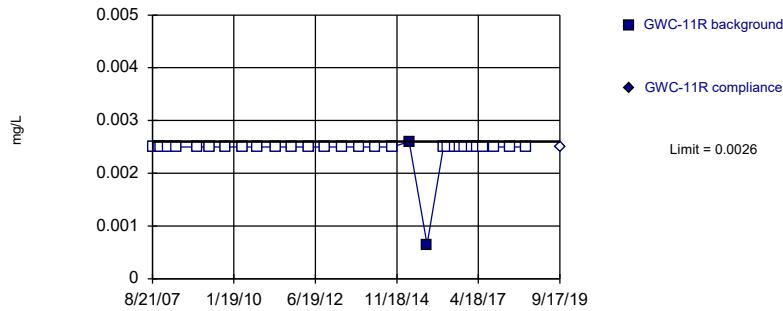


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

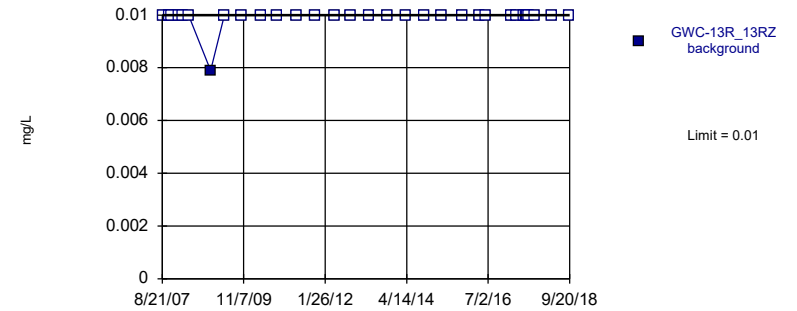
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.003807. Individual comparison alpha = 0.001905 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ

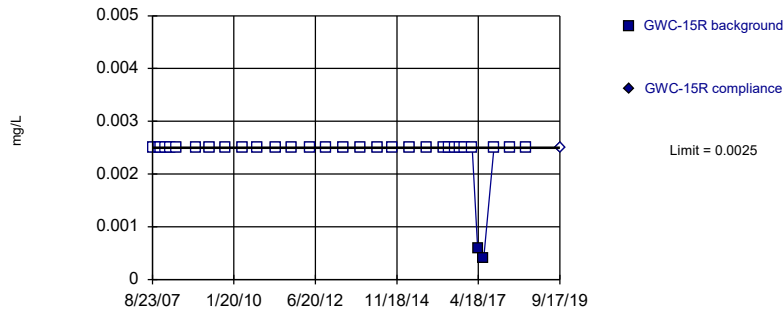


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

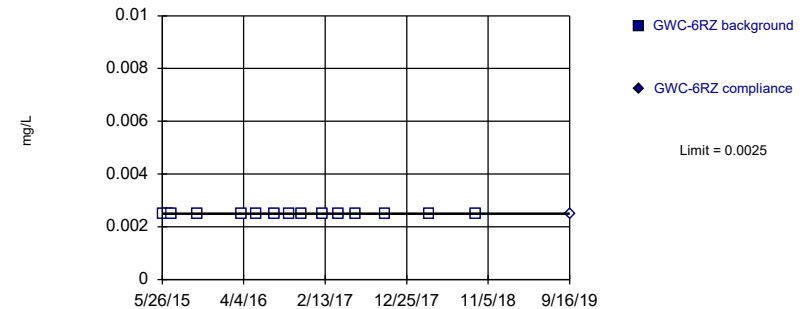


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

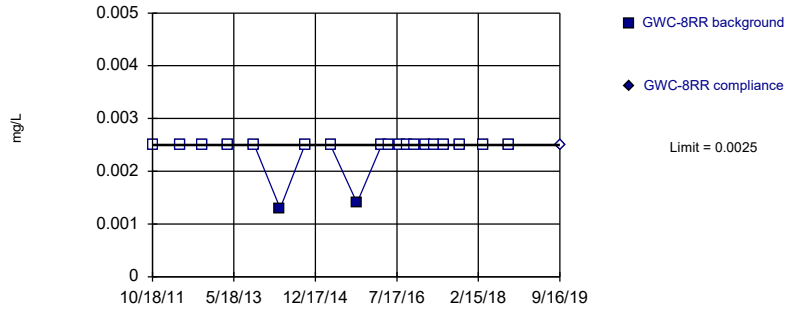


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

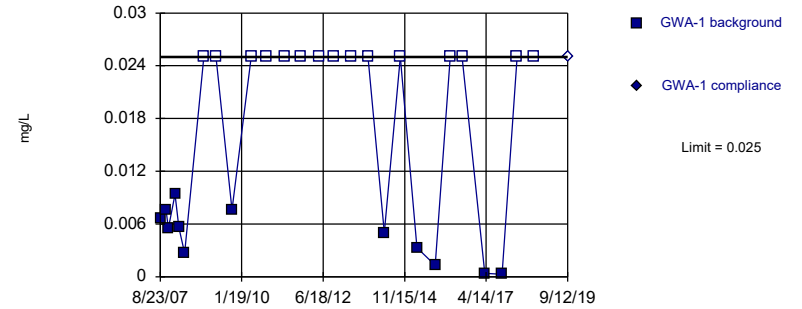


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

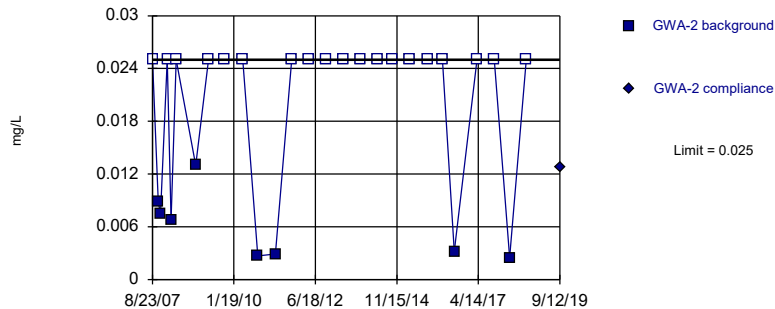


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

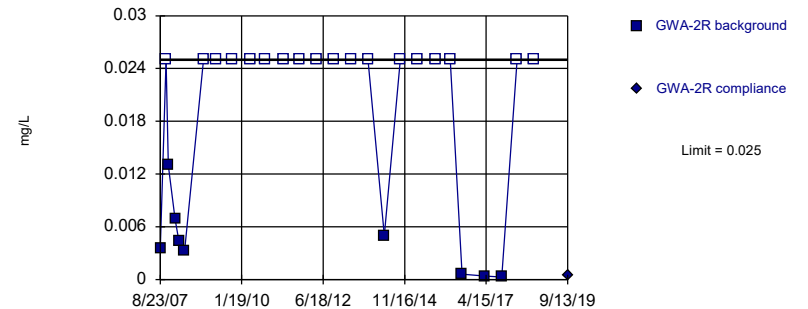


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 70.37% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

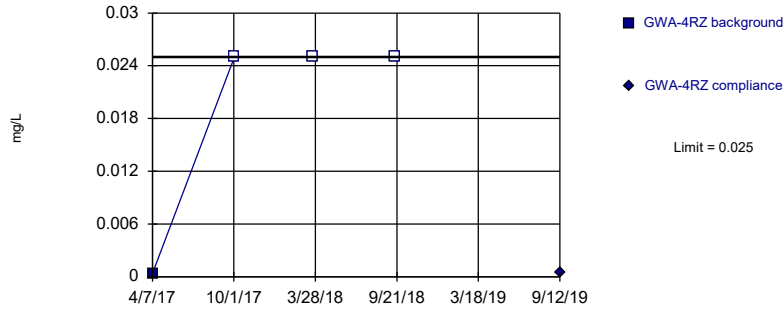


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

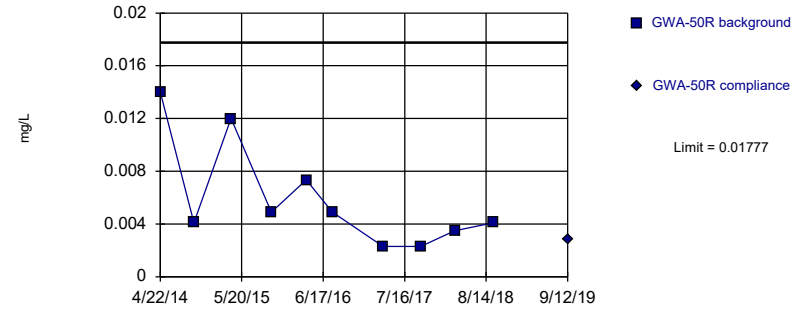


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 4 background values. 75% NDs. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

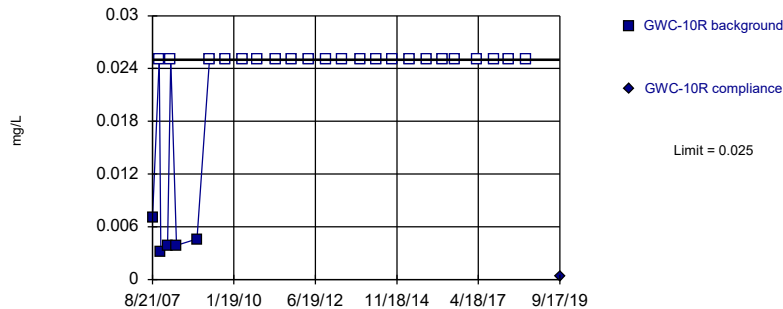


Background Data Summary: Mean=0.005944, Std. Dev.=0.004014, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.813, critical = 0.781. Kappa = 2.945 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

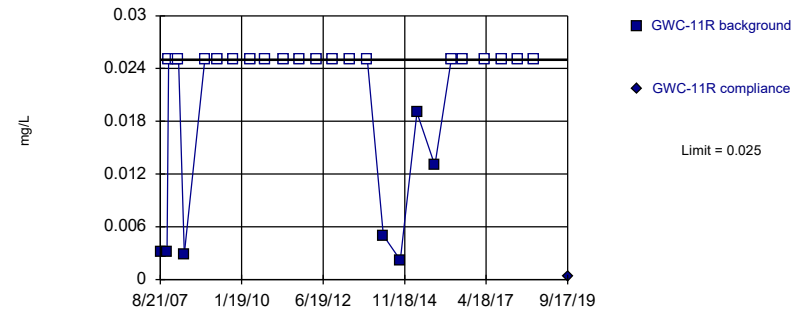


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 81.48% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

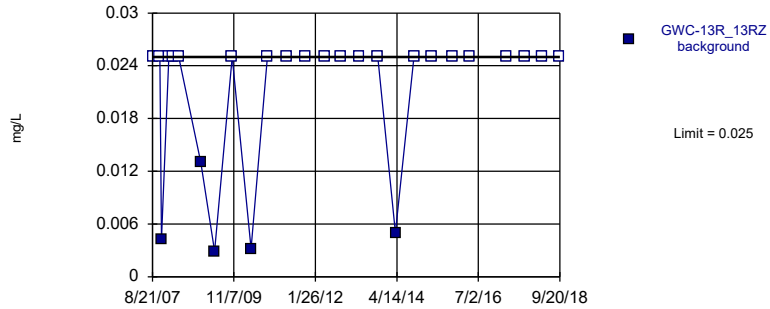
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 74.07% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

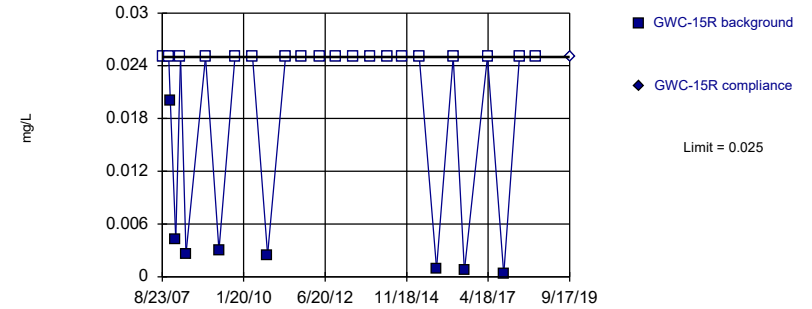
Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 80.77% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2). Assumes 1 future value.

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

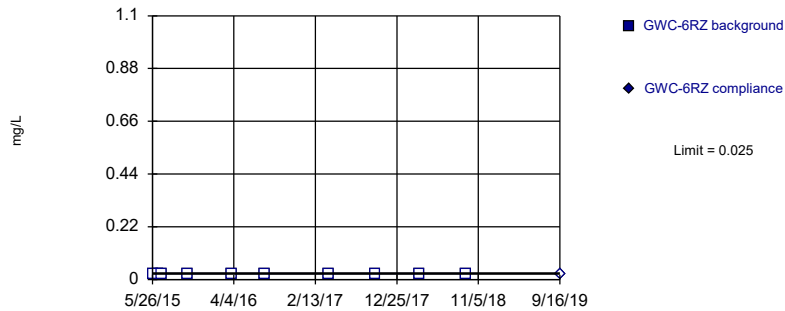
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 70.37% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

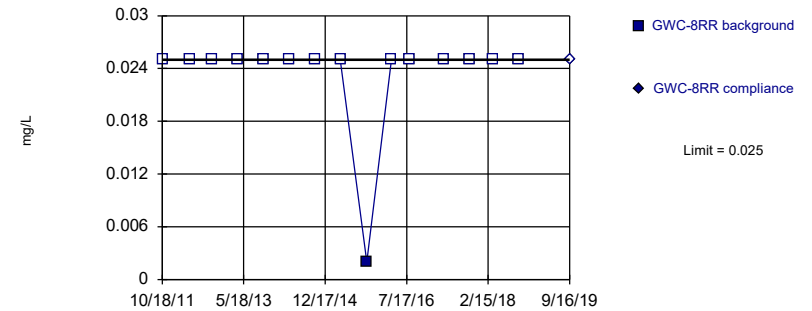
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0293. Individual comparison alpha = 0.01476 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Non-parametric

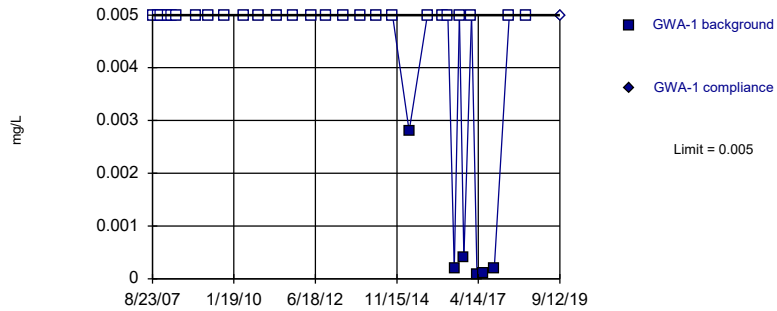


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

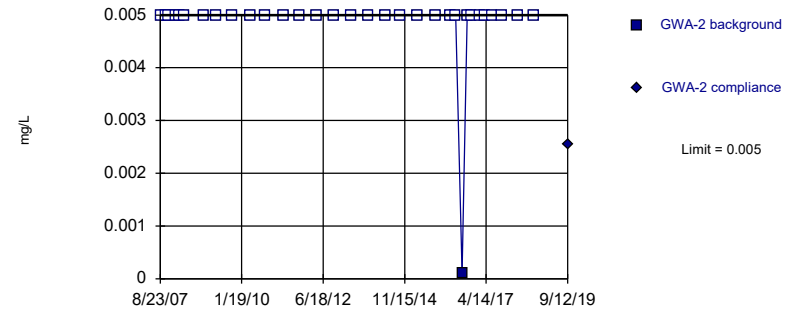


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

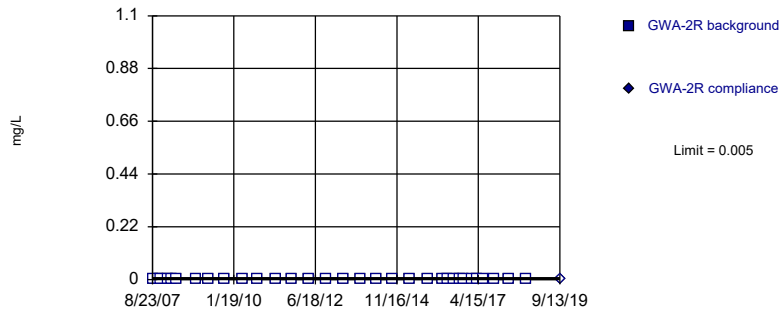


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

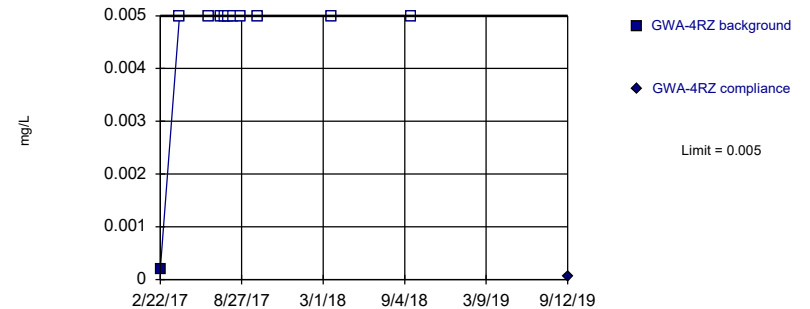


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

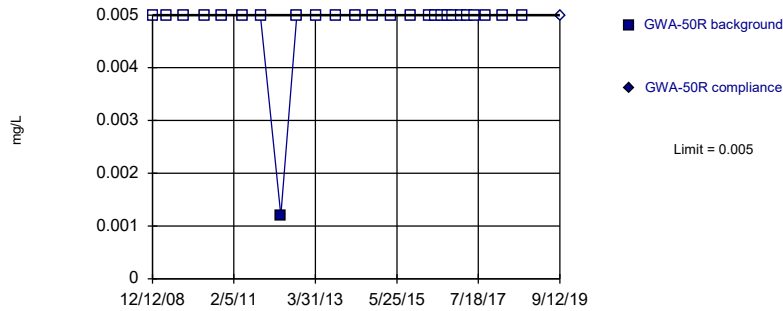


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

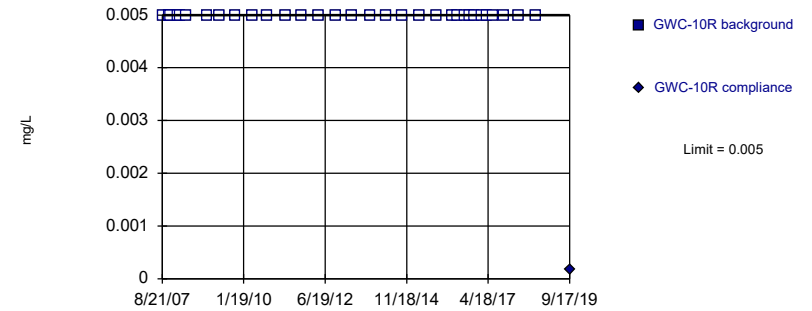


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

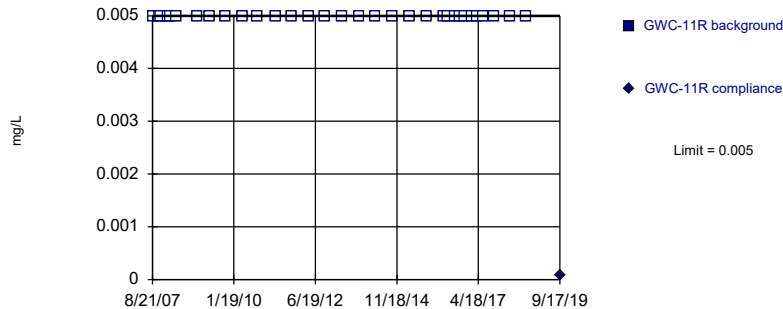


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

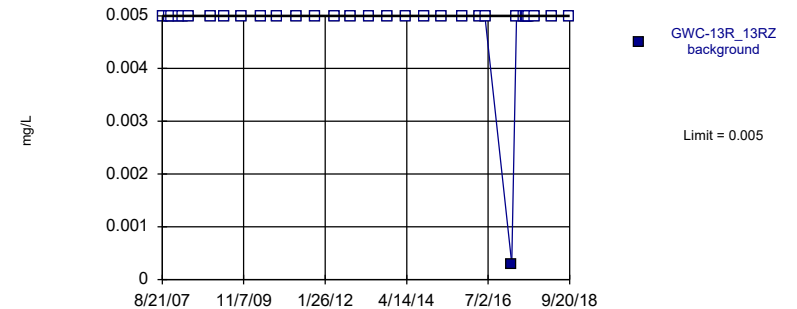


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ

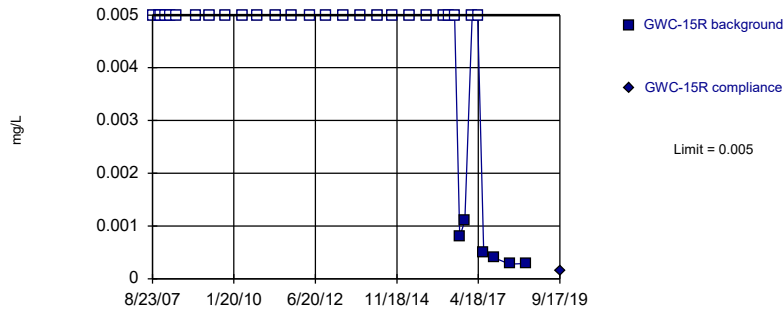


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

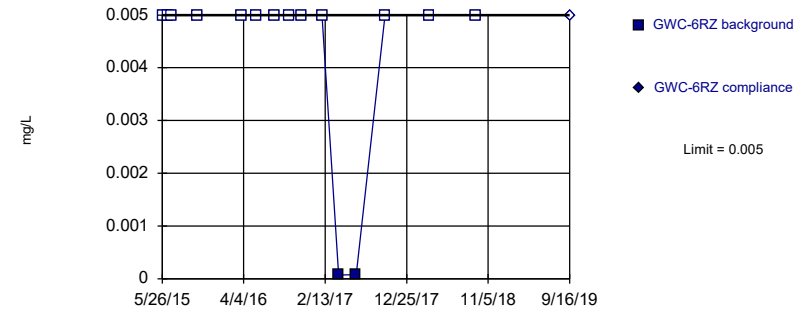


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

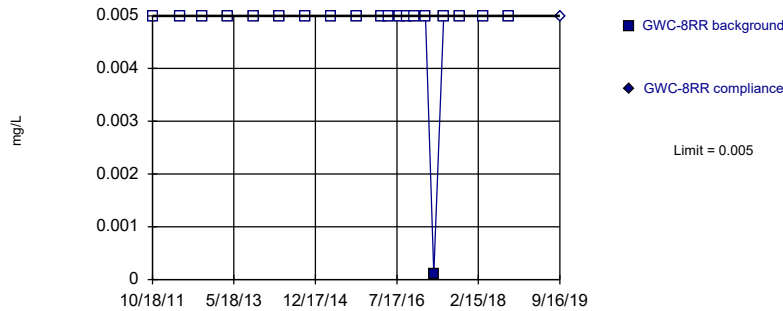


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

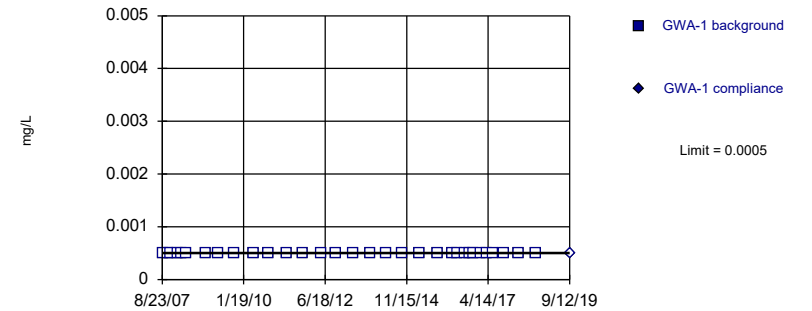


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

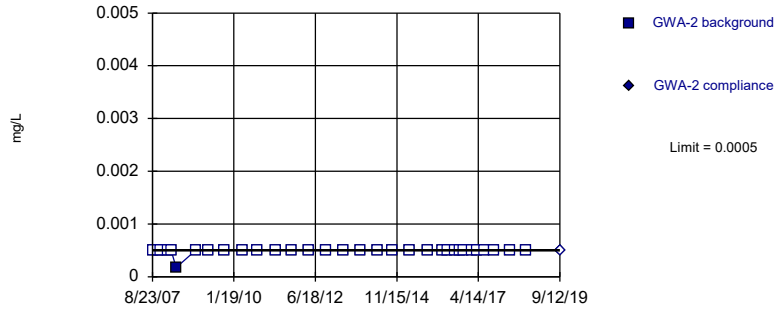


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

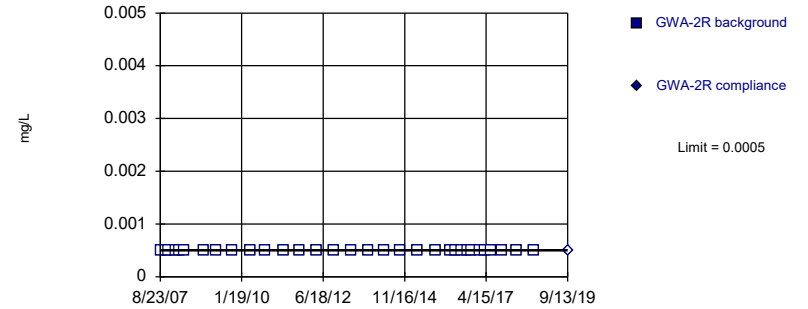


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

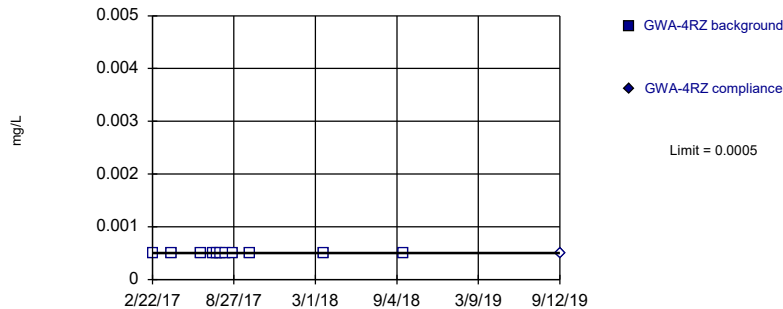


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

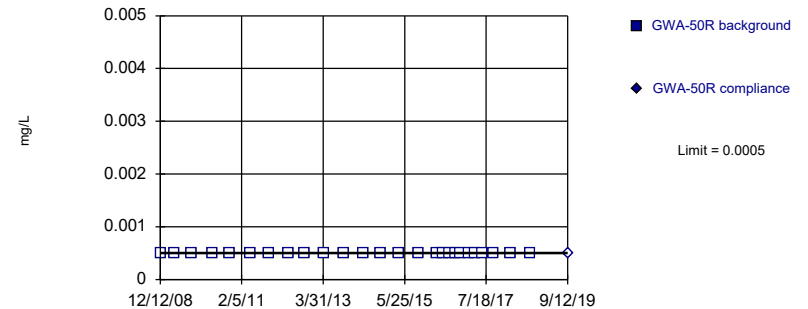


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

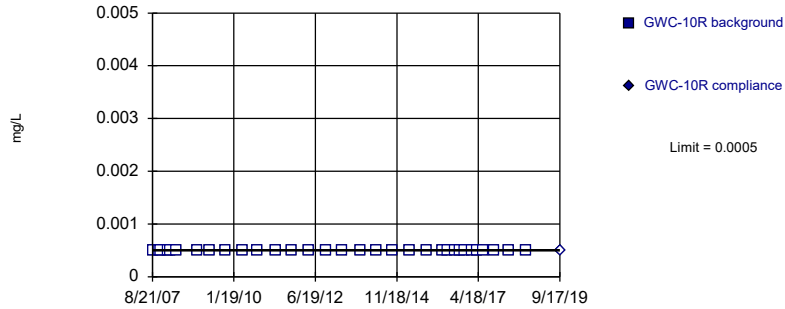
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

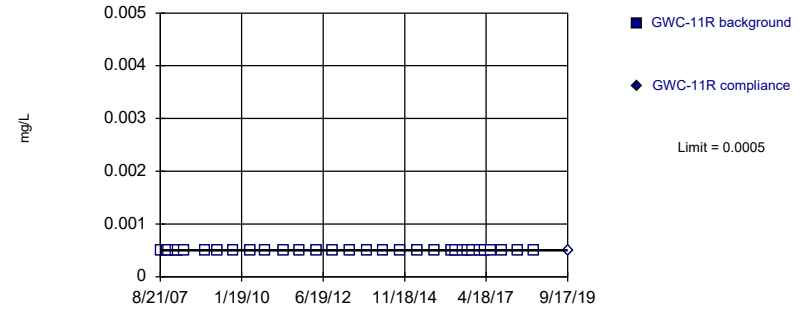
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

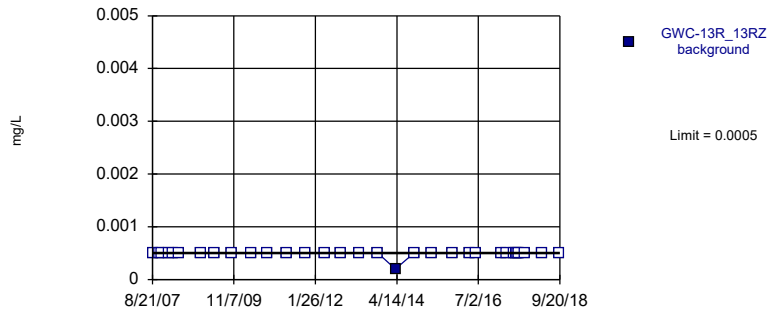
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

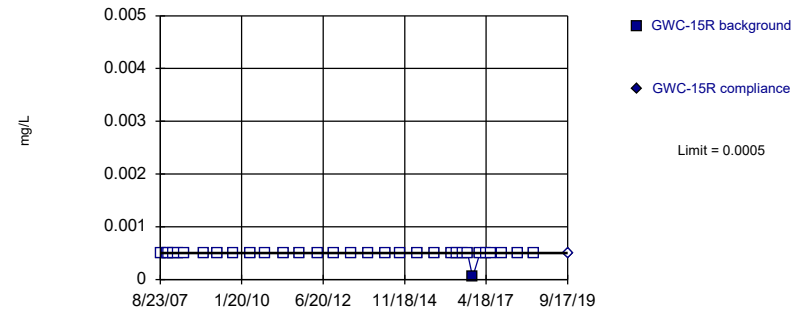
Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Non-parametric

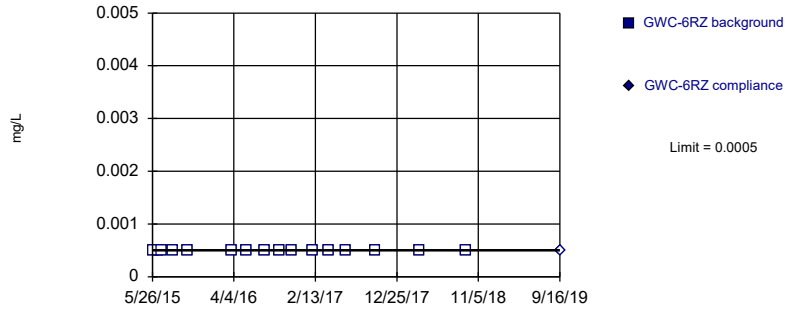


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

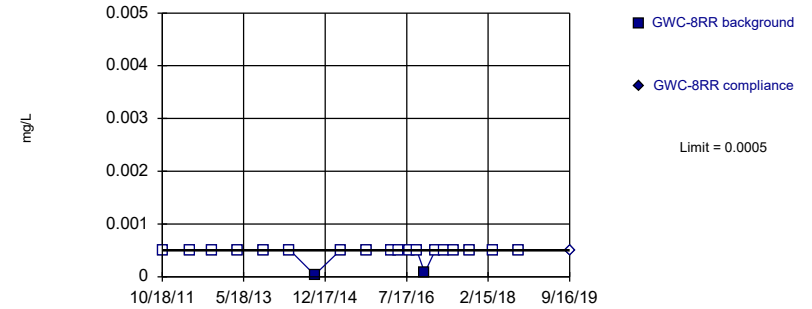


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 16) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

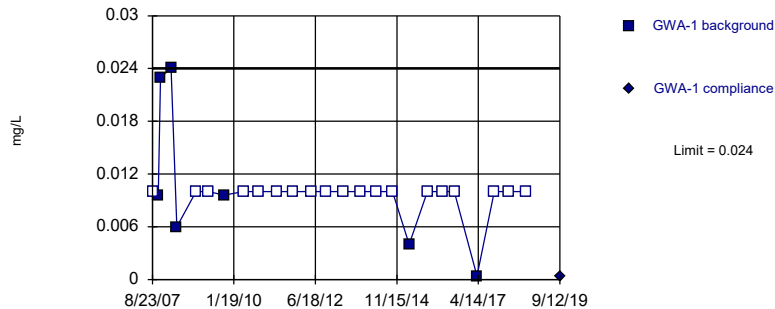


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

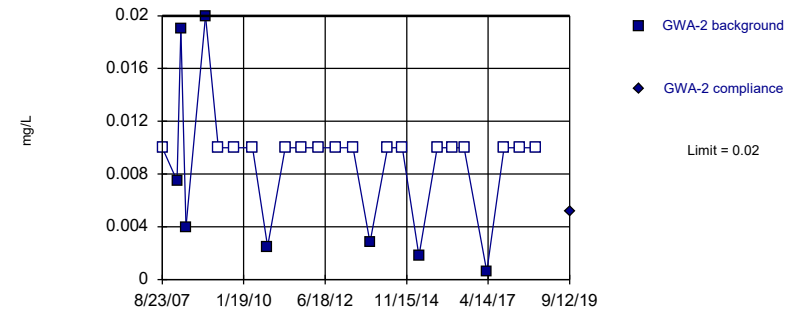


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 73.08% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

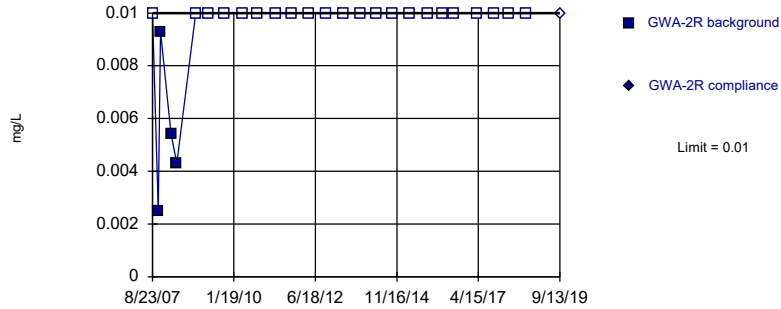


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 68% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

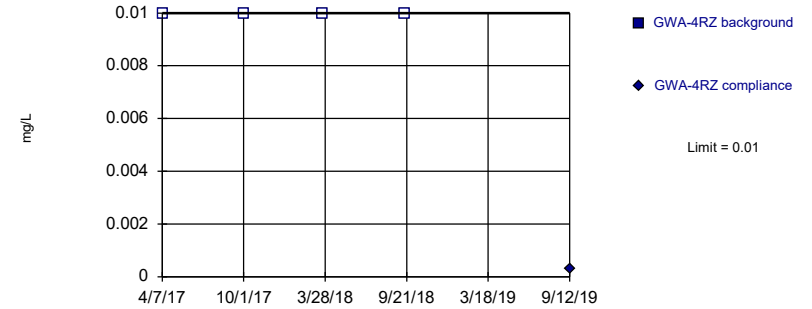


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 84.62% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

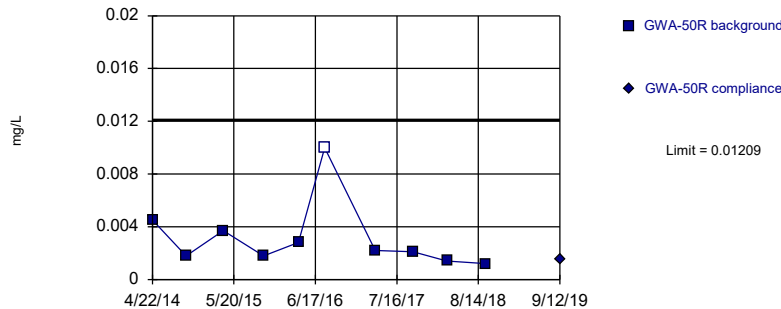


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

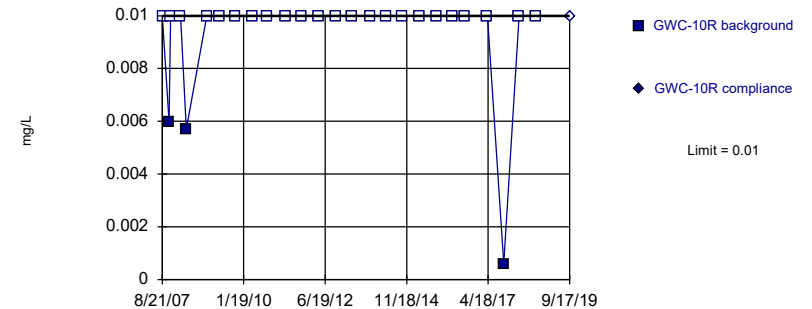


Background Data Summary (based on square root transformation): Mean=0.05305, Std. Dev.=0.01932, n=10, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8214, critical = 0.781. Kappa = 2.945 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Nickel Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

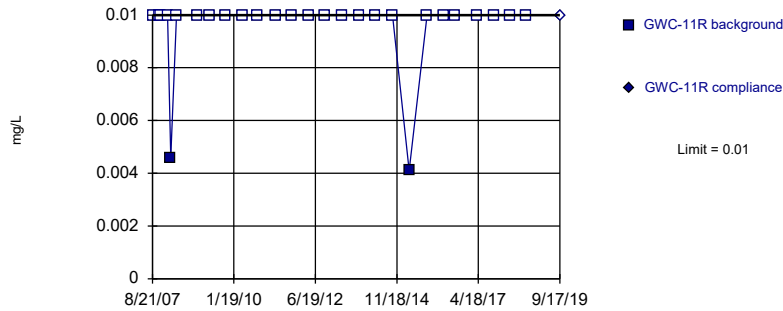


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 88.46% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

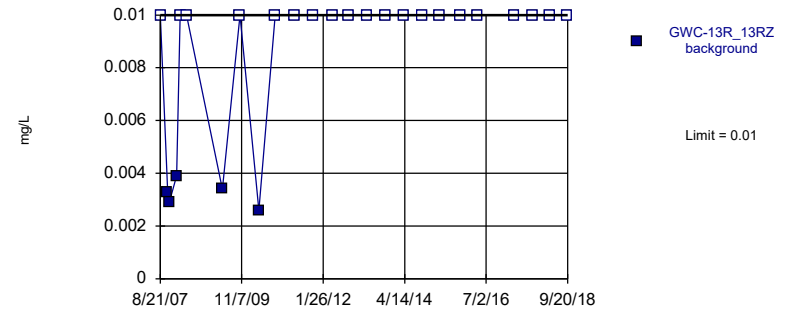


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 92.59% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ

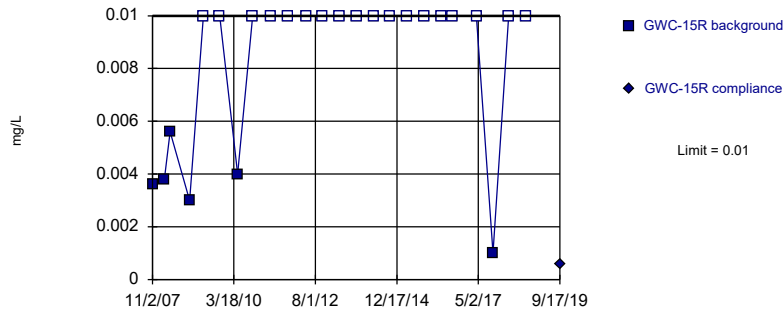


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 25 background values. 80% NDs. Well-constituent pair annual alpha = 0.005656. Individual comparison alpha = 0.002832 (1 of 2). Assumes 1 future value.

Constituent: Nickel Analysis Run 1/15/2020 9:19 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

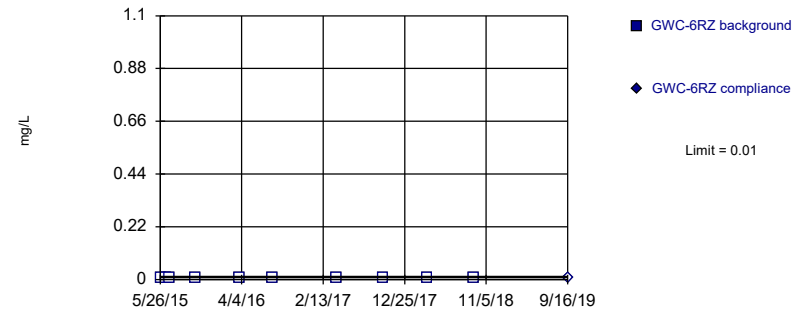


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 75% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

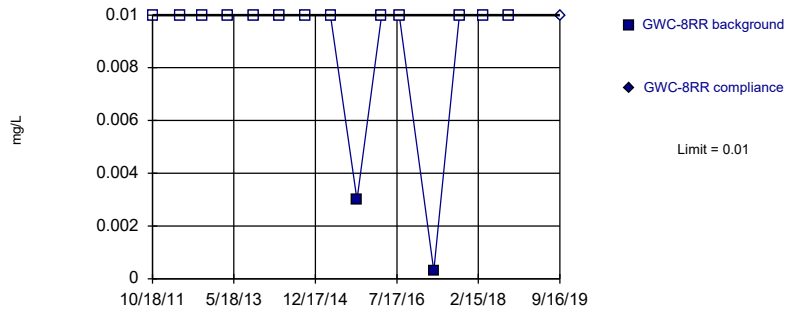


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0293. Individual comparison alpha = 0.01476 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

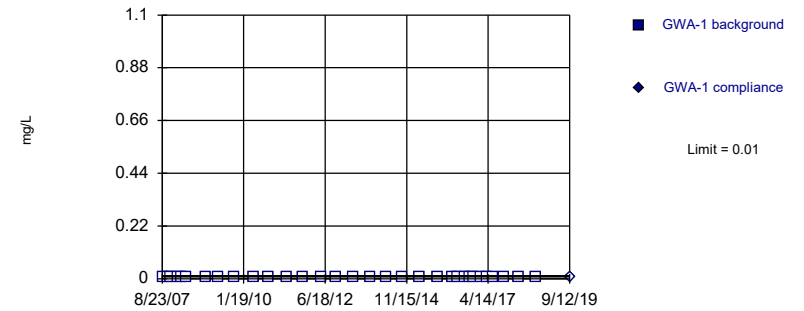


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

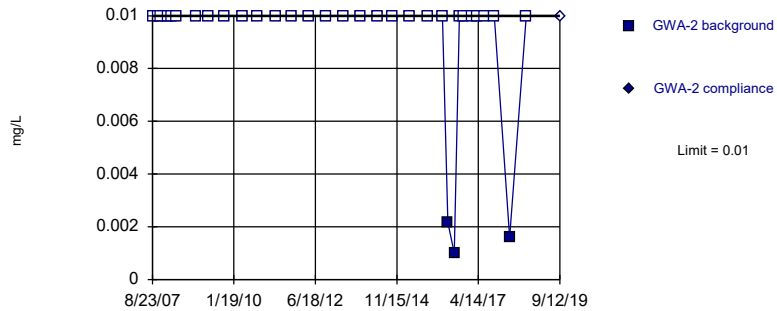


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

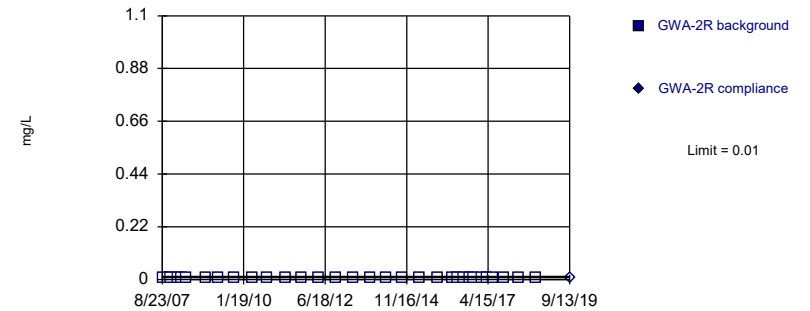


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



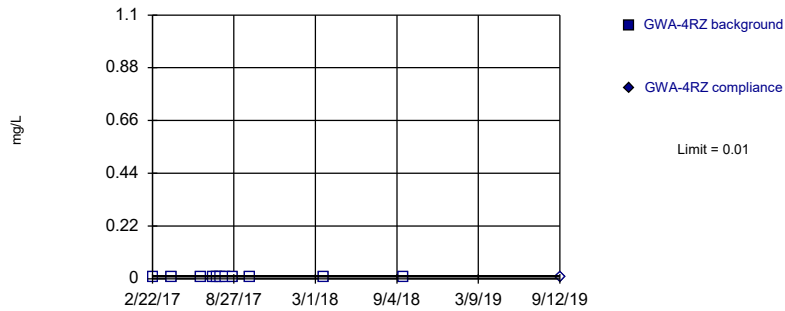
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



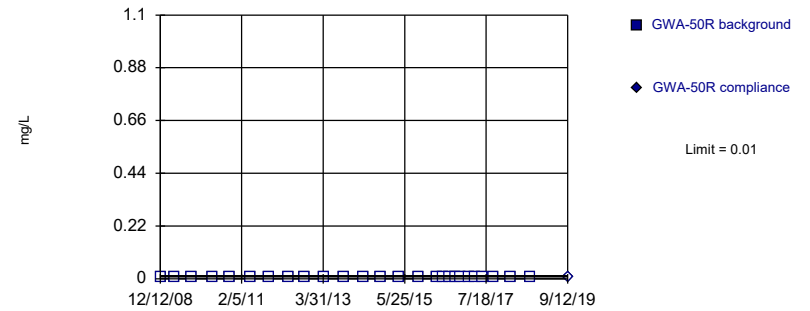
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



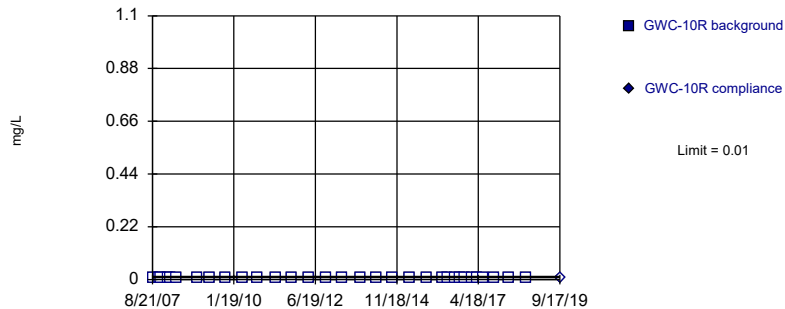
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 26) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



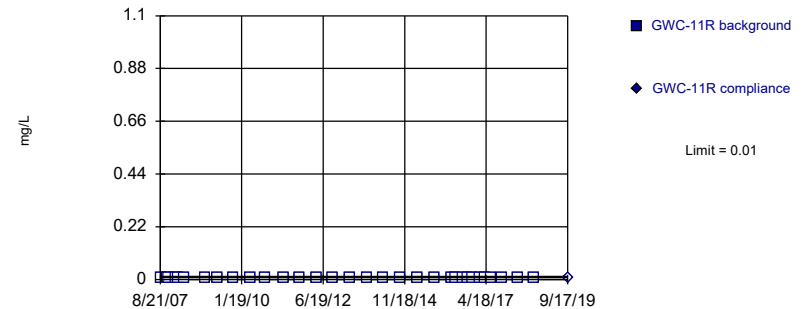
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

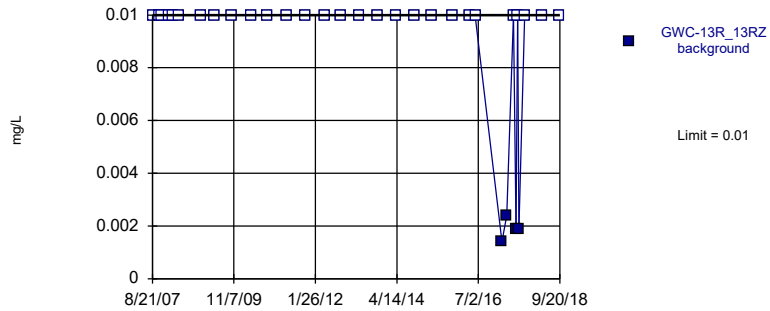
Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

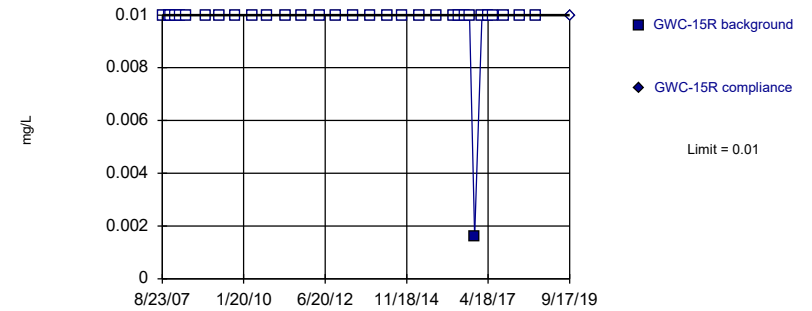
Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2). Assumes 1 future value.

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

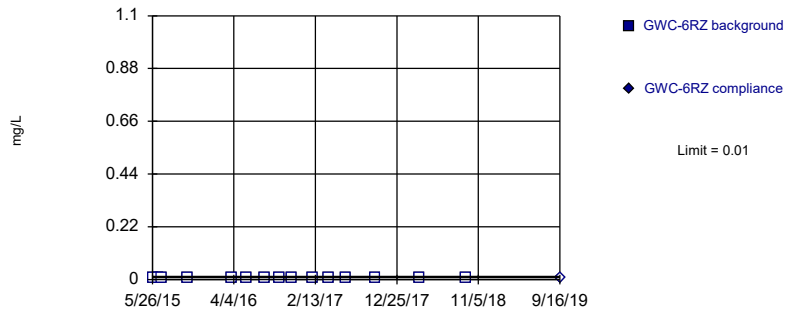
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.003603. Individual comparison alpha = 0.001803 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

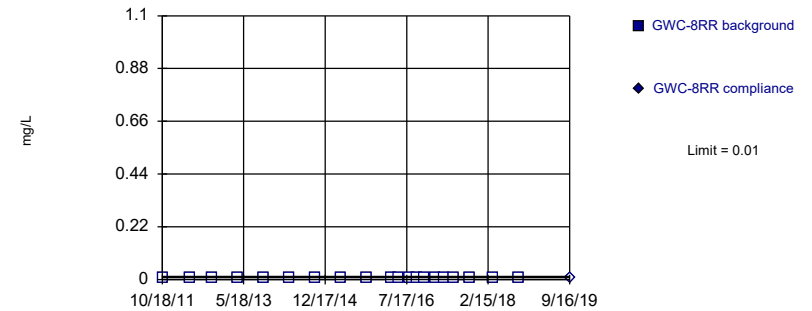
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

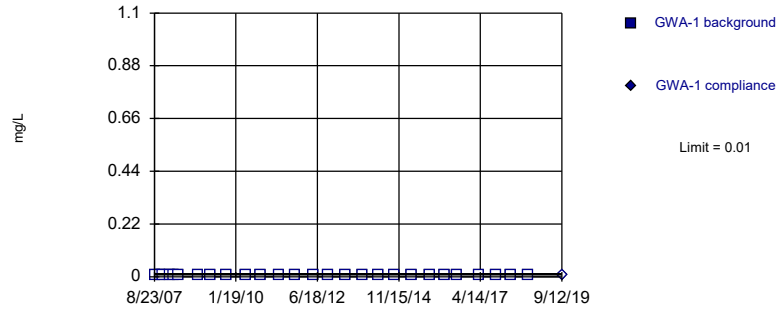
Within Limit
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

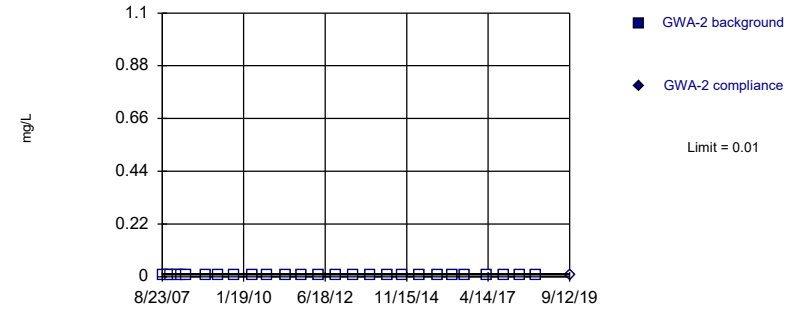
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

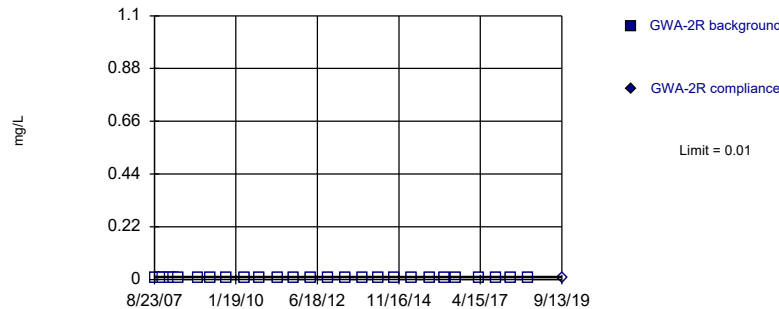
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

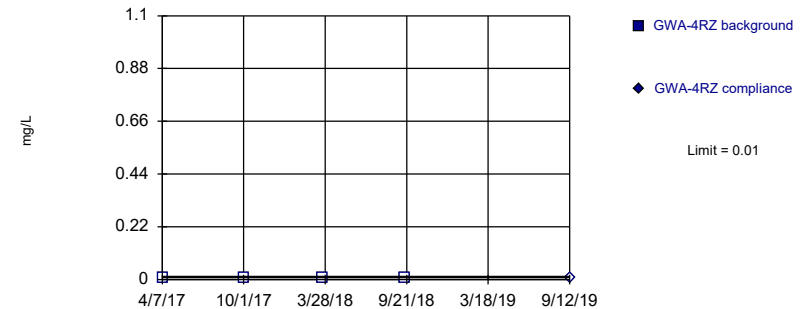
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
 Intrawell Non-parametric

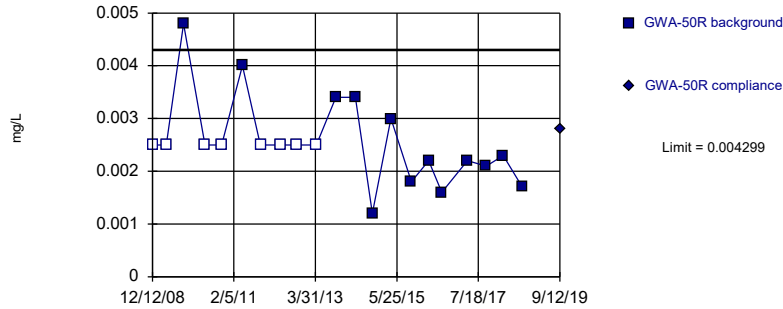


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

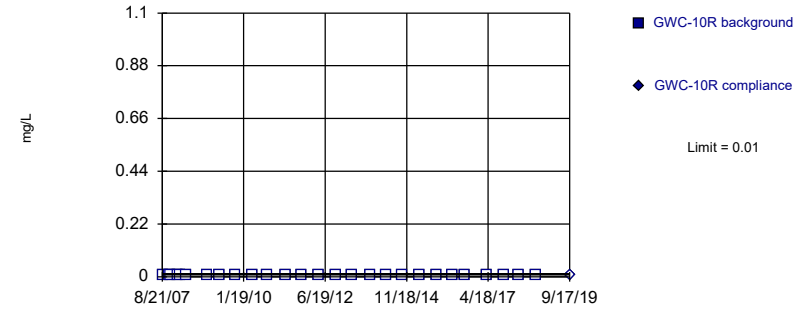


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002202, Std. Dev.=0.0008907, n=21, 38.1% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8968, critical = 0.873. Kappa = 2.354 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

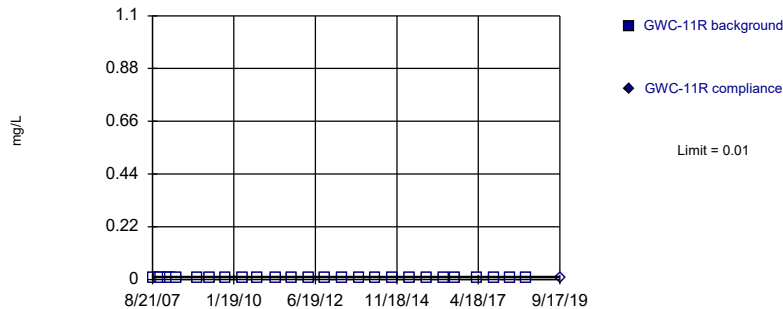


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

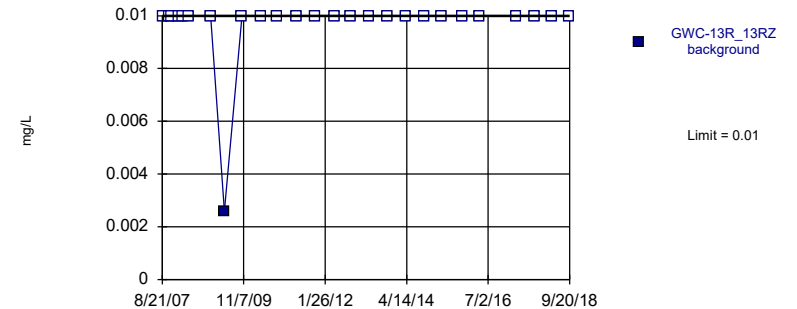


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

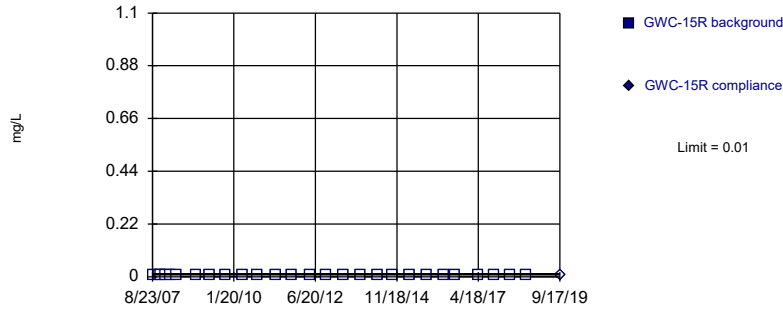
Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 96.15% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2). Assumes 1 future value.

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

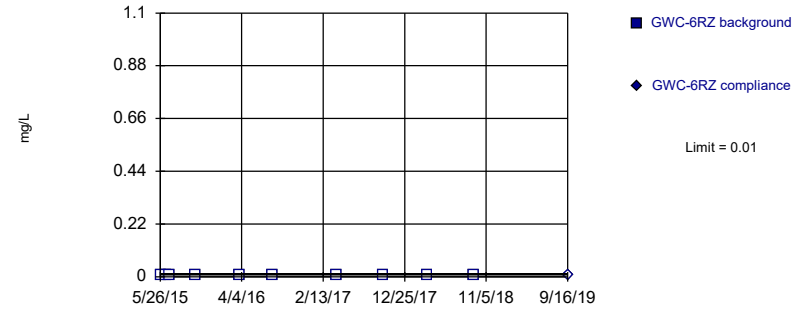
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

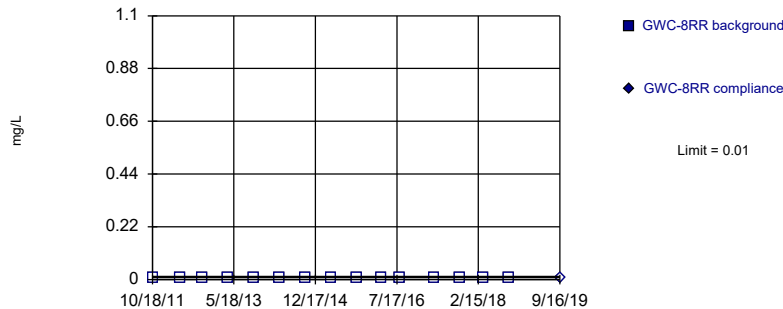
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0293. Individual comparison alpha = 0.01476 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

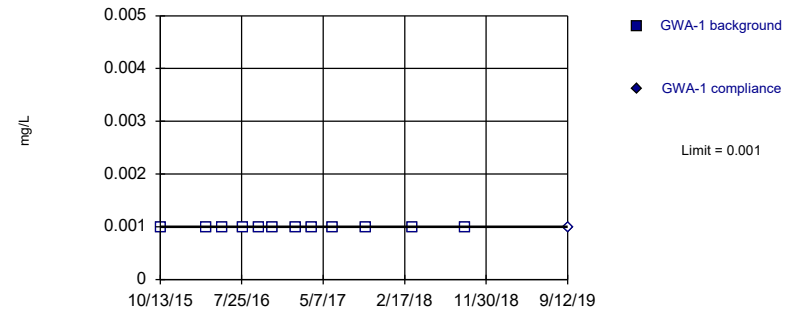
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Non-parametric

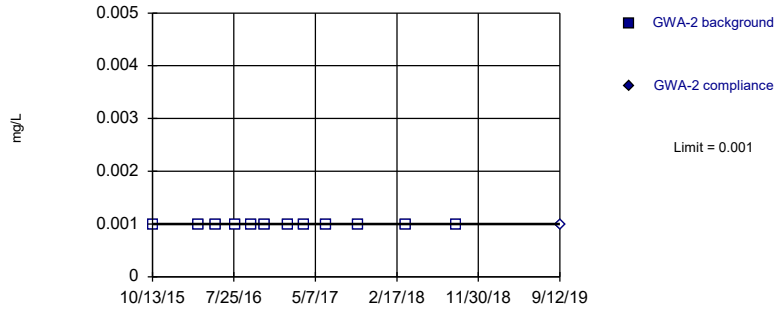


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

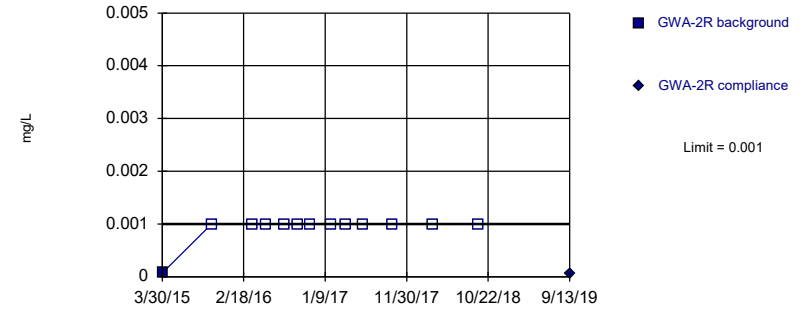


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

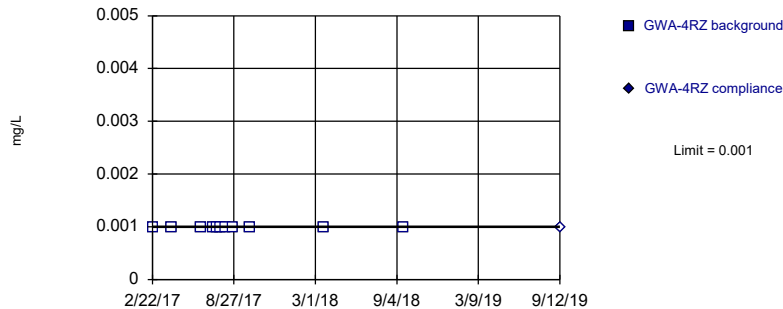


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

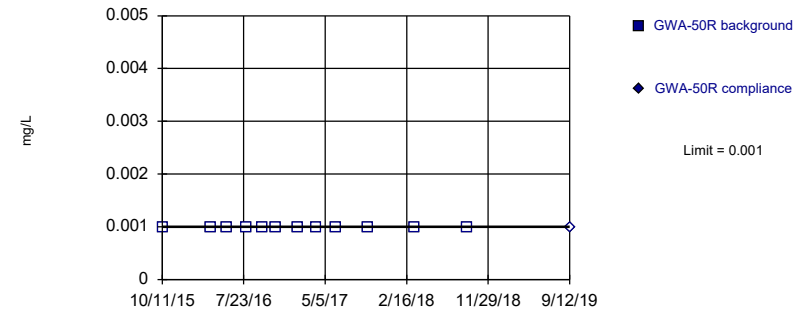


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02537. Individual comparison alpha = 0.01276 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

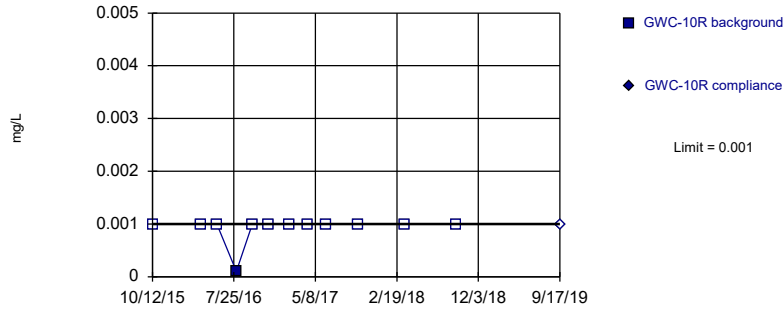


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

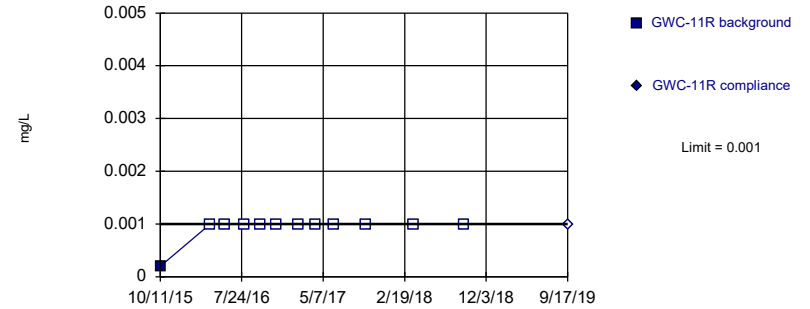


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

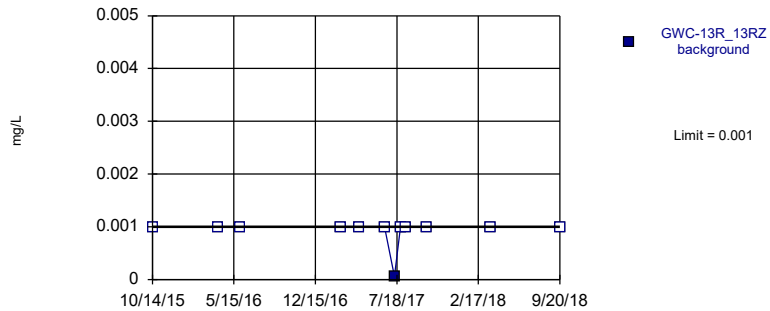


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric, GWC-13R_13RZ

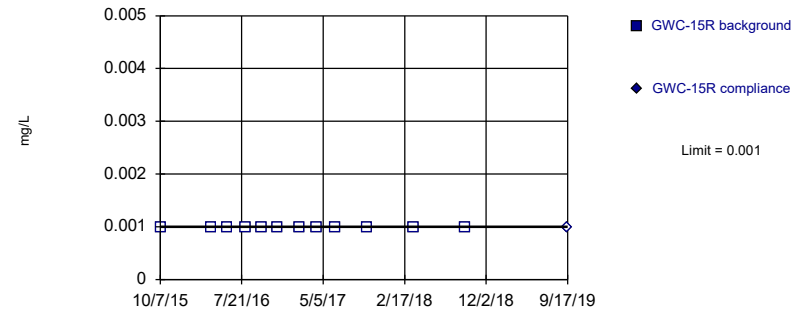


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 12 background values. 91.67% NDs. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2). Assumes 1 future value.

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

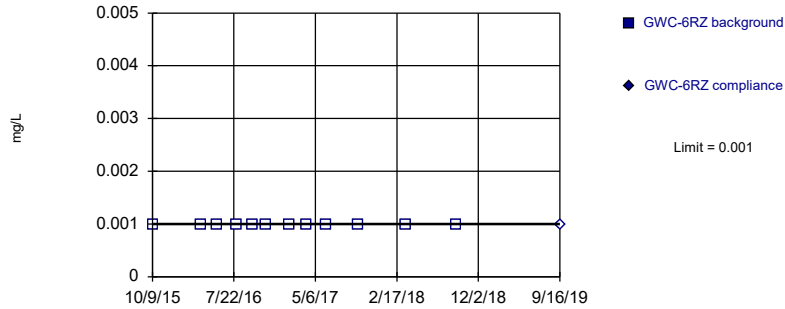


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

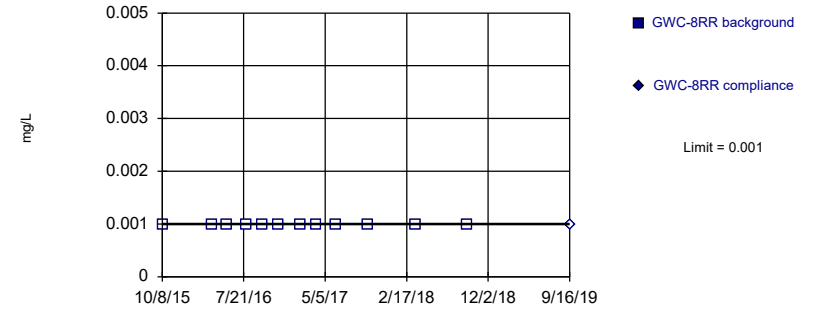


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

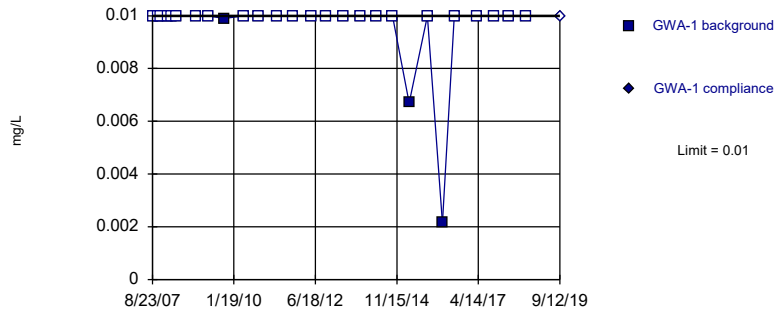


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 12) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02143. Individual comparison alpha = 0.01077 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

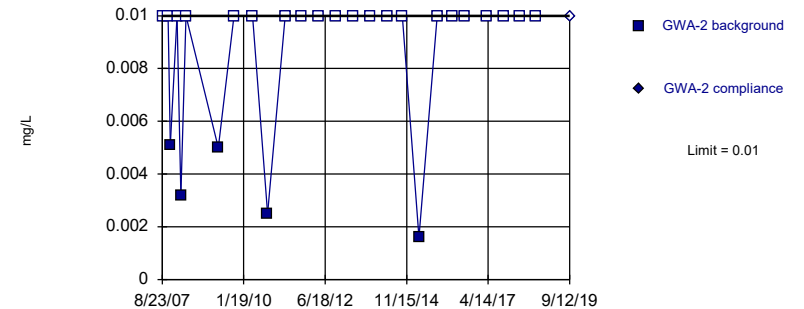


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

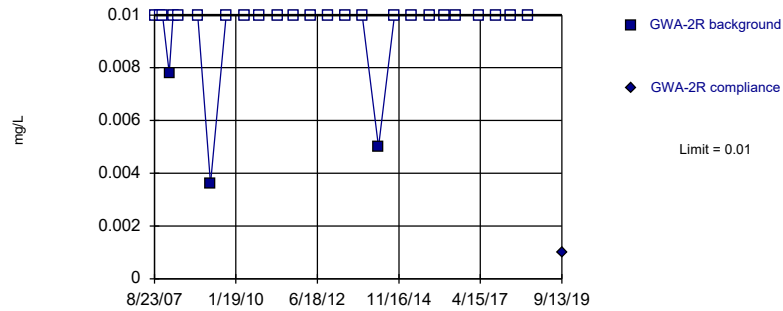


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 26 background values. 80.77% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

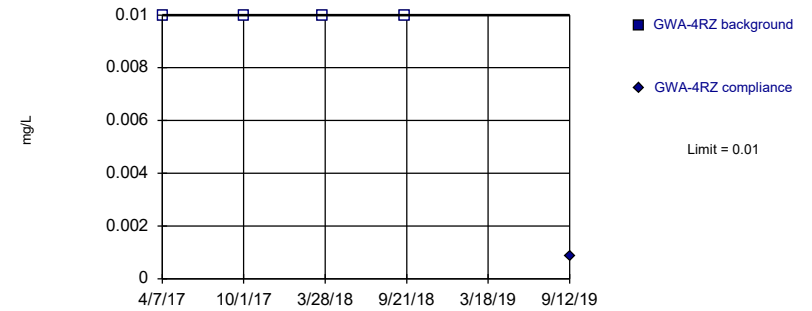


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

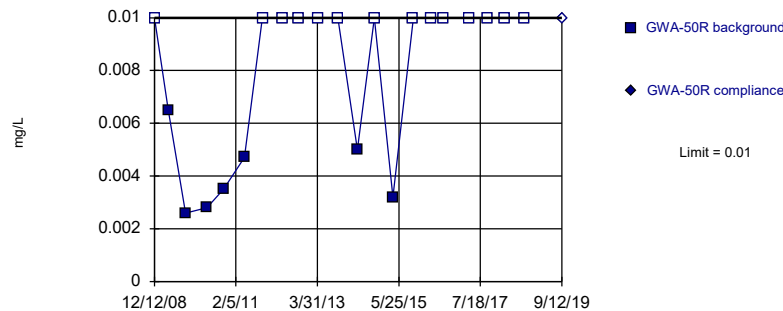


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

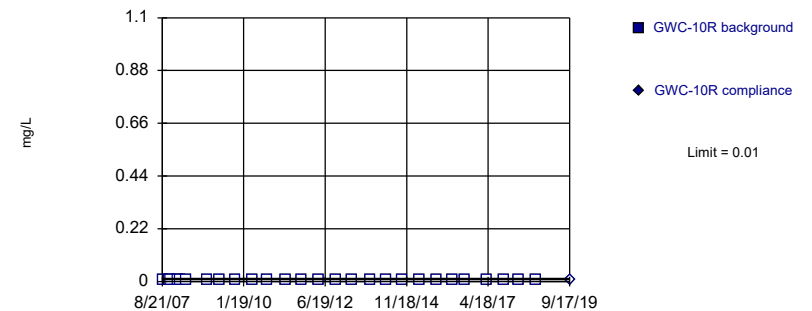


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 21 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

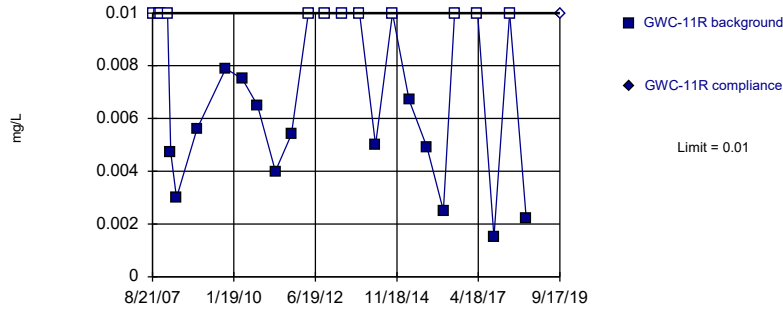


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

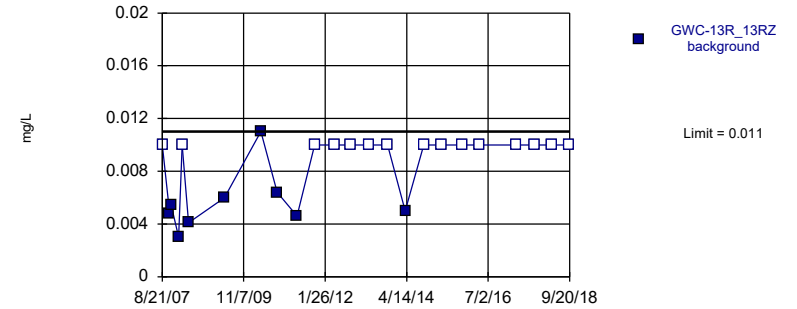


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. 46.15% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric, GWC-13R_13RZ

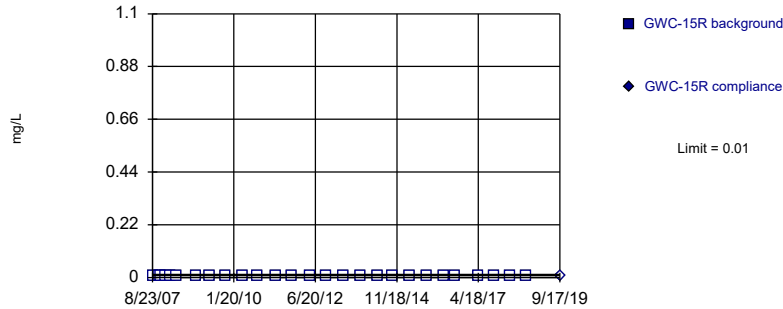


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2). Assumes 1 future value.

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

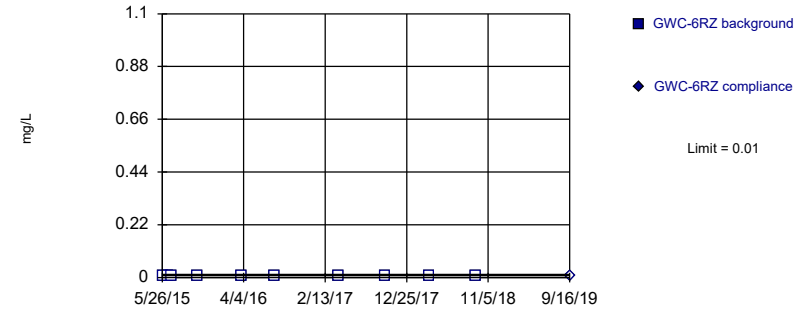


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

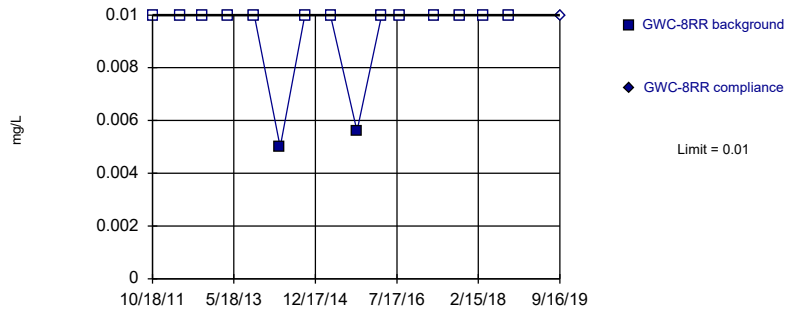


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0293. Individual comparison alpha = 0.01476 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

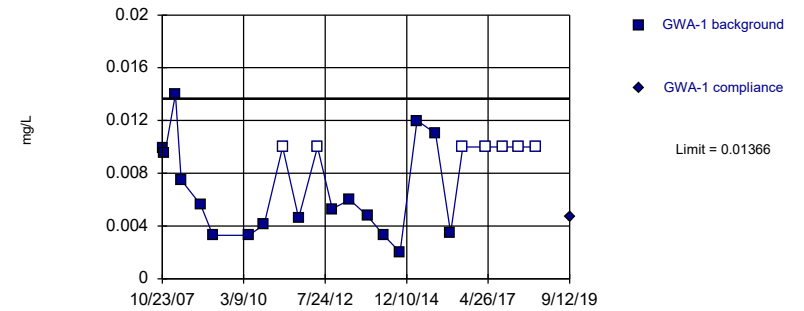


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

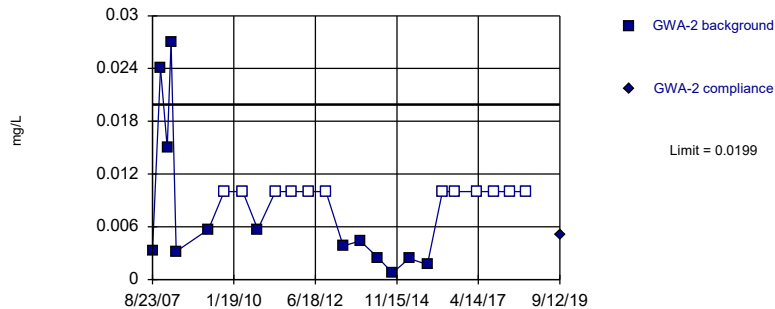


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.005745, Std. Dev.=0.003444, n=24, 29.17% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.904, critical = 0.884. Kappa = 2.299 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

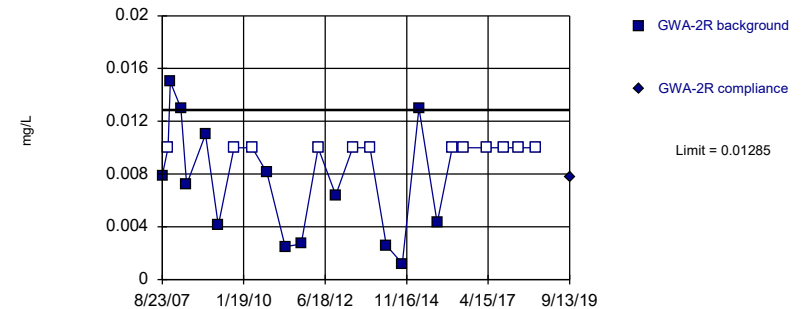


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.06488, Std. Dev.=0.03341, n=25, 48% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9039, critical = 0.888. Kappa = 2.281 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

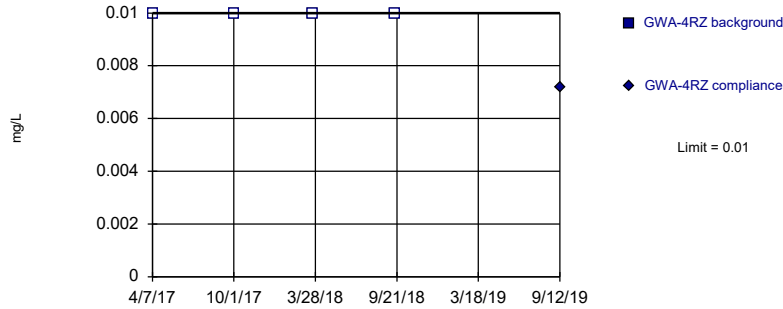


Background Data Summary (based on square transformation) (after Kaplan-Meier Adjustment): Mean=0.00004454, Std. Dev.=0.00005316, n=26, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8915, critical = 0.891. Kappa = 2.269 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

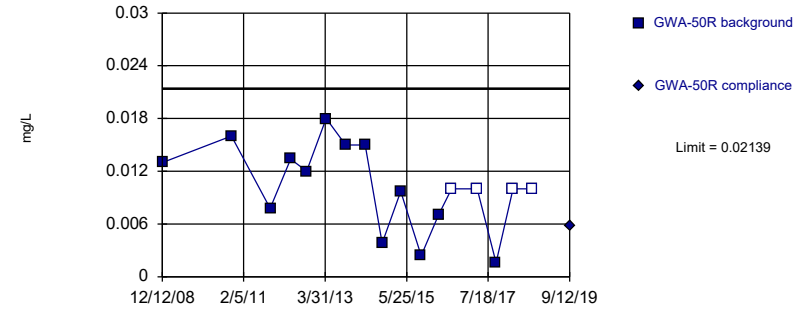


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.119. Individual comparison alpha = 0.06138 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

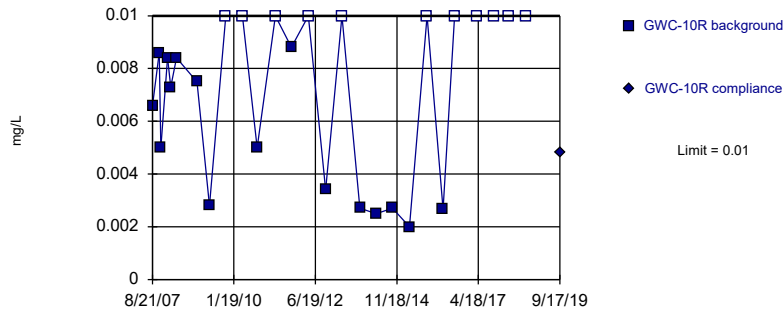


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.008728, Std. Dev.=0.005133, n=17, 23.53% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9563, critical = 0.851. Kappa = 2.466 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

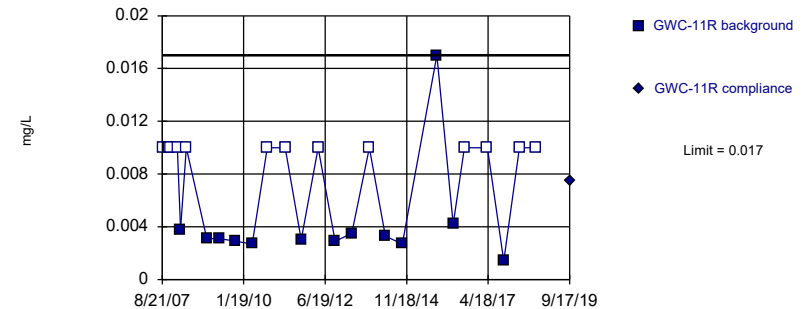


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 40.74% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

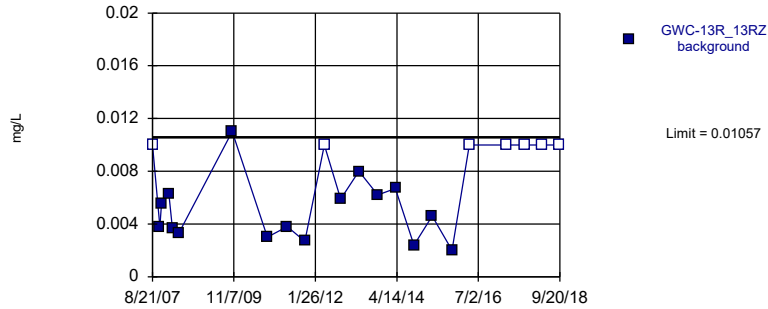
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 26 background values. 50% NDs. Well-constituent pair annual alpha = 0.005327. Individual comparison alpha = 0.002667 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

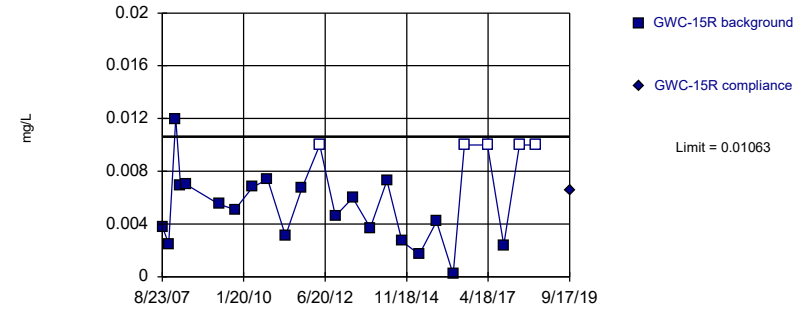
Prediction Limit
Intrawell Parametric, GWC-13R_13RZ



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.06716, Std. Dev.=0.0154, n=23, 30.43% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8961, critical = 0.881. Kappa = 2.317 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486. Assumes 1 future value.

Constituent: Zinc Analysis Run 1/15/2020 9:20 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

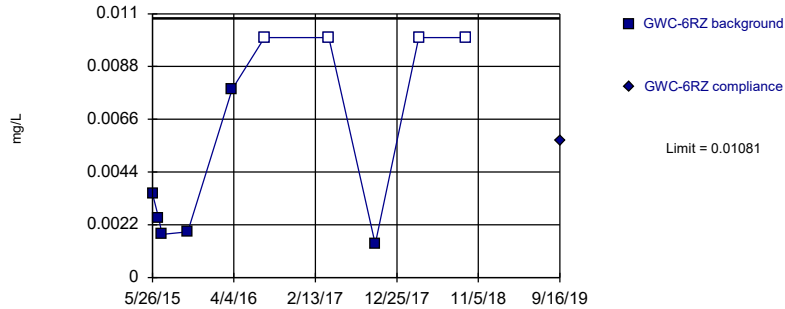
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.004906, Std. Dev.=0.002508, n=25, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9599, critical = 0.888. Kappa = 2.281 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 1/15/2020 9:21 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

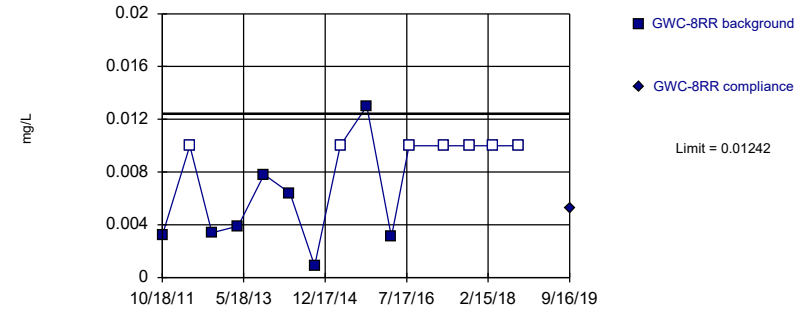
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05354, Std. Dev.=0.01713, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7942, critical = 0.781. Kappa = 2.945 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 1/15/2020 9:21 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.004691, Std. Dev.=0.003024, n=15, 46.67% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8633, critical = 0.835. Kappa = 2.555 (c=16, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005486.

Constituent: Zinc Analysis Run 1/15/2020 9:21 AM View: PL's - Bedrock
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Interwell Prediction Limit Summary Table – App. III Cells 1 & 2 Significant Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/10/2020, 12:02 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Chloride (mg/L)	GWC-13	3.1	n/a	9/18/2019	4	Yes	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-14_14Z	3.1	n/a	9/17/2019	3.8	Yes	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-13R_13RZ	3.1	n/a	9/18/2019	7.6	Yes	91	6.593	x^(1/3)	0.000...	Param 1 of 2
pH (pH units)	GWC-15_15Z	7.6	5.1	9/17/2019	7.76	Yes	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-8RR	7.6	5.1	9/16/2019	7.9	Yes	92	0	n/a	0.000...	NP (normality) 1 of 2

Prediction Limit Summary Table – App. III Cells 1 & 2 All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/10/2020, 12:02 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWC-10	0.050	n/a	9/17/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-10R	0.050	n/a	9/17/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-11	0.050	n/a	9/17/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-11R	0.050	n/a	9/17/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-12	0.050	n/a	9/17/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-13	0.050	n/a	9/18/2019	0.017	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-14_14Z	0.050	n/a	9/17/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-15R	0.050	n/a	9/17/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-15_15Z	0.050	n/a	9/17/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-5	0.050	n/a	9/16/2019	0.0051	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-6	0.050	n/a	9/16/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-6RZ	0.050	n/a	9/16/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-7Z	0.050	n/a	9/13/2019	0.0065	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-8RR	0.050	n/a	9/16/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-8Z	0.050	n/a	9/16/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-9	0.050	n/a	9/16/2019	0.02ND	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-13R_13RZ	0.050	n/a	9/18/2019	0.014	No	91	75.82	n/a	0.000...	NP (NDs) 1 of 2
Chloride (mg/L)	GWC-10	3.1	n/a	9/17/2019	2.4	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-10R	3.1	n/a	9/17/2019	2.8	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-11	3.1	n/a	9/17/2019	1.1	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-11R	3.1	n/a	9/17/2019	1.4	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-12	3.1	n/a	9/17/2019	0.84	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-13	3.1	n/a	9/18/2019	4	Yes	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-14_14Z	3.1	n/a	9/17/2019	3.8	Yes	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-15R	3.1	n/a	9/17/2019	2	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-15_15Z	3.1	n/a	9/17/2019	0.78	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-5	3.1	n/a	9/16/2019	0.73	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-6	3.1	n/a	9/16/2019	1.1	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-6RZ	3.1	n/a	9/16/2019	1.2	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-7Z	3.1	n/a	9/13/2019	1	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-8RR	3.1	n/a	9/16/2019	0.76	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-8Z	3.1	n/a	9/16/2019	1.4	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-9	3.1	n/a	9/16/2019	1.9	No	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Chloride (mg/L)	GWC-13R_13RZ	3.1	n/a	9/18/2019	7.6	Yes	91	6.593	x^(1/3)	0.000...	Param 1 of 2
Fluoride (mg/L)	GWC-10	1.1	n/a	9/17/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-10R	1.1	n/a	9/17/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-11	1.1	n/a	9/17/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-11R	1.1	n/a	9/17/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-12	1.1	n/a	9/17/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-13	1.1	n/a	9/18/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-14_14Z	1.1	n/a	9/17/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-15R	1.1	n/a	9/17/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-15_15Z	1.1	n/a	9/17/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-5	1.1	n/a	9/16/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-6	1.1	n/a	9/16/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-6RZ	1.1	n/a	9/16/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-7Z	1.1	n/a	9/13/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-8RR	1.1	n/a	9/16/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-8Z	1.1	n/a	9/16/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-9	1.1	n/a	9/16/2019	0.15ND	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2

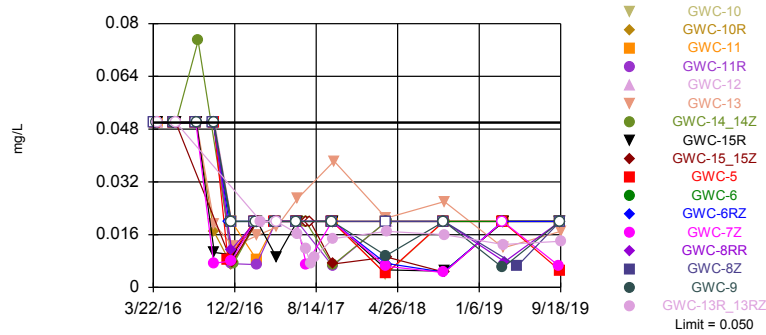
Prediction Limit Summary Table – App. III Cells 1 & 2 All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/10/2020, 12:02 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Fluoride (mg/L)	GWC-13R_13RZ	1.1	n/a	9/18/2019	0.17	No	91	50.55	n/a	0.000...	NP (NDs) 1 of 2
pH (pH units)	GWC-10	7.6	5.1	9/17/2019	7.16	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-10R	7.6	5.1	9/17/2019	7.51	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-11	7.6	5.1	9/17/2019	6.55	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-11R	7.6	5.1	9/17/2019	7.58	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-12	7.6	5.1	9/17/2019	6.19	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-13	7.6	5.1	9/18/2019	7.28	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-14_14Z	7.6	5.1	9/17/2019	6.04	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-15R	7.6	5.1	9/17/2019	7.35	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-15_15Z	7.6	5.1	9/17/2019	7.76	Yes	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-5	7.6	5.1	9/16/2019	6.09	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-6	7.6	5.1	9/16/2019	7.35	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-6RZ	7.6	5.1	9/16/2019	6.83	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-7Z	7.6	5.1	9/13/2019	6.8	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-8RR	7.6	5.1	9/16/2019	7.9	Yes	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-8Z	7.6	5.1	9/16/2019	7.15	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-9	7.6	5.1	9/16/2019	6.03	No	92	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-13R_13RZ	7.6	5.1	9/18/2019	7.5	No	92	0	n/a	0.000...	NP (normality) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

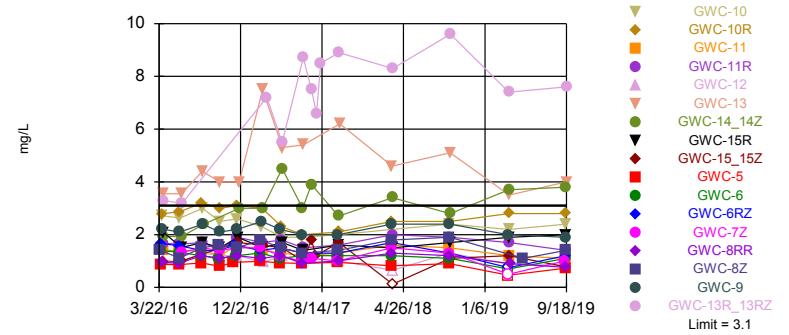


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 91 background values. 75.82% NDs. Annual per-constituent alpha = 0.007798. Individual comparison alpha = 0.0002302 (1 of 2). Comparing 17 points to limit.

Constituent: Boron Analysis Run 1/10/2020 11:57 AM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Exceeds Limit: GWC-13, GWC-14_14Z,
GWC-13R_13RZ

Prediction Limit
Interwell Parametric

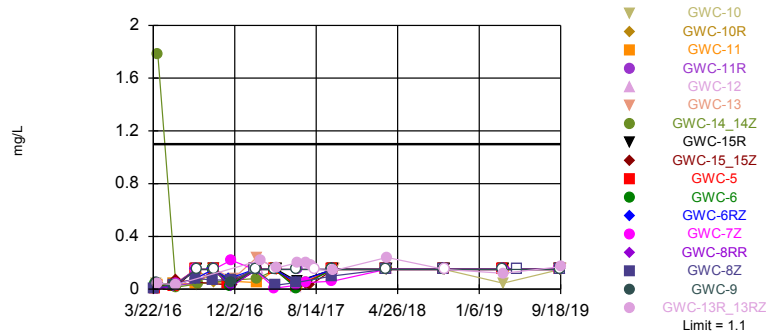


Background Data Summary (based on cube root transformation): Mean=1.114, Std. Dev.=0.1611, n=91, 6.593% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.974, critical = 0.962. Kappa = 2.097 (c=7, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0004426. Comparing 17 points to limit.

Constituent: Chloride Analysis Run 1/10/2020 11:57 AM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Interwell Non-parametric

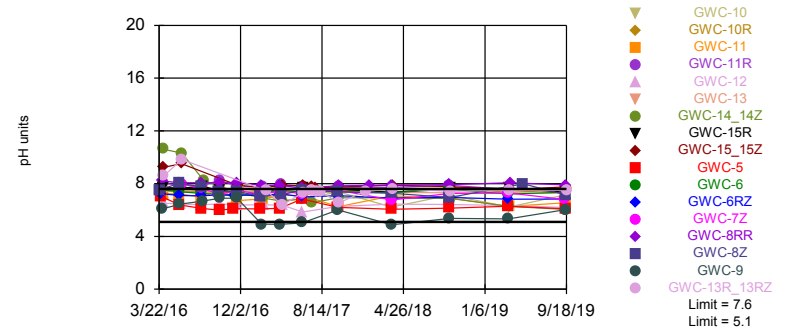


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 91 background values. 50.55% NDs. Annual per-constituent alpha = 0.007798. Individual comparison alpha = 0.0002302 (1 of 2). Comparing 17 points to limit.

Constituent: Fluoride Analysis Run 1/10/2020 11:57 AM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Exceeds Limits: GWC-15_15Z, GWC-8RR

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 92 background values. Annual per-constituent alpha = 0.0153. Individual comparison alpha = 0.0004518 (1 of 2). Comparing 17 points to limit.

Constituent: pH Analysis Run 1/10/2020 11:57 AM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-2R (bg)	GWA-2 (bg)	GWA-3 (bg)	GWA-50 (bg)	GWC-5	GWA-50R (bg)	GWC-6RZ
3/22/2016	<0.1	<0.1							
3/23/2016			<0.1	<0.1	<0.1				
3/28/2016						<0.1	<0.1	<0.1	
3/29/2016									<0.1
3/30/2016									
3/31/2016									
4/4/2016									
4/5/2016									
5/19/2016	<0.1		<0.1						
5/20/2016				<0.1					
5/23/2016					<0.1	<0.1			
5/24/2016									<0.1
5/25/2016		<0.1					<0.1	<0.1	
5/26/2016									
5/27/2016									
5/31/2016									
6/1/2016									
7/29/2016	<0.1 (*)		<0.1 (*)	<0.1 (*)	<0.1 (*)				
8/1/2016						<0.1 (*)	<0.1 (*)	<0.1 (*)	<0.1
8/2/2016		<0.1 (*)							
8/3/2016									
8/4/2016									
8/5/2016									
8/9/2016									
9/22/2016			<0.1		<0.1				
9/23/2016	<0.1 (*)			<0.1 (*)					
9/26/2016		<0.1				<0.1		<0.1	<0.1
9/27/2016							<0.1		
9/28/2016									
9/29/2016									
9/30/2016									
11/9/2016	<0.04 (*)			<0.04 (*)					
11/10/2016			<0.04		<0.04	<0.04 (*)			
11/11/2016							0.0083 (J)	0.0193 (J)	
11/14/2016									<0.04
11/18/2016									
11/21/2016		<0.04							
11/22/2016									
11/23/2016									
11/28/2016									
1/30/2017	<0.04					<0.04		<0.04	
1/31/2017			<0.04	<0.04	<0.04		<0.04		
2/1/2017									<0.04
2/3/2017		<0.04							
2/6/2017									
2/7/2017									
2/8/2017									
2/9/2017									
2/10/2017									
2/13/2017									
2/22/2017									
3/30/2017	0.0065 (J)			<0.04	<0.04				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-9	GWC-8RR	GWC-10R	GWC-10	GWC-13	GWC-11	GWC-13R_13RZ	GWC-11R
4/3/2017									
4/6/2017	<0.04	<0.04	<0.04						
4/7/2017									
4/10/2017				<0.04	<0.04		<0.04		<0.04
4/11/2017								<0.04	
4/12/2017						0.0183 (J)			
6/9/2017									
6/12/2017									
6/13/2017	<0.04	<0.04							
6/14/2017			<0.04	<0.04	<0.04				
6/15/2017							<0.04		<0.04
6/16/2017						0.0269 (J)		0.0163 (J)	
7/12/2017								0.0117 (J)	
7/14/2017									
7/20/2017									
7/26/2017									
7/28/2017								0.0071 (J)	
8/9/2017									
8/10/2017								0.0093 (J)	
8/24/2017									
10/2/2017									
10/3/2017	<0.04	<0.04							
10/4/2017			<0.04	<0.04	<0.04		<0.04		0.0065 (J)
10/5/2017									
10/6/2017								0.0148 (J)	
10/9/2017						0.0383 (J)			
3/16/2018									
3/19/2018	<0.04								
3/20/2018		0.0096 (J)			0.004 (J)				
3/21/2018			<0.04	<0.04		0.021 (J)	<0.04		
3/22/2018									<0.04
3/23/2018								0.017 (J)	
9/14/2018									
9/17/2018	<0.04								
9/18/2018		<0.04 (D)	<0.04	<0.04	<0.04		<0.04		<0.04
9/19/2018						0.026 (J)			
9/20/2018								0.016 (J)	
3/19/2019									
3/20/2019									
3/21/2019	<0.04	0.006 (X)							
3/22/2019				<0.04	<0.04			0.013 (XD)	
3/23/2019						0.012 (X)	<0.04		<0.04
3/25/2019									
3/27/2019			0.0078 (X)						
5/6/2019									
9/12/2019									
9/13/2019									
9/16/2019	<0.04	<0.04	<0.04						
9/17/2019				<0.04	<0.04		<0.04		<0.04
9/18/2019						0.017 (X)		0.014 (X)	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
3/22/2016						
3/23/2016						
3/28/2016						
3/29/2016						
3/30/2016						
3/31/2016						
4/4/2016	<0.1					
4/5/2016		<0.1	<0.1	<0.1		
5/19/2016						
5/20/2016						
5/23/2016						
5/24/2016						
5/25/2016						
5/26/2016						
5/27/2016	<0.1					
5/31/2016		<0.1		<0.1	<0.1	
6/1/2016			<0.1			
7/29/2016						
8/1/2016						
8/2/2016					<0.1 (*)	
8/3/2016	<0.1					
8/4/2016				<0.1		
8/5/2016						
8/9/2016			0.0748 (D)			
9/22/2016						
9/23/2016						
9/26/2016						
9/27/2016					0.0073 (J)	
9/28/2016						
9/29/2016				0.0106 (J)		
9/30/2016	<0.1					
11/9/2016						
11/10/2016						
11/11/2016						
11/14/2016						
11/18/2016						
11/21/2016					0.008 (J)	
11/22/2016	<0.04					
11/23/2016		0.0076 (J)		0.0099 (J)		
11/28/2016			0.0072 (J)			
1/30/2017						
1/31/2017						
2/1/2017					<0.04	
2/3/2017						
2/6/2017						
2/7/2017						
2/8/2017						
2/9/2017			<0.04			
2/10/2017		<0.04		<0.04		
2/13/2017	<0.04					
2/22/2017						0.022 (J)
3/30/2017						

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
4/3/2017						
4/6/2017					<0.04	
4/7/2017						0.0082 (J)
4/10/2017						
4/11/2017	<0.04	<0.04	<0.04			
4/12/2017				0.009 (J)		
6/9/2017						
6/12/2017						
6/13/2017					<0.04	
6/14/2017	<0.04		<0.04			0.008 (J)
6/15/2017		<0.04		<0.04		
6/16/2017						
7/12/2017		<0.04	<0.04			0.0082 (J)
7/14/2017					0.007 (J)	
7/20/2017						0.0091 (J)
7/26/2017		<0.04				
7/28/2017						<0.04
8/9/2017						0.0071 (J)
8/10/2017						
8/24/2017						0.0062 (J)
10/2/2017						
10/3/2017					<0.04	0.006 (J)
10/4/2017	<0.04					
10/5/2017			0.0068 (J)			
10/6/2017		0.0071 (J)		<0.04		
10/9/2017						
3/16/2018						
3/19/2018						
3/20/2018					0.0064 (J)	
3/21/2018						0.0062 (J)
3/22/2018	<0.04		<0.04			
3/23/2018		0.0092 (J)		0.0053 (J)		
9/14/2018						
9/17/2018						
9/18/2018	<0.04				0.0045 (J)	0.0096 (J)
9/19/2018		0.0046 (J)	<0.04	0.0049 (J)		
9/20/2018						
3/19/2019						
3/20/2019						
3/21/2019					<0.04	0.0066 (X)
3/22/2019		<0.04 (D)	<0.04 (D)			
3/23/2019	<0.04					
3/25/2019				<0.04		
3/27/2019						
5/6/2019						
9/12/2019						0.012 (X)
9/13/2019					0.0065 (X)	
9/16/2019						
9/17/2019	<0.04	<0.04	<0.04	<0.04		
9/18/2019						

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-2R (bg)	GWA-2 (bg)	GWA-3 (bg)	GWA-50 (bg)	GWC-5	GWA-50R (bg)	GWC-6RZ
3/22/2016	1.5101	1.4231							
3/23/2016			0.9079	2.4904	1.6092				
3/28/2016						1.14	0.8659	0.9204	
3/29/2016									1.6645
3/30/2016									
3/31/2016									
4/4/2016									
4/5/2016									
5/19/2016	1.5		0.9136						
5/20/2016				1.71					
5/23/2016					1.52	1.19			
5/24/2016									1.58
5/25/2016		1.11					0.8639	1.04	
5/26/2016									
5/27/2016									
5/31/2016									
6/1/2016									
7/29/2016	1.7		1.1	2	1.5				
8/1/2016						1.2	0.93	0.85	1.4
8/2/2016		1.5							
8/3/2016									
8/4/2016									
8/5/2016									
8/9/2016									
9/22/2016			1		1.4				
9/23/2016	1.8			1.8					
9/26/2016		1.6				1.1		0.87	1.4
9/27/2016							0.8		
9/28/2016									
9/29/2016									
9/30/2016									
11/9/2016	2			1.6					
11/10/2016			1.2		1.6	1.3			
11/11/2016							0.95	0.99	
11/14/2016									1.6
11/18/2016									
11/21/2016		1.5							
11/22/2016									
11/23/2016									
11/28/2016									
1/30/2017	1.5					1.2		0.95	
1/31/2017			1.2	1.3	1.6		0.99		
2/1/2017									1.4
2/3/2017		1.8							
2/6/2017									
2/7/2017									
2/8/2017									
2/9/2017									
2/10/2017									
2/13/2017									
2/22/2017									
3/30/2017	1.8			1.6	1.4				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-9	GWC-8RR	GWC-10R	GWC-10	GWC-13	GWC-11	GWC-13R_13RZ	GWC-11R
4/3/2017									
4/6/2017	1.1	2.2	1.2						
4/7/2017									
4/10/2017				2.3	1.9		1.3		1.8
4/11/2017								5.5	
4/12/2017						5.3			
6/9/2017									
6/12/2017									
6/13/2017	1.2	2							
6/14/2017			0.92	2	1.9				
6/15/2017							1.2		1.5
6/16/2017						5.4		8.7	
7/12/2017								7.5	
7/14/2017									
7/20/2017									
7/26/2017									
7/28/2017								6.6	
8/9/2017									
8/10/2017								8.5	
8/24/2017									
10/2/2017									
10/3/2017	1.2	2							
10/4/2017			1	2.1	2		1.3		1.6
10/5/2017									
10/6/2017								8.9	
10/9/2017						6.2			
3/16/2018									
3/19/2018	1.2								
3/20/2018		2.4			2.2				
3/21/2018			1.3	2.5		4.6	1.6		
3/22/2018									2
3/23/2018								8.3	
9/14/2018									
9/17/2018	1.1								
9/18/2018		2.4 (D)	1.2	2.5	2.4		1.5		1.9
9/19/2018						5.1			
9/20/2018								9.6	
3/19/2019									
3/20/2019									
3/21/2019	<1.4	2							
3/22/2019				2.8	2.2			7.4 (D)	
3/23/2019							1.2		1.7
3/25/2019									
3/27/2019			0.9						
5/6/2019									
9/12/2019									
9/13/2019									
9/16/2019	1.1	1.9	0.76 (X)						
9/17/2019				2.8	2.4		1.1		1.4
9/18/2019						4		7.6	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
3/22/2016						
3/23/2016						
3/28/2016						
3/29/2016						
3/30/2016						
3/31/2016						
4/4/2016	1.03					
4/5/2016		0.9439	1.93	2.08		
5/19/2016						
5/20/2016						
5/23/2016						
5/24/2016						
5/25/2016						
5/26/2016						
5/27/2016	0.9684					
5/31/2016		1		1.51	1.33	
6/1/2016			1.93			
7/29/2016						
8/1/2016						
8/2/2016					1.5	
8/3/2016	1.3					
8/4/2016				1.7		
8/5/2016						
8/9/2016			2.4			
9/22/2016						
9/23/2016						
9/26/2016						
9/27/2016					1.4	
9/28/2016						
9/29/2016				1.5		
9/30/2016	1.2					
11/9/2016						
11/10/2016						
11/11/2016						
11/14/2016						
11/18/2016						
11/21/2016					1.5	
11/22/2016	1.2					
11/23/2016		1.7		1.9		
11/28/2016			3			
1/30/2017						
1/31/2017						
2/1/2017					1.5	
2/3/2017						
2/6/2017						
2/7/2017						
2/8/2017						
2/9/2017			3			
2/10/2017		1.6		1.5		
2/13/2017	0.96					
2/22/2017						3.7
3/30/2017						

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
4/3/2017						
4/6/2017					1.2	
4/7/2017						2.5
4/10/2017						
4/11/2017	1.2	1.5	4.5			
4/12/2017				1.7		
6/9/2017						
6/12/2017						
6/13/2017					0.98	
6/14/2017	0.89		3			2.6
6/15/2017		1		1.4		
6/16/2017						
7/12/2017		1.8	3.9			2.8
7/14/2017					1.1	
7/20/2017						2.3
7/26/2017		1.2				
7/28/2017						2
8/9/2017						1.8
8/10/2017						
8/24/2017						2.9
10/2/2017						
10/3/2017					1	2.8
10/4/2017	1					
10/5/2017			2.7			
10/6/2017		1.7		1.6		
10/9/2017						
3/16/2018						
3/19/2018						
3/20/2018					1.5	
3/21/2018						2.9
3/22/2018	<1.3		3.4			
3/23/2018		<0.25		1.5		
9/14/2018						
9/17/2018						
9/18/2018	1.3				1.3	3.1
9/19/2018		1.1	2.8	1.7		
9/20/2018						
3/19/2019						
3/20/2019						
3/21/2019					<1	3.6
3/22/2019		1.2 (D)	3.7 (D)			
3/23/2019	0.88					
3/25/2019				1.9		
3/27/2019						
5/6/2019						
9/12/2019						2.1
9/13/2019					1	
9/16/2019						
9/17/2019	0.84 (X)	0.78 (X)	3.8	2		
9/18/2019						

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-2R (bg)	GWA-2 (bg)	GWA-3 (bg)	GWA-50 (bg)	GWC-5	GWA-50R (bg)	GWC-6RZ
3/22/2016	0.0614 (J)	0.00323 (J)							
3/23/2016			0.0826 (J)	0.0477 (J)	<0.3				
3/28/2016						0.0314 (J)	0.00421 (J)	0.0326 (J)	
3/29/2016									0.00363 (J)
3/30/2016									
3/31/2016									
4/4/2016									
4/5/2016									
5/19/2016	0.064 (J)		0.0409 (J)						
5/20/2016				0.033 (J)					
5/23/2016					<0.3	0.027 (J)			
5/24/2016									0.0286 (J)
5/25/2016		0.0345 (J)					0.0207 (J)	0.0285 (J)	
5/26/2016									
5/27/2016									
5/31/2016									
6/1/2016									
7/29/2016	0.11 (J)		0.07 (J)	0.16 (J)	<0.3				
8/1/2016						<0.3	<0.3	<0.3	0.08 (J)
8/2/2016		0.08 (J)							
8/3/2016									
8/4/2016									
8/5/2016									
8/9/2016									
9/22/2016			<0.3		<0.3				
9/23/2016	0.03 (J)			0.1 (J)					
9/26/2016		0.07 (J)				<0.3		<0.3	<0.3
9/27/2016							<0.3		
9/28/2016									
9/29/2016									
9/30/2016									
11/9/2016	0.1 (J)			0.04 (J)					
11/10/2016			0.03 (J)		<0.3	0.04 (J)			
11/11/2016							0.04 (J)	<0.3	
11/14/2016									0.08 (J)
11/18/2016									
11/21/2016		0.07 (J)							
11/22/2016									
11/23/2016									
11/28/2016									
1/30/2017	<0.3					<0.3		<0.3	
1/31/2017			<0.3	<0.3	<0.3		<0.3		
2/1/2017									<0.3
2/3/2017		<0.3							
2/6/2017									
2/7/2017									
2/8/2017									
2/9/2017									
2/10/2017									
2/13/2017									
2/22/2017									
3/30/2017	0.01 (J)			0.02 (J)	<0.3				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-9	GWC-8RR	GWC-10R	GWC-10	GWC-13	GWC-11	GWC-13R_13RZ	GWC-11R
4/3/2017									
4/6/2017	<0.3	<0.3	<0.3						
4/7/2017									
4/10/2017				<0.3	<0.3		<0.3		<0.3
4/11/2017								0.16 (J)	
4/12/2017						<0.3			
6/9/2017									
6/12/2017									
6/13/2017	0.006 (J)	<0.3							
6/14/2017			<0.3	<0.3	0.02 (J)				
6/15/2017							0.03 (J)		<0.3
6/16/2017						0.04 (J)		0.2 (J)	
7/12/2017								0.2 (J)	
7/14/2017									
7/20/2017									
7/26/2017									
7/28/2017								0.18 (J)	
8/9/2017									
8/10/2017								<0.3 (*)	
8/24/2017									
10/2/2017									
10/3/2017	<0.3	<0.3							
10/4/2017			<0.3	<0.3	<0.3		<0.3		<0.3
10/5/2017									
10/6/2017								0.14 (J)	
10/9/2017						<0.3			
3/16/2018									
3/19/2018	<0.3								
3/20/2018		<0.3			<0.3				
3/21/2018			<0.3	<0.3		<0.3	<0.3		
3/22/2018									<0.3
3/23/2018								0.24 (J)	
9/14/2018									
9/17/2018	<0.3								
9/18/2018		<0.3 (D)	<0.3	<0.3	<0.3		<0.3		<0.3
9/19/2018						<0.3			
9/20/2018								<0.3	
3/19/2019									
3/20/2019									
3/21/2019	<0.3	<0.3							
3/22/2019				<0.3	0.045 (X)			0.12 (XD)	
3/23/2019						<0.3	<0.3		<0.3
3/25/2019									
3/27/2019			<0.3						
5/6/2019									
9/12/2019									
9/13/2019									
9/16/2019	<0.3	<0.3	<0.3						
9/17/2019				<0.3	<0.3		<0.3		<0.3
9/18/2019						<0.3		0.17 (X)	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
3/22/2016						
3/23/2016						
3/28/2016						
3/29/2016						
3/30/2016						
3/31/2016						
4/4/2016	0.035 (J)					
4/5/2016		0.011 (J)	1.78243 (J)	0.00288 (J)		
5/19/2016						
5/20/2016						
5/23/2016						
5/24/2016						
5/25/2016						
5/26/2016						
5/27/2016	0.032 (J)					
5/31/2016		0.0669 (J)		0.0233 (J)	0.043 (J)	
6/1/2016			0.0148 (J)			
7/29/2016						
8/1/2016						
8/2/2016					<0.3	
8/3/2016	<0.3					
8/4/2016				<0.3		
8/5/2016						
8/9/2016			0.04 (J)			
9/22/2016						
9/23/2016						
9/26/2016						
9/27/2016					<0.3	
9/28/2016						
9/29/2016				<0.3		
9/30/2016	<0.3					
11/9/2016						
11/10/2016						
11/11/2016						
11/14/2016						
11/18/2016						
11/21/2016					0.22 (J)	
11/22/2016	0.03 (J)					
11/23/2016		0.03 (J)		0.04 (J)		
11/28/2016			0.07 (J)			
1/30/2017						
1/31/2017						
2/1/2017					<0.3	
2/3/2017						
2/6/2017						
2/7/2017						
2/8/2017						
2/9/2017			0.08 (J)			
2/10/2017		<0.3		<0.3		
2/13/2017	<0.3					
2/22/2017					0.3	
3/30/2017						

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
4/3/2017						
4/6/2017					0.008 (J)	
4/7/2017						0.19 (J)
4/10/2017						
4/11/2017	<0.3	<0.3	<0.3			
4/12/2017				<0.3		
6/9/2017						
6/12/2017						
6/13/2017					0.03 (J)	
6/14/2017	0.01 (J)		0.01 (J)			0.19 (J)
6/15/2017		0.02 (J)		0.06 (J)		
6/16/2017						
7/12/2017		0.04 (J)	0.05 (J)			0.18 (J)
7/14/2017					0.05 (J)	
7/20/2017						0.17 (J)
7/26/2017		0.03 (J)				
7/28/2017						0.13 (J)
8/9/2017						<0.3 (*)
8/10/2017						
8/24/2017						0.16 (J)
10/2/2017						
10/3/2017					0.06 (J)	0.17 (J)
10/4/2017	<0.3					
10/5/2017			<0.3			
10/6/2017		<0.3		<0.3		
10/9/2017						
3/16/2018						
3/19/2018						
3/20/2018					<0.3	
3/21/2018						0.24 (J)
3/22/2018	<0.3		<0.3			
3/23/2018		<0.3		<0.3		
9/14/2018						
9/17/2018						
9/18/2018	<0.3				<0.3	<0.3
9/19/2018		<0.3	<0.3	<0.3		
9/20/2018						
3/19/2019						
3/20/2019						
3/21/2019					<0.3	0.19 (X)
3/22/2019		<0.3 (D)	<0.3 (D)			
3/23/2019	<0.3					
3/25/2019				<0.3		
3/27/2019						
5/6/2019						
9/12/2019						0.1 (X)
9/13/2019					<0.3	
9/16/2019						
9/17/2019	<0.3	<0.3	<0.3	<0.3		
9/18/2019						

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_ApplIII_Interwell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)	GWC-8Z	GWA-3 (bg)	GWA-2R (bg)	GWA-2 (bg)	GWA-50 (bg)	GWC-5	GWA-50R (bg)	GWC-6RZ
3/22/2016	7.65	7.53 (D)							
3/23/2016			5.96	7.45	6.7				
3/28/2016						6.22	7.04	6.45 (D)	
3/29/2016									7.24
3/30/2016									
3/31/2016									
4/4/2016									
4/5/2016									
5/19/2016	7.6			7.5					
5/20/2016					6.36				
5/23/2016			5.73			5.86			
5/24/2016									7.1
5/25/2016		8.04					6.39	6.96	
5/26/2016									
5/27/2016									
5/31/2016									
6/1/2016									
7/29/2016	7.58		5.51	7.59	6.75				
8/1/2016						6.39	6.13	5.64	7.07
8/2/2016		7.74							
8/3/2016									
8/4/2016									
8/5/2016									
8/9/2016									
9/22/2016			5.45	7.44					
9/23/2016	7.57				6.62				
9/26/2016		7.4				5.74		6.26	7.15
9/27/2016							5.98		
9/28/2016									
9/29/2016									
9/30/2016									
11/9/2016	7.45				6.42				
11/10/2016			5.51	7.55		5.78			
11/11/2016							6.11	5.62	
11/14/2016									7.15
11/18/2016									
11/21/2016		7.4							
11/22/2016									
11/23/2016									
11/28/2016									
1/30/2017	7.64					5.88		5.49	
1/31/2017			5.42	7.56	5.66		6.08		
2/1/2017									7.09
2/3/2017		7.05							
2/6/2017									
2/7/2017									
2/8/2017									
2/9/2017									
2/10/2017									
2/13/2017									
2/22/2017									
3/30/2017	7.51		5.43		6.33				

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-9	GWC-8RR	GWC-10	GWC-10R	GWC-12	GWC-11R	GWC-13R_13RZ	GWC-11
4/3/2017									
4/6/2017	7.49	4.92	7.86						
4/7/2017									
4/10/2017				6.72	7.51		7.95		7.13
4/11/2017						6.37		6.37	
4/12/2017									
6/9/2017									
6/12/2017									
6/13/2017	7.38	5.03							
6/14/2017			7.66	6.83	7.34	5.85			
6/15/2017							7.79		7.1
6/16/2017								7.33	
7/12/2017								7.46	
7/14/2017									
7/20/2017									
7/26/2017									
7/27/2017								7.37	
7/28/2017								7.37	
8/9/2017								7.38	
8/10/2017								7.38	
8/24/2017									
10/2/2017									
10/3/2017	7.39	6.01							
10/4/2017			7.84	7.38	7.54	6.27	7.74		6.25
10/5/2017									
10/6/2017								6.55	
10/9/2017									
12/28/2017								7.43 (Y)	
1/9/2018			7.86 (Y)						
3/16/2018									
3/19/2018	7.32								
3/20/2018		4.88		6.23					
3/21/2018			7.9		7.33				7.07
3/22/2018						6.45	7.72		
3/23/2018								7.58	
9/14/2018									
9/17/2018	7.57								
9/18/2018		5.36 (D)	7.92	7.14	7.66	6.42	7.88		6.9
9/19/2018									
9/20/2018								7.43	
3/19/2019									
3/20/2019									
3/21/2019	7.21	5.33							
3/22/2019				6.23	7.34			7.49 (D)	
3/23/2019						6.34	7.56		6.27
3/25/2019									
3/27/2019			8.07						
5/6/2019									
9/12/2019									
9/13/2019									
9/16/2019	7.35	6.03	7.9						
9/17/2019				7.16	7.51	6.19	7.58		6.55

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
3/22/2016						
3/23/2016						
3/28/2016						
3/29/2016						
3/30/2016						
3/31/2016						
4/4/2016	7.44 (D)					
4/5/2016		9.23	10.61	7.71		
5/19/2016						
5/20/2016						
5/23/2016						
5/24/2016						
5/25/2016						
5/26/2016						
5/27/2016						
5/31/2016	7.37	9.52		7.66	7.98	
6/1/2016			10.32			
7/29/2016						
8/1/2016						
8/2/2016					7.64	
8/3/2016						
8/4/2016	7.32			7.8		
8/5/2016						
8/9/2016			8.23			
9/22/2016						
9/23/2016						
9/26/2016						
9/27/2016					7.18	
9/28/2016						
9/29/2016	7.38			7.46		
9/30/2016						
11/9/2016						
11/10/2016						
11/11/2016						
11/14/2016						
11/18/2016						
11/21/2016					7.49	
11/22/2016						
11/23/2016		7.88		7.62		
11/28/2016	7.43		7.29			
1/30/2017						
1/31/2017						
2/1/2017					7.2	
2/3/2017						
2/6/2017						
2/7/2017						
2/8/2017						
2/9/2017	7.36		6.91			
2/10/2017		7.72		7.51		
2/13/2017						
2/22/2017						7.38
3/30/2017						

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_ApplIII_Interwell
 Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
4/3/2017						
4/6/2017					7.42	
4/7/2017						7.35
4/10/2017						
4/11/2017		7.83	6.68			
4/12/2017	7.46			7.54		
6/9/2017						
6/12/2017						
6/13/2017					7.25	
6/14/2017			6.84			7.3
6/15/2017		7.86		7.71		
6/16/2017	7.36					
7/12/2017		7.73	6.54			7.39
7/14/2017					7.5	
7/20/2017						7.44
7/26/2017		7.71				
7/27/2017						
7/28/2017						7.5
8/9/2017						7.52
8/10/2017						
8/24/2017						7.5
10/2/2017						
10/3/2017					7.5	7.51
10/4/2017						
10/5/2017			6.93			
10/6/2017		7.74		7.58		
10/9/2017	7.38					
12/28/2017						7.32 (Y)
1/9/2018						
3/16/2018						
3/19/2018						
3/20/2018					6.76	
3/21/2018	7.33					7.3
3/22/2018			6.93			
3/23/2018		7.89		7.34		
9/14/2018						
9/17/2018						
9/18/2018					7.26	7.26
9/19/2018	7.31	7.77	6.88	7.66		
9/20/2018						
3/19/2019						
3/20/2019						
3/21/2019					7.3	7.28
3/22/2019		7.55 (D)	6.27 (D)			
3/23/2019	7.27					
3/25/2019				7.64		
3/27/2019						
5/6/2019						
9/12/2019						7.2
9/13/2019					6.8	
9/16/2019						
9/17/2019		7.76	6.04	7.35		

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 12:02 PM View: Cells1&2_AppIII_Interwell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-15_15Z	GWC-14_14Z	GWC-15R	GWC-7Z	GWA-4RZ (bg)
9/18/2019	7.28					

Intrawell Prediction Limit Summary Table – App. III Cells 1 & 2 Significant Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/10/2020, 11:49 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate (mg/L)	GWC-15R	11	n/a	9/17/2019	13.1	Yes	8	0	No	0.000...	Param 1 of 3

Prediction Limit Summary Table – App. III Cells 1 & 2 All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/10/2020, 11:49 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	GWC-10	43	n/a	9/17/2019	36.7	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-10R	47	n/a	9/17/2019	40.5	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-11	27	n/a	9/17/2019	16.8	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-11R	37	n/a	9/17/2019	27.6	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-12	10	n/a	9/17/2019	7.8	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-13	75	n/a	9/18/2019	40.7	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-14_14Z	48	n/a	9/17/2019	11.4	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-15R	64	n/a	9/17/2019	39.5	No	8	0	sqrt(x)	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-15_15Z	34	n/a	9/17/2019	22.1	No	8	0	x^2	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-5	8.3	n/a	9/16/2019	2.8	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-6	16	n/a	9/16/2019	13.5	No	7	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-6RZ	15	n/a	9/16/2019	9.5	No	7	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-7Z	27	n/a	9/13/2019	24.6	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-8RR	26	n/a	9/16/2019	23	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-8Z	27	n/a	9/16/2019	20.3	No	7	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-9	37	n/a	9/16/2019	12	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-13R_13RZ	70	n/a	9/18/2019	42.9	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-10	2.3	n/a	9/17/2019	1.2	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-10R	2.1	n/a	9/17/2019	1.6	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-11	4	n/a	9/17/2019	2.6	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-11R	5	n/a	9/17/2019	2	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-12	0.83	n/a	9/17/2019	0.5ND	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-13	200	n/a	9/18/2019	50.7	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-14_14Z	6.2	n/a	9/17/2019	6.1	No	7	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-15R	11	n/a	9/17/2019	13.1	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-15_15Z	15	n/a	9/17/2019	1.6	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-5	2.3	n/a	9/16/2019	1.2	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-6	4.2	n/a	9/16/2019	2	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-6RZ	3.5	n/a	9/16/2019	1.6	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-7Z	2.2	n/a	9/13/2019	0.76	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-8RR	2.1	n/a	9/16/2019	0.69	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-8Z	4.1	n/a	9/16/2019	1	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-9	5	n/a	9/16/2019	3	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-13R_13RZ	86	n/a	9/18/2019	68.1	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-10	190	n/a	9/17/2019	165	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-10R	220	n/a	9/17/2019	172	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-11	160	n/a	9/17/2019	101	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-11R	170	n/a	9/17/2019	143	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-12	120	n/a	9/17/2019	62	No	8	0	ln(x)	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-13	440	n/a	9/18/2019	200	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-14_14Z	320	n/a	9/17/2019	86	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-15R	260	n/a	9/17/2019	179	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-15_15Z	250	n/a	9/17/2019	117	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-5	140	n/a	9/16/2019	45	No	8	12.5	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-6	180	n/a	9/16/2019	82	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-6RZ	180	n/a	9/16/2019	65	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-7Z	180	n/a	9/13/2019	115	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-8RR	130	n/a	9/16/2019	113	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-8Z	170	n/a	9/16/2019	99	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-9	210	n/a	9/16/2019	85	No	8	0	No	0.000...	Param 1 of 3

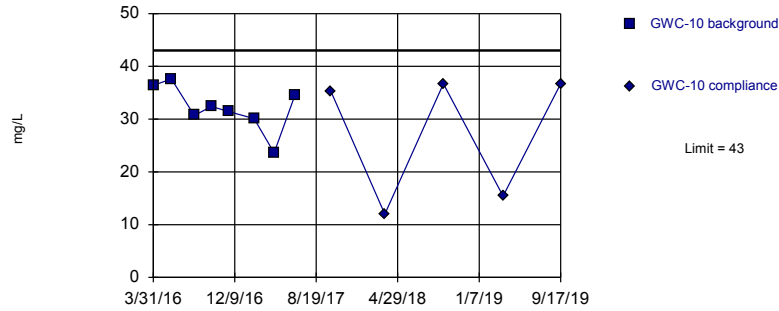
Prediction Limit Summary Table – App. III Cells 1 & 2 All Results

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/10/2020, 11:49 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/l)	GWC-13R_13RZ	440	n/a	9/18/2019	281	No	8	0	No	0.000...	Param 1 of 3

Within Limit

Prediction Limit
Intrawell Parametric

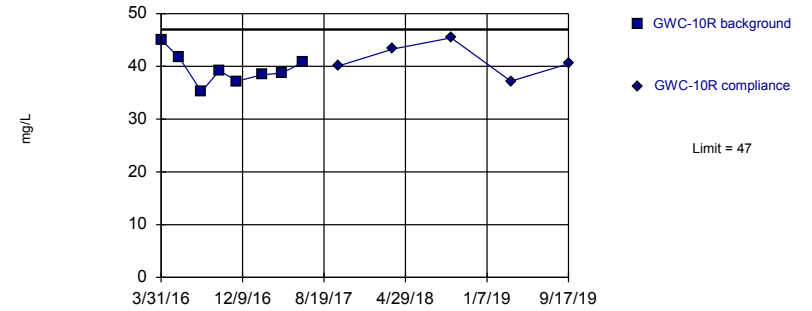


Background Data Summary: Mean=32.1, Std. Dev.=4.372, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.938, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

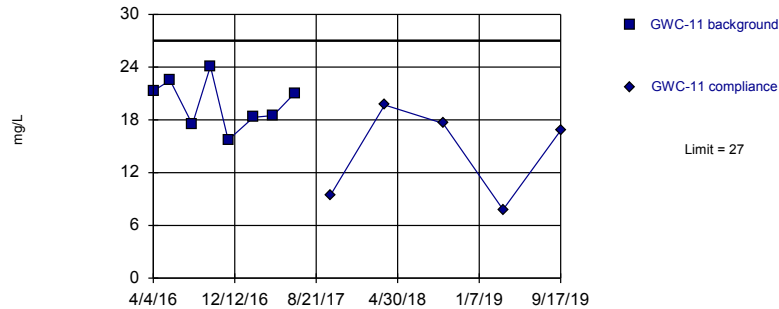


Background Data Summary: Mean=39.53, Std. Dev.=2.988, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9738, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

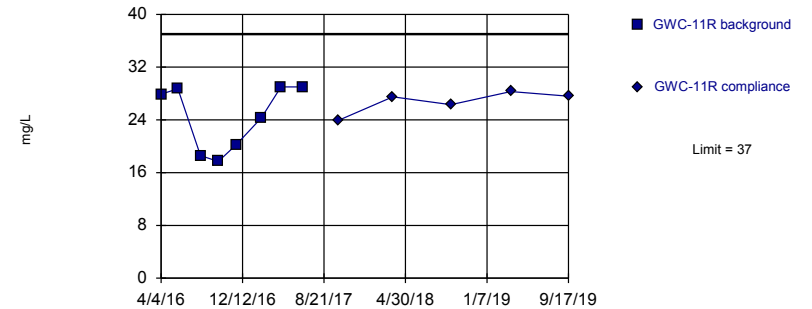


Background Data Summary: Mean=19.86, Std. Dev.=2.815, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9681, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=24.43, Std. Dev.=4.917, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8246, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
3/31/2016	36.4	
5/26/2016	37.6	
8/5/2016	30.7	
9/28/2016	32.4	
11/22/2016	31.4	
2/7/2017	30.1	
4/10/2017	23.6	
6/14/2017	34.6	
10/4/2017		35.2
3/20/2018		12 (J)
9/18/2018		36.7
3/22/2019		15.4 (X)
9/17/2019		36.7

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
3/31/2016	45	
5/26/2016	41.7	
8/3/2016	35.2	
9/28/2016	39.2	
11/22/2016	37.2	
2/7/2017	38.4	
4/10/2017	38.7	
6/14/2017	40.8	
10/4/2017		40.1
3/21/2018		43.3
9/18/2018		45.4
3/22/2019		37.2
9/17/2019		40.5

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
4/4/2016	21.3	
5/26/2016	22.5	
8/3/2016	17.5	
9/28/2016	24.1	
11/22/2016	15.7	
2/8/2017	18.3	
4/10/2017	18.5	
6/15/2017	21	
10/4/2017		9.4
3/21/2018		19.7 (J)
9/18/2018		17.6 (J)
3/23/2019		7.8
9/17/2019		16.8

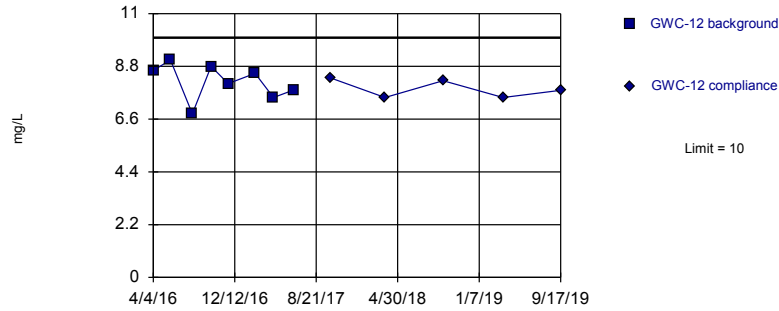
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
4/4/2016	27.9	
5/26/2016	28.7	
8/4/2016	18.6	
9/28/2016	17.7	
11/22/2016	20.2	
2/8/2017	24.3	
4/10/2017	29	
6/15/2017	29	
10/4/2017		23.9
3/22/2018		27.5
9/18/2018		26.3
3/23/2019		28.3
9/17/2019		27.6

Within Limit

Prediction Limit
Intrawell Parametric

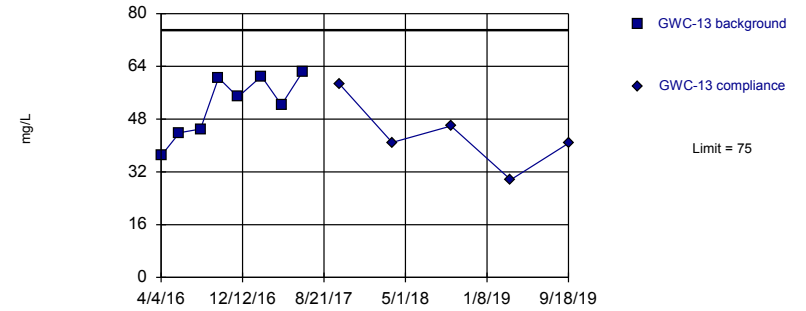


Background Data Summary: Mean=8.154, Std. Dev.=0.7497, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.955, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

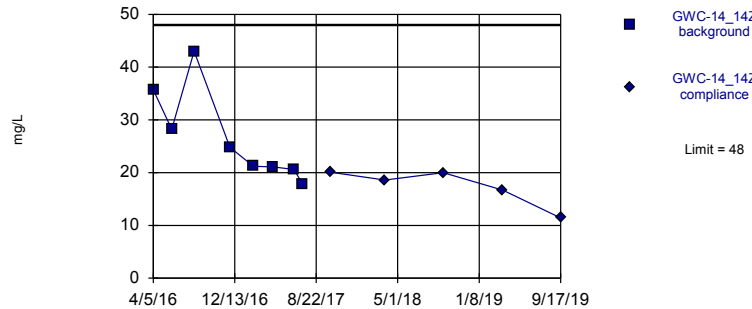


Background Data Summary: Mean=52.08, Std. Dev.=9.33, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9156, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

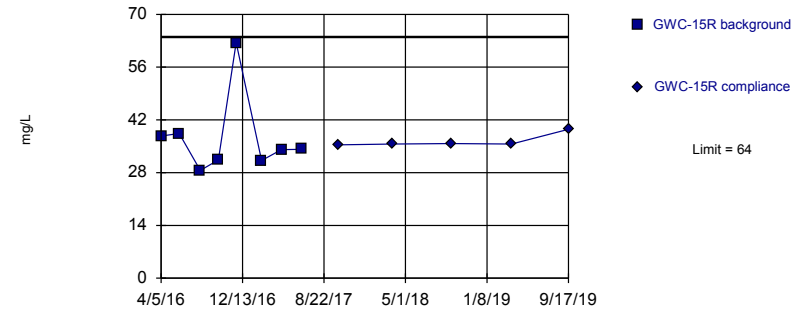


Background Data Summary: Mean=26.54, Std. Dev.=8.719, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.871, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=6.058, Std. Dev.=0.7987, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7543, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
4/4/2016	8.63	
5/27/2016	9.07	
8/3/2016	6.82	
9/30/2016	8.8	
11/22/2016	8.08	
2/13/2017	8.51	
4/11/2017	7.5	
6/14/2017	7.82	
10/4/2017		8.32
3/22/2018		7.5
9/18/2018		8.2
3/23/2019		7.5
9/17/2019		7.8

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
4/4/2016	36.9	
5/31/2016	43.9	
8/4/2016	45	
9/29/2016	60.5	
11/28/2016	54.7	
2/9/2017	61	
4/12/2017	52.3	
6/16/2017	62.3	
10/9/2017		58.6
3/21/2018		40.9
9/19/2018		45.9
3/23/2019		29.6
9/18/2019		40.7

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
4/5/2016	35.7	
6/1/2016	28.2	
8/9/2016	43	
11/28/2016	24.8	
2/9/2017	21.2	
4/11/2017	21.1	
6/14/2017	20.6	
7/12/2017	17.7	
10/5/2017		20.1
3/22/2018		18.6 (J)
9/19/2018		20 (J)
3/22/2019		16.7 (XD)
9/17/2019		11.4

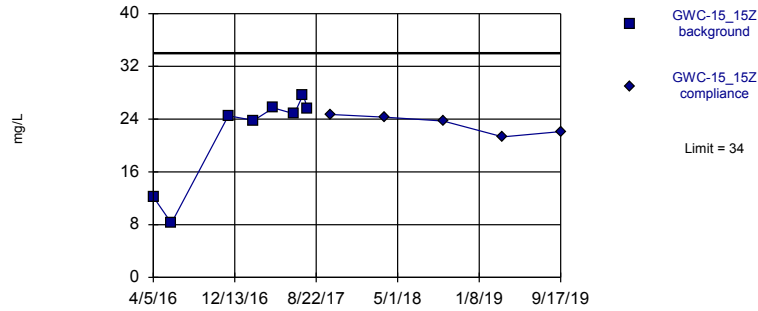
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
4/5/2016	37.7	
5/31/2016	38.4	
8/4/2016	28.6	
9/29/2016	31.4	
11/23/2016	62.5	
2/10/2017	31.2	
4/12/2017	34.1	
6/15/2017	34.2	
10/6/2017		35.4
3/23/2018		35.6
9/19/2018		35.7
3/25/2019		35.6
9/17/2019		39.5

Within Limit

Prediction Limit
Intrawell Parametric

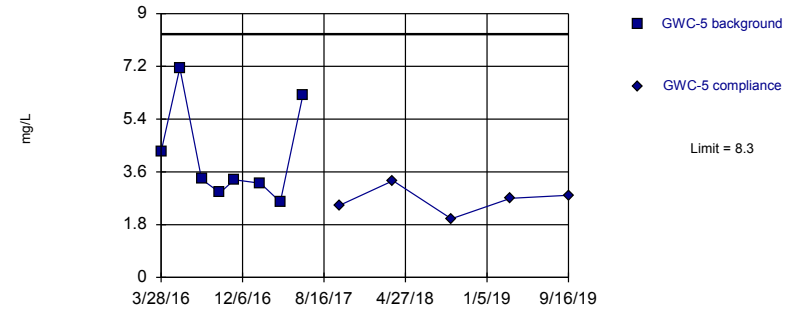


Background Data Summary (based on square transformation): Mean=510.2, Std. Dev.=255.9, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7895, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

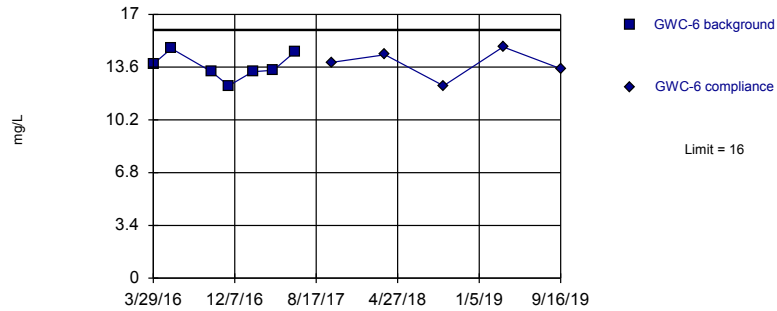


Background Data Summary: Mean=4.126, Std. Dev.=1.672, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8232, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

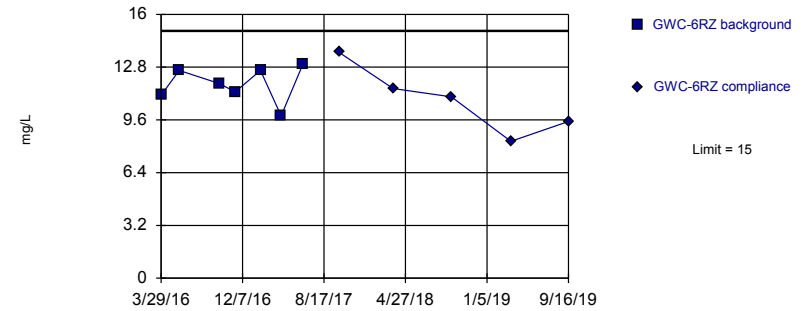


Background Data Summary: Mean=13.66, Std. Dev.=0.8284, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9331, critical = 0.73. Kappa = 2.789 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=11.75, Std. Dev.=1.102, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9328, critical = 0.73. Kappa = 2.789 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
4/5/2016	12.2	
5/31/2016	8.24	
11/23/2016	24.5	
2/10/2017	23.8	
4/11/2017	25.7	
6/15/2017	24.8	
7/12/2017	27.7	
7/26/2017	25.6	
10/6/2017		24.7
3/23/2018		24.3 (J)
9/19/2018		23.7 (J)
3/22/2019		21.3 (XD)
9/17/2019		22.1

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
3/28/2016	4.29	
5/25/2016	7.15	
8/1/2016	3.35	
9/27/2016	2.89	
11/11/2016	3.33	
1/31/2017	3.21	
4/3/2017	2.57	
6/12/2017	6.22	
10/3/2017		2.45
3/19/2018		3.3
9/17/2018		2
3/20/2019		2.7
9/16/2019		2.8

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
3/29/2016	13.8	
5/24/2016	14.8	
9/26/2016	13.3	
11/18/2016	12.4	
2/1/2017	13.3	
4/6/2017	13.4	
6/13/2017	14.6	
10/3/2017		13.9
3/19/2018		14.4 (J)
9/17/2018		12.4 (J)
3/21/2019		14.9 (X)
9/16/2019		13.5

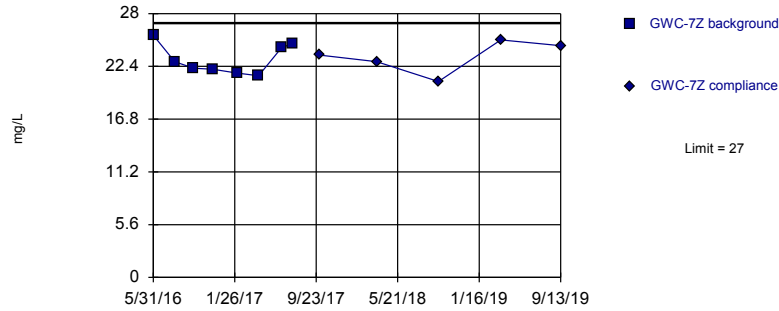
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
3/29/2016	11.1	
5/24/2016	12.6	
9/26/2016	11.8	
11/14/2016	11.3	
2/1/2017	12.6	
4/6/2017	9.84	
6/13/2017	13	
10/3/2017		13.7
3/20/2018		11.5 (J)
9/17/2018		11 (J)
3/21/2019		8.3
9/16/2019		9.5

Within Limit

Prediction Limit
Intrawell Parametric

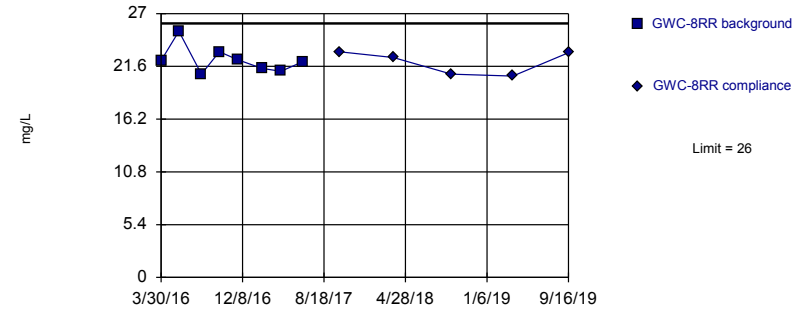


Background Data Summary: Mean=23.15, Std. Dev.=1.604, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8983, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

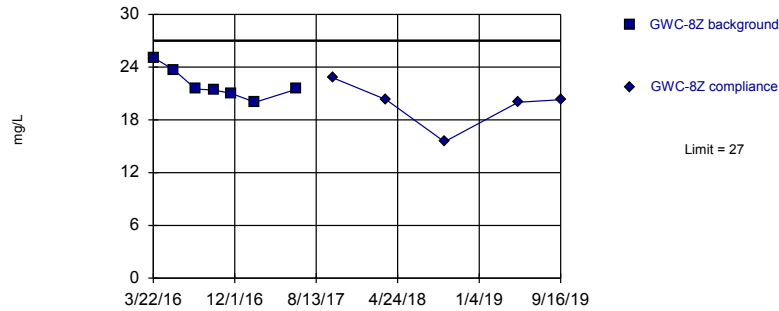


Background Data Summary: Mean=22.28, Std. Dev.=1.394, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8797, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

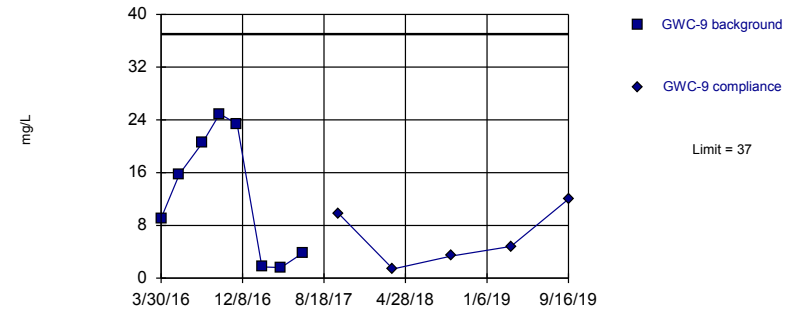


Background Data Summary: Mean=22.03, Std. Dev.=1.749, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8766, critical = 0.73. Kappa = 2.789 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=12.6, Std. Dev.=9.783, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8779, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:42 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	25.7	
8/2/2016	22.9	
9/27/2016	22.2	
11/21/2016	22.1	
2/1/2017	21.7	
4/6/2017	21.4	
6/13/2017	24.4	
7/14/2017	24.8	
10/3/2017		23.6
3/20/2018		22.9 (J)
9/18/2018		20.8 (J)
3/21/2019		25.2
9/13/2019		24.6

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
3/30/2016	22.2	
5/24/2016	25.2	
8/2/2016	20.8	
9/27/2016	23.1	
11/22/2016	22.3	
2/6/2017	21.4	
4/6/2017	21.1	
6/14/2017	22.1	
10/4/2017		23.1
3/21/2018		22.5 (J)
9/18/2018		20.8 (J)
3/27/2019		20.6 (X)
9/16/2019		23

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
3/22/2016	25.1	
5/25/2016	23.7	
8/2/2016	21.5	
9/26/2016	21.4	
11/21/2016	21	
2/3/2017	20	
6/13/2017	21.5	
10/3/2017		22.8
3/20/2018		20.3 (J)
9/18/2018		15.5 (J)
5/6/2019		20 (X)
9/16/2019		20.3

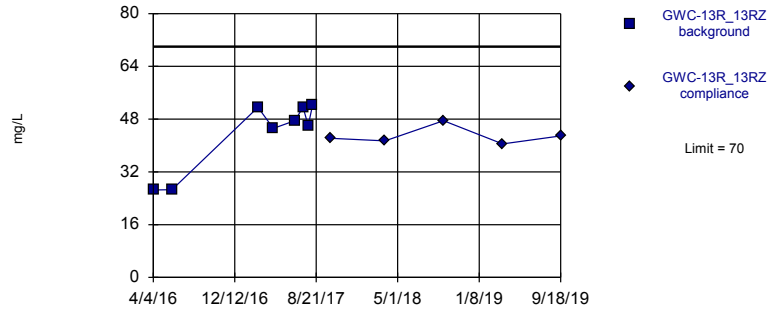
Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
3/30/2016	9.07	
5/26/2016	15.8	
8/5/2016	20.5	
9/28/2016	24.9	
11/21/2016	23.4	
2/6/2017	1.7	
4/6/2017	1.6	
6/13/2017	3.82	
10/3/2017		9.77
3/20/2018		1.4
9/18/2018		3.35 (D)
3/21/2019		4.8
9/16/2019		12

Within Limit

Prediction Limit
Intrawell Parametric

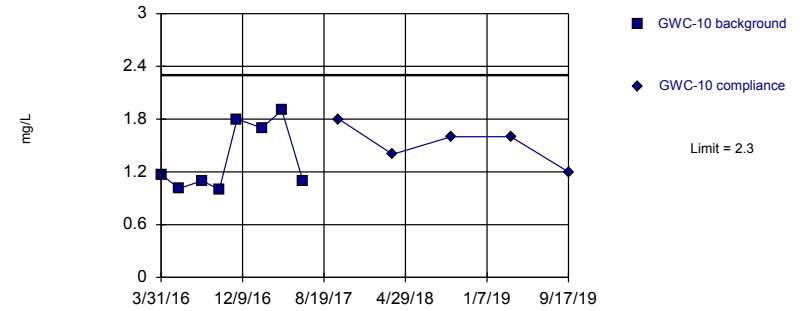


Background Data Summary: Mean=43.4, Std. Dev.=10.73, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7541, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Calcium Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

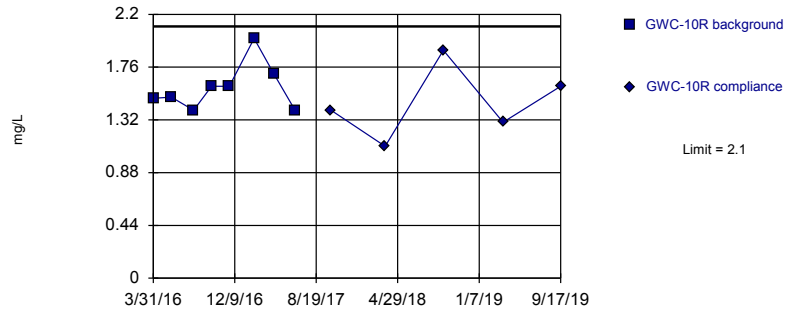


Background Data Summary: Mean=1.348, Std. Dev.=0.3823, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7974, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

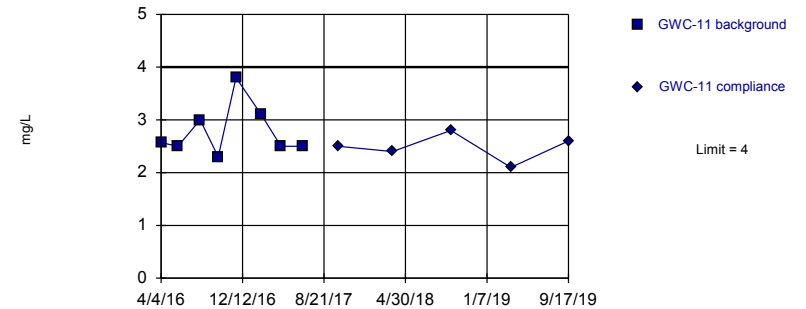


Background Data Summary: Mean=1.589, Std. Dev.=0.1953, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8645, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.784, Std. Dev.=0.4929, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8308, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
4/4/2016	26.5	
6/1/2016	26.6	
2/22/2017	51.6	
4/11/2017	45.2	
6/16/2017	47.5	
7/12/2017	51.6	
7/28/2017	46	
8/10/2017	52.2	
10/6/2017		42.2
3/23/2018		41.4
9/20/2018		47.5
3/22/2019		40.5 (D)
9/18/2019		42.9

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
3/31/2016	1.17	
5/26/2016	1.01	
8/5/2016	1.1	
9/28/2016	1	
11/22/2016	1.8	
2/7/2017	1.7	
4/10/2017	1.9	
6/14/2017	1.1	
10/4/2017		1.8
3/20/2018		1.4
9/18/2018		1.6
3/22/2019		1.6
9/17/2019		1.2

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
3/31/2016	1.5	
5/26/2016	1.51	
8/3/2016	1.4	
9/28/2016	1.6	
11/22/2016	1.6	
2/7/2017	2	
4/10/2017	1.7	
6/14/2017	1.4	
10/4/2017		1.4
3/21/2018		1.1
9/18/2018		1.9
3/22/2019		1.3
9/17/2019		1.6

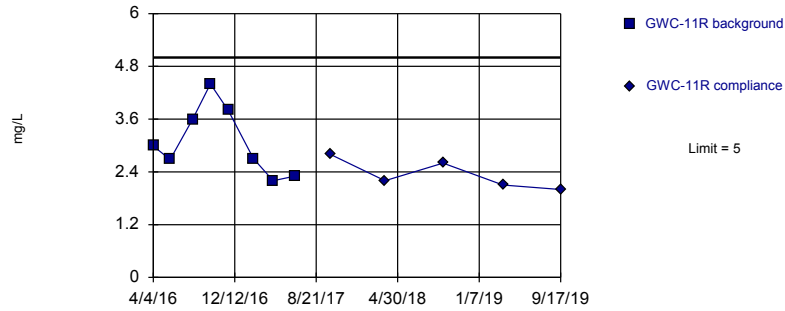
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
4/4/2016	2.57	
5/26/2016	2.5	
8/3/2016	3	
9/28/2016	2.3	
11/22/2016	3.8	
2/8/2017	3.1	
4/10/2017	2.5	
6/15/2017	2.5	
10/4/2017		2.5
3/21/2018		2.4
9/18/2018		2.8
3/23/2019		2.1
9/17/2019		2.6

Within Limit

Prediction Limit
Intrawell Parametric

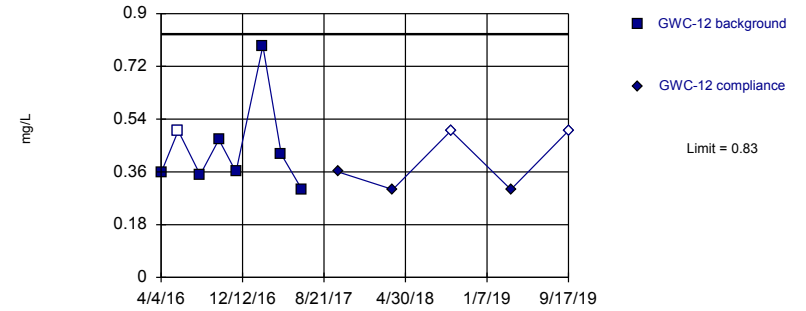


Background Data Summary: Mean=3.084, Std. Dev.=0.777, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9301, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

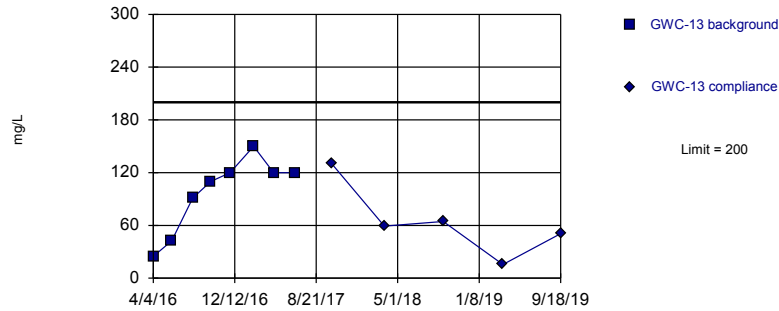


Background Data Summary: Mean=0.4434, Std. Dev.=0.155, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8006, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

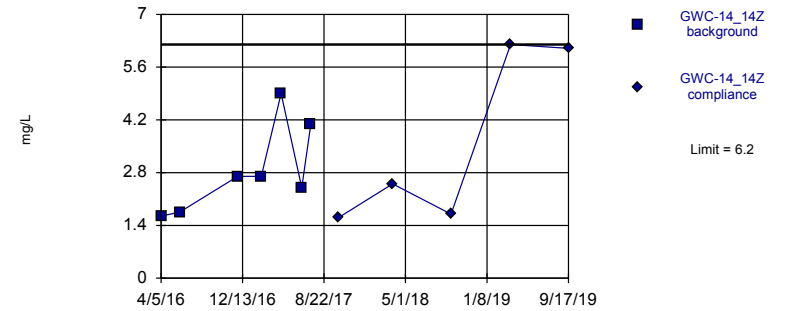


Background Data Summary: Mean=97.29, Std. Dev.=42.73, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8774, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.886, Std. Dev.=1.201, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8931, critical = 0.73. Kappa = 2.789 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
4/4/2016	2.99	
5/26/2016	2.68	
8/4/2016	3.6	
9/28/2016	4.4	
11/22/2016	3.8	
2/8/2017	2.7	
4/10/2017	2.2	
6/15/2017	2.3	
10/4/2017		2.8
3/22/2018		2.2
9/18/2018		2.6
3/23/2019		2.1
9/17/2019		2

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
4/4/2016	0.3574 (J)	
5/27/2016	<1	
8/3/2016	0.35 (J)	
9/30/2016	0.47 (J)	
11/22/2016	0.36 (J)	
2/13/2017	0.79 (J)	
4/11/2017	0.42 (J)	
6/14/2017	0.3 (J)	
10/4/2017		0.36 (J)
3/22/2018		0.3 (J)
9/18/2018		<1
3/23/2019		0.3 (X)
9/17/2019		<1

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
4/4/2016	24.8	
5/31/2016	42.5	
8/4/2016	91	
9/29/2016	110	
11/28/2016	120	
2/9/2017	150	
4/12/2017	120	
6/16/2017	120	
10/9/2017		130
3/21/2018		59.1
9/19/2018		64.5
3/23/2019		15.5 (X)
9/18/2019		50.7

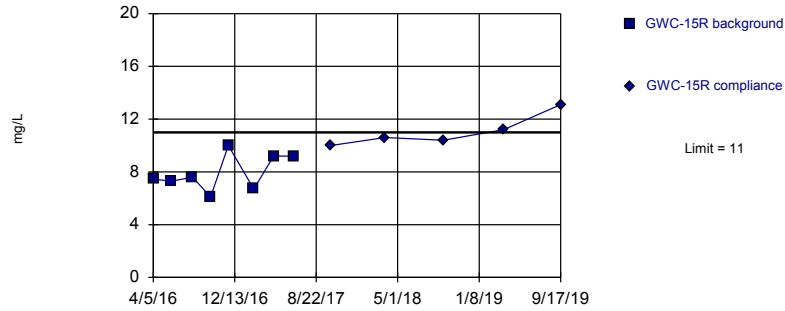
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
4/5/2016	1.65	
6/1/2016	1.75	
11/28/2016	2.7	
2/9/2017	2.7	
4/11/2017	4.9	
6/14/2017	2.4	
7/12/2017	4.1	
10/5/2017		1.6
3/22/2018		2.5
9/19/2018		1.7
3/22/2019		6.2 (D)
9/17/2019		6.1

Exceeds Limit

Prediction Limit
Intrawell Parametric

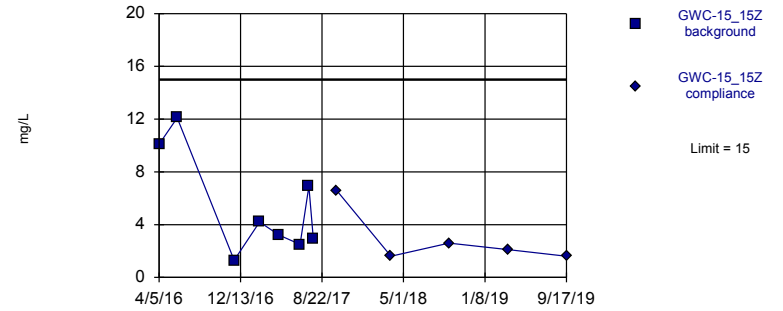


Background Data Summary: Mean=7.943, Std. Dev.=1.369, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9297, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

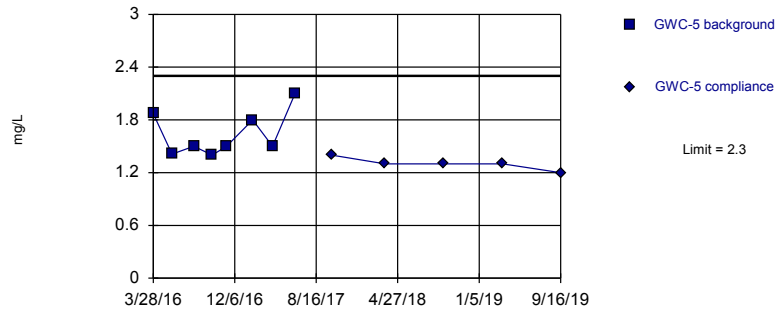


Background Data Summary: Mean=5.4, Std. Dev.=3.909, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8784, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

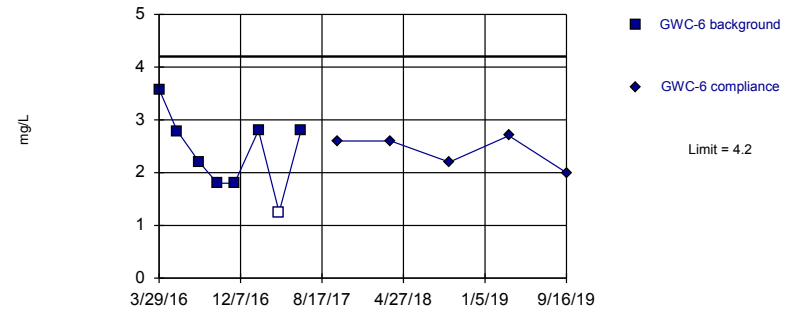


Background Data Summary: Mean=1.635, Std. Dev.=0.2561, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8411, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.378, Std. Dev.=0.7505, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9485, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
4/5/2016	7.45	
5/31/2016	7.29	
8/4/2016	7.6	
9/29/2016	6.1	
11/23/2016	10	
2/10/2017	6.7	
4/12/2017	9.2	
6/15/2017	9.2	
10/6/2017		10
3/23/2018		10.6
9/19/2018		10.4
3/25/2019		11.2
9/17/2019		13.1

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
4/5/2016	10.1	
5/31/2016	12.1	
11/23/2016	1.3	
2/10/2017	4.2	
4/11/2017	3.2	
6/15/2017	2.5	
7/12/2017	6.9	
7/26/2017	2.9	
10/6/2017		6.6
3/23/2018		1.6
9/19/2018		2.6
3/22/2019		2.1 (D)
9/17/2019		1.6

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
3/28/2016	1.87	
5/25/2016	1.41	
8/1/2016	1.5	
9/27/2016	1.4	
11/11/2016	1.5	
1/31/2017	1.8	
4/3/2017	1.5	
6/12/2017	2.1	
10/3/2017		1.4
3/19/2018		1.3
9/17/2018		1.3
3/20/2019		1.3
9/16/2019		1.2

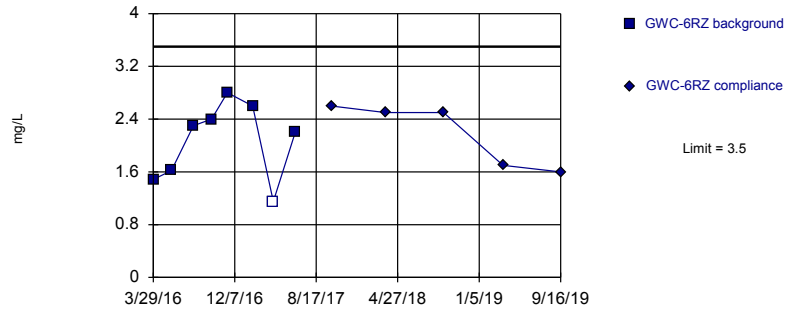
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
3/29/2016	3.5801	
5/24/2016	2.79	
8/1/2016	2.2	
9/26/2016	1.8	
11/18/2016	1.8	
2/1/2017	2.8	
4/6/2017	<2.5 (*)	
6/13/2017	2.8	
10/3/2017		2.6
3/19/2018		2.6
9/17/2018		2.2
3/21/2019		2.7
9/16/2019		2

Within Limit

Prediction Limit
Intrawell Parametric

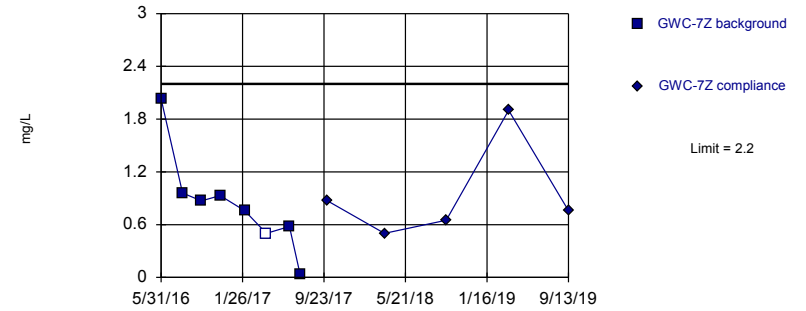


Background Data Summary: Mean=2.07, Std. Dev.=0.5834, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9351, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

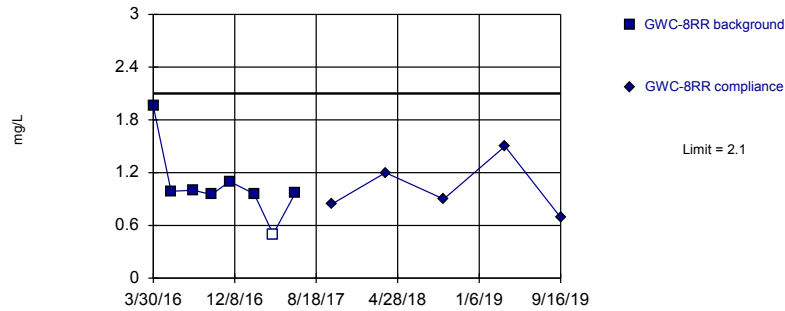


Background Data Summary: Mean=0.8338, Std. Dev.=0.5693, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8851, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

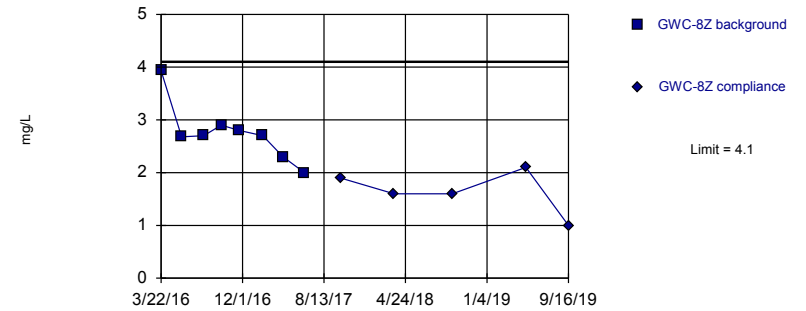


Background Data Summary: Mean=1.053, Std. Dev.=0.4059, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.759, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.752, Std. Dev.=0.5603, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8668, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
3/29/2016	1.4863	
5/24/2016	1.62	
8/1/2016	2.3	
9/26/2016	2.4	
11/14/2016	2.8	
2/1/2017	2.6	
4/6/2017	<2.3 (*)	
6/13/2017	2.2	
10/3/2017		2.6
3/20/2018		2.5
9/17/2018		2.5
3/21/2019		1.7
9/16/2019		1.6

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	2.03	
8/2/2016	0.96 (J)	
9/27/2016	0.87 (J)	
11/21/2016	0.93 (J)	
2/1/2017	0.76 (J)	
4/6/2017	<1 (*)	
6/13/2017	0.58 (J)	
7/14/2017	0.04 (J)	
10/3/2017		0.87 (J)
3/20/2018		0.5 (J)
9/18/2018		0.65 (J)
3/21/2019		1.9
9/13/2019		0.76 (X)

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
3/30/2016	1.9542	
5/24/2016	0.989 (J)	
8/2/2016	1	
9/27/2016	0.95 (J)	
11/22/2016	1.1	
2/6/2017	0.96 (J)	
4/6/2017	<1 (*)	
6/14/2017	0.97 (J)	
10/4/2017		0.84 (J)
3/21/2018		1.2
9/18/2018		0.9 (J)
3/27/2019		1.5
9/16/2019		0.69 (X)

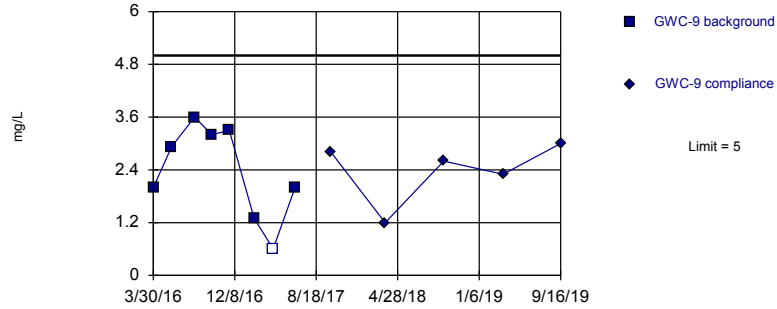
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
3/22/2016	3.9321	
5/25/2016	2.68	
8/2/2016	2.7	
9/26/2016	2.9	
11/21/2016	2.8	
2/3/2017	2.7	
4/7/2017	2.3	
6/13/2017	2	
10/3/2017		1.9
3/20/2018		1.6
9/18/2018		1.6
5/6/2019		2.1
9/16/2019		1

Within Limit

Prediction Limit
Intrawell Parametric

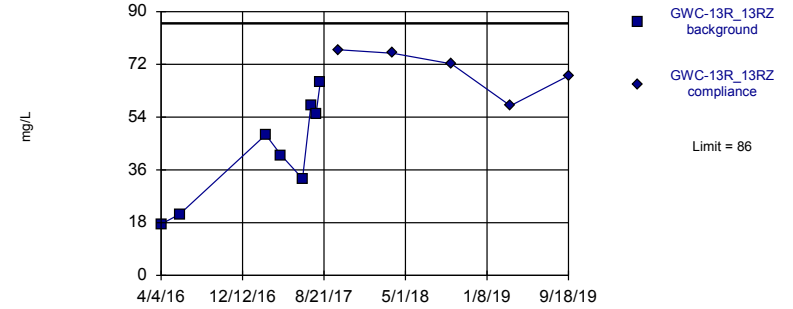


Background Data Summary: Mean=2.366, Std. Dev.=1.064, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9257, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

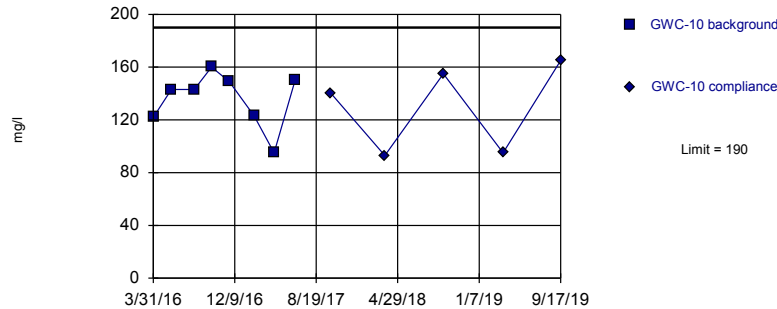


Background Data Summary: Mean=42.43, Std. Dev.=17.58, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9495, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Sulfate Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

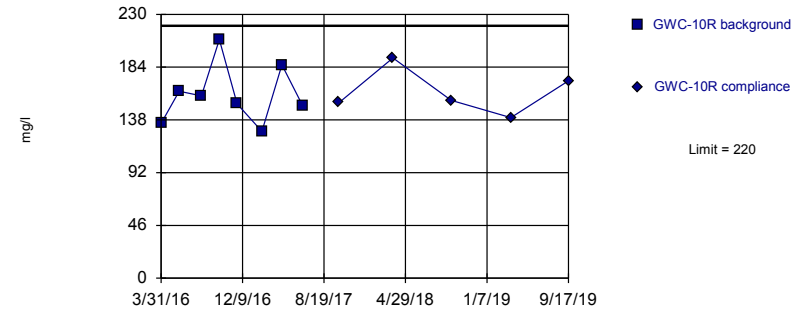


Background Data Summary: Mean=135.6, Std. Dev.=20.99, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9016, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=160.1, Std. Dev.=26.19, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9405, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
3/30/2016	2	
5/26/2016	2.93	
8/5/2016	3.6	
9/28/2016	3.2	
11/21/2016	3.3	
2/6/2017	1.3	
4/6/2017	<1.2 (*)	
6/13/2017	2	
10/3/2017		2.8
3/20/2018		1.2
9/18/2018		2.6
3/21/2019		2.3
9/16/2019		3

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
4/4/2016	17.5	
6/1/2016	20.9	
2/22/2017	48	
4/11/2017	41	
6/16/2017	33	
7/12/2017	58	
7/28/2017	55	
8/10/2017	66	
10/6/2017		77
3/23/2018		75.8
9/20/2018		72.2
3/22/2019		57.9 (D)
9/18/2019		68.1

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10	GWC-10
3/31/2016	122	
5/26/2016	143	
8/5/2016	143	
9/28/2016	160	
11/22/2016	149	
2/7/2017	123	
4/10/2017	95	
6/14/2017	150	
10/4/2017		140
3/20/2018		93
9/18/2018		155
3/22/2019		95
9/17/2019		165

Prediction Limit

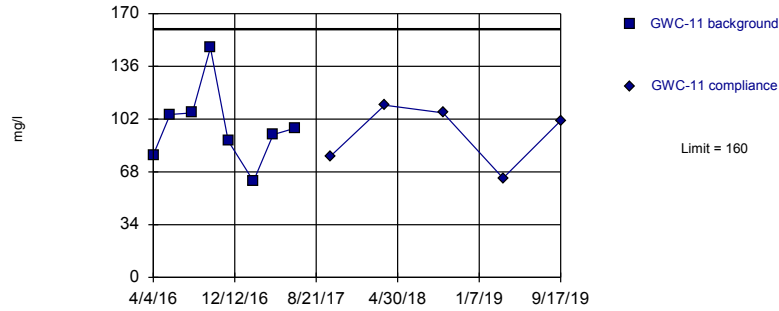
Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-10R	GWC-10R
3/31/2016	135	
5/26/2016	163	
8/3/2016	159	
9/28/2016	208	
11/22/2016	152	
2/7/2017	128	
4/10/2017	186	
6/14/2017	150	
10/4/2017		153
3/21/2018		192
9/18/2018		155
3/22/2019		140
9/17/2019		172

Within Limit

Prediction Limit
Intrawell Parametric

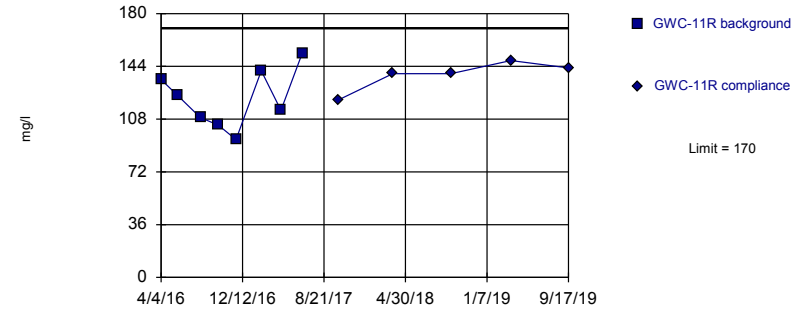


Background Data Summary: Mean=97, Std. Dev.=25.08, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.924, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

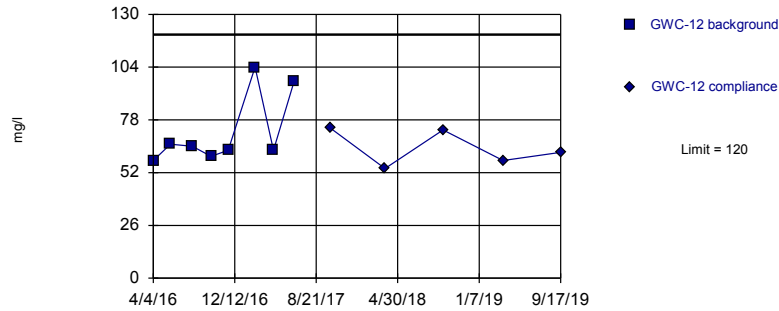


Background Data Summary: Mean=121.8, Std. Dev.=20.13, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9723, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

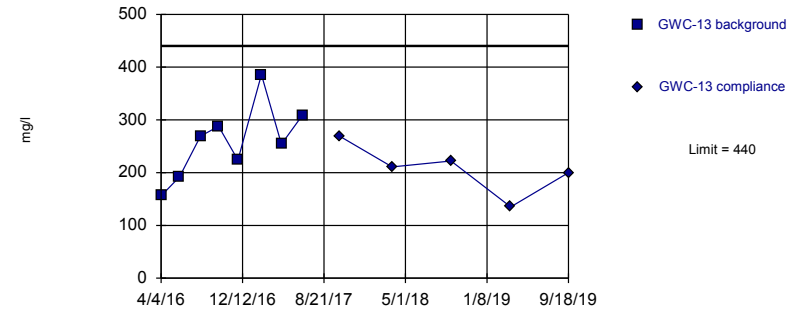


Background Data Summary (based on natural log transformation): Mean=4.253, Std. Dev.=0.2246, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7515, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=259.8, Std. Dev.=71.63, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9864, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:43 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11	GWC-11
4/4/2016	79	
5/26/2016	105	
8/3/2016	106	
9/28/2016	148	
11/22/2016	88	
2/8/2017	62	
4/10/2017	92	
6/15/2017	96	
10/4/2017		78
3/21/2018		111
9/18/2018		106
3/23/2019		64
9/17/2019		101

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-11R	GWC-11R
4/4/2016	135	
5/26/2016	124	
8/4/2016	109	
9/28/2016	104	
11/22/2016	94	
2/8/2017	141 (J)	
4/10/2017	114	
6/15/2017	153	
10/4/2017		121
3/22/2018		139
9/18/2018		139
3/23/2019		148
9/17/2019		143

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-12	GWC-12
4/4/2016	58	
5/27/2016	66	
8/3/2016	65	
9/30/2016	60	
11/22/2016	63	
2/13/2017	104 (J)	
4/11/2017	63	
6/14/2017	97	
10/4/2017		74
3/22/2018		54
9/18/2018		73
3/23/2019		58
9/17/2019		62

Prediction Limit

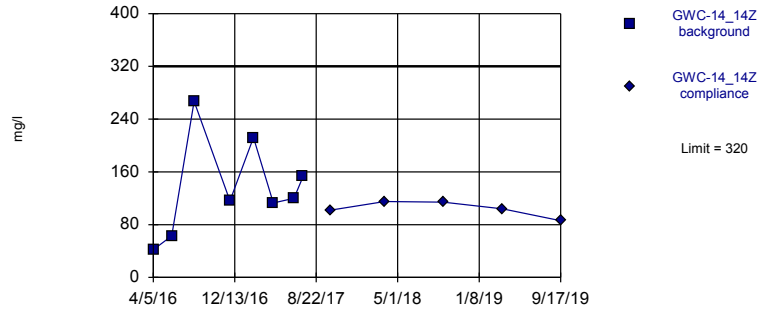
Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13	GWC-13
4/4/2016	156	
5/31/2016	192	
8/4/2016	269	
9/29/2016	288	
11/28/2016	224	
2/9/2017	386	
4/12/2017	254	
6/16/2017	309	
10/9/2017		269
3/21/2018		211
9/19/2018		222
3/23/2019		135
9/18/2019		200

Within Limit

Prediction Limit
Intrawell Parametric

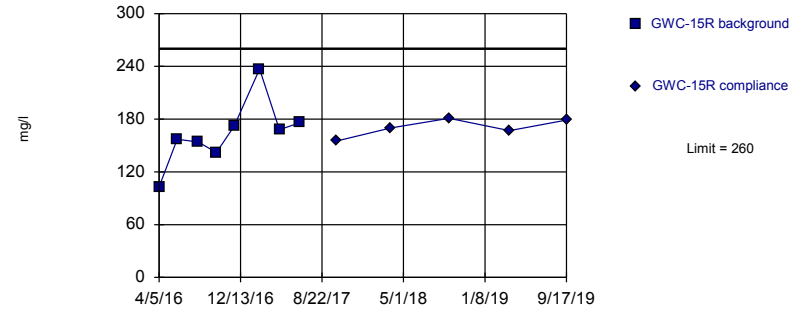


Background Data Summary: Mean=135.8, Std. Dev.=74.23, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9409, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

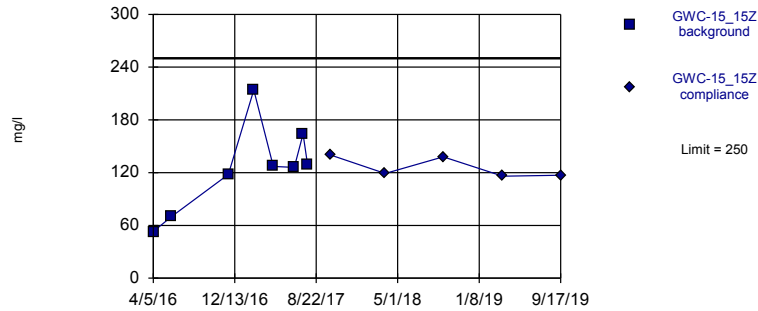


Background Data Summary: Mean=163.6, Std. Dev.=37.62, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9228, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

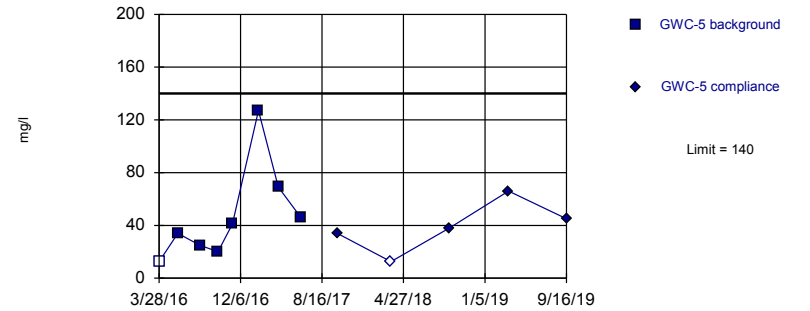


Background Data Summary: Mean=125.1, Std. Dev.=50.31, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9413, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=46.81, Std. Dev.=36.83, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8316, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-14_14Z	GWC-14_14Z
4/5/2016	42	
6/1/2016	63	
8/9/2016	267	
11/28/2016	116	
2/9/2017	212 (J)	
4/11/2017	113	
6/14/2017	120	
7/12/2017	153	
10/5/2017		102
3/22/2018		115
9/19/2018		114
3/22/2019		104 (D)
9/17/2019		86

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R	GWC-15R
4/5/2016	103	
5/31/2016	157	
8/4/2016	154	
9/29/2016	142	
11/23/2016	172	
2/10/2017	237	
4/12/2017	168	
6/15/2017	176	
10/6/2017		155
3/23/2018		170
9/19/2018		181
3/25/2019		167
9/17/2019		179

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z	GWC-15_15Z
4/5/2016	53	
5/31/2016	70	
11/23/2016	118	
2/10/2017	214	
4/11/2017	127	
6/15/2017	126	
7/12/2017	164	
7/26/2017	129	
10/6/2017		140
3/23/2018		119
9/19/2018		138
3/22/2019		116 (D)
9/17/2019		117

Prediction Limit

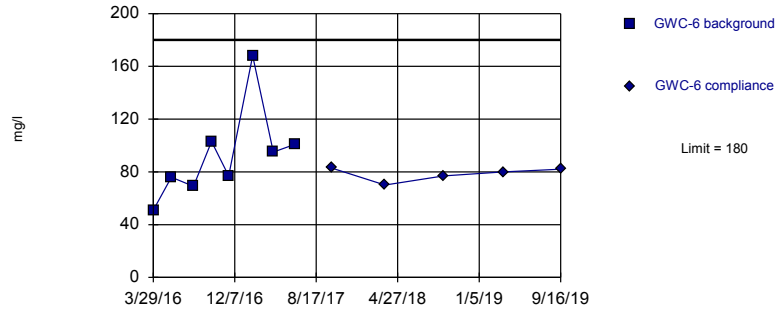
Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-5	GWC-5
3/28/2016	<25	
5/25/2016	34	
8/1/2016	25	
9/27/2016	20 (J)	
11/11/2016	41	
1/31/2017	127	
4/3/2017	69	
6/12/2017	46	
10/3/2017		34
3/19/2018		<25
9/17/2018		38
3/20/2019		66
9/16/2019		45

Within Limit

Prediction Limit
Intrawell Parametric

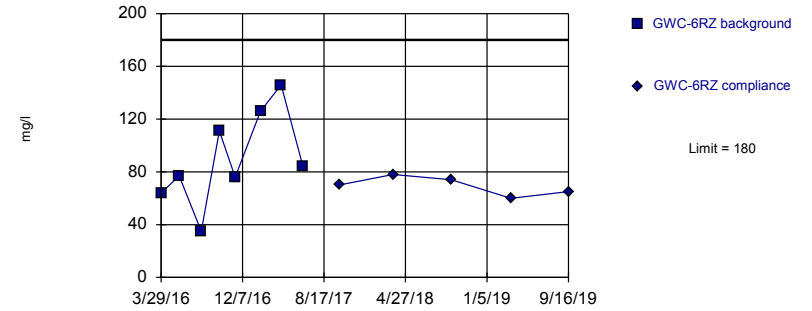


Background Data Summary: Mean=92.5, Std. Dev.=35.21, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8711, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

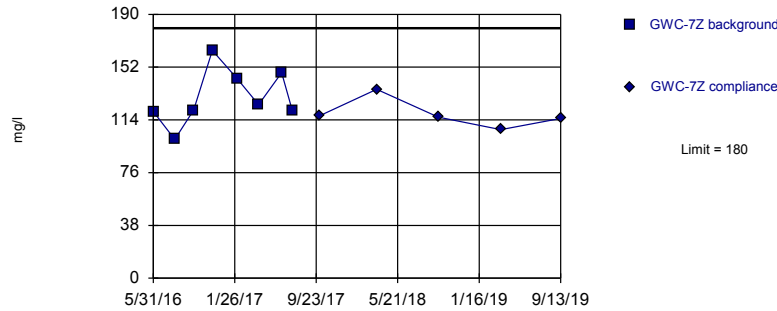


Background Data Summary: Mean=89.88, Std. Dev.=35.81, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9697, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

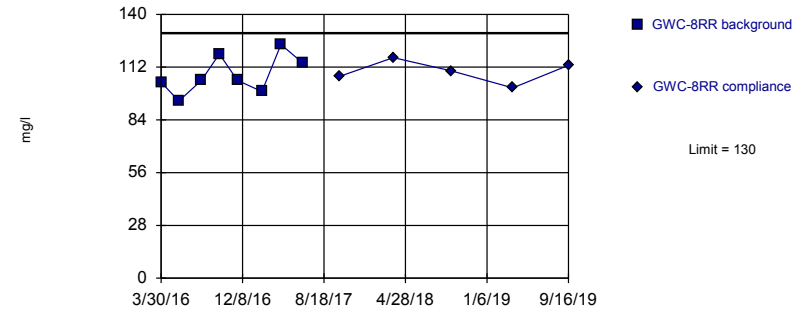


Background Data Summary: Mean=130.4, Std. Dev.=20.22, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9385, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=108, Std. Dev.=10.17, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9501, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6	GWC-6
3/29/2016	51	
5/24/2016	76	
8/1/2016	69	
9/26/2016	103	
11/18/2016	77	
2/1/2017	168	
4/6/2017	95	
6/13/2017	101	
10/3/2017		83
3/19/2018		70
9/17/2018		77
3/21/2019		80
9/16/2019		82

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-6RZ	GWC-6RZ
3/29/2016	64	
5/24/2016	77	
8/1/2016	35	
9/26/2016	111	
11/14/2016	76	
2/1/2017	126	
4/6/2017	146	
6/13/2017	84	
10/3/2017		70
3/20/2018		78
9/17/2018		74
3/21/2019		60
9/16/2019		65

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z	GWC-7Z
5/31/2016	120	
8/2/2016	100	
9/27/2016	121	
11/21/2016	164	
2/1/2017	144	
4/6/2017	125	
6/13/2017	148	
7/14/2017	121	
10/3/2017		117
3/20/2018		136
9/18/2018		116
3/21/2019		107
9/13/2019		115

Prediction Limit

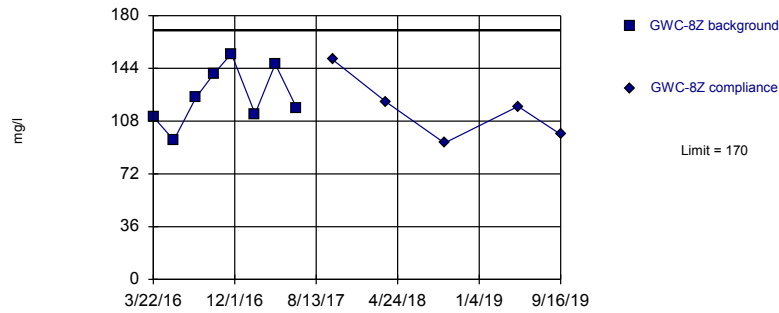
Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8RR	GWC-8RR
3/30/2016	104	
5/24/2016	94	
8/2/2016	105	
9/27/2016	119	
11/22/2016	105	
2/6/2017	99	
4/6/2017	124	
6/14/2017	114	
10/4/2017		107
3/21/2018		117
9/18/2018		110
3/27/2019		101
9/16/2019		113

Within Limit

Prediction Limit
Intrawell Parametric

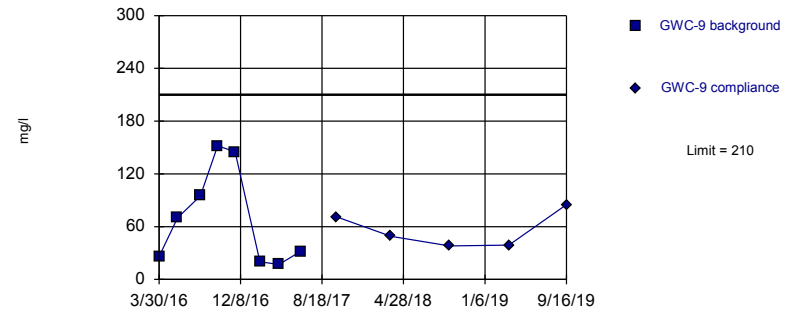


Background Data Summary: Mean=125.1, Std. Dev.=20.2, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9543, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric

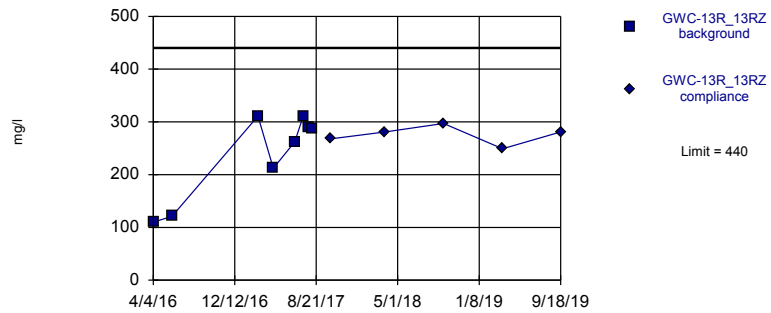


Background Data Summary: Mean=69.63, Std. Dev.=55.63, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8465, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=237.9, Std. Dev.=81.89, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8211, critical = 0.749. Kappa = 2.468 (c=7, w=17, 1 of 3, event alpha = 0.05132). Report alpha = 0.0004426.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 11:44 AM View: cells_1&2_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-8Z	GWC-8Z
3/22/2016	111	
5/25/2016	95	
8/2/2016	124	
9/26/2016	140	
11/21/2016	154	
2/3/2017	113	
4/7/2017	147	
6/13/2017	117	
10/3/2017		150
3/20/2018		121
9/18/2018		93
5/6/2019		118
9/16/2019		99

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-9	GWC-9
3/30/2016	26	
5/26/2016	70	
8/5/2016	95	
9/28/2016	152	
11/21/2016	145	
2/6/2017	20 (J)	
4/6/2017	17 (J)	
6/13/2017	32	
10/3/2017		71
3/20/2018		49
9/18/2018		38
3/21/2019		39
9/16/2019		85

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 11:49 AM View: cells_1&2_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13R_13RZ	GWC-13R_13RZ
4/4/2016	110	
6/1/2016	121	
2/22/2017	311	
4/11/2017	212	
6/16/2017	262	
7/12/2017	310	
7/28/2017	289	
8/10/2017	288	
10/6/2017		268
3/23/2018		281
9/20/2018		297
3/22/2019		249 (D)
9/18/2019		281

Intrawell Prediction Limit Summary - Cells 3 & 4 (Significant Results)

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 10:24 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-21R	0.0064	n/a	9/6/2019	0.01	Yes	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-21R	0.0377	n/a	9/6/2019	0.041	Yes	20	n/a	n/a	0	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-21R	0.006515	n/a	9/6/2019	0.045	Yes	15	-5.726	0.2492	20	Kaplan-Meier	ln(x)	0.0002993	Param Intra 1 of 2

Intrawell Prediction Limit Summary - Cells 3 & 4 (All Results)

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 10:24 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-36R	0.003	n/a	9/4/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWA-51RZ	0.0033	n/a	9/4/2019	0.0006	No	19	n/a	n/a	68.42	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWA-53R	0.0034	n/a	9/5/2019	0.00035	No	20	n/a	n/a	60	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-16R	0.0187	n/a	9/9/2019	0.011	No	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Antimony (mg/L)	GWC-17R	0.003	n/a	9/10/2019	0.003ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-18	0.003	n/a	9/9/2019	0.003ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-18R	0.003	n/a	9/6/2019	0.00028	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-19R	0.003	n/a	9/9/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-20R	0.003	n/a	9/6/2019	0.001755	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-21R	0.0064	n/a	9/6/2019	0.01	Yes	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Antimony (mg/L)	GWC-22R	0.003	n/a	9/5/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-23R	0.003	n/a	9/6/2019	0.00029	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-24R	0.005	n/a	9/5/2019	0.00031	No	17	n/a	n/a	64.71	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-25R	0.003	n/a	9/5/2019	0.003ND	No	19	n/a	n/a	68.42	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-36R	0.005	n/a	9/4/2019	0.005ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-51RZ	0.008095	n/a	9/4/2019	0.00061	No	19	0.002535	0.002138	36.84	Kaplan-Meier	No	0.0002993	Param Intra 1 of 2
Arsenic (mg/L)	GWA-53R	0.005	n/a	9/5/2019	0.00046	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-16R	0.005	n/a	9/9/2019	0.00094	No	19	n/a	n/a	68.42	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-17R	0.005	n/a	9/10/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-18	0.005	n/a	9/9/2019	0.00099	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-18R	0.005	n/a	9/6/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-19R	0.005	n/a	9/9/2019	0.00082	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-20R	0.005	n/a	9/6/2019	0.00047	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-21R	0.005	n/a	9/6/2019	0.0024	No	19	n/a	n/a	68.42	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-22R	0.005	n/a	9/5/2019	0.0024	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-23R	0.005	n/a	9/6/2019	0.00054	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-24R	0.005	n/a	9/5/2019	0.0005	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-25R	0.005	n/a	9/5/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-36R	0.03424	n/a	9/4/2019	0.026	No	20	0.02211	0.004732	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWA-51RZ	0.0345	n/a	9/4/2019	0.018	No	20	0.01511	0.007558	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWA-53R	0.01632	n/a	9/5/2019	0.014	No	20	0.0144	0.0007501	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-16R	0.079	n/a	9/9/2019	0.03	No	20	0.2188	0.02428	0	None	sqrt(x)	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-17R	0.02153	n/a	9/10/2019	0.019	No	19	0.01975	0.0006818	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-18	0.04779	n/a	9/9/2019	0.028	No	19	0.0302	0.006763	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-18R	0.0173	n/a	9/6/2019	0.014	No	16	0.01425	0.001127	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-19R	0.01846	n/a	9/9/2019	0.015	No	19	0.01597	0.0009569	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-20R	0.03595	n/a	9/6/2019	0.0275	No	20	0.02989	0.002362	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-21R	0.0377	n/a	9/6/2019	0.041	Yes	20	n/a	n/a	0	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-22R	0.06518	n/a	9/5/2019	0.045	No	19	0.0402	0.009605	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-23R	0.0421	n/a	9/6/2019	0.021	No	20	0.02645	0.006104	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-24R	0.03363	n/a	9/5/2019	0.021	No	19	0.02339	0.003934	0	None	No	0.0002993	Param Intra 1 of 2
Barium (mg/L)	GWC-25R	0.0167	n/a	9/5/2019	0.016	No	20	n/a	n/a	0	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWA-36R	0.0032	n/a	9/4/2019	0.003ND	No	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWA-51RZ	0.003	n/a	9/4/2019	0.003ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-53R	0.003	n/a	9/5/2019	0.003ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-16R	0.003	n/a	9/9/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-17R	0.003	n/a	9/10/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-18	0.003	n/a	9/9/2019	0.003ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-18R	0.003	n/a	9/6/2019	0.003ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-19R	0.003	n/a	9/9/2019	0.003ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2

Intrawell Prediction Limit Summary - Cells 3 & 4 (All Results)

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 10:24 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	GWC-20R	0.003	n/a	9/6/2019	0.003ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-21R	0.003	n/a	9/6/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-22R	0.003	n/a	9/5/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-23R	0.003	n/a	9/6/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-24R	0.003	n/a	9/5/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-25R	0.003	n/a	9/5/2019	0.003ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWA-36R	0.001	n/a	9/4/2019	0.00016	No	20	n/a	n/a	40	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Cadmium (mg/L)	GWA-51RZ	0.0025	n/a	9/4/2019	0.0025ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWA-53R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-16R	0.0025	n/a	9/9/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-17R	0.0025	n/a	9/10/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-18	0.0025	n/a	9/9/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-18R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-19R	0.0025	n/a	9/9/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-20R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-21R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-22R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-23R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-24R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-25R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-36R	0.01	n/a	9/4/2019	0.0013	No	20	n/a	n/a	65	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-51RZ	0.02	n/a	9/4/2019	0.01ND	No	17	n/a	n/a	58.82	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.00055	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-16R	0.01	n/a	9/9/2019	0.01ND	No	20	n/a	n/a	65	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-17R	0.01	n/a	9/10/2019	0.01ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-18	0.005104	n/a	9/9/2019	0.001	No	16	0.002947	0.0007961	0	None	No	0.0002993	Param Intra 1 of 2
Chromium (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.00053	No	16	n/a	n/a	68.75	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.00056	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.00071	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-21R	0.01	n/a	9/6/2019	0.00078	No	20	n/a	n/a	65	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.01ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-23R	0.01	n/a	9/6/2019	0.01ND	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.00044	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-36R	0.0039	n/a	9/4/2019	0.0025ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-51RZ	0.0025	n/a	9/4/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-53R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-16R	0.005136	n/a	9/9/2019	0.0025ND	No	20	0.001806	0.001298	15	None	No	0.0002993	Param Intra 1 of 2
Cobalt (mg/L)	GWC-17R	0.0025	n/a	9/10/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-18	0.0025	n/a	9/9/2019	0.0025ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-18R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-19R	0.0025	n/a	9/9/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-20R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-21R	0.0183	n/a	9/6/2019	0.00051	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.0012	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-23R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-24R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-25R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-36R	0.025	n/a	9/4/2019	0.025ND	No	15	n/a	n/a	66.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-51RZ	0.025	n/a	9/4/2019	0.025ND	No	14	n/a	n/a	64.29	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2

Intrawell Prediction Limit Summary - Cells 3 & 4 (All Results)

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 10:24 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Copper (mg/L)	GWA-53R	0.025	n/a	9/5/2019	0.025ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-16R	0.025	n/a	9/9/2019	0.00082	No	15	n/a	n/a	13.33	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Copper (mg/L)	GWC-17R	0.025	n/a	9/10/2019	0.025ND	No	15	n/a	n/a	40	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Copper (mg/L)	GWC-18	0.025	n/a	9/9/2019	0.025ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-18R	0.025	n/a	9/6/2019	0.025ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-19R	0.025	n/a	9/9/2019	0.025ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-20R	0.025	n/a	9/6/2019	0.025ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-21R	0.025	n/a	9/6/2019	0.01	No	15	n/a	n/a	53.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-22R	0.025	n/a	9/5/2019	0.025ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-23R	0.025	n/a	9/6/2019	0.00037	No	15	n/a	n/a	66.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-24R	0.025	n/a	9/5/2019	0.001	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-25R	0.025	n/a	9/5/2019	0.025ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-36R	0.0069	n/a	9/4/2019	0.005ND	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-51RZ	0.005	n/a	9/4/2019	0.005ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-53R	0.005	n/a	9/5/2019	0.000083	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-16R	0.005	n/a	9/9/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-17R	0.005	n/a	9/10/2019	0.005ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-18	0.005	n/a	9/9/2019	0.00005	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-18R	0.005	n/a	9/6/2019	0.005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-19R	0.005	n/a	9/9/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-20R	0.005	n/a	9/6/2019	0.005ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-21R	0.005	n/a	9/6/2019	0.0016	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-22R	0.005	n/a	9/5/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-23R	0.005	n/a	9/6/2019	0.000068	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-24R	0.005	n/a	9/5/2019	0.0000905	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-25R	0.005	n/a	9/5/2019	0.00006	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-36R	0.0005	n/a	9/4/2019	0.0005ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-51RZ	0.0005	n/a	9/4/2019	0.0005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-53R	0.0005	n/a	9/5/2019	0.0005ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-16R	0.0005	n/a	9/9/2019	0.0005ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-17R	0.0005	n/a	9/10/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-18	0.0005	n/a	9/9/2019	0.0005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-18R	0.0005	n/a	9/6/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-19R	0.0005	n/a	9/9/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-20R	0.0005	n/a	9/6/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-21R	0.0005	n/a	9/6/2019	0.0005ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-22R	0.0005	n/a	9/5/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-23R	0.0005	n/a	9/6/2019	0.0005ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-24R	0.0005	n/a	9/5/2019	0.0005ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-25R	0.0005	n/a	9/5/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-36R	0.01	n/a	9/4/2019	0.01ND	No	15	n/a	n/a	53.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-51RZ	0.01	n/a	9/4/2019	0.01ND	No	14	n/a	n/a	85.71	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-16R	0.02928	n/a	9/9/2019	0.0066	No	11	0.01443	0.004761	0	None	No	0.0002993	Param Intra 1 of 2
Nickel (mg/L)	GWC-17R	0.01	n/a	9/10/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-18	0.01	n/a	9/9/2019	0.01ND	No	15	n/a	n/a	66.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-21R	0.01	n/a	9/6/2019	0.0028	No	14	n/a	n/a	42.86	n/a	n/a	0.008612	NP Intra (normality) 1 of 2

Intrawell Prediction Limit Summary - Cells 3 & 4 (All Results)

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 10:24 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Nickel (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.0011	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-23R	0.01	n/a	9/6/2019	0.00086	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-36R	0.01	n/a	9/4/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-51RZ	0.01	n/a	9/4/2019	0.01	No	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Selenium (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-16R	0.01	n/a	9/9/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-17R	0.01	n/a	9/10/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-18	0.01	n/a	9/9/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-21R	0.01	n/a	9/6/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-23R	0.01	n/a	9/6/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWA-36R	0.01	n/a	9/4/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWA-51RZ	0.01	n/a	9/4/2019	0.01ND	No	14	n/a	n/a	100	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-16R	0.01	n/a	9/9/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-17R	0.01	n/a	9/10/2019	0.01ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-18	0.01	n/a	9/9/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-21R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-23R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-36R	0.001	n/a	9/4/2019	0.001ND	No	19	n/a	n/a	89.47	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-51RZ	0.001	n/a	9/4/2019	0.00014	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-53R	0.001	n/a	9/5/2019	0.001ND	No	19	n/a	n/a	100	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-16R	0.00116	n/a	9/9/2019	0.00006	No	20	-8.321	0.6089	20	Kaplan-Meier	ln(x)	0.0002993	Param Intra 1 of 2
Thallium (mg/L)	GWC-17R	0.001	n/a	9/10/2019	0.001ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-18	0.001	n/a	9/9/2019	0.001ND	No	20	n/a	n/a	40	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Thallium (mg/L)	GWC-18R	0.001	n/a	9/6/2019	0.001ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-19R	0.001	n/a	9/9/2019	0.001ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-20R	0.001	n/a	9/6/2019	0.001ND	No	20	n/a	n/a	45	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Thallium (mg/L)	GWC-21R	0.001	n/a	9/6/2019	0.0002	No	20	n/a	n/a	40	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Thallium (mg/L)	GWC-22R	0.001	n/a	9/5/2019	0.000055	No	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Thallium (mg/L)	GWC-23R	0.001	n/a	9/6/2019	0.0003	No	18	n/a	n/a	33.33	n/a	n/a	0.005373	NP Intra (normality) 1 of 2
Thallium (mg/L)	GWC-24R	0.001	n/a	9/5/2019	0.001ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-25R	0.001	n/a	9/5/2019	0.001ND	No	20	n/a	n/a	100	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-36R	0.01	n/a	9/4/2019	0.01ND	No	15	n/a	n/a	66.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-51RZ	0.01862	n/a	9/4/2019	0.01ND	No	13	0.006365	0.004195	46.15	Kaplan-Meier	No	0.0002993	Param Intra 1 of 2
Vanadium (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-16R	0.01	n/a	9/9/2019	0.00091	No	15	n/a	n/a	60	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2

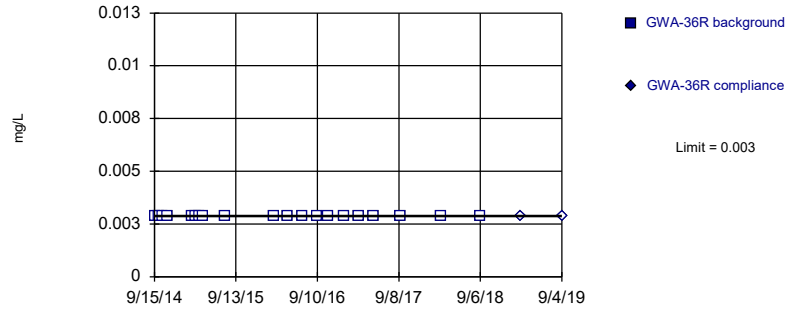
Intrawell Prediction Limit Summary - Cells 3 & 4 (All Results)

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 10:24 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	N Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Vanadium (mg/L)	GWC-17R	0.01	n/a	9/10/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-18	0.01	n/a	9/9/2019	0.00078	No	15	n/a	n/a	100	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	86.67	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.00081	No	15	n/a	n/a	100	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-21R	0.01	n/a	9/6/2019	0.0012	No	15	n/a	n/a	100	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.00094	No	15	n/a	n/a	100	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-23R	0.01	n/a	9/6/2019	0.0011	No	15	n/a	n/a	80	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.0012	No	15	n/a	n/a	73.33	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	100	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-36R	0.2321	n/a	9/4/2019	0.052	No	14	0.06816	0.05752	0	None	No	No	0.0002993	Param Intra 1 of 2
Zinc (mg/L)	GWA-51RZ	0.02982	n/a	9/4/2019	0.0051	No	13	0.01128	0.00635	30.77	Kaplan-Meier	No	No	0.0002993	Param Intra 1 of 2
Zinc (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.0098	No	15	n/a	n/a	40	n/a	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-16R	0.09557	n/a	9/9/2019	0.029	No	15	0.0002999	0.0002062	6.667	None	x^3	No	0.0002993	Param Intra 1 of 2
Zinc (mg/L)	GWC-17R	0.02404	n/a	9/10/2019	0.0055	No	15	0.1752	0.04079	13.33	None	x^(1/3)	No	0.0002993	Param Intra 1 of 2
Zinc (mg/L)	GWC-18	0.02694	n/a	9/9/2019	0.0063	No	15	-5.394	0.6405	13.33	None	ln(x)	No	0.0002993	Param Intra 1 of 2
Zinc (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.0046	No	15	n/a	n/a	53.33	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.0062	No	15	n/a	n/a	33.33	n/a	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.00455	No	14	n/a	n/a	28.57	n/a	n/a	n/a	0.008612	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-21R	0.006515	n/a	9/6/2019	0.045	Yes	15	-5.726	0.2492	20	Kaplan-Meier	ln(x)	No	0.0002993	Param Intra 1 of 2
Zinc (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.0053	No	15	n/a	n/a	40	n/a	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-23R	0.008062	n/a	9/6/2019	0.0059	No	15	-6.256	0.5164	40	Kaplan-Meier	ln(x)	No	0.0002993	Param Intra 1 of 2
Zinc (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.00675	No	15	n/a	n/a	60	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.0053	No	15	n/a	n/a	60	n/a	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit
Intrawell Non-parametric

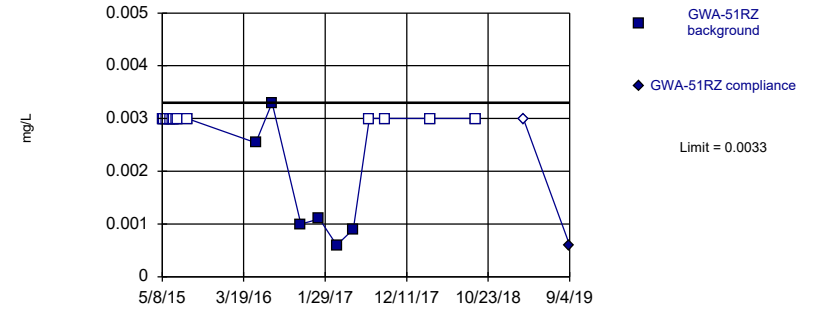


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

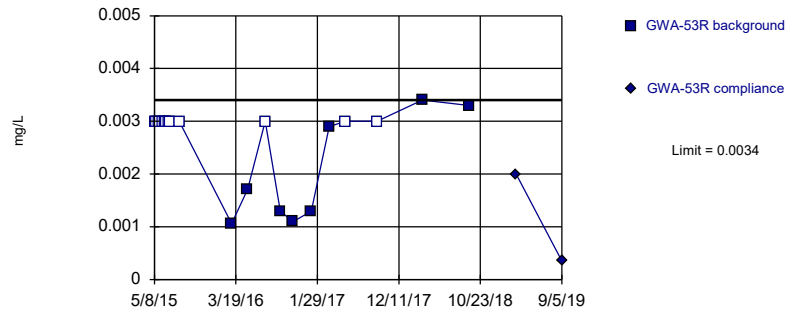


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

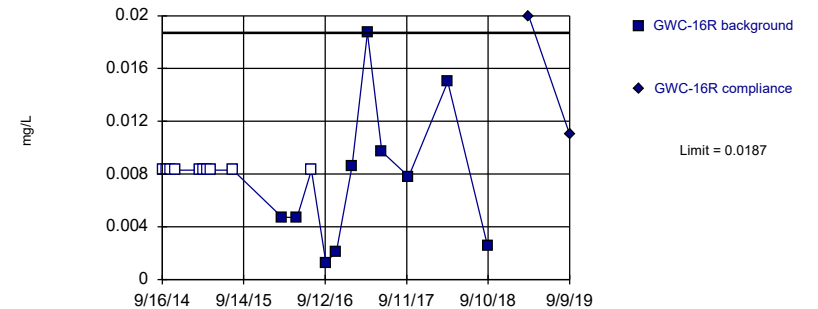


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 60% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

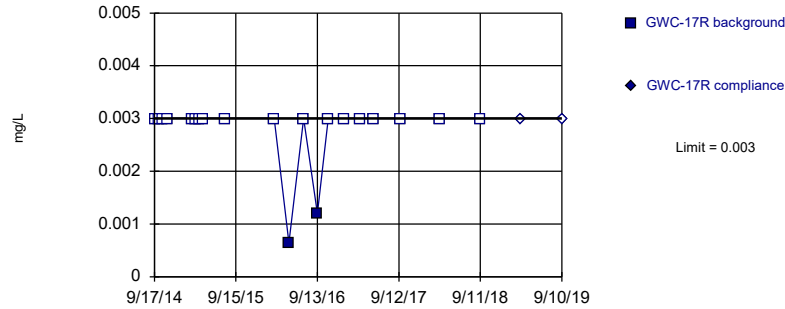


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

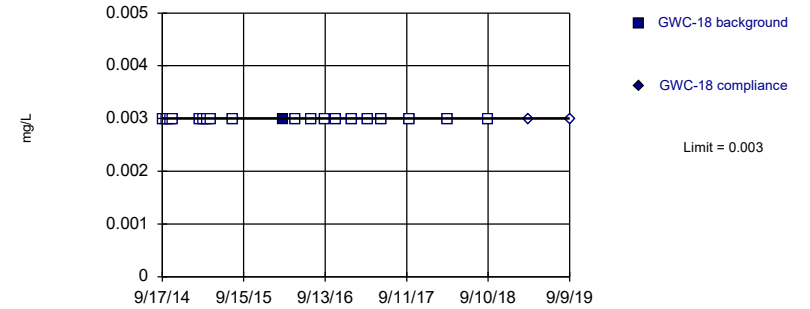


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

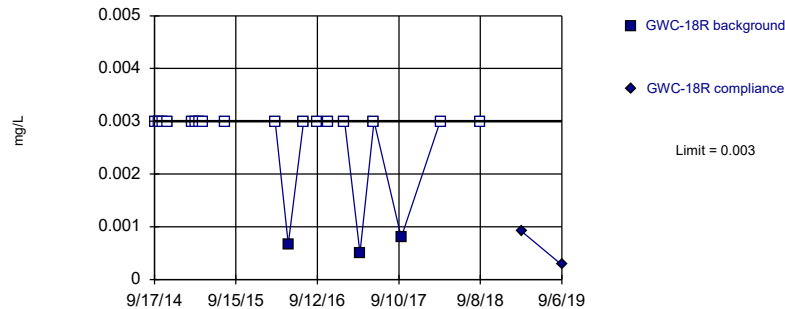


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

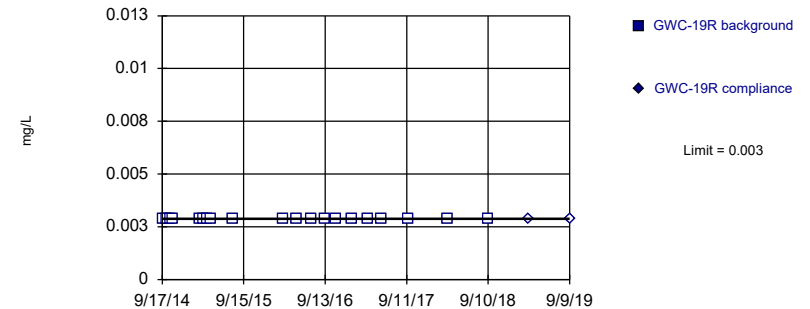


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

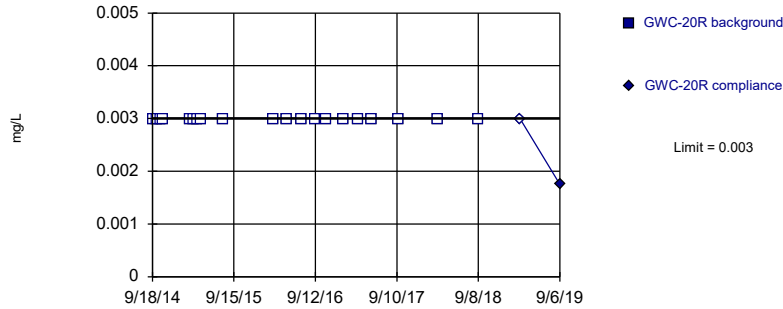


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

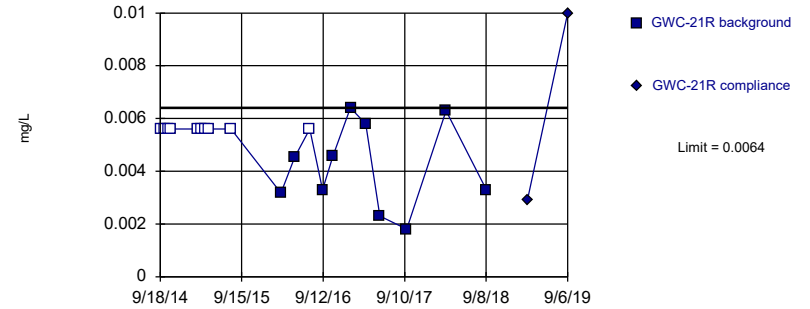


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Exceeds Limit

Prediction Limit
Intrawell Non-parametric

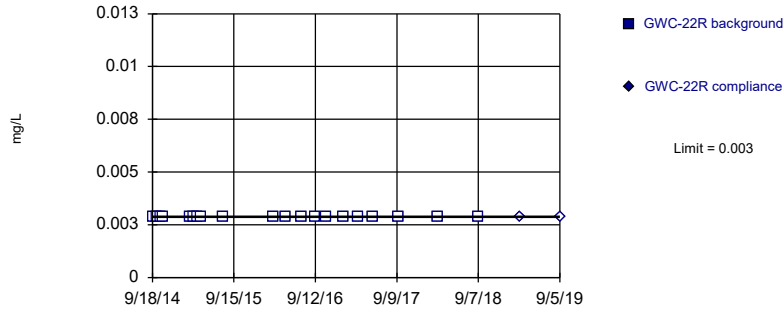


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

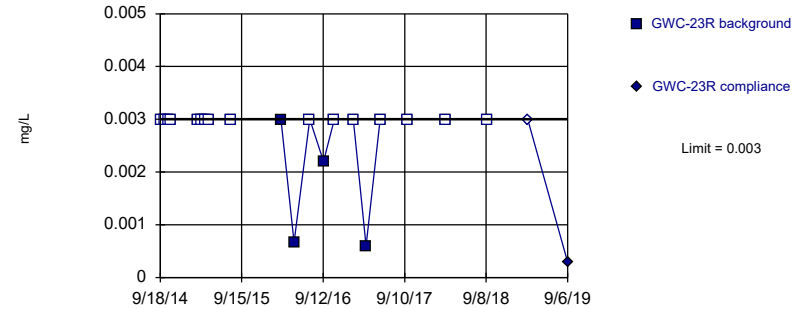


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

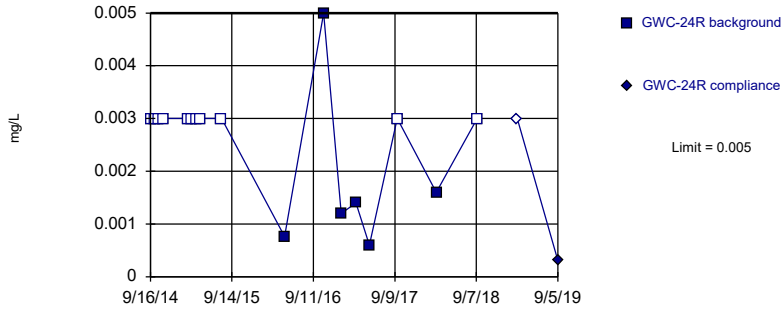


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:14 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

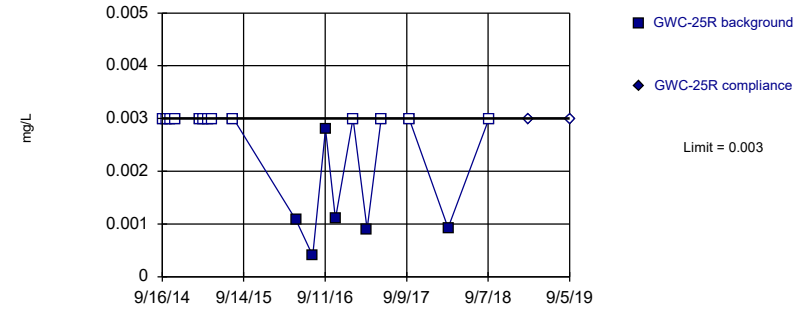


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

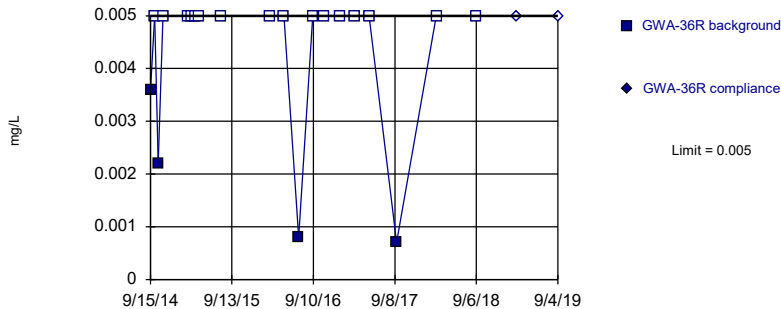


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

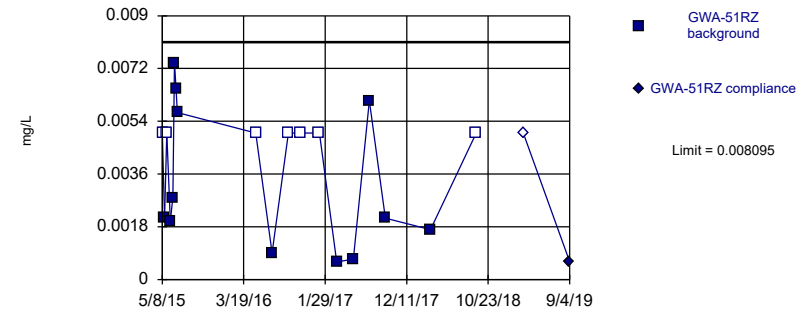


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



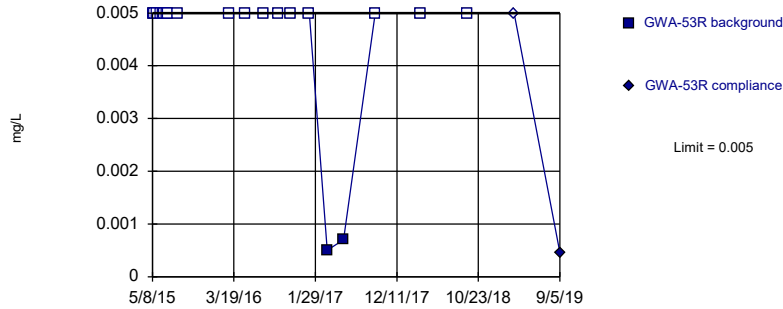
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002535, Std. Dev.=0.002138, n=19, 36.84% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8967, critical = 0.863. Kappa = 2.601 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



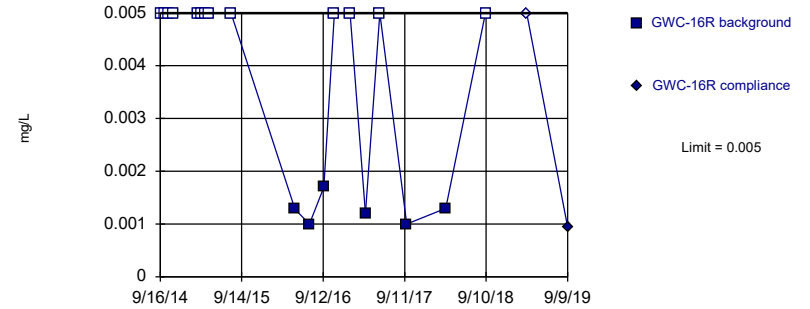
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



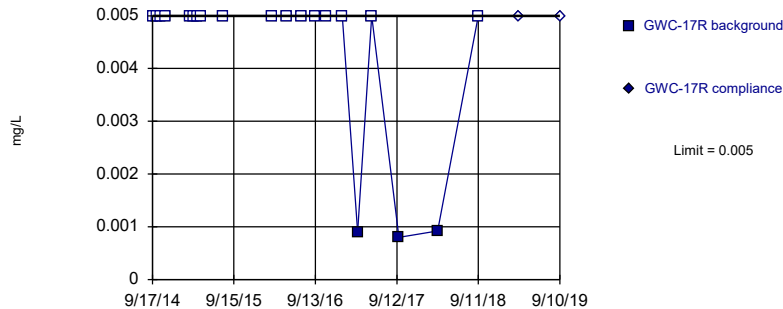
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



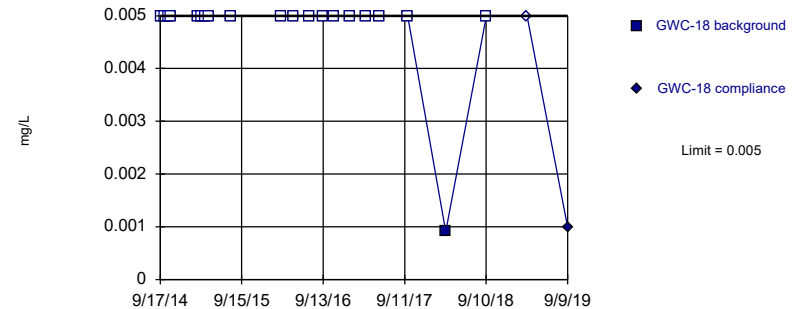
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



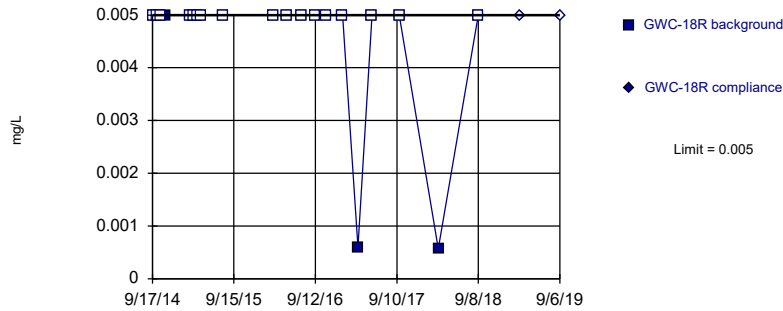
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



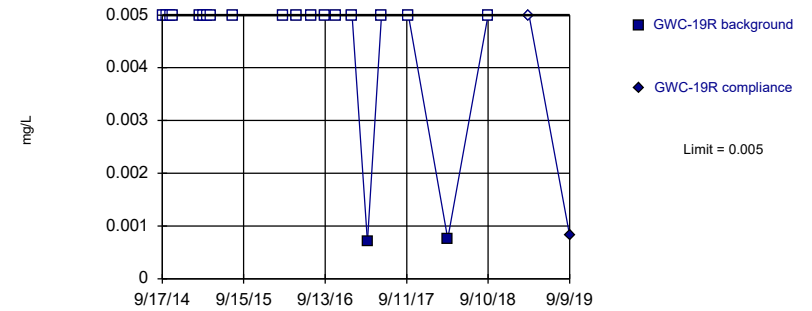
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



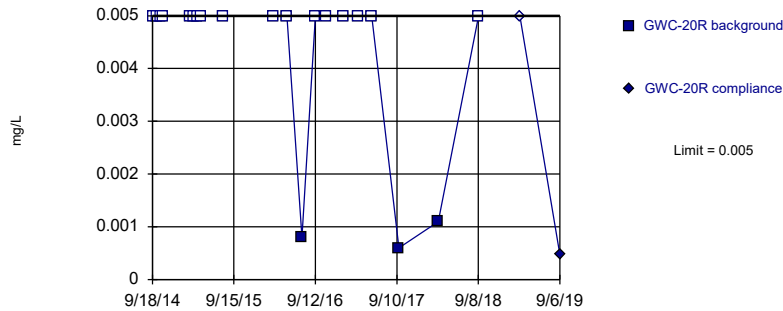
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



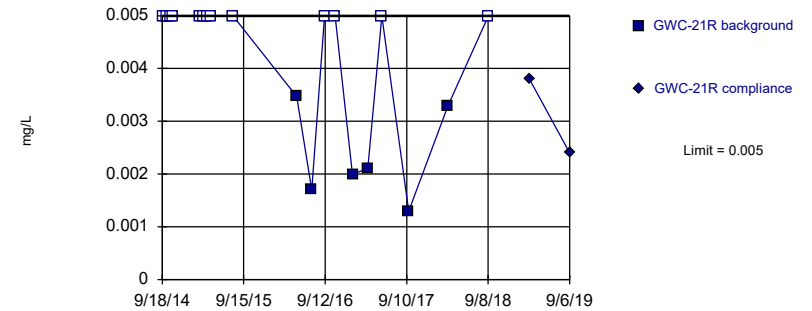
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



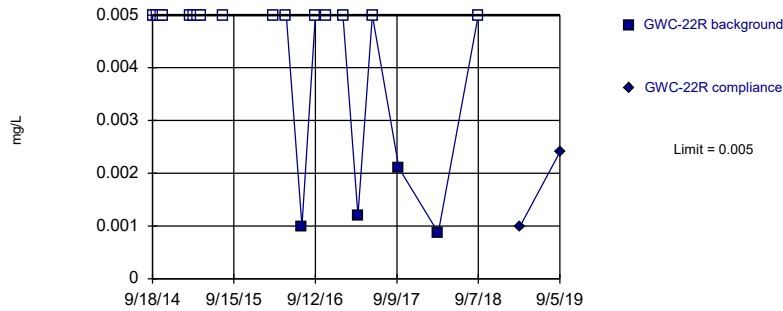
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



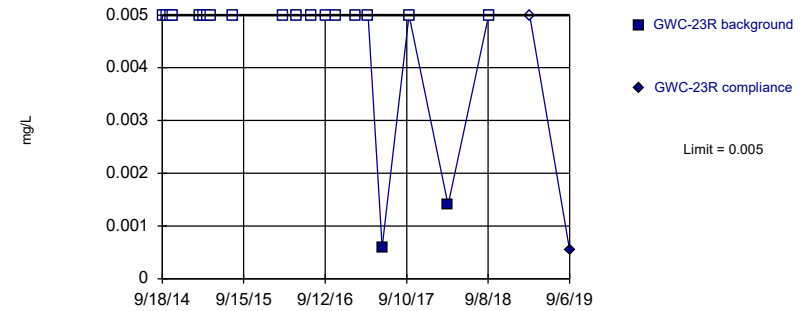
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



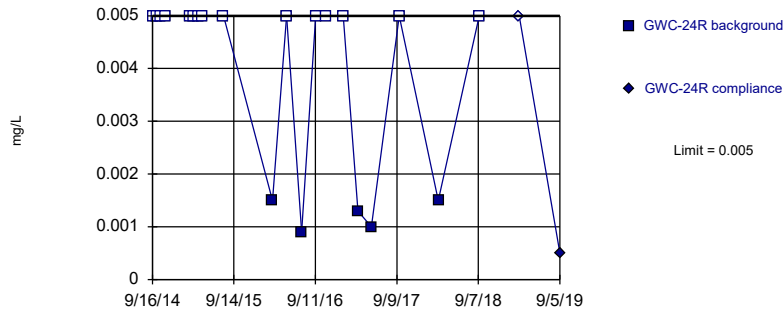
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



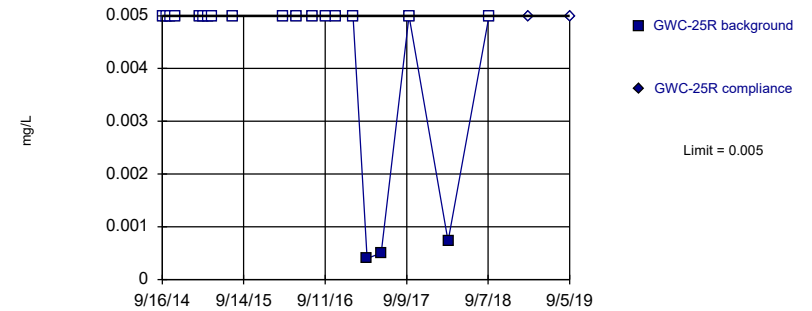
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

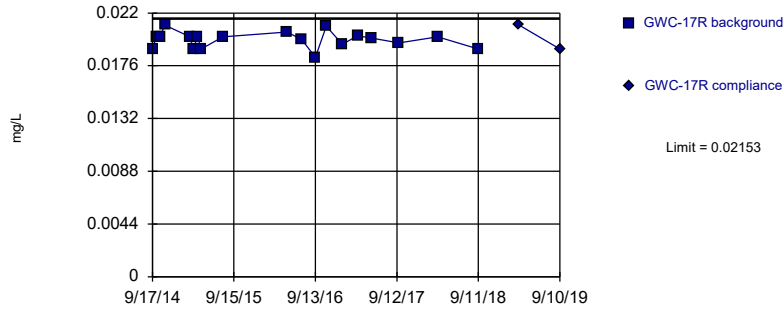
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

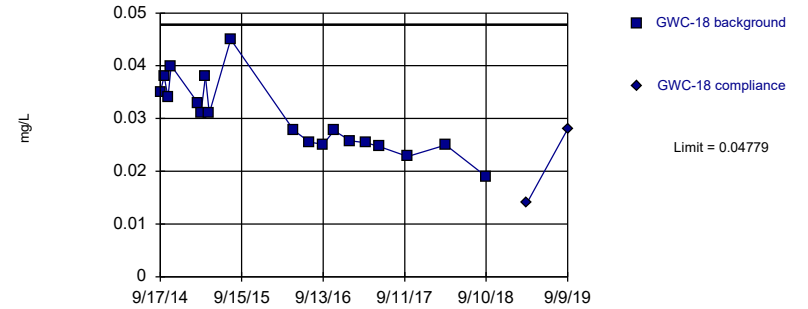
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.01975, Std. Dev.=0.0006818, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9366, critical = 0.863. Kappa = 2.601 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

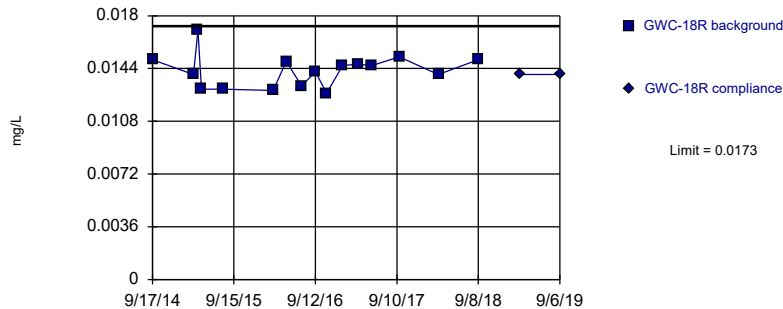
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.0302, Std. Dev.=0.006763, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9507, critical = 0.863. Kappa = 2.601 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

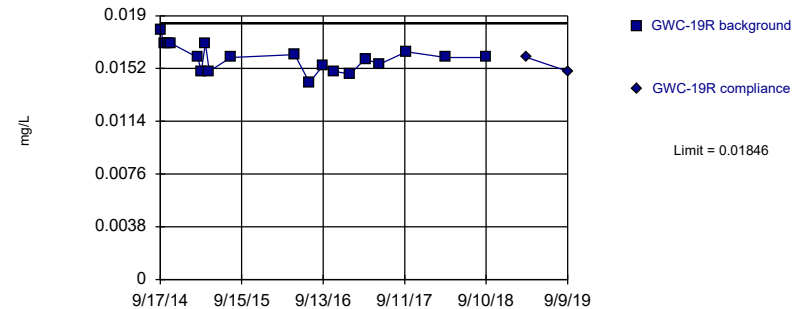
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.01425, Std. Dev.=0.001127, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9188, critical = 0.844. Kappa = 2.709 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit Prediction Limit
Intrawell Parametric

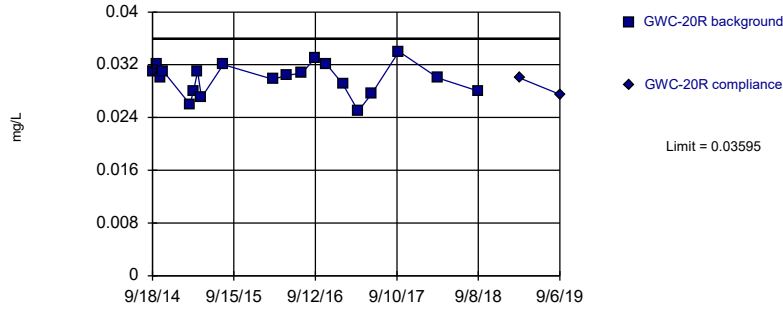


Background Data Summary: Mean=0.01597, Std. Dev.=0.0009569, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9654, critical = 0.863. Kappa = 2.601 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

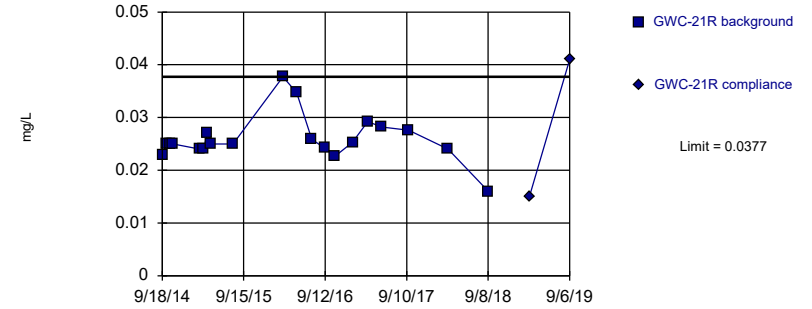


Background Data Summary: Mean=0.02989, Std. Dev.=0.002362, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9722, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Exceeds Limit

Prediction Limit
Intrawell Non-parametric

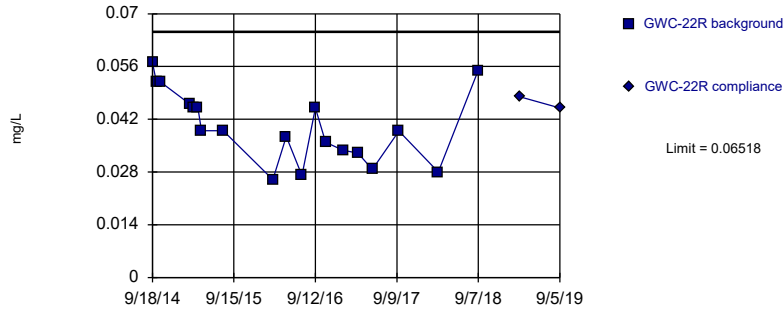


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

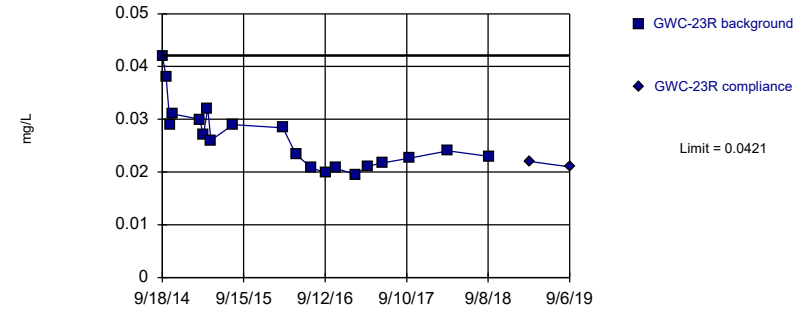


Background Data Summary: Mean=0.0402, Std. Dev.=0.009605, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.951, critical = 0.863. Kappa = 2.601 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

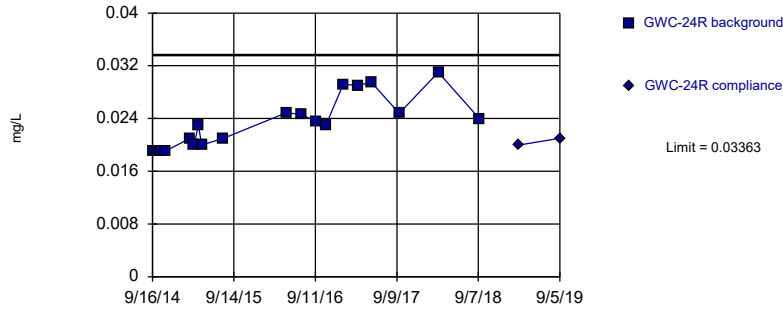


Background Data Summary: Mean=0.02645, Std. Dev.=0.006104, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8978, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Barium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

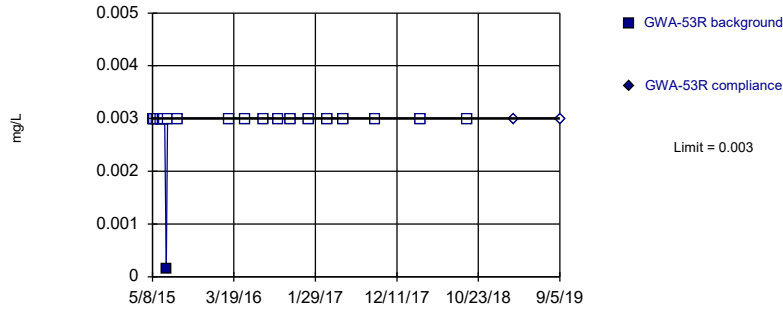
Within Limit

Prediction Limit
Intrawell Parametric



Within Limit

Prediction Limit
Intrawell Non-parametric

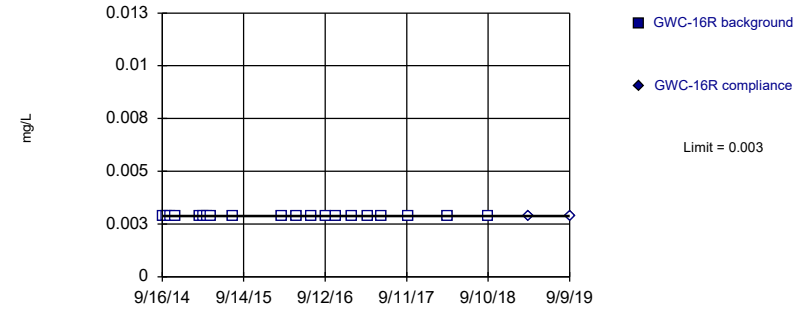


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

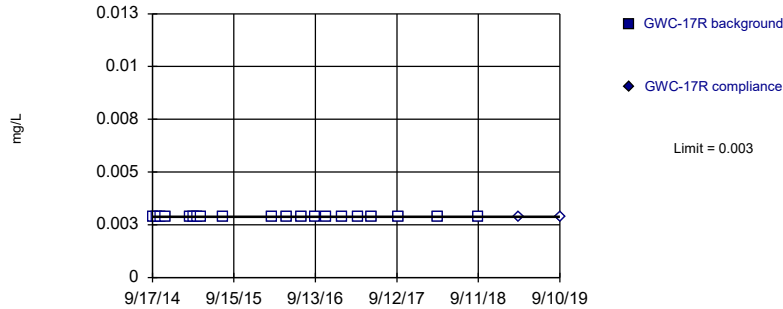


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

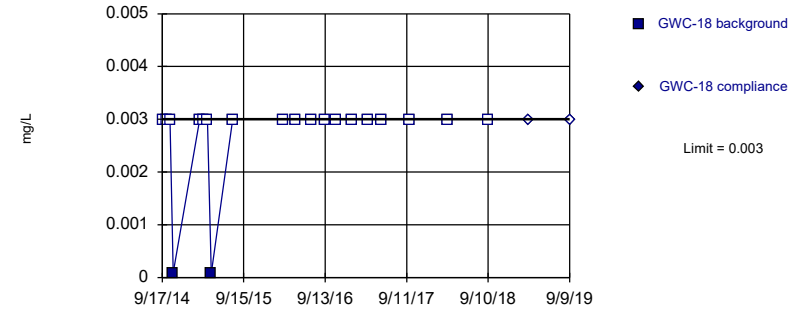


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

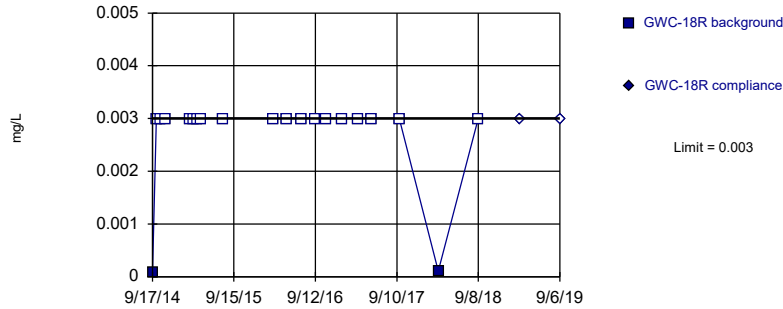


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

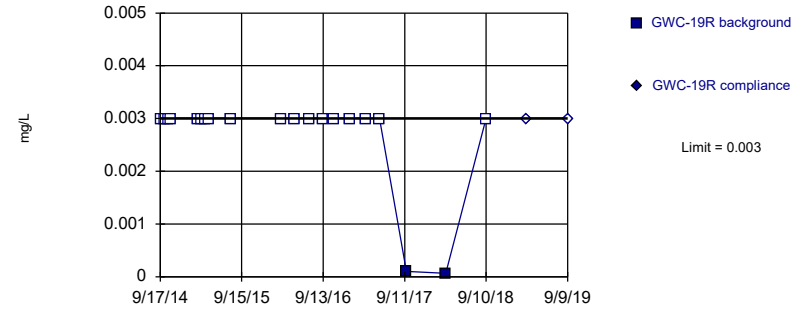


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

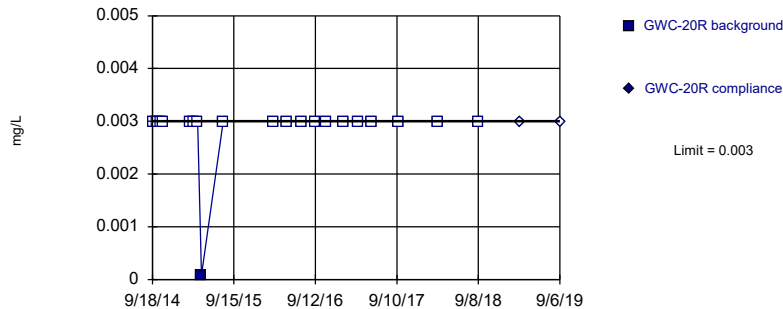


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

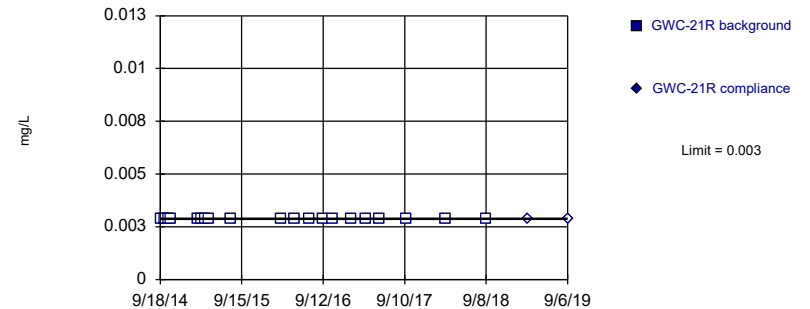


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

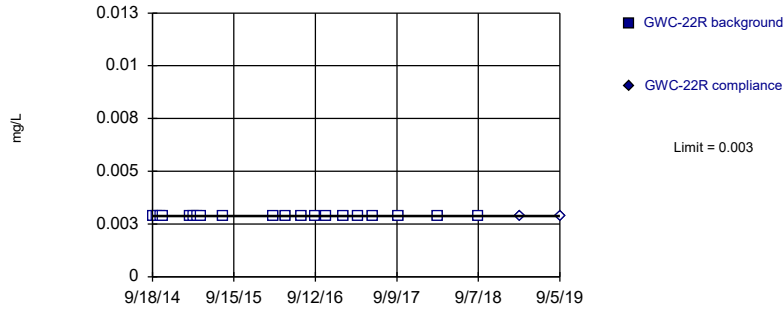


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

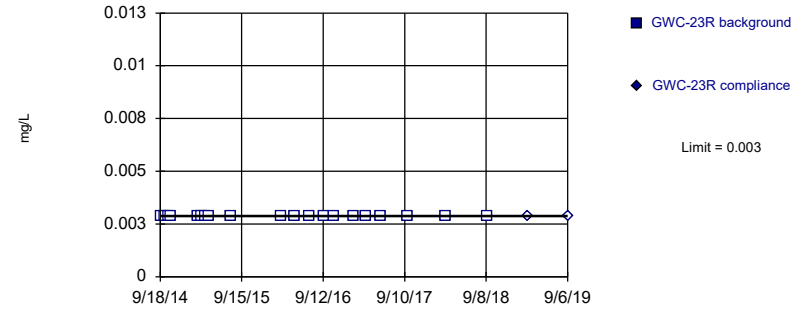


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

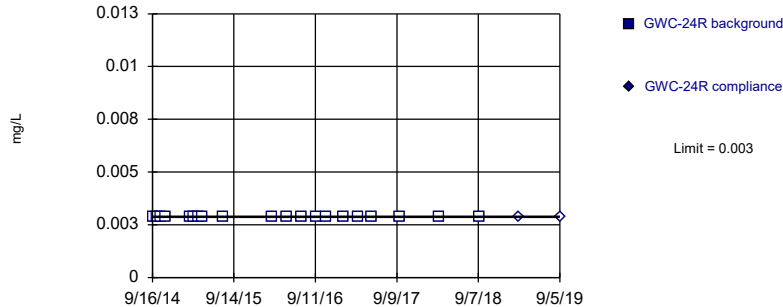


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

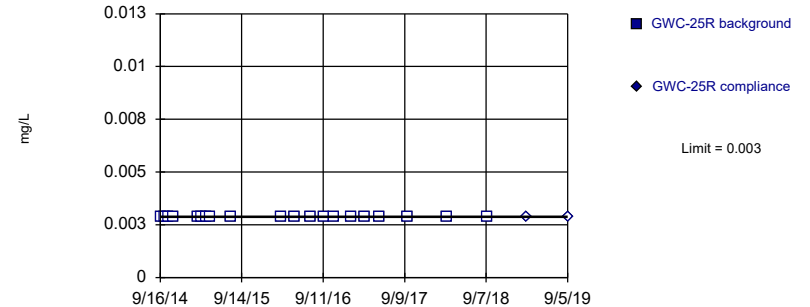


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

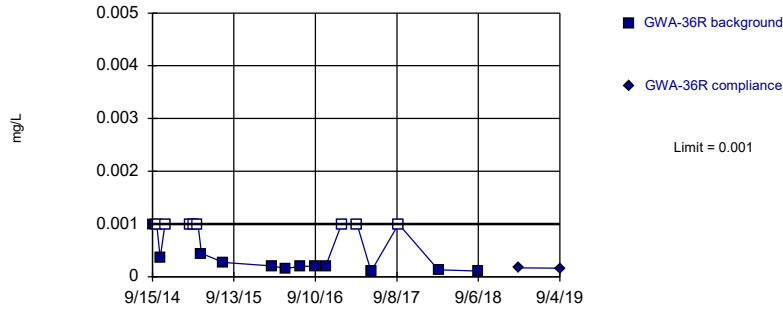


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

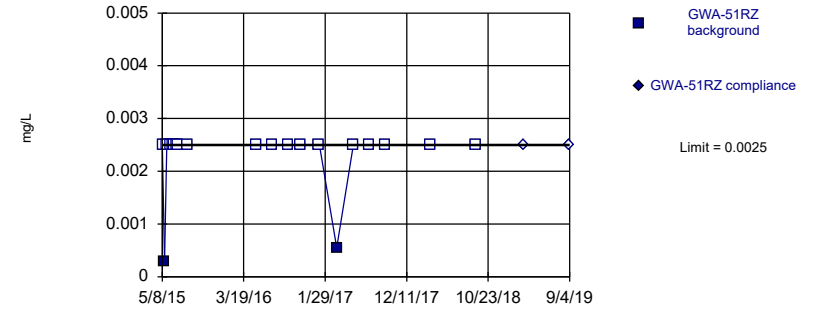


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

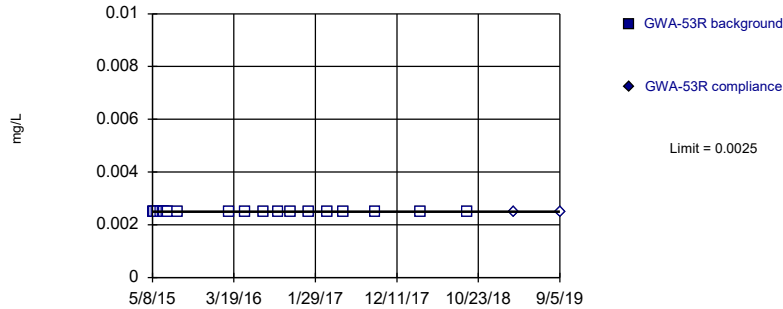


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

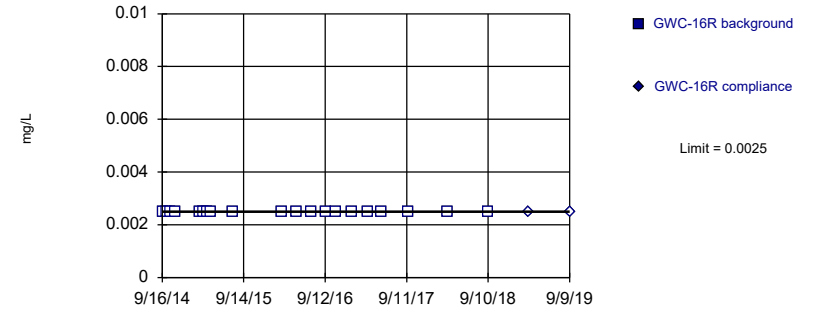


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

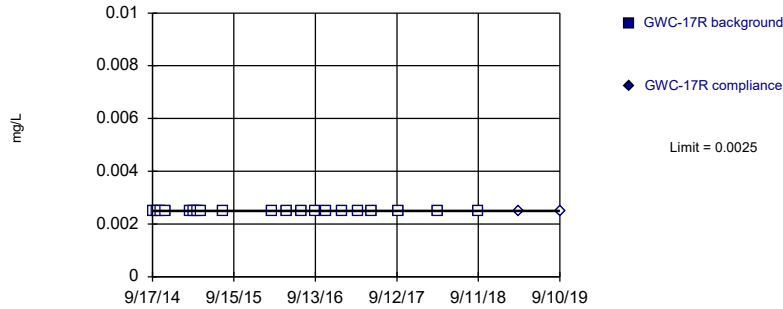


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

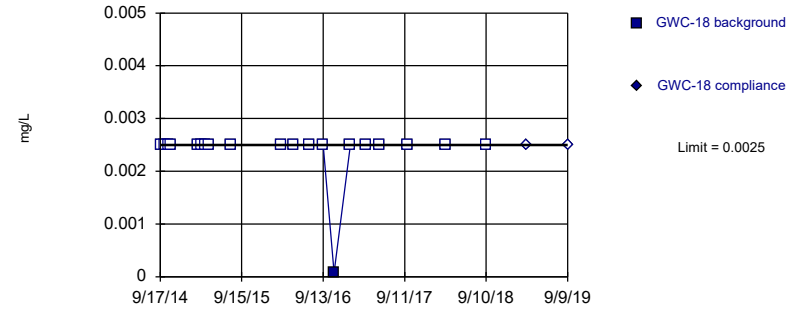


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

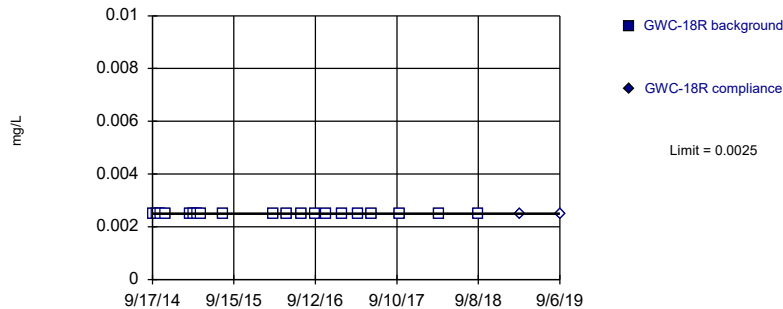


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

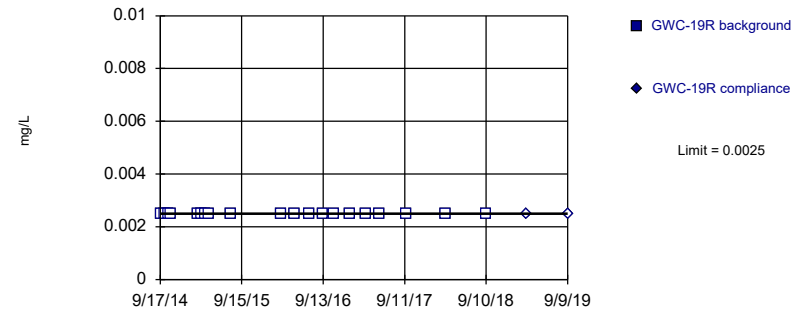


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

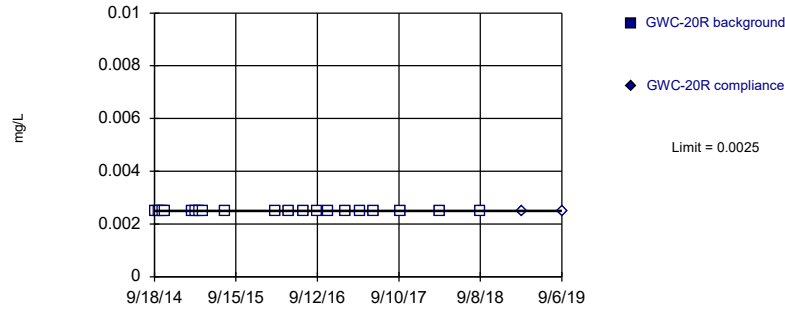


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

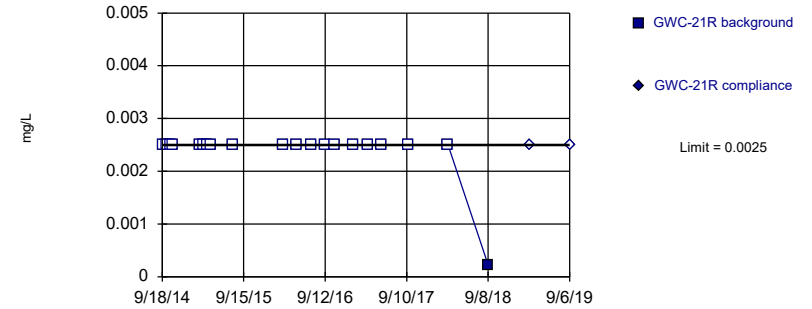


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

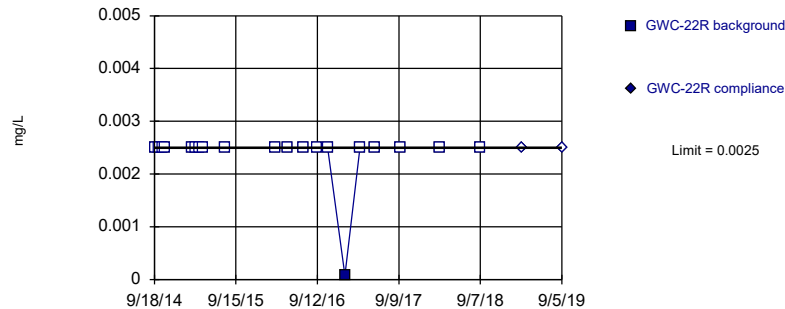


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

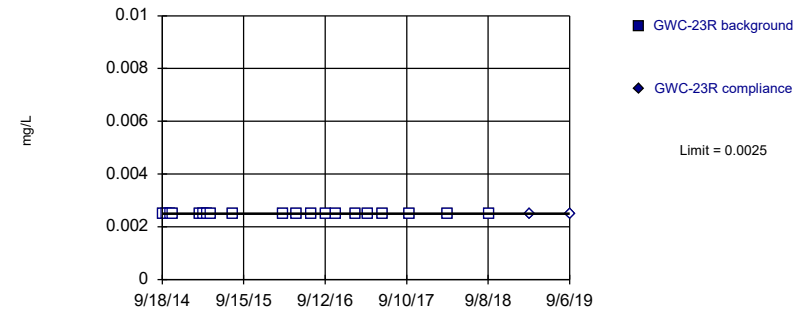


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:15 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

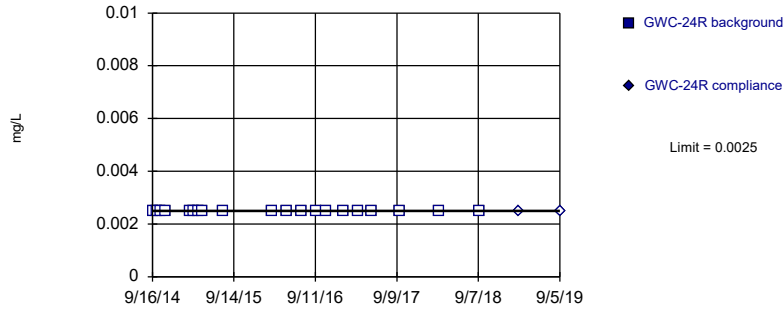


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

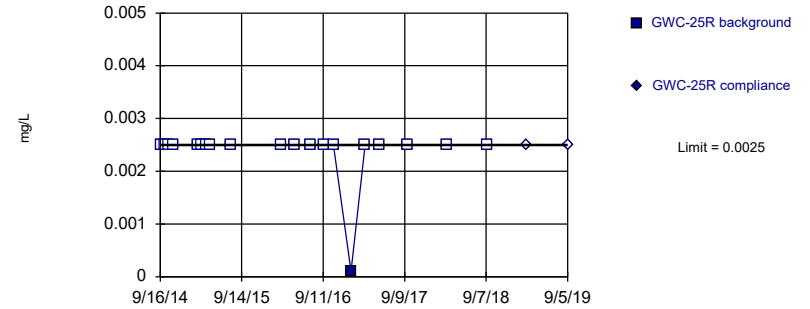


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

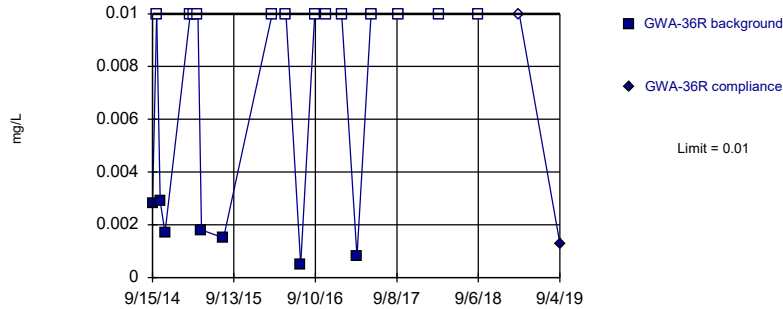


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

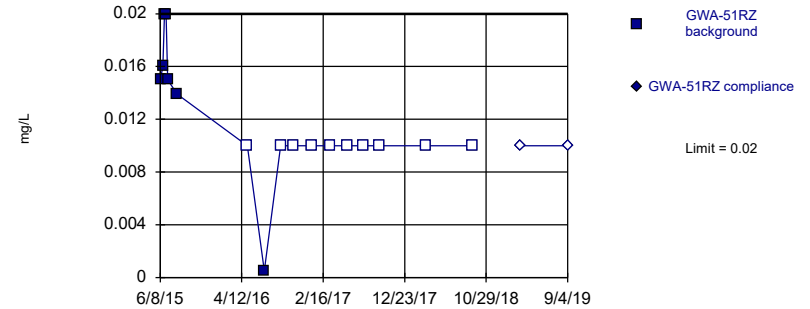


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

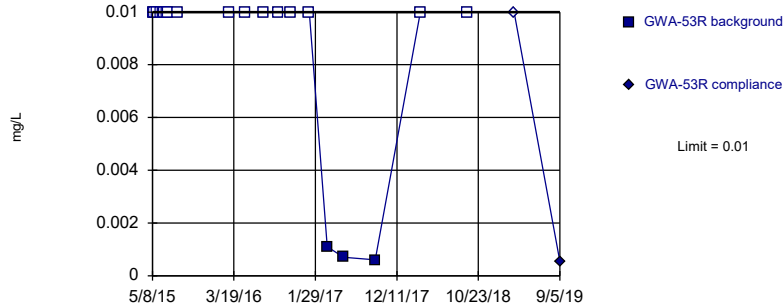


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

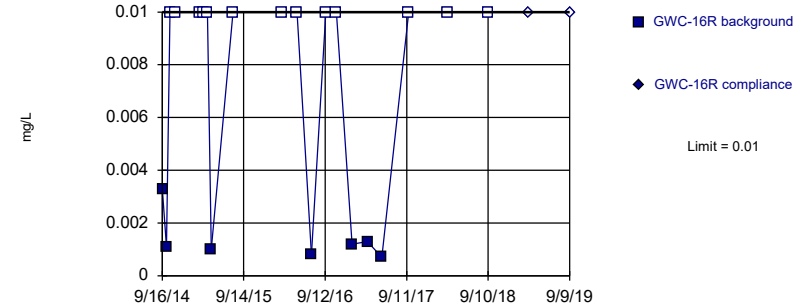


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

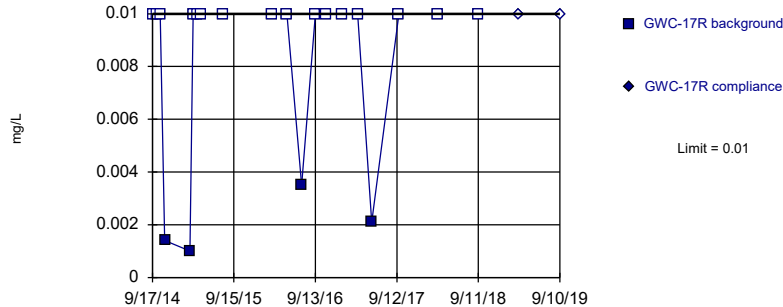


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

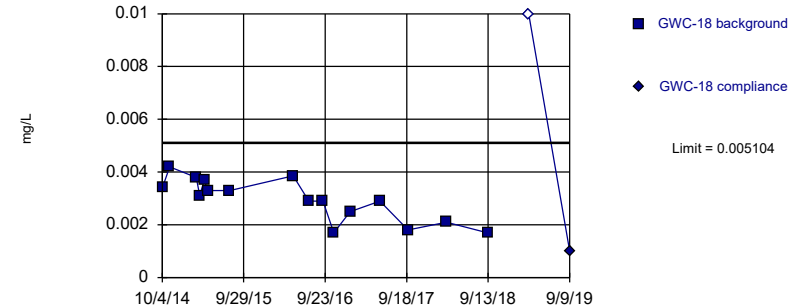


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

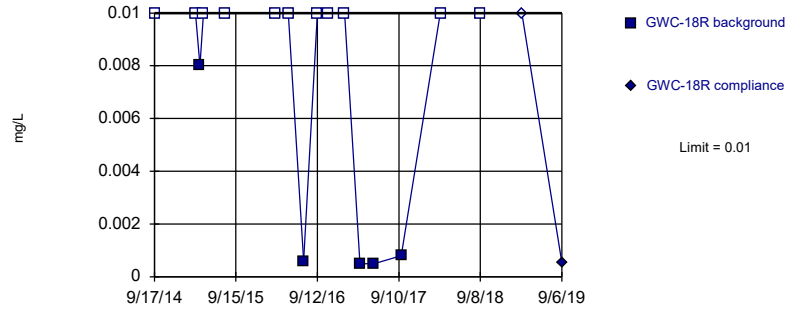


Background Data Summary: Mean=0.002947, Std. Dev.=0.0007961, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9365, critical = 0.844. Kappa = 2.709 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

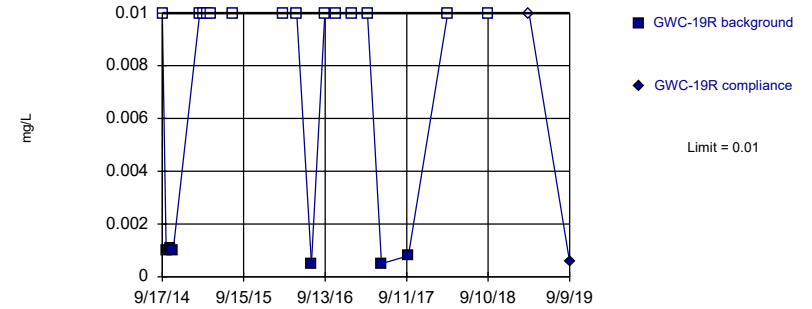


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 16 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

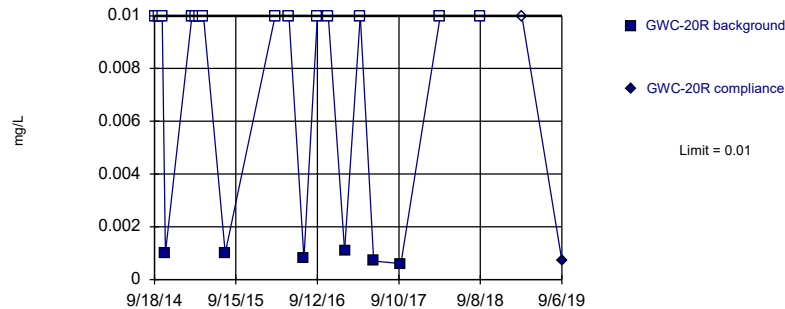


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

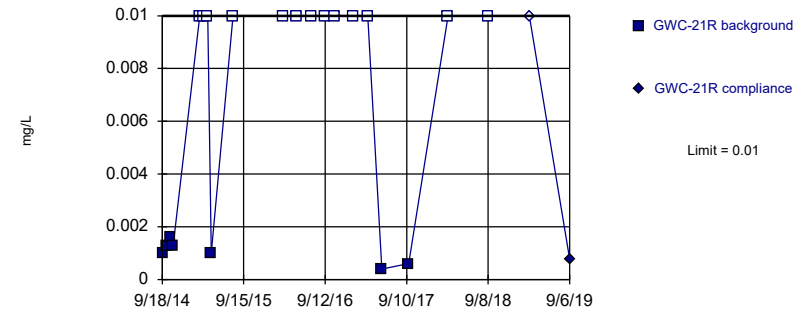


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

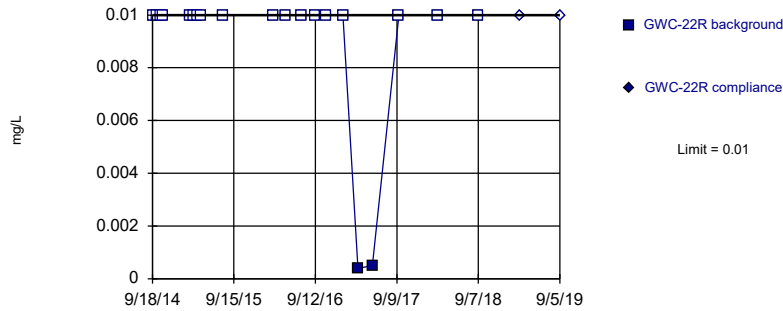


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

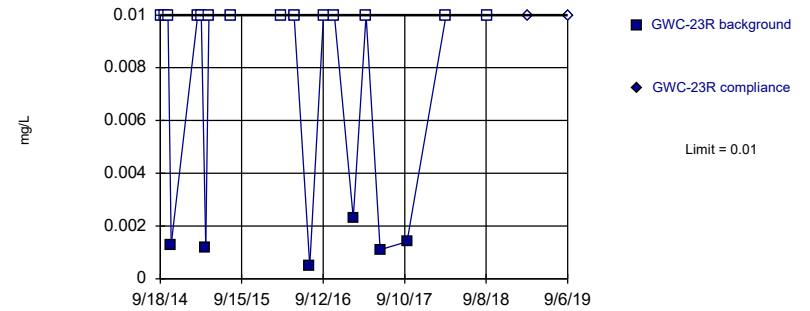


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

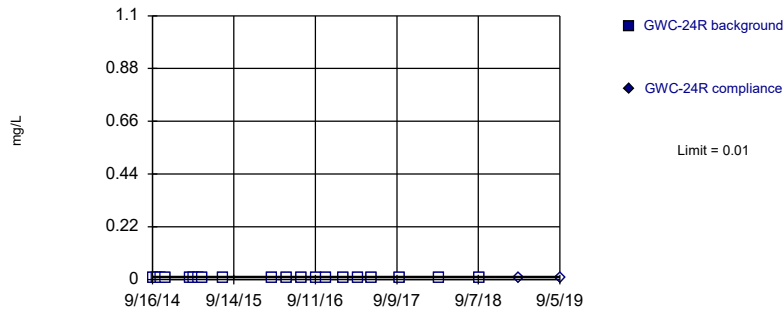


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

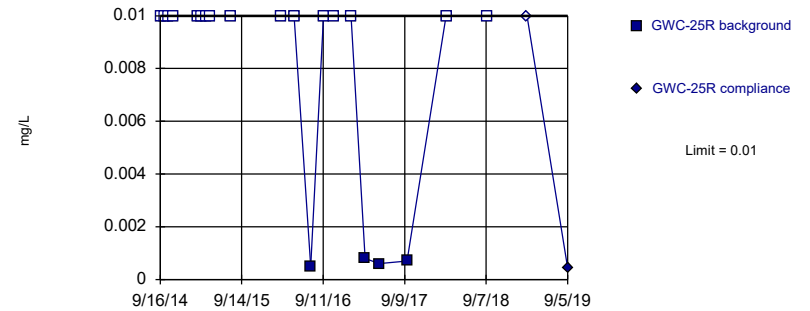


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

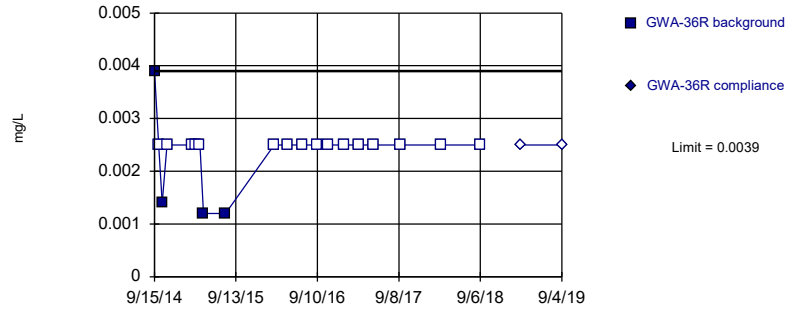
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

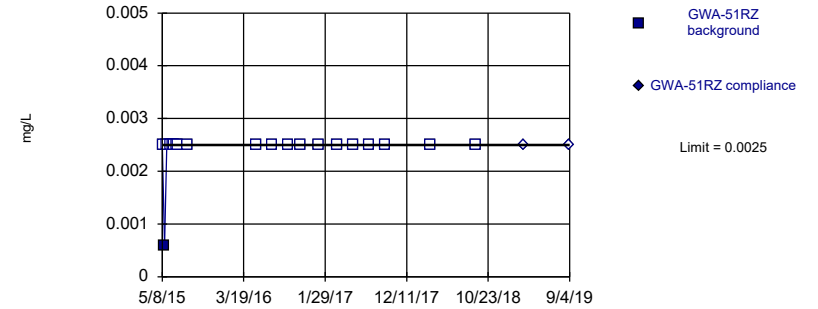
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

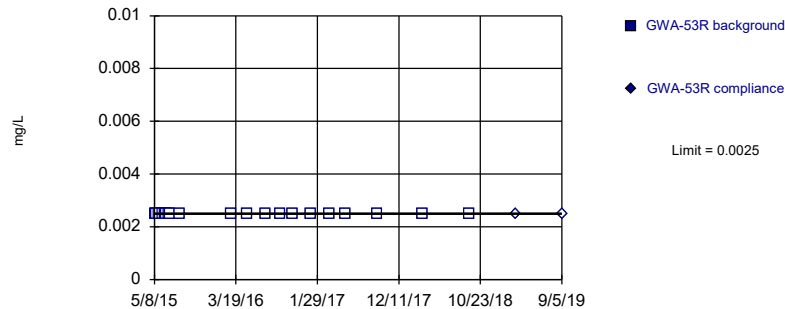
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

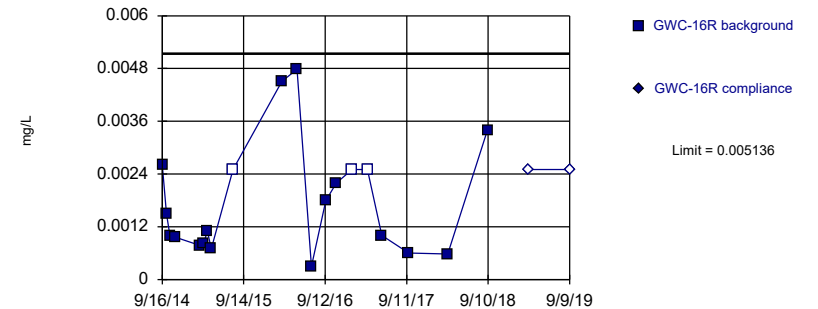
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

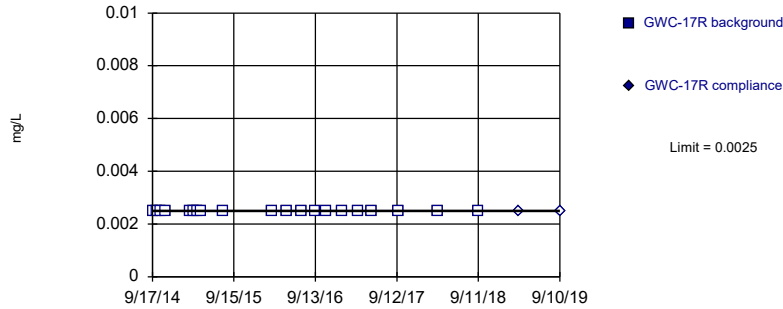
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.001806, Std. Dev.=0.001298, n=20, 15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8747, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

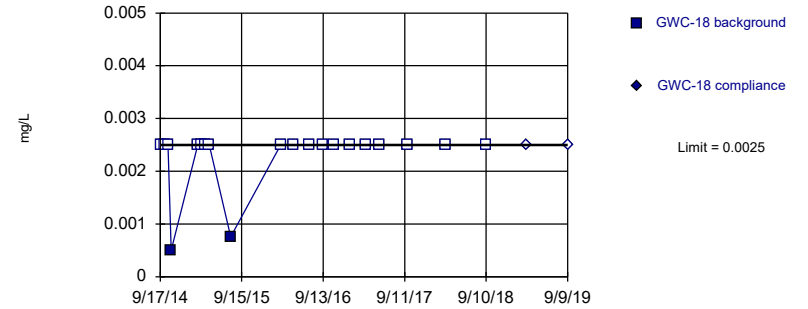
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

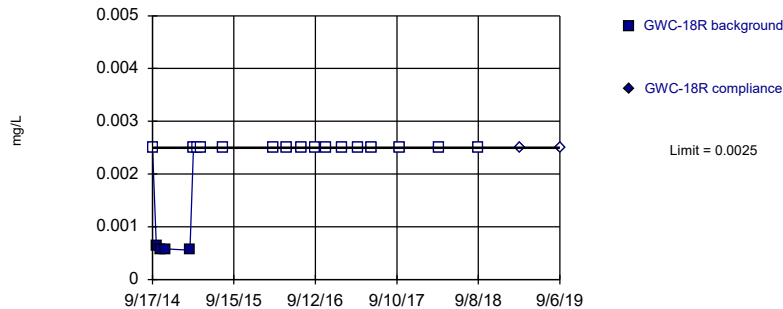
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

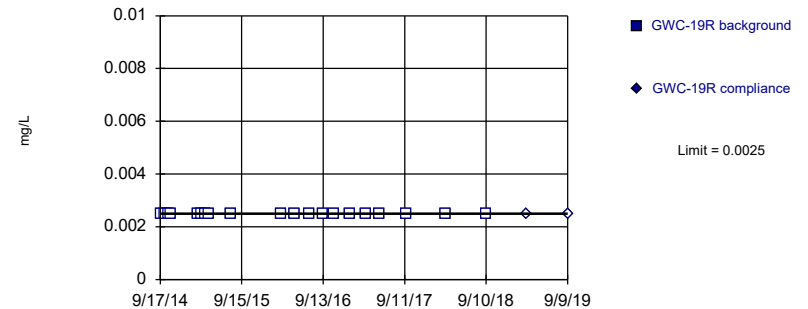
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit Prediction Limit
 Intrawell Non-parametric

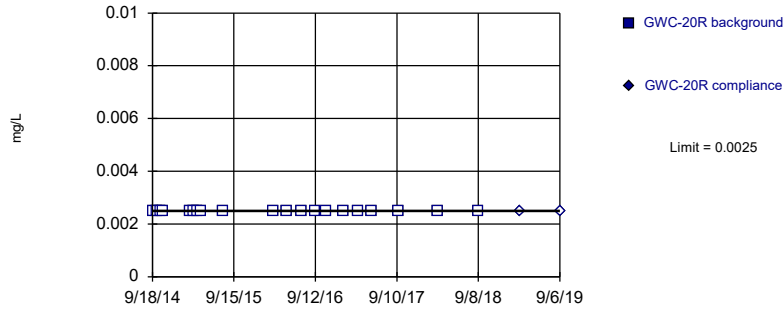


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

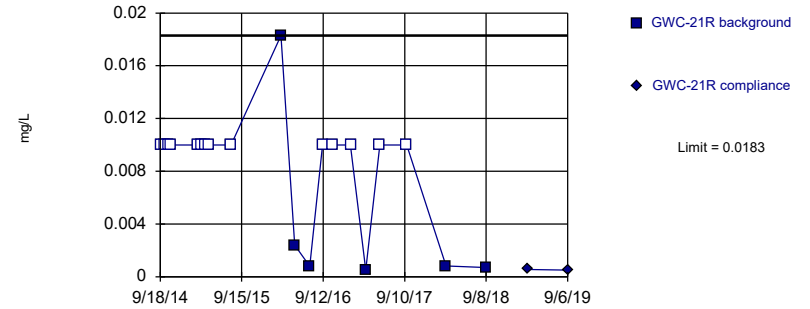


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

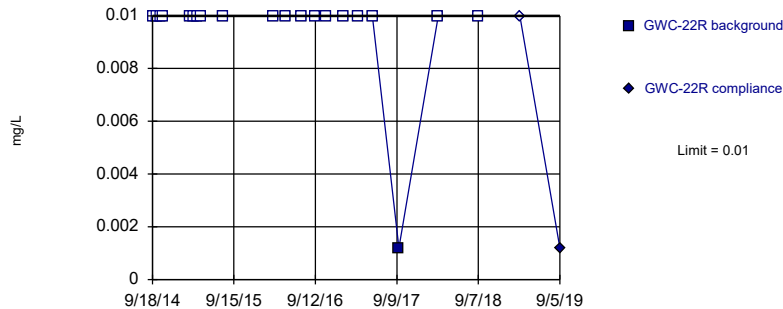


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

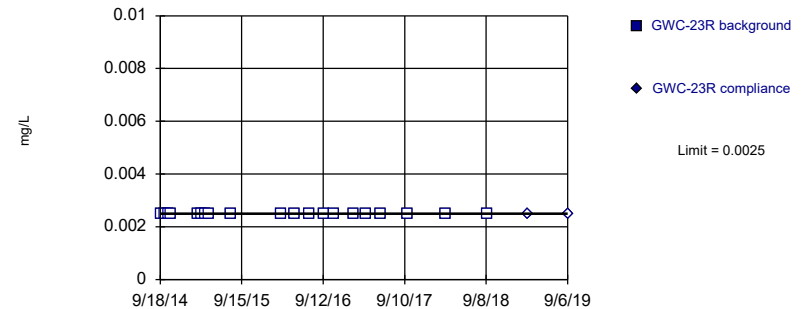


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

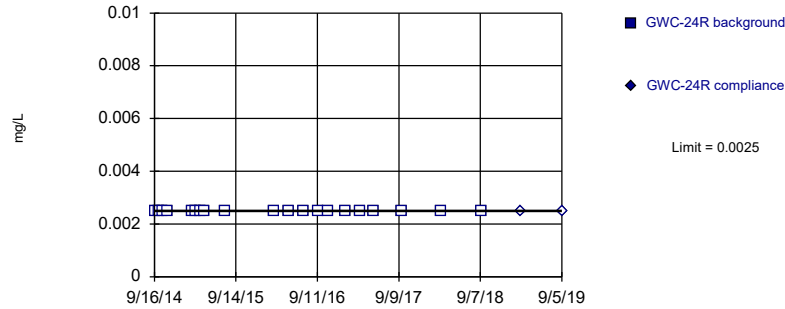


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

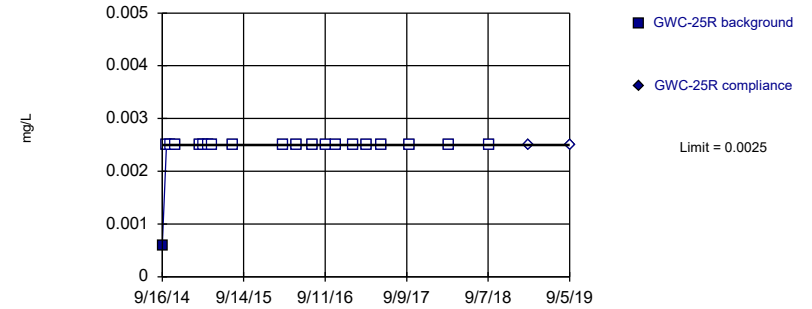


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

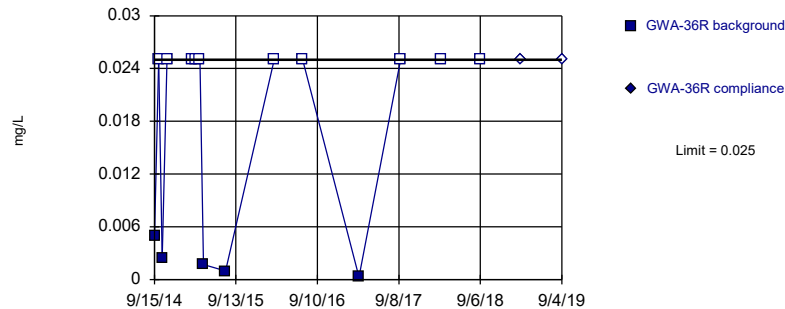


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

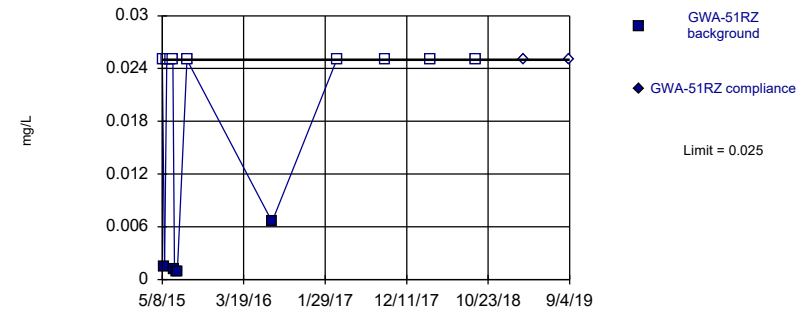


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

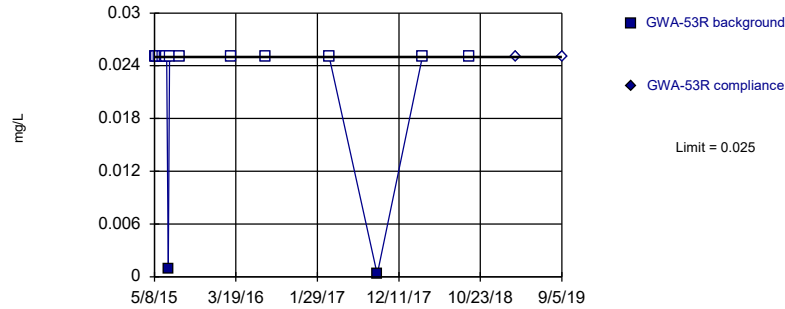


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

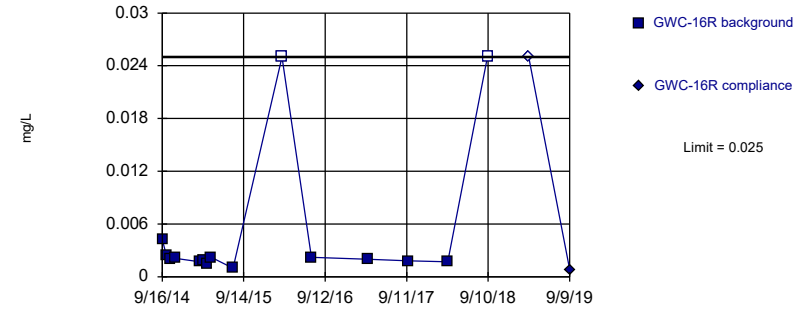


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

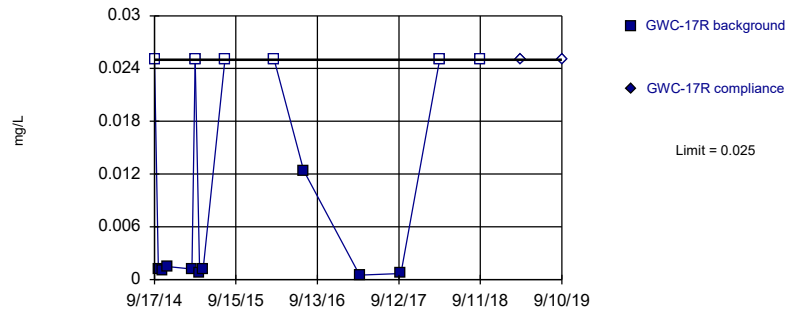


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 13.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

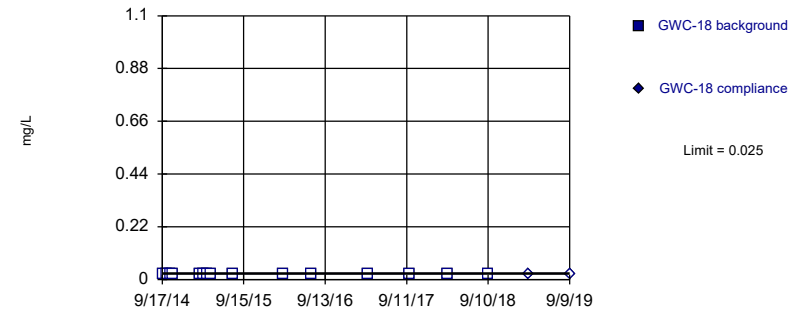


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

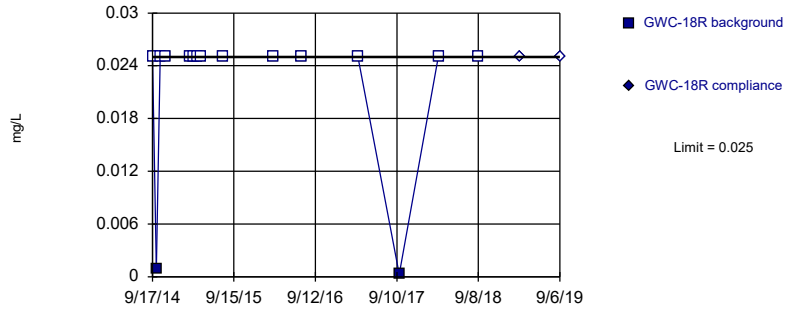


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

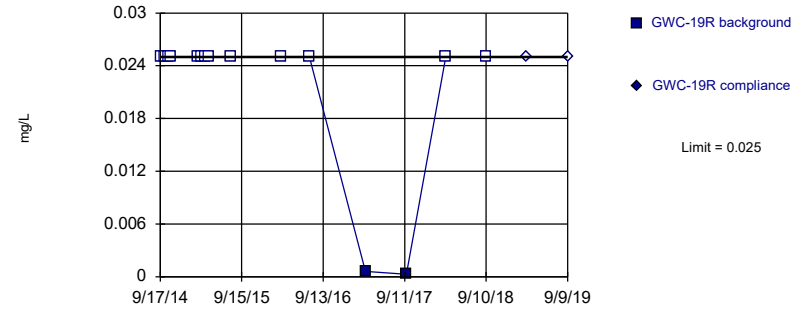


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

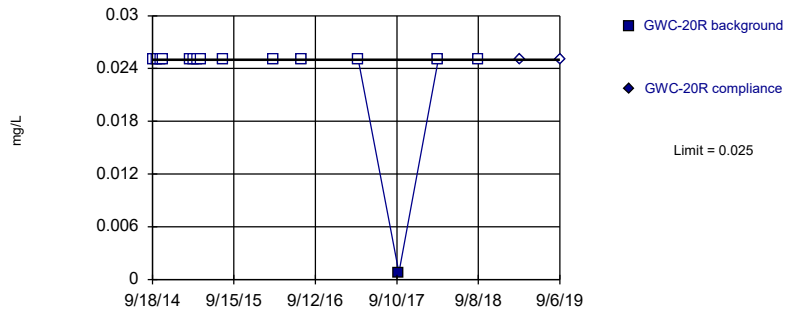


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

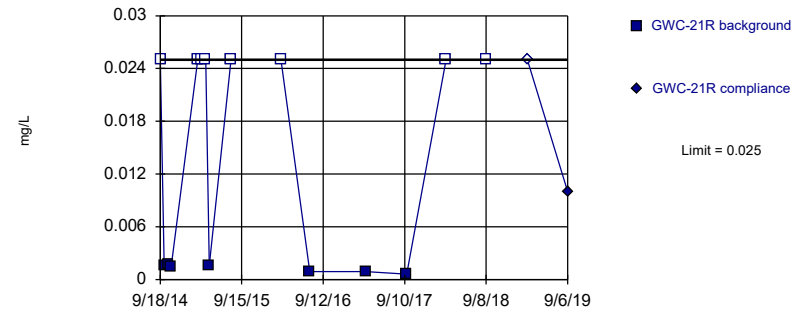


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

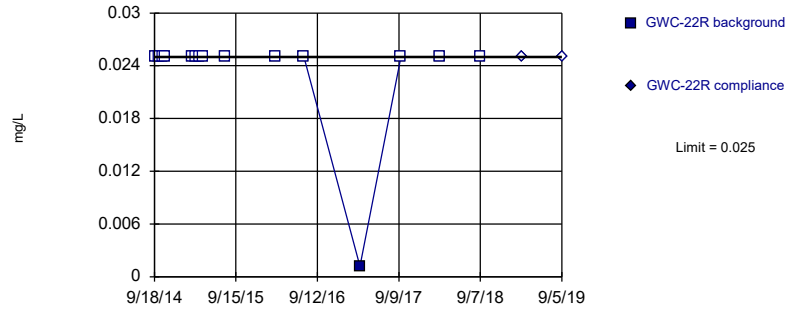


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

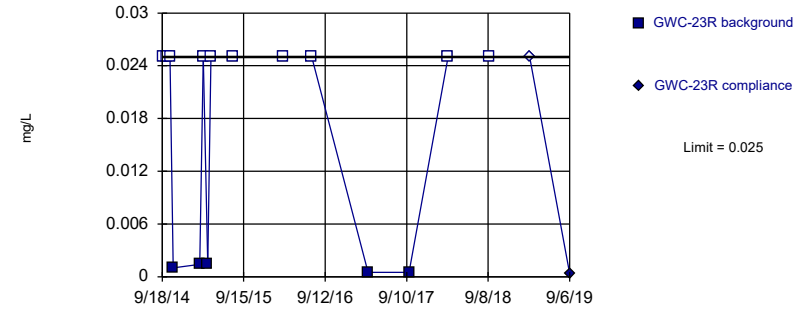


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

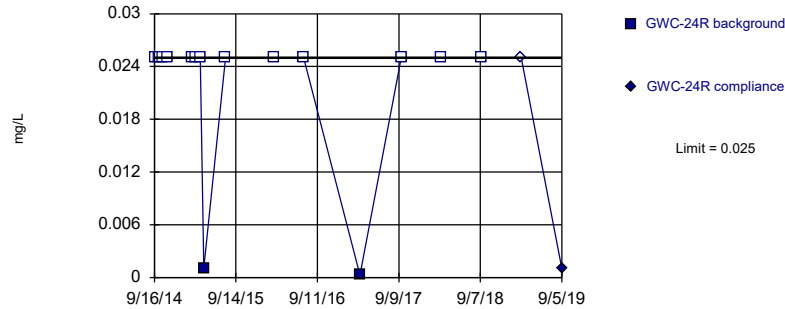


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

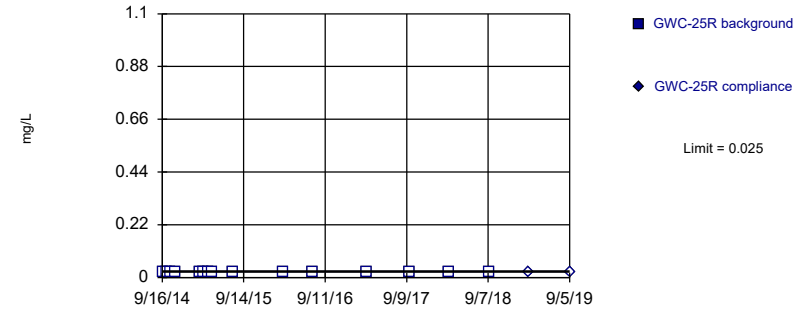


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

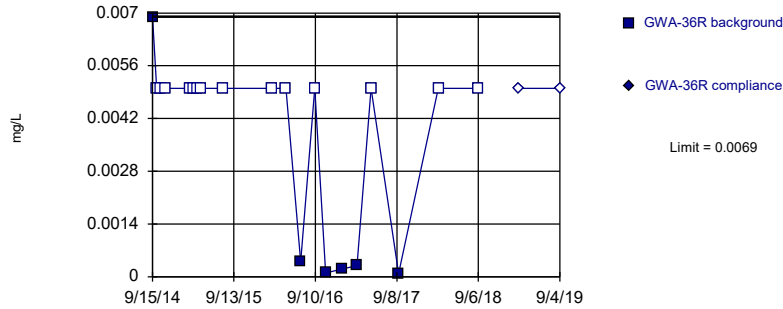


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

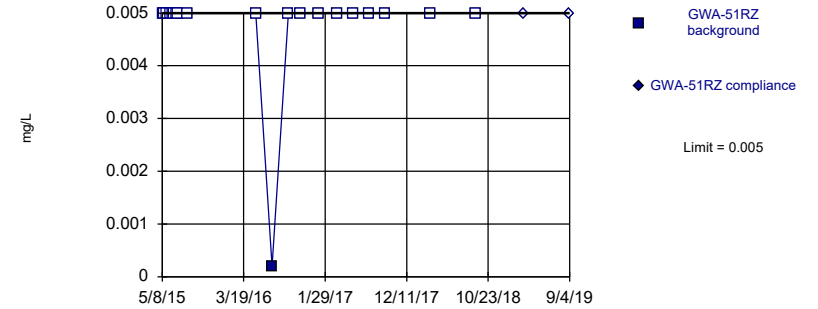


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

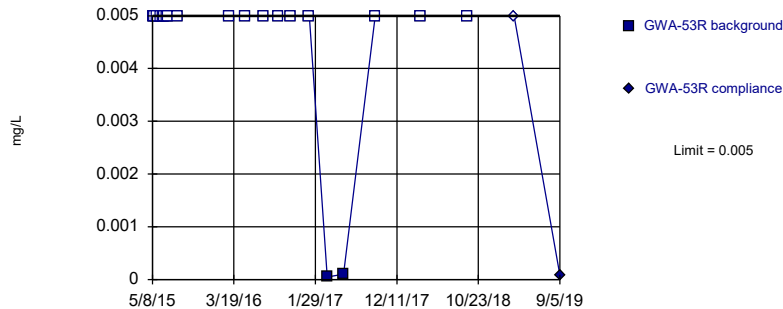


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

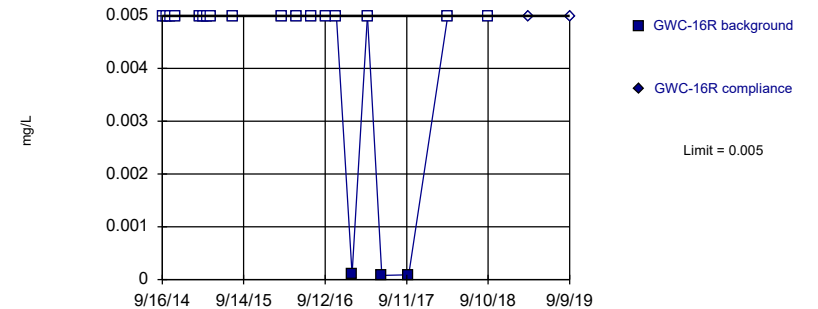


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric



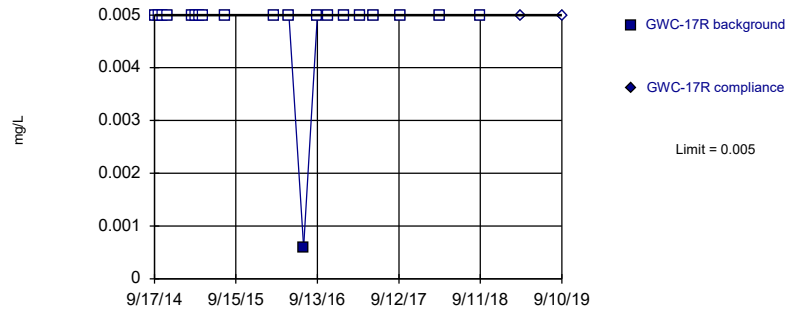
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



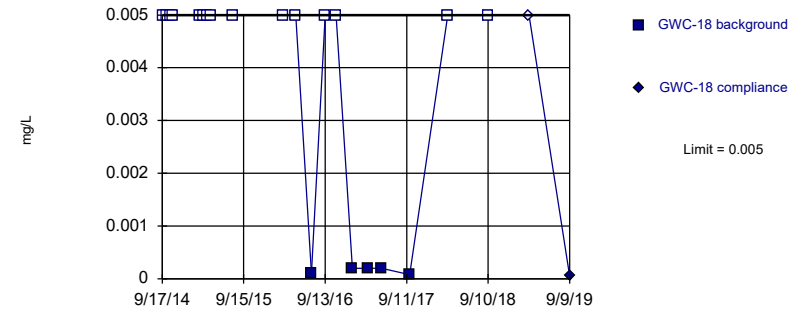
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



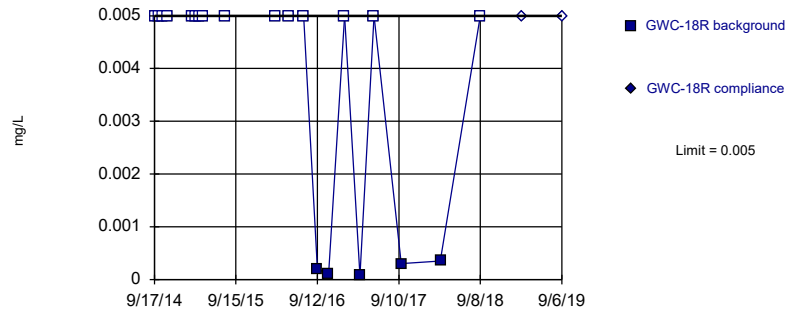
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



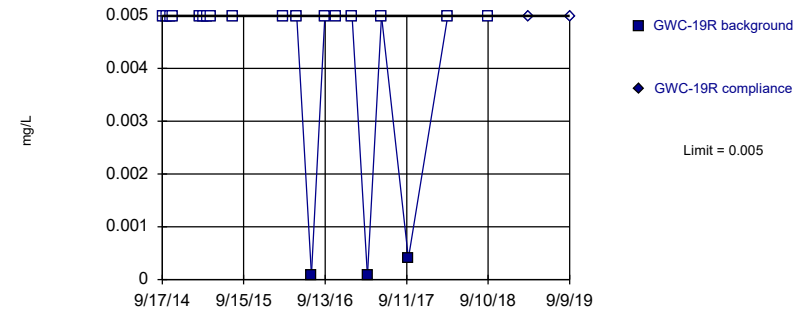
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

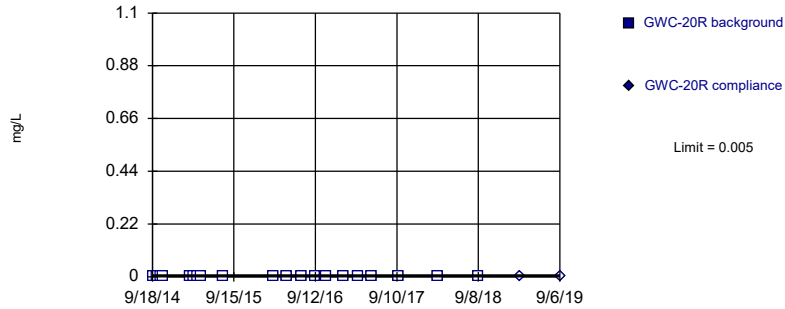


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

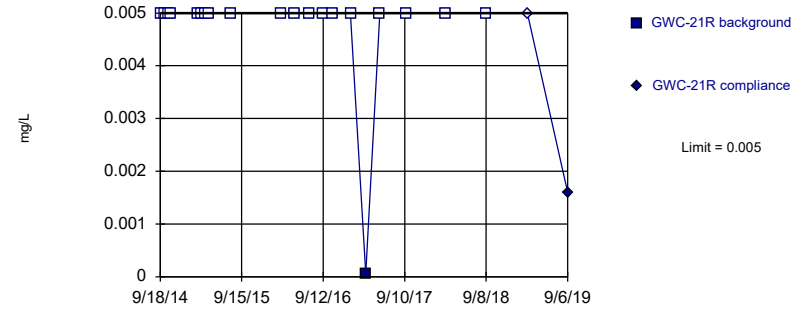


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:16 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

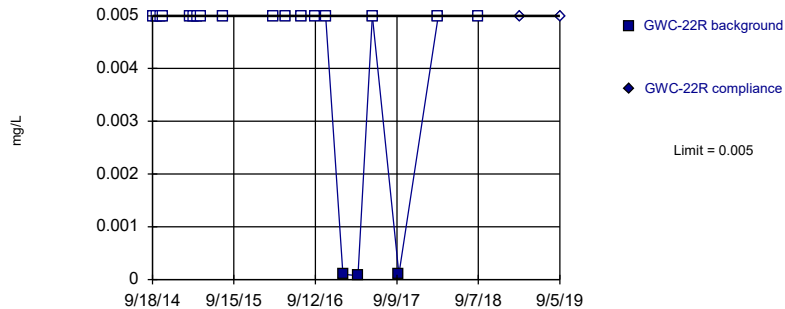


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

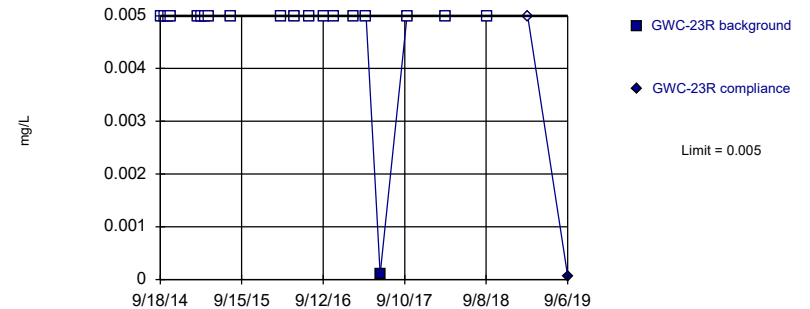


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric



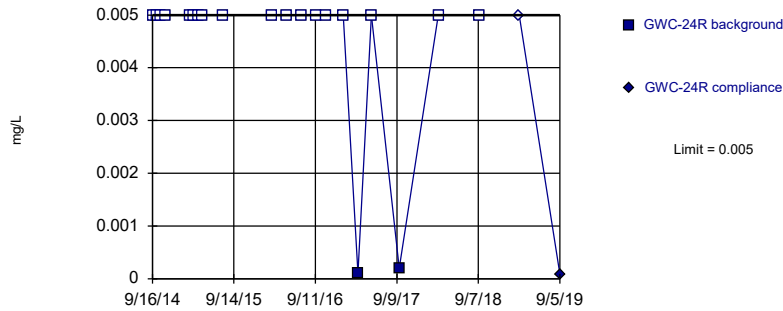
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

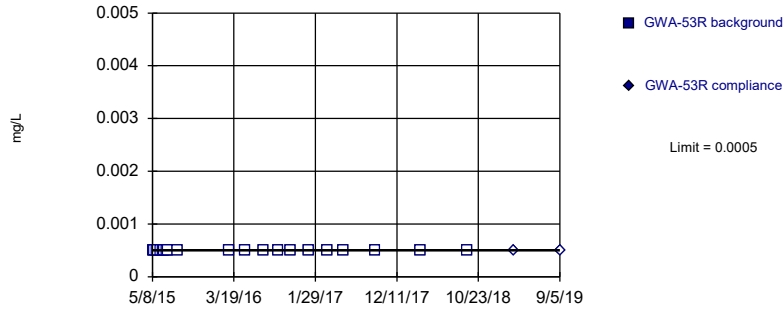
Within Limit

Prediction Limit
Intrawell Non-parametric



Within Limit

Prediction Limit
 Intrawell Non-parametric

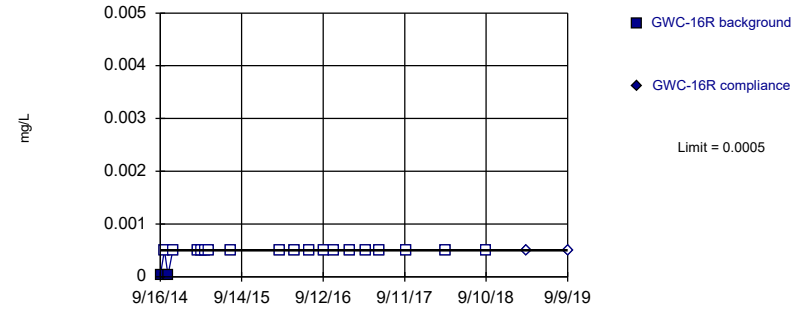


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

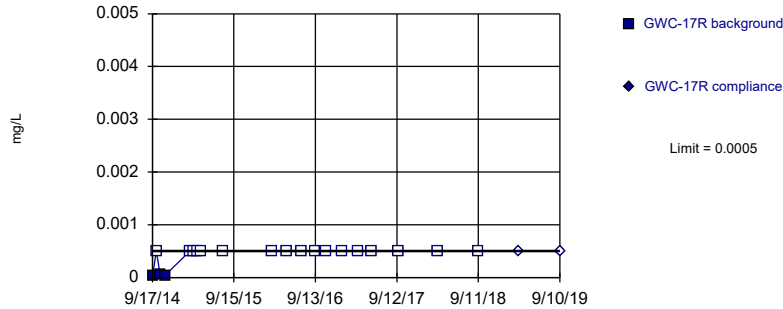


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

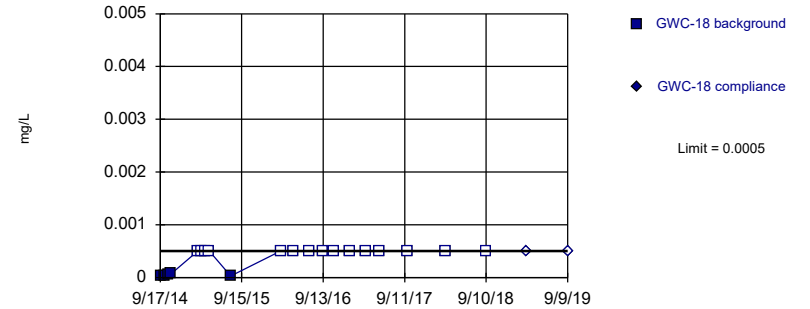


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

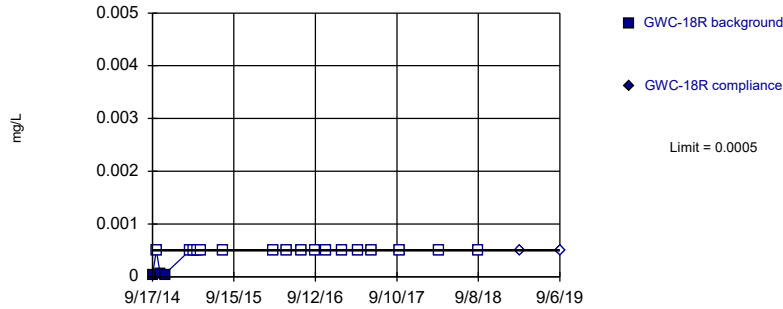


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

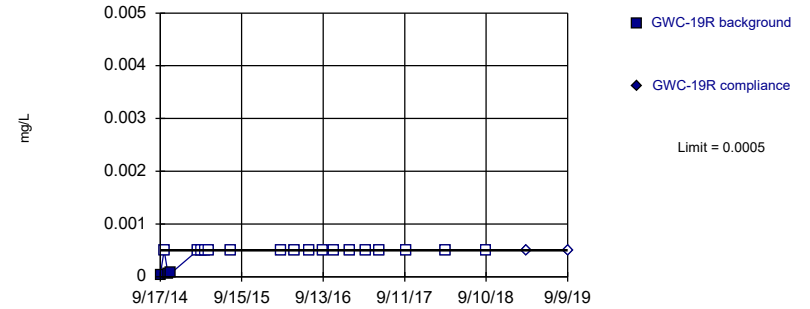


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

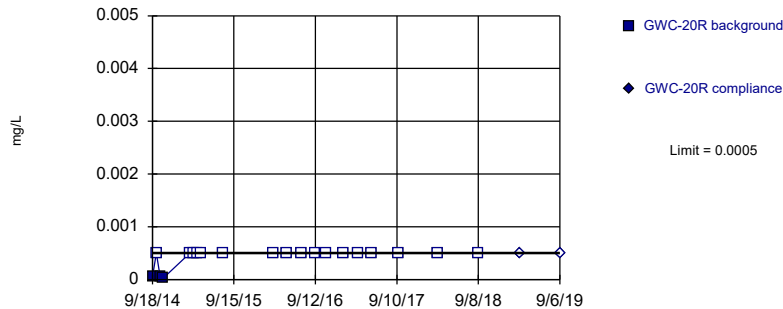


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

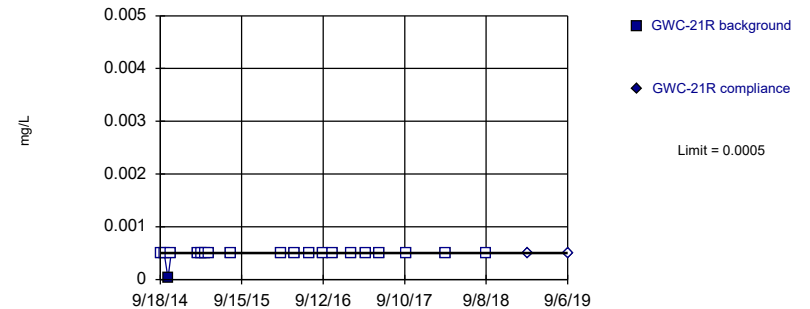


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

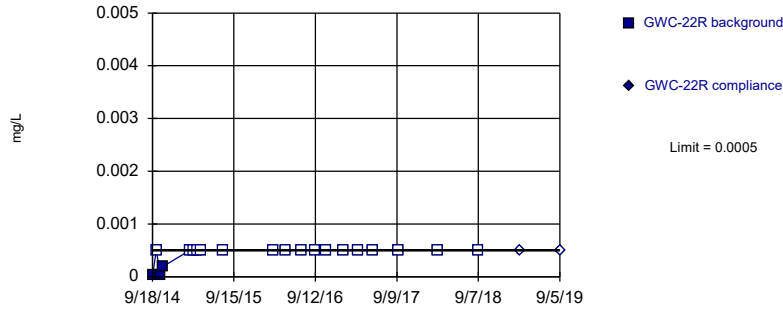


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

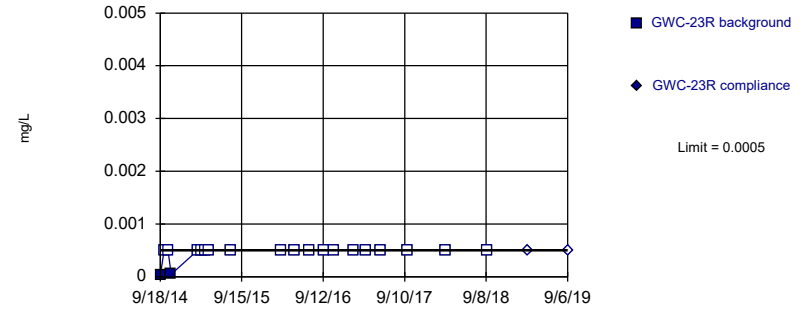


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

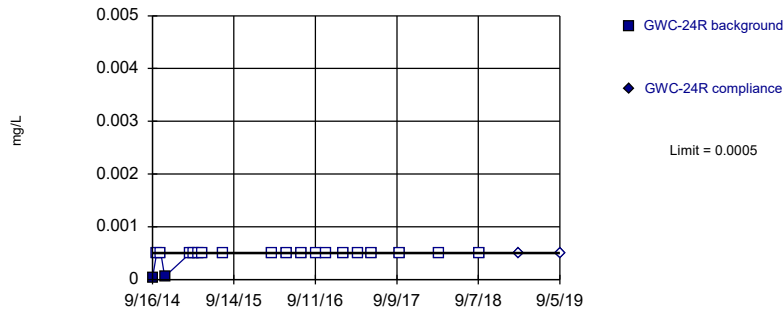


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

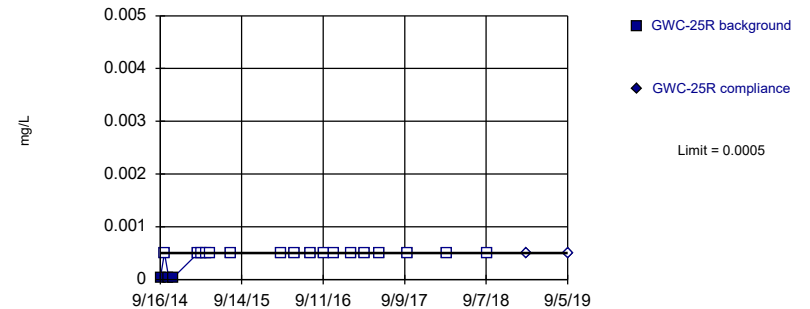


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

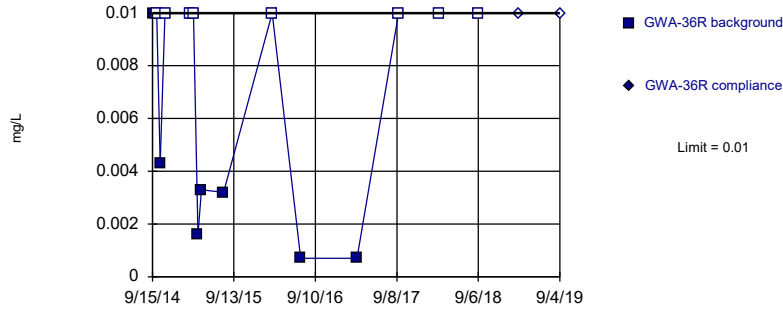


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

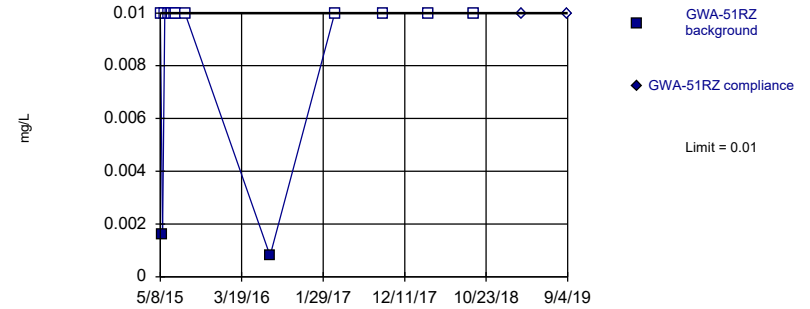


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

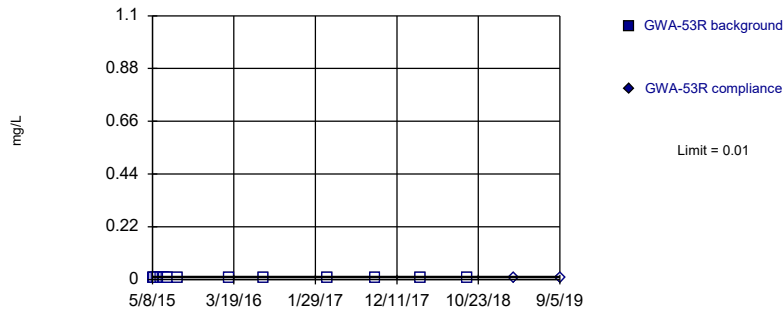


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

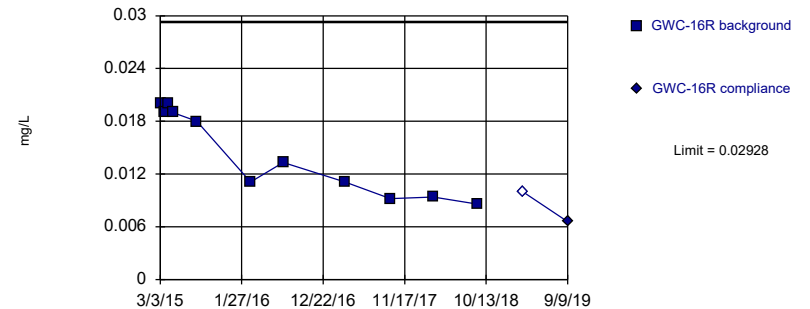


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

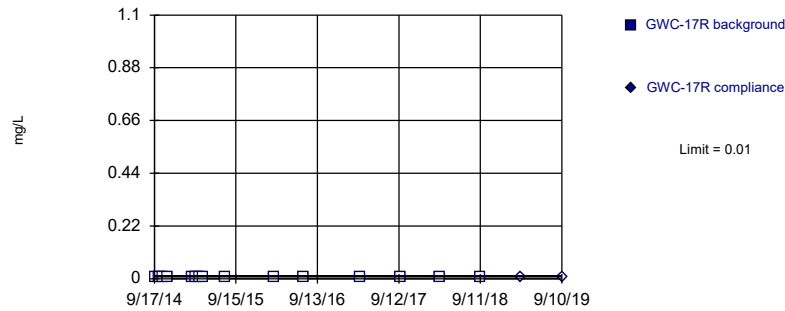


Background Data Summary: Mean=0.01443, Std. Dev.=0.004761, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8333, critical = 0.792. Kappa = 3.12 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

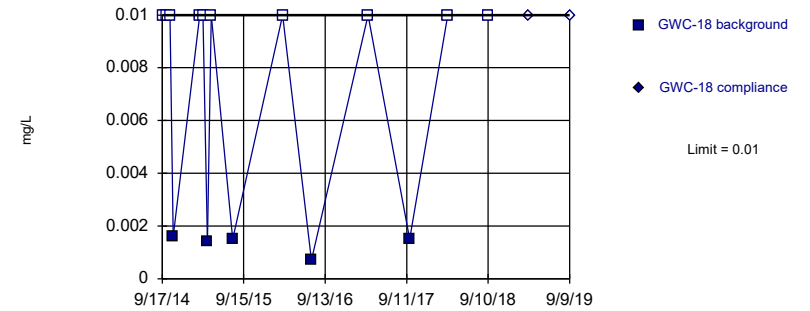


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

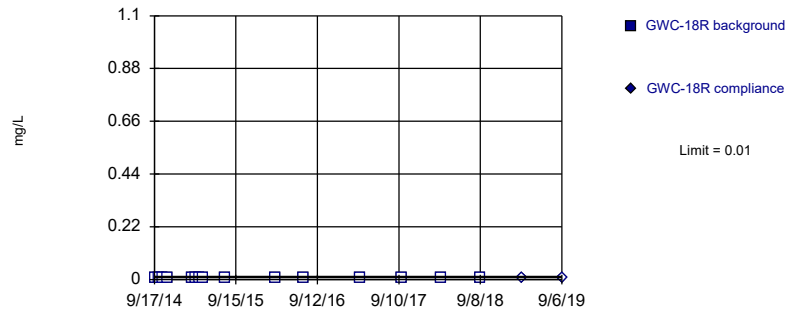


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

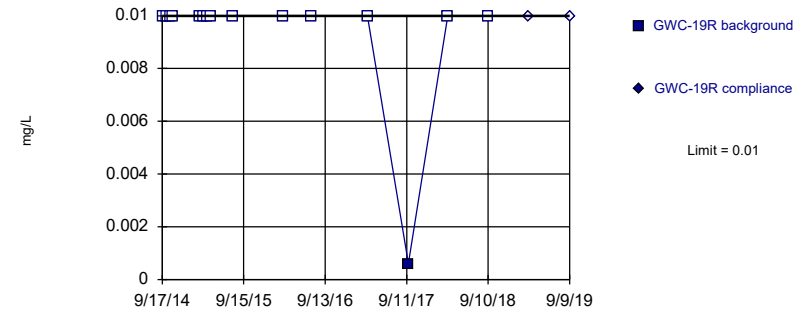


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

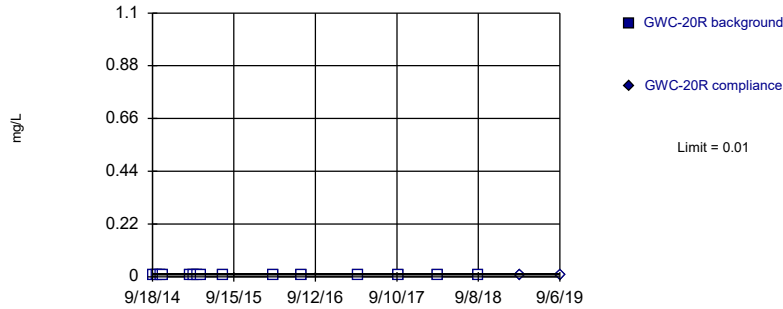


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

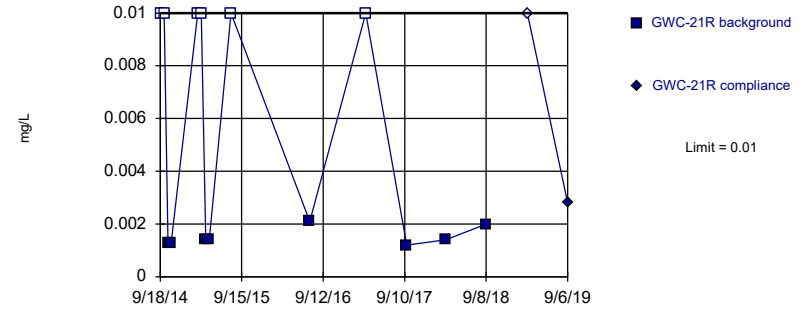


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

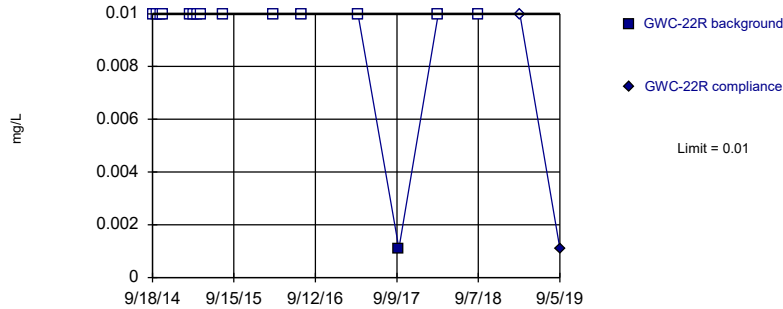


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 42.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

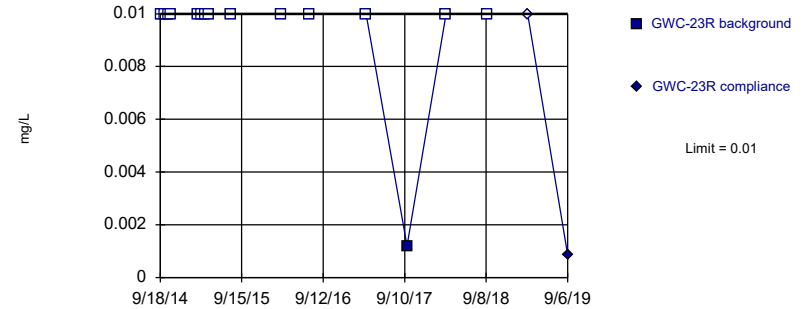


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

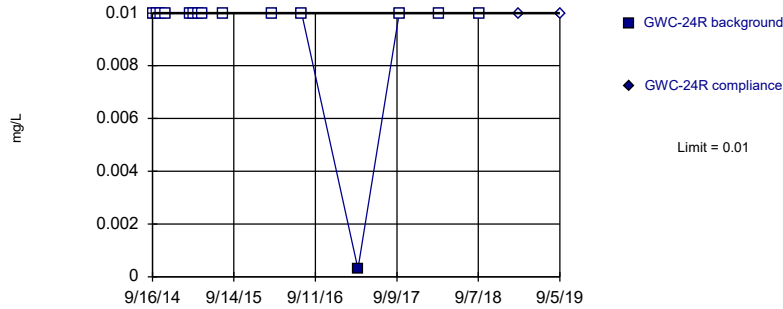


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

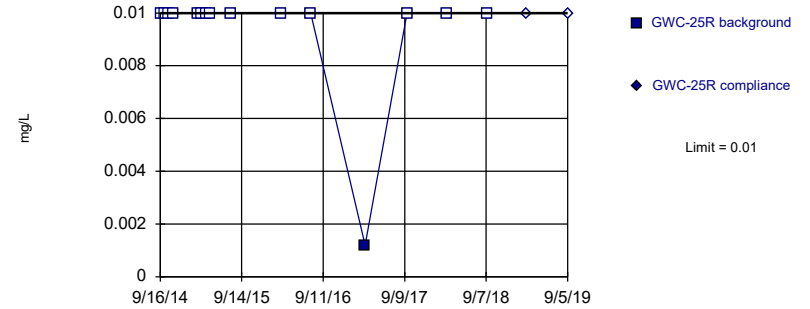


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

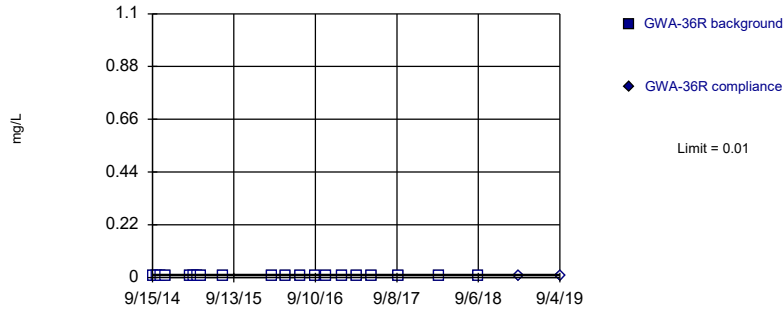


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

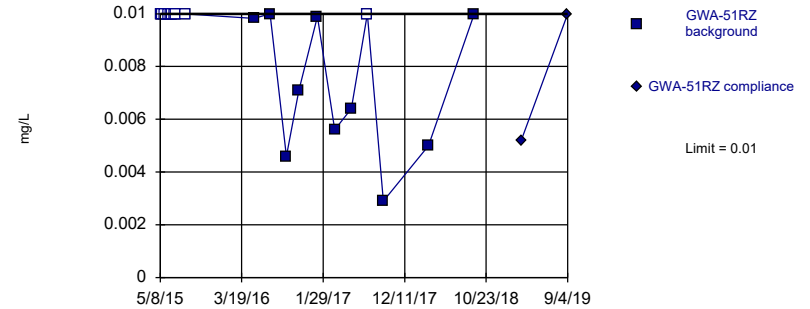


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



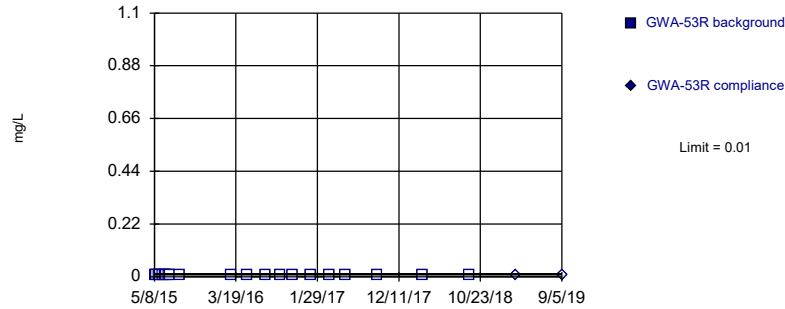
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



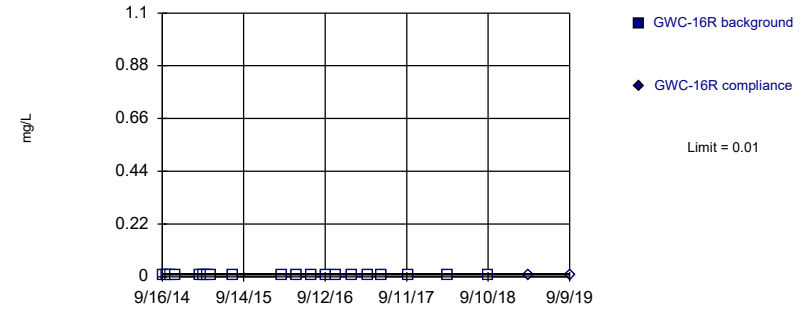
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



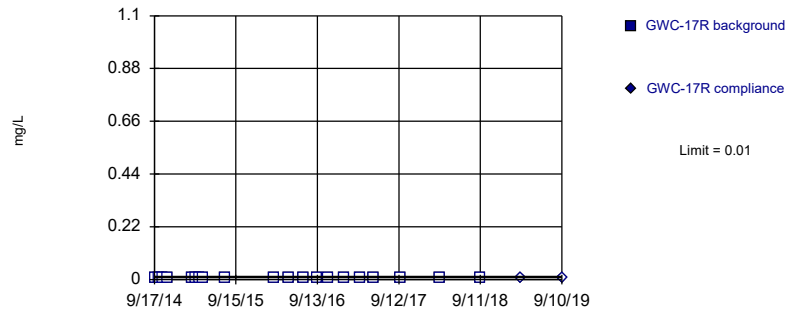
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



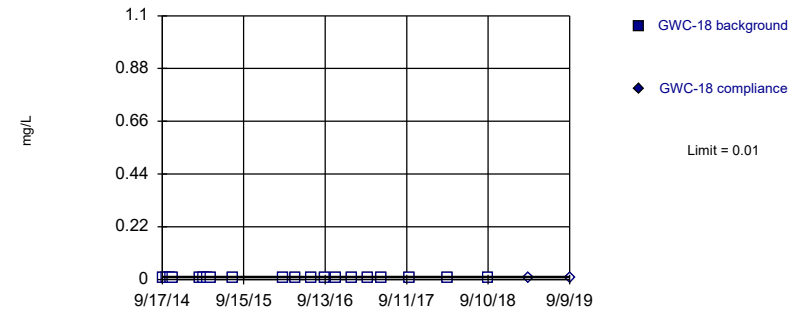
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric

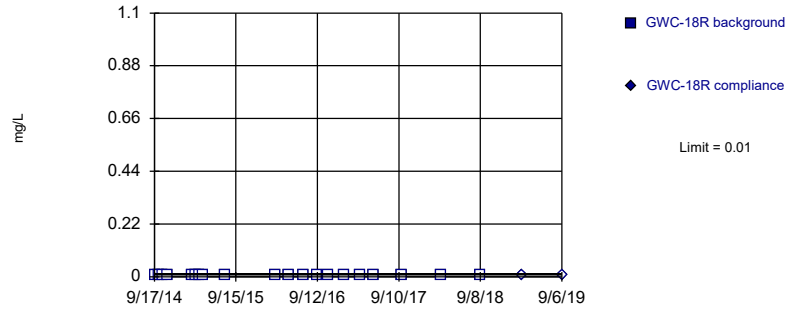


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

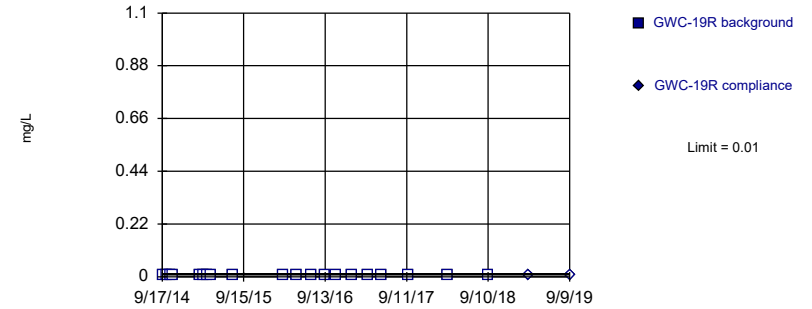


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

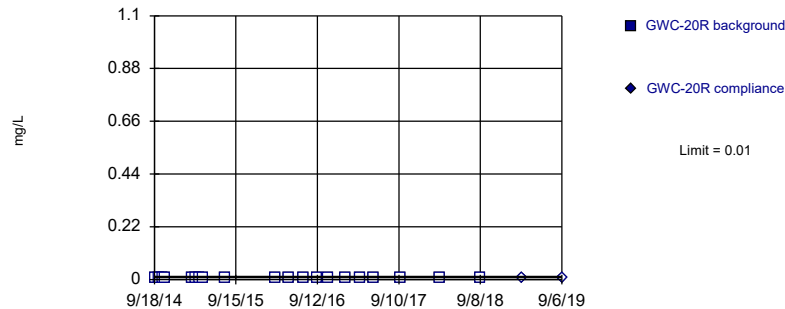


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

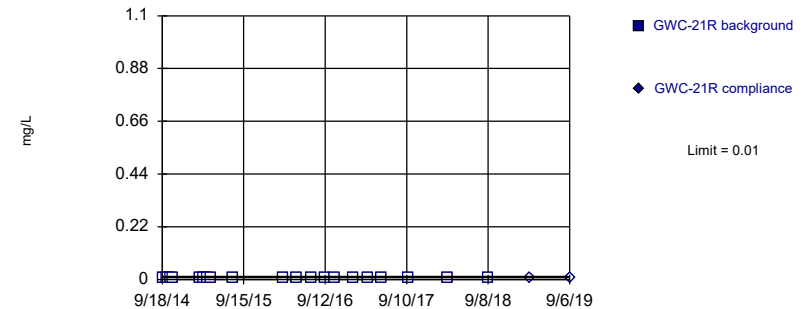


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

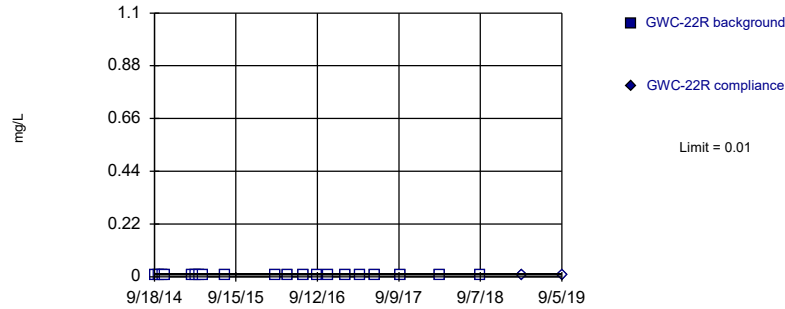


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

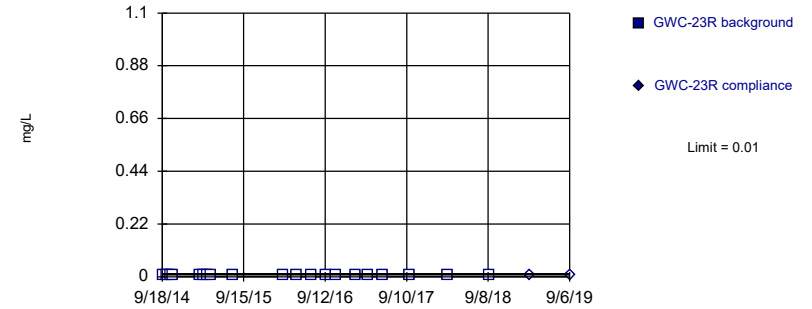


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

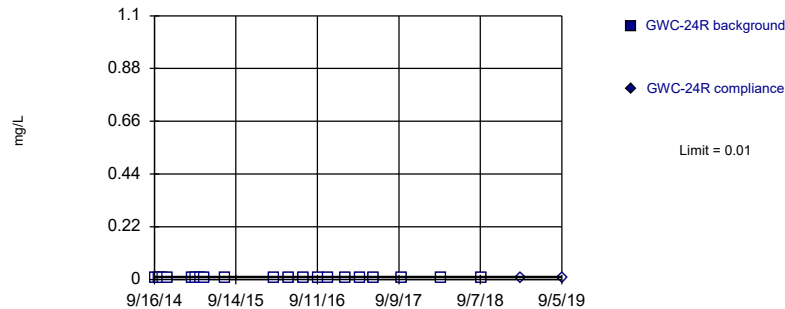


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

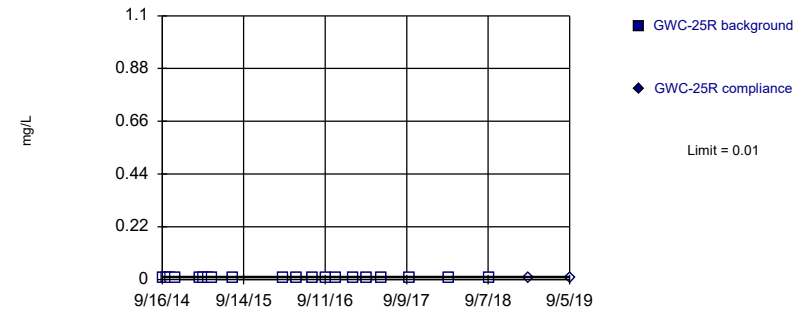


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

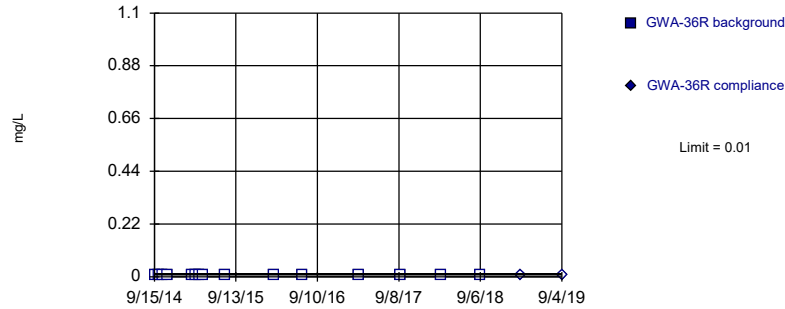
Prediction Limit Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

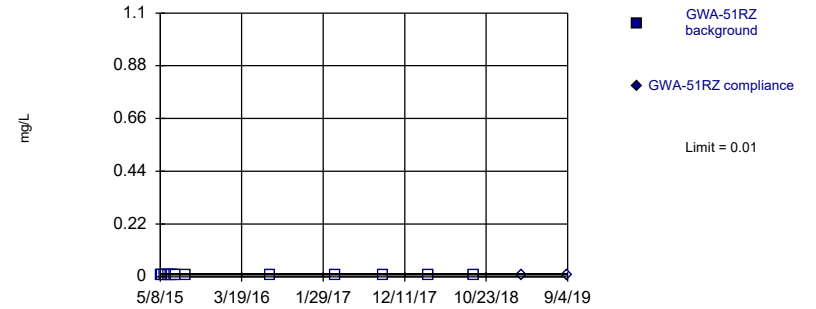
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

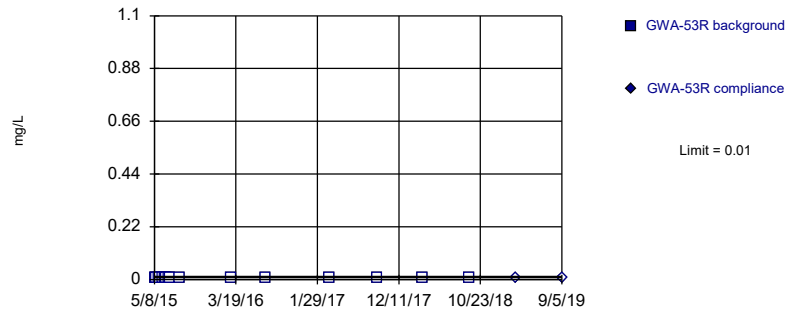
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 14) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

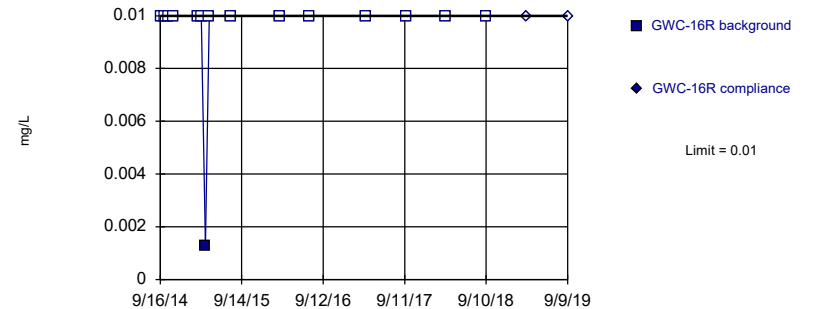
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit Prediction Limit
 Intrawell Non-parametric

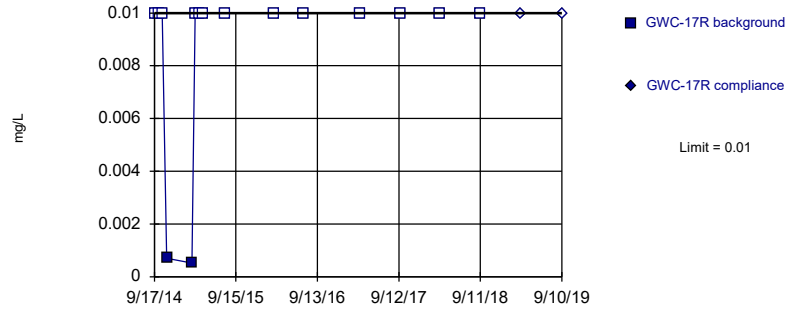


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

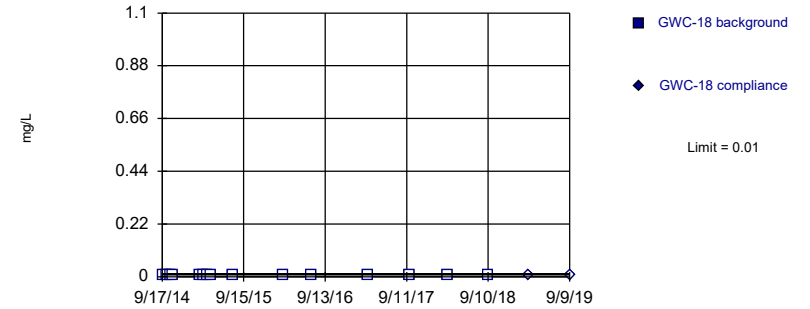


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

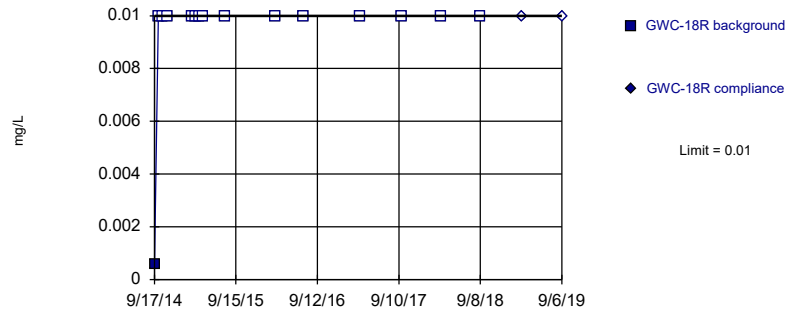


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

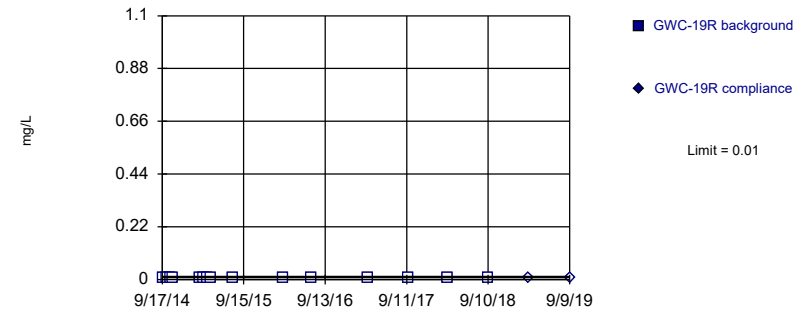


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

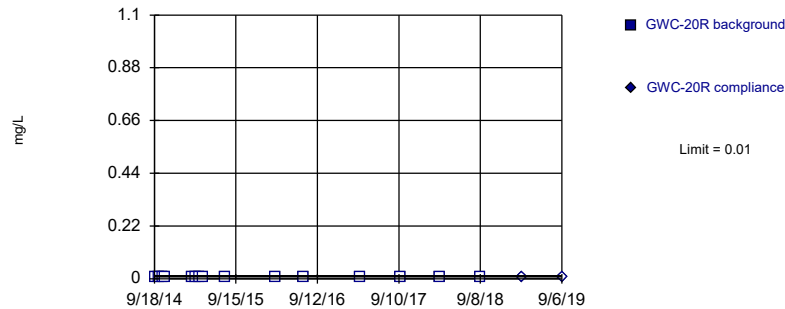


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

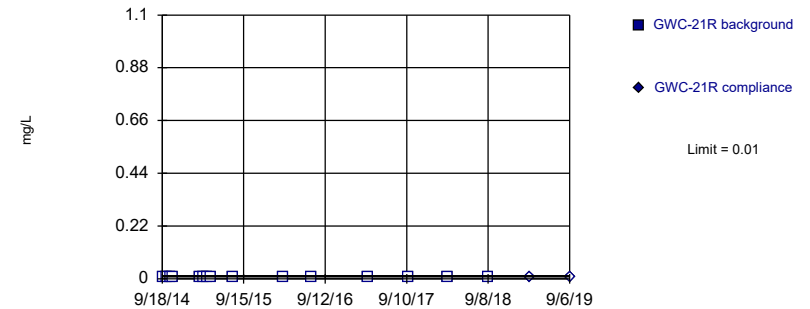


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

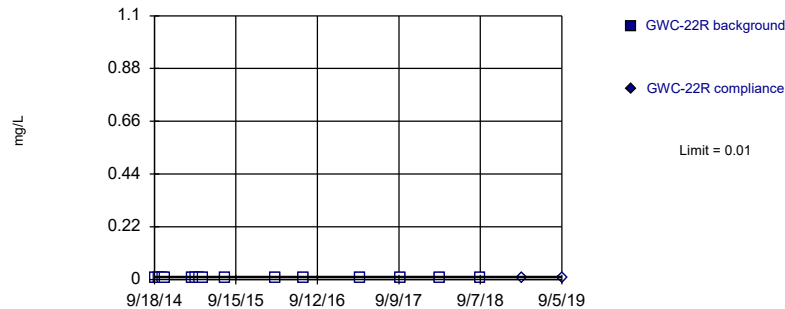


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:17 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

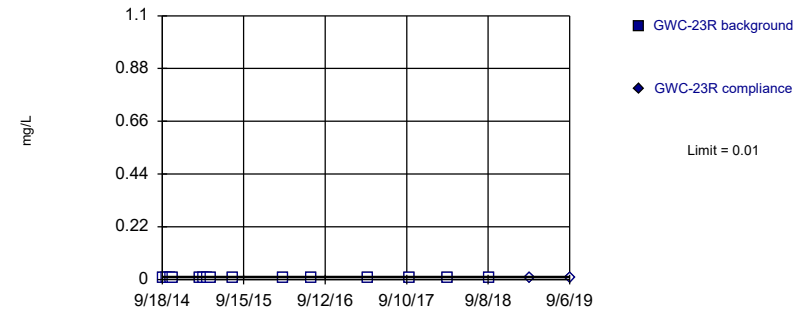


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

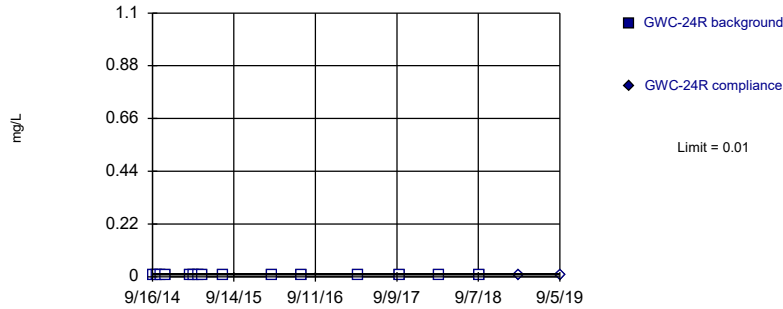


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

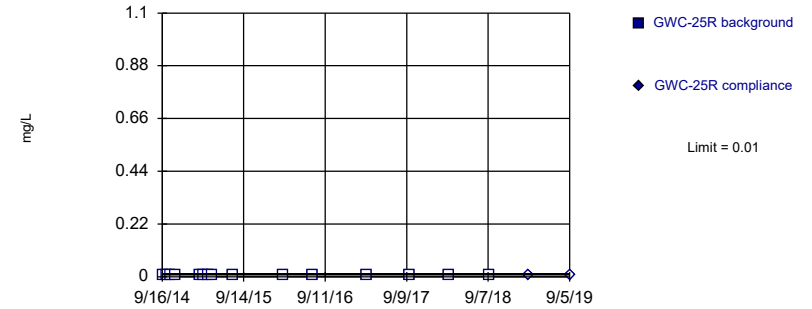


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

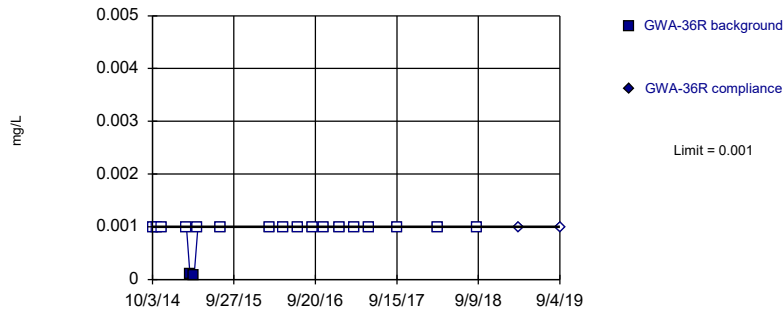


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

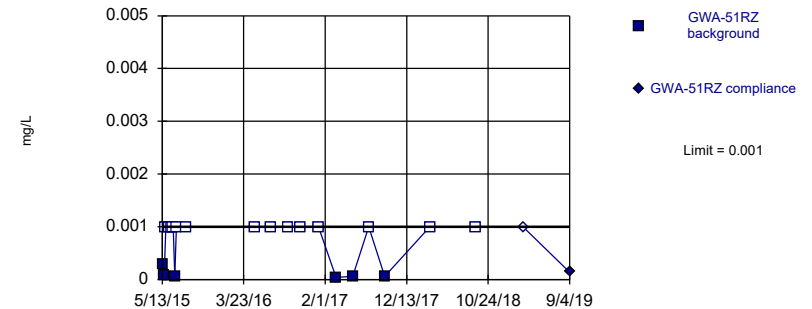


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

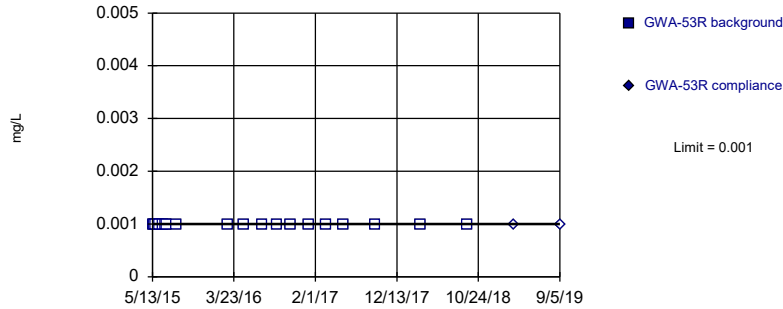


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

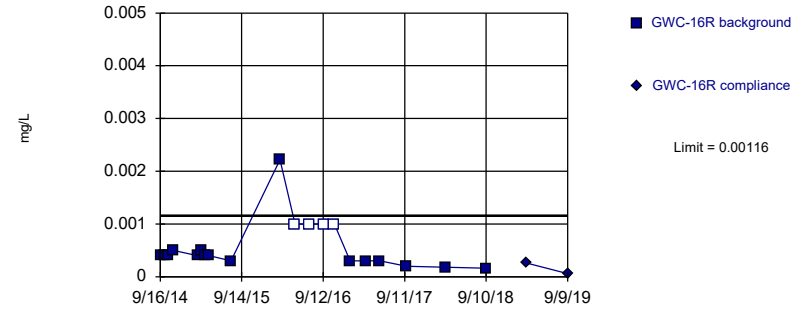


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 19) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

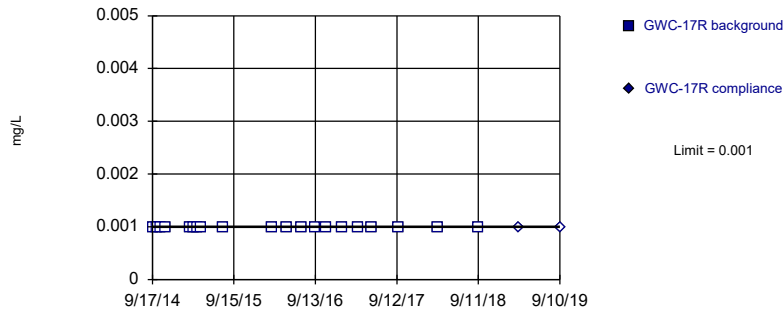


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-8.321, Std. Dev.=0.6089, n=20, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9187, critical = 0.868. Kappa = 2.565 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

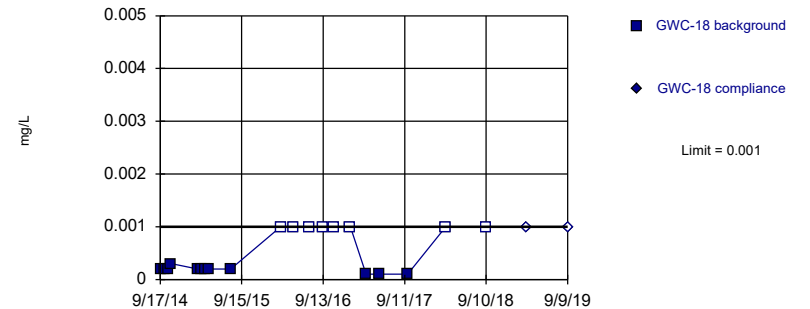


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

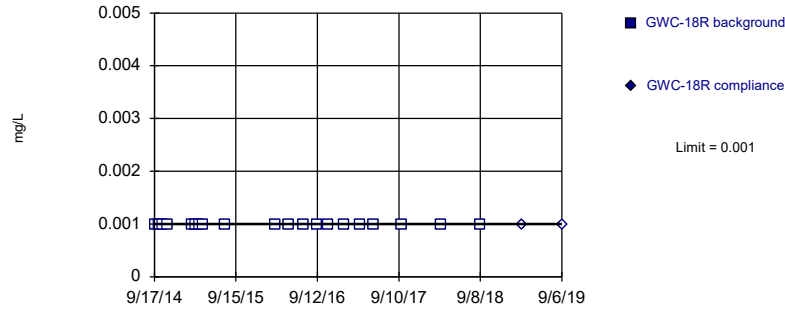


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

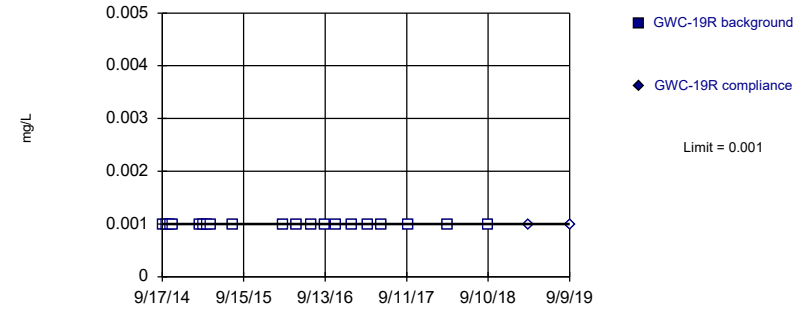


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

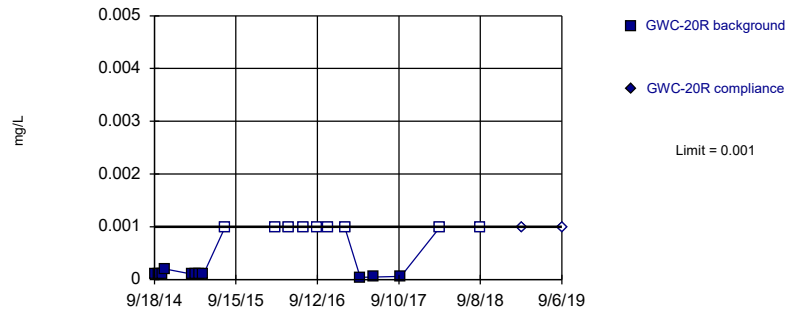


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

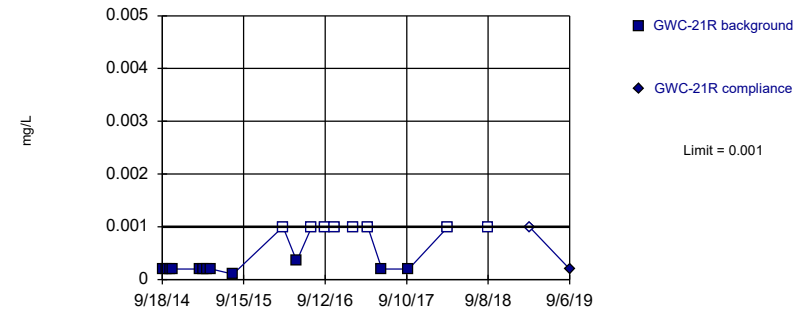


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 45% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

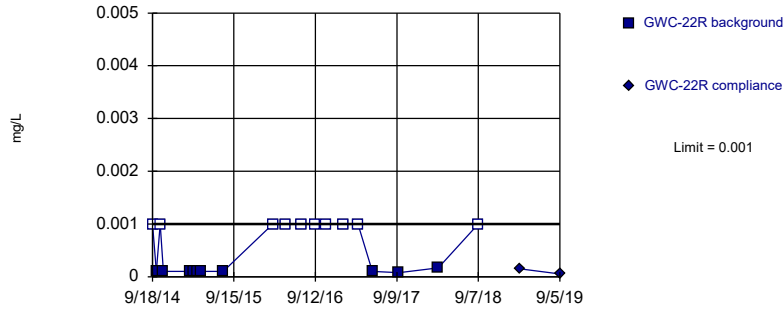


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

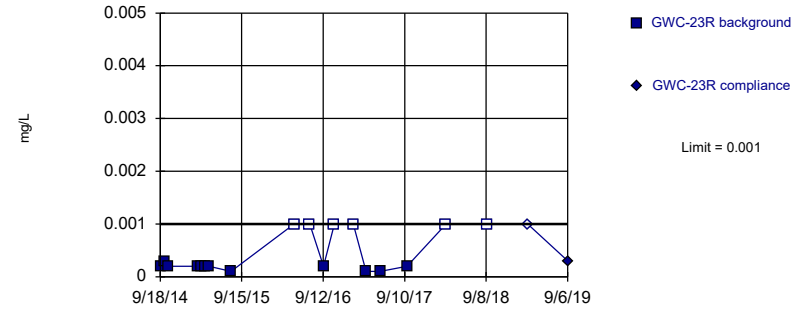


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

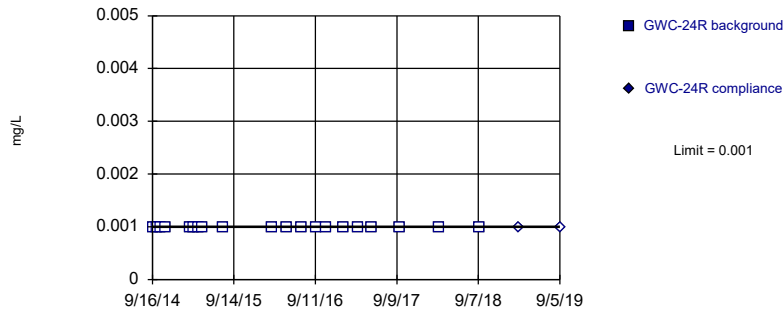


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 18 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

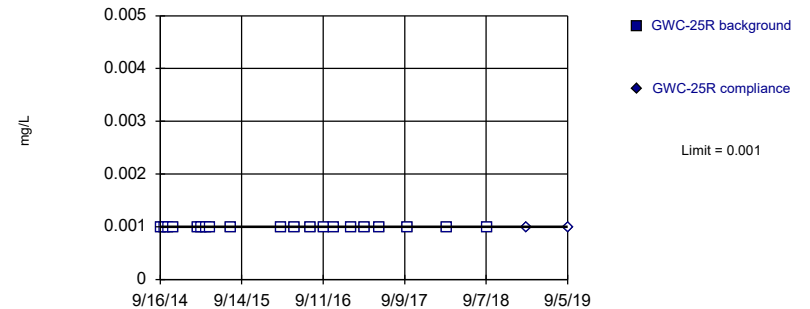


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

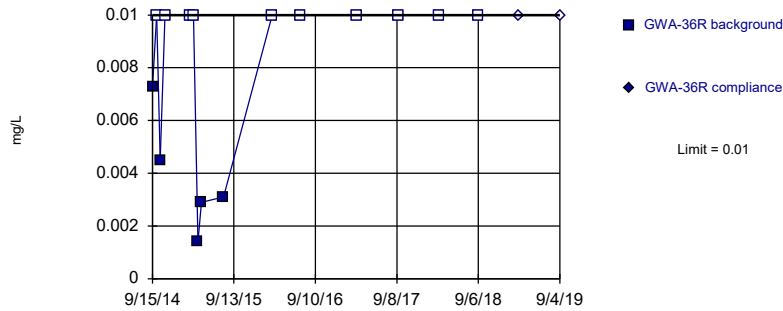


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

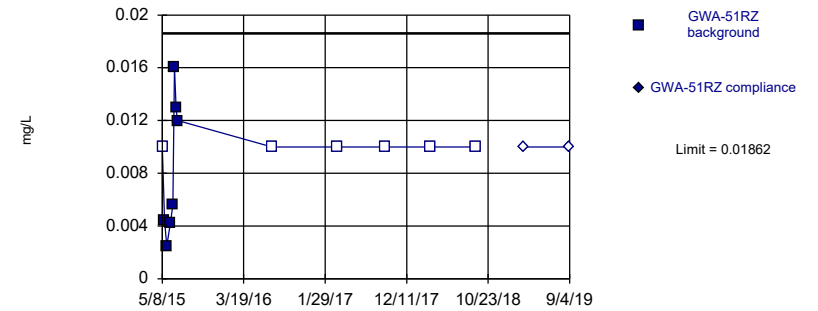


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

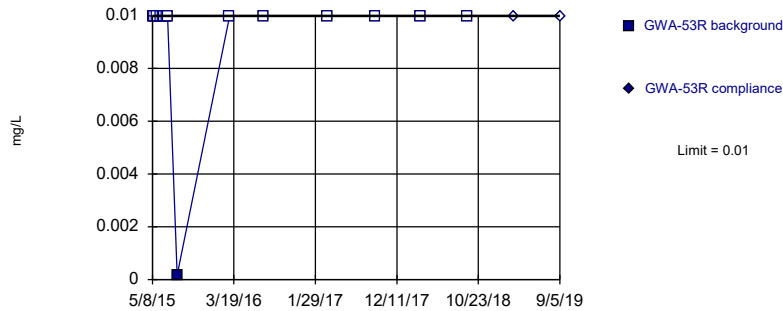


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.006365, Std. Dev.=0.004195, n=13, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9127, critical = 0.814. Kappa = 2.92 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

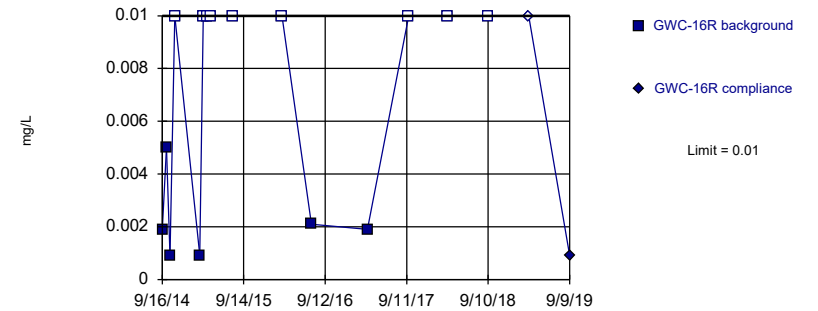


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

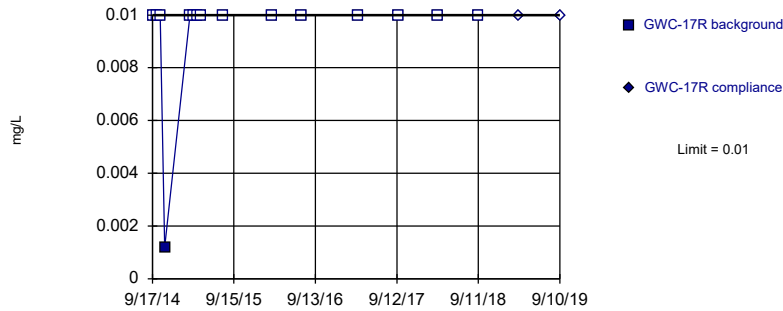


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

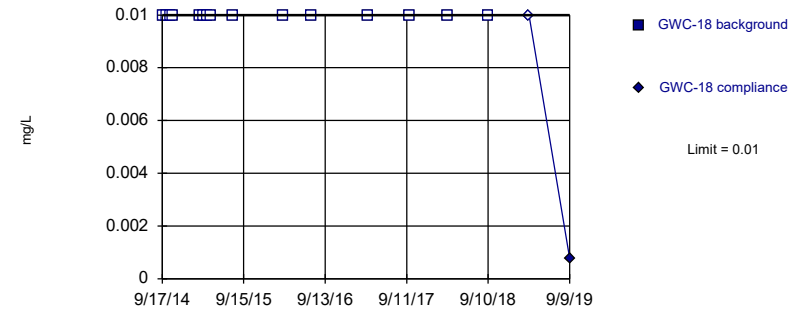


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

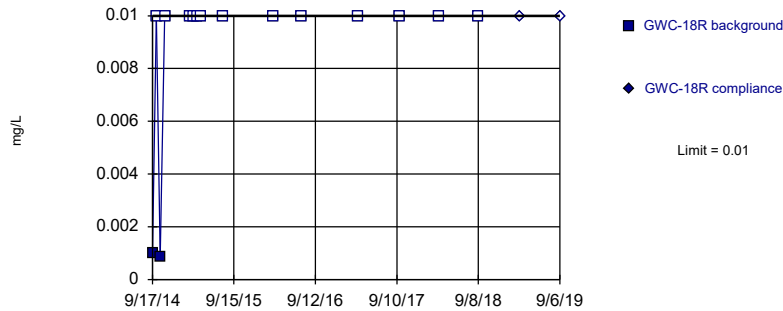


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

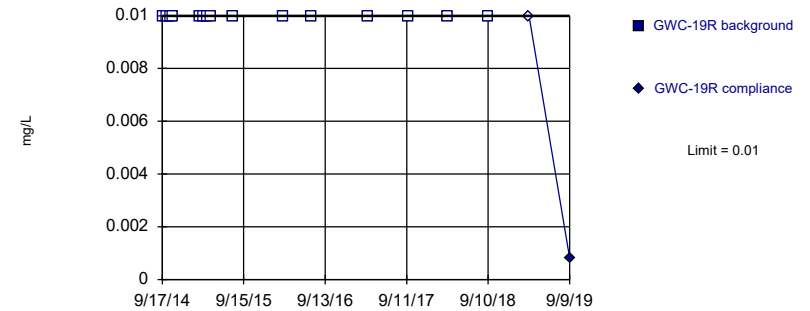


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

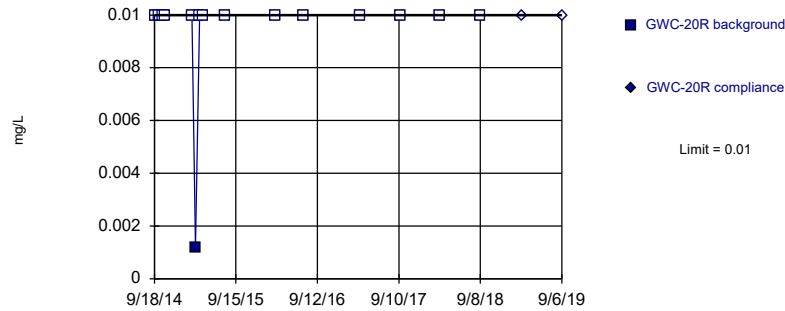


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

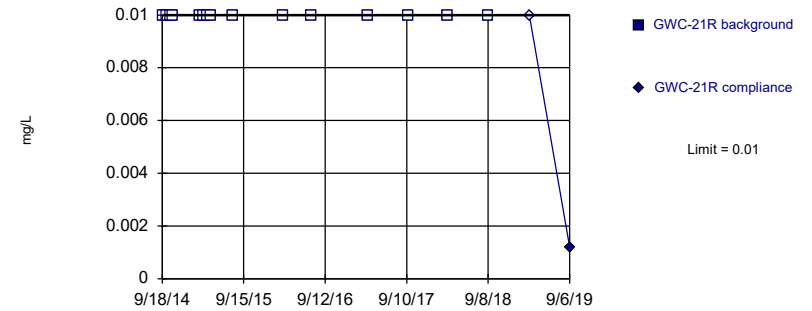


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

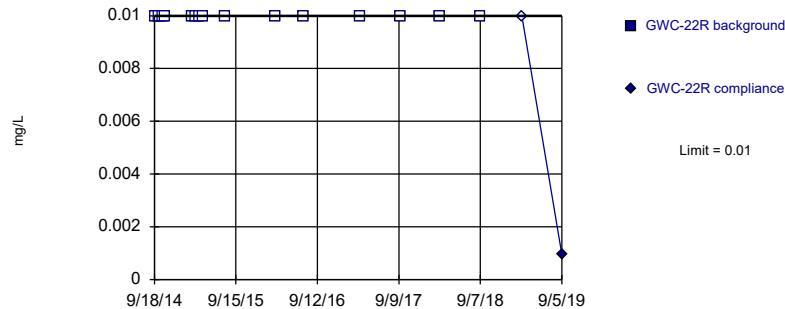


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

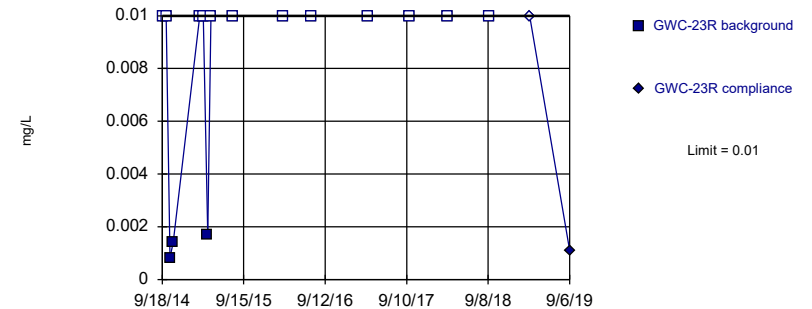


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

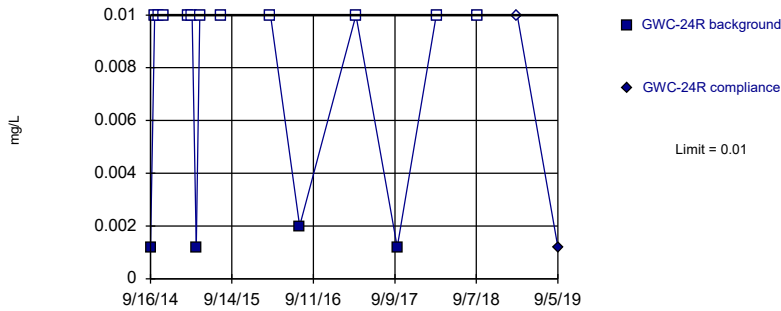


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

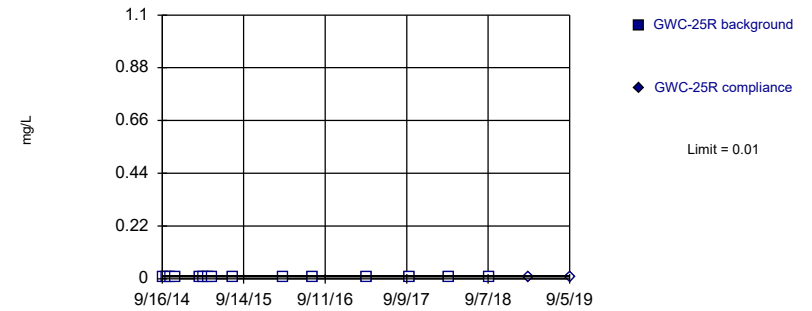


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 73.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

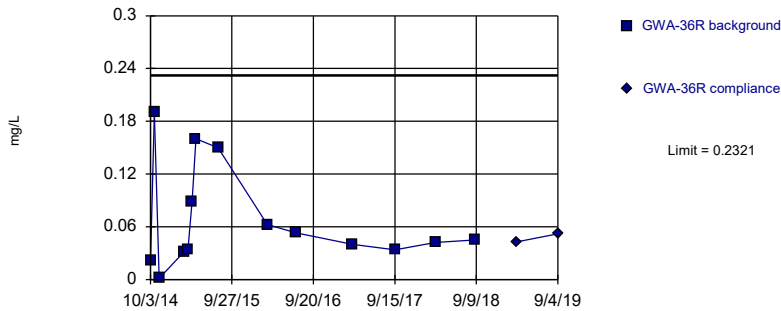


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 15) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Parametric

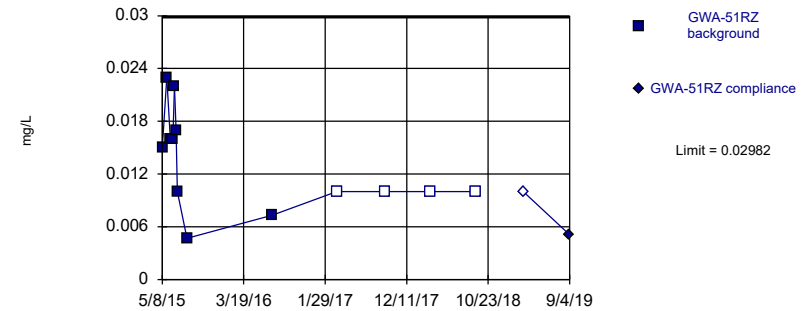


Background Data Summary: Mean=0.06816, Std. Dev.=0.05752, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.828, critical = 0.825. Kappa = 2.85 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

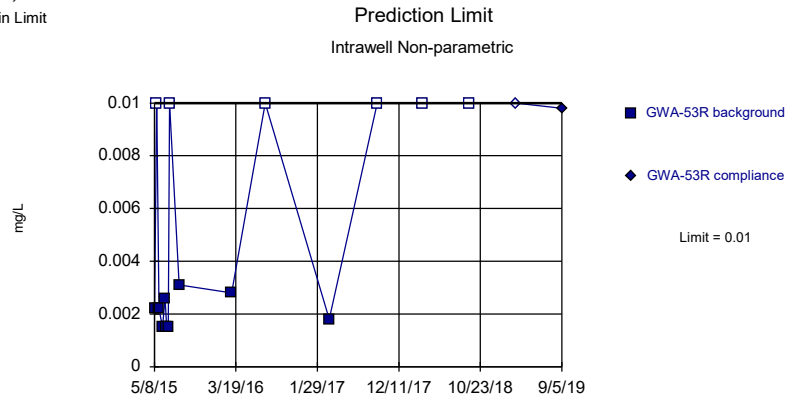
Prediction Limit
 Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.01128, Std. Dev.=0.00635, n=13, 30.77% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.921, critical = 0.814. Kappa = 2.92 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

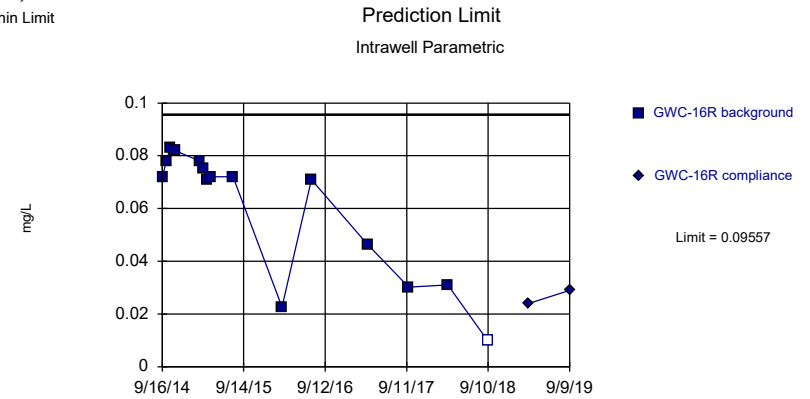
Within Limit



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

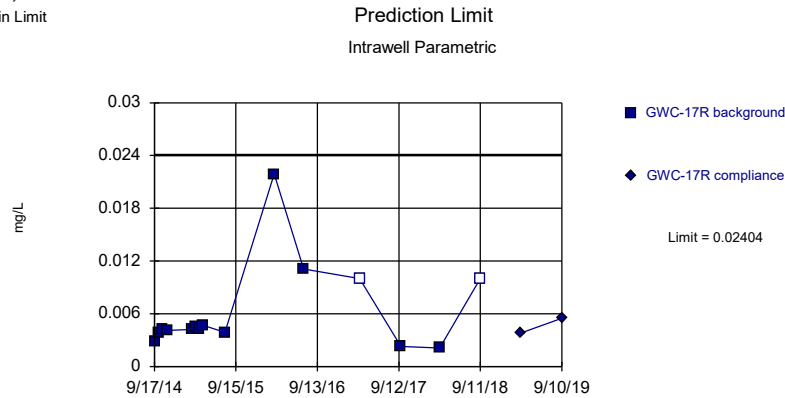
Within Limit



Background Data Summary (based on cube transformation): Mean=0.0002999, Std. Dev.=0.0002062, n=15, 6.667% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8545, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

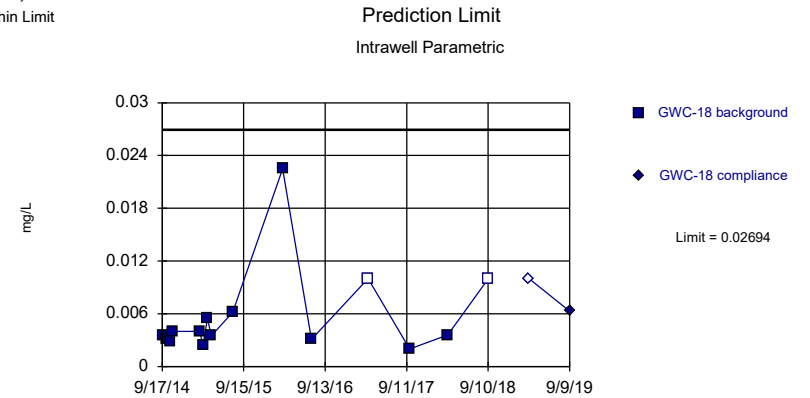
Within Limit



Background Data Summary (based on cube root transformation): Mean=0.1752, Std. Dev.=0.04079, n=15, 13.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8411, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

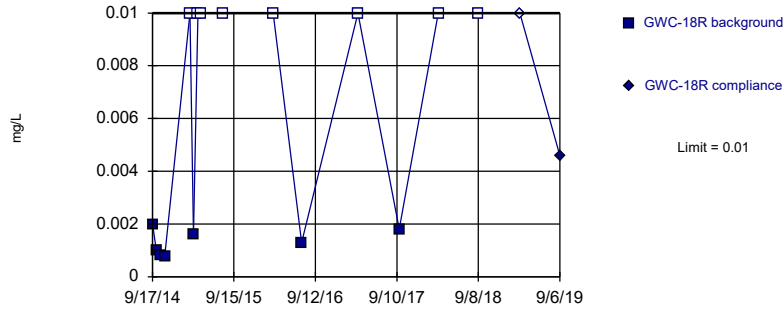


Background Data Summary (based on natural log transformation): Mean=-5.394, Std. Dev.=0.6405, n=15, 13.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8867, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

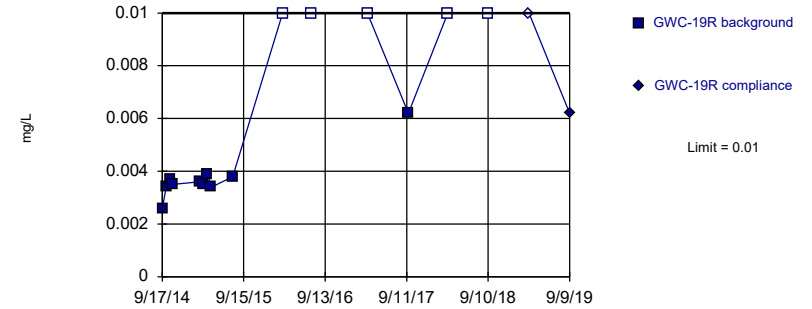


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

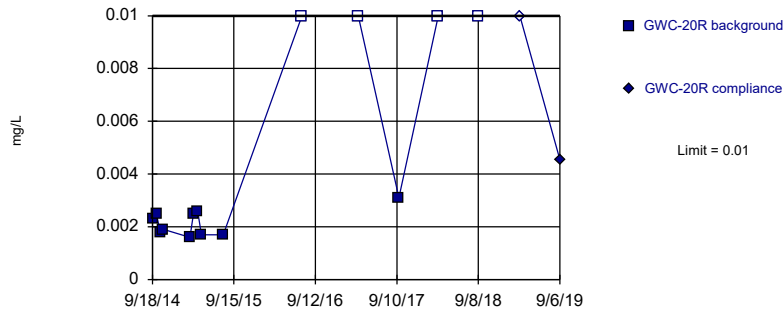


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

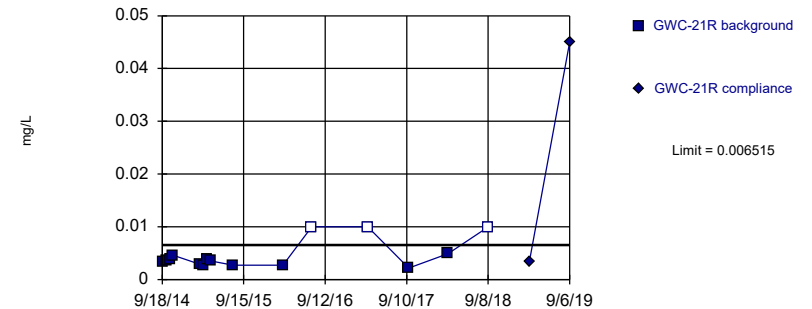


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 28.57% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

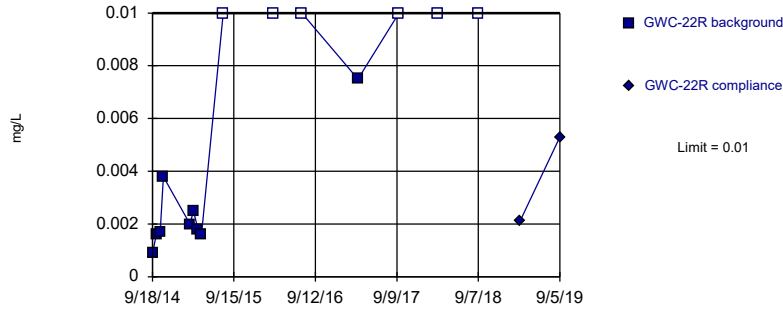


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.726, Std. Dev.=0.2492, n=15, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8434, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

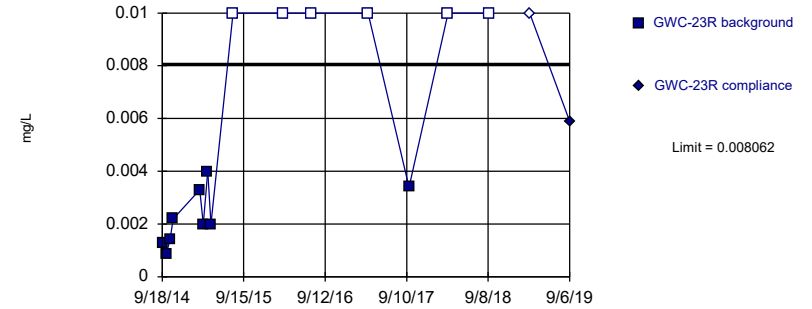


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

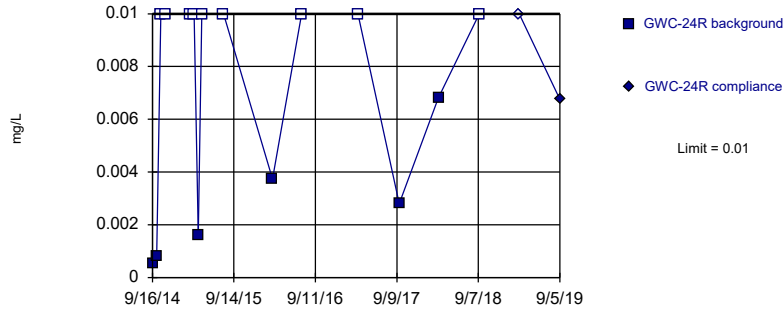


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.256, Std. Dev.=0.5164, n=15, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8588, critical = 0.835. Kappa = 2.779 (c=16, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.0002993.

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

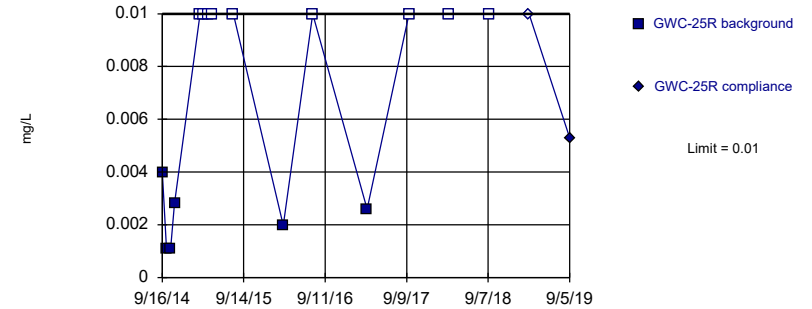


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 10:18 AM View: Bedrock & Overburden
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Intrawell Prediction Limit Summary - Cells 3 & 4 Bedrock Wells (Significant)

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 9:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-21R	0.0064	n/a	9/6/2019	0.01	Yes	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-21R	0.0377	n/a	9/6/2019	0.041	Yes	20	n/a	n/a	0	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-21R	0.006455	n/a	9/6/2019	0.045	Yes	15	-5.726	0.2492	20	Kaplan-Meier	ln(x)	0.0003292	Param Intra 1 of 2

Intrawell Prediction Limit Summary - Cells 3 & 4 Bedrock Wells (All Results)

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 9:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg	N Bg	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-51R_51RZ	0.0033	n/a	3/8/2019	0.003ND	No	19	n/a	n/a	68.42	n/a	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWA-53R	0.0034	n/a	9/5/2019	0.00035	No	20	n/a	n/a	60	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-16R	0.0187	n/a	9/9/2019	0.011	No	20	n/a	n/a	50	n/a	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Antimony (mg/L)	GWC-17R	0.003	n/a	9/10/2019	0.003ND	No	20	n/a	n/a	90	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-18R	0.003	n/a	9/6/2019	0.00028	No	20	n/a	n/a	85	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-21R	0.0064	n/a	9/6/2019	0.01	Yes	20	n/a	n/a	50	n/a	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Antimony (mg/L)	GWC-23R	0.003	n/a	9/6/2019	0.00029	No	20	n/a	n/a	80	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-24R	0.005	n/a	9/5/2019	0.00031	No	17	n/a	n/a	64.71	n/a	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-25R	0.003	n/a	9/5/2019	0.003ND	No	19	n/a	n/a	68.42	n/a	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-36R	0.005	n/a	9/4/2019	0.005ND	No	20	n/a	n/a	80	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWA-51R_51RZ	0.008027	n/a	3/8/2019	0.005ND	No	19	0.002535	0.002138	36.84	Kaplan-Meier	No	No	0.0003292	Param Intra 1 of 2
Arsenic (mg/L)	GWA-53R	0.005	n/a	9/5/2019	0.00046	No	20	n/a	n/a	90	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-16R	0.005	n/a	9/9/2019	0.00094	No	19	n/a	n/a	68.42	n/a	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-17R	0.005	n/a	9/10/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-18R	0.005	n/a	9/6/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-19R	0.005	n/a	9/9/2019	0.00082	No	20	n/a	n/a	90	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-20R	0.005	n/a	9/6/2019	0.00047	No	20	n/a	n/a	85	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-21R	0.005	n/a	9/6/2019	0.0024	No	19	n/a	n/a	68.42	n/a	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-22R	0.005	n/a	9/5/2019	0.0024	No	20	n/a	n/a	80	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-23R	0.005	n/a	9/6/2019	0.00054	No	20	n/a	n/a	90	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-24R	0.005	n/a	9/5/2019	0.0005	No	20	n/a	n/a	75	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Arsenic (mg/L)	GWC-25R	0.005	n/a	9/5/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-36R	0.0341	n/a	9/4/2019	0.026	No	20	0.02211	0.004732	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWA-51R_51RZ	0.03426	n/a	3/8/2019	0.015	No	20	0.01511	0.007558	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWA-53R	0.0163	n/a	9/5/2019	0.014	No	20	0.0144	0.0007501	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWC-16R	0.07858	n/a	9/9/2019	0.03	No	20	0.2188	0.02428	0	None	sqrt(x)	0.0003292	Param Intra 1 of 2	
Barium (mg/L)	GWC-17R	0.0215	n/a	9/10/2019	0.019	No	19	0.01975	0.0006818	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWC-18R	0.01726	n/a	9/6/2019	0.014	No	16	0.01425	0.001127	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWC-19R	0.01843	n/a	9/9/2019	0.015	No	19	0.01597	0.0009569	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWC-20R	0.03588	n/a	9/6/2019	0.0275	No	20	0.02989	0.002362	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWC-21R	0.0377	n/a	9/6/2019	0.041	Yes	20	n/a	n/a	0	n/a	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-22R	0.06487	n/a	9/5/2019	0.045	No	19	0.0402	0.009605	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWC-23R	0.04191	n/a	9/6/2019	0.021	No	20	0.02645	0.006104	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWC-24R	0.0335	n/a	9/5/2019	0.021	No	19	0.02339	0.003934	0	None	No	No	0.0003292	Param Intra 1 of 2
Barium (mg/L)	GWC-25R	0.0167	n/a	9/5/2019	0.016	No	20	n/a	n/a	0	n/a	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWA-36R	0.0032	n/a	9/4/2019	0.003ND	No	20	n/a	n/a	50	n/a	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWA-51R_51RZ	0.003	n/a	3/8/2019	0.003ND	No	20	n/a	n/a	95	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWA-53R	0.003	n/a	9/5/2019	0.003ND	No	20	n/a	n/a	95	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-18R	0.003	n/a	9/6/2019	0.003ND	No	20	n/a	n/a	90	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-19R	0.003	n/a	9/9/2019	0.003ND	No	20	n/a	n/a	90	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-20R	0.003	n/a	9/6/2019	0.003ND	No	20	n/a	n/a	95	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWA-36R	0.001	n/a	9/4/2019	0.00016	No	20	n/a	n/a	40	n/a	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Cadmium (mg/L)	GWA-51R_51RZ	0.001	n/a	3/8/2019	0.001ND	No	20	n/a	n/a	90	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-21R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-22R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-25R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-36R	0.01	n/a	9/4/2019	0.0013	No	20	n/a	n/a	65	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-51R_51RZ	0.02	n/a	3/8/2019	0.01ND	No	17	n/a	n/a	58.82	n/a	n/a	n/a	0.005914	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.00055	No	20	n/a	n/a	85	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-16R	0.01	n/a	9/9/2019	0.01ND	No	20	n/a	n/a	65	n/a	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2

Intrawell Prediction Limit Summary - Cells 3 & 4 Bedrock Wells (All Results) Page 2

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 9:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GWC-17R	0.01	n/a	9/10/2019	0.01ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.00053	No	16	n/a	n/a	68.75	n/a	n/a	0.006456	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.00056	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.00071	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-21R	0.01	n/a	9/6/2019	0.00078	No	20	n/a	n/a	65	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.01ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-23R	0.01	n/a	9/6/2019	0.01ND	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Chromium (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.00044	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-36R	0.0039	n/a	9/4/2019	0.0025ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWA-51R_51RZ	0.01	n/a	3/8/2019	0.01ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-16R	0.005096	n/a	9/9/2019	0.0025ND	No	20	0.001806	0.001298	15	None	No	0.0003292	Param Intra 1 of 2
Cobalt (mg/L)	GWC-18R	0.0025	n/a	9/6/2019	0.0025ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-21R	0.0183	n/a	9/6/2019	0.00051	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.0012	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-25R	0.0025	n/a	9/5/2019	0.0025ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-36R	0.025	n/a	9/4/2019	0.025ND	No	15	n/a	n/a	66.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-51R_51RZ	0.025	n/a	3/8/2019	0.025ND	No	14	n/a	n/a	64.29	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWA-53R	0.025	n/a	9/5/2019	0.025ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-16R	0.025	n/a	9/9/2019	0.00082	No	15	n/a	n/a	13.33	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Copper (mg/L)	GWC-17R	0.025	n/a	9/10/2019	0.025ND	No	15	n/a	n/a	40	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Copper (mg/L)	GWC-18R	0.025	n/a	9/6/2019	0.025ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-19R	0.025	n/a	9/9/2019	0.025ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-20R	0.025	n/a	9/6/2019	0.025ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-21R	0.025	n/a	9/6/2019	0.01	No	15	n/a	n/a	53.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-22R	0.025	n/a	9/5/2019	0.025ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-23R	0.025	n/a	9/6/2019	0.00037	No	15	n/a	n/a	66.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Copper (mg/L)	GWC-24R	0.025	n/a	9/5/2019	0.001	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-36R	0.0069	n/a	9/4/2019	0.005ND	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-51R_51RZ	0.005	n/a	3/8/2019	0.005ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWA-53R	0.005	n/a	9/5/2019	0.000083	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-16R	0.005	n/a	9/9/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-17R	0.005	n/a	9/10/2019	0.005ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-18R	0.005	n/a	9/6/2019	0.005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-19R	0.005	n/a	9/9/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-21R	0.005	n/a	9/6/2019	0.0016	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-22R	0.005	n/a	9/5/2019	0.005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-23R	0.005	n/a	9/6/2019	0.000068	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-24R	0.005	n/a	9/5/2019	0.0000905	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Lead (mg/L)	GWC-25R	0.005	n/a	9/5/2019	0.00006	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-36R	0.0005	n/a	9/4/2019	0.0005ND	No	20	n/a	n/a	80	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWA-51R_51RZ	0.0005	n/a	3/8/2019	0.0005ND	No	20	n/a	n/a	75	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-16R	0.0005	n/a	9/9/2019	0.0005ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-17R	0.0005	n/a	9/10/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-18R	0.0005	n/a	9/6/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-19R	0.0005	n/a	9/9/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-20R	0.0005	n/a	9/6/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-21R	0.0005	n/a	9/6/2019	0.0005ND	No	20	n/a	n/a	95	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-22R	0.0005	n/a	9/5/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-23R	0.0005	n/a	9/6/2019	0.0005ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Mercury (mg/L)	GWC-24R	0.0005	n/a	9/5/2019	0.0005ND	No	20	n/a	n/a	90	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2

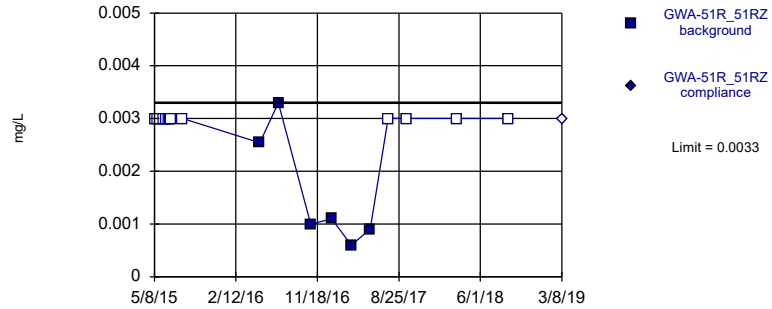
Intrawell Prediction Limit Summary - Cells 3 & 4 Bedrock Wells (All Results) Page 3

Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR Printed 1/15/2020, 9:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Mercury (mg/L)	GWC-25R	0.0005	n/a	9/5/2019	0.0005ND	No	20	n/a	n/a	85	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-36R	0.01	n/a	9/4/2019	0.01ND	No	15	n/a	n/a	53.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWA-51R_51RZ	0.01	n/a	3/8/2019	0.01ND	No	14	n/a	n/a	85.71	n/a	n/a	0.008612	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-16R	0.02906	n/a	9/9/2019	0.0066	No	11	0.01443	0.004761	0	None	No	0.0003292	Param Intra 1 of 2
Nickel (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-21R	0.01	n/a	9/6/2019	0.0028	No	14	n/a	n/a	42.86	n/a	n/a	0.008612	NP Intra (normality) 1 of 2
Nickel (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.0011	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-23R	0.01	n/a	9/6/2019	0.00086	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWA-51R_51RZ	0.01	n/a	3/8/2019	0.0052	No	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Silver (mg/L)	GWC-16R	0.01	n/a	9/9/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Silver (mg/L)	GWC-17R	0.01	n/a	9/10/2019	0.01ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-36R	0.001	n/a	9/4/2019	0.001ND	No	19	n/a	n/a	89.47	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWA-51R_51RZ	0.001	n/a	3/8/2019	0.001ND	No	20	n/a	n/a	70	n/a	n/a	0.004291	NP Intra (NDs) 1 of 2
Thallium (mg/L)	GWC-16R	0.001139	n/a	9/9/2019	0.00006	No	20	-8.321	0.6089	20	Kaplan-Meier	ln(x)	0.0003292	Param Intra 1 of 2
Thallium (mg/L)	GWC-20R	0.001	n/a	9/6/2019	0.001ND	No	20	n/a	n/a	45	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Thallium (mg/L)	GWC-21R	0.001	n/a	9/6/2019	0.0002	No	20	n/a	n/a	40	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Thallium (mg/L)	GWC-22R	0.001	n/a	9/5/2019	0.000055	No	20	n/a	n/a	50	n/a	n/a	0.004291	NP Intra (normality) 1 of 2
Thallium (mg/L)	GWC-23R	0.001	n/a	9/6/2019	0.0003	No	18	n/a	n/a	33.33	n/a	n/a	0.005373	NP Intra (normality) 1 of 2
Vanadium (mg/L)	GWA-36R	0.01	n/a	9/4/2019	0.01ND	No	15	n/a	n/a	66.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWA-51R_51RZ	0.01844	n/a	3/8/2019	0.01ND	No	13	0.006365	0.004195	46.15	Kaplan-Meier	No	0.0003292	Param Intra 1 of 2
Vanadium (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-16R	0.01	n/a	9/9/2019	0.00091	No	15	n/a	n/a	60	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-17R	0.01	n/a	9/10/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	86.67	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.01ND	No	15	n/a	n/a	93.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-23R	0.01	n/a	9/6/2019	0.0011	No	15	n/a	n/a	80	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Vanadium (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.0012	No	15	n/a	n/a	73.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWA-36R	0.2298	n/a	9/4/2019	0.052	No	14	0.06816	0.05752	0	None	No	0.0003292	Param Intra 1 of 2
Zinc (mg/L)	GWA-51R_51RZ	0.02956	n/a	3/8/2019	0.01ND	No	13	0.01128	0.00635	30.77	Kaplan-Meier	No	0.0003292	Param Intra 1 of 2
Zinc (mg/L)	GWA-53R	0.01	n/a	9/5/2019	0.0098	No	15	n/a	n/a	40	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-16R	0.09529	n/a	9/9/2019	0.029	No	15	0.0002999	0.0002062	6.667	None	x^3	0.0003292	Param Intra 1 of 2
Zinc (mg/L)	GWC-17R	0.02366	n/a	9/10/2019	0.0055	No	15	0.1752	0.04079	13.33	None	x^(1/3)	0.0003292	Param Intra 1 of 2
Zinc (mg/L)	GWC-18R	0.01	n/a	9/6/2019	0.0046	No	15	n/a	n/a	53.33	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-19R	0.01	n/a	9/9/2019	0.0062	No	15	n/a	n/a	33.33	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-20R	0.01	n/a	9/6/2019	0.00455	No	14	n/a	n/a	28.57	n/a	n/a	0.008612	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-21R	0.006455	n/a	9/6/2019	0.045	Yes	15	-5.726	0.2492	20	Kaplan-Meier	ln(x)	0.0003292	Param Intra 1 of 2
Zinc (mg/L)	GWC-22R	0.01	n/a	9/5/2019	0.0053	No	15	n/a	n/a	40	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Zinc (mg/L)	GWC-23R	0.007909	n/a	9/6/2019	0.0059	No	15	-6.256	0.5164	40	Kaplan-Meier	ln(x)	0.0003292	Param Intra 1 of 2
Zinc (mg/L)	GWC-24R	0.01	n/a	9/5/2019	0.00675	No	15	n/a	n/a	60	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2
Zinc (mg/L)	GWC-25R	0.01	n/a	9/5/2019	0.0053	No	15	n/a	n/a	60	n/a	n/a	0.007533	NP Intra (NDs) 1 of 2

Within Limit

Prediction Limit
 Intrawell Non-parametric

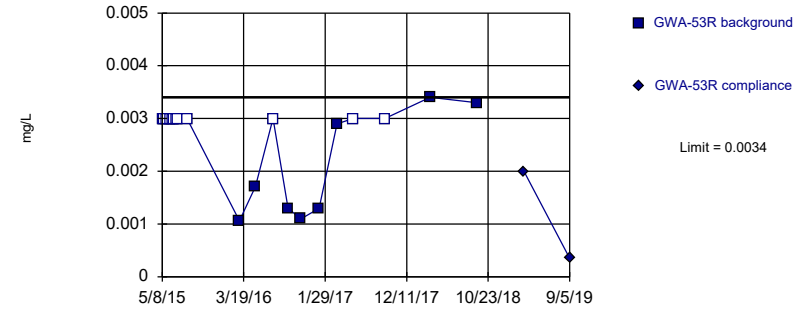


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:42 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

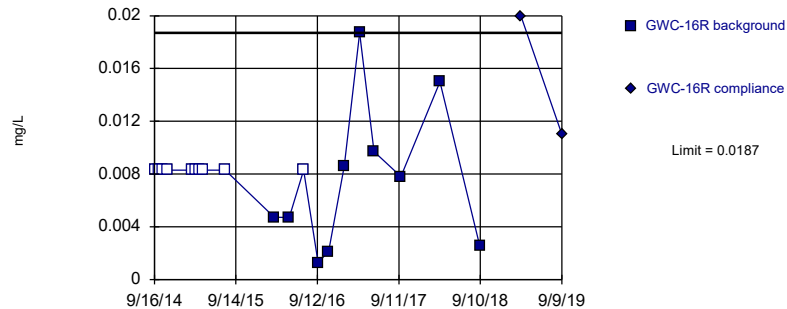


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 60% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:42 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

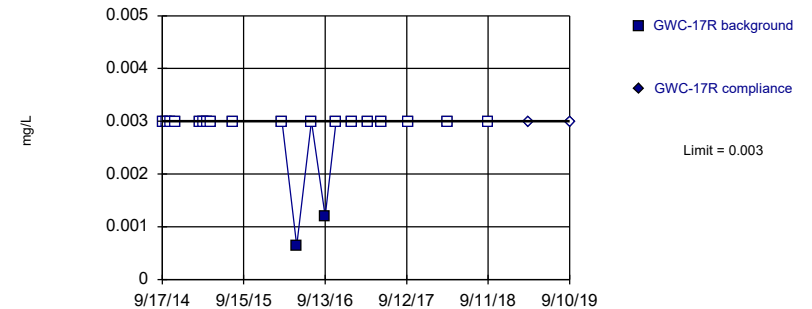


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:42 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

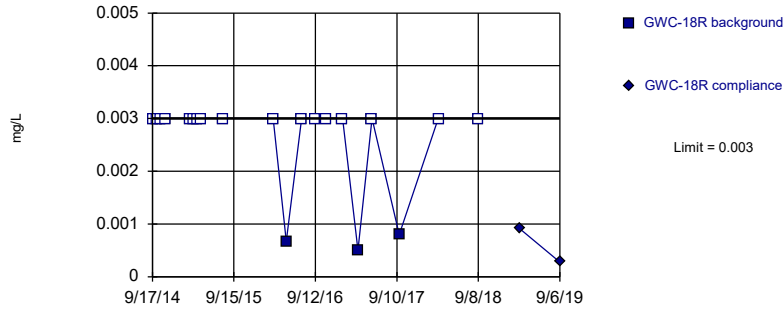


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:42 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

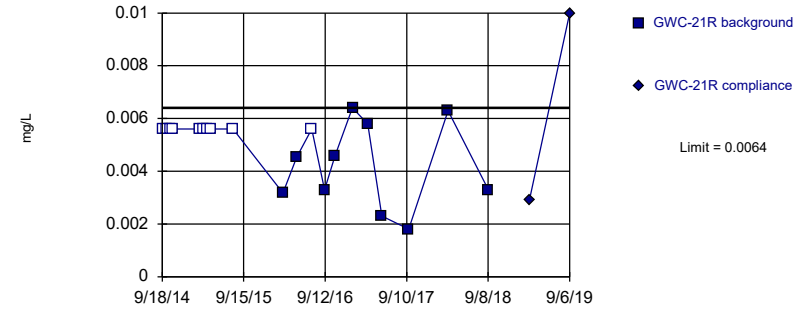


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:42 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Exceeds Limit

Prediction Limit
Intrawell Non-parametric

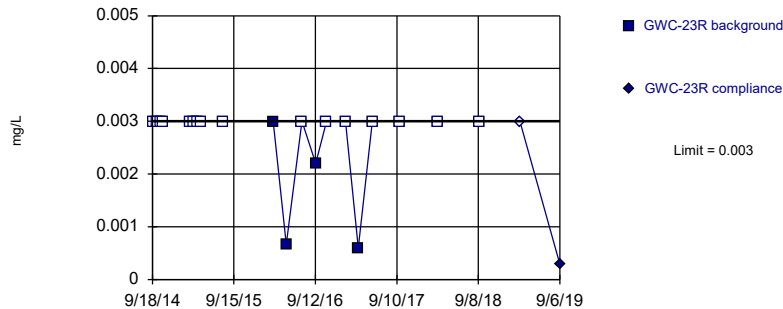


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

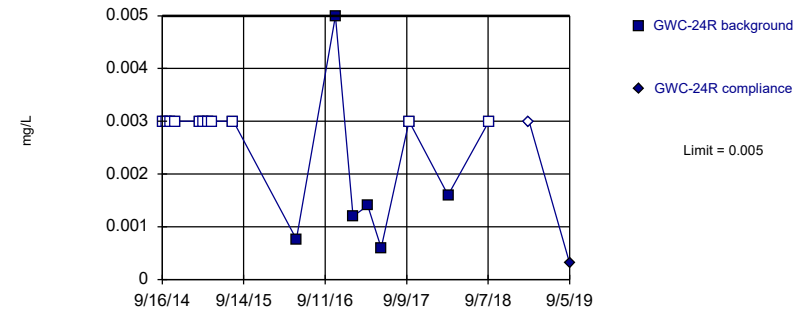


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

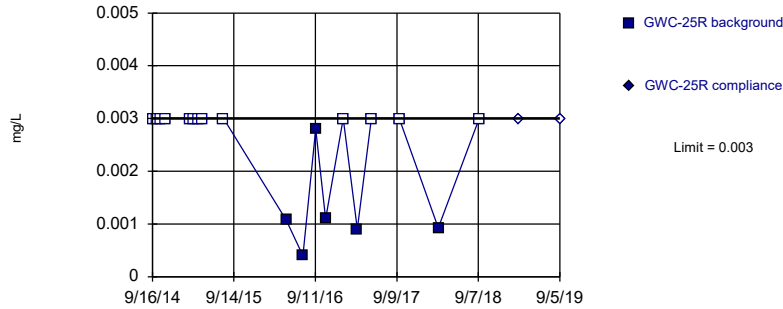


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 64.71% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

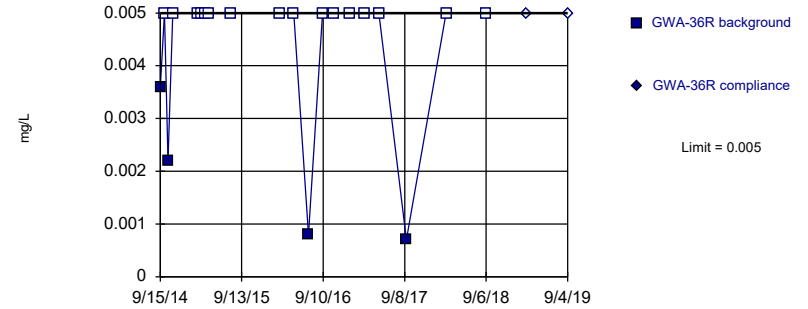


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Antimony Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

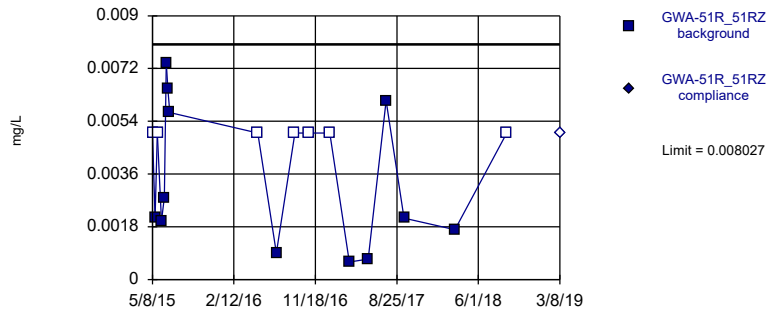


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

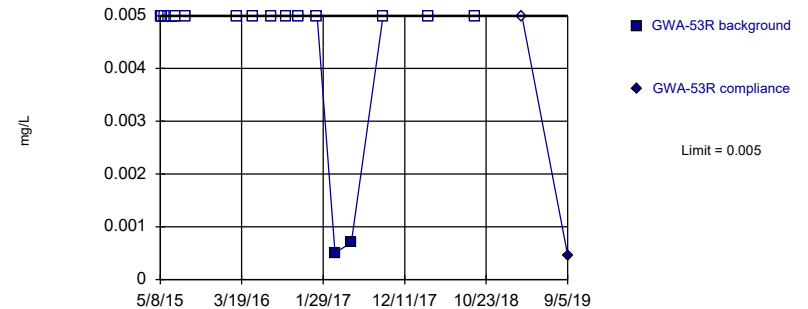


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002535, Std. Dev.=0.002138, n=19, 36.84% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8967, critical = 0.863. Kappa = 2.569 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

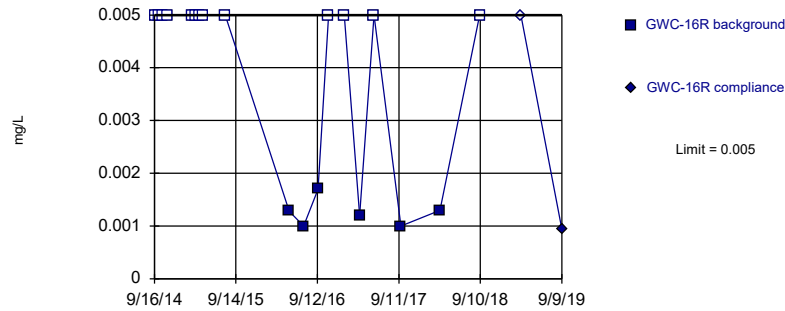


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

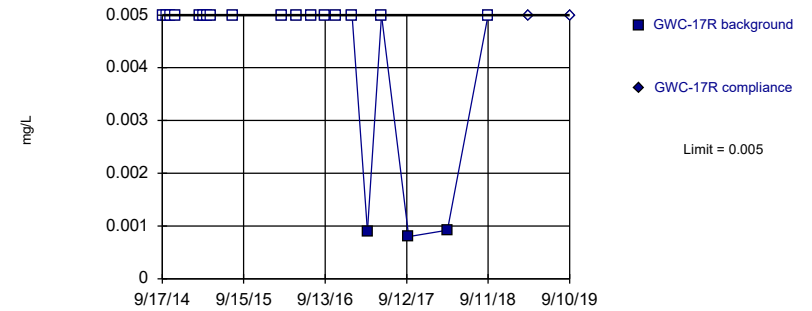


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

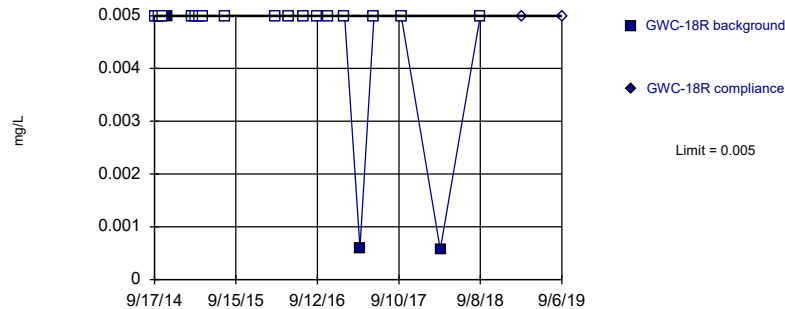


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

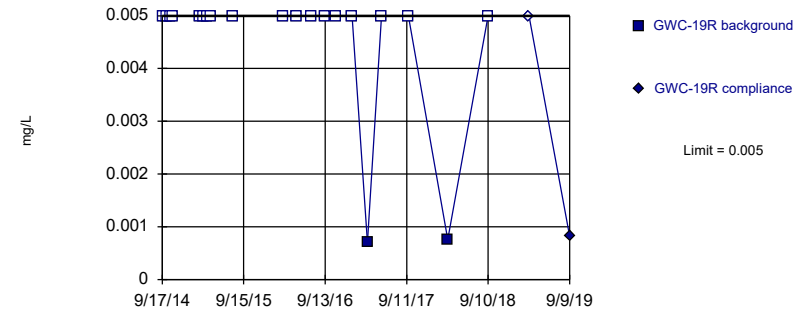


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric



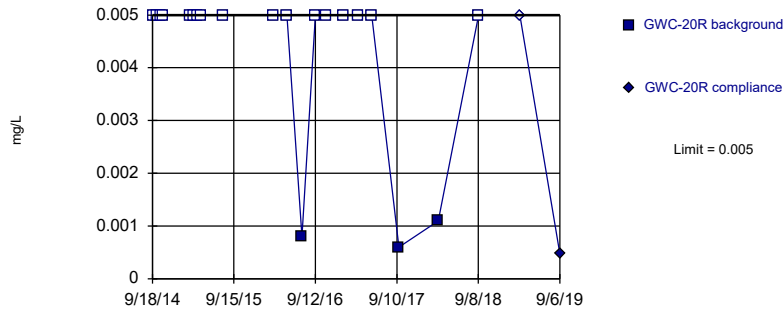
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



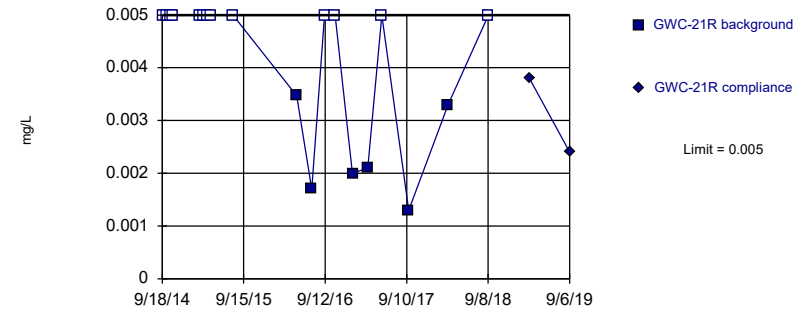
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



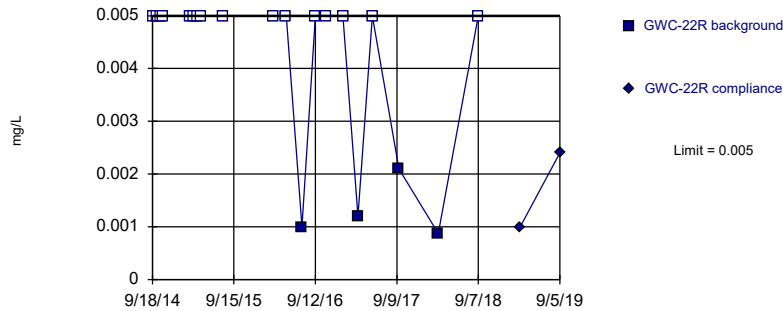
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 68.42% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



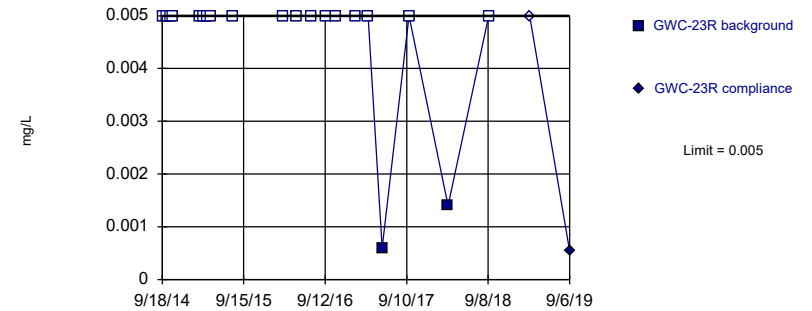
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

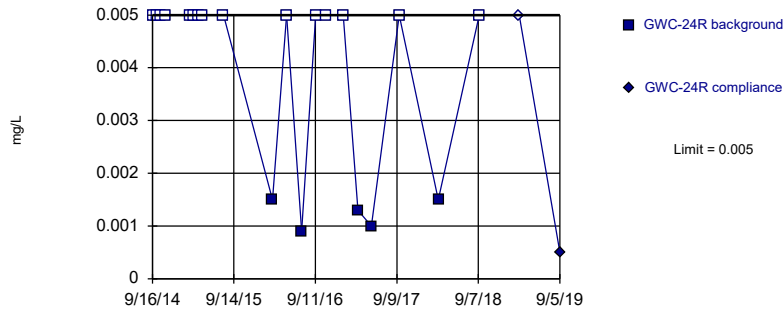


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

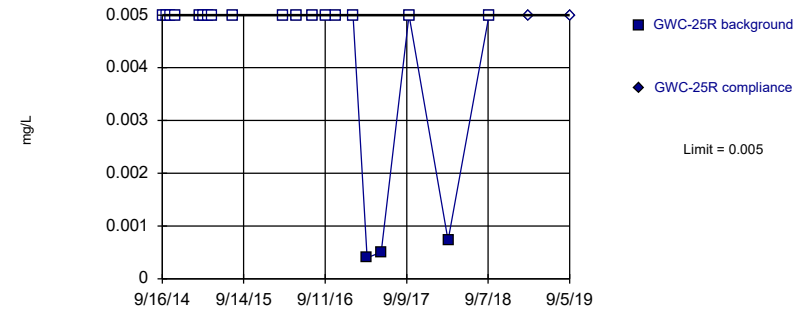


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

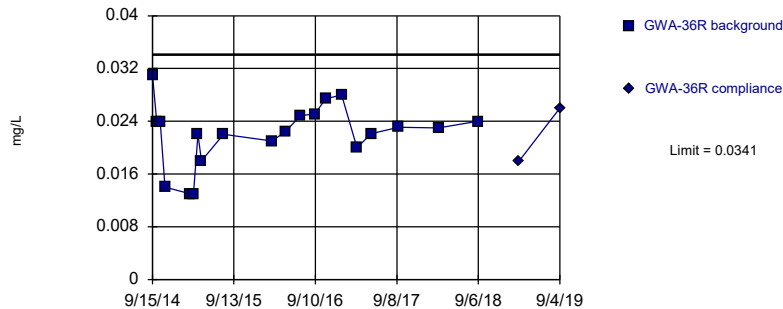


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Arsenic Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Parametric

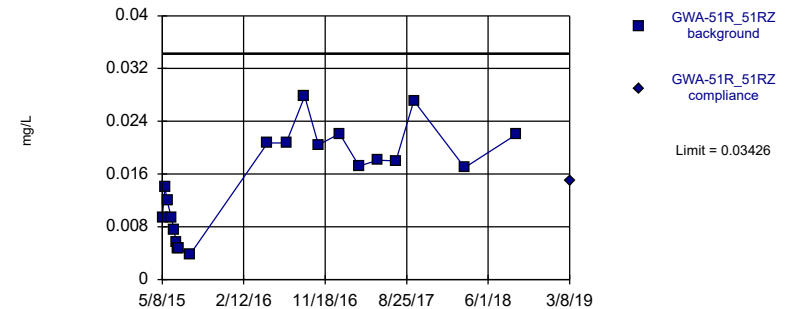


Background Data Summary: Mean=0.02211, Std. Dev.=0.004732, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.868. Kappa = 2.534 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Parametric

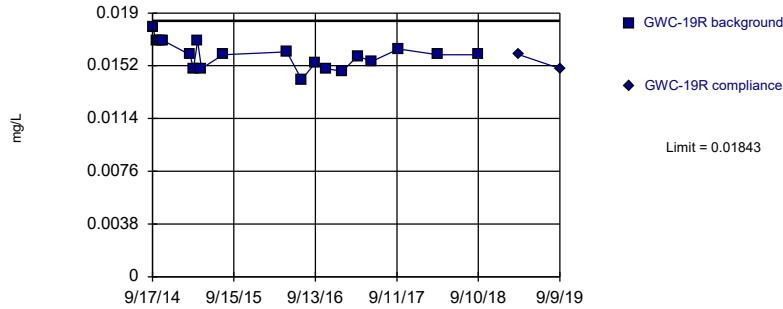


Background Data Summary: Mean=0.01511, Std. Dev.=0.007558, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9362, critical = 0.868. Kappa = 2.534 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Parametric

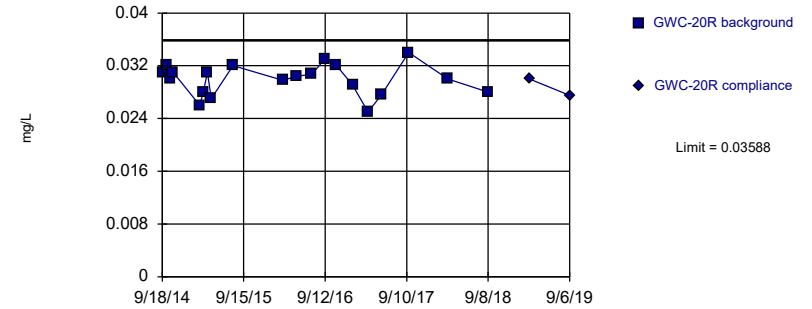


Background Data Summary: Mean=0.01597, Std. Dev.=0.0009569, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9654, critical = 0.863. Kappa = 2.569 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Parametric

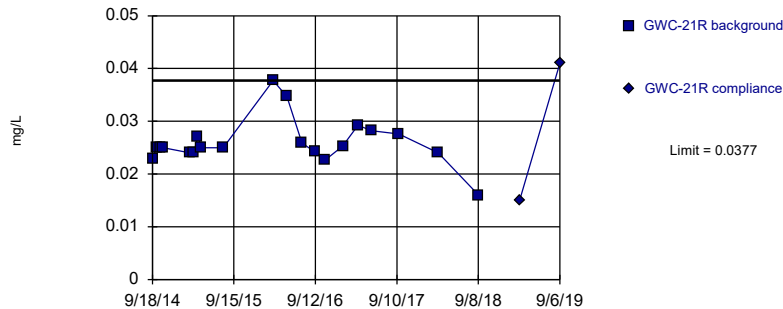


Background Data Summary: Mean=0.02989, Std. Dev.=0.002362, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9722, critical = 0.868. Kappa = 2.534 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Exceeds Limit

Prediction Limit Intrawell Non-parametric

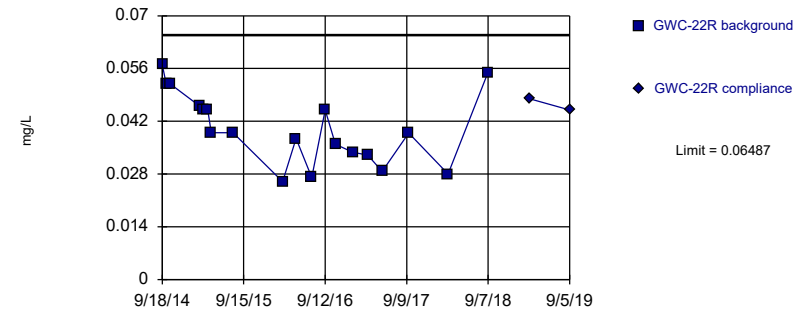


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Parametric

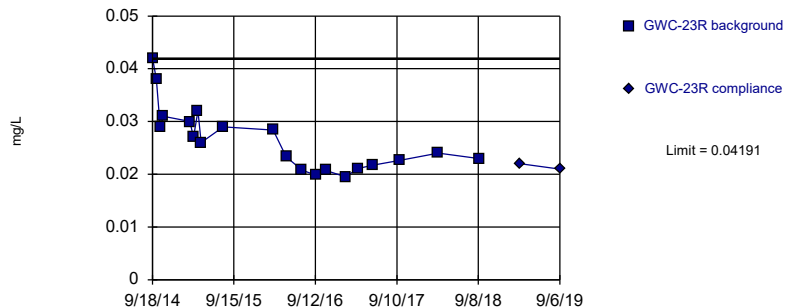


Background Data Summary: Mean=0.0402, Std. Dev.=0.009605, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.951, critical = 0.863. Kappa = 2.569 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Parametric

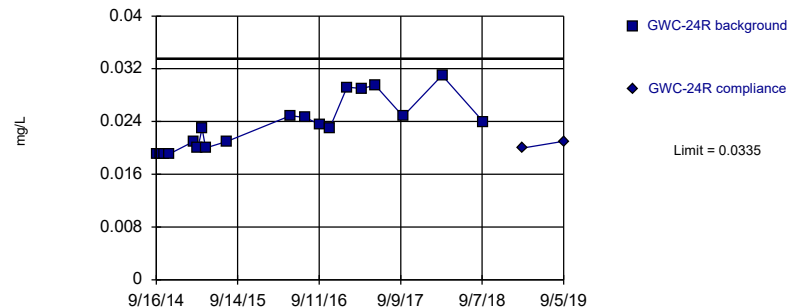


Background Data Summary: Mean=0.02645, Std. Dev.=0.006104, n=20. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8978, critical = 0.868. Kappa = 2.534 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Parametric

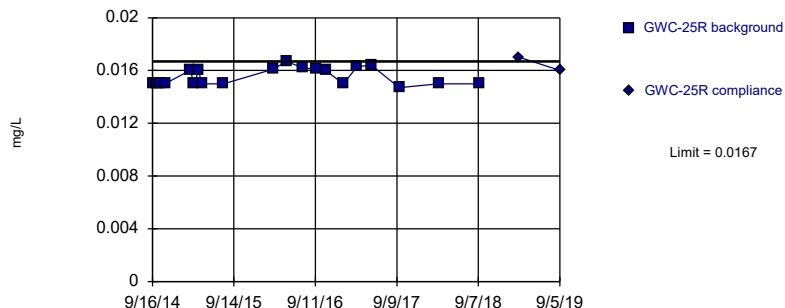


Background Data Summary: Mean=0.02339, Std. Dev.=0.003934, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8951, critical = 0.863. Kappa = 2.569 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

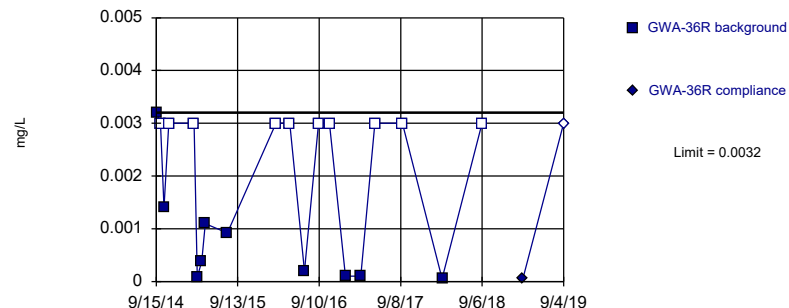


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Barium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

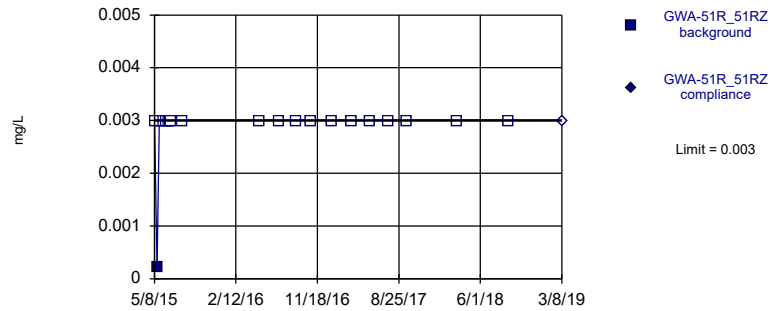


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

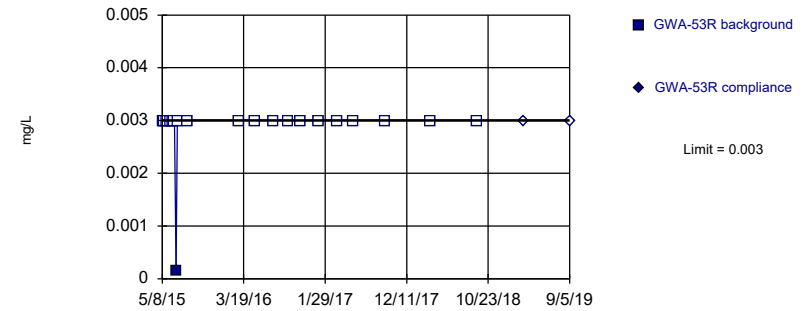


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

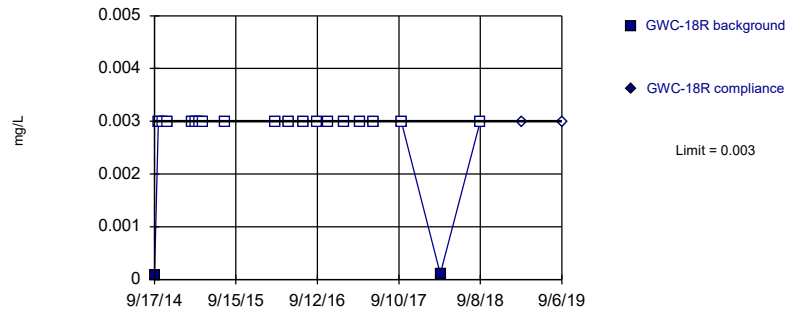


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

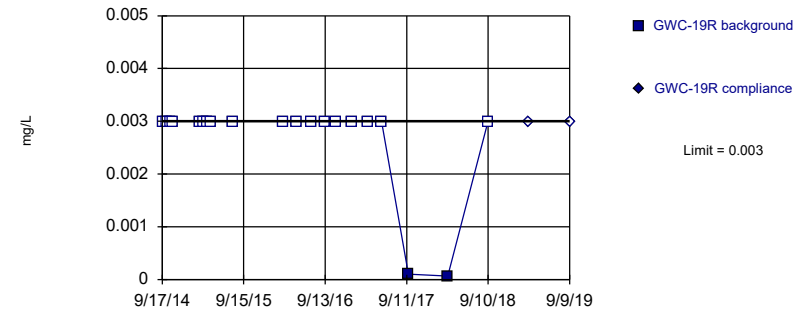


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

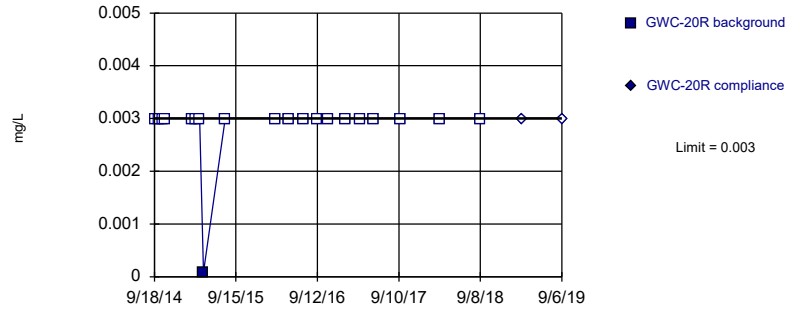


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

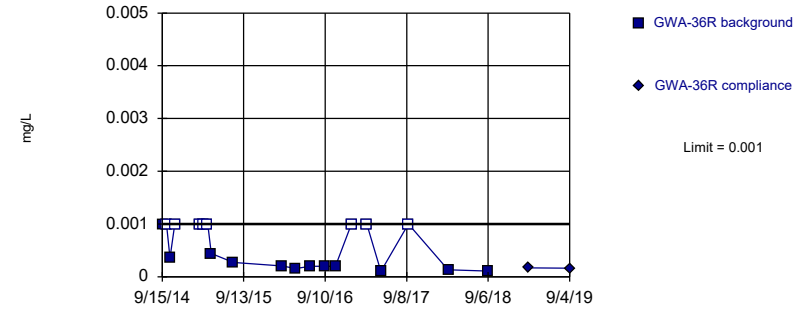


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Beryllium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

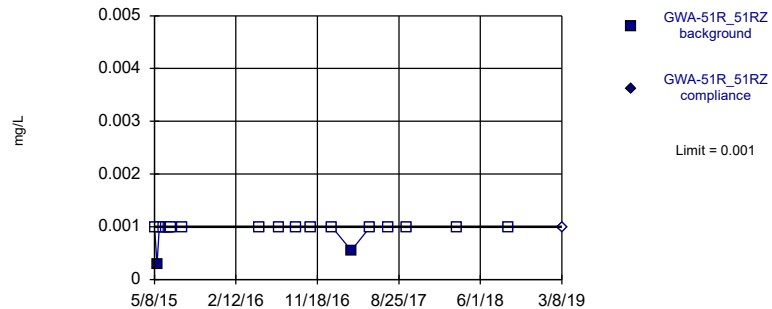


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

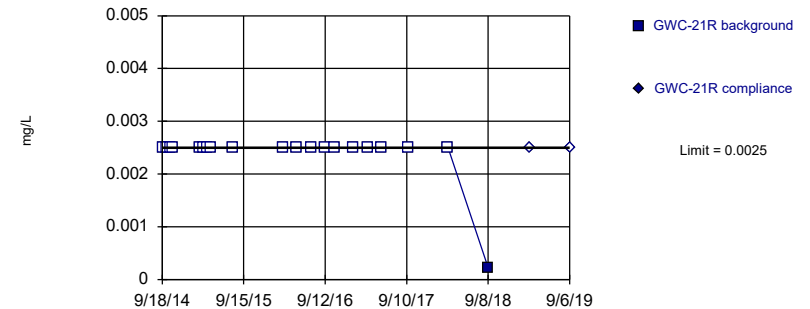


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

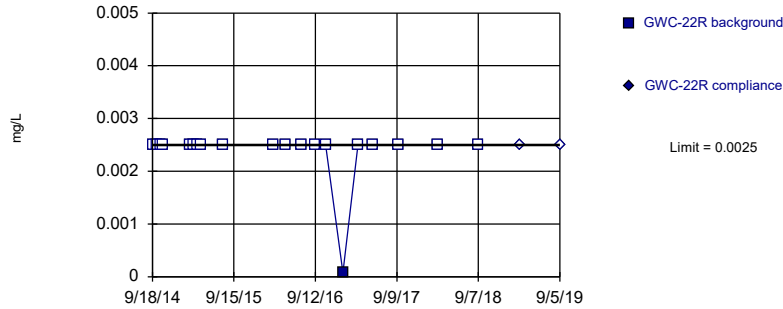


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

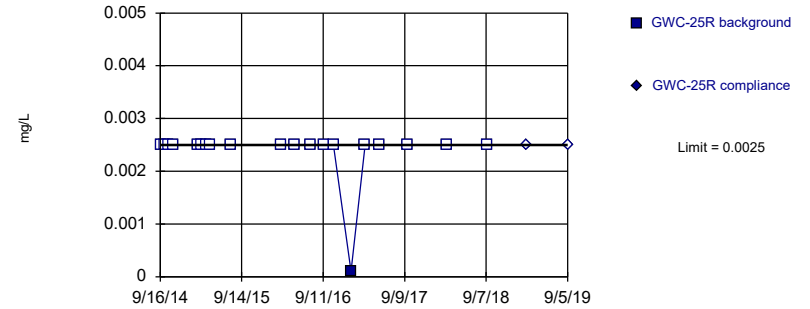


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

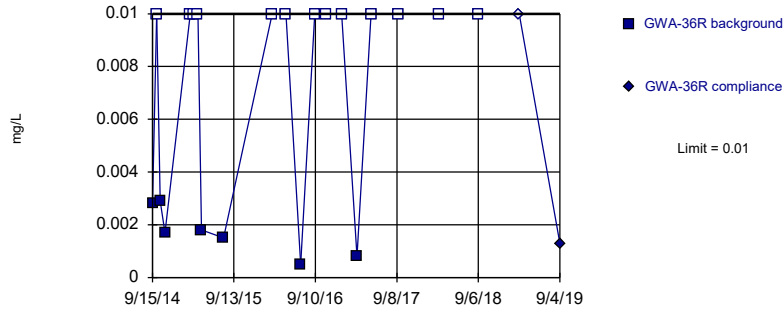


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cadmium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

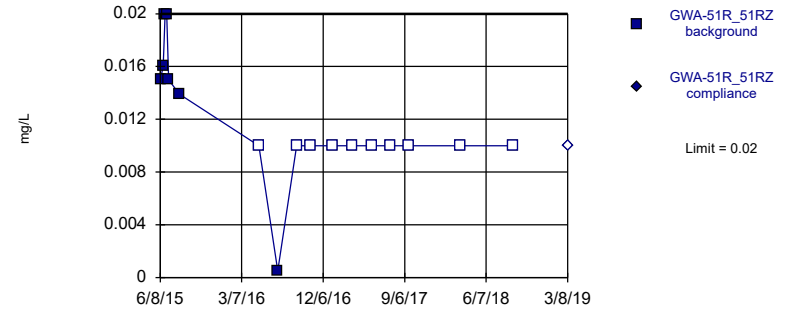


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

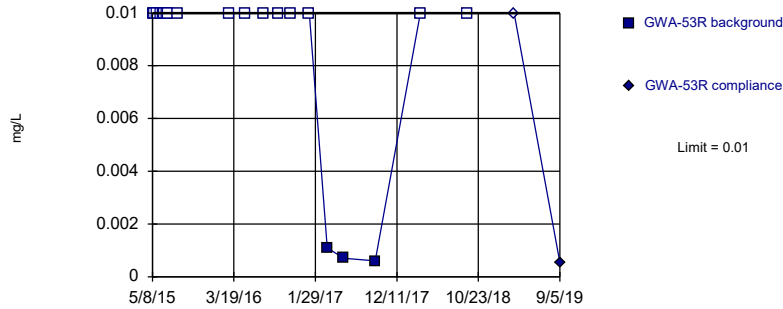


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 58.82% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005914 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

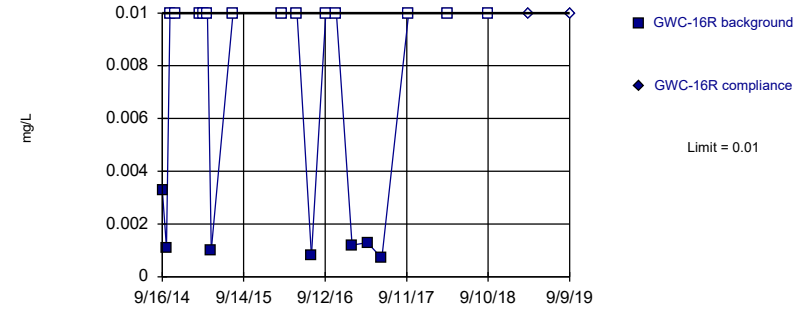


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

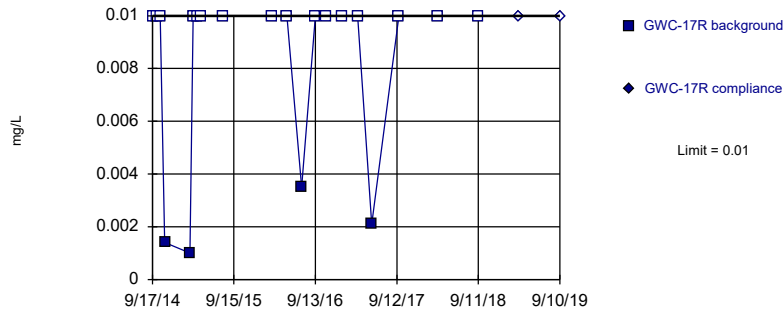


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

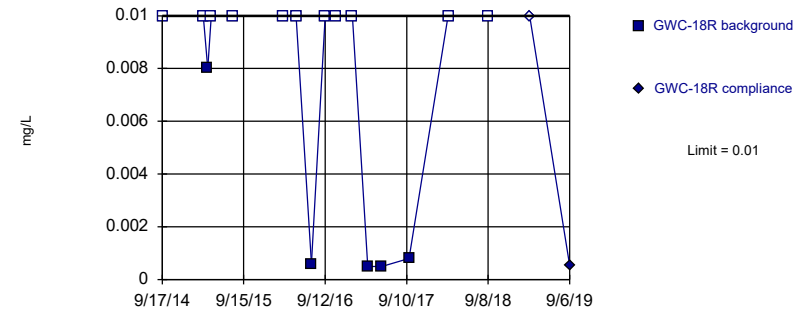


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

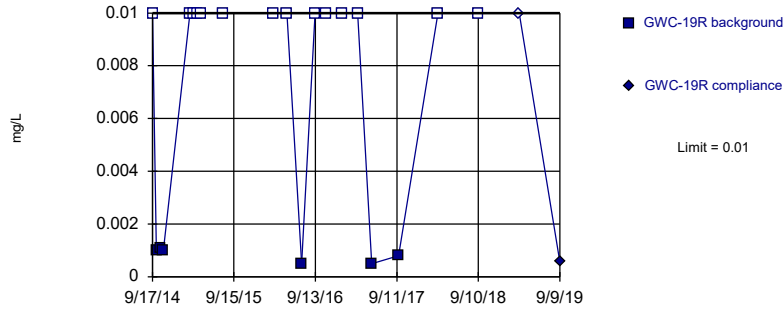


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 16 background values. 68.75% NDs. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

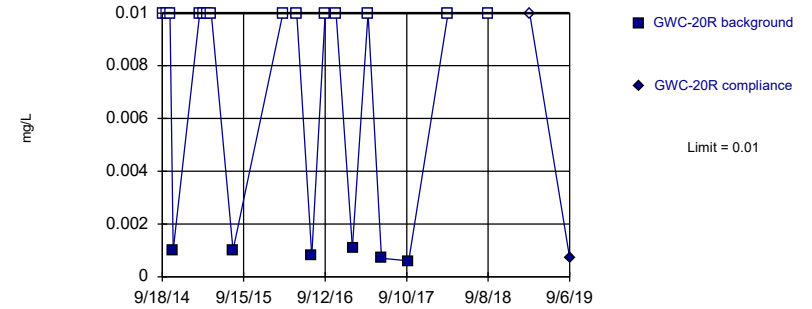


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

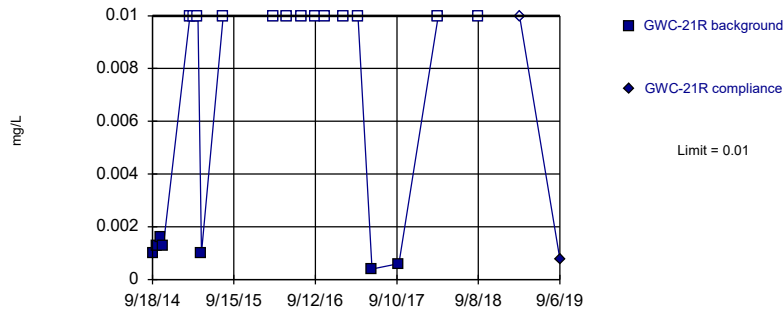


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

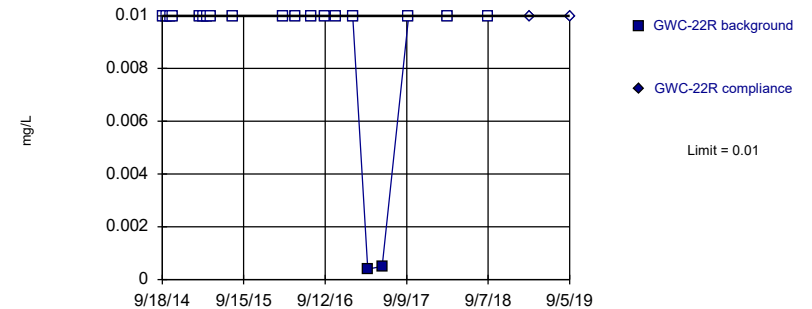


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 65% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

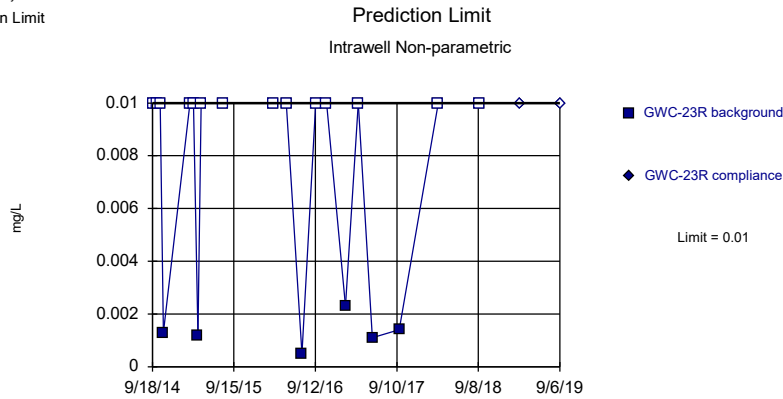
Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

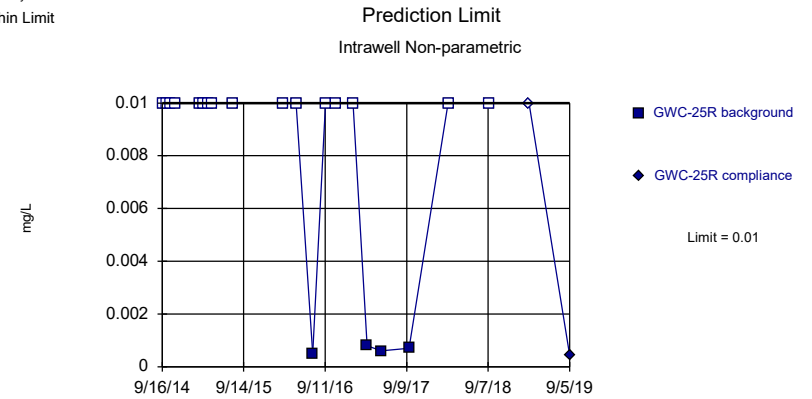
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

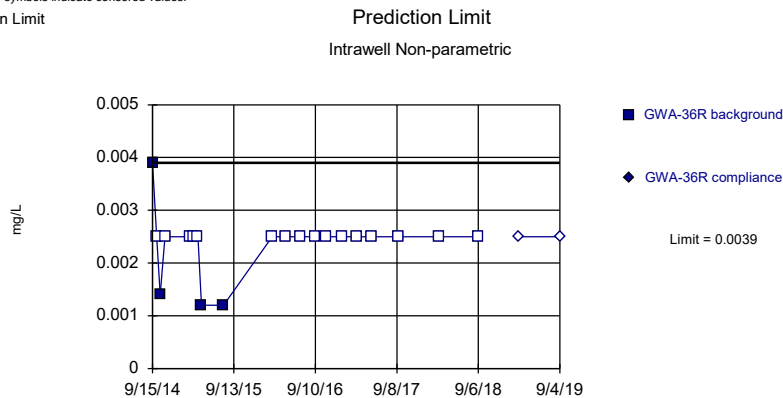
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Chromium Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

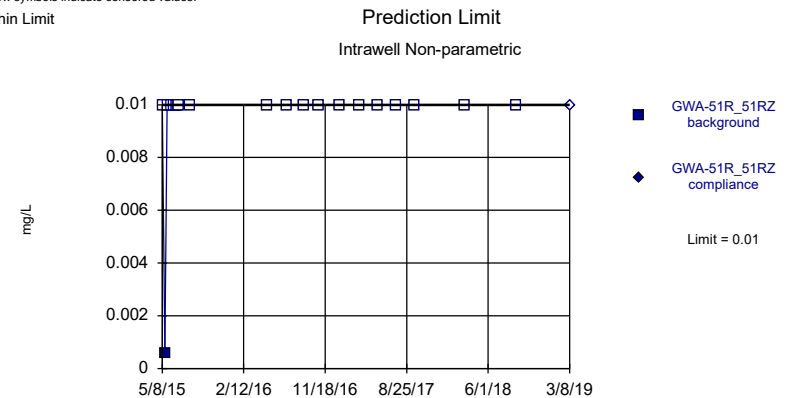
Within Limit



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

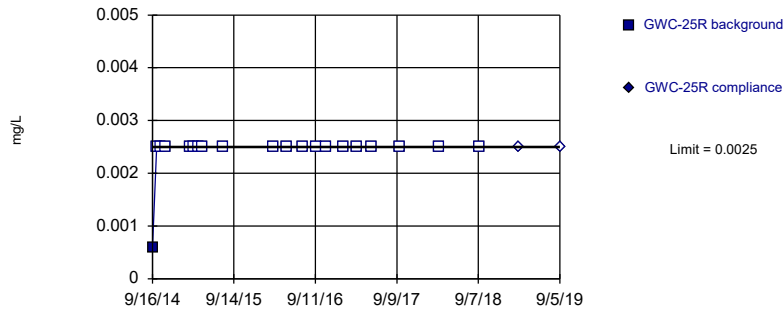


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

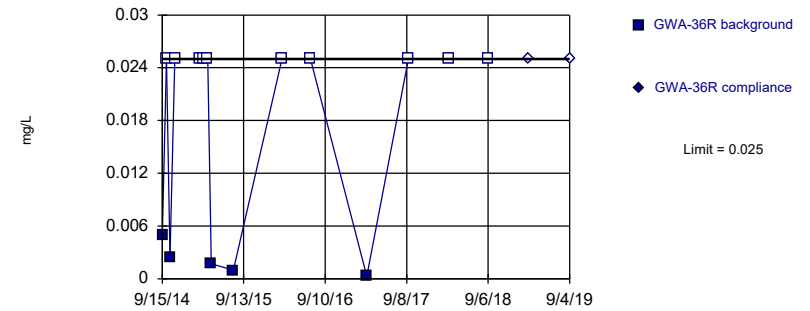


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Cobalt Analysis Run 1/15/2020 9:43 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

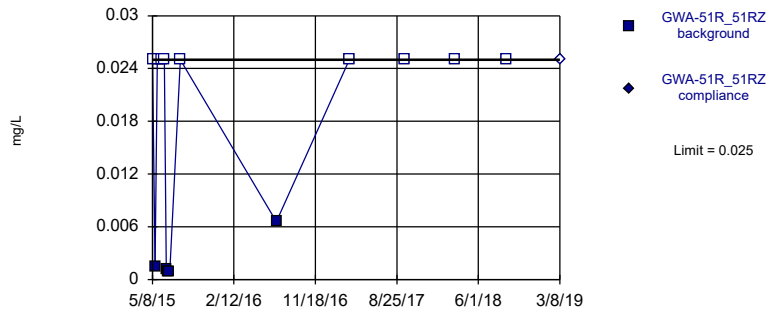


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

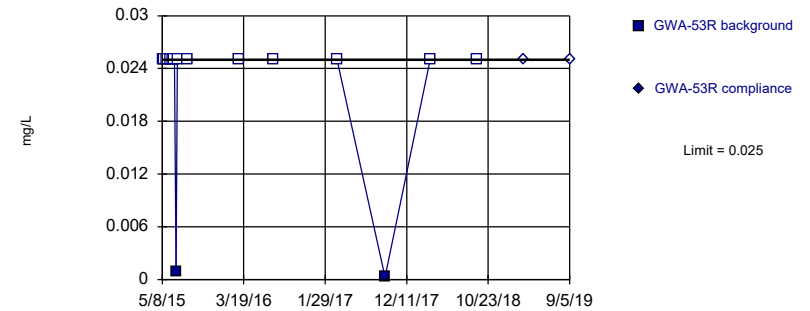


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

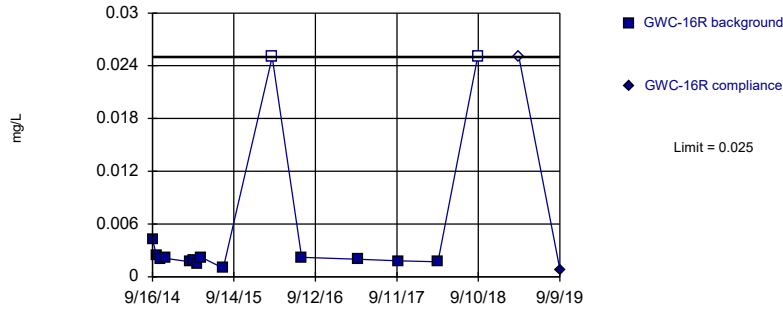


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

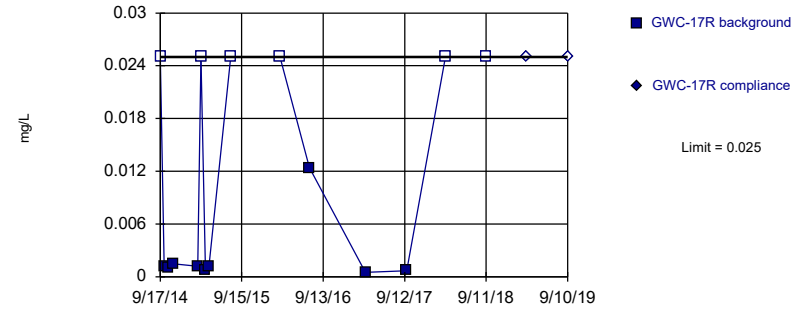


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 13.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

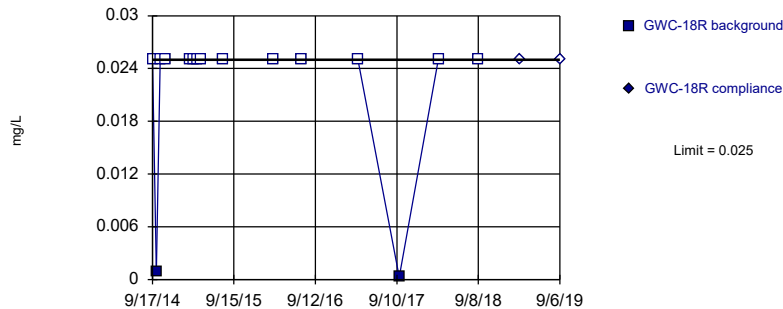


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

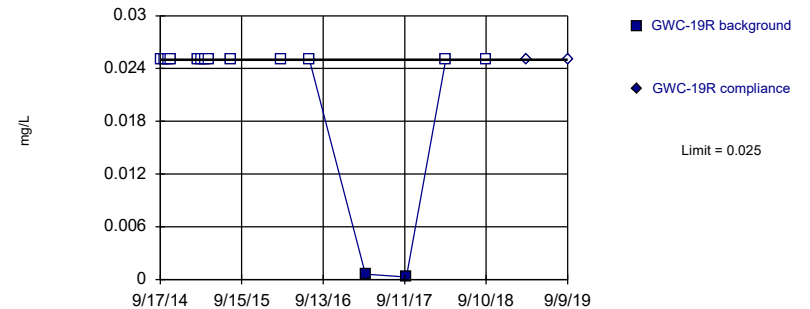


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

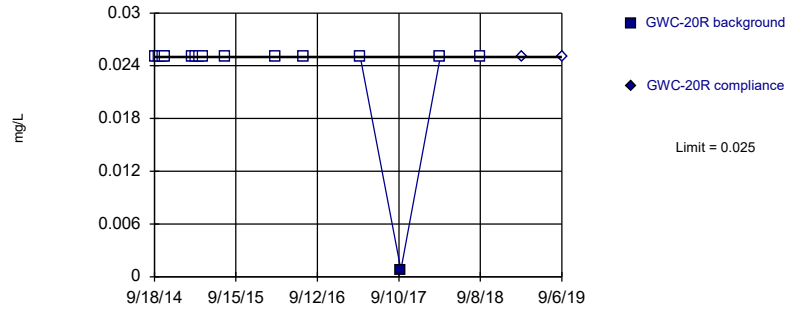


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

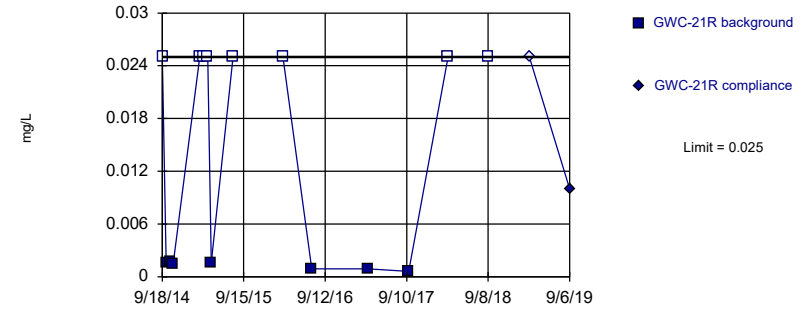


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

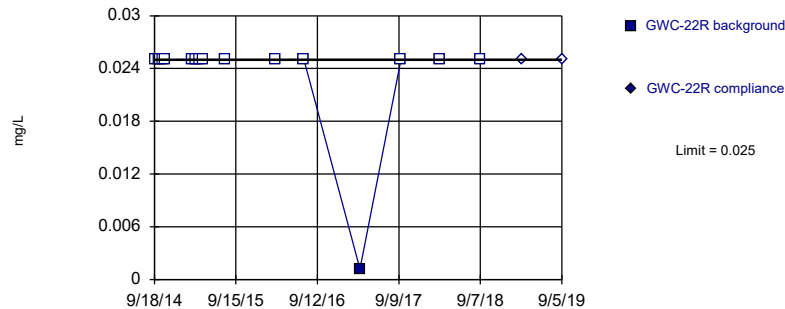


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

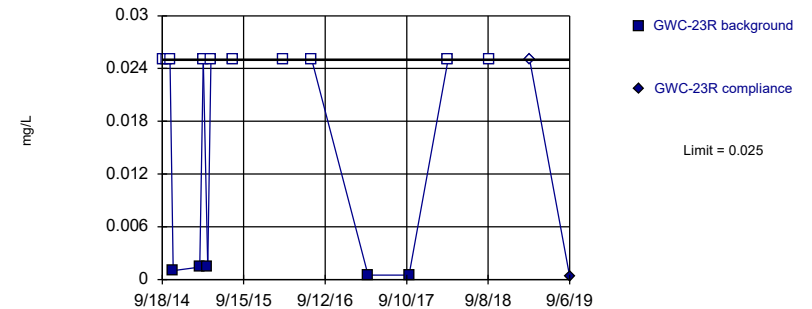


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

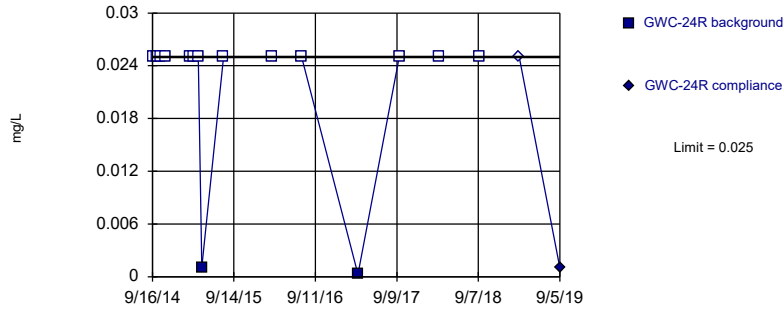


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

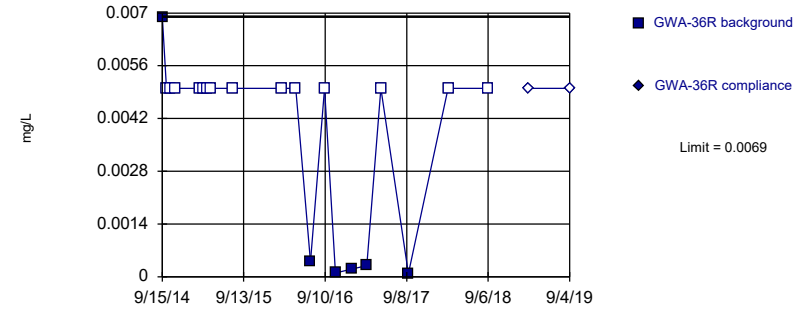


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Copper Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

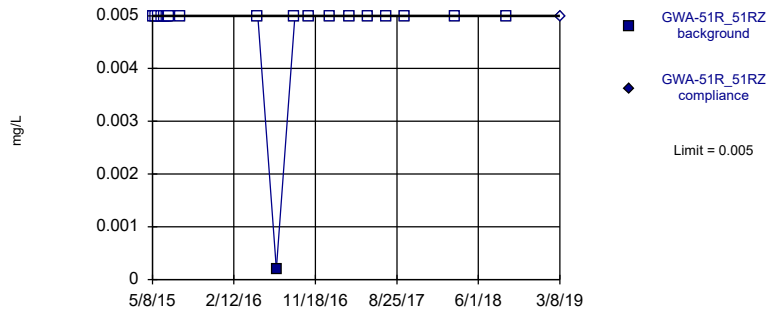


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

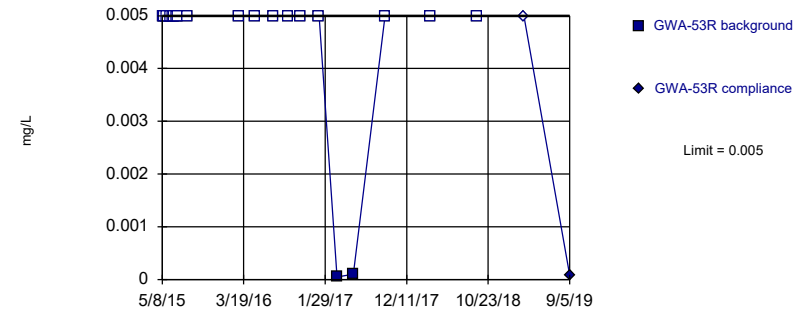


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

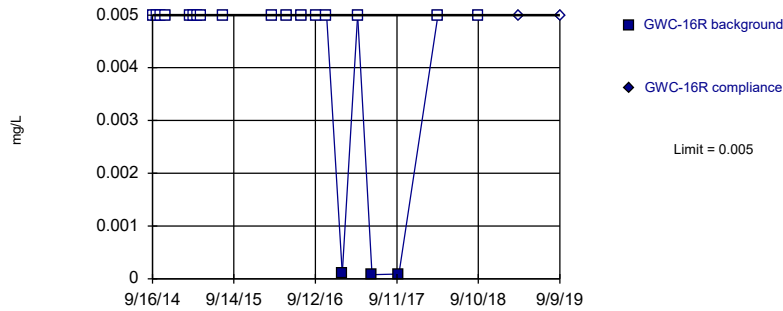


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

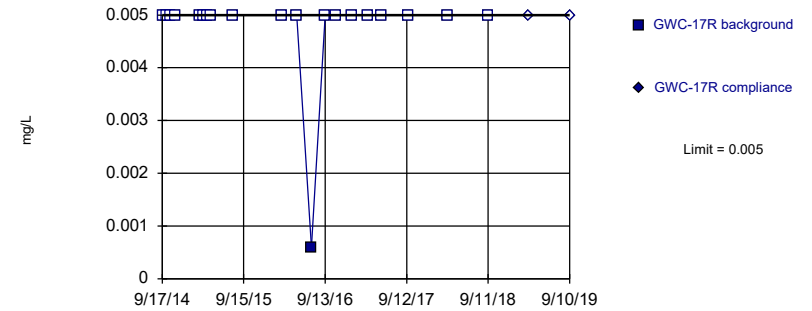


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

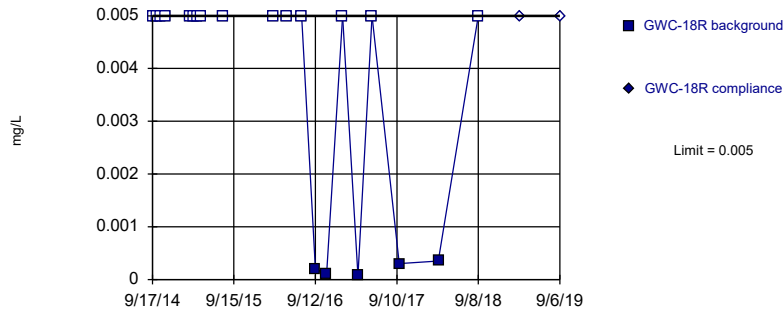


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

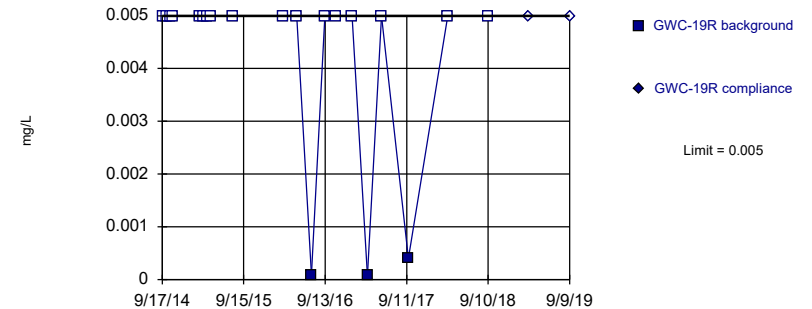


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

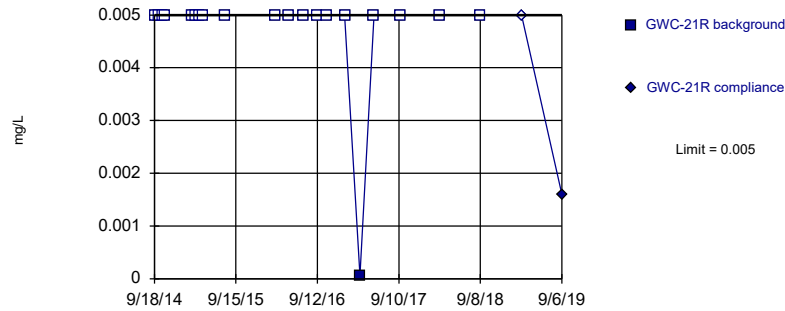


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

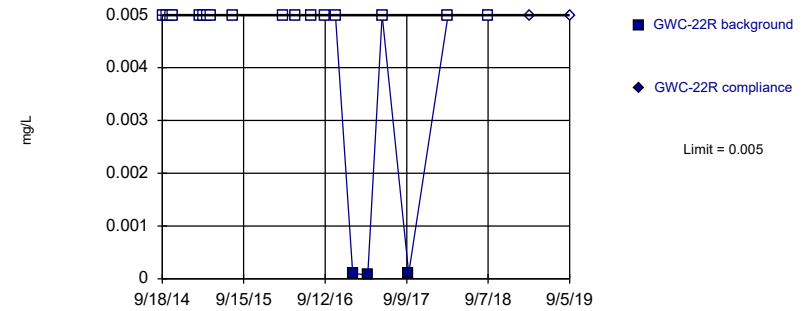


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

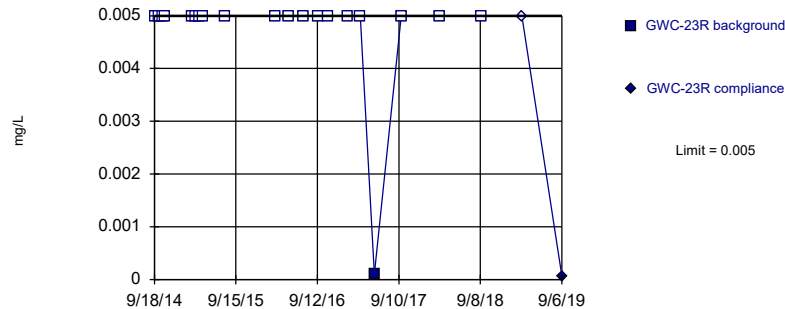


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

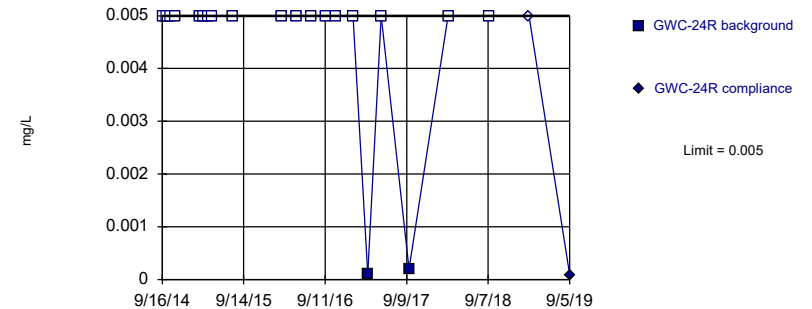


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

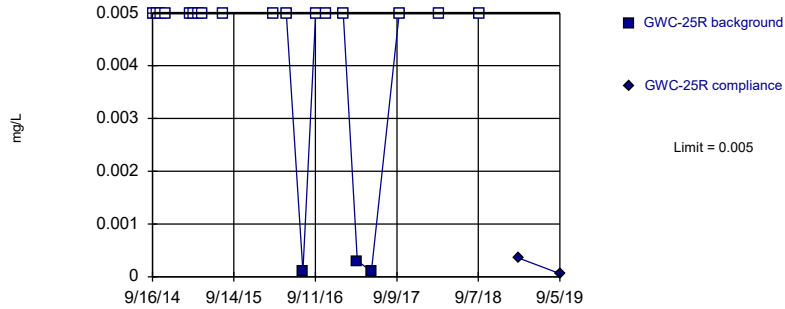


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

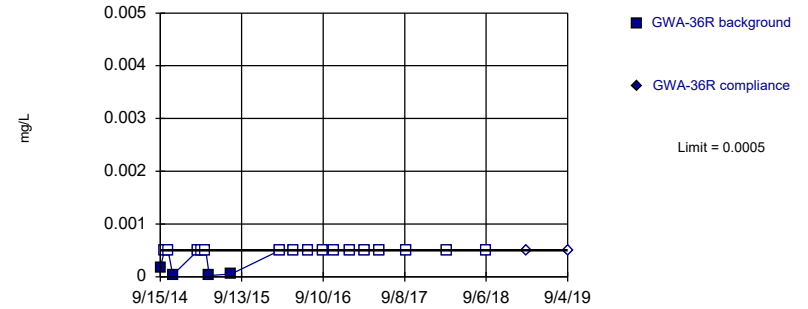


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Lead Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

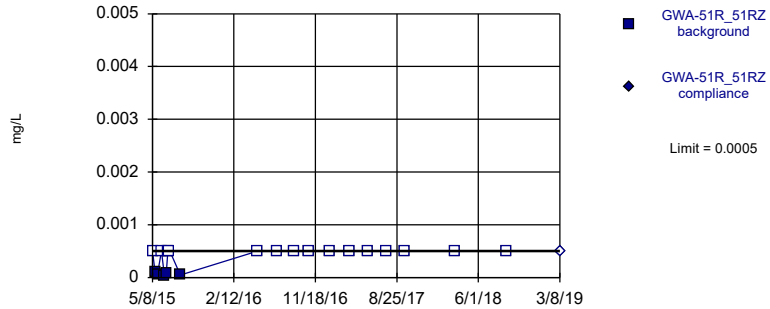


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 80% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

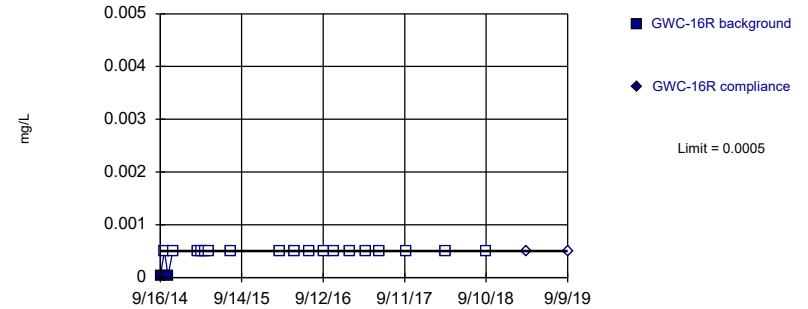


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 75% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

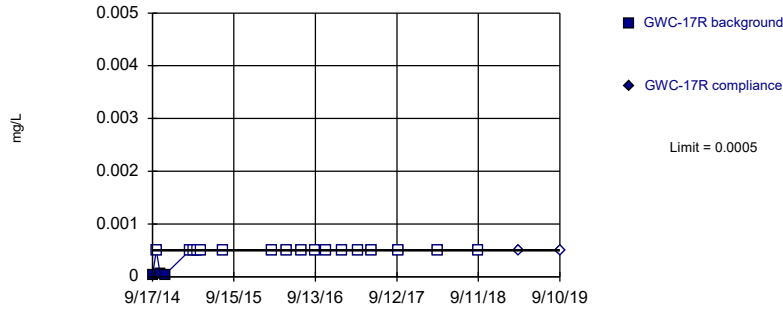


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

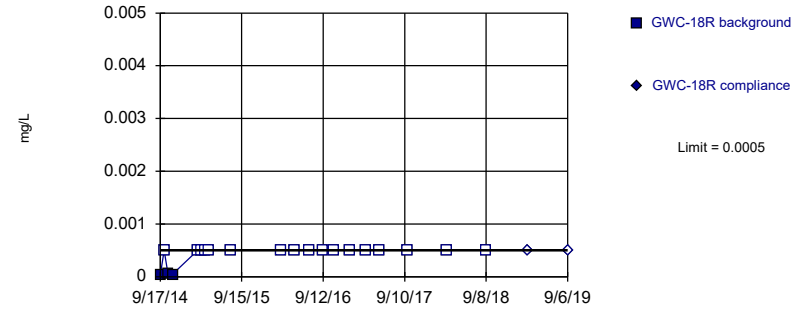


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

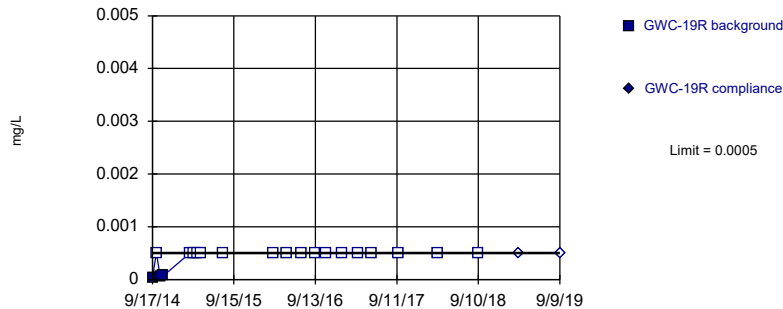


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

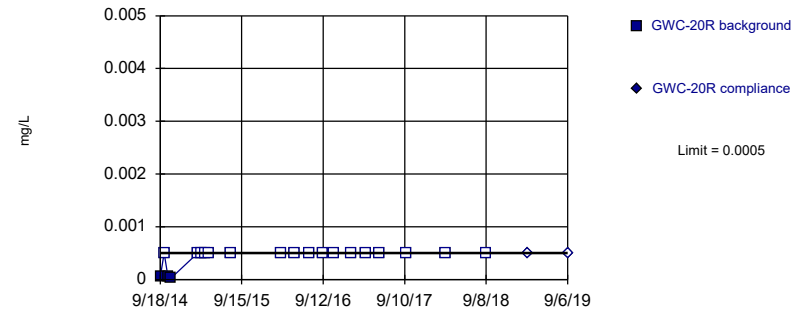


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

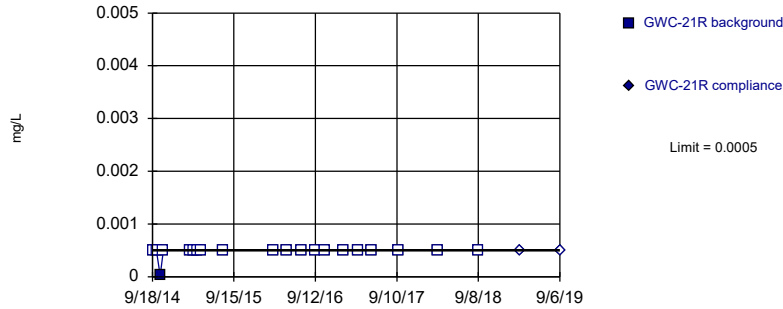


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

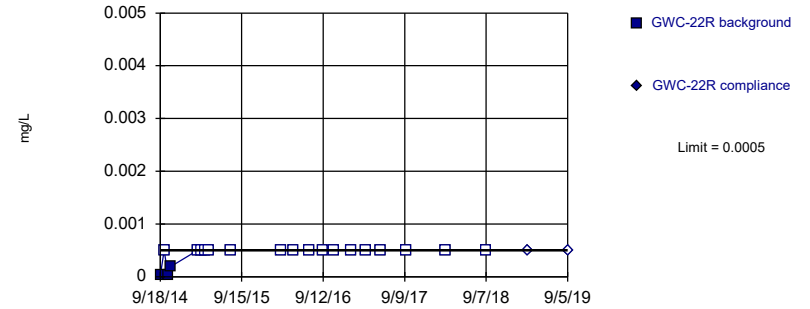


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

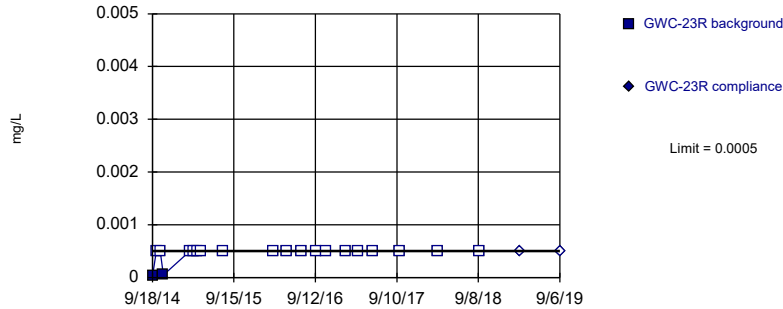


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

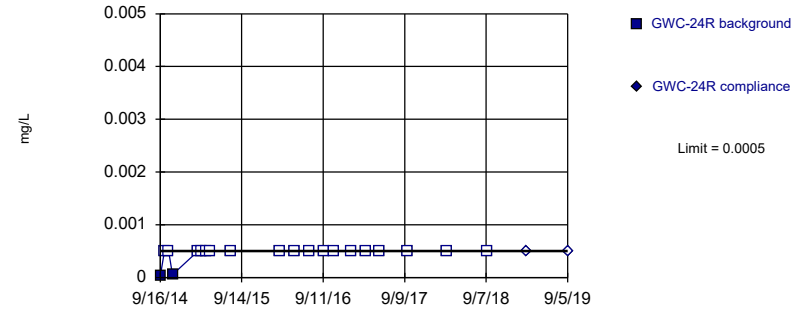


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

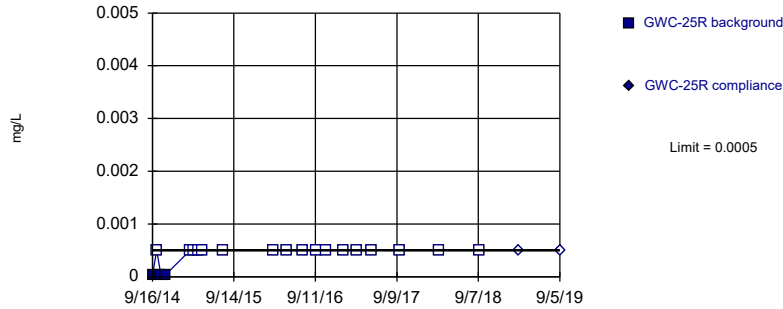


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 90% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

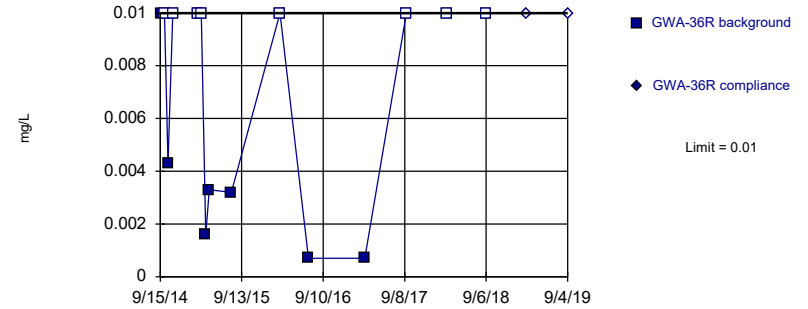


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 85% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Mercury Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

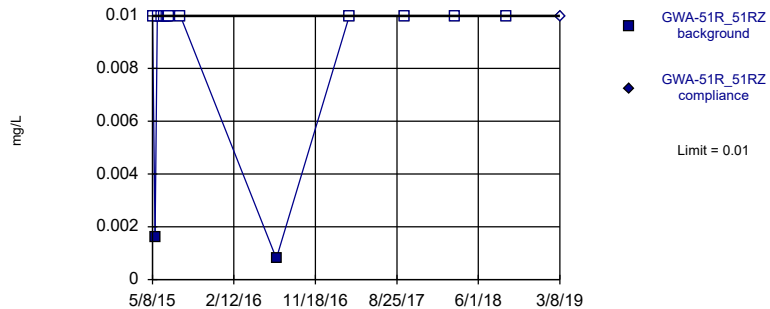


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

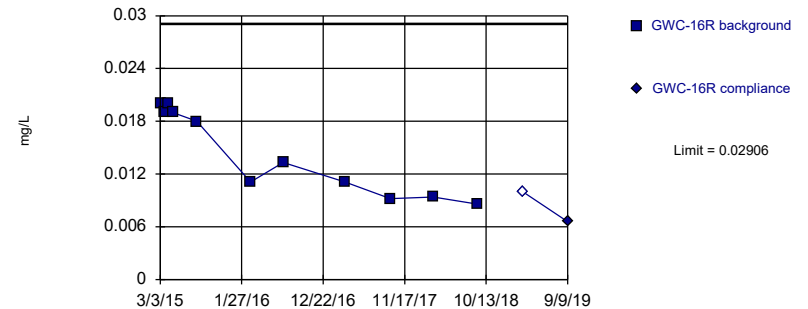


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 14 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

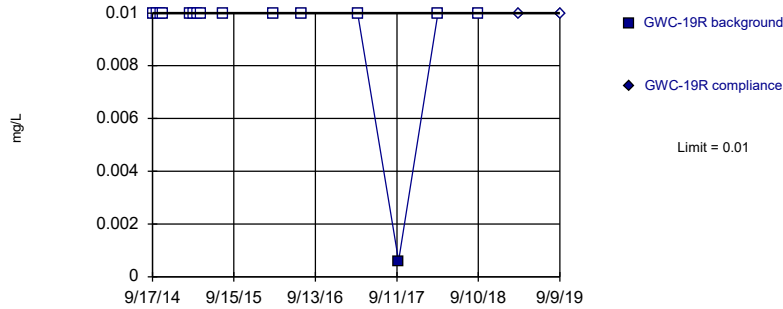


Background Data Summary: Mean=0.01443, Std. Dev.=0.004761, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8333, critical = 0.792. Kappa = 3.074 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

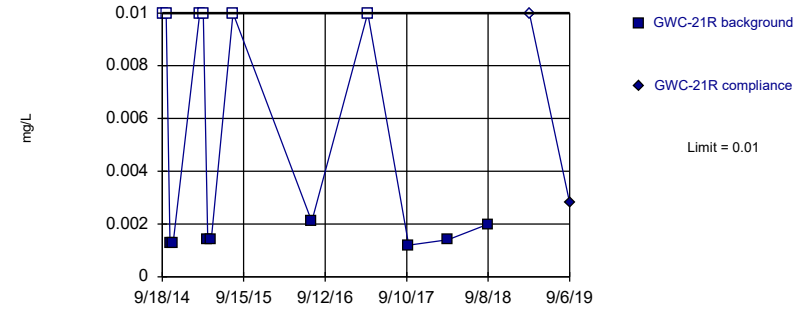


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

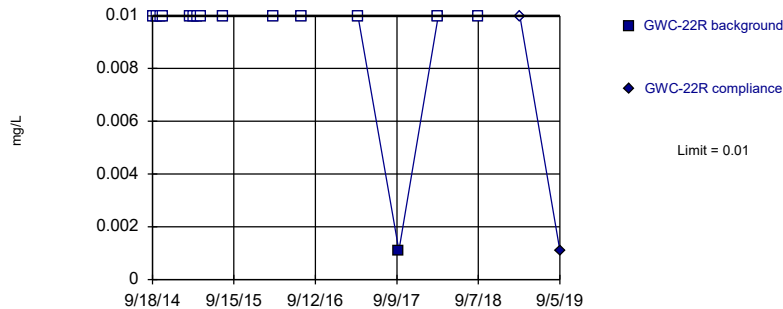


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 42.86% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

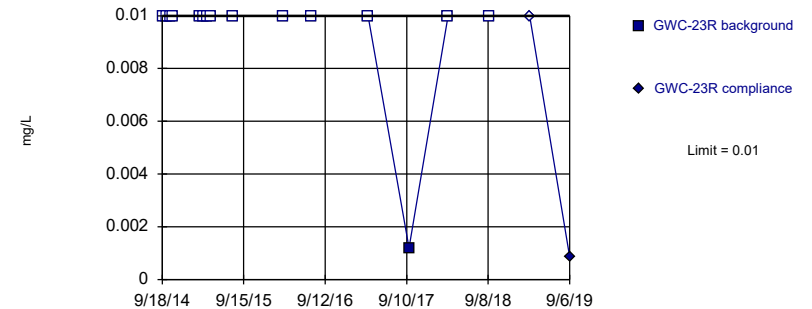


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

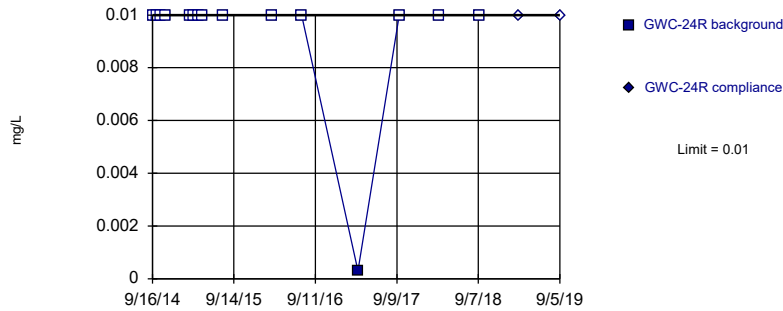


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

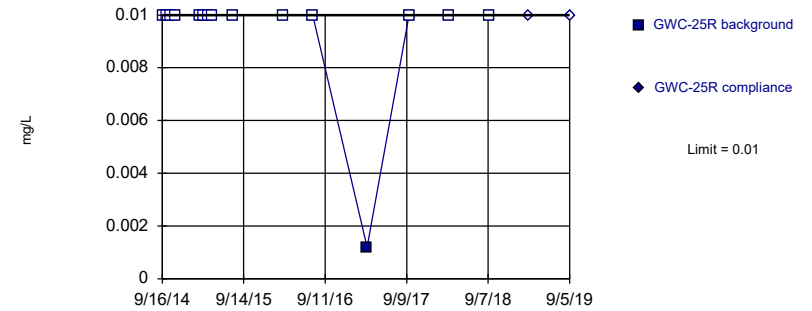


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

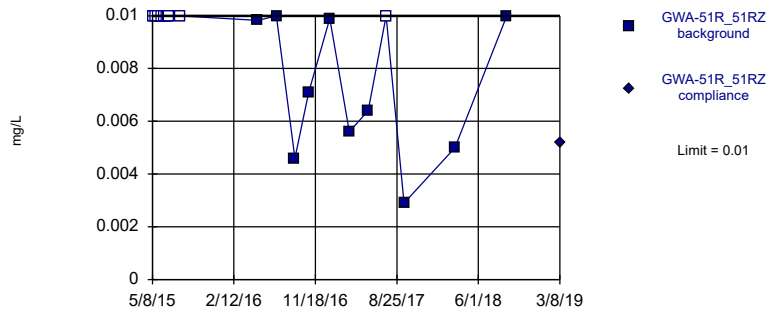


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Nickel Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

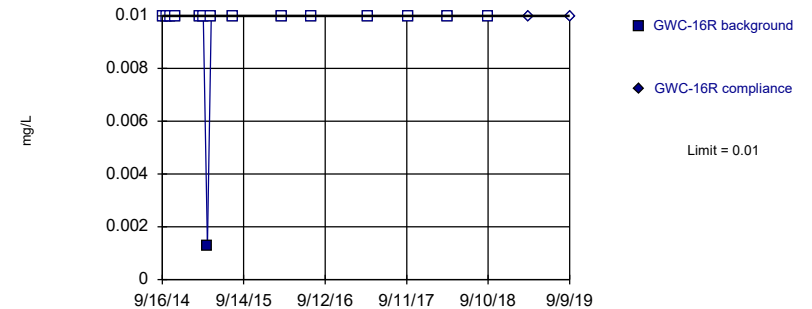


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Selenium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

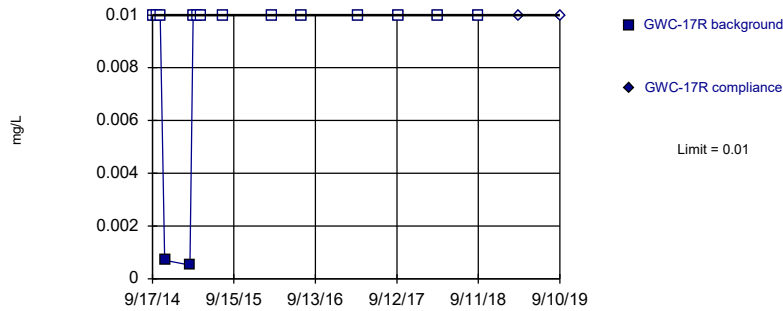


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

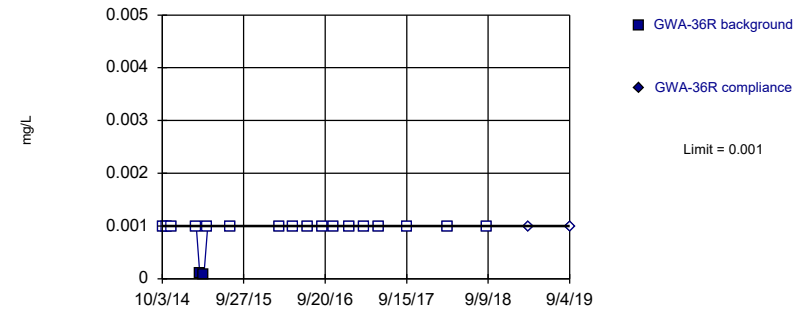


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Silver Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

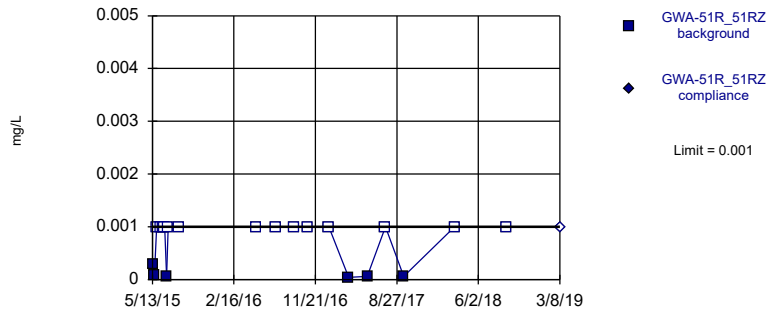


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

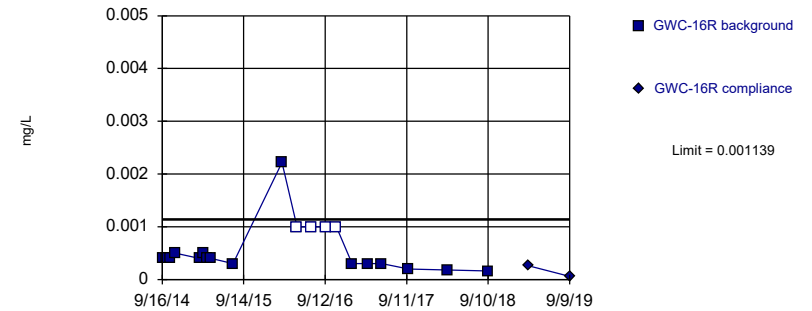


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 70% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

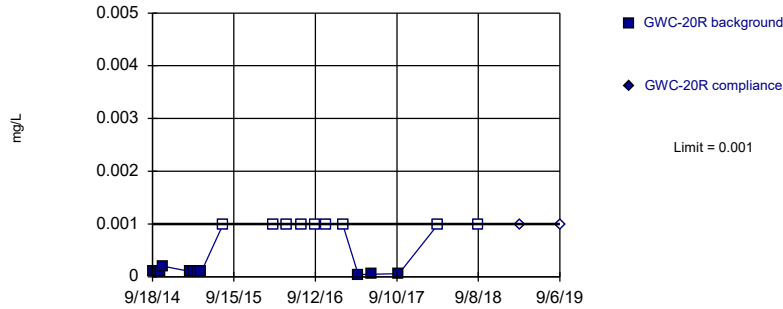


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-8.321, Std. Dev.=0.6089, n=20, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9187, critical = 0.868. Kappa = 2.534 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Thallium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

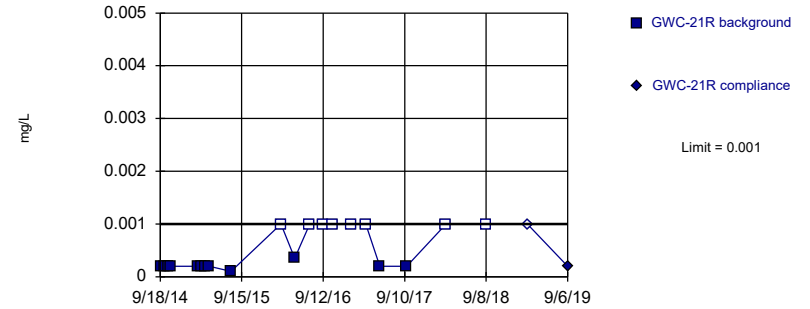


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 45% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

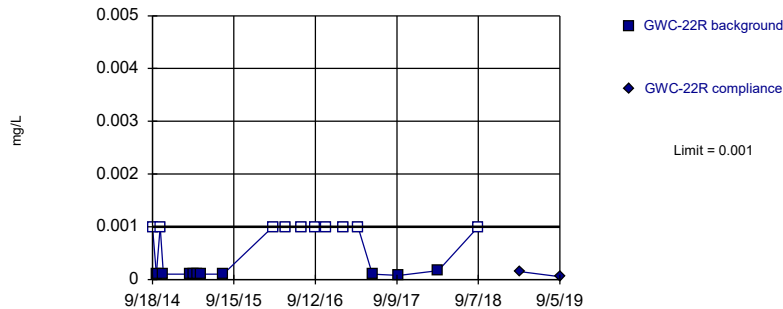


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 40% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

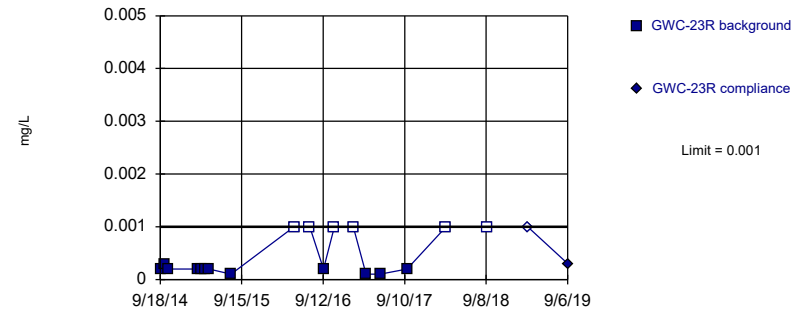


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 50% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

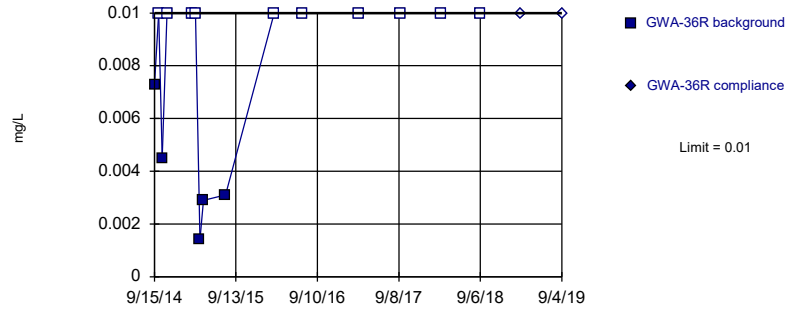


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 18 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Thallium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

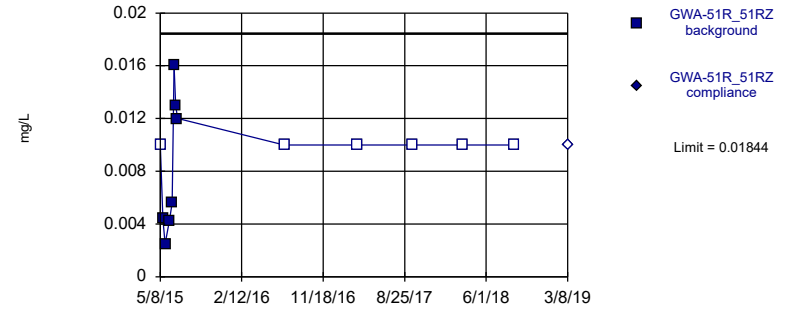


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

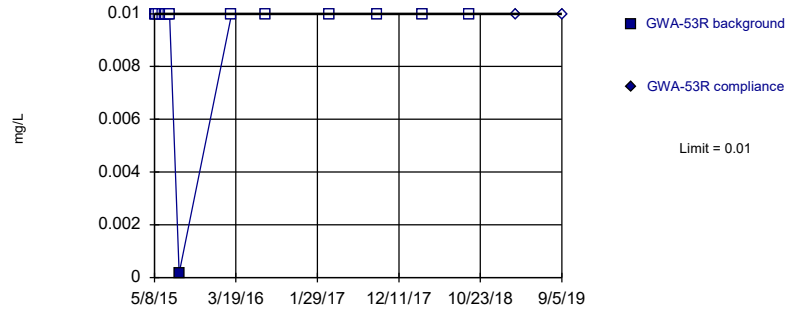


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.006365, Std. Dev.=0.004195, n=13, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9127, critical = 0.814. Kappa = 2.879 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Vanadium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

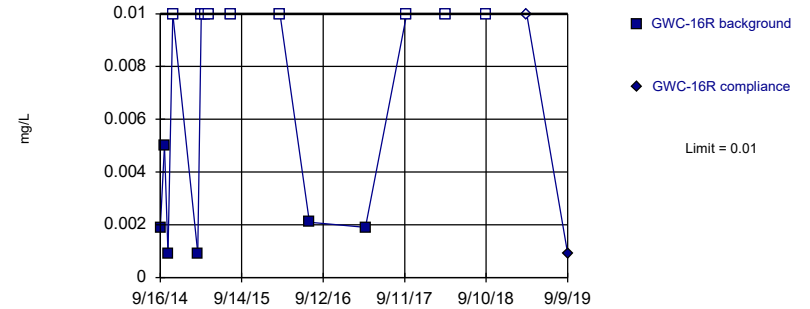


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

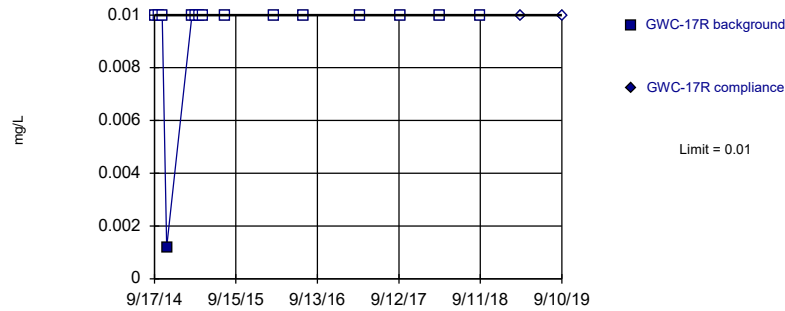


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:44 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

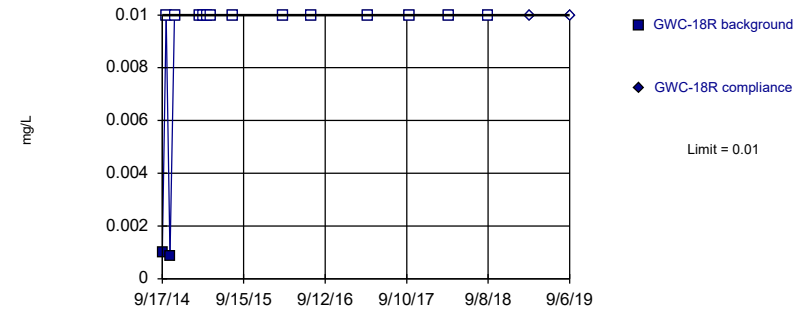


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

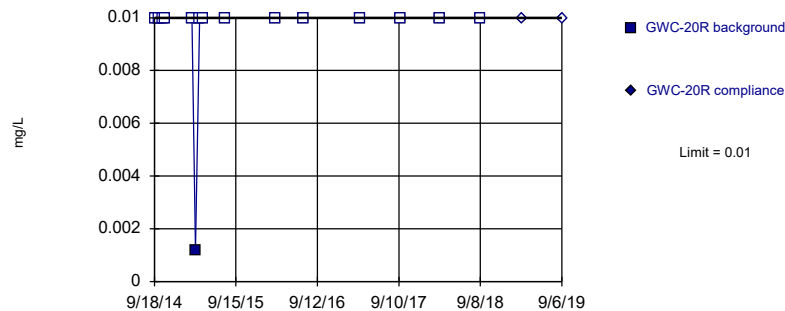


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

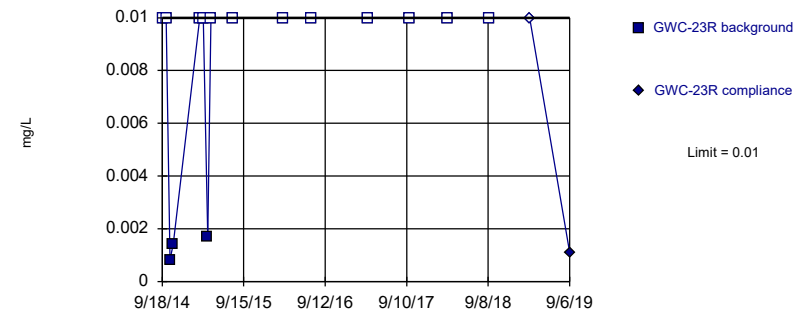


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

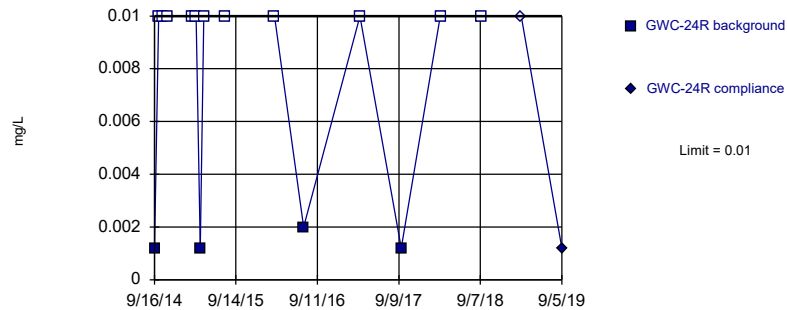


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 80% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

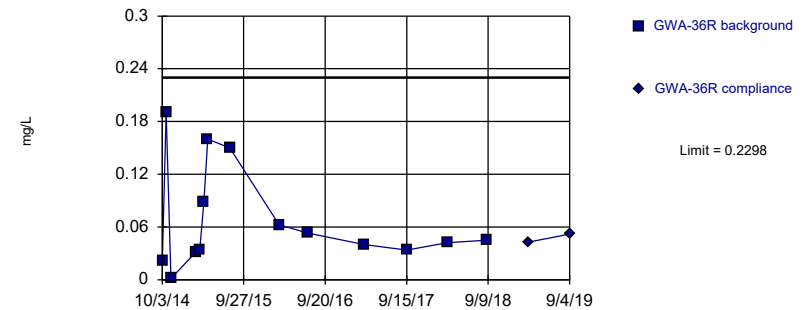


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 73.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Vanadium Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

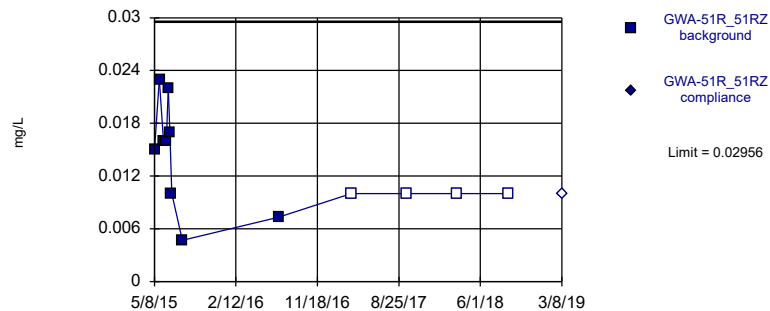


Background Data Summary: Mean=0.06816, Std. Dev.=0.05752, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.828, critical = 0.825. Kappa = 2.811 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

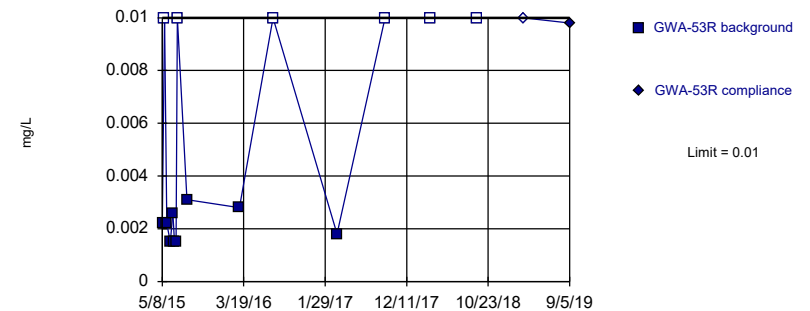


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.01128, Std. Dev.=0.00635, n=13, 30.77% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.921, critical = 0.814. Kappa = 2.879 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

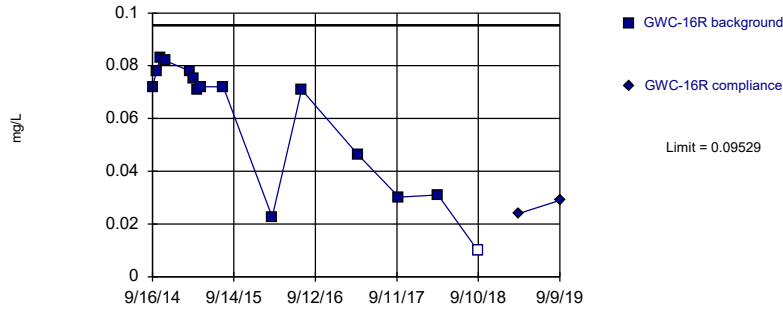


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

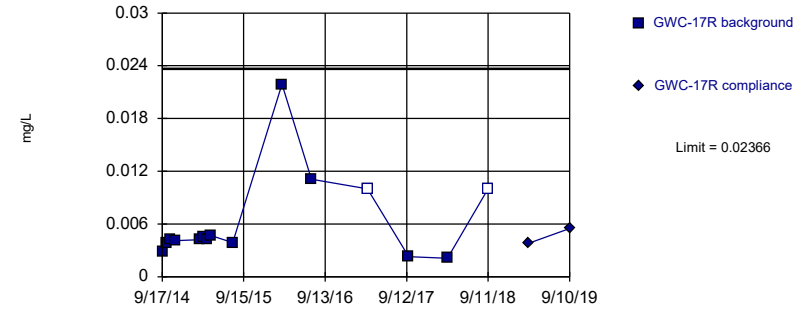


Background Data Summary (based on cube transformation): Mean=0.0002999, Std. Dev.=0.0002062, n=15, 6.667% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8545, critical = 0.835. Kappa = 2.742 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

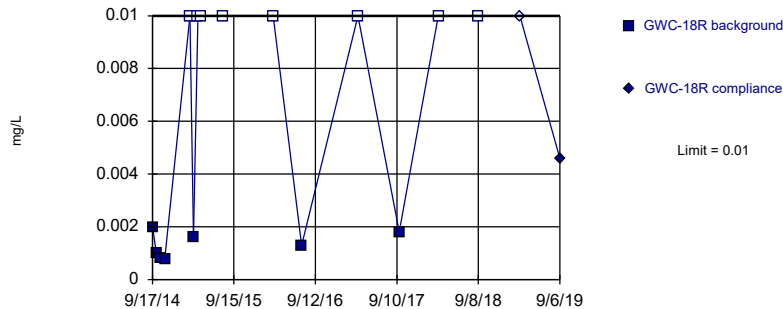


Background Data Summary (based on cube root transformation): Mean=0.1752, Std. Dev.=0.04079, n=15, 13.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8411, critical = 0.835. Kappa = 2.742 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

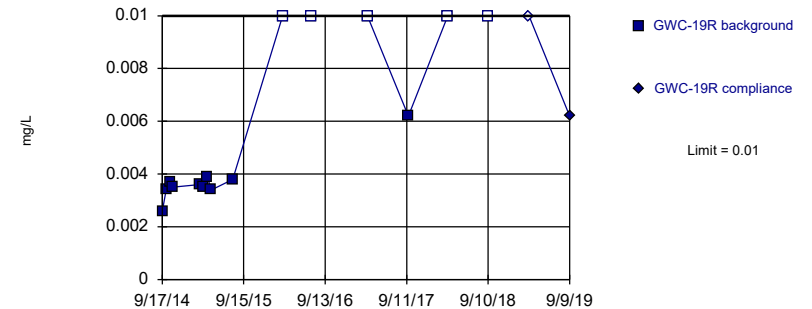


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 53.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

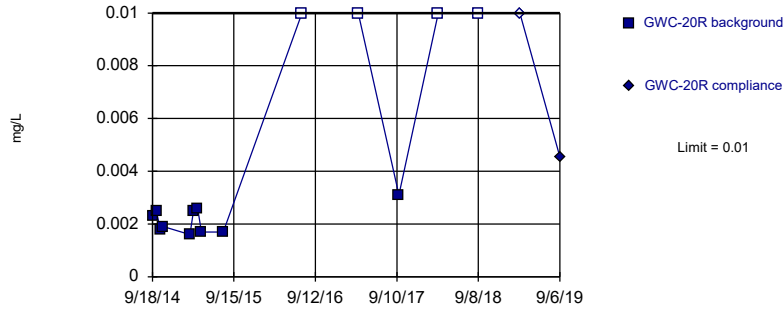


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

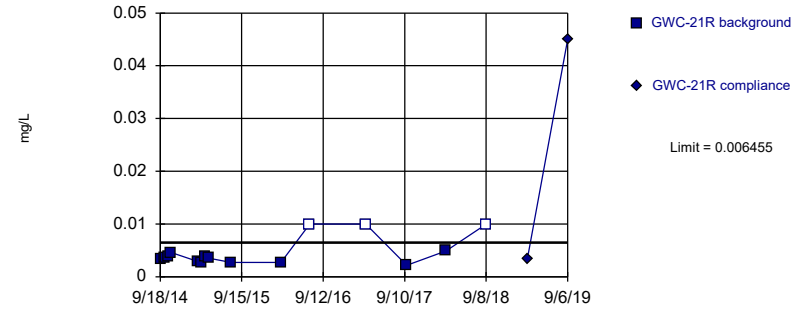


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 28.57% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

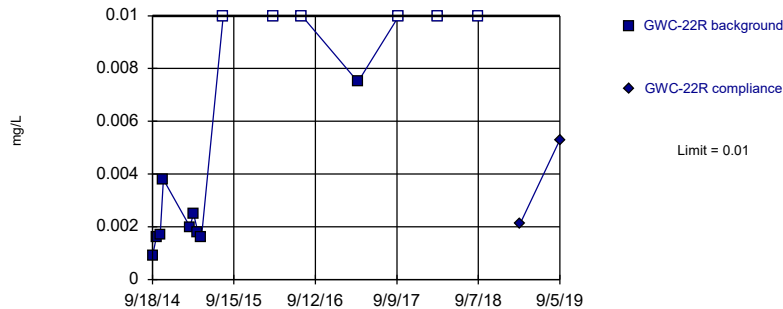


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.726, Std. Dev.=0.2492, n=15, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8434, critical = 0.835. Kappa = 2.742 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

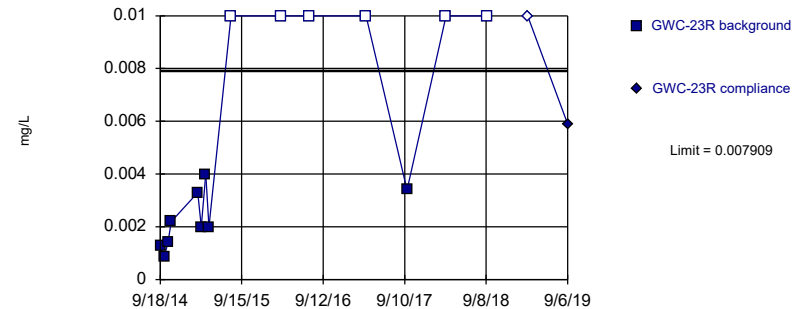


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 15 background values. 40% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

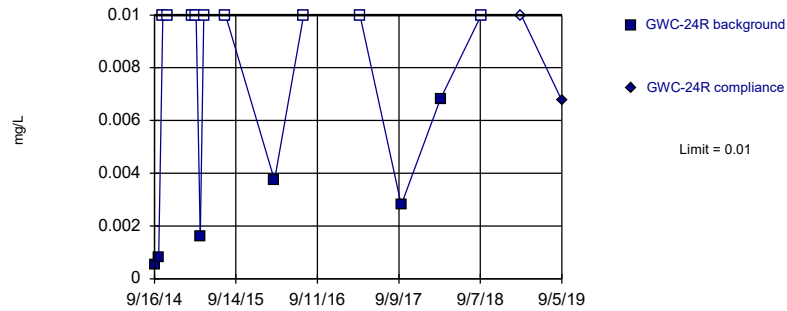


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.256, Std. Dev.=0.5164, n=15, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8588, critical = 0.835. Kappa = 2.742 (c=16, w=10, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003292.

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

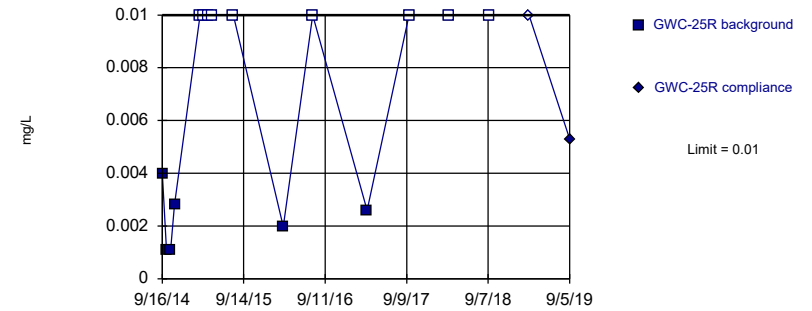


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 15 background values. 60% NDs. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

Constituent: Zinc Analysis Run 1/15/2020 9:45 AM View: PL's Bedrock
 Plant Bowen Client: Southern Company Data: Bowen 3 and 4 CCR

Prediction Limit Summary Table – App. III Cells 3 & 4 Significant Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 1/10/2020, 1:14 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GWC-16R	49	n/a	9/9/2019	55.7	Yes	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-17R	49	n/a	9/10/2019	66.7	Yes	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-21R	49	n/a	9/6/2019	57.8	Yes	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-23R	49	n/a	9/6/2019	55.9	Yes	156	0	n/a	0.000...	NP (normality) 1 of 2

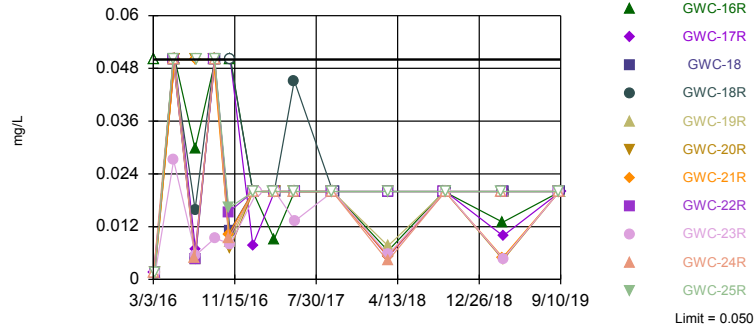
Prediction Limit Summary Table – App. III Cells 3 & 4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 1/10/2020, 1:14 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWC-16R	0.050	n/a	9/9/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-17R	0.050	n/a	9/10/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-18	0.050	n/a	9/9/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-18R	0.050	n/a	9/6/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-19R	0.050	n/a	9/9/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-20R	0.050	n/a	9/6/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-21R	0.050	n/a	9/6/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-22R	0.050	n/a	9/5/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-23R	0.050	n/a	9/6/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-24R	0.050	n/a	9/5/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	GWC-25R	0.050	n/a	9/5/2019	0.02ND	No	156	68.59	n/a	0.000...	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-16R	49	n/a	9/9/2019	55.7	Yes	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-17R	49	n/a	9/10/2019	66.7	Yes	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-18	49	n/a	9/9/2019	15.2	No	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-18R	49	n/a	9/6/2019	27.5	No	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-19R	49	n/a	9/9/2019	29.6	No	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-20R	49	n/a	9/6/2019	31.1	No	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-21R	49	n/a	9/6/2019	57.8	Yes	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-22R	49	n/a	9/5/2019	31.8	No	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-23R	49	n/a	9/6/2019	55.9	Yes	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-24R	49	n/a	9/5/2019	30.6	No	156	0	n/a	0.000...	NP (normality) 1 of 2
Calcium (mg/L)	GWC-25R	49	n/a	9/5/2019	34.6	No	156	0	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-16R	0.40	n/a	9/9/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-17R	0.40	n/a	9/10/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-18	0.40	n/a	9/9/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-18R	0.40	n/a	9/6/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-19R	0.40	n/a	9/9/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-20R	0.40	n/a	9/6/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-21R	0.40	n/a	9/6/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-22R	0.40	n/a	9/5/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-23R	0.40	n/a	9/6/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-24R	0.40	n/a	9/5/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-25R	0.40	n/a	9/5/2019	0.15ND	No	156	49.36	n/a	0.000...	NP (normality) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

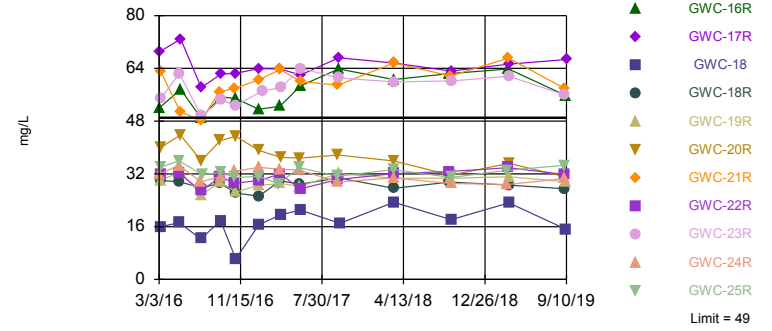


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 156 background values. 68.59% NDs. Annual per-constituent alpha = 0.00178. Individual comparison alpha = 0.00008098 (1 of 2). Comparing 11 points to limit.

Constituent: Boron Analysis Run 1/10/2020 1:12 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limit: GWC-16R, GWC-17R, GWC-21R, GWC-23R

Prediction Limit
Interwell Non-parametric

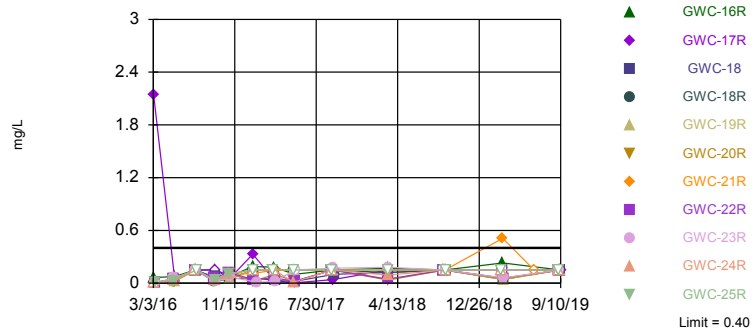


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 156 background values. Annual per-constituent alpha = 0.00178. Individual comparison alpha = 0.00008098 (1 of 2). Comparing 11 points to limit.

Constituent: Calcium Analysis Run 1/10/2020 1:12 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 156 background values. 49.36% NDs. Annual per-constituent alpha = 0.00178. Individual comparison alpha = 0.00008098 (1 of 2). Comparing 11 points to limit.

Constituent: Fluoride Analysis Run 1/10/2020 1:12 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWA-56 (bg)	GWA-55R (bg)	GWC-24R	GWC-17R	GWC-18R	GWC-19R	GWC-18	GWC-22R
2/29/2016									
3/1/2016									
3/2/2016									
3/3/2016	<0.1 (D)	<0.003	<0.1						
3/4/2016				<0.003	<0.003				
3/7/2016						<0.003	<0.003	<0.003	<0.003
3/8/2016									
3/9/2016									
5/2/2016									
5/3/2016			<0.1						
5/4/2016									
5/5/2016				<0.1		<0.1		<0.1	<0.1
5/6/2016									
5/9/2016		<0.1					<0.1		
5/10/2016	<0.1				<0.1				
7/6/2016									
7/7/2016									
7/8/2016									
7/11/2016		0.0128 (J)	0.0047 (J)						
7/12/2016				0.005 (J)					
7/13/2016	0.0297 (J)					0.0159 (J)		0.0047 (J)	
7/14/2016					0.0069 (J)		0.0045 (J)		0.0047 (J)
7/15/2016									
7/18/2016									
9/7/2016									
9/8/2016									
9/9/2016		0.0158 (J)	<0.1						
9/12/2016						<0.1	<0.1		<0.1
9/13/2016				<0.1				<0.1	
9/14/2016					<0.1				
9/15/2016	<0.1								
10/25/2016									
10/26/2016		0.0257 (J)							
10/27/2016			0.0108 (J)	0.0093 (J)					0.0153 (J)
10/31/2016							0.0086 (J)	0.0111 (J)	
11/1/2016					<0.1	<0.1			
11/2/2016	<0.1								
1/5/2017									
1/6/2017									
1/9/2017		0.0219 (J)	<0.04						
1/11/2017	<0.04				0.0078 (J)	<0.04	<0.04		
1/12/2017								<0.04	
1/13/2017				<0.04					<0.04
1/25/2017									
2/9/2017									
3/14/2017									
3/15/2017		0.0253 (J)							
3/16/2017			<0.04						
3/20/2017	0.0092 (J)			<0.04		<0.04			<0.04
3/21/2017					<0.04		<0.04		
3/22/2017									
3/23/2017								<0.04	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_ApplIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWA-56 (bg)	GWA-55R (bg)	GWC-24R	GWC-17R	GWC-18R	GWC-19R	GWC-18	GWC-22R
5/16/2017									
5/17/2017									
5/18/2017		0.0249 (J)	<0.04						
5/19/2017				<0.04					
5/22/2017						0.0452	<0.04 (*)		
5/23/2017	<0.04 (*)				<0.04			<0.04	<0.04
5/24/2017									
7/19/2017									
9/15/2017		<0.04 (*)							
9/18/2017			<0.04						
9/19/2017				<0.04					<0.04
9/20/2017							<0.04 (*)		
9/21/2017	<0.04					<0.04			
9/22/2017					<0.04				
9/25/2017								<0.04	
3/12/2018			0.0041 (J)						
3/13/2018		0.024 (J)		0.0042 (J)					<0.04
3/14/2018	0.0065 (J)				0.0051 (J)	<0.04	0.0076 (J)	<0.04	
9/6/2018									
9/7/2018	<0.04	0.024 (J)	<0.04			<0.04			<0.04
9/10/2018							<0.04		
9/11/2018				<0.04	<0.04			<0.04	
3/6/2019									
3/7/2019		0.02 (X)	<0.04						
3/8/2019				<0.04					
3/11/2019	0.013 (X)								<0.04
3/12/2019					0.0099 (X)	<0.04	<0.04	<0.04	
9/4/2019		0.015 (X)							
9/5/2019			<0.04	<0.04					<0.04
9/6/2019						<0.04			
9/9/2019	<0.04						<0.04	<0.04	
9/10/2019					<0.04				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-21R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
2/29/2016					
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016					
3/7/2016					
3/8/2016	<0.003	<0.003	<0.003		
3/9/2016				<0.003	
5/2/2016					
5/3/2016					
5/4/2016	<0.1				<0.1 (D)
5/5/2016					
5/6/2016				0.0271 (J)	
5/9/2016		<0.1	<0.1		
5/10/2016					
7/6/2016					
7/7/2016					0.0096 (JD)
7/8/2016					
7/11/2016					
7/12/2016					
7/13/2016					
7/14/2016			<0.1		
7/15/2016		<0.1		0.0055 (J)	
7/18/2016	<0.1				
9/7/2016					
9/8/2016					0.0137 (JD)
9/9/2016		<0.1			
9/12/2016			<0.1		
9/13/2016	<0.1				
9/14/2016				0.0094 (J)	
9/15/2016					
10/25/2016					
10/26/2016					0.0247 (JD)
10/27/2016	0.0162 (J)	0.0103 (J)			
10/31/2016			0.007 (J)		
11/1/2016				0.008 (J)	
11/2/2016					
1/5/2017					
1/6/2017					0.0082 (JD)
1/9/2017					
1/11/2017					
1/12/2017		<0.04	<0.04		
1/13/2017	<0.04				
1/25/2017				<0.04	
2/9/2017					
3/14/2017					
3/15/2017					<0.04 (D)
3/16/2017	<0.04				
3/20/2017					
3/21/2017		<0.04			
3/22/2017			<0.04	<0.04	
3/23/2017					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-21R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
5/16/2017					
5/17/2017					
5/18/2017					0.0076 (JD)
5/19/2017	<0.04				
5/22/2017			<0.04 (*)		
5/23/2017		<0.04 (*)			
5/24/2017				0.0133 (J)	
7/19/2017					0.0193 (JD)
9/15/2017					
9/18/2017					
9/19/2017	<0.04	<0.04	<0.04		0.0132 (JD)
9/20/2017					
9/21/2017				<0.04 (*)	
9/22/2017					
9/25/2017					
3/12/2018					
3/13/2018	<0.04				0.013 (J)
3/14/2018		0.0053 (J)	<0.04	0.0056 (J)	
9/6/2018					
9/7/2018					<0.04
9/10/2018		<0.04	<0.04		
9/11/2018	<0.04			<0.04	
3/6/2019					
3/7/2019					
3/8/2019	<0.04				0.0085 (X)
3/11/2019		0.005 (X)			
3/12/2019			0.0045 (X)	0.0047 (X)	
9/4/2019					0.01 (X)
9/5/2019	<0.04				
9/6/2019		<0.04	<0.04	<0.04	
9/9/2019					
9/10/2019					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWA-56 (bg)	GWA-55R (bg)	GWC-24R	GWC-17R	GWC-18R	GWC-19R	GWC-18	GWC-22R
5/16/2017									
5/17/2017									
5/18/2017		26.9	31.3						
5/19/2017				33.2					
5/22/2017						28.9	28.2		
5/23/2017	58.7				62			21	27.5
5/24/2017									
7/19/2017									
9/15/2017		19.6							
9/18/2017			29.7						
9/19/2017				29.5					30.3
9/20/2017							32.1		
9/21/2017	63.8					30.8			
9/22/2017					67.2				
9/25/2017								17	
3/12/2018			38.2						
3/13/2018		26		30.8					32.1
3/14/2018	60.6				65.6	27.6	30.7	23.4 (J)	
9/6/2018									
9/7/2018	62.4	25.1	40.3			29.5			32.7
9/10/2018							30.7		
9/11/2018				29.1	63.2			18.1 (J)	
3/6/2019									
3/7/2019		33.3	40.4						
3/8/2019				28.8					
3/11/2019	63.8								33.9
3/12/2019					65.3	28.6	31.1	23.2 (X)	
9/4/2019		31.6							
9/5/2019			34.6	30.6					31.8
9/6/2019						27.5			
9/9/2019	55.7						29.6	15.2	
9/10/2019					66.7				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-21R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
2/29/2016					
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016					
3/7/2016					
3/8/2016	34	63	40		
3/9/2016				55	
5/2/2016					
5/3/2016					
5/4/2016	36				43.4 (D)
5/5/2016					
5/6/2016				62.4	
5/9/2016		50.8	43.8		
5/10/2016					
7/6/2016					
7/7/2016					40.1 (D)
7/8/2016					
7/11/2016					
7/12/2016					
7/13/2016					
7/14/2016			36		
7/15/2016		48.2		49.5	
7/18/2016	31.7				
9/7/2016					
9/8/2016					37.1 (D)
9/9/2016		56.9			
9/12/2016			42.1		
9/13/2016	32.5				
9/14/2016				54.4	
9/15/2016					
10/25/2016					
10/26/2016					38.8 (D)
10/27/2016	30.9	57.9			
10/31/2016			43.4		
11/1/2016				52.8	
11/2/2016					
1/5/2017					
1/6/2017					39.6 (D)
1/9/2017					
1/11/2017					
1/12/2017		60.5	39.1		
1/13/2017	31.2				
1/25/2017				57.2	
2/9/2017					
3/14/2017					
3/15/2017					36.1 (D)
3/16/2017	29				
3/20/2017					
3/21/2017		63.7			
3/22/2017			37	58.1	
3/23/2017					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-21R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
5/16/2017					
5/17/2017					
5/18/2017					40.1 (D)
5/19/2017	33.9				
5/22/2017			36.8		
5/23/2017		60			
5/24/2017				64	
7/19/2017					46.9 (D)
9/15/2017					
9/18/2017					
9/19/2017	31.3	58.9	37.7		47.7 (D)
9/20/2017					
9/21/2017				61.1	
9/22/2017					
9/25/2017					
3/12/2018					
3/13/2018	33.3				46.1 (D)
3/14/2018		65.6	35.9	59.9	
9/6/2018					
9/7/2018					44.2
9/10/2018		61.7	31.6		
9/11/2018	30.9			60.2	
3/6/2019					
3/7/2019					
3/8/2019	33.1				46.6
3/11/2019		67.1			
3/12/2019			35.2	61.6	
9/4/2019					40.7
9/5/2019	34.6				
9/6/2019		57.8	31.1	55.9	
9/9/2019					
9/10/2019					

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWA-56 (bg)	GWA-55R (bg)	GWC-24R	GWC-17R	GWC-18R	GWC-19R	GWC-18	GWC-22R
2/29/2016									
3/1/2016									
3/2/2016									
3/3/2016	0.06259 (JD)	0.1143 (J)	0.0392 (J)						
3/4/2016				<0.005	2.1421 (J)				
3/7/2016						0.00232 (J)	<0.01	0.00623 (J)	0.00526 (J)
3/8/2016									
3/9/2016									
5/2/2016									
5/3/2016			0.058 (J)						
5/4/2016									
5/5/2016				0.039 (J)		0.025 (J)		0.045 (J)	0.049 (J)
5/6/2016									
5/9/2016		0.0383 (J)					0.0246 (J)		
5/10/2016	0.0767 (J)				0.0258 (J)				
7/6/2016									
7/7/2016									
7/8/2016									
7/11/2016		<0.3 (*)	<0.3 (*)						
7/12/2016				<0.3 (*)					
7/13/2016	<0.3					<0.3		<0.3 (*)	
7/14/2016					<0.3		<0.3		<0.3
7/15/2016									
7/18/2016									
9/7/2016									
9/8/2016									
9/9/2016		0.1 (J)	0.02 (J)						
9/12/2016						0.02 (J)	0.03 (J)		0.06 (J)
9/13/2016				0.04 (J)				0.07 (J)	
9/14/2016					<0.3				
9/15/2016	<0.3								
10/25/2016									
10/26/2016		0.2 (J)							
10/27/2016			0.12 (J)	0.11 (J)					0.12 (J)
10/31/2016							0.05 (J)	0.05 (J)	
11/1/2016					0.06 (J)	0.05 (J)			
11/2/2016	0.08 (J)								
1/5/2017									
1/6/2017									
1/9/2017		0.26 (J)	0.06 (J)						
1/11/2017	0.19 (J)				0.33	<0.3	<0.3		
1/12/2017								0.06 (J)	
1/13/2017				<0.3					0.04 (J)
1/25/2017									
2/9/2017									
3/14/2017									
3/15/2017		0.19 (J)							
3/16/2017			0.08 (J)						
3/20/2017	0.18 (J)			<0.3		<0.3			0.06 (J)
3/21/2017					0.03 (J)		<0.3		
3/22/2017									
3/23/2017								0.03 (J)	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWA-56 (bg)	GWA-55R (bg)	GWC-24R	GWC-17R	GWC-18R	GWC-19R	GWC-18	GWC-22R
5/16/2017									
5/17/2017									
5/18/2017		0.19 (J)	0.04 (J)						
5/19/2017				0.01 (J)					
5/22/2017						<0.3	<0.3		
5/23/2017	0.1 (J)				0.004 (J)			0.02 (J)	0.02 (J)
5/24/2017									
7/19/2017									
9/15/2017		0.24 (J)							
9/18/2017			<0.3						
9/19/2017				<0.3					<0.3
9/20/2017							<0.3		
9/21/2017	<0.3					<0.3			
9/22/2017					0.04 (J)				
9/25/2017								0.1 (J)	
3/12/2018			<0.3						
3/13/2018		0.4		0.091 (J)					0.046 (J)
3/14/2018	0.17 (J)				<0.3	0.12 (J)	0.045 (J)	0.12 (J)	
9/6/2018									
9/7/2018	<0.3	0.14 (J)	<0.3			<0.3			<0.3
9/10/2018							<0.3		
9/11/2018				<0.3	<0.3			<0.3	
3/6/2019									
3/7/2019		0.089 (X)	<0.3						
3/8/2019				<0.3					
3/11/2019	0.23 (X)								<0.3
3/12/2019					0.056 (X)	0.042 (X)	0.04 (X)	0.05 (X)	
6/18/2019									
9/4/2019		0.11 (X)							
9/5/2019			<0.3	<0.3					<0.3
9/6/2019						<0.3			
9/9/2019	<0.3						<0.3	<0.3	
9/10/2019					<0.3				

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-21R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
2/29/2016					
3/1/2016					
3/2/2016					
3/3/2016					
3/4/2016					
3/7/2016					
3/8/2016	0.00246 (J)	0.00287 (J)	0.00425 (J)		
3/9/2016				<0.01	
5/2/2016					
5/3/2016					
5/4/2016	0.027 (J)				0.057 (JD)
5/5/2016					
5/6/2016				0.056 (J)	
5/9/2016		0.0222 (J)	0.0259 (J)		
5/10/2016					
7/6/2016					
7/7/2016					0.09 (JD)
7/8/2016					
7/11/2016					
7/12/2016					
7/13/2016					
7/14/2016			<0.3		
7/15/2016		<0.3		<0.3	
7/18/2016	<0.3				
9/7/2016					
9/8/2016					0.03 (JD)
9/9/2016		0.03 (J)			
9/12/2016			0.03 (J)		
9/13/2016	0.03 (J)				
9/14/2016				0.02 (J)	
9/15/2016					
10/25/2016					
10/26/2016					0.15 (JD)
10/27/2016	0.1 (J)	0.1 (J)			
10/31/2016			0.11 (J)		
11/1/2016				0.07 (J)	
11/2/2016					
1/5/2017					
1/6/2017					0.11 (JD)
1/9/2017					
1/11/2017					
1/12/2017		0.11 (J)	0.02 (J)		
1/13/2017	<0.3				
1/25/2017				0.01 (J)	
2/9/2017					
3/14/2017					
3/15/2017					0.004 (JD)
3/16/2017	<0.3				
3/20/2017					
3/21/2017		<0.3			
3/22/2017			0.1 (J)	0.02 (J)	
3/23/2017					

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 1:14 PM View: Cells3&4_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-21R	GWC-20R	GWC-23R	GWA-51R_51RZ ...
5/16/2017					
5/17/2017					
5/18/2017					0.007 (JD)
5/19/2017	<0.3				
5/22/2017			0.02 (J)		
5/23/2017		<0.3			
5/24/2017				<0.3	
7/19/2017					0.12 (JD)
9/15/2017					
9/18/2017					
9/19/2017	<0.3	<0.3	<0.3		0.07 (JD)
9/20/2017					
9/21/2017				0.17 (J)	
9/22/2017					
9/25/2017					
3/12/2018					
3/13/2018	<0.3				0.16 (J)
3/14/2018		<0.3	0.035 (J)	0.18 (J)	
9/6/2018					
9/7/2018					<0.3
9/10/2018		<0.3	<0.3		
9/11/2018	<0.3			<0.3	
3/6/2019					
3/7/2019					
3/8/2019	<0.3				0.075 (X)
3/11/2019		0.51			
3/12/2019			0.048 (X)	0.06 (X)	
6/18/2019		<0.3			
9/4/2019					<0.3
9/5/2019	<0.3				
9/6/2019		<0.3	<0.3	<0.3	
9/9/2019					
9/10/2019					

Intrawell Prediction Limit Summary Table – App. III Cells 3 & 4 Significant Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 1/10/2020, 1:19 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (pH units)	GWC-22R	7.9	7.5	9/5/2019	7.09	Yes	8	0	No	0.000342	Param 1 of 3

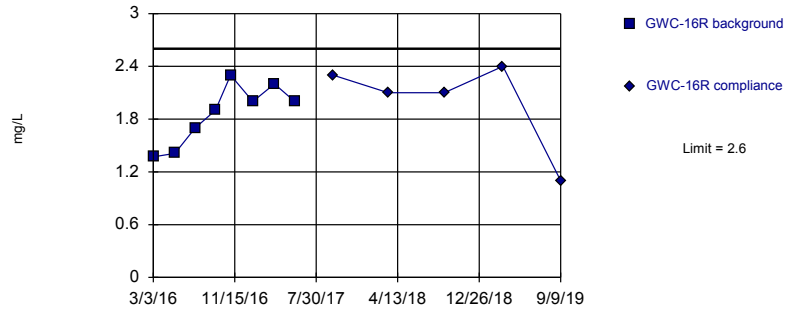
Prediction Limit Summary Table – App. III Cells 3 & 4 All Results

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 1/10/2020, 1:19 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Chloride (mg/L)	GWC-16R	2.6	n/a	9/9/2019	1.1	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-17R	7.4	n/a	9/10/2019	4.5	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-18	2.4	n/a	9/9/2019	2	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-18R	2.9	n/a	9/6/2019	2.3	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-19R	3	n/a	9/9/2019	2.3	No	8	0	sqrt(x)	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-20R	2.3	n/a	9/6/2019	1.6	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-21R	5.1	n/a	9/6/2019	3.5	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-22R	3.3	n/a	9/5/2019	2.7	No	8	0	sqrt(x)	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-23R	2.6	n/a	9/6/2019	1.4	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-24R	3.1	n/a	9/5/2019	2.2	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-25R	3.2	n/a	9/5/2019	2.5	No	8	0	No	0.000...	Param 1 of 3
pH (pH units)	GWC-16R	7.5	6.8	9/9/2019	7.13	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-17R	7.3	7.1	9/10/2019	7.17	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-18	7.5	5.8	9/9/2019	6.71	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-18R	8	7.5	9/6/2019	7.65	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-19R	7.9	7.5	9/9/2019	7.73	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-20R	7.9	7.3	9/6/2019	7.75	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-21R	7.4	6.8	9/6/2019	7.04	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-22R	7.9	7.5	9/5/2019	7.09	Yes	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-23R	7.7	7	9/6/2019	7.32	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-24R	8	6.8	9/5/2019	7.4	No	8	0	No	0.000342	Param 1 of 3
pH (pH units)	GWC-25R	7.8	7.2	9/5/2019	7.59	No	8	0	No	0.000342	Param 1 of 3
Sulfate (mg/L)	GWC-16R	13	n/a	9/9/2019	3.8	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-17R	9.3	n/a	9/10/2019	6	No	8	0	ln(x)	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-18	2.5	n/a	9/9/2019	1.8	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-18R	2.6	n/a	9/6/2019	2	No	7	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-19R	3.7	n/a	9/9/2019	3.7	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-20R	1.9	n/a	9/6/2019	1.4	No	8	0	x^2	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-21R	6.3	n/a	9/6/2019	6	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-22R	2.6	n/a	9/5/2019	1.7	No	7	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-23R	27	n/a	9/6/2019	9.5	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-24R	15	n/a	9/5/2019	1.8	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-25R	2	n/a	9/5/2019	1.6	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-16R	340	n/a	9/9/2019	275	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-17R	390	n/a	9/10/2019	312	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-18	140	n/a	9/9/2019	95	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-18R	190	n/a	9/6/2019	141	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-19R	240	n/a	9/9/2019	172	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-20R	220	n/a	9/6/2019	24	No	7	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-21R	430	n/a	9/6/2019	291	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-22R	200	n/a	9/5/2019	171	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-23R	360	n/a	9/6/2019	300	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-24R	220	n/a	9/5/2019	157	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-25R	200	n/a	9/5/2019	177	No	8	0	No	0.000...	Param 1 of 3

Within Limit

Prediction Limit
Intrawell Parametric

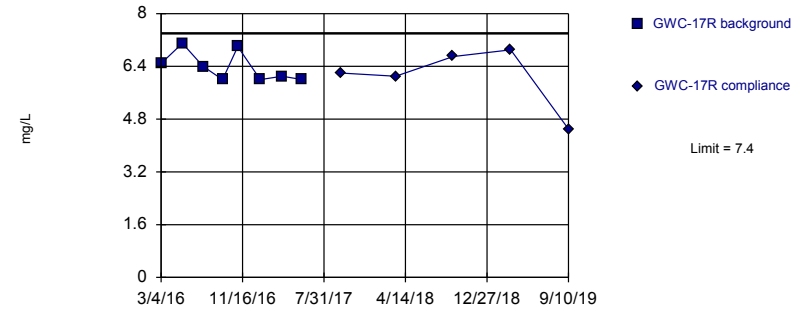


Background Data Summary: Mean=1.86, Std. Dev.=0.3417, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9264, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:15 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

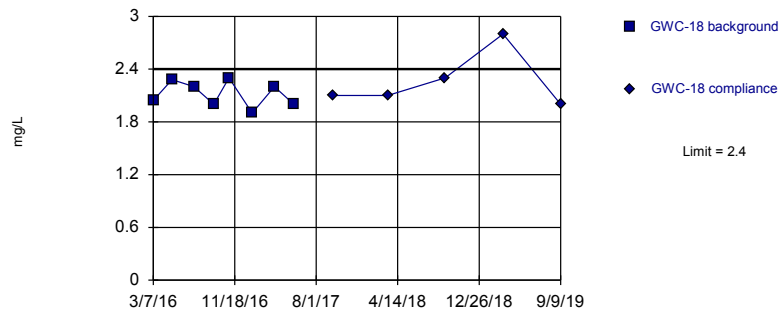


Background Data Summary: Mean=6.386, Std. Dev.=0.4515, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8243, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:15 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

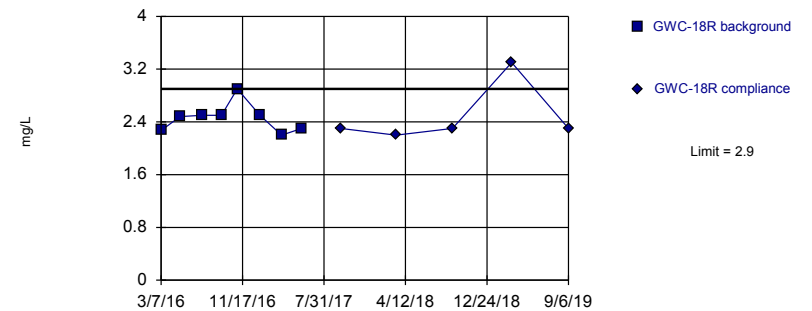


Background Data Summary: Mean=2.116, Std. Dev.=0.1481, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9123, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:15 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=2.456, Std. Dev.=0.2165, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8642, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:15 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
3/3/2016	1.3707 (D)	
5/10/2016	1.41	
7/13/2016	1.7	
9/15/2016	1.9	
11/2/2016	2.3	
1/11/2017	2	
3/20/2017	2.2	
5/23/2017	2	
9/21/2017		2.3
3/14/2018		2.1
9/7/2018		2.1
3/11/2019		2.4
9/9/2019		1.1

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
3/4/2016	6.4905	
5/10/2016	7.1	
7/14/2016	6.4	
9/14/2016	6	
11/1/2016	7	
1/11/2017	6	
3/21/2017	6.1	
5/23/2017	6	
9/22/2017		6.2
3/14/2018		6.1
9/11/2018		6.7
3/12/2019		6.9
9/10/2019		4.5

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
3/7/2016	2.0446	
5/5/2016	2.28	
7/13/2016	2.2	
9/13/2016	2	
10/31/2016	2.3	
1/12/2017	1.9	
3/23/2017	2.2	
5/23/2017	2	
9/25/2017		2.1
3/14/2018		2.1
9/11/2018		2.3
3/12/2019		2.8
9/9/2019		2

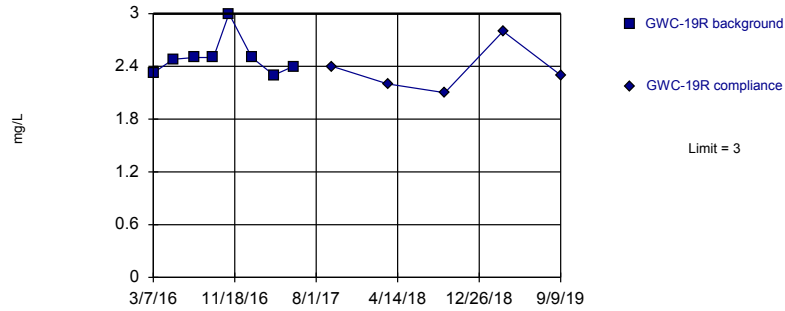
Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
3/7/2016	2.2698	
5/5/2016	2.48	
7/13/2016	2.5	
9/12/2016	2.5	
11/1/2016	2.9	
1/11/2017	2.5	
3/20/2017	2.2	
5/22/2017	2.3	
9/21/2017		2.3
3/14/2018		2.2
9/7/2018		2.3
3/12/2019		3.3
9/6/2019		2.3

Within Limit

Prediction Limit
Intrawell Parametric

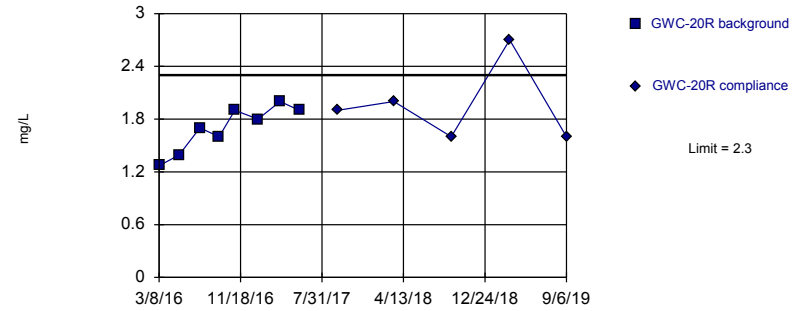


Background Data Summary (based on square root transformation): Mean=1.58, Std. Dev.=0.06671, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7624, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:15 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

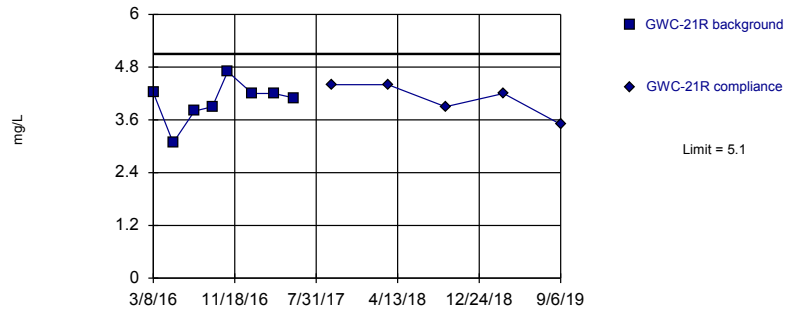


Background Data Summary: Mean=1.695, Std. Dev.=0.2594, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9282, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:15 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

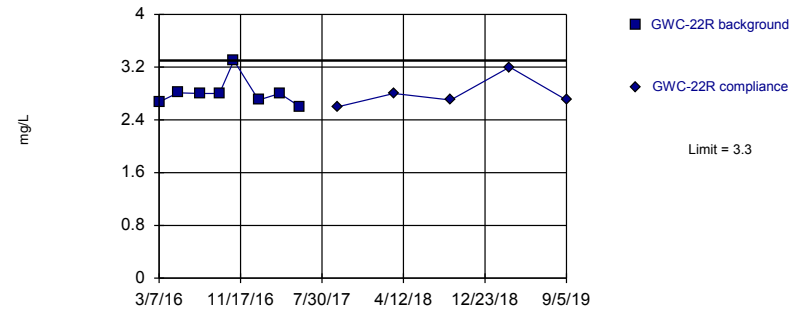


Background Data Summary: Mean=4.025, Std. Dev.=0.4659, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9022, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:15 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.675, Std. Dev.=0.06163, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7573, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:15 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
3/7/2016	2.3254	
5/9/2016	2.48	
7/14/2016	2.5	
9/12/2016	2.5	
10/31/2016	3	
1/11/2017	2.5	
3/21/2017	2.3	
5/22/2017	2.4	
9/20/2017		2.4
3/14/2018		2.2
9/10/2018		2.1
3/12/2019		2.8
9/9/2019		2.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
3/8/2016	1.2699	
5/9/2016	1.39	
7/14/2016	1.7	
9/12/2016	1.6	
10/31/2016	1.9	
1/12/2017	1.8	
3/22/2017	2	
5/22/2017	1.9	
9/19/2017		1.9
3/14/2018		2
9/10/2018		1.6
3/12/2019		2.7
9/6/2019		1.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
3/8/2016	4.2184	
5/9/2016	3.08	
7/15/2016	3.8	
9/9/2016	3.9	
10/27/2016	4.7	
1/12/2017	4.2	
3/21/2017	4.2	
5/23/2017	4.1	
9/19/2017		4.4
3/14/2018		4.4
9/10/2018		3.9
3/11/2019		4.2
9/6/2019		3.5

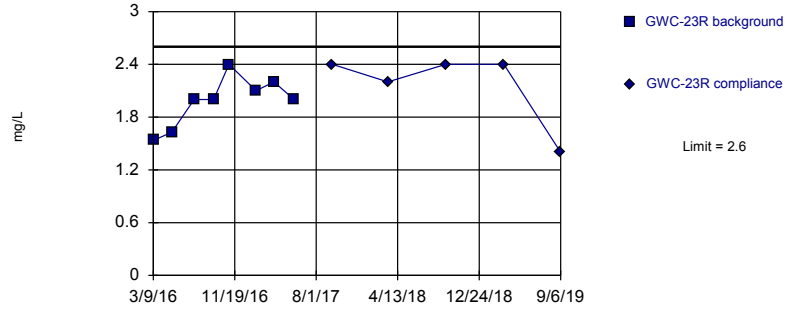
Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
3/7/2016	2.6729	
5/5/2016	2.81	
7/14/2016	2.8	
9/12/2016	2.8	
10/27/2016	3.3	
1/13/2017	2.7	
3/20/2017	2.8	
5/23/2017	2.6	
9/19/2017		2.6
3/13/2018		2.8
9/7/2018		2.7
3/11/2019		3.2
9/5/2019		2.7

Within Limit

Prediction Limit
Intrawell Parametric

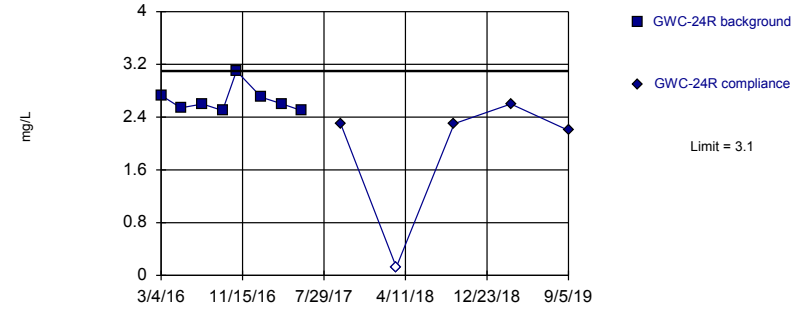


Background Data Summary: Mean=1.983, Std. Dev.=0.2831, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9276, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

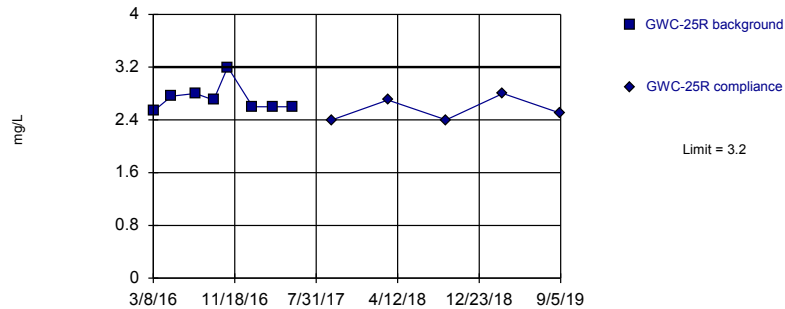


Background Data Summary: Mean=2.659, Std. Dev.=0.1974, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7876, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

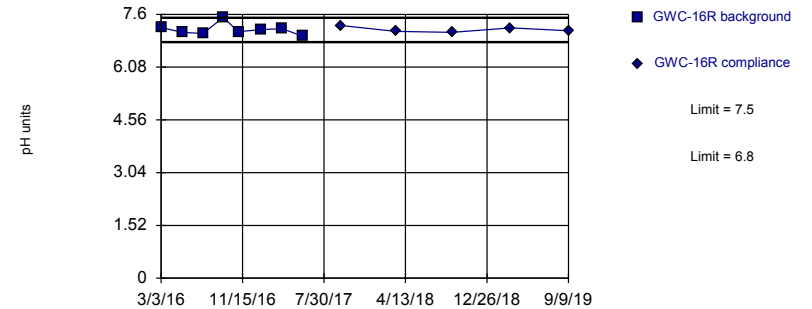


Background Data Summary: Mean=2.724, Std. Dev.=0.213, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7927, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Chloride Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.16, Std. Dev.=0.1627, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8775, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
3/9/2016	1.5349	
5/6/2016	1.63	
7/15/2016	2	
9/14/2016	2	
11/1/2016	2.4	
1/25/2017	2.1	
3/22/2017	2.2	
5/24/2017	2	
9/21/2017		2.4
3/14/2018		2.2
9/11/2018		2.4
3/12/2019		2.4
9/6/2019		1.4

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
3/4/2016	2.7291	
5/5/2016	2.54	
7/12/2016	2.6	
9/13/2016	2.5	
10/27/2016	3.1	
1/13/2017	2.7	
3/20/2017	2.6	
5/19/2017	2.5	
9/19/2017		2.3
3/13/2018		<0.25
9/11/2018		2.3
3/8/2019		2.6
9/5/2019		2.2

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
3/8/2016	2.5307	
5/4/2016	2.76	
7/18/2016	2.8	
9/13/2016	2.7	
10/27/2016	3.2	
1/13/2017	2.6	
3/16/2017	2.6	
5/19/2017	2.6	
9/19/2017		2.4
3/13/2018		2.7
9/11/2018		2.4
3/8/2019		2.8
9/5/2019		2.5

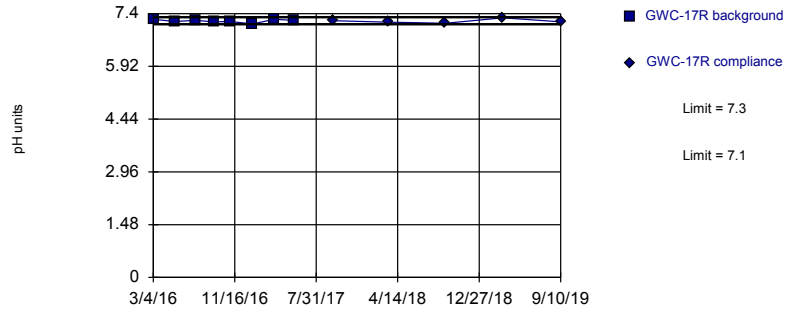
Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
3/3/2016	7.22 (D)	
5/10/2016	7.08	
7/13/2016	7.05	
9/15/2016	7.51	
11/2/2016	7.1	
1/11/2017	7.16	
3/20/2017	7.19	
5/23/2017	6.97	
9/21/2017		7.28
3/14/2018		7.11
9/7/2018		7.08
3/11/2019		7.21
9/9/2019		7.13

Within Limits

Prediction Limit
Intrawell Parametric

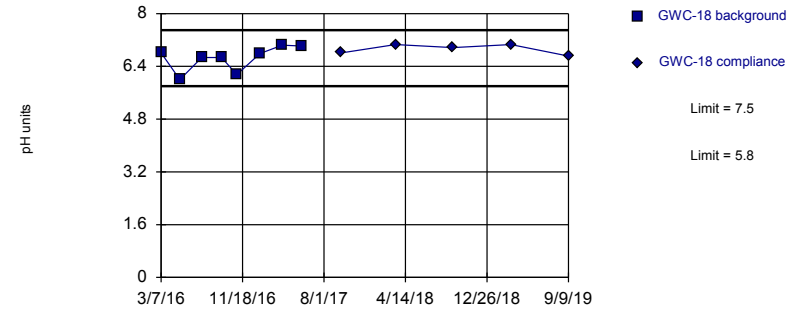


Background Data Summary: Mean=7.193, Std. Dev.=0.04268, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9104, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

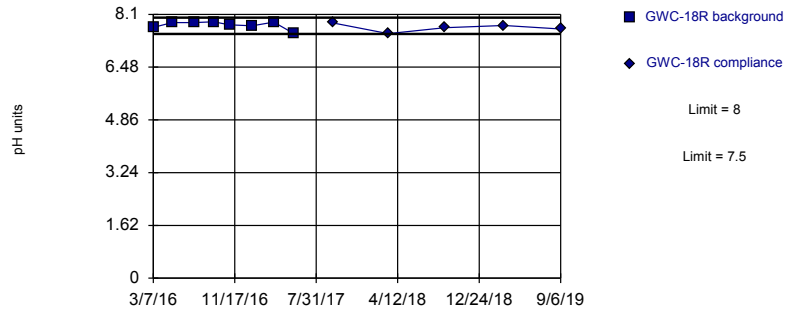


Background Data Summary: Mean=6.644, Std. Dev.=0.3793, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8695, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

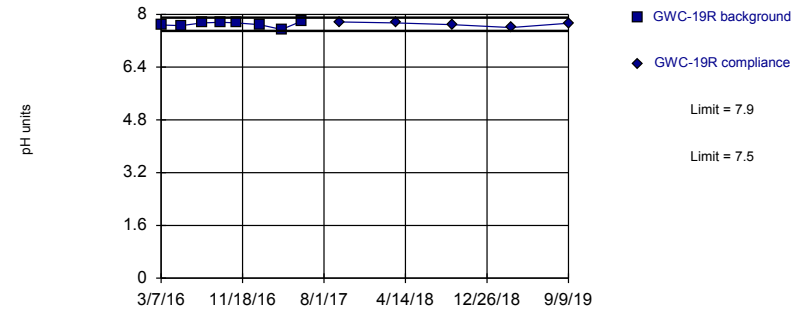


Background Data Summary: Mean=7.771, Std. Dev.=0.1218, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8087, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.7, Std. Dev.=0.07801, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9037, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
3/4/2016	7.24	
5/10/2016	7.18	
7/14/2016	7.21	
9/13/2016	7.17	
11/1/2016	7.18	
1/11/2017	7.11	
3/21/2017	7.24	
5/23/2017	7.21	
9/22/2017		7.2
3/14/2018		7.16
9/11/2018		7.13
3/12/2019		7.28
9/10/2019		7.17

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
3/7/2016	6.81	
5/5/2016	6	
7/13/2016	6.67	
9/13/2016	6.67	
10/31/2016	6.15	
1/12/2017	6.79	
3/23/2017	7.04	
5/23/2017	7.02	
9/25/2017		6.81
3/14/2018		7.06
9/11/2018		6.97
3/12/2019		7.06
9/9/2019		6.71

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
3/7/2016	7.7	
5/5/2016	7.85	
7/13/2016	7.85	
9/12/2016	7.87	
11/1/2016	7.78	
1/11/2017	7.75	
3/20/2017	7.86	
5/22/2017	7.51	
9/21/2017		7.84
3/14/2018		7.51
9/7/2018		7.69
3/12/2019		7.76
9/6/2019		7.65

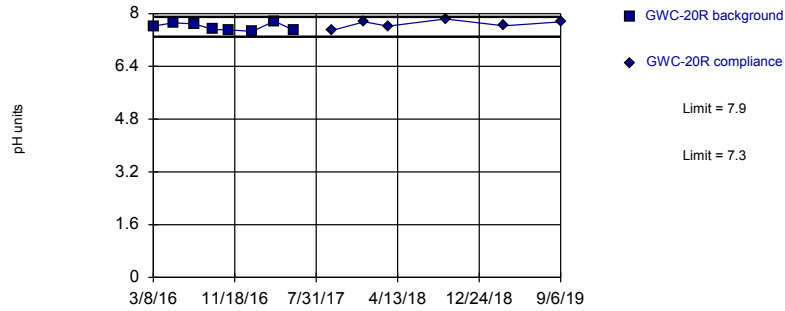
Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
3/7/2016	7.68	
5/9/2016	7.66	
7/14/2016	7.74	
9/12/2016	7.76	
10/31/2016	7.74	
1/11/2017	7.69	
3/21/2017	7.54	
5/22/2017	7.79	
9/20/2017		7.77
3/14/2018		7.74
9/10/2018		7.69
3/12/2019		7.6
9/9/2019		7.73

Within Limits

Prediction Limit
Intrawell Parametric

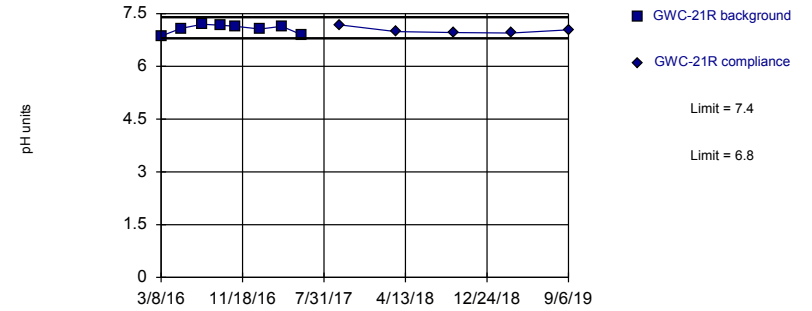


Background Data Summary: Mean=7.599, Std. Dev.=0.117, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9027, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

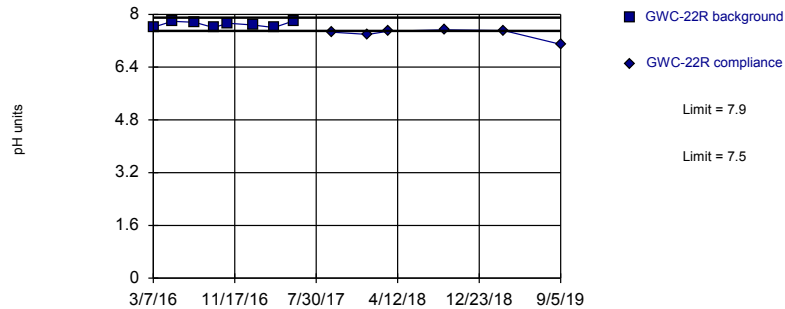


Background Data Summary: Mean=7.069, Std. Dev.=0.1253, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8661, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Exceeds Limits

Prediction Limit
Intrawell Parametric

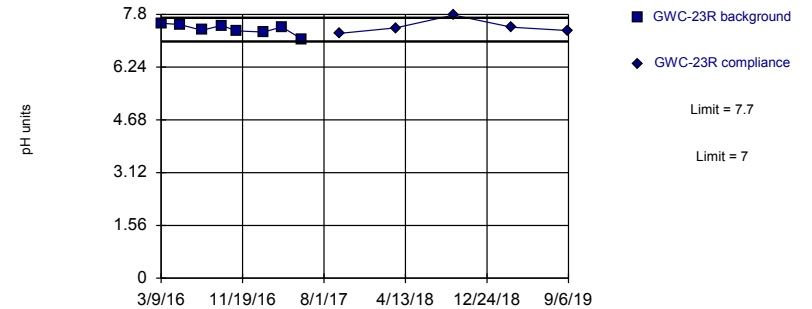


Background Data Summary: Mean=7.698, Std. Dev.=0.08714, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8791, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.366, Std. Dev.=0.1524, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9238, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
3/8/2016	7.62	
5/9/2016	7.72	
7/14/2016	7.69	
9/12/2016	7.52	
10/31/2016	7.51	
1/12/2017	7.46	
3/22/2017	7.77	
5/22/2017	7.5	
9/19/2017		7.49
12/29/2017		7.75 (Y)
3/14/2018		7.62
9/10/2018		7.84
3/12/2019		7.63
9/6/2019		7.75

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
3/8/2016	6.86	
5/9/2016	7.08	
7/15/2016	7.2	
9/9/2016	7.17	
10/27/2016	7.14	
1/12/2017	7.06	
3/21/2017	7.14	
5/23/2017	6.9	
9/19/2017		7.18
3/14/2018		6.99
9/10/2018		6.96
3/11/2019		6.95
9/6/2019		7.04

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
3/7/2016	7.61	
5/5/2016	7.79	
7/14/2016	7.76	
9/12/2016	7.6	
10/27/2016	7.73	
1/13/2017	7.68	
3/20/2017	7.6	
5/23/2017	7.81	
9/19/2017		7.46
1/9/2018		7.39 (Y)
3/13/2018		7.49
9/7/2018		7.53
3/11/2019		7.51
9/5/2019		7.09

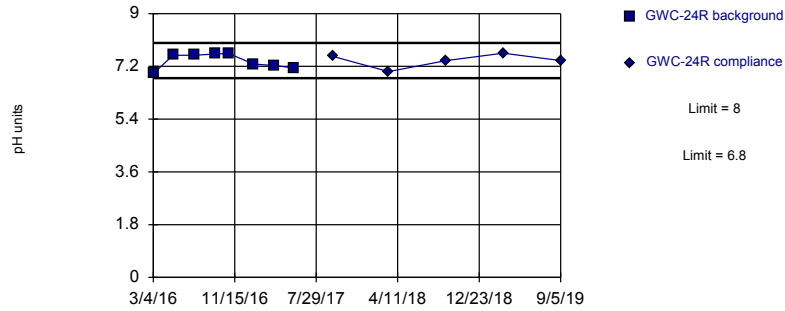
Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
3/9/2016	7.54	
5/6/2016	7.5	
7/15/2016	7.33	
9/14/2016	7.47	
11/1/2016	7.31	
1/25/2017	7.28	
3/22/2017	7.43	
5/24/2017	7.07	
9/21/2017		7.24
3/14/2018		7.4
9/11/2018		7.78
3/12/2019		7.42
9/6/2019		7.32

Within Limits

Prediction Limit
Intrawell Parametric

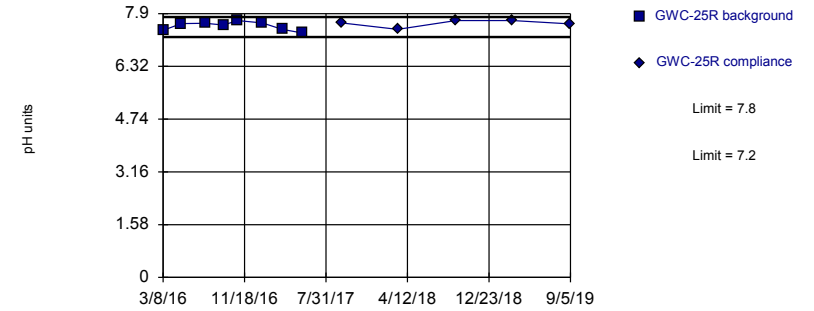


Background Data Summary: Mean=7.379, Std. Dev.=0.2606, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8726, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limits

Prediction Limit
Intrawell Parametric

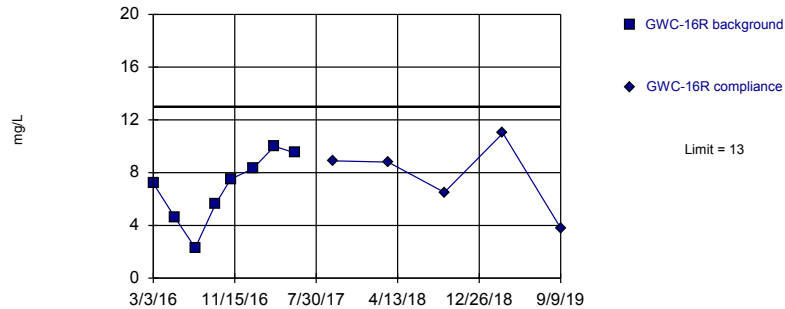


Background Data Summary: Mean=7.529, Std. Dev.=0.1292, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9156, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: pH Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

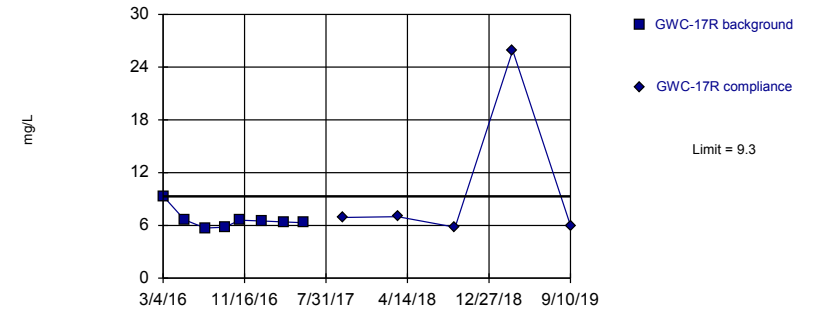


Background Data Summary: Mean=6.873, Std. Dev.=2.589, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9568, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=1.885, Std. Dev.=0.1523, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7603, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
3/4/2016	6.95	
5/5/2016	7.58	
7/12/2016	7.58	
9/13/2016	7.62	
10/27/2016	7.64	
1/13/2017	7.28	
3/20/2017	7.23	
5/19/2017	7.15	
9/19/2017		7.54
3/13/2018		7.02
9/11/2018		7.4
3/8/2019		7.65
9/5/2019		7.4

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
3/8/2016	7.4	
5/4/2016	7.6	
7/18/2016	7.61	
9/13/2016	7.56	
10/27/2016	7.69	
1/13/2017	7.62	
3/16/2017	7.43	
5/19/2017	7.32	
9/19/2017		7.62
3/13/2018		7.43
9/11/2018		7.69
3/8/2019		7.69
9/5/2019		7.59

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
3/3/2016	7.1809 (D)	
5/10/2016	4.6	
7/13/2016	2.3	
9/15/2016	5.6	
11/2/2016	7.5	
1/11/2017	8.3	
3/20/2017	10	
5/23/2017	9.5	
9/21/2017		8.9
3/14/2018		8.8
9/7/2018		6.5
3/11/2019		11
9/9/2019		3.8

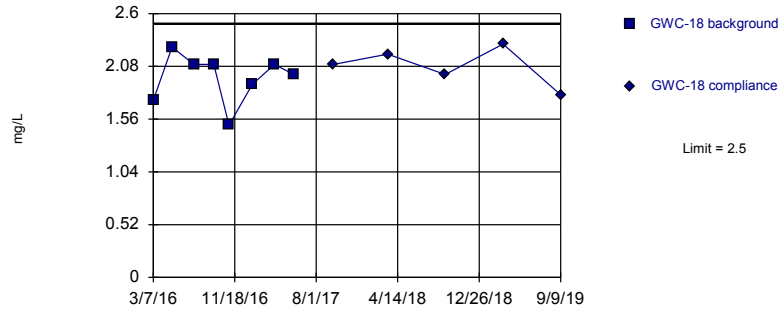
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
3/4/2016	9.3417	
5/10/2016	6.65	
7/14/2016	5.7	
9/14/2016	5.8	
11/1/2016	6.6	
1/11/2017	6.5	
3/21/2017	6.4	
5/23/2017	6.3	
9/22/2017		6.9
3/14/2018		7
9/11/2018		5.8
3/12/2019		25.9
9/10/2019		6

Within Limit

Prediction Limit
Intrawell Parametric

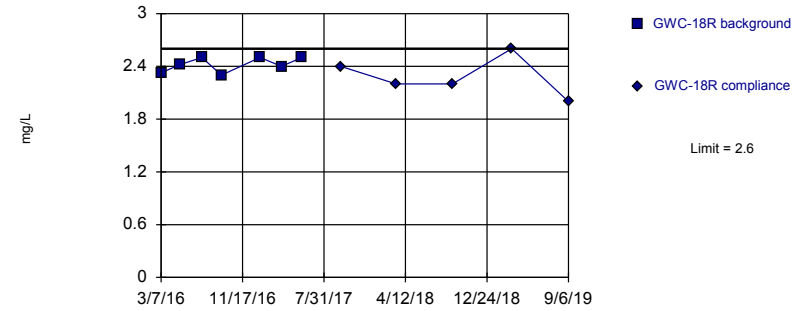


Background Data Summary: Mean=1.965, Std. Dev.=0.2441, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9166, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

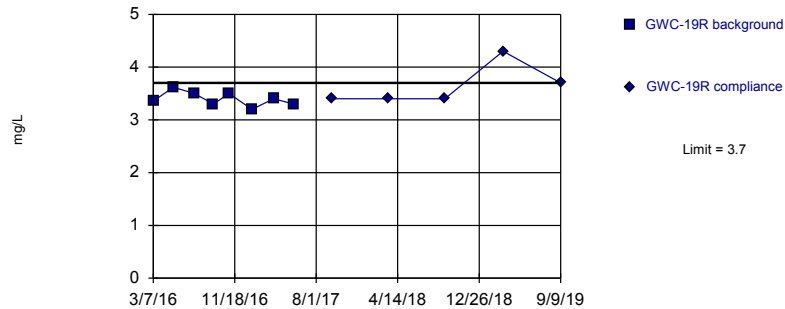


Background Data Summary: Mean=2.421, Std. Dev.=0.08453, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8552, critical = 0.73. Kappa = 2.527 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

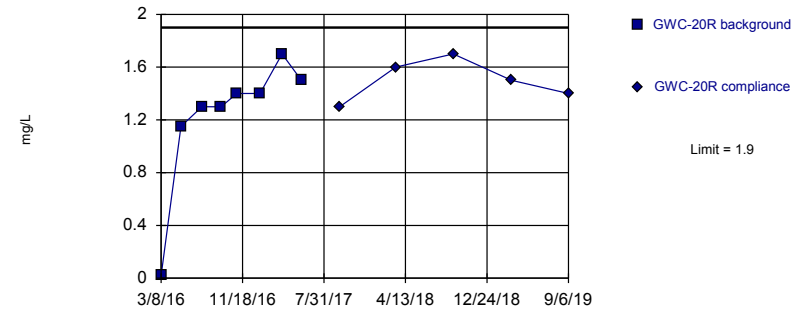


Background Data Summary: Mean=3.397, Std. Dev.=0.1364, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9662, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square transformation): Mean=1.72, Std. Dev.=0.8351, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9072, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
3/7/2016	1.7468	
5/5/2016	2.27	
7/13/2016	2.1	
9/13/2016	2.1	
10/31/2016	1.5	
1/12/2017	1.9	
3/23/2017	2.1	
5/23/2017	2	
9/25/2017		2.1
3/14/2018		2.2
9/11/2018		2
3/12/2019		2.3
9/9/2019		1.8

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
3/7/2016	2.3258	
5/5/2016	2.42	
7/13/2016	2.5	
9/12/2016	2.3	
1/11/2017	2.5	
3/20/2017	2.4	
5/22/2017	2.5	
9/21/2017		2.4
3/14/2018		2.2
9/7/2018		2.2
3/12/2019		2.6
9/6/2019		2

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
3/7/2016	3.3556	
5/9/2016	3.62	
7/14/2016	3.5	
9/12/2016	3.3	
10/31/2016	3.5	
1/11/2017	3.2	
3/21/2017	3.4	
5/22/2017	3.3	
9/20/2017		3.4
3/14/2018		3.4
9/10/2018		3.4
3/12/2019		4.3
9/9/2019		3.7

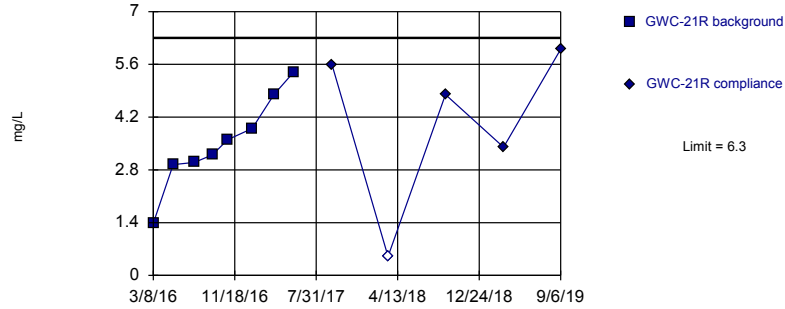
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
3/8/2016	0.0196 (J)	
5/9/2016	1.15	
7/14/2016	1.3	
9/12/2016	1.3	
10/31/2016	1.4	
1/12/2017	1.4	
3/22/2017	1.7	
5/22/2017	1.5	
9/19/2017		1.3
3/14/2018		1.6
9/10/2018		1.7
3/12/2019		1.5
9/6/2019		1.4

Within Limit

Prediction Limit
Intrawell Parametric

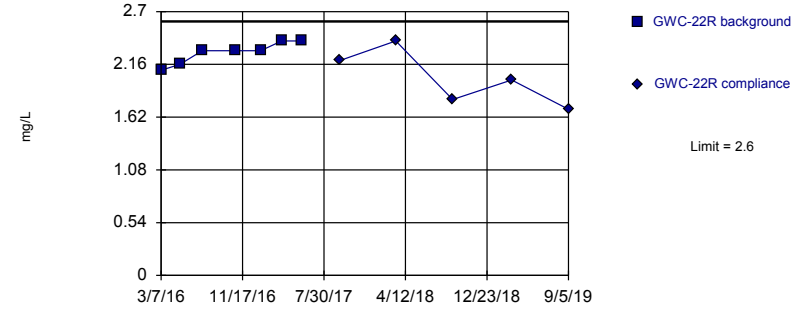


Background Data Summary: Mean=3.528, Std. Dev.=1.23, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9655, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
3/8/2016	1.3858	
5/9/2016	2.94	
7/15/2016	3	
9/9/2016	3.2	
10/27/2016	3.6	
1/12/2017	3.9	
3/21/2017	4.8	
5/23/2017	5.4	
9/19/2017		5.6
3/14/2018		<1
9/10/2018		4.8
3/11/2019		3.4
9/6/2019		6

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
3/7/2016	2.1008	
5/5/2016	2.16	
7/14/2016	2.3	
10/27/2016	2.3	
1/13/2017	2.3	
3/20/2017	2.4	
5/23/2017	2.4	
9/19/2017		2.2
3/13/2018		2.4
9/7/2018		1.8
3/11/2019		2
9/5/2019		1.7

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
3/9/2016	26.4322	
5/6/2016	17.7	
7/15/2016	12	
9/14/2016	12	
11/1/2016	10	
1/25/2017	8.2	
3/22/2017	13	
5/24/2017	10	
9/21/2017		16
3/14/2018		14
9/11/2018		14.9
3/12/2019		17.7
9/6/2019		9.5

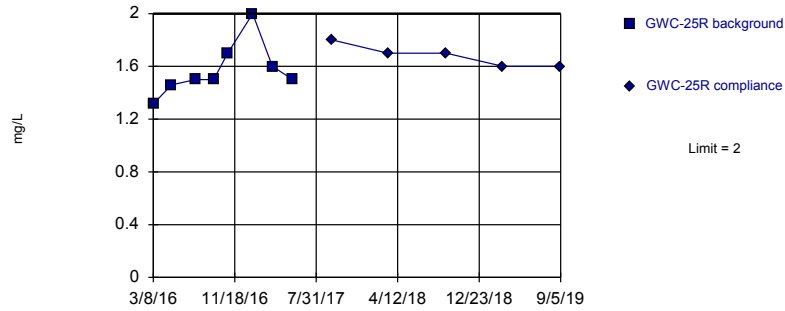
Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
3/4/2016	1.0816	
5/5/2016	11.3	
7/12/2016	8.8	
9/13/2016	5.4	
10/27/2016	9.9	
1/13/2017	7.8	
3/20/2017	2.3	
5/19/2017	2.4	
9/19/2017		2.3
3/13/2018		1.4
9/11/2018		1.7
3/8/2019		1.9
9/5/2019		1.8

Within Limit

Prediction Limit
Intrawell Parametric

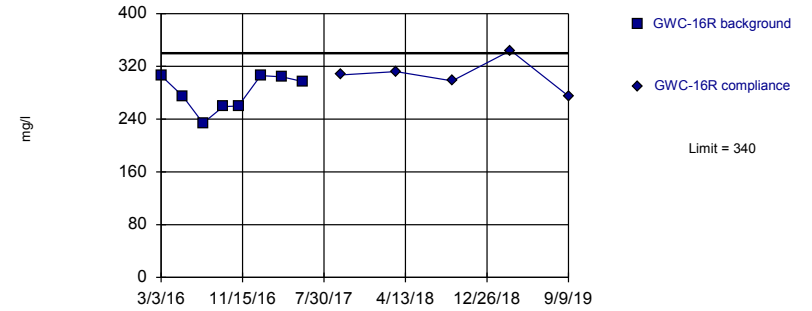


Background Data Summary: Mean=1.572, Std. Dev.=0.205, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8756, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Sulfate Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

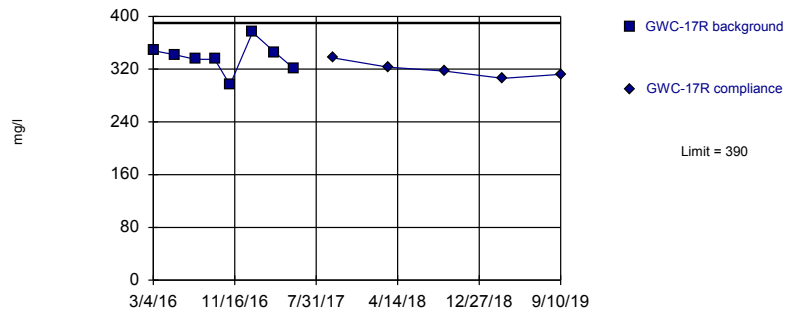


Background Data Summary: Mean=280.1, Std. Dev.=27.25, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8725, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

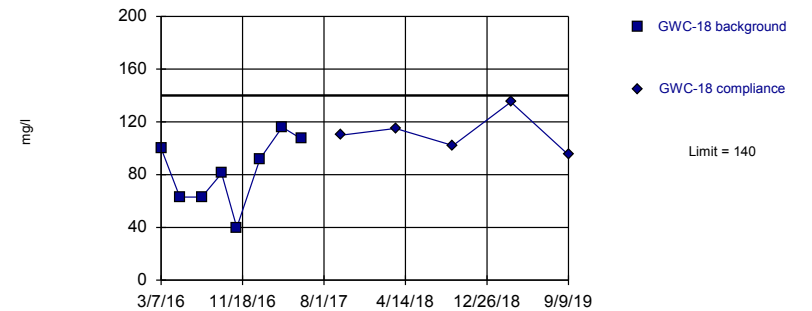


Background Data Summary: Mean=337.3, Std. Dev.=23.07, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.953, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=82.75, Std. Dev.=25.88, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9572, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
3/8/2016	1.3157	
5/4/2016	1.46	
7/18/2016	1.5	
9/13/2016	1.5	
10/27/2016	1.7	
1/13/2017	2	
3/16/2017	1.6	
5/19/2017	1.5	
9/19/2017		1.8
3/13/2018		1.7
9/11/2018		1.7
3/8/2019		1.6
9/5/2019		1.6

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R	GWC-16R
3/3/2016	306 (D)	
5/10/2016	275 (D)	
7/13/2016	234 (D)	
9/15/2016	259 (D)	
11/2/2016	260 (D)	
1/11/2017	306	
3/20/2017	304	
5/23/2017	297	
9/21/2017		307
3/14/2018		312
9/7/2018		298
3/11/2019		344
9/9/2019		275

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-17R	GWC-17R
3/4/2016	348 (D)	
5/10/2016	342 (D)	
7/14/2016	335 (D)	
9/14/2016	335 (D)	
11/1/2016	296 (D)	
1/11/2017	376	
3/21/2017	346	
5/23/2017	320	
9/22/2017		337
3/14/2018		323
9/11/2018		317
3/12/2019		306
9/10/2019		312

Prediction Limit

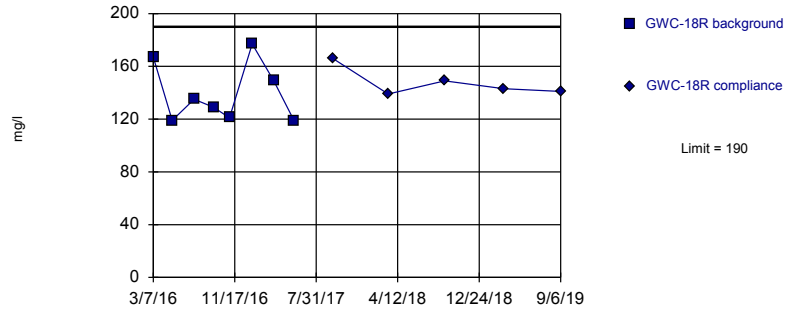
Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18	GWC-18
3/7/2016	100 (D)	
5/5/2016	63 (D)	
7/13/2016	63 (D)	
9/13/2016	81 (D)	
10/31/2016	40 (D)	
1/12/2017	92	
3/23/2017	116	
5/23/2017	107	
9/25/2017		110
3/14/2018		115
9/11/2018		102
3/12/2019		135 (X)
9/9/2019		95

Within Limit

Prediction Limit
Intrawell Parametric

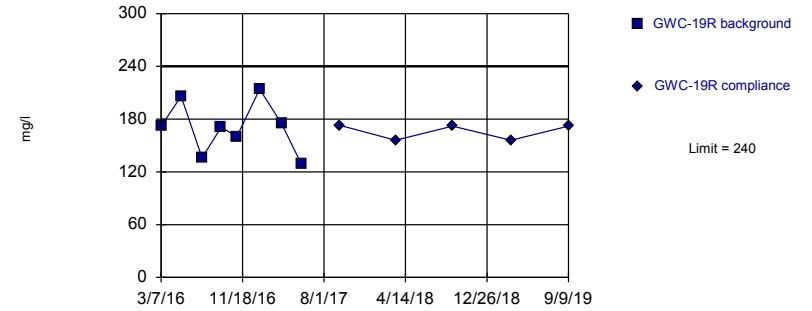


Background Data Summary: Mean=139.5, Std. Dev.=22.57, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.864, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

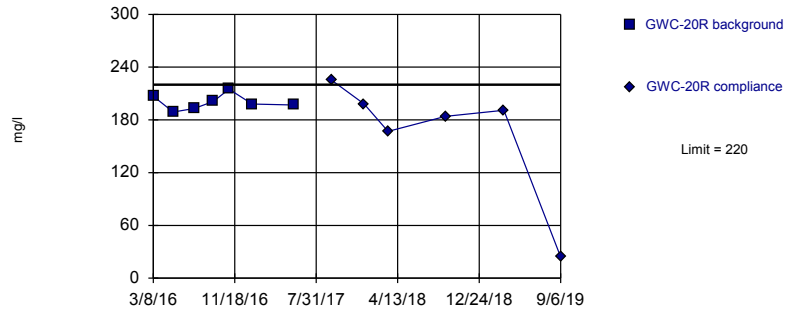


Background Data Summary: Mean=170.4, Std. Dev.=29.76, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9383, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

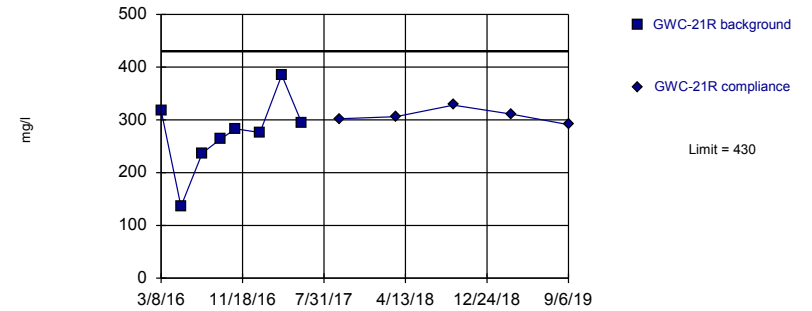


Background Data Summary: Mean=200, Std. Dev.=8.737, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9638, critical = 0.73. Kappa = 2.527 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=274, Std. Dev.=70.99, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9402, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:16 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-18R	GWC-18R
3/7/2016	167 (D)	
5/5/2016	119 (D)	
7/13/2016	135 (D)	
9/12/2016	129 (D)	
11/1/2016	121 (D)	
1/11/2017	177	
3/20/2017	149	
5/22/2017	119	
9/21/2017		166
3/14/2018		139
9/7/2018		149
3/12/2019		143 (X)
9/6/2019		141

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-19R	GWC-19R
3/7/2016	172 (D)	
5/9/2016	206 (D)	
7/14/2016	136 (D)	
9/12/2016	171 (D)	
10/31/2016	160 (D)	
1/11/2017	214	
3/21/2017	175 (J)	
5/22/2017	129	
9/20/2017		173
3/14/2018		156
9/10/2018		172
3/12/2019		156 (X)
9/9/2019		172

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-20R	GWC-20R
3/8/2016	207 (D)	
5/9/2016	189 (D)	
7/14/2016	193 (D)	
9/12/2016	201 (D)	
10/31/2016	215 (D)	
1/12/2017	198	
5/22/2017	197	
9/19/2017		225
12/29/2017		198 (Y)
3/14/2018		167
9/10/2018		184
3/12/2019		191 (X)
9/6/2019		24

Prediction Limit

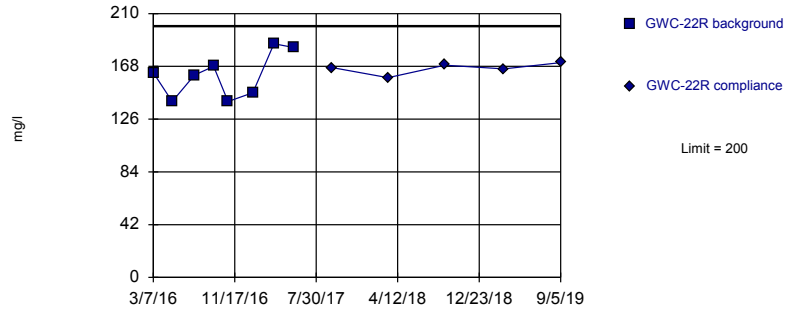
Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R	GWC-21R
3/8/2016	318 (D)	
5/9/2016	136 (D)	
7/15/2016	237 (D)	
9/9/2016	263 (D)	
10/27/2016	283 (D)	
1/12/2017	276	
3/21/2017	385	
5/23/2017	294	
9/19/2017		302
3/14/2018		306
9/10/2018		328
3/11/2019		311
9/6/2019		291

Within Limit

Prediction Limit
Intrawell Parametric

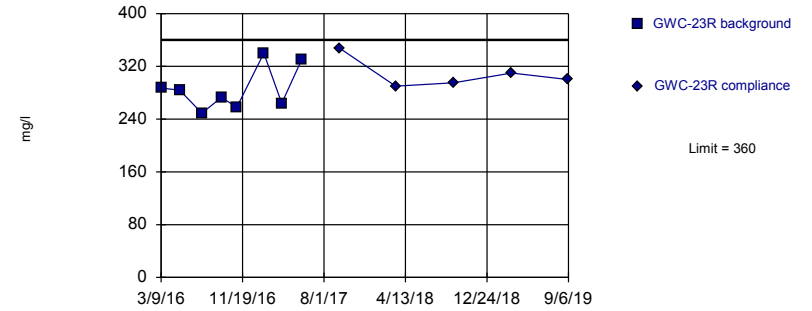


Background Data Summary: Mean=161, Std. Dev.=17.89, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9128, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:17 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

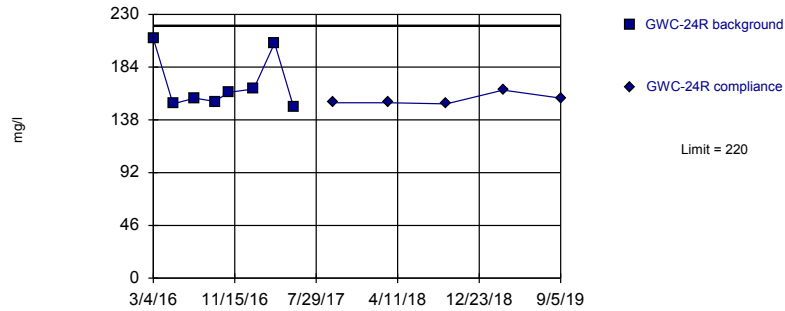


Background Data Summary: Mean=285.8, Std. Dev.=33.28, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8844, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:17 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric

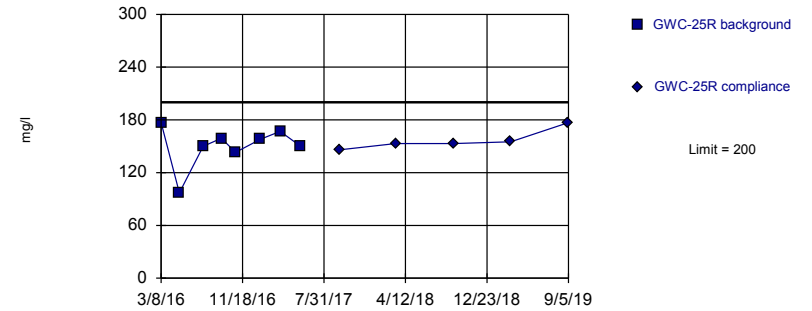


Background Data Summary: Mean=169.1, Std. Dev.=23.96, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7604, critical = 0.749. Kappa = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:17 PM View: Cells3&4_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-22R	GWC-22R
3/7/2016	163 (D)	
5/5/2016	140 (D)	
7/14/2016	161 (D)	
9/12/2016	168 (D)	
10/27/2016	140 (D)	
1/13/2017	147 (J)	
3/20/2017	186	
5/23/2017	183	
9/19/2017		167
3/13/2018		159
9/7/2018		169
3/11/2019		166
9/5/2019		171

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R	GWC-23R
3/9/2016	287 (D)	
5/6/2016	284 (D)	
7/15/2016	249 (D)	
9/14/2016	273 (D)	
11/1/2016	258 (D)	
1/25/2017	340	
3/22/2017	264	
5/24/2017	331	
9/21/2017		347
3/14/2018		290
9/11/2018		295
3/12/2019		310 (X)
9/6/2019		300

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-24R	GWC-24R
3/4/2016	209 (D)	
5/5/2016	152 (D)	
7/12/2016	157 (D)	
9/13/2016	154 (D)	
10/27/2016	162 (D)	
1/13/2017	165	
3/20/2017	205 (J)	
5/19/2017	149	
9/19/2017		153
3/13/2018		153
9/11/2018		152
3/8/2019		164
9/5/2019		157

Prediction Limit

Constituent: Total Dissolved Solids (mg/l) Analysis Run 1/10/2020 1:19 PM View: Cells3&4_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-25R	GWC-25R
3/8/2016	177 (D)	
5/4/2016	97 (D)	
7/18/2016	150 (D)	
9/13/2016	159 (D)	
10/27/2016	143 (D)	
1/13/2017	158	
3/16/2017	167	
5/19/2017	150	
9/19/2017		146
3/13/2018		153
9/11/2018		153
3/8/2019		155
9/5/2019		177

Intrawell Prediction Limit Summary - Cells 9 & 10 Overburden (Significant Results)

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/15/2020, 11:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-45	0.003	n/a	9/11/2019	0.014	Yes	11	n/a	n/a	45.45	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Zinc (mg/L)	GWC-48	0.009006	n/a	9/11/2019	0.011	Yes	10	0.006348	0.001312	50	Kaplan-Meier	No	0.0006583	Param Intra 1 of 3

Intrawell Prediction Limit Summary - Cells 9 & 10 Overburden (All Results)

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/15/2020, 11:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Obsrv.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-39Z	0.003065	n/a	9/9/2019	0.00079	No	11	0.001342	0.0008802	27.27	Kaplan-Meier	No	0.0006583	Param Intra 1 of 3
Antimony (mg/L)	GWA-40	0.003	n/a	9/9/2019	0.003ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-41	0.003	n/a	9/10/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-42	0.003	n/a	9/10/2019	0.003ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-43	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-44	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-45	0.003	n/a	9/11/2019	0.014	Yes	11	n/a	n/a	45.45	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Antimony (mg/L)	GWC-47	0.003	n/a	9/12/2019	0.003ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-48	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-49Z	0.003	n/a	9/11/2019	0.00065	No	11	n/a	n/a	54.55	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWA-39Z	0.005	n/a	9/9/2019	0.00043	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWA-40	0.005	n/a	9/9/2019	0.00068	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWA-41	0.005	n/a	9/10/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWA-42	0.005	n/a	9/10/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWA-43	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-44	0.005	n/a	9/11/2019	0.005ND	No	10	n/a	n/a	70	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-45	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-47	0.005	n/a	9/12/2019	0.005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-48	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-49Z	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Barium (mg/L)	GWA-39Z	0.03213	n/a	9/9/2019	0.015	No	11	0.01385	0.009342	18.18	Kaplan-Meier	No	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWA-40	0.01228	n/a	9/9/2019	0.0078	No	10	0.009012	0.001613	0	None	No	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWA-41	0.03439	n/a	9/10/2019	0.0195	No	11	0.02693	0.003812	0	None	No	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWA-42	0.006685	n/a	9/10/2019	0.0068	No	11	0.006255	0.0002197	0	None	No	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWA-43	0.0414	n/a	9/11/2019	0.015	No	11	0.02405	0.00887	0	None	No	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWC-44	0.07634	n/a	9/11/2019	0.036	No	10	0.0348	0.0205	0	None	No	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWC-45	0.006272	n/a	9/11/2019	0.0061	No	10	0.00579	0.0002378	0	None	No	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWC-47	0.0174	n/a	9/12/2019	0.0085	No	11	0.01361	0.001939	0	None	No	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWC-48	0.03647	n/a	9/11/2019	0.0295	No	11	0.0007215	0.0003112	9.091	None	x^2	0.0006583	Param Intra 1 of 3
Barium (mg/L)	GWC-49Z	0.01332	n/a	9/11/2019	0.0038	No	11	0.0068	0.00333	9.091	None	No	0.0006583	Param Intra 1 of 3
Beryllium (mg/L)	GWA-39Z	0.003	n/a	9/9/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWA-40	0.003	n/a	9/9/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWA-41	0.003	n/a	9/10/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWA-42	0.0002	n/a	9/10/2019	0.00015	No	9	n/a	n/a	0	n/a	n/a	0.004675	NP Intra (normality) 1 of 3
Beryllium (mg/L)	GWA-43	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-44	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-45	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-47	0.003	n/a	9/12/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-48	0.003	n/a	9/11/2019	0.0003	No	11	n/a	n/a	27.27	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Beryllium (mg/L)	GWC-49Z	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWA-39Z	0.0025	n/a	9/9/2019	0.0025ND	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWA-40	0.0025	n/a	9/9/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWA-41	0.0025	n/a	9/10/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWA-42	0.001	n/a	9/10/2019	0.00014	No	11	n/a	n/a	18.18	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Cadmium (mg/L)	GWA-43	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-44	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-45	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-47	0.0025	n/a	9/12/2019	0.0025ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-48	0.0007429	n/a	9/11/2019	0.00021	No	10	-8.534	0.6559	10	None	ln(x)	0.0006583	Param Intra 1 of 3
Cadmium (mg/L)	GWC-49Z	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	36.36	n/a	n/a	0.002806	NP Intra (normality) 1 of 3

Intrawell Prediction Limit Summary - Cells 9 & 10 Overburden (All Results) Page 2

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/15/2020, 11:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GWA-39Z	0.01	n/a	9/9/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-40	0.01	n/a	9/9/2019	0.01ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-41	0.01	n/a	9/10/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-42	0.01	n/a	9/10/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-43	0.01	n/a	9/11/2019	0.00051	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWC-44	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWC-45	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWC-47	0.007416	n/a	9/12/2019	0.0014	No	10	-6.134	0.6071	10	None	ln(x)	0.0006583	Param Intra 1 of 3
Chromium (mg/L)	GWC-48	0.003655	n/a	9/11/2019	0.00165	No	11	0.03719	0.01189	45.45	Kaplan-Meier	sqrt(x)	0.0006583	Param Intra 1 of 3
Chromium (mg/L)	GWC-49Z	0.017	n/a	9/11/2019	0.002	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWA-39Z	0.008898	n/a	9/9/2019	0.0025ND	No	11	0.04771	0.02382	9.091	None	sqrt(x)	0.0006583	Param Intra 1 of 3
Cobalt (mg/L)	GWA-40	0.0025	n/a	9/9/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWA-41	0.0025	n/a	9/10/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWA-42	0.0025	n/a	9/10/2019	0.0025ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWA-43	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-44	0.01	n/a	9/11/2019	0.0018	No	11	n/a	n/a	9.091	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Cobalt (mg/L)	GWC-45	0.01	n/a	9/11/2019	0.0014	No	11	n/a	n/a	18.18	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Cobalt (mg/L)	GWC-47	0.0025	n/a	9/12/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-48	0.01	n/a	9/11/2019	0.00135	No	11	n/a	n/a	9.091	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Cobalt (mg/L)	GWC-49Z	0.006069	n/a	9/11/2019	0.00075	No	11	0.003487	0.001319	18.18	Kaplan-Meier	No	0.0006583	Param Intra 1 of 3
Copper (mg/L)	GWA-39Z	0.025	n/a	9/9/2019	0.025ND	No	10	n/a	n/a	80	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWA-40	0.025	n/a	9/9/2019	0.0022	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWA-41	0.025	n/a	9/10/2019	0.00038	No	10	n/a	n/a	80	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWA-42	0.025	n/a	9/10/2019	0.025ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWA-43	0.025	n/a	9/11/2019	0.00036	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-44	0.025	n/a	9/11/2019	0.00043	No	10	n/a	n/a	80	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-45	0.025	n/a	9/11/2019	0.012	No	10	n/a	n/a	50	n/a	n/a	0.00344	NP Intra (normality) 1 of 3
Copper (mg/L)	GWC-47	0.025	n/a	9/12/2019	0.025ND	No	10	n/a	n/a	80	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-48	0.025	n/a	9/11/2019	0.000535	No	10	n/a	n/a	80	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-49Z	0.025	n/a	9/11/2019	0.00021	No	10	n/a	n/a	70	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-39Z	0.005	n/a	9/9/2019	0.005ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-40	0.005	n/a	9/9/2019	0.005ND	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-41	0.005	n/a	9/10/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-42	0.005	n/a	9/10/2019	0.005ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-43	0.005	n/a	9/11/2019	0.0001	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-44	0.000851	n/a	9/11/2019	0.00047	No	11	-8.001	0.4762	27.27	Kaplan-Meier	ln(x)	0.0006583	Param Intra 1 of 3
Lead (mg/L)	GWC-45	0.005	n/a	9/11/2019	0.00016	No	11	n/a	n/a	36.36	n/a	n/a	0.002806	NP Intra (normality) 1 of 3
Lead (mg/L)	GWC-47	0.005	n/a	9/12/2019	0.005ND	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-48	0.005	n/a	9/11/2019	0.002529	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-49Z	0.005	n/a	9/11/2019	0.000082	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-39Z	0.0005	n/a	9/9/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-40	0.0005	n/a	9/9/2019	0.0005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-41	0.0005	n/a	9/10/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-42	0.0005	n/a	9/10/2019	0.0005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-43	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-44	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-45	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-47	0.0005	n/a	9/12/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-48	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-49Z	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3

Intrawell Prediction Limit Summary - Cells 9 & 10 Overburden (All Results) Page 3

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/15/2020, 11:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Nickel (mg/L)	GWA-39Z	0.01203	n/a	9/9/2019	0.0014	No	10	0.004838	0.00355	20	Kaplan-Meier	No	0.0006583	Param Intra 1 of 3
Nickel (mg/L)	GWA-40	0.01	n/a	9/9/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWA-41	0.01	n/a	9/10/2019	0.0004	No	10	n/a	n/a	60	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWA-42	0.01	n/a	9/10/2019	0.0012	No	10	n/a	n/a	20	n/a	n/a	0.00344	NP Intra (normality) 1 of 3
Nickel (mg/L)	GWA-43	0.01	n/a	9/11/2019	0.00082	No	10	n/a	n/a	40	n/a	n/a	0.00344	NP Intra (normality) 1 of 3
Nickel (mg/L)	GWC-44	0.01	n/a	9/11/2019	0.00058	No	10	n/a	n/a	50	n/a	n/a	0.00344	NP Intra (normality) 1 of 3
Nickel (mg/L)	GWC-45	0.01	n/a	9/11/2019	0.0012	No	10	n/a	n/a	10	n/a	n/a	0.00344	NP Intra (normality) 1 of 3
Nickel (mg/L)	GWC-47	0.01	n/a	9/12/2019	0.01ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-48	0.01	n/a	9/11/2019	0.00405	No	10	n/a	n/a	10	n/a	n/a	0.00344	NP Intra (normality) 1 of 3
Nickel (mg/L)	GWC-49Z	0.009645	n/a	9/11/2019	0.0012	No	10	0.004688	0.002447	10	None	No	0.0006583	Param Intra 1 of 3
Selenium (mg/L)	GWA-39Z	0.01	n/a	9/9/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-40	0.01	n/a	9/9/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-41	0.01	n/a	9/10/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-42	0.01	n/a	9/10/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-43	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-44	0.006769	n/a	9/11/2019	0.0021	No	11	0.05783	0.01249	45.45	Kaplan-Meier	sqrt(x)	0.0006583	Param Intra 1 of 3
Selenium (mg/L)	GWC-45	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-47	0.01	n/a	9/12/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-48	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-49Z	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-39Z	0.01	n/a	9/9/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-40	0.01	n/a	9/9/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-41	0.01	n/a	9/10/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-42	0.01	n/a	9/10/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-43	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-44	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-45	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-47	0.01	n/a	9/12/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-48	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-49Z	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-39Z	0.001	n/a	9/9/2019	0.001ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-40	0.001	n/a	9/9/2019	0.001ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-41	0.001	n/a	9/10/2019	0.001ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-42	0.001	n/a	9/10/2019	0.001ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-43	0.001	n/a	9/11/2019	0.000062	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-44	0.001	n/a	9/11/2019	0.001ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-45	0.001	n/a	9/11/2019	0.001ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-47	0.001	n/a	9/12/2019	0.001ND	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-48	0.001	n/a	9/11/2019	0.000115	No	11	n/a	n/a	63.64	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-49Z	0.001	n/a	9/11/2019	0.001ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWA-39Z	0.01	n/a	9/9/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWA-40	0.01	n/a	9/9/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWA-41	0.01	n/a	9/10/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWA-42	0.01	n/a	9/10/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWA-43	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-44	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-45	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-47	0.01	n/a	9/12/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-48	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-49Z	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3

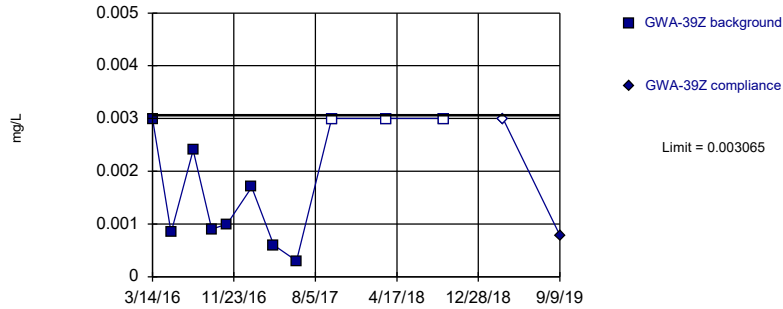
Intrawell Prediction Limit Summary - Cells 9 & 10 Overburden (All Results) Page 4

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/15/2020, 11:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Zinc (mg/L)	GWA-39Z	0.01	n/a	9/9/2019	0.0047	No	10	n/a	n/a	60	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Zinc (mg/L)	GWA-40	0.01	n/a	9/9/2019	0.0058	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Zinc (mg/L)	GWA-41	0.01	n/a	9/10/2019	0.00745	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Zinc (mg/L)	GWA-42	0.01464	n/a	9/10/2019	0.014	No	10	0.09783	0.01143	40	Kaplan-Meier	sqrt(x)	0.0006583	Param Intra 1 of 3
Zinc (mg/L)	GWA-43	0.01	n/a	9/11/2019	0.0065	No	10	n/a	n/a	50	n/a	n/a	0.00344	NP Intra (normality) 1 of 3
Zinc (mg/L)	GWC-44	0.006272	n/a	9/11/2019	0.0068	No	10	0.06517	0.006924	40	Kaplan-Meier	sqrt(x)	0.0006583	Param Intra 1 of 3
Zinc (mg/L)	GWC-45	0.007268	n/a	9/11/2019	0.0065	No	10	0.004638	0.001298	50	Kaplan-Meier	No	0.0006583	Param Intra 1 of 3
Zinc (mg/L)	GWC-47	0.03556	n/a	9/12/2019	0.035	No	11	0.02497	0.005411	18.18	Kaplan-Meier	No	0.0006583	Param Intra 1 of 3
Zinc (mg/L)	GWC-48	0.009006	n/a	9/11/2019	0.011	Yes	10	0.006348	0.001312	50	Kaplan-Meier	No	0.0006583	Param Intra 1 of 3
Zinc (mg/L)	GWC-49Z	0.01	n/a	9/11/2019	0.0085	No	10	n/a	n/a	60	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3

Within Limit

Prediction Limit
Intrawell Parametric

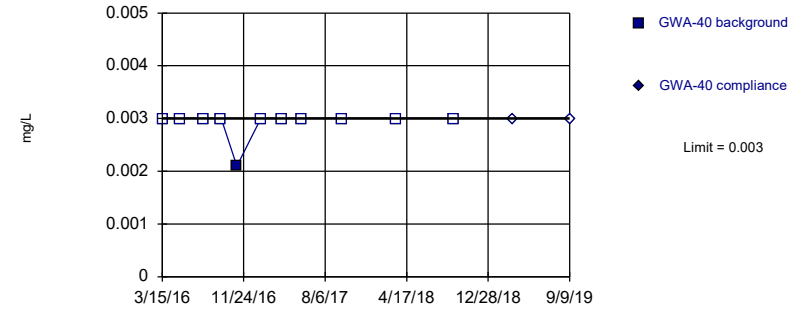


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001342, Std. Dev.=0.0008802, n=11, 27.27% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8365, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

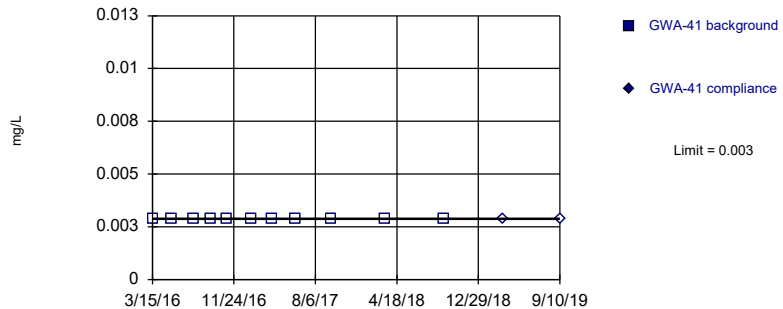


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

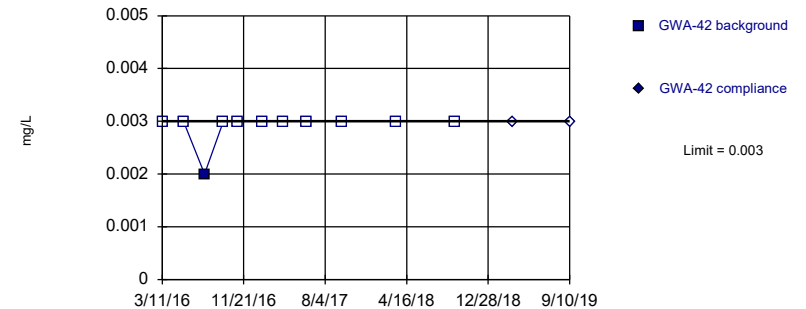


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

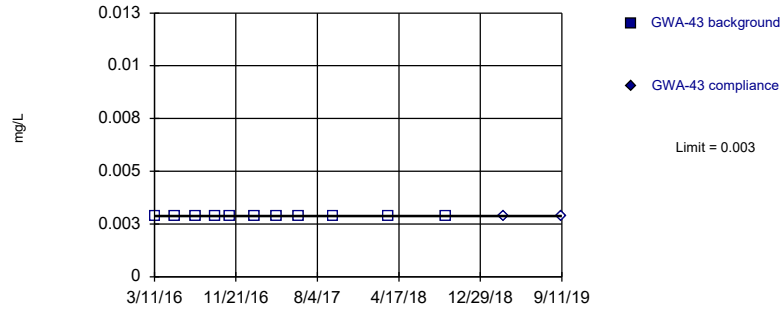


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

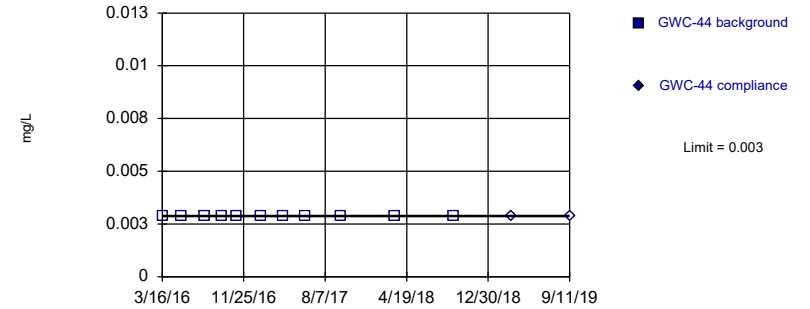


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

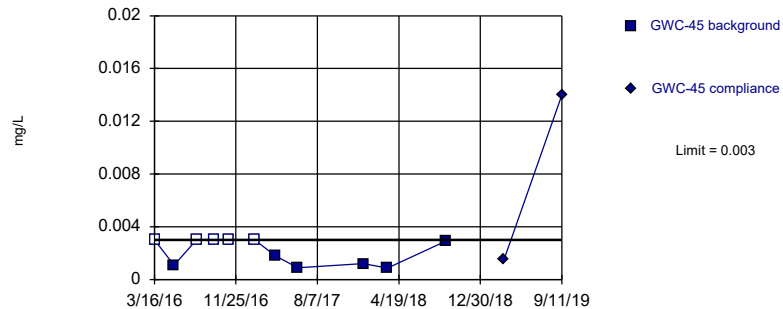


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Exceeds Limit

Prediction Limit
Intrawell Non-parametric

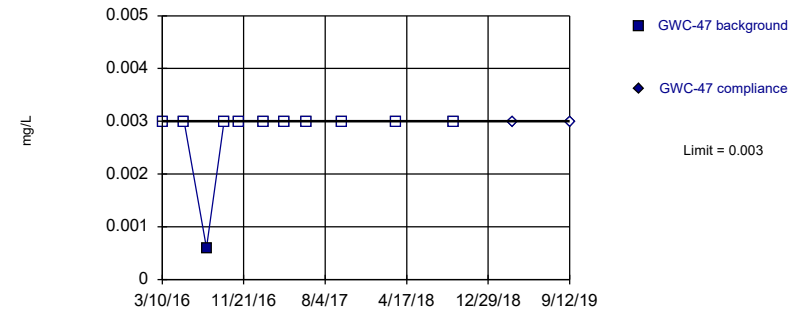


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Seasonality was not detected with 95% confidence.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

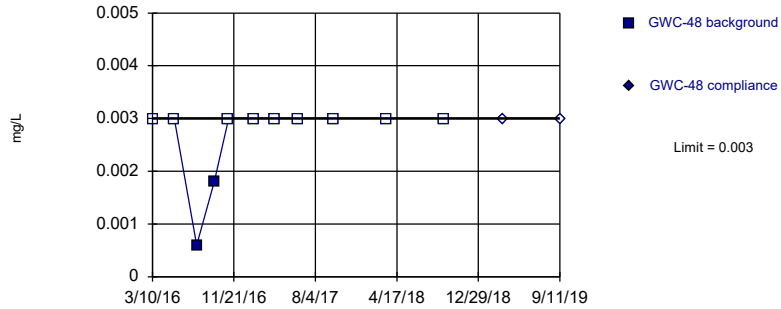


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

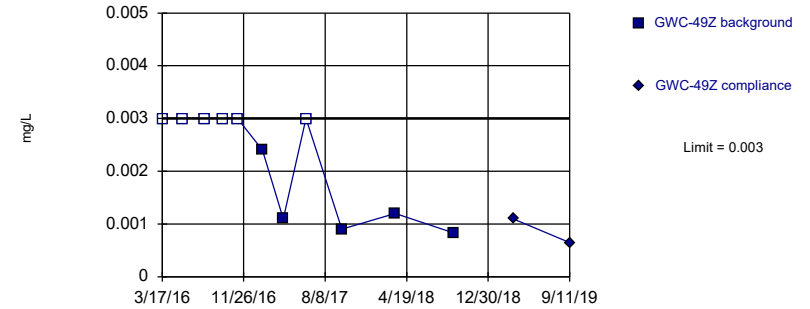


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

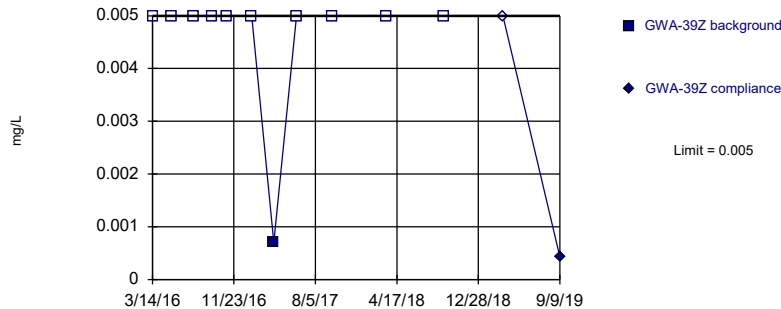


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

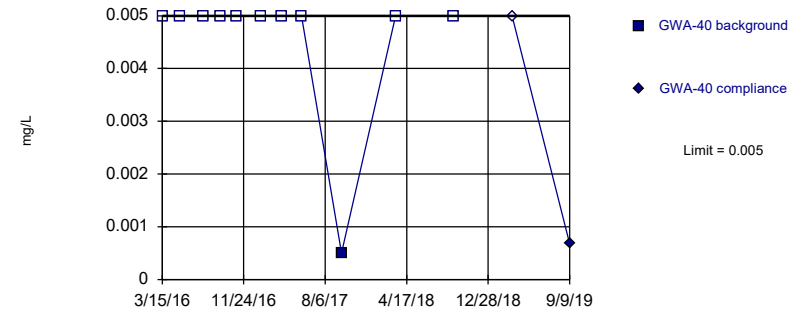


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

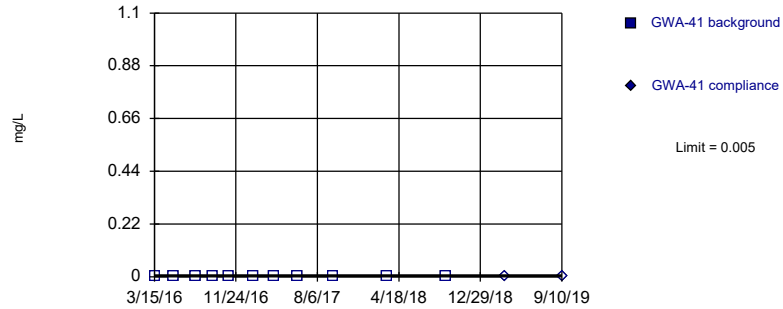
Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

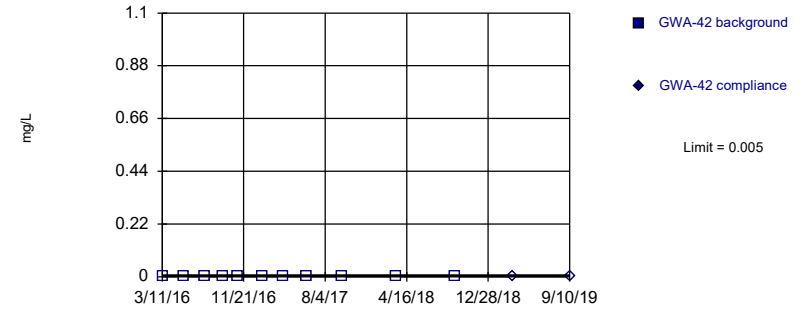
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

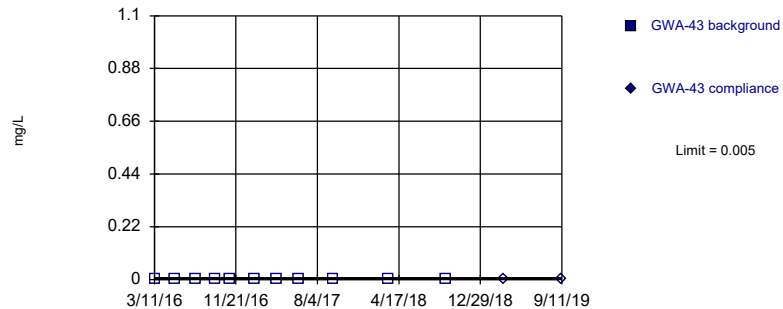
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

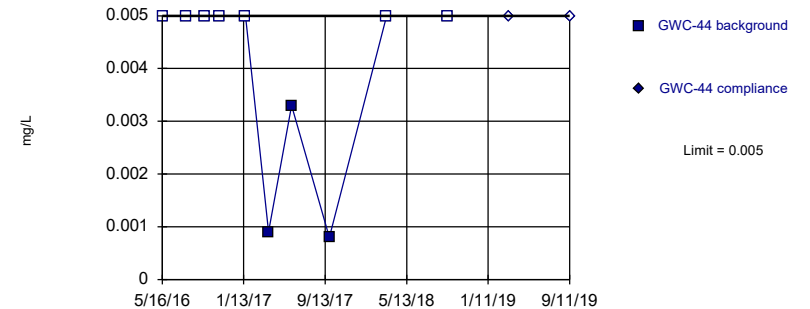
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

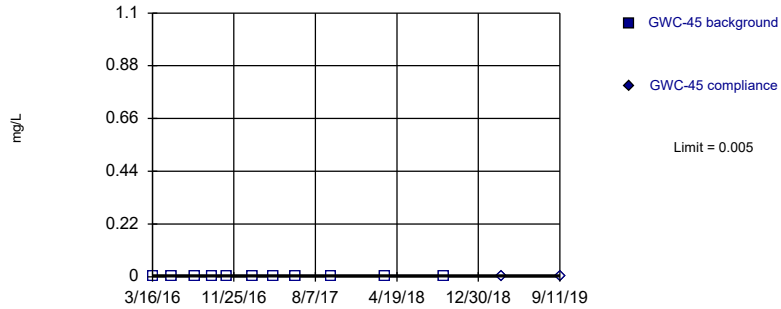
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

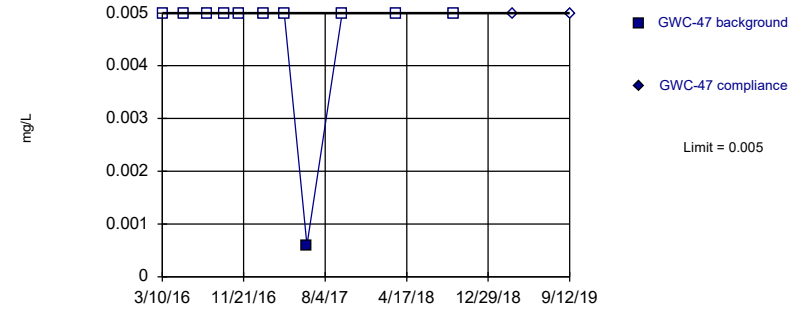
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

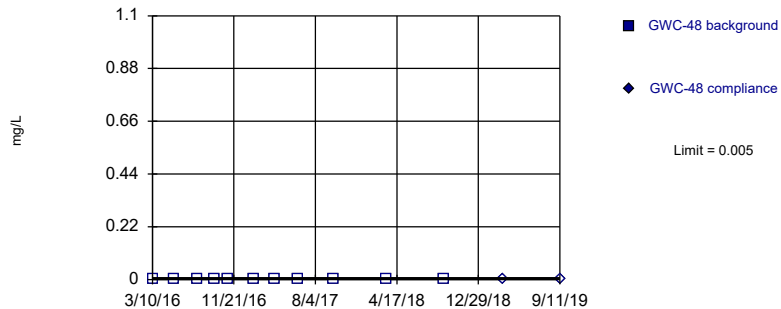
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

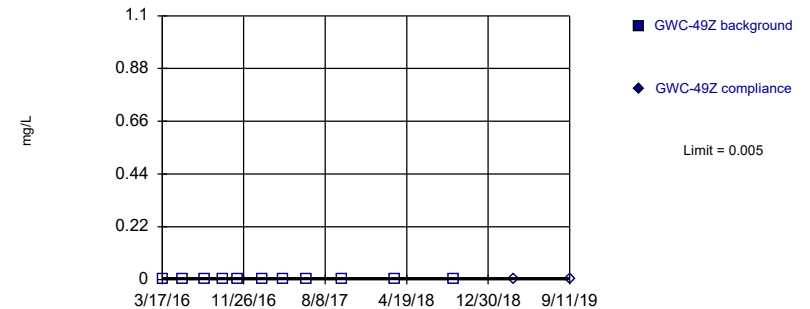
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

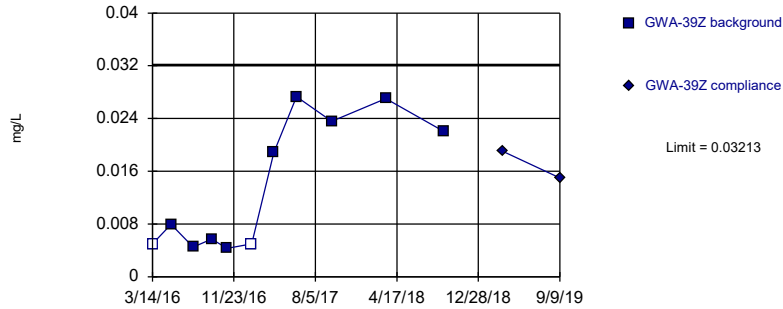
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

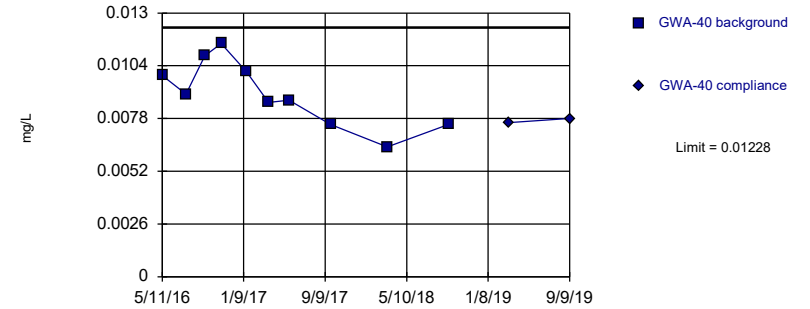
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.01385, Std. Dev.=0.009342, n=11, 18.18% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7963, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Barium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

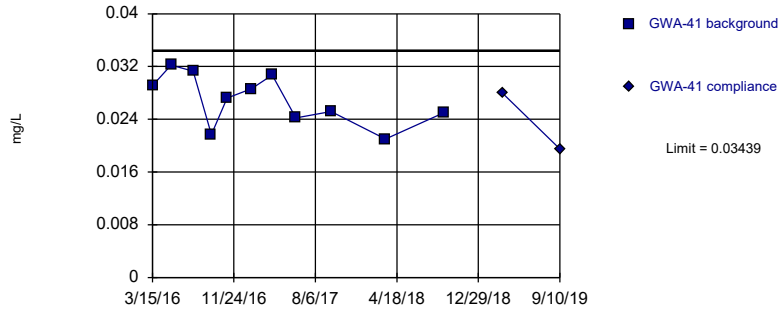
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=0.009012, Std. Dev.=0.001613, n=10. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9738, critical = 0.781. Kappa = 2.026 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Barium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

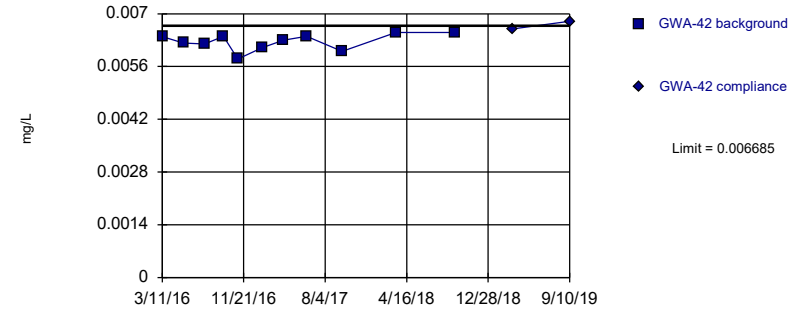
Within Limit Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=0.02693, Std. Dev.=0.003812, n=11. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9494, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Barium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

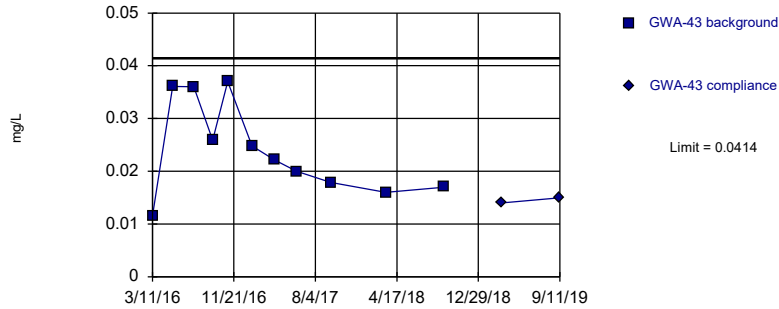
Within Limit Prediction Limit
 Intrawell Parametric



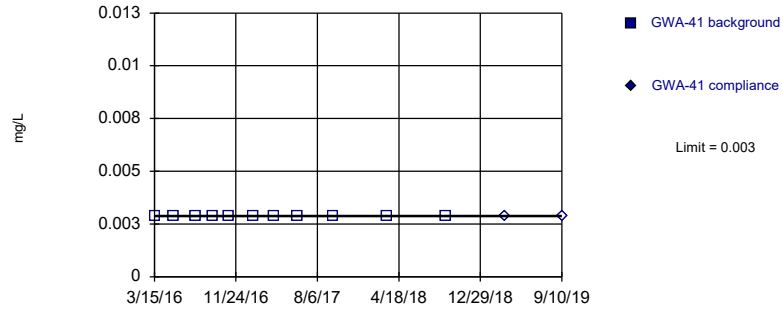
Background Data Summary: Mean=0.006255, Std. Dev.=0.0002197, n=11. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.919, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Barium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit Prediction Limit
Intrawell Parametric



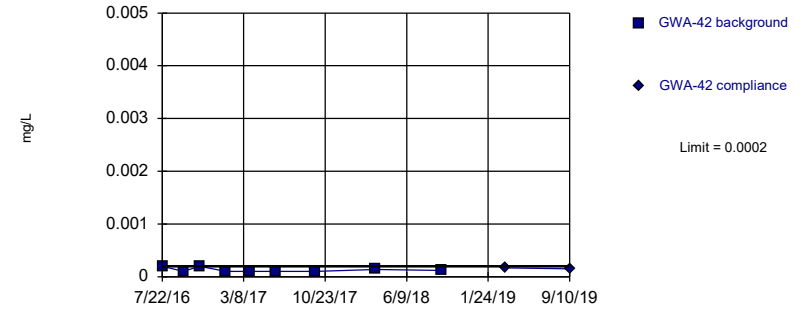
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

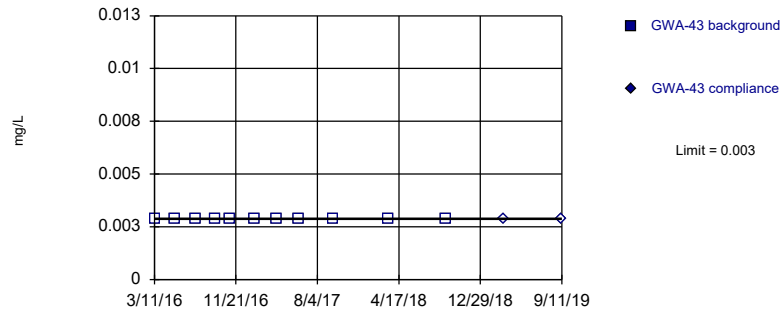
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

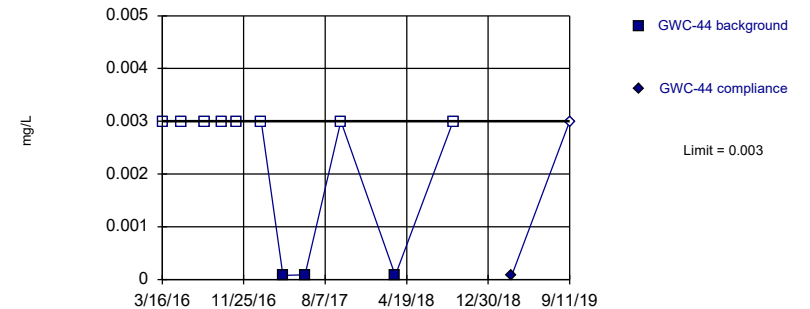
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit Prediction Limit
Intrawell Non-parametric

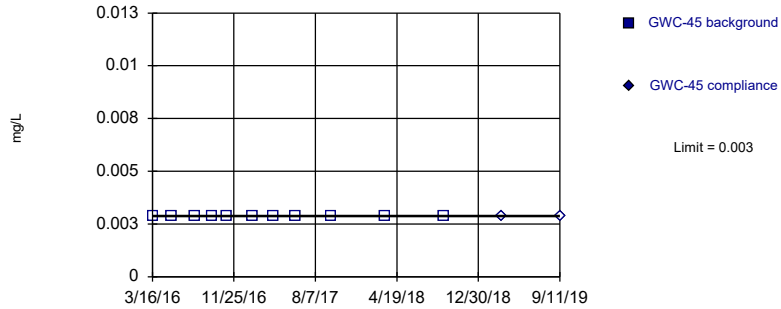


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

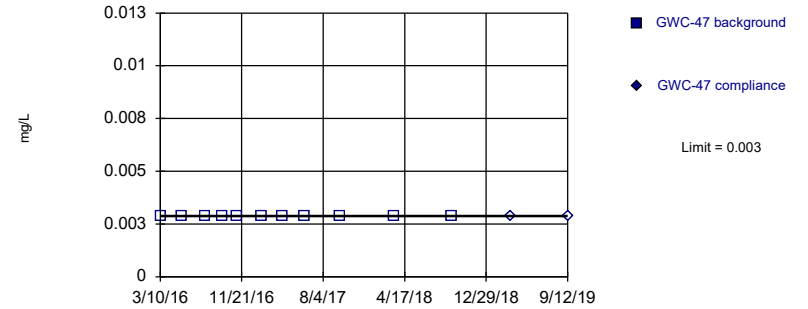


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

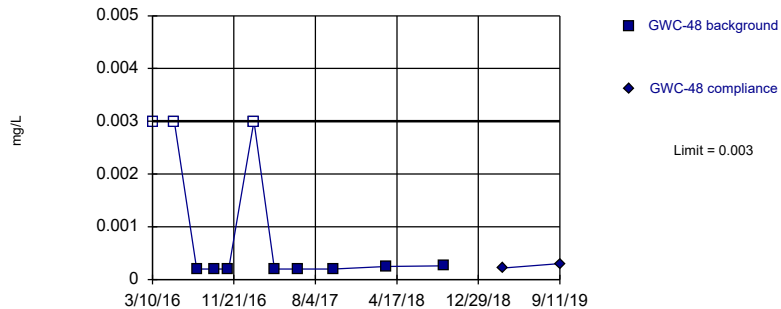


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

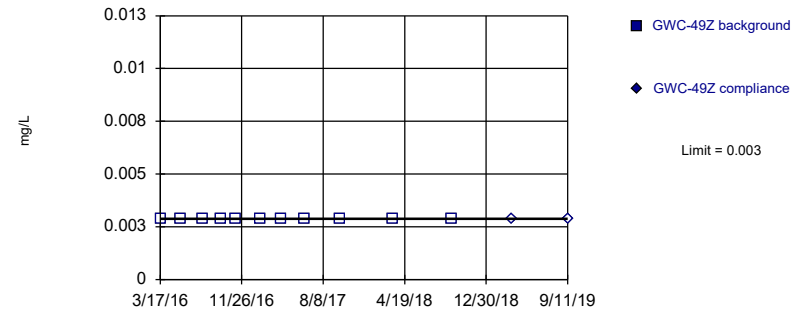


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 27.27% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

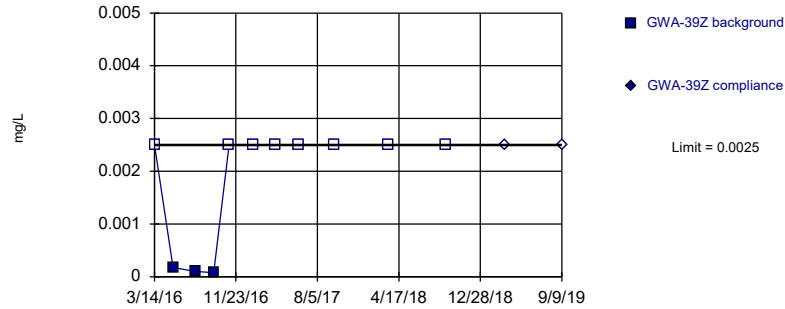


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

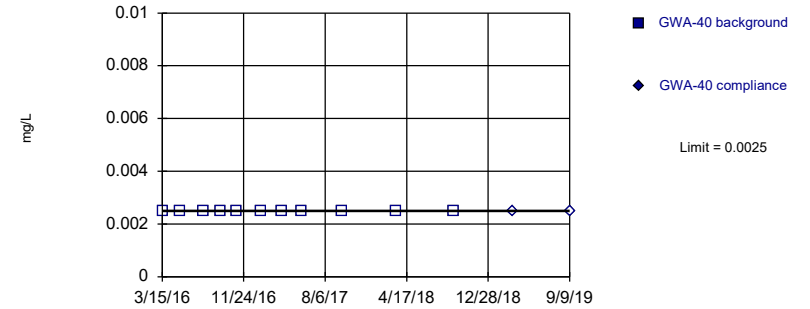


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

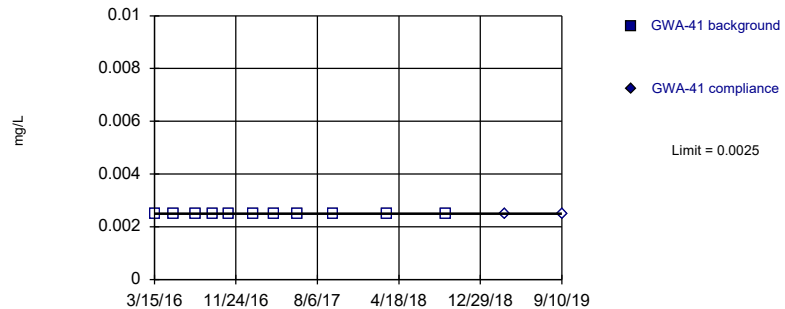


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

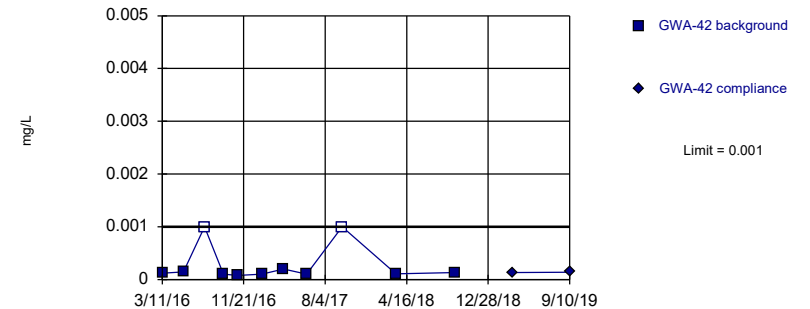


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

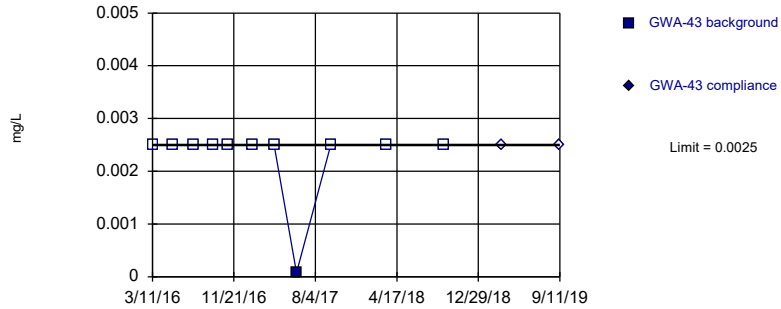


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 18.18% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

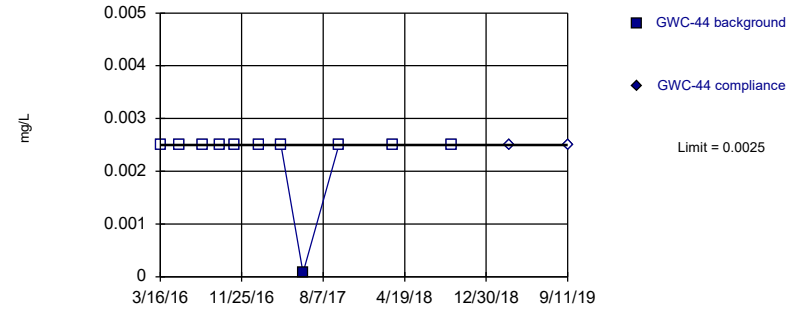


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

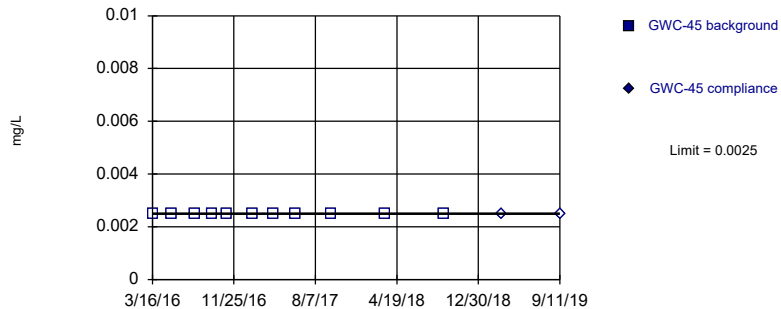


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

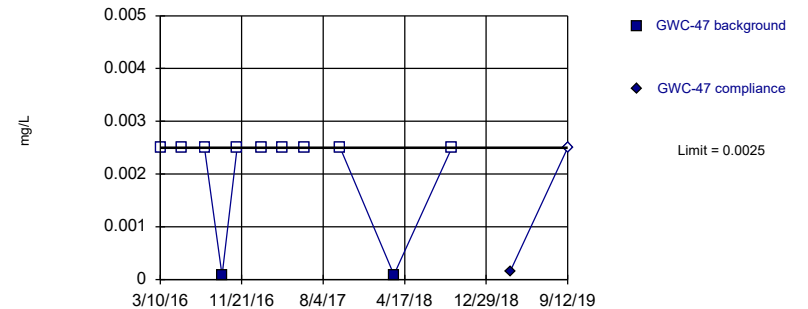


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



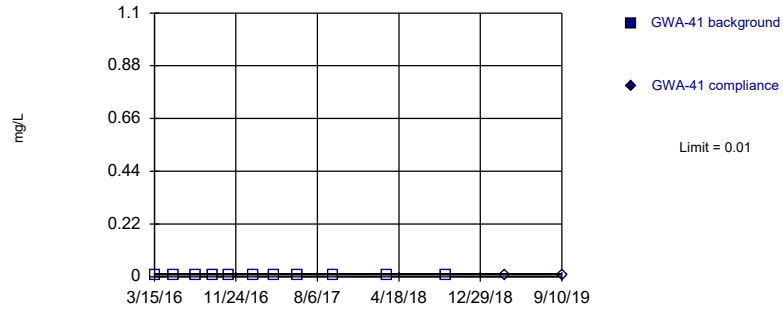
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



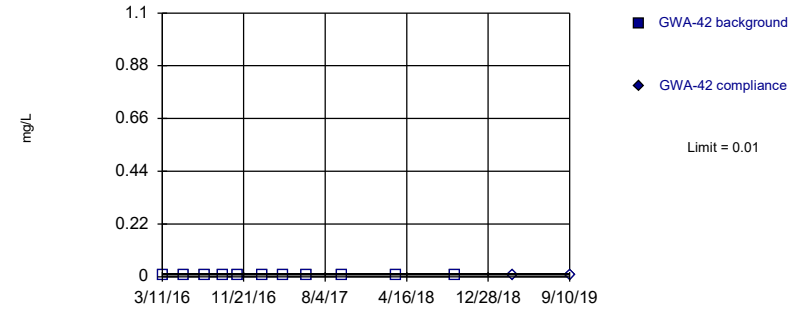
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Chromium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



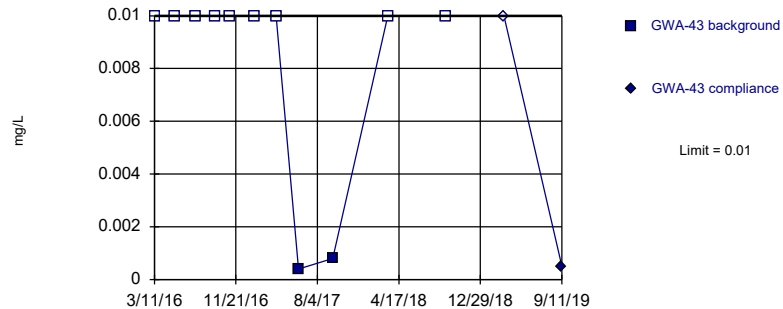
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Chromium Analysis Run 1/15/2020 11:24 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



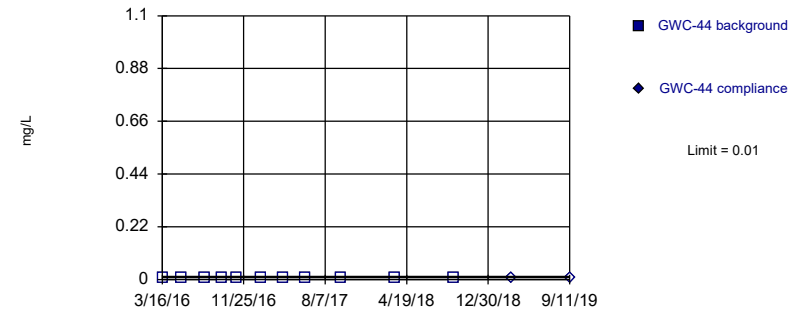
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Chromium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

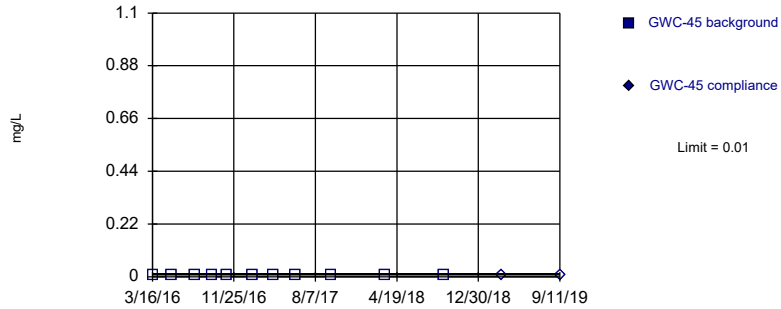


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Chromium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

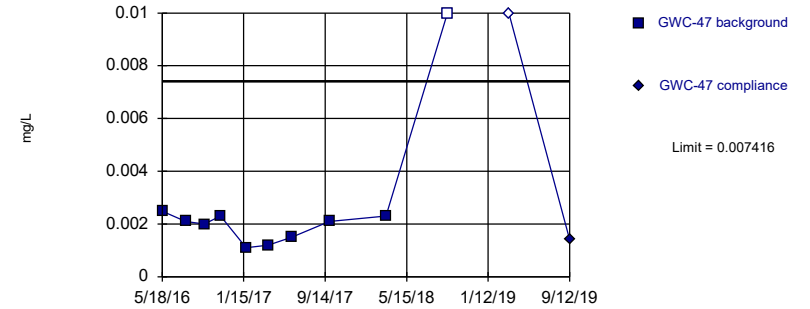


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

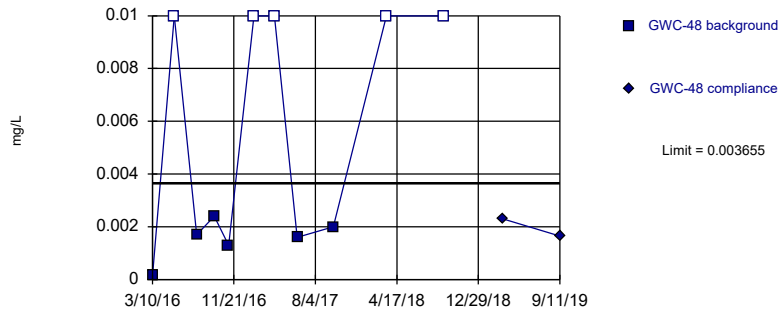


Background Data Summary (based on natural log transformation): Mean=-6.134, Std. Dev.=0.6071, n=10, 10% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7857, critical = 0.781. Kappa = 2.026 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Chromium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

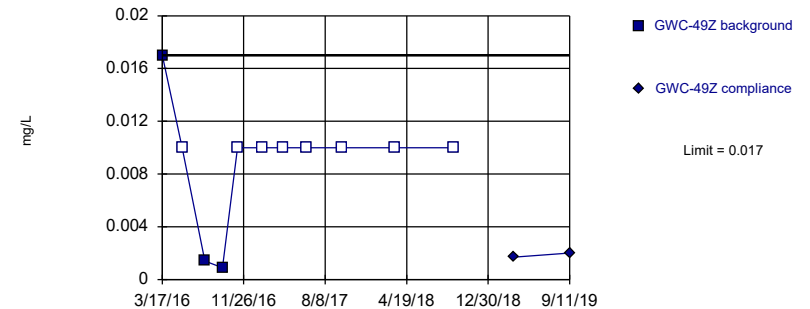


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.03719, Std. Dev.=0.01189, n=11, 45.45% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7973, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Chromium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

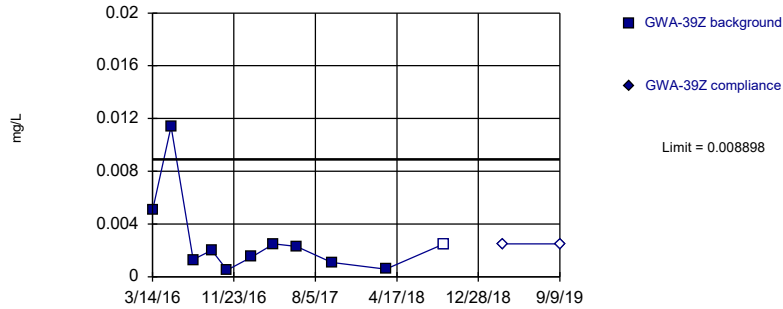


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

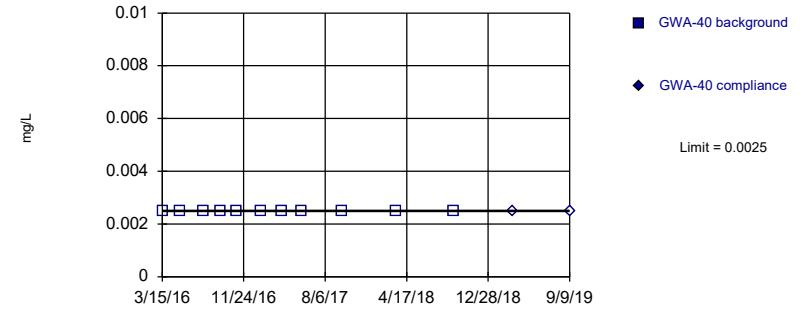


Background Data Summary (based on square root transformation): Mean=0.04771, Std. Dev.=0.02382, n=11, 9.091% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8448, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

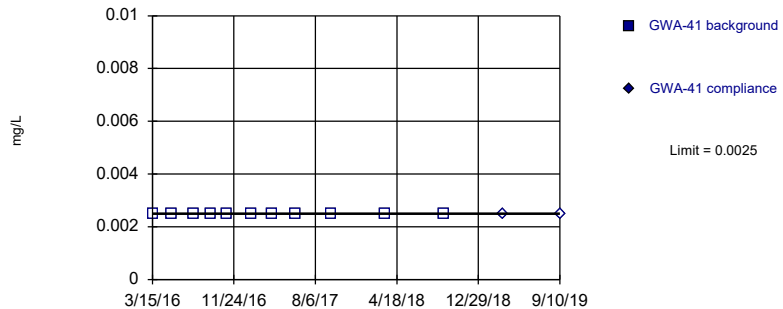


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

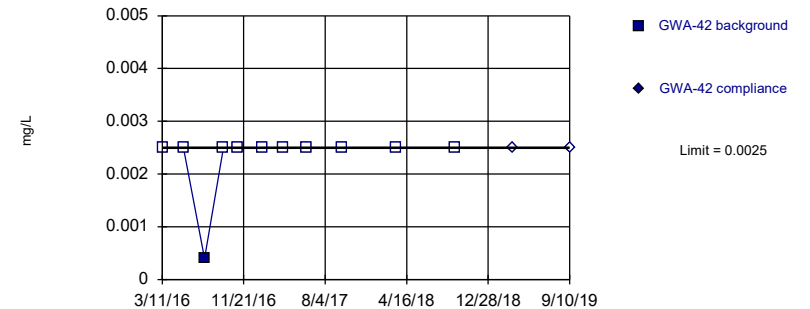


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

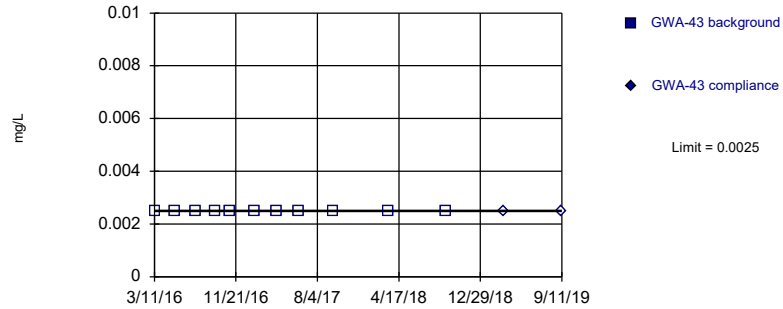
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

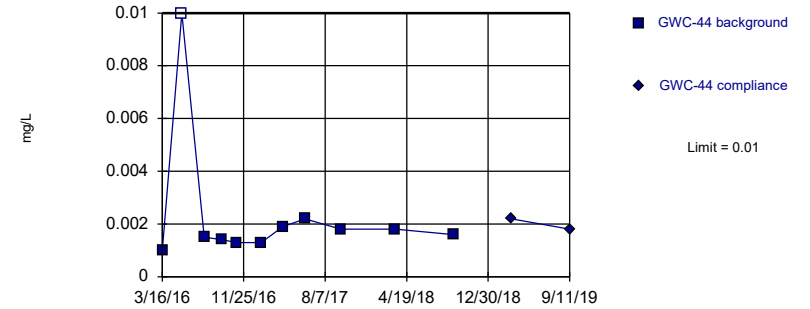
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

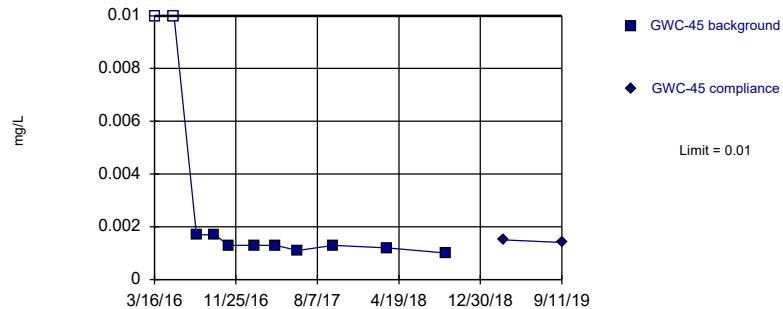
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 9.091% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

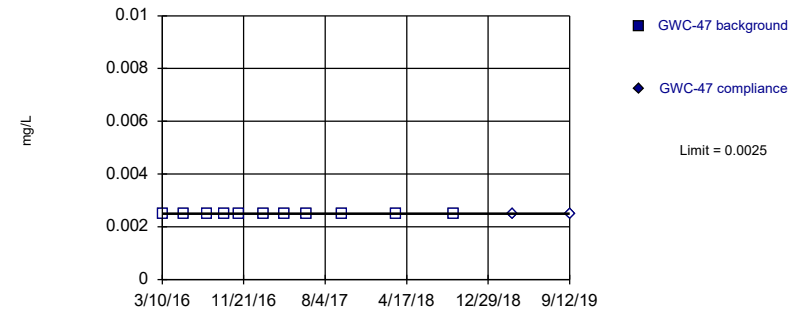
Within Limit Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 18.18% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit Prediction Limit
Intrawell Non-parametric

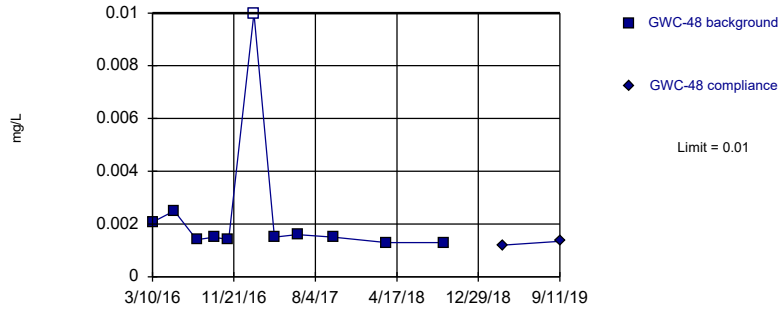


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

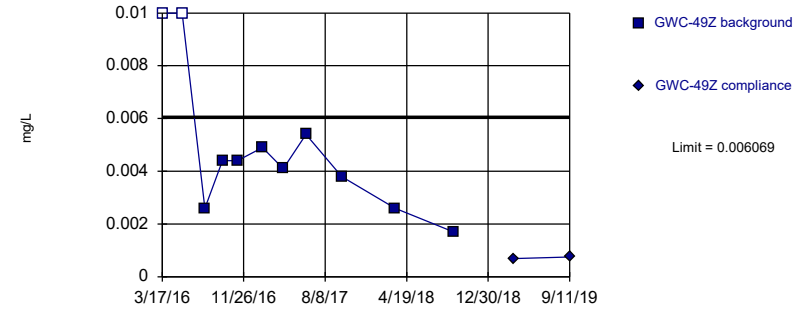


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 9.091% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

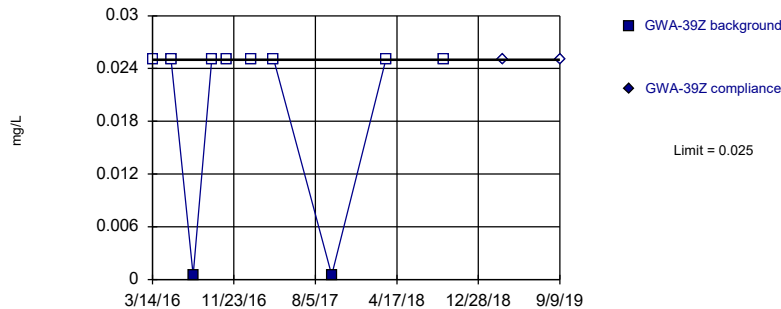


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.003487, Std. Dev.=0.001319, n=11, 18.18% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.83, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Cobalt Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

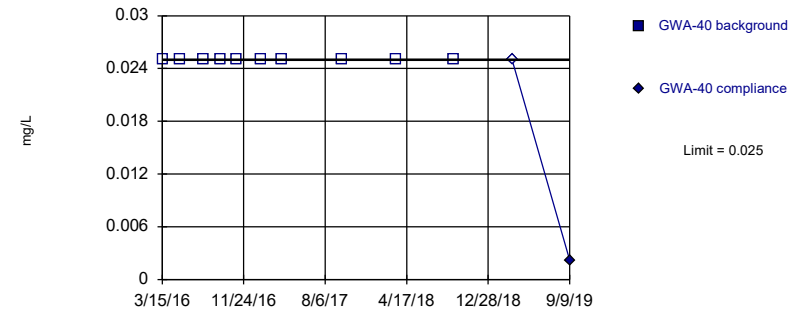


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

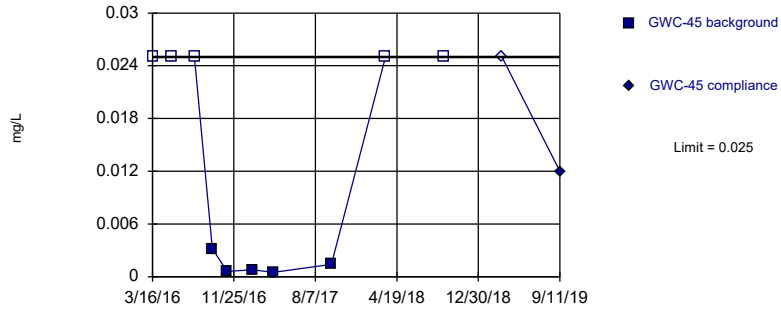


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

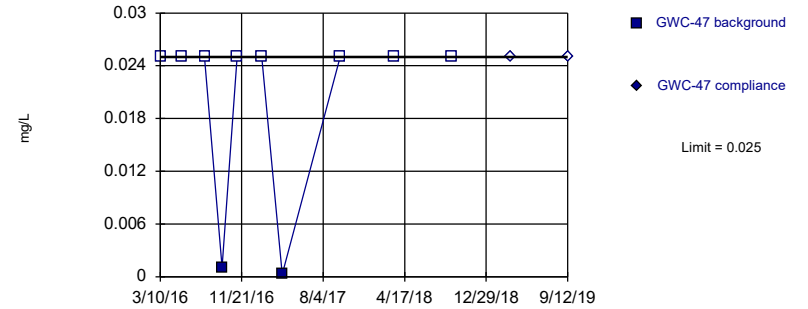


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 50% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

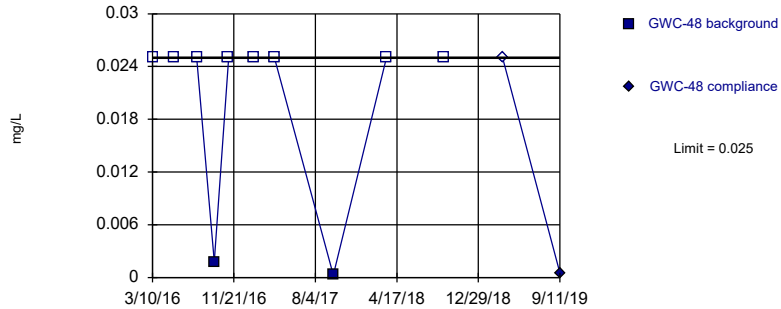


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

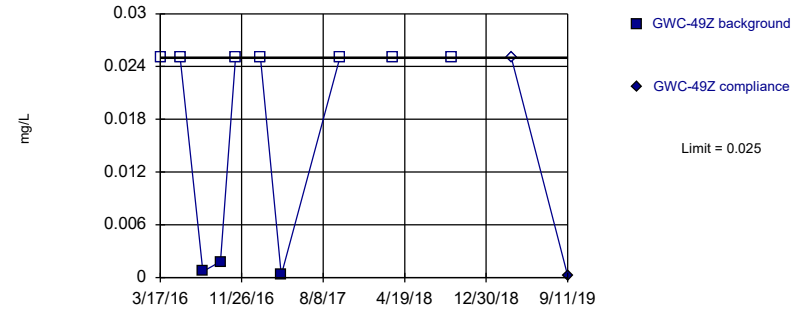


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

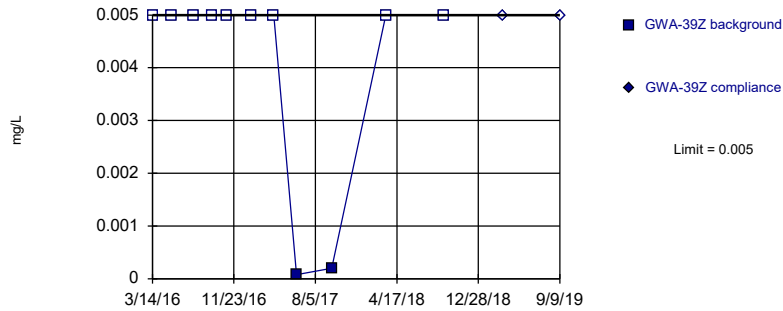


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

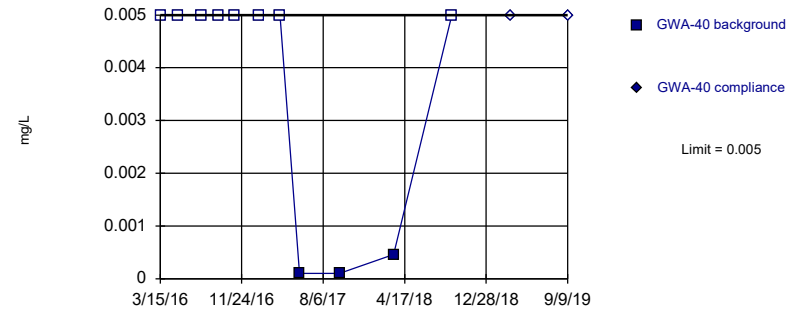


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

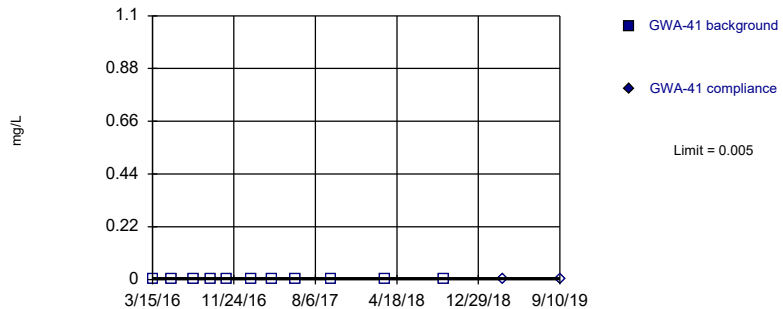


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

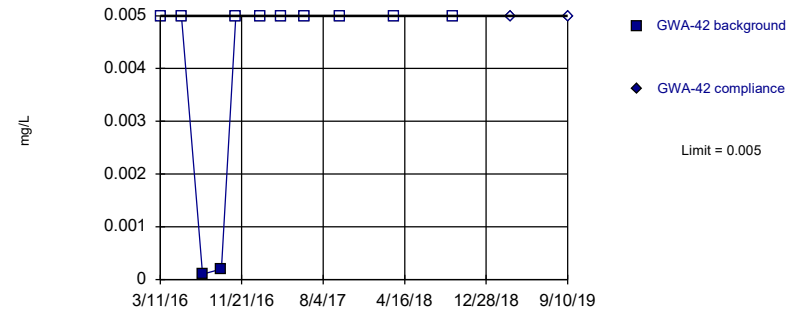


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

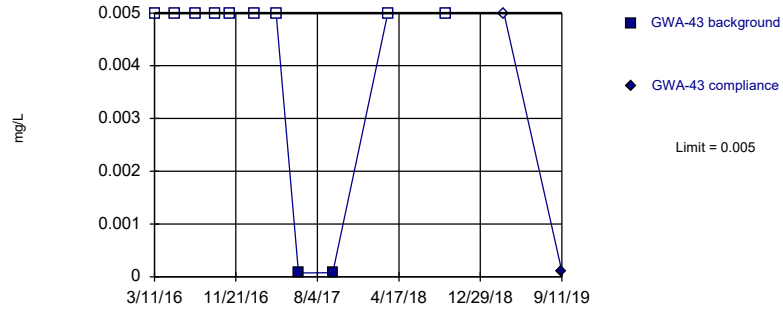


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

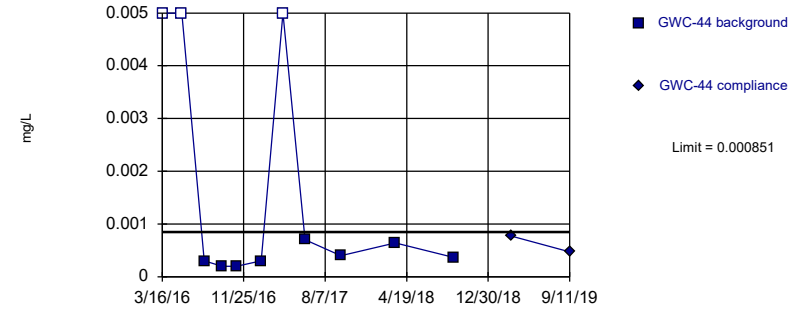


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

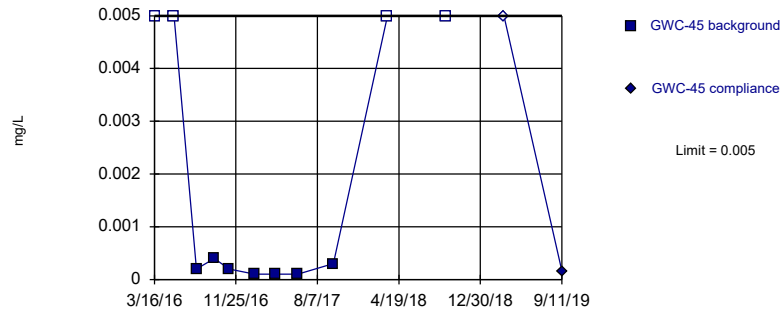


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-8.001, Std. Dev.=0.4762, n=11, 27.27% NDs. Insufficient data to test for seasonality; data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7955, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

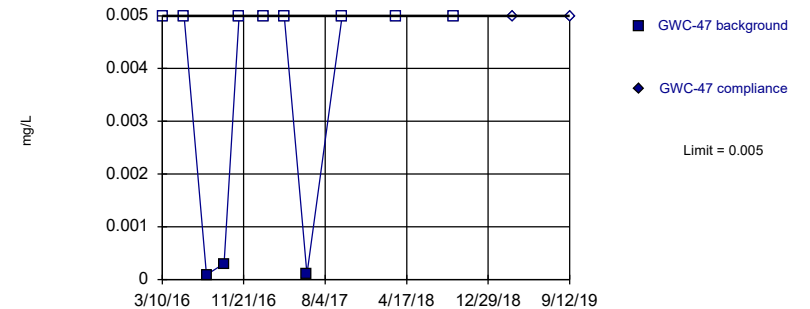


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 36.36% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

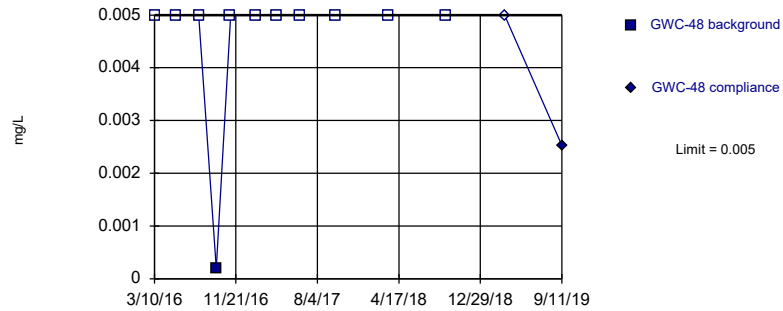


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

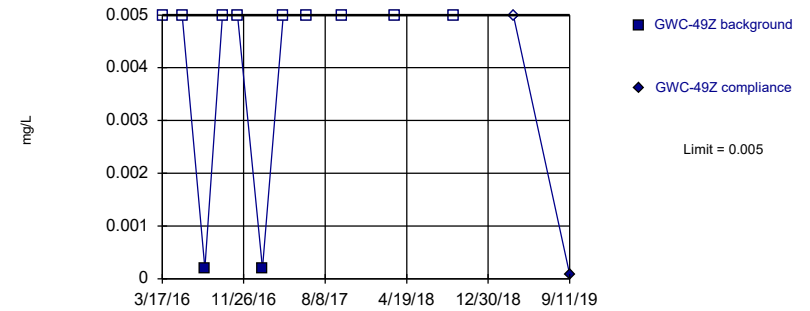


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

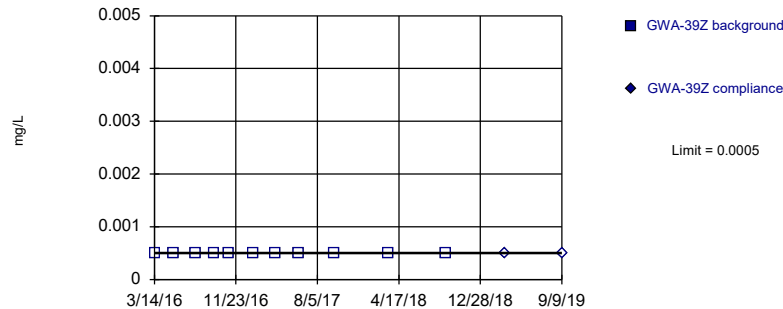


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

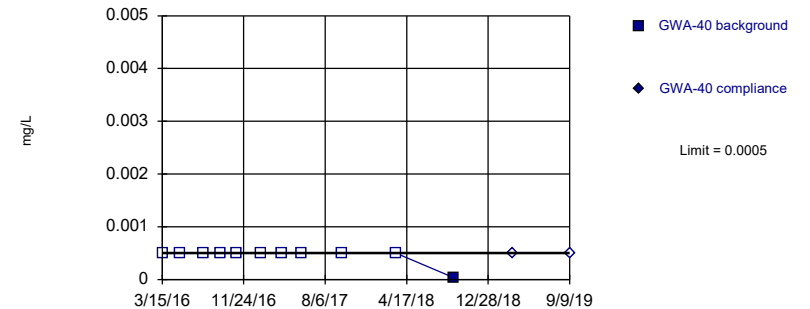


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

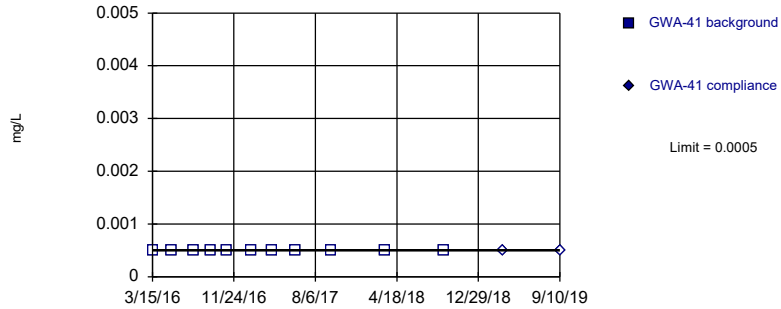


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

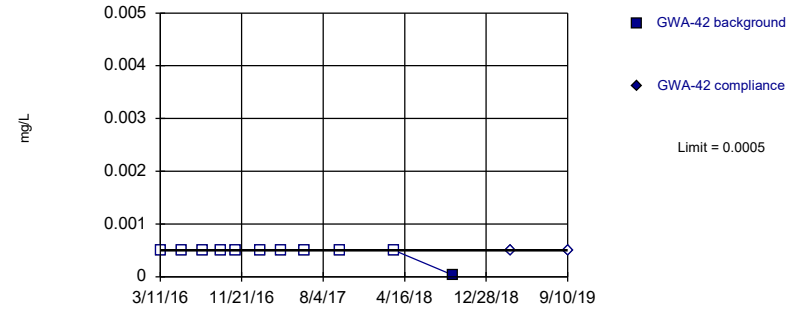


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

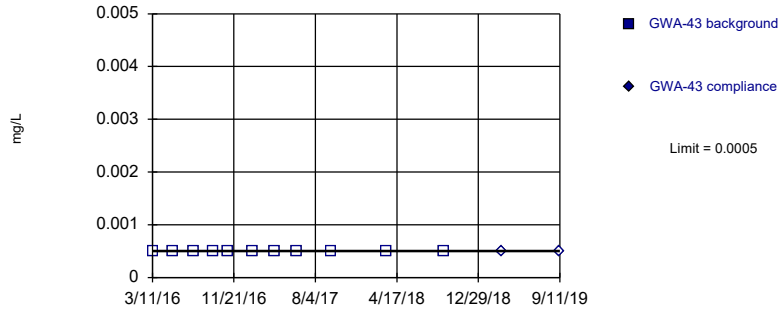


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

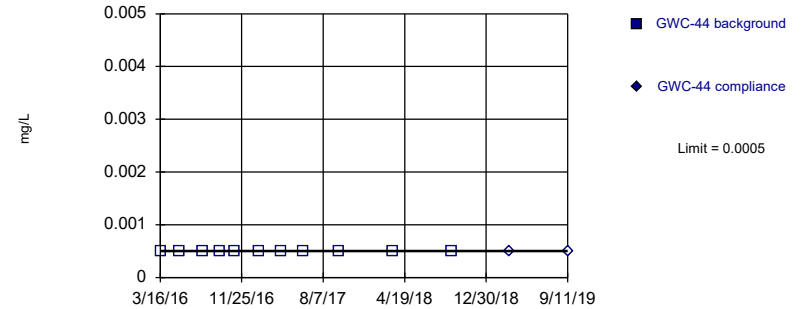


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

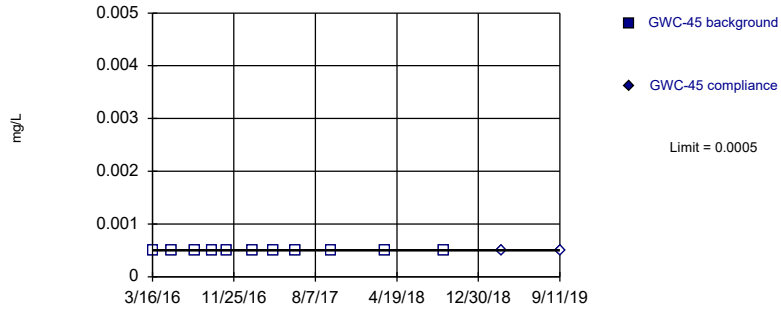


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

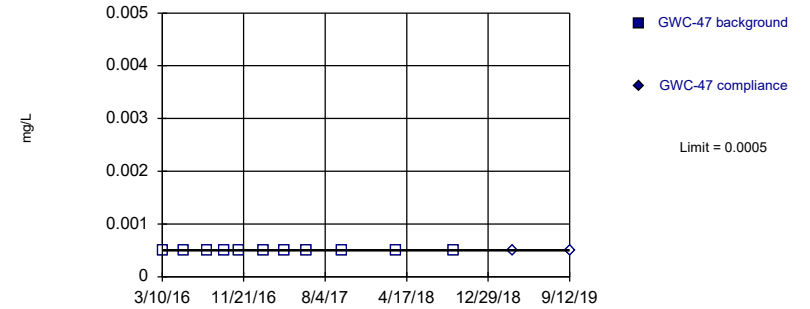


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

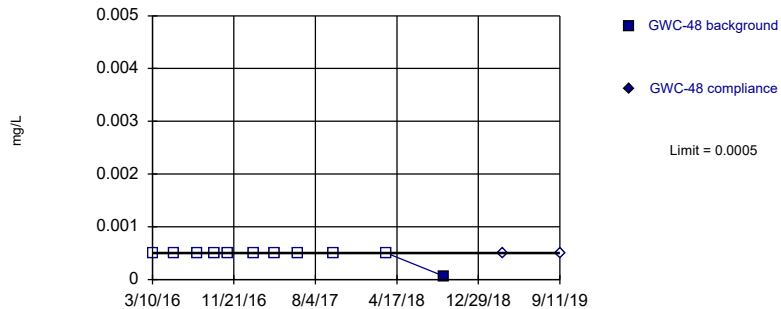


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

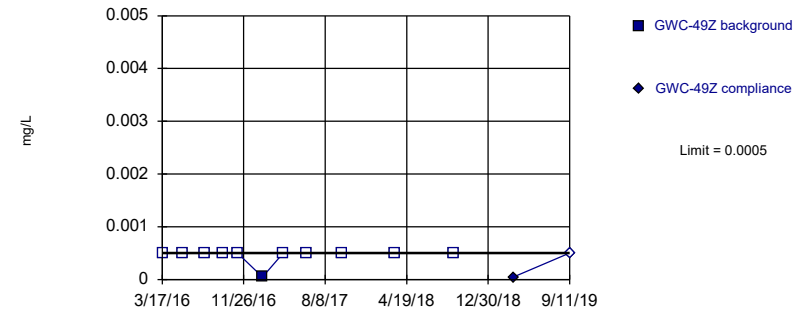


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

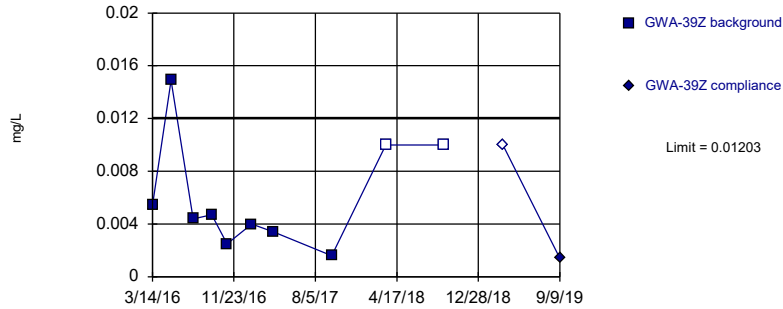


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Mercury Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Parametric

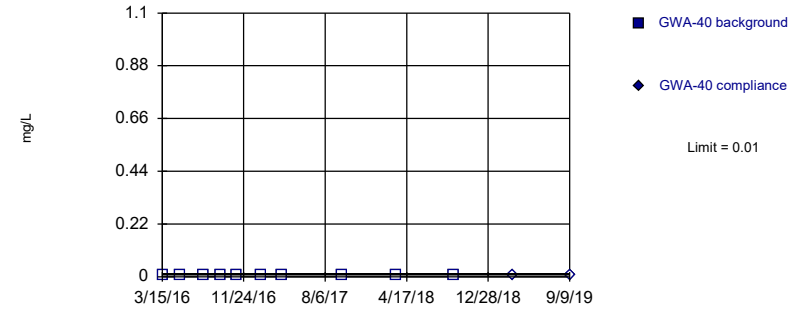


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.004838, Std. Dev.=0.00355, n=10, 20% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8664, critical = 0.781. Kappa = 2.026 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

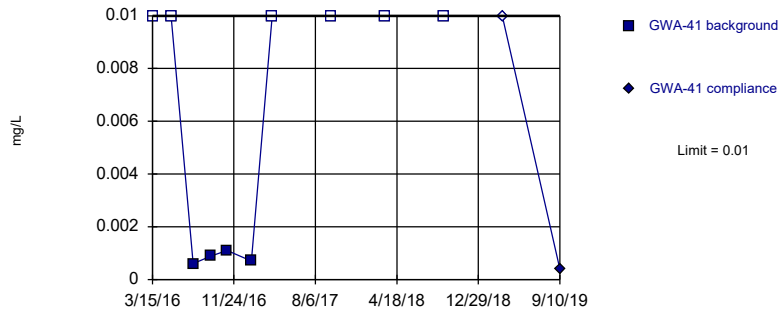


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

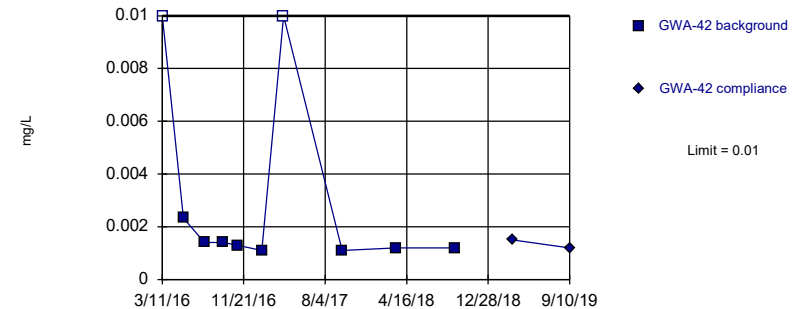


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

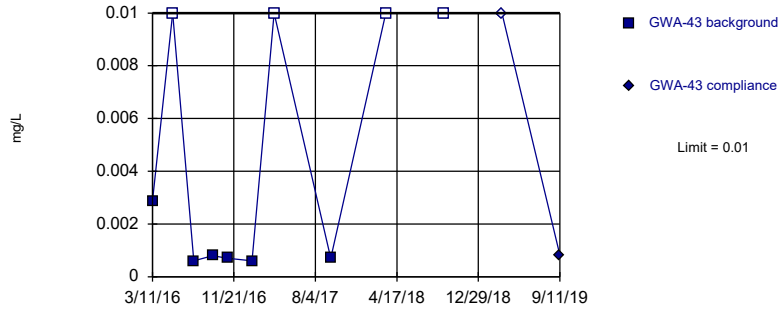


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 20% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

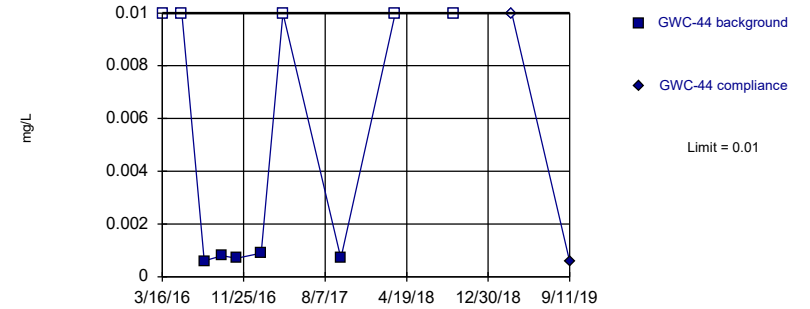


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 40% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

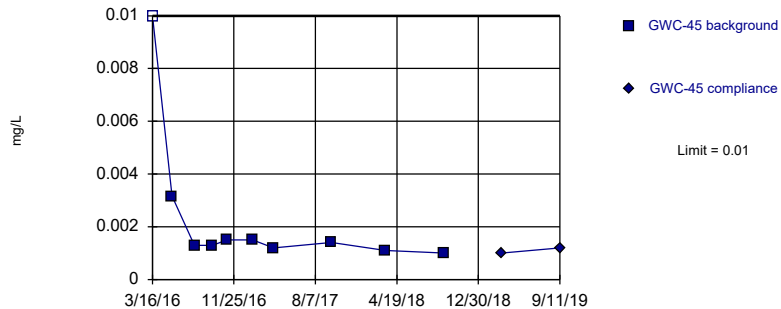


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 50% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

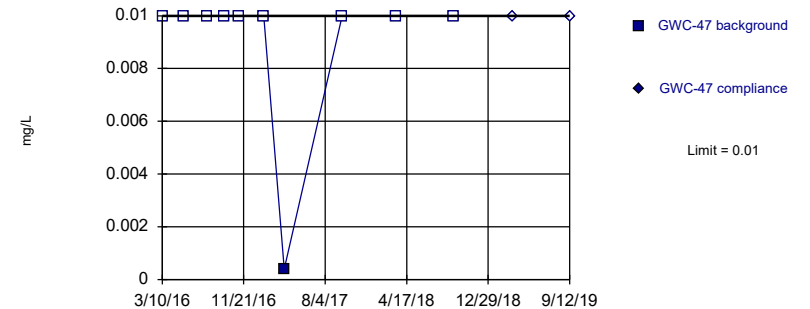


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 10% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

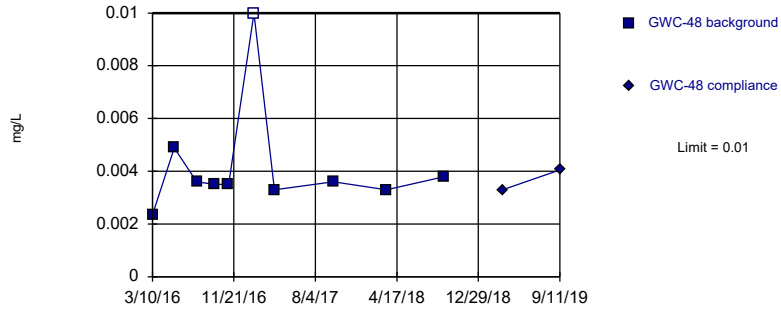


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

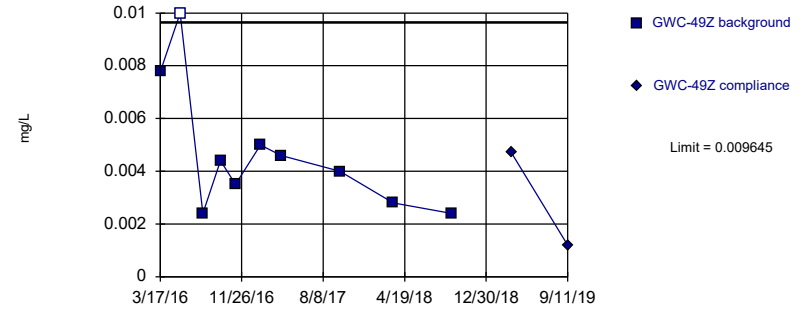


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 10% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

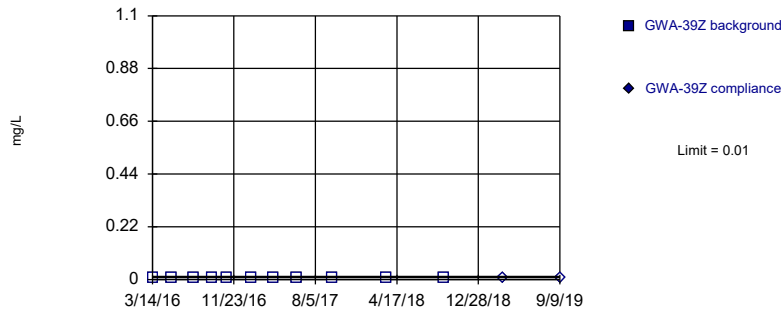


Background Data Summary: Mean=0.004688, Std. Dev.=0.002447, n=10, 10% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8465, critical = 0.781. Kappa = 2.026 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Nickel Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

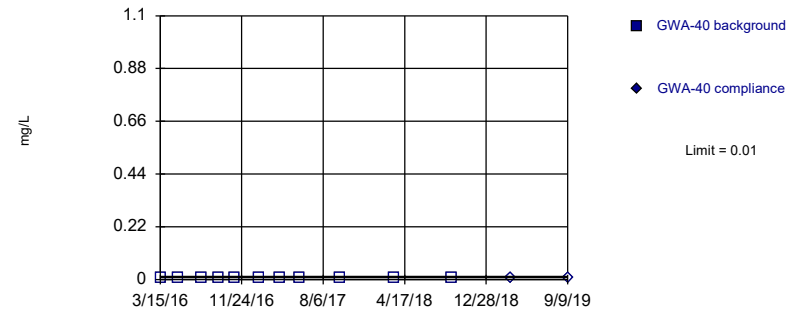


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

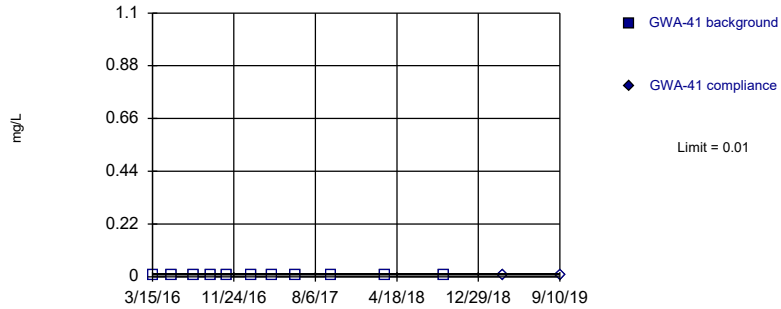


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

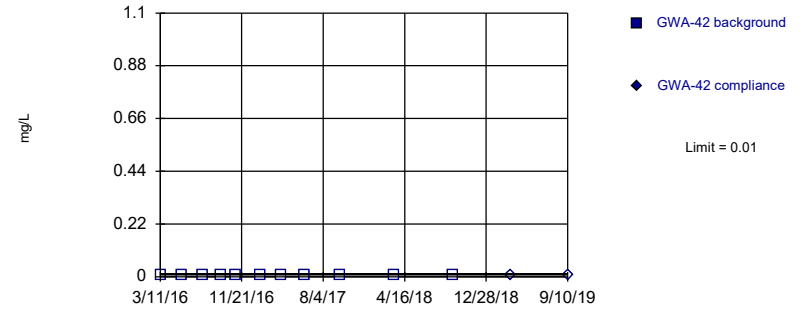


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

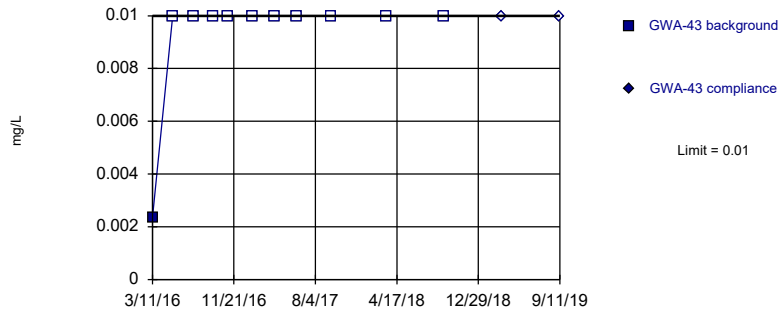


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

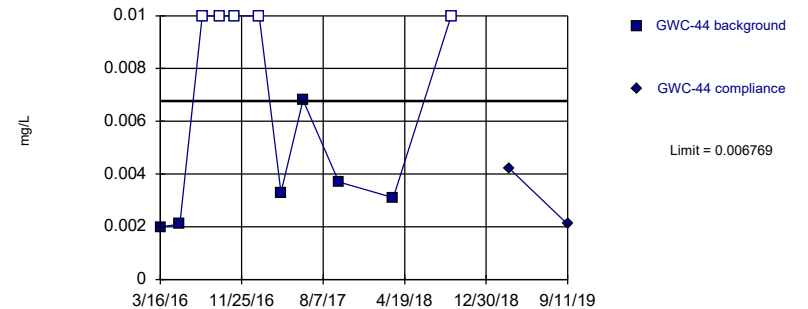


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

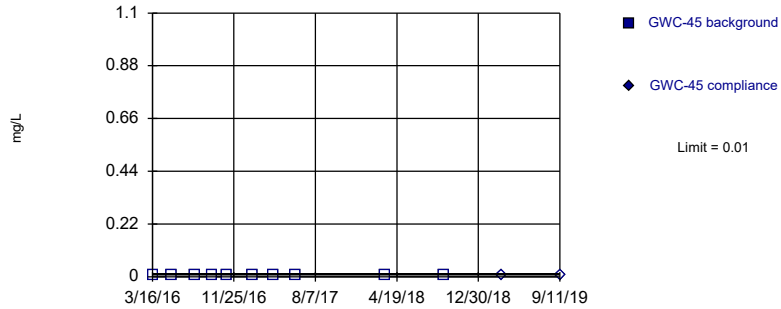


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05783, Std. Dev.=0.01249, n=11, 45.45% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7929, critical = 0.792. Kappa = 1.957 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Selenium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

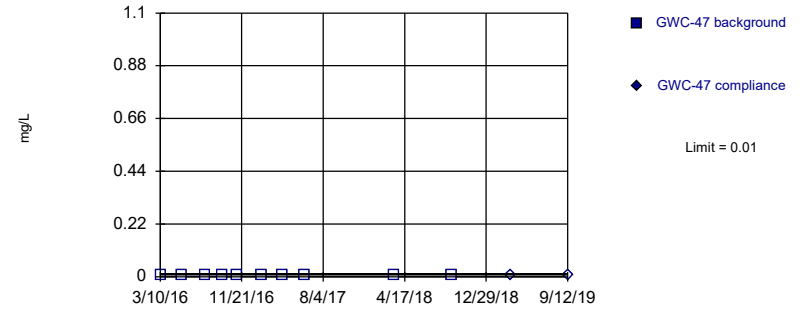


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

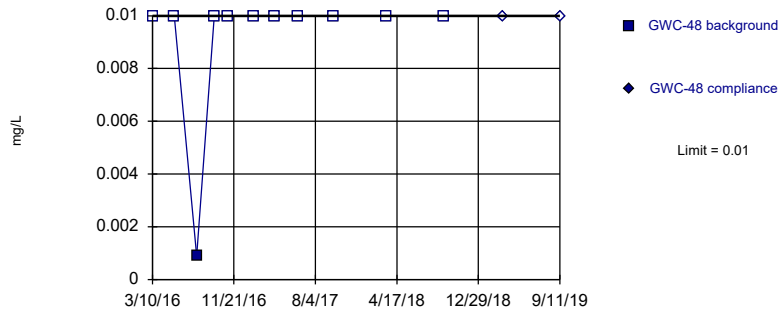


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:25 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

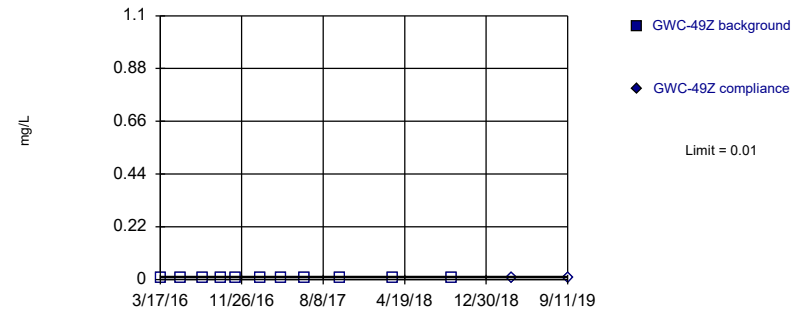


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

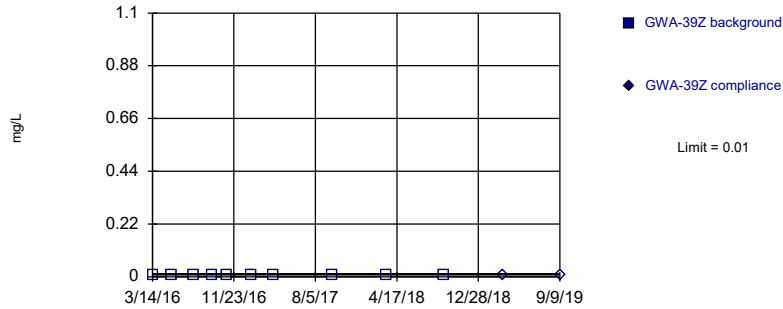


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

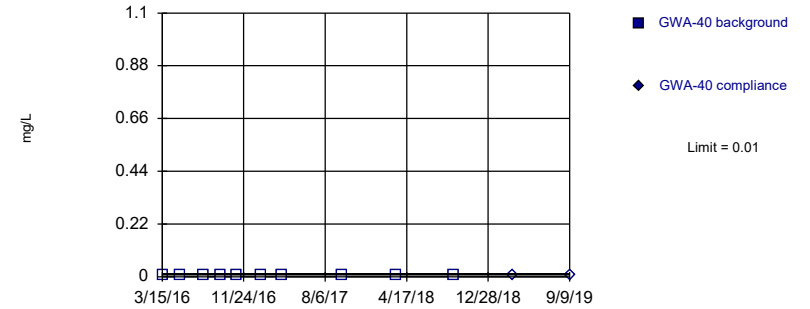


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

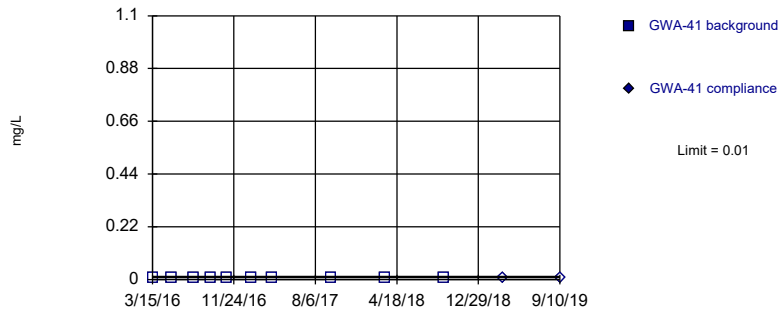


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

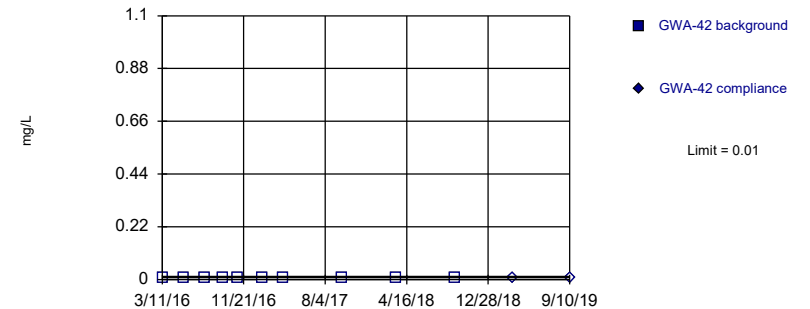


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

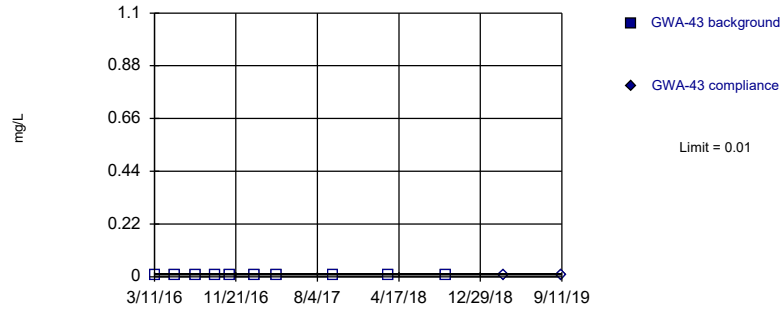


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

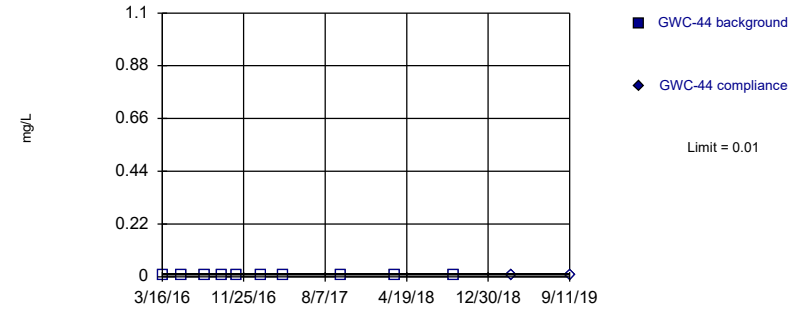


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

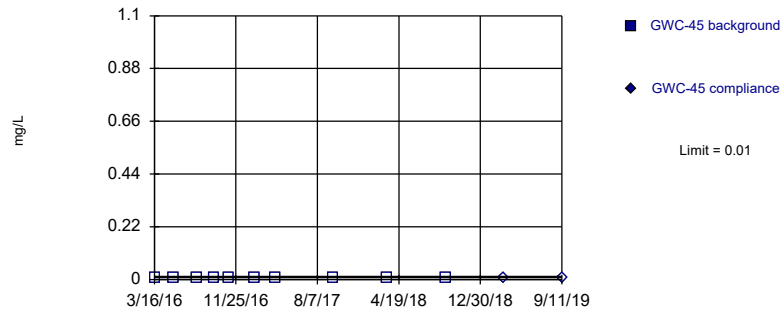


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

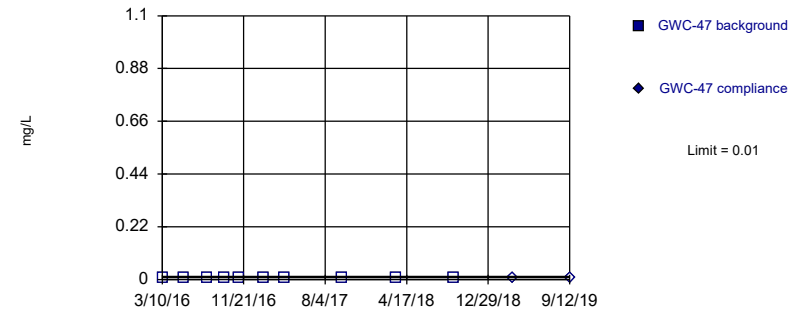


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

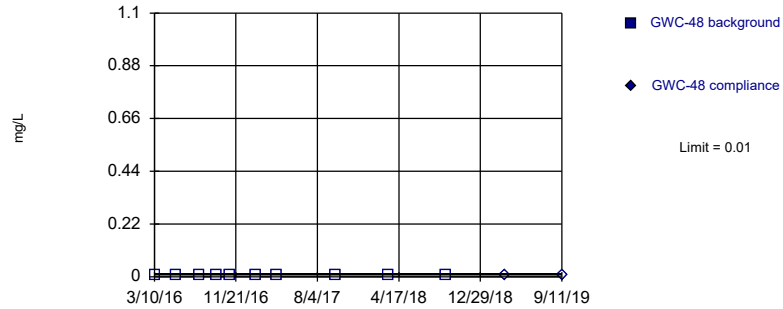


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

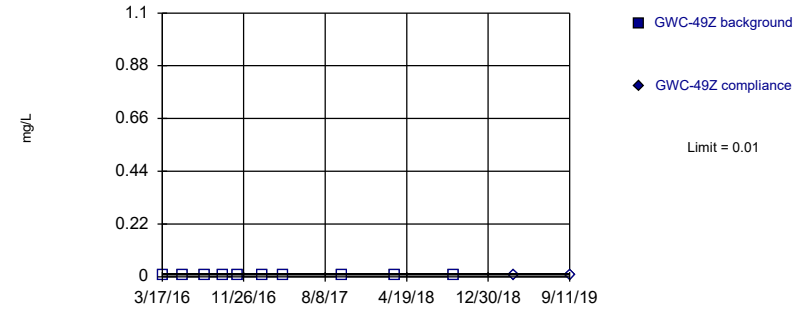


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

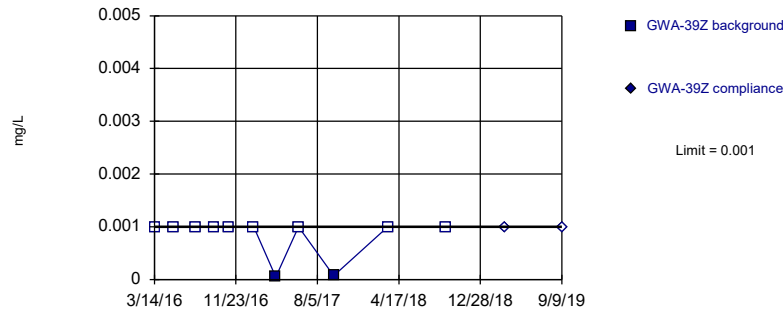


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

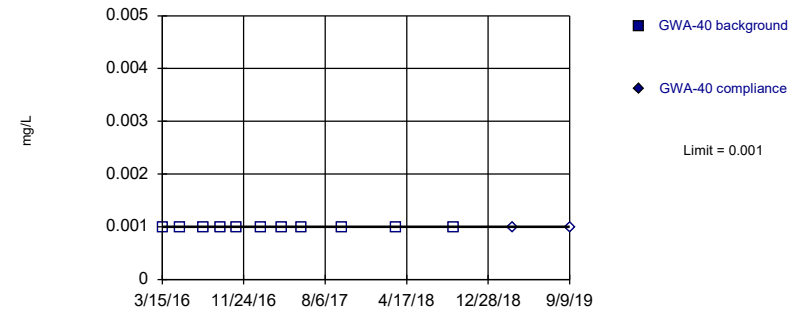


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

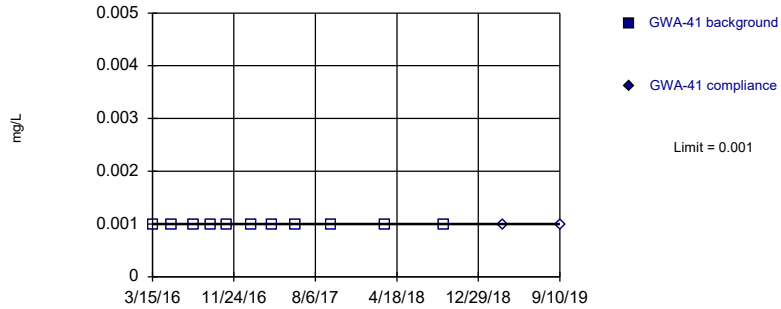


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

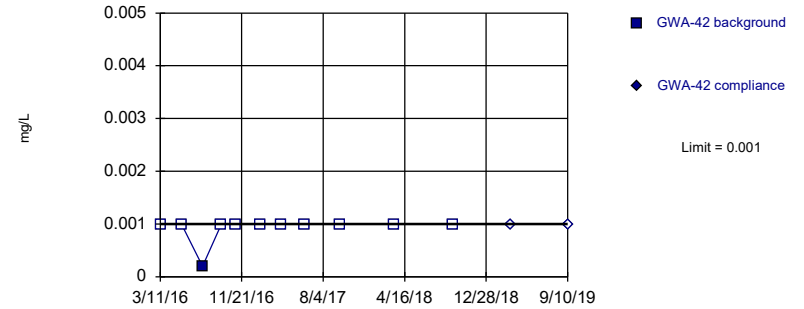


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

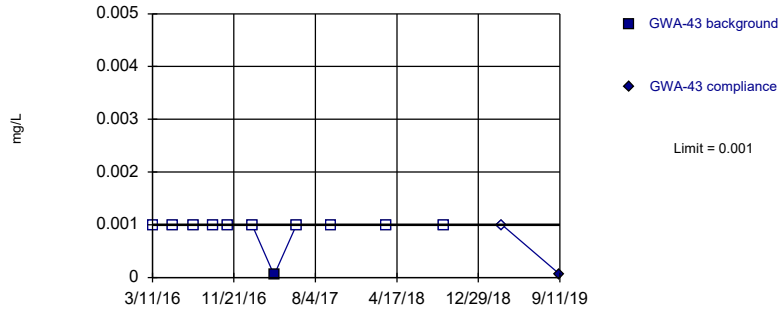


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

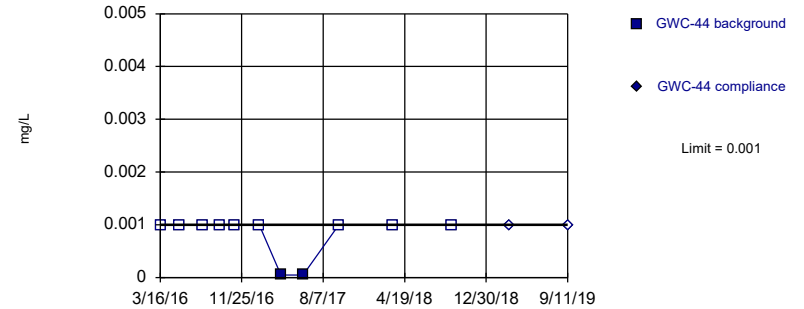


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

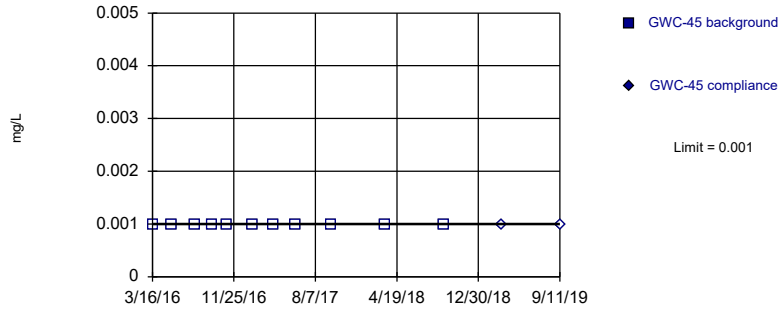


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

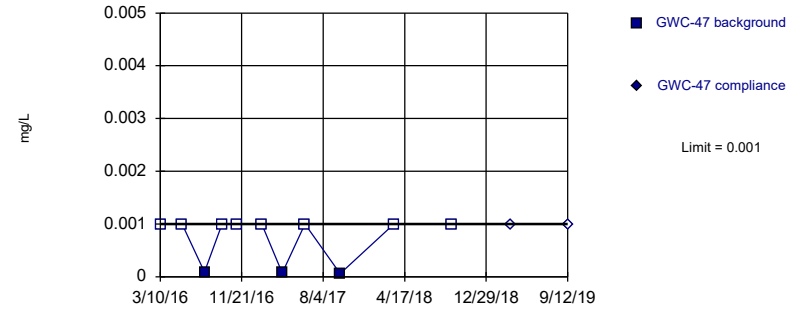


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

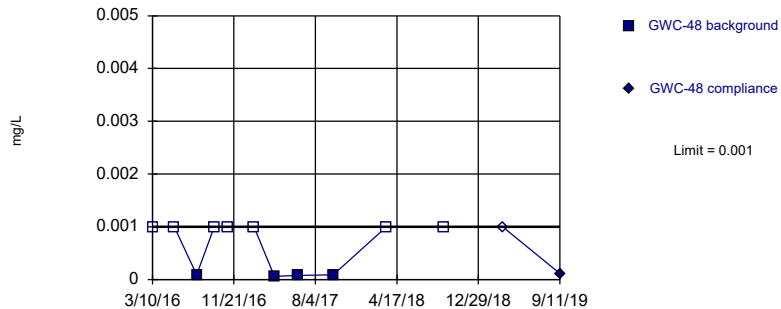


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

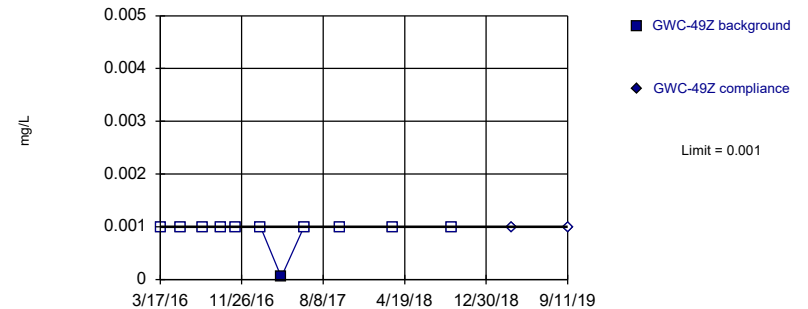


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

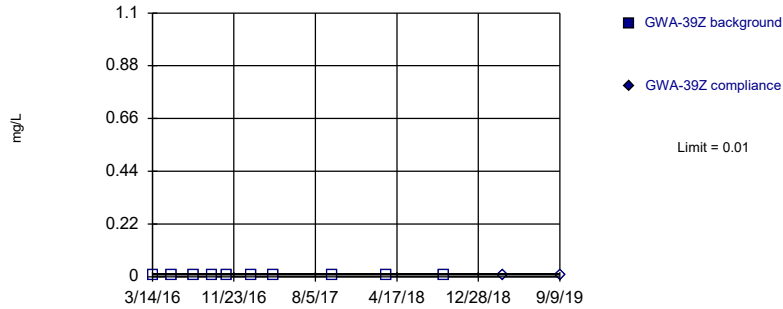


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

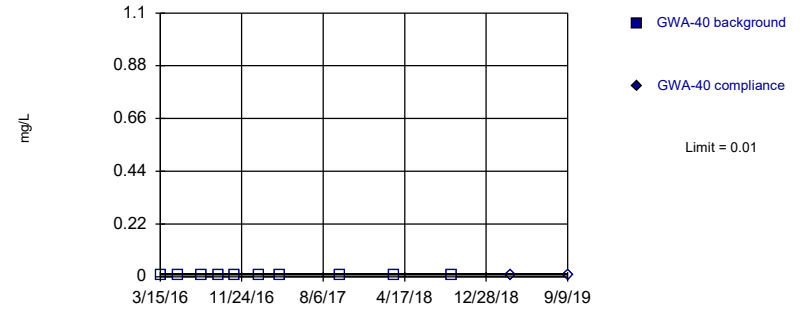


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

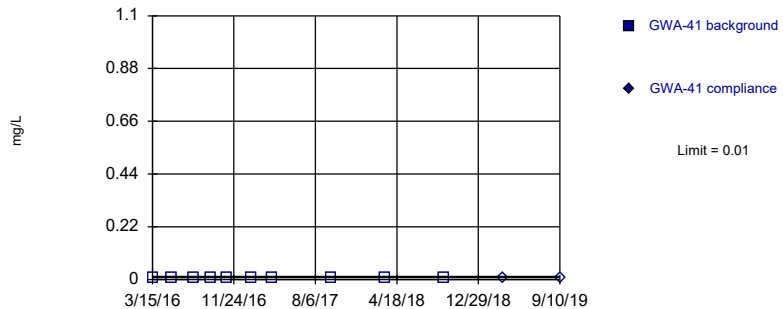


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

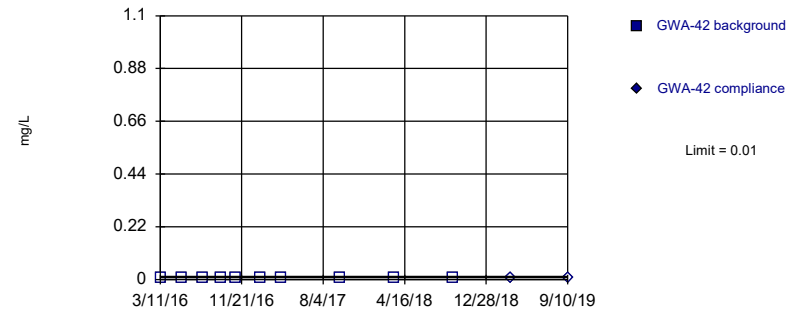


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

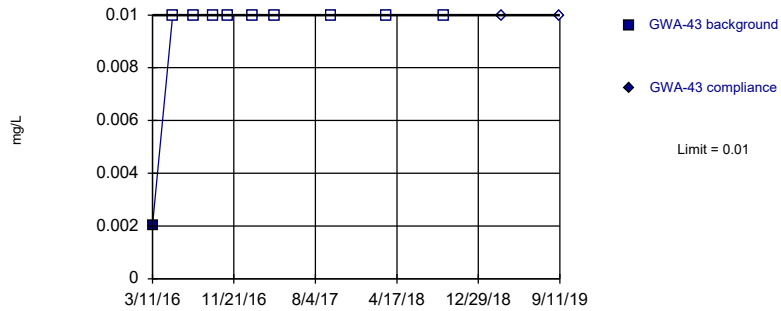


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

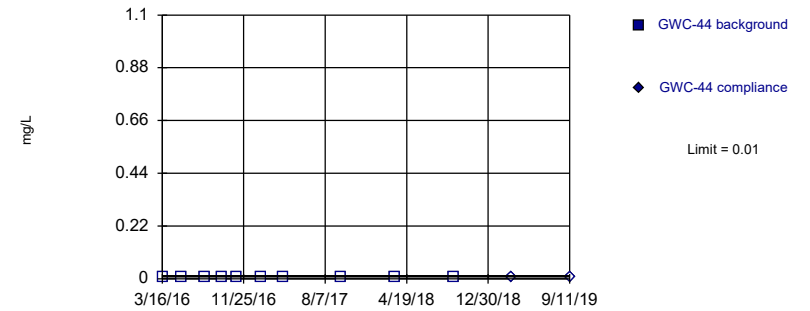


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

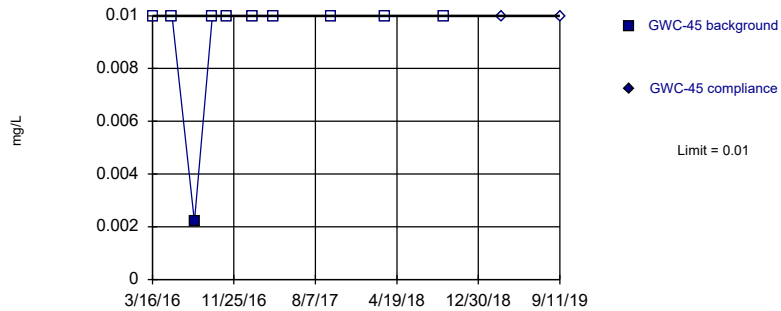


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

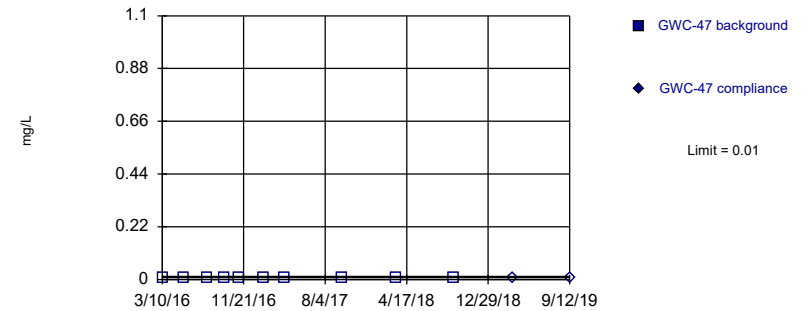


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

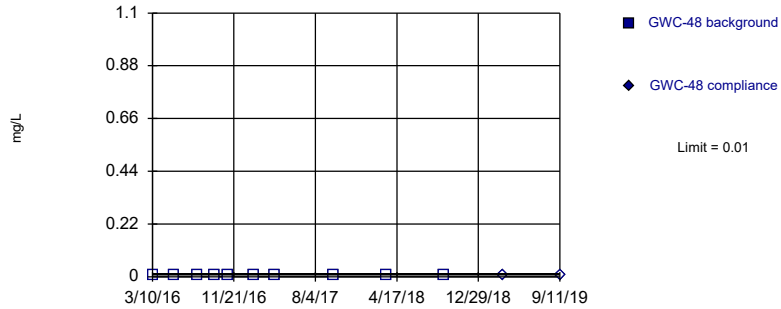


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

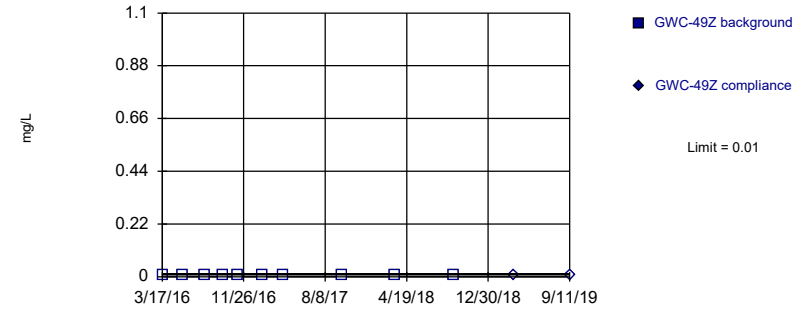


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

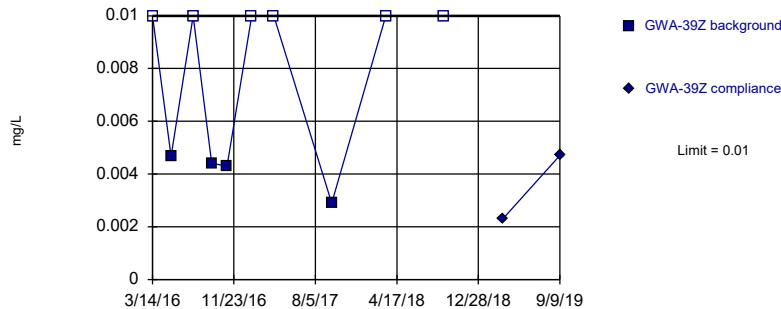


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

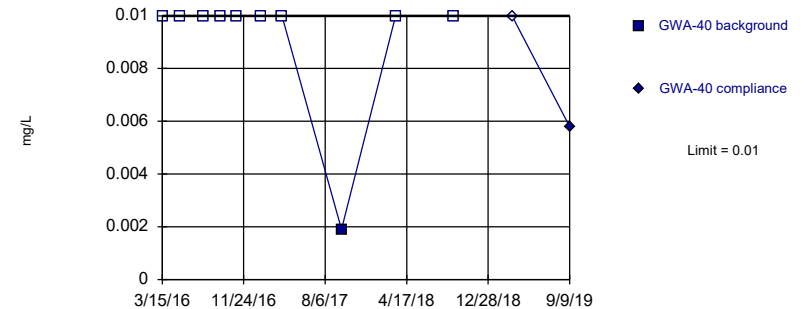


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Zinc Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

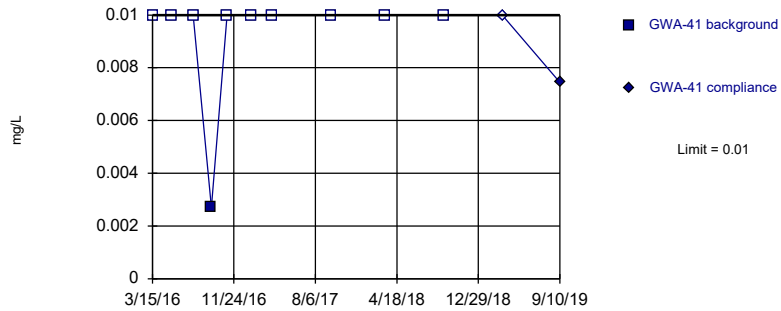


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Zinc Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

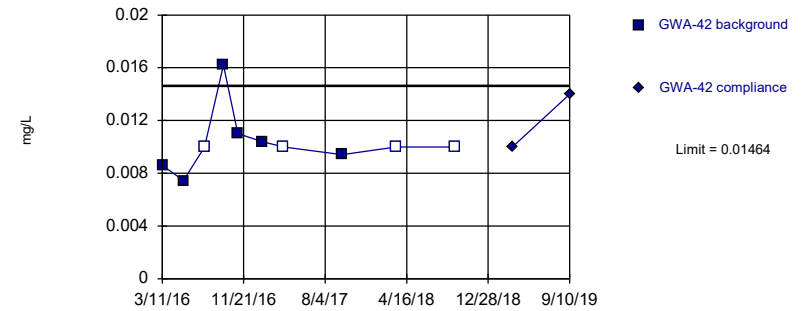


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Zinc Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

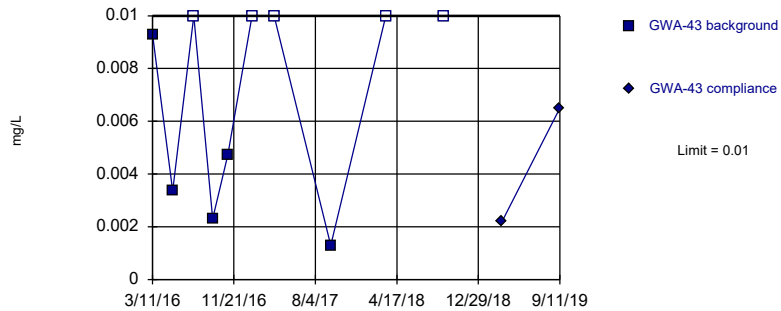


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.09783, Std. Dev.=0.01143, n=10, 40% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8081, critical = 0.781. Kappa = 2.026 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Zinc Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

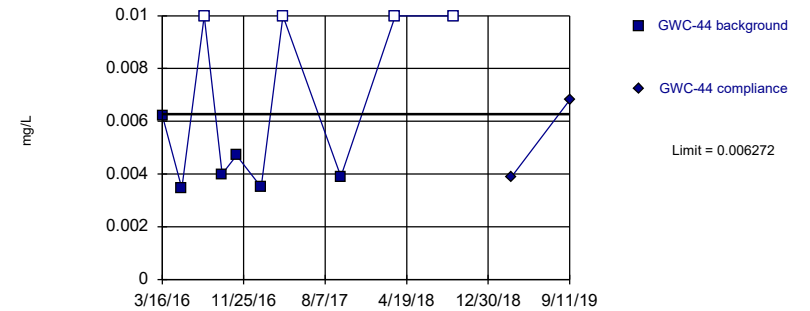


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 50% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Zinc Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.06517, Std. Dev.=0.006924, n=10, 40% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7836, critical = 0.781. Kappa = 2.026 (c=16, w=5, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006583.

Constituent: Zinc Analysis Run 1/15/2020 11:26 AM View: Overburden Wells
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Intrawell Prediction Limit Summary - Significant Results

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/16/2020, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-39R_39RZ	0.007699	n/a	3/14/2019	0.014	Yes	11	0.003012	0.002494	18.18	Kaplan-Meier	No	0.0008228	Param Intra 1 of 3
Antimony (mg/L)	GWC-49R	0.003	n/a	9/11/2019	0.0032	Yes	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Barium (mg/L)	GWC-49R	0.01169	n/a	9/11/2019	0.017	Yes	11	9.9e-7	3.2e-7	9.091	None	x^3	0.0008228	Param Intra 1 of 3
Zinc (mg/L)	GWC-47R	0.01788	n/a	9/11/2019	0.028	Yes	10	0.0133	0.002353	20	Kaplan-Meier	No	0.0008228	Param Intra 1 of 3

Intrawell Prediction Limit Summary - All Results

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/16/2020, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Obsrv.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-39R_39RZ	0.007699	n/a	3/14/2019	0.014	Yes	11	0.003012	0.002494	18.18	Kaplan-Meier	No	0.0008228	Param Intra 1 of 3
Antimony (mg/L)	GWA-41R	0.0035	n/a	9/10/2019	0.0029	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-43R	0.003	n/a	9/11/2019	0.00029	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-45R	0.003517	n/a	9/11/2019	0.003ND	No	11	0.001604	0.001018	27.27	Kaplan-Meier	No	0.0008228	Param Intra 1 of 3
Antimony (mg/L)	GWC-46R	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-47R	0.001616	n/a	9/11/2019	0.00099	No	11	0.03034	0.005246	45.45	Kaplan-Meier	sqrt(x)	0.0008228	Param Intra 1 of 3
Antimony (mg/L)	GWC-49R	0.003	n/a	9/11/2019	0.0032	Yes	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWA-39R_39RZ	0.005	n/a	3/14/2019	0.005ND	No	11	n/a	n/a	54.55	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWA-41R	0.005	n/a	9/10/2019	0.005ND	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWA-43R	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-45R	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-46R	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic (mg/L)	GWC-47R	0.005	n/a	9/11/2019	0.00067	No	10	n/a	n/a	50	n/a	n/a	0.00344	NP Intra (normality) 1 of 3
Arsenic (mg/L)	GWC-49R	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Barium (mg/L)	GWA-39R_39RZ	0.01964	n/a	3/14/2019	0.018	No	11	0.01544	0.002236	0	None	No	0.0008228	Param Intra 1 of 3
Barium (mg/L)	GWA-41R	0.0447	n/a	9/10/2019	0.031	No	11	0.02243	0.01186	0	None	No	0.0008228	Param Intra 1 of 3
Barium (mg/L)	GWA-43R	0.008996	n/a	9/11/2019	0.0079	No	11	0.008105	0.0004743	0	None	No	0.0008228	Param Intra 1 of 3
Barium (mg/L)	GWC-45R	0.02411	n/a	9/11/2019	0.021	No	11	0.02006	0.002154	0	None	No	0.0008228	Param Intra 1 of 3
Barium (mg/L)	GWC-46R	0.02079	n/a	9/11/2019	0.013	No	11	0.01549	0.002822	0	None	No	0.0008228	Param Intra 1 of 3
Barium (mg/L)	GWC-47R	0.01808	n/a	9/11/2019	0.0097	No	10	0.01146	0.003404	10	None	No	0.0008228	Param Intra 1 of 3
Barium (mg/L)	GWC-49R	0.01169	n/a	9/11/2019	0.017	Yes	11	9.9e-7	3.2e-7	9.091	None	x^3	0.0008228	Param Intra 1 of 3
Beryllium (mg/L)	GWA-39R_39RZ	0.003	n/a	3/14/2019	0.003ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWA-41R	0.003	n/a	9/10/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWA-43R	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-45R	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-46R	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-47R	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium (mg/L)	GWC-49R	0.003	n/a	9/11/2019	0.003ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWA-39R_39RZ	0.001	n/a	3/14/2019	0.001ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWA-41R	0.0025	n/a	9/10/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWA-43R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-45R	0.0025	n/a	9/11/2019	0.0025ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-46R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-47R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium (mg/L)	GWC-49R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-39R_39RZ	0.01	n/a	3/14/2019	0.004	No	11	n/a	n/a	54.55	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-41R	0.01	n/a	9/10/2019	0.01ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWA-43R	0.002735	n/a	9/11/2019	0.00066	No	11	-6.826	0.492	45.45	Kaplan-Meier	ln(x)	0.0008228	Param Intra 1 of 3
Chromium (mg/L)	GWC-45R	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Chromium (mg/L)	GWC-46R	0.003994	n/a	9/11/2019	0.0038	No	11	-6.182	0.3505	27.27	Kaplan-Meier	ln(x)	0.0008228	Param Intra 1 of 3
Chromium (mg/L)	GWC-47R	0.003043	n/a	9/11/2019	0.0015	No	10	0.001916	0.0005792	0	None	No	0.0008228	Param Intra 1 of 3
Chromium (mg/L)	GWC-49R	0.01	n/a	9/11/2019	0.00063	No	11	n/a	n/a	54.55	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWA-39R_39RZ	0.01	n/a	3/14/2019	0.01ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWA-41R	0.0025	n/a	9/10/2019	0.0025ND	No	11	n/a	n/a	63.64	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWA-43R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-45R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-46R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-47R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt (mg/L)	GWC-49R	0.0025	n/a	9/11/2019	0.0025ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWA-39R_39RZ	0.0271	n/a	3/14/2019	0.025ND	No	7	n/a	n/a	71.43	n/a	n/a	0.008668	NP Intra (NDs) 1 of 3

Intrawell Prediction Limit Summary - All Results

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/16/2020, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Copper (mg/L)	GWA-41R	0.025	n/a	9/10/2019	0.0022	No	10	n/a	n/a	70	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWA-43R	0.025	n/a	9/11/2019	0.00026	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-45R	0.025	n/a	9/11/2019	0.025ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-46R	0.025	n/a	9/11/2019	0.025ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-47R	0.025	n/a	9/11/2019	0.0008	No	10	n/a	n/a	70	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Copper (mg/L)	GWC-49R	0.025	n/a	9/11/2019	0.025ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-39R_39RZ	0.005	n/a	3/14/2019	0.005ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-41R	0.005	n/a	9/10/2019	0.005ND	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWA-43R	0.005	n/a	9/11/2019	0.000092	No	11	n/a	n/a	72.73	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-45R	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	63.64	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-46R	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-47R	0.005	n/a	9/11/2019	0.000085	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead (mg/L)	GWC-49R	0.005	n/a	9/11/2019	0.005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-39R_39RZ	0.0005	n/a	3/14/2019	0.0005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-41R	0.0005	n/a	9/10/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWA-43R	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-45R	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-46R	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-47R	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Mercury (mg/L)	GWC-49R	0.0005	n/a	9/11/2019	0.0005ND	No	11	n/a	n/a	81.82	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWA-39R_39RZ	0.0224	n/a	3/14/2019	0.0017	No	7	n/a	n/a	57.14	n/a	n/a	0.008668	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWA-41R	0.01	n/a	9/10/2019	0.00084	No	10	n/a	n/a	60	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWA-43R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-45R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-46R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-47R	0.01	n/a	9/11/2019	0.0014	No	10	n/a	n/a	60	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Nickel (mg/L)	GWC-49R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-39R_39RZ	0.01	n/a	3/14/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-41R	0.01	n/a	9/10/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-43R	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-45R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-46R	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-47R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-49R	0.01	n/a	9/11/2019	0.01ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-39R_39RZ	0.01	n/a	3/14/2019	0.01ND	No	7	n/a	n/a	85.71	n/a	n/a	0.008668	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-41R	0.01	n/a	9/10/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWA-43R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-45R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-46R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-47R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Silver (mg/L)	GWC-49R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-39R_39RZ	0.001	n/a	3/14/2019	0.001ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-41R	0.001	n/a	9/10/2019	0.001ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-43R	0.001	n/a	9/11/2019	0.001ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-45R	0.001	n/a	9/11/2019	0.001ND	No	11	n/a	n/a	100	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-46R	0.001	n/a	9/11/2019	0.001ND	No	11	n/a	n/a	63.64	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-47R	0.0009583	n/a	9/11/2019	0.00023	No	11	-7.867	0.4878	0	None	ln(x)	0.0008228	Param Intra 1 of 3
Thallium (mg/L)	GWC-49R	0.001	n/a	9/11/2019	0.001ND	No	11	n/a	n/a	90.91	n/a	n/a	0.002806	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWA-39R_39RZ	0.01	n/a	3/14/2019	0.01ND	No	7	n/a	n/a	85.71	n/a	n/a	0.008668	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWA-41R	0.01	n/a	9/10/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3

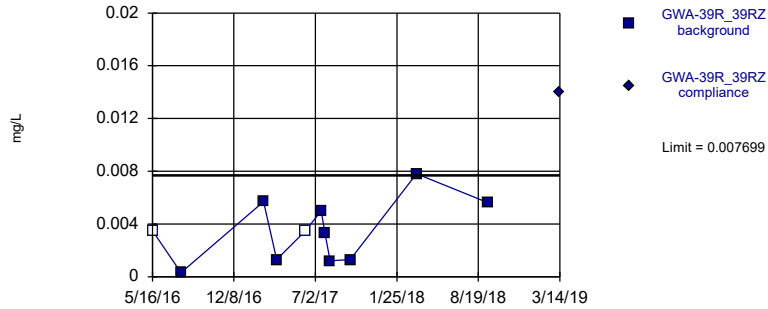
Intrawell Prediction Limit Summary - All Results

Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR Printed 1/16/2020, 12:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Vanadium (mg/L)	GWA-43R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	90	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-45R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-46R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-47R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Vanadium (mg/L)	GWC-49R	0.01	n/a	9/11/2019	0.01ND	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Zinc (mg/L)	GWA-39R_39RZ	0.01	n/a	3/14/2019	0.0035	No	7	n/a	n/a	57.14	n/a	n/a	0.008668	NP Intra (NDs) 1 of 3
Zinc (mg/L)	GWA-41R	0.01	n/a	9/10/2019	0.0075	No	10	n/a	n/a	80	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3
Zinc (mg/L)	GWA-43R	0.009267	n/a	9/11/2019	0.0053	No	10	0.004636	0.00238	50	Kaplan-Meier	No	0.0008228	Param Intra 1 of 3
Zinc (mg/L)	GWC-45R	0.005777	n/a	9/11/2019	0.0058	No	10	0.002972	0.001441	40	Kaplan-Meier	No	0.0008228	Param Intra 1 of 3
Zinc (mg/L)	GWC-46R	0.006359	n/a	9/11/2019	0.0055	No	10	0.05657	0.01191	50	Kaplan-Meier	sqrt(x)	0.0008228	Param Intra 1 of 3
Zinc (mg/L)	GWC-47R	0.01788	n/a	9/11/2019	0.028	Yes	10	0.0133	0.002353	20	Kaplan-Meier	No	0.0008228	Param Intra 1 of 3
Zinc (mg/L)	GWC-49R	0.01	n/a	9/11/2019	0.005	No	10	n/a	n/a	100	n/a	n/a	0.00344	NP Intra (NDs) 1 of 3

Exceeds Limit

Prediction Limit
Intrawell Parametric

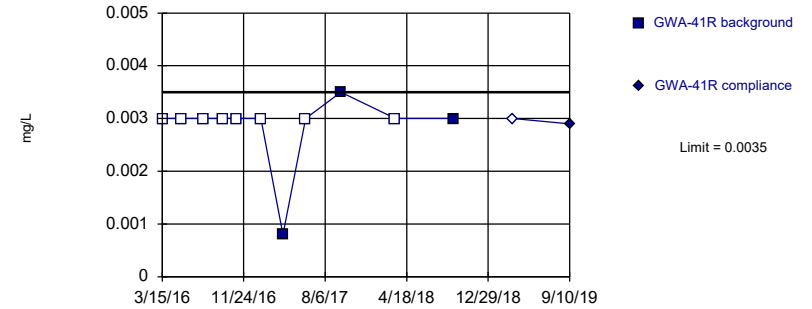


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.003012, Std. Dev.=0.002494, n=11, 18.18% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9403, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Antimony Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

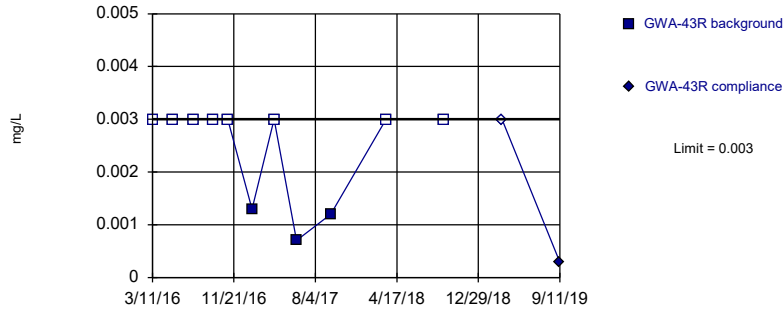


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

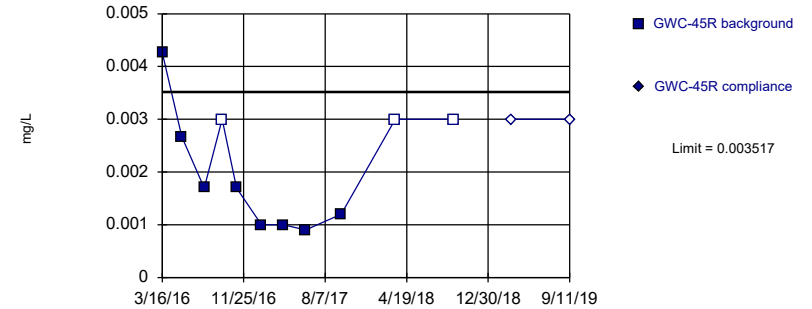


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

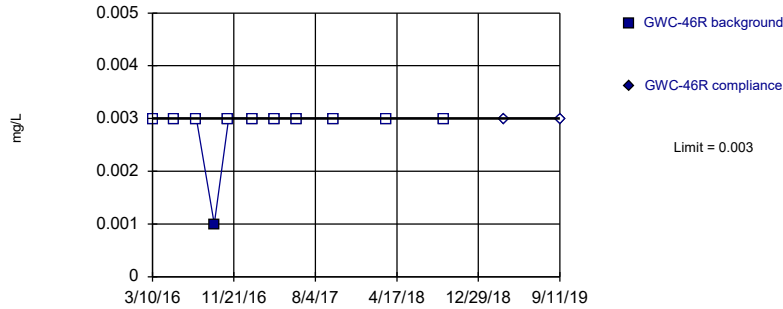


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001604, Std. Dev.=0.001018, n=11, 27.27% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8897, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Antimony Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

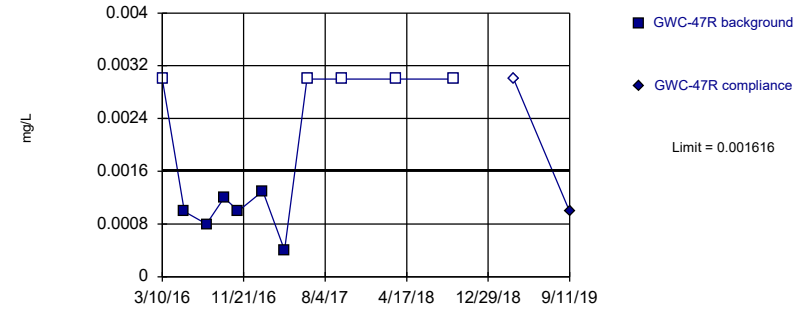


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

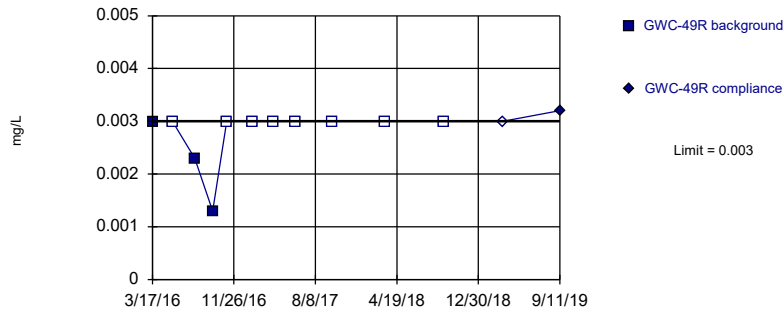


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.03034, Std. Dev.=0.005246, n=11, 45.45% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8154, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Antimony Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Exceeds Limit

Prediction Limit
Intrawell Non-parametric

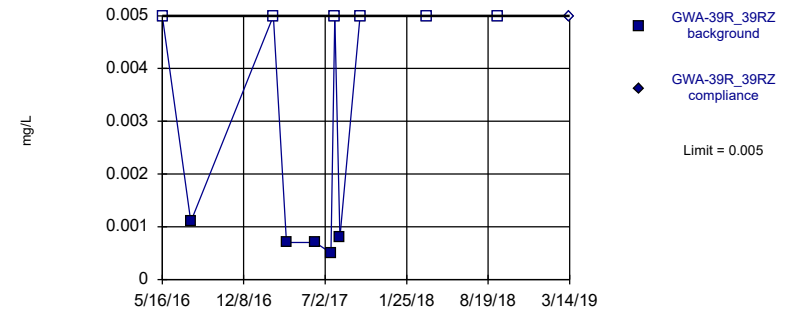


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Antimony Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



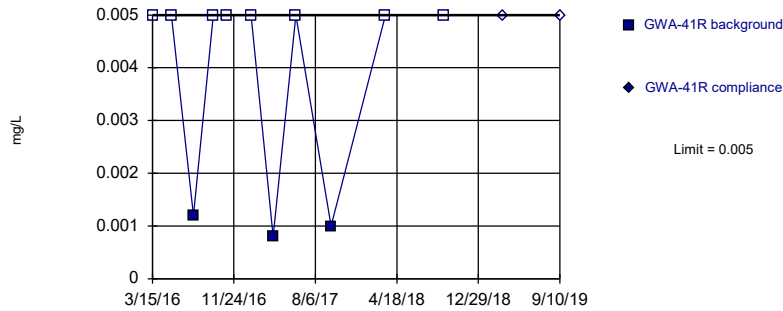
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



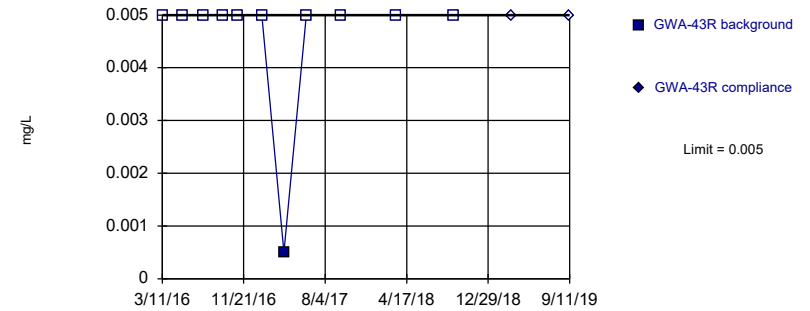
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



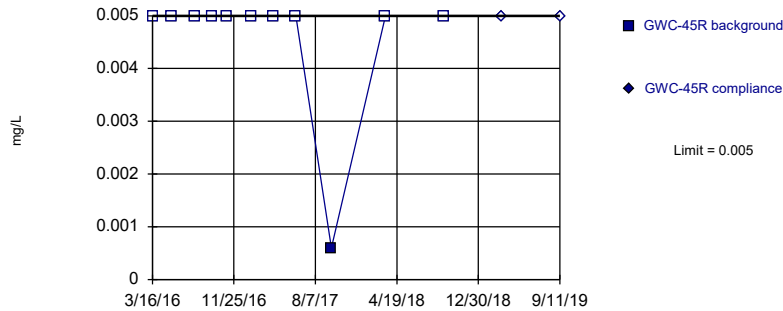
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



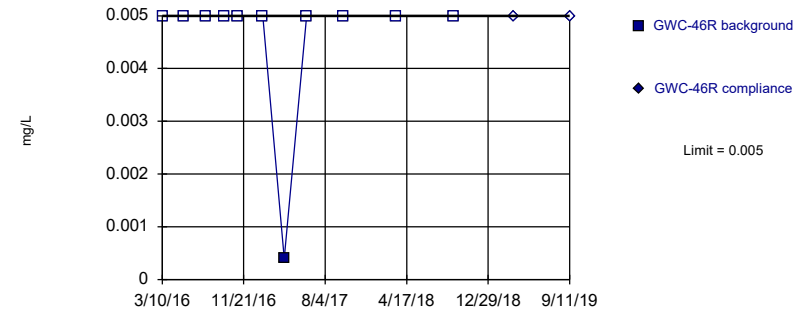
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric

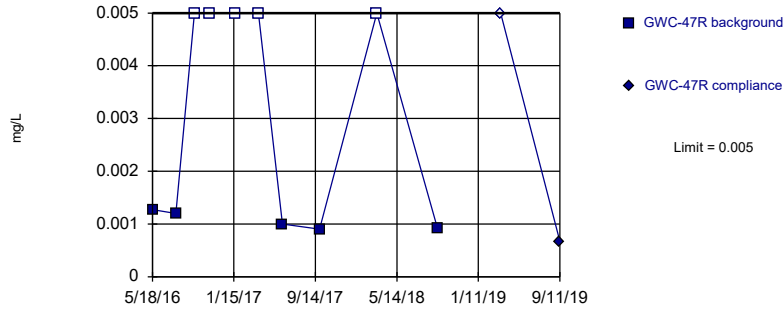


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

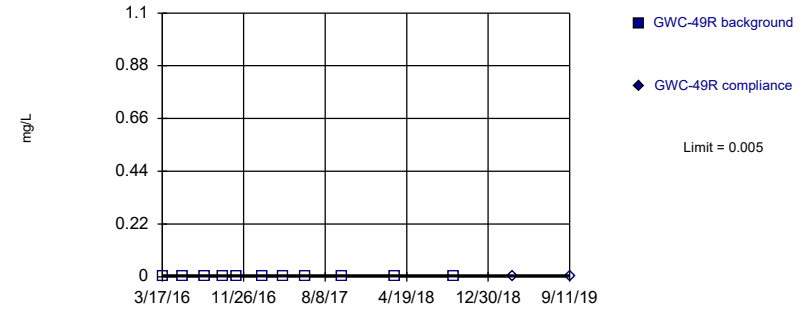


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 50% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

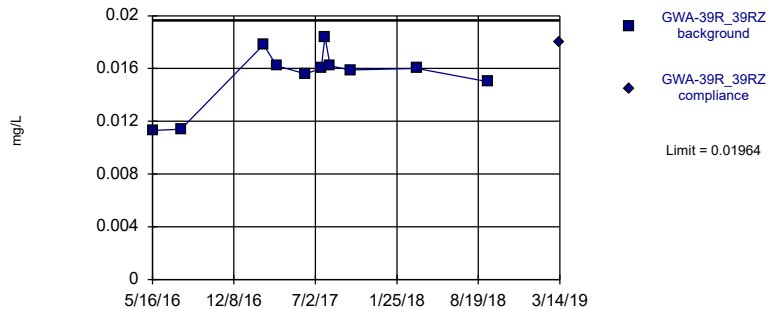


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Arsenic Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Parametric

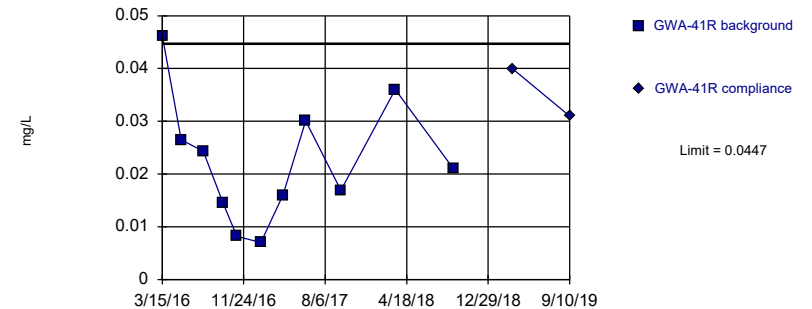


Background Data Summary: Mean=0.01544, Std. Dev.=0.002236, n=11. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8351, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Barium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

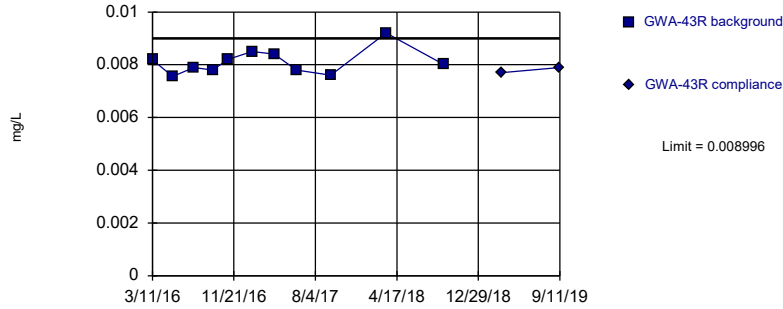
Prediction Limit
 Intrawell Parametric



Background Data Summary: Mean=0.02243, Std. Dev.=0.01186, n=11. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9589, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Barium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

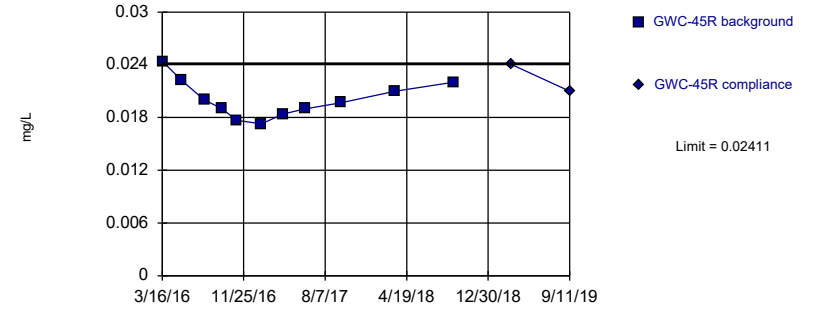
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.008105, Std. Dev.=0.0004743, n=11. Insufficient data to test for seasonality; data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9088, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Barium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

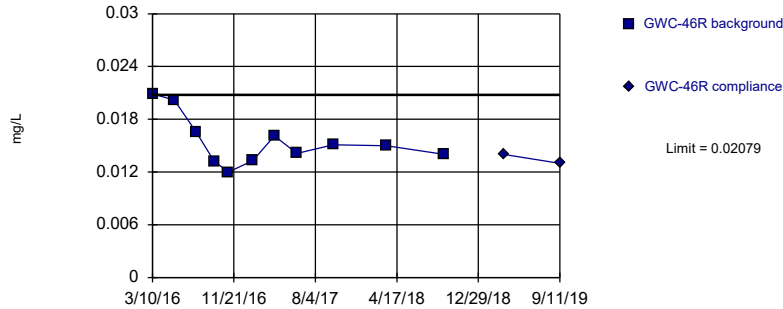
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.02006, Std. Dev.=0.002154, n=11. Insufficient data to test for seasonality; data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9497, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Barium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit Prediction Limit
Intrawell Parametric

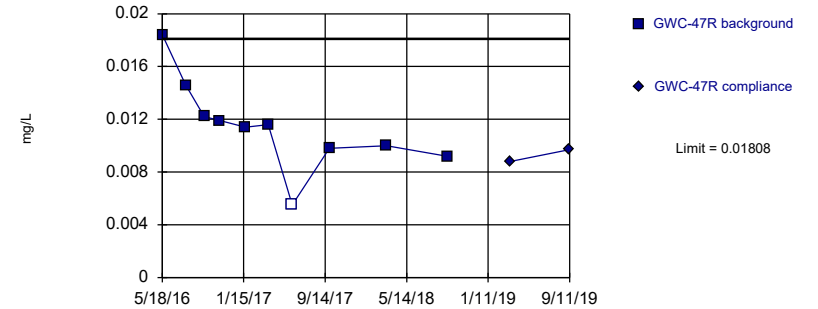


Background Data Summary: Mean=0.01549, Std. Dev.=0.002822, n=11. Insufficient data to test for seasonality; data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8859, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Barium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Parametric

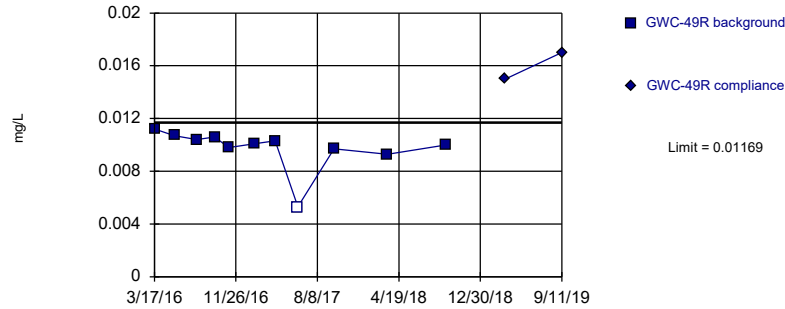


Background Data Summary: Mean=0.01146, Std. Dev.=0.003404, n=10, 10% NDs. Insufficient data to test for seasonality; data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9463, critical = 0.781. Kappa = 1.946 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Barium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Exceeds Limit

Prediction Limit Intrawell Parametric

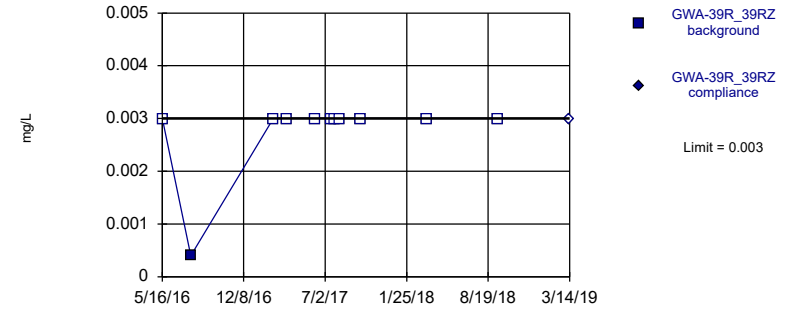


Background Data Summary (based on cube transformation): Mean=9.9e-7, Std. Dev.=3.2e-7, n=11, 9.091% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8401, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Barium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

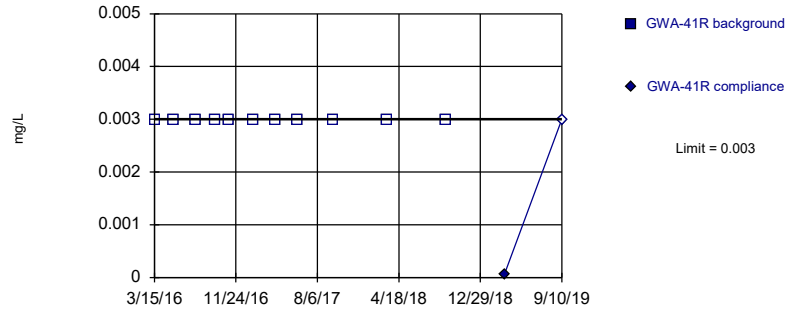


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

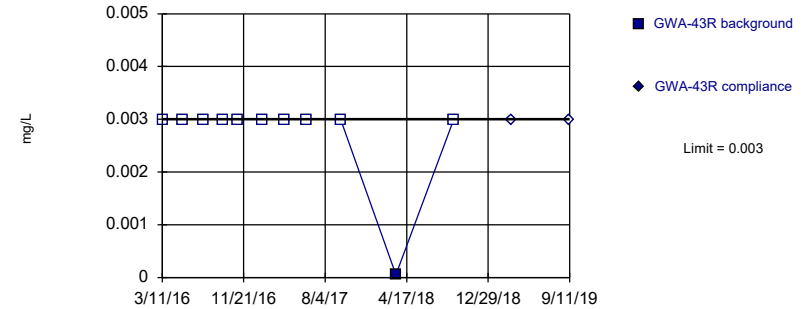


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit Intrawell Non-parametric

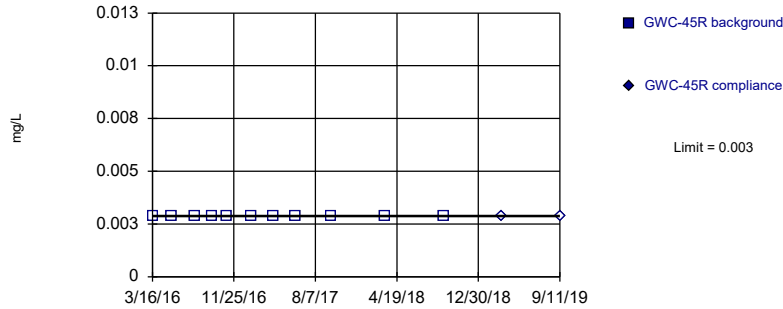


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

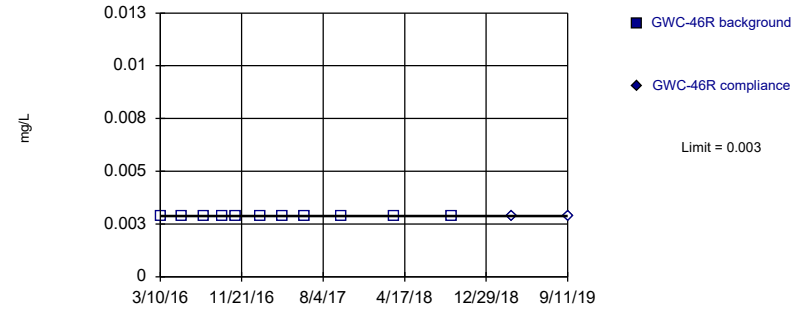


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

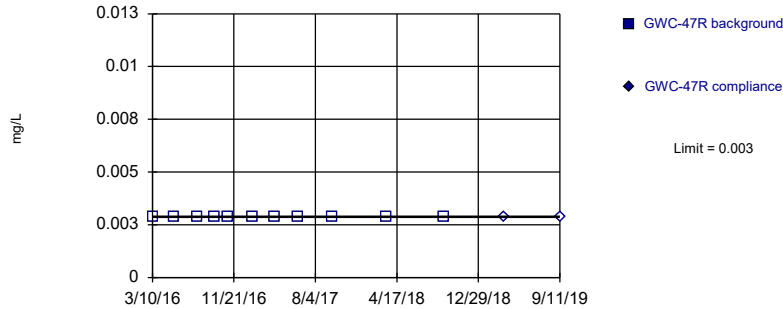


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

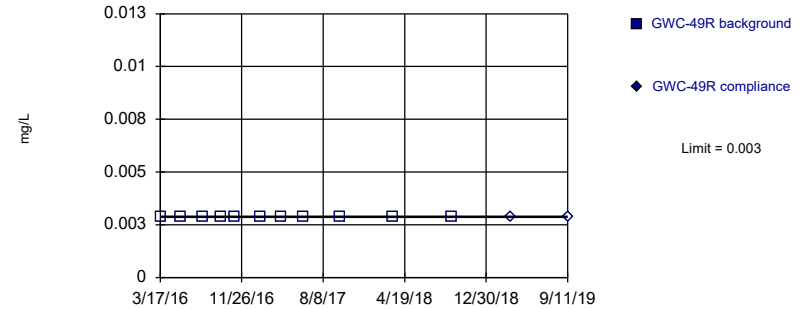


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

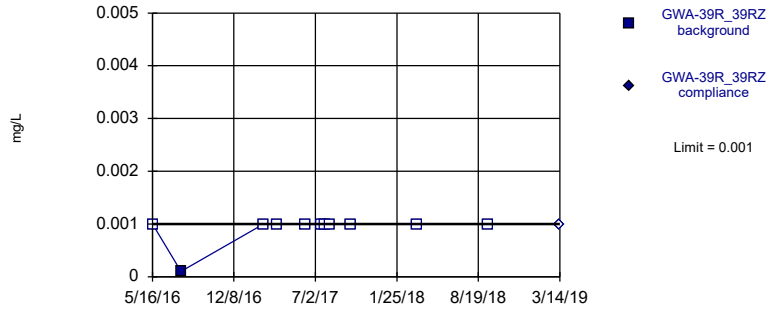


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Beryllium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

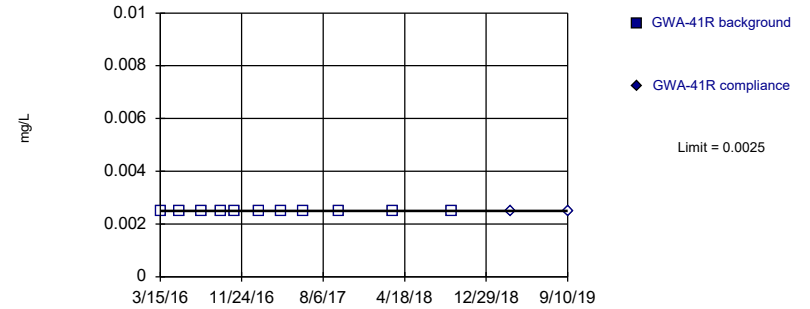


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

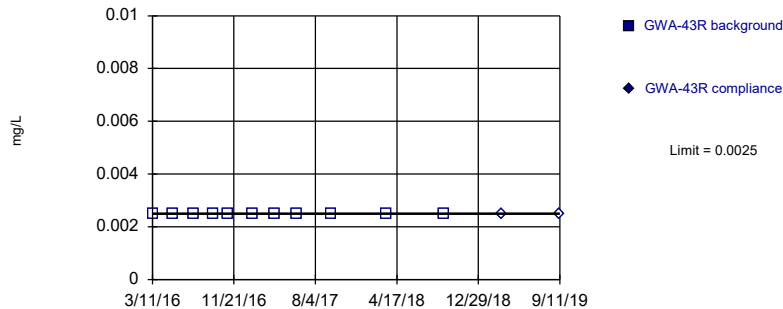


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

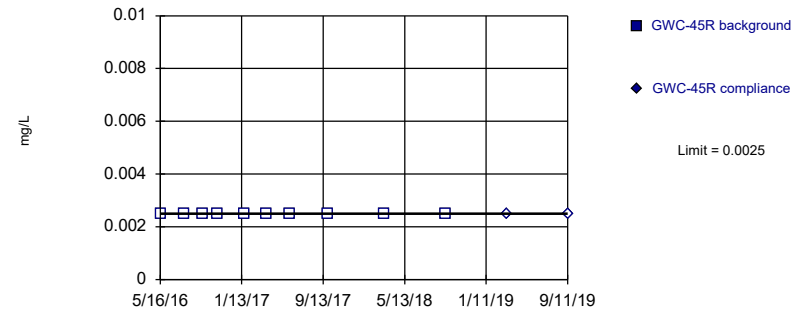


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

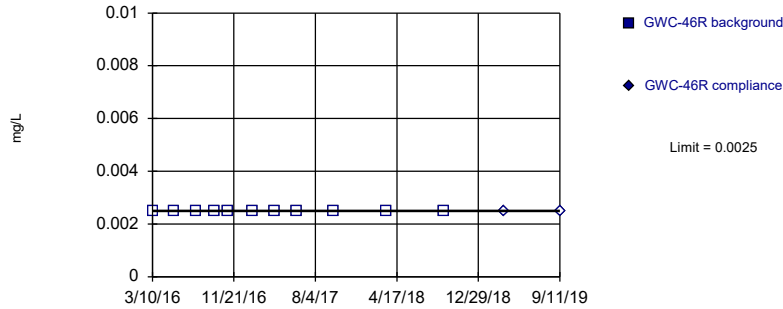


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

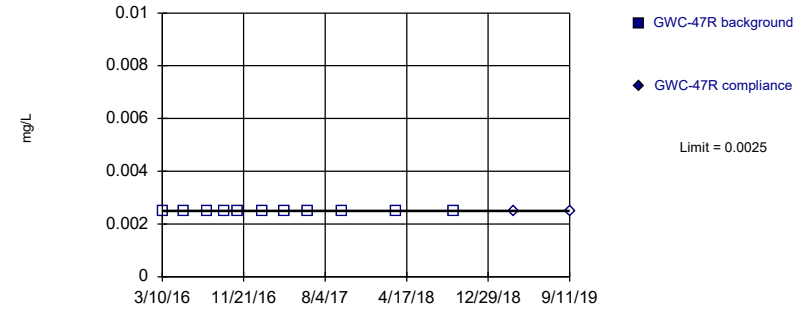


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

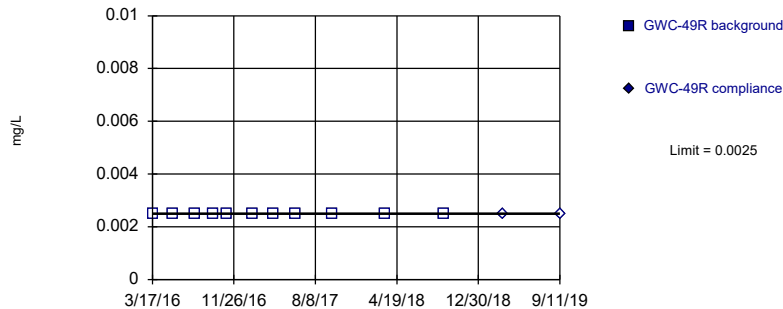


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric

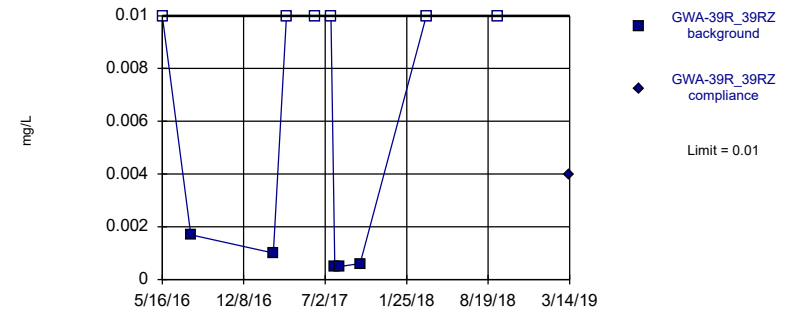


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cadmium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit Prediction Limit
Intrawell Non-parametric



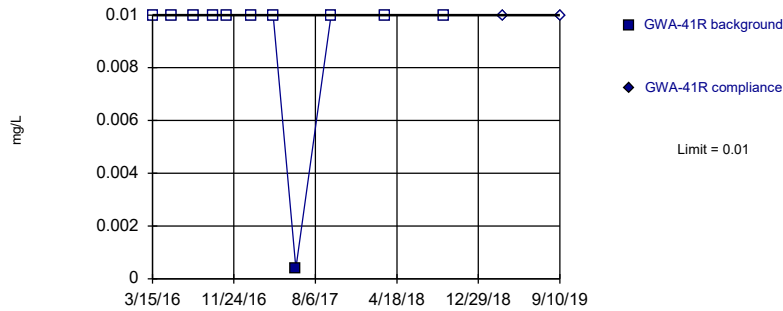
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



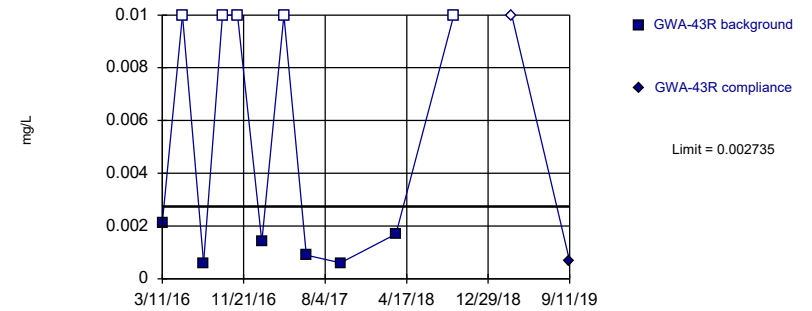
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Parametric



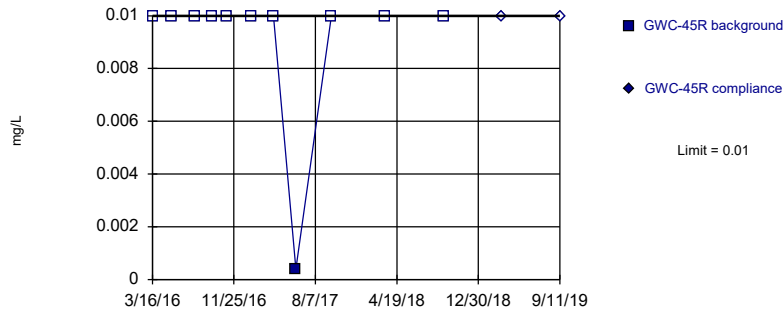
Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.826, Std. Dev.=0.492, n=11, 45.45% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk (@alpha = 0.01, calculated = 0.8019, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Chromium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



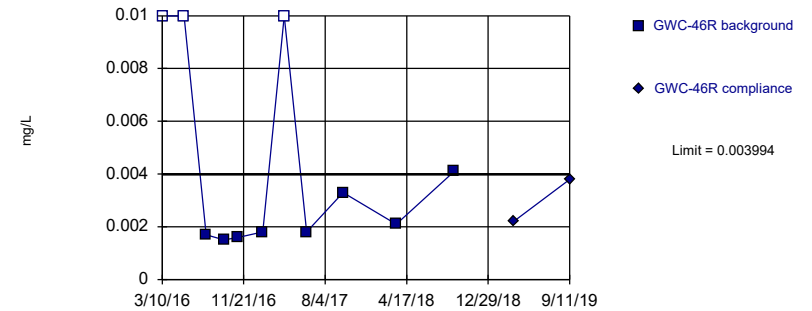
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Parametric

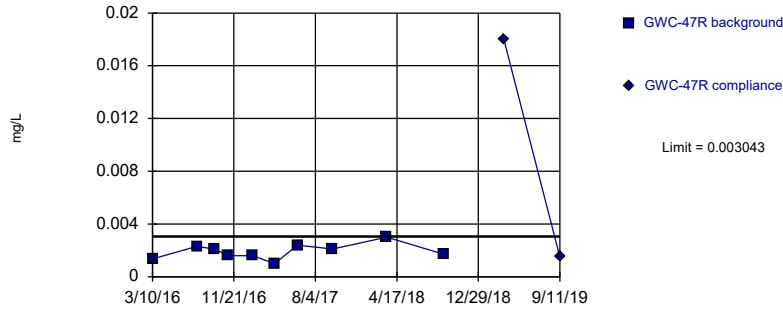


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.182, Std. Dev.=0.3505, n=11, 27.27% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk (@alpha = 0.01, calculated = 0.7957, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Chromium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

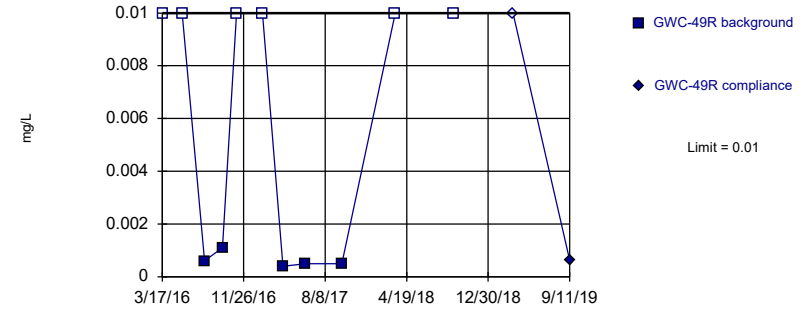


Background Data Summary: Mean=0.001916, Std. Dev.=0.0005792, n=10. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9766, critical = 0.781. Kappa = 1.946 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Chromium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



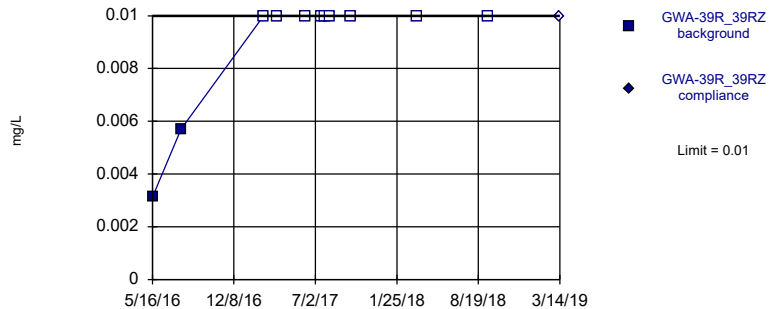
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 54.55% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Chromium Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



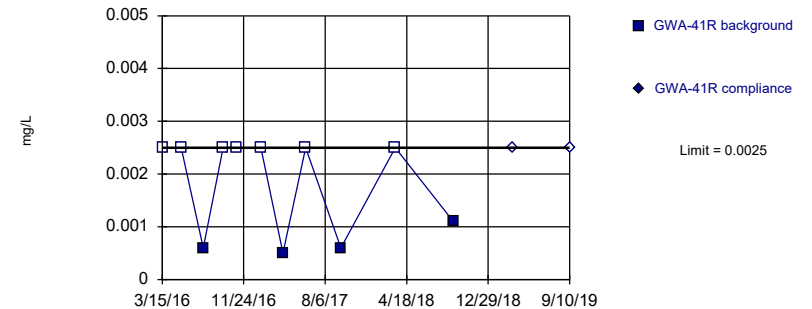
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

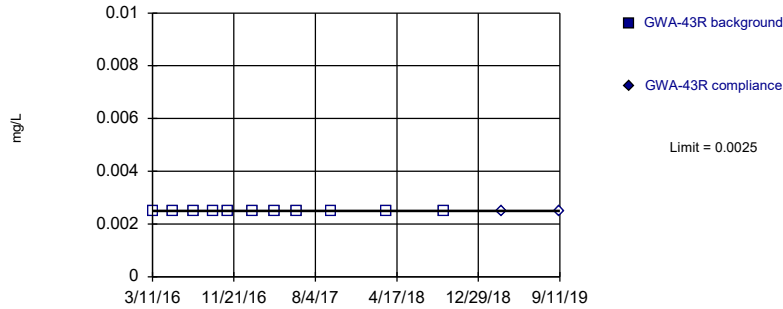


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

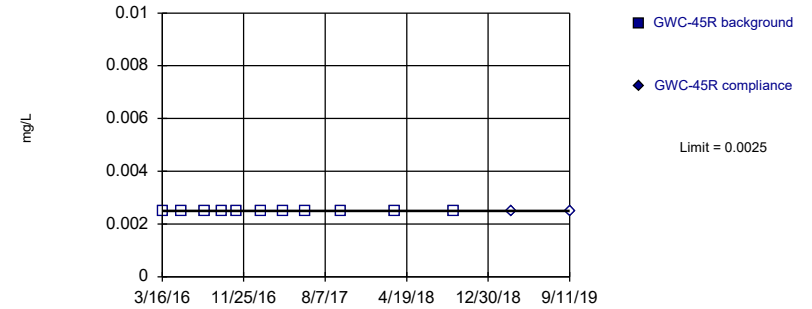


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

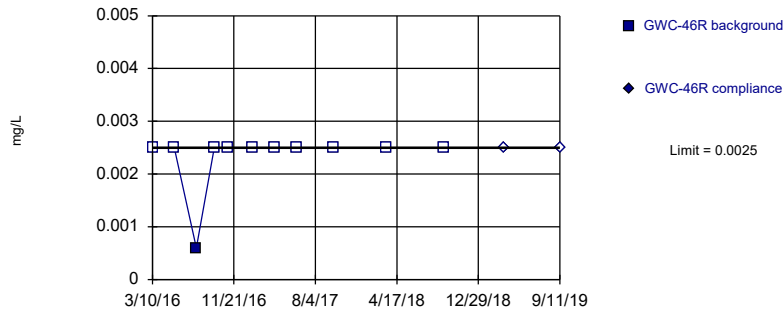


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

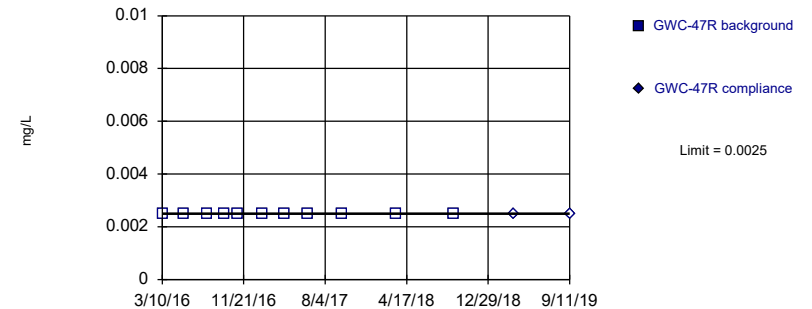


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

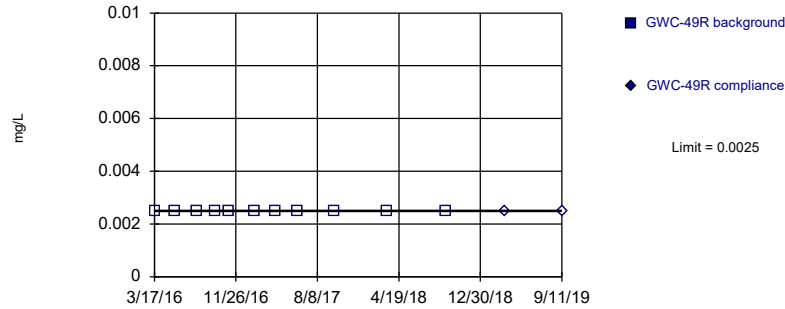
Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

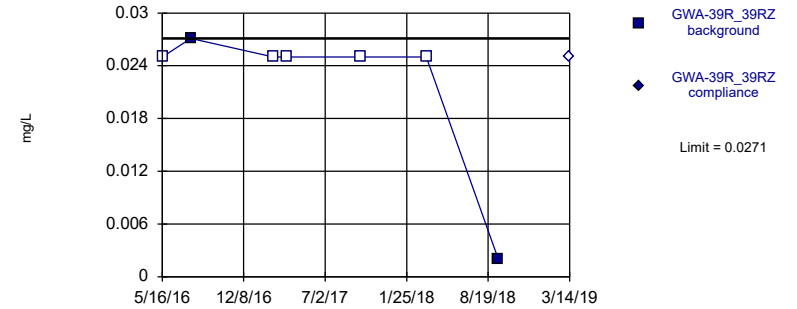
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Cobalt Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

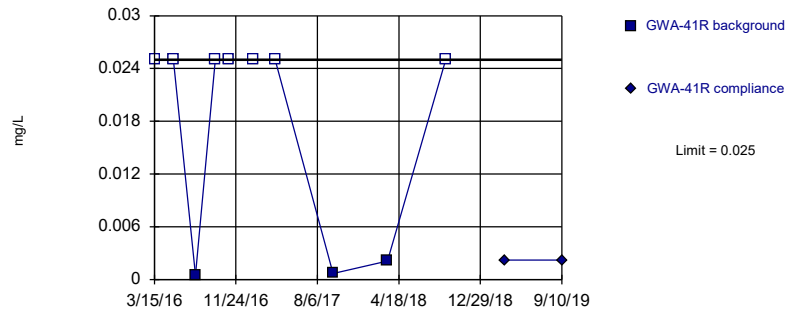
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

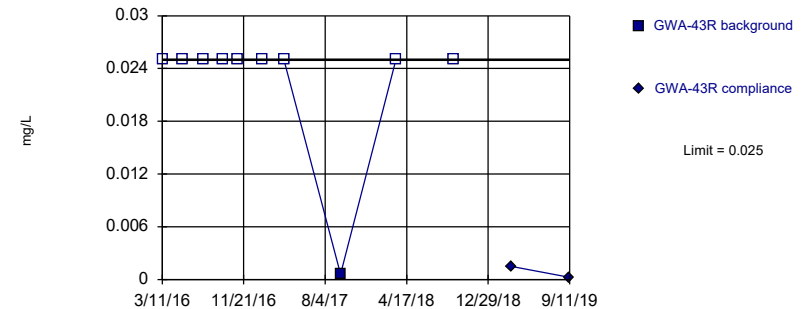
Within Limit Prediction Limit
 Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit Prediction Limit
 Intrawell Non-parametric

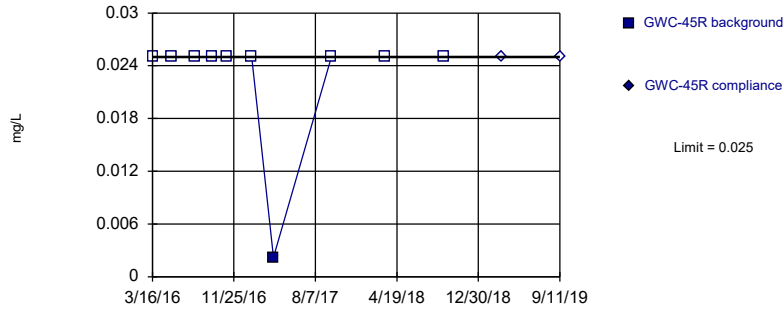


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Copper Analysis Run 1/16/2020 11:57 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

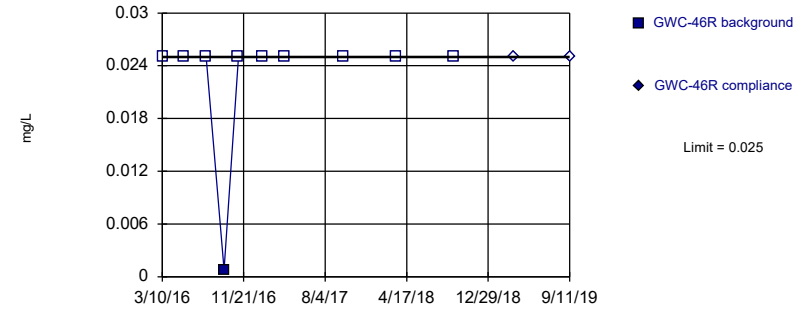


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Copper Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

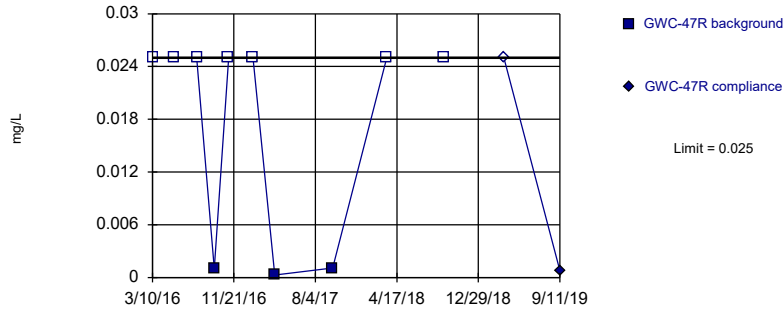


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Copper Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

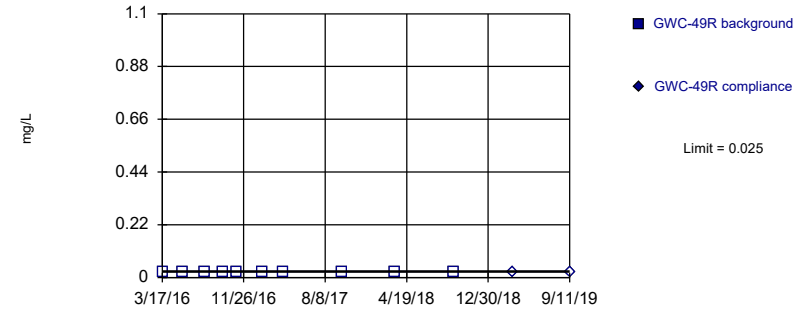


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Copper Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

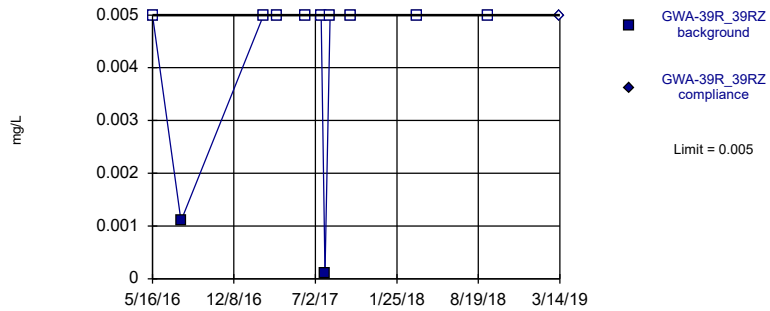


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Copper Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

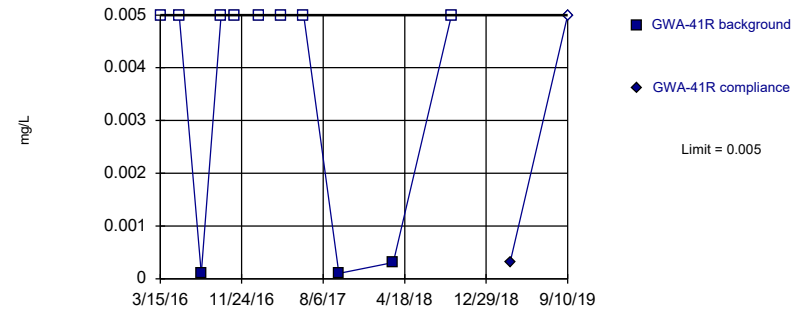


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

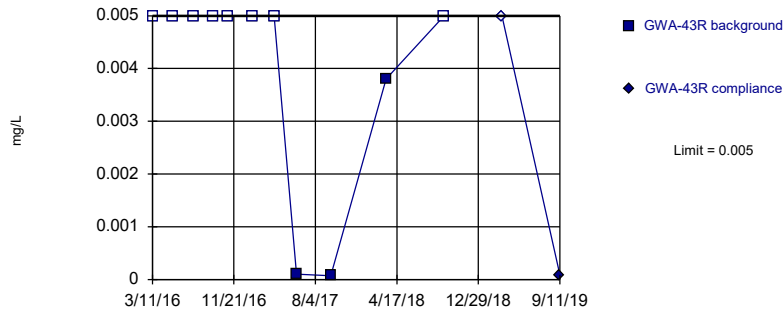


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

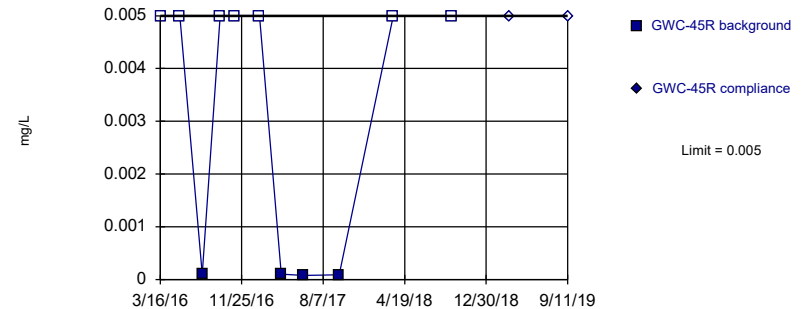


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

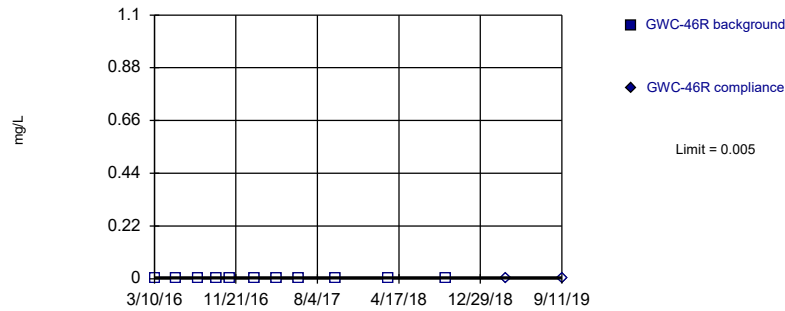


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

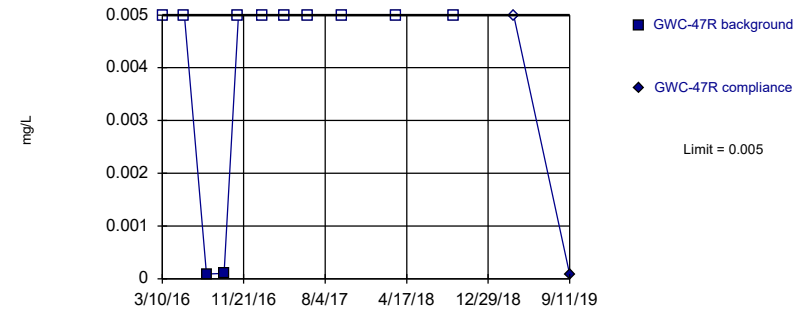


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

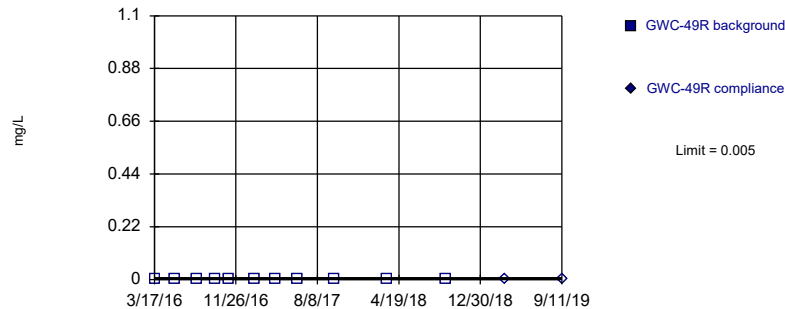


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

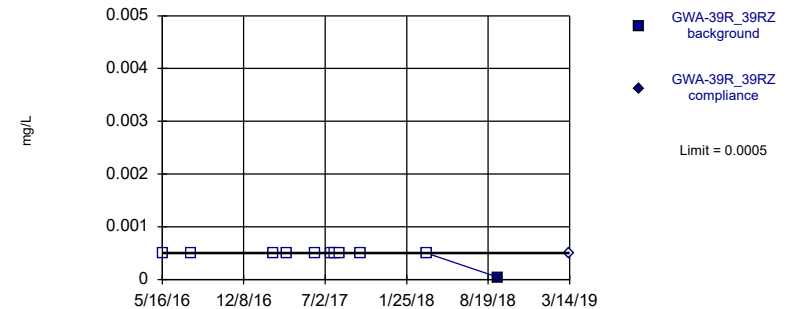


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Lead Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

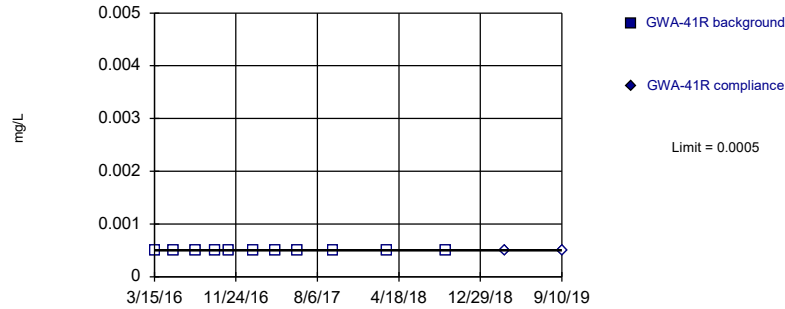


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

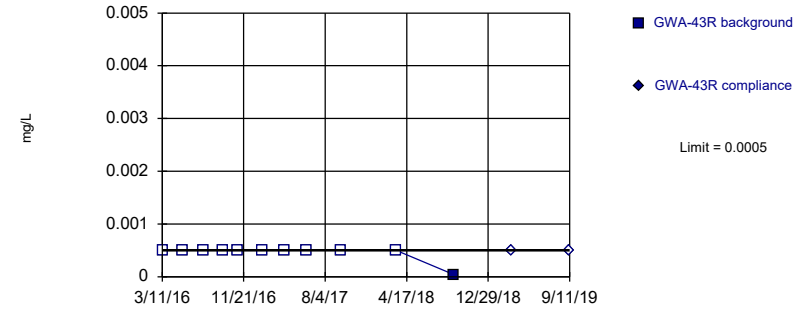


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

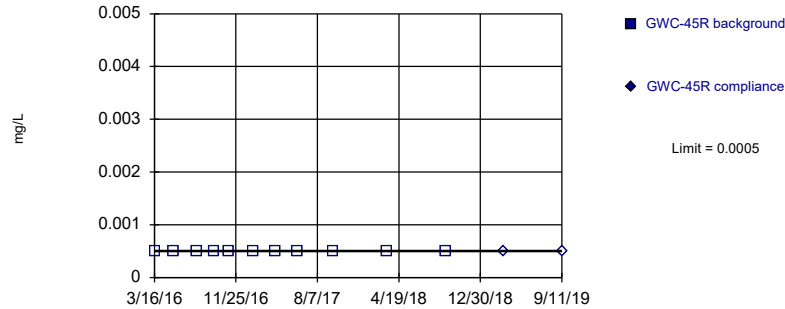


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

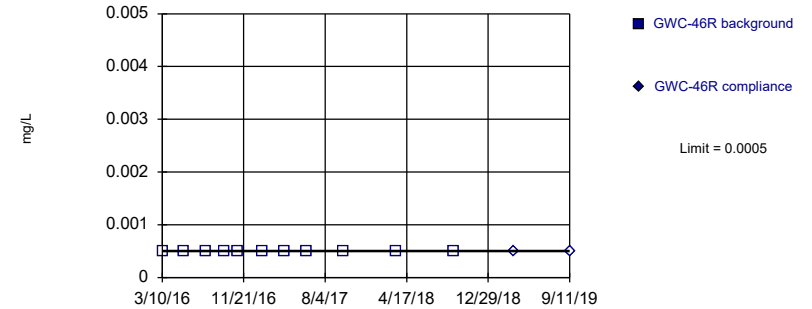


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

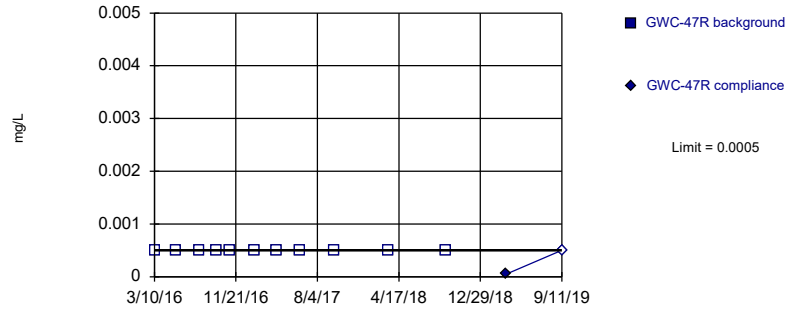


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Mercury Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

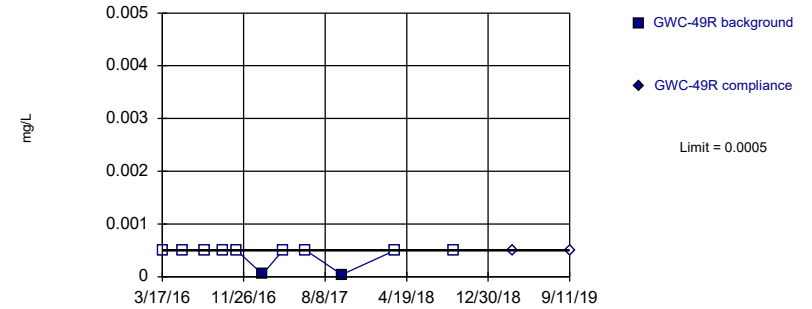


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Mercury Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

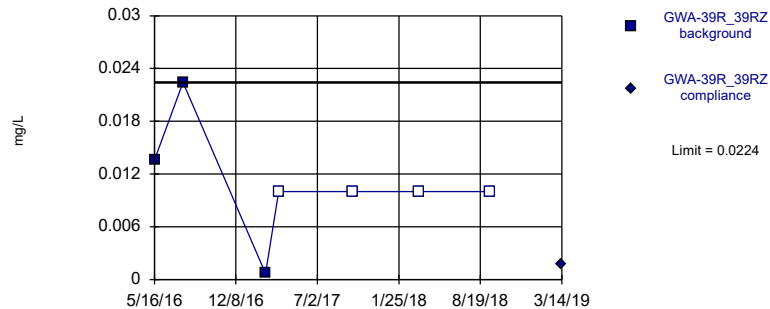


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Mercury Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

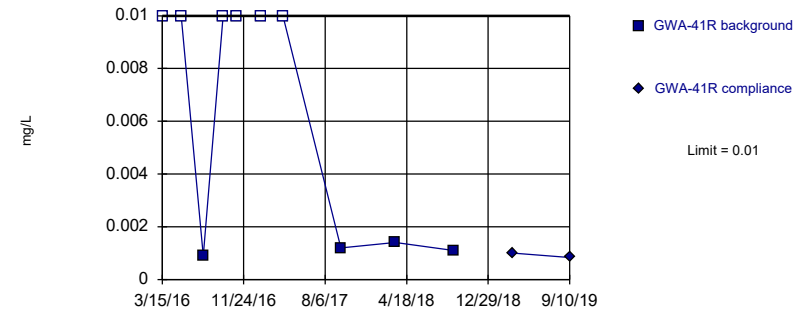


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Nickel Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



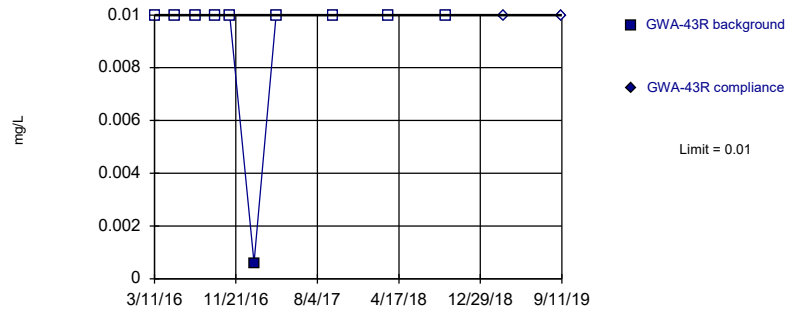
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Nickel Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



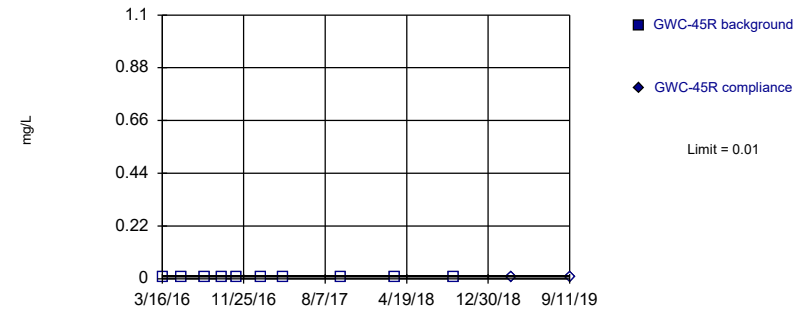
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Nickel Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



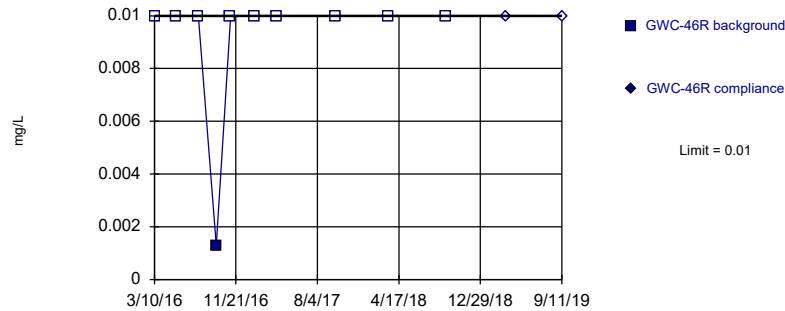
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Nickel Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



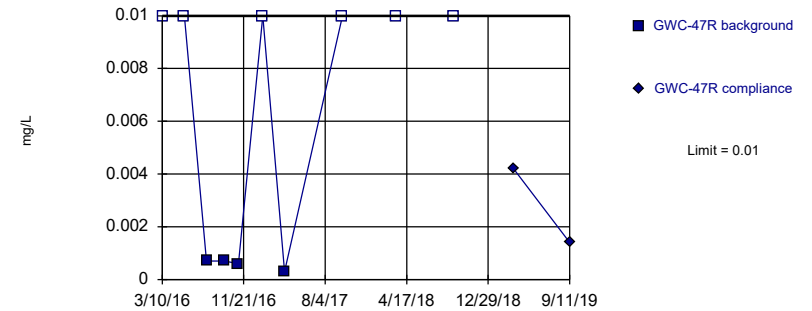
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Nickel Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



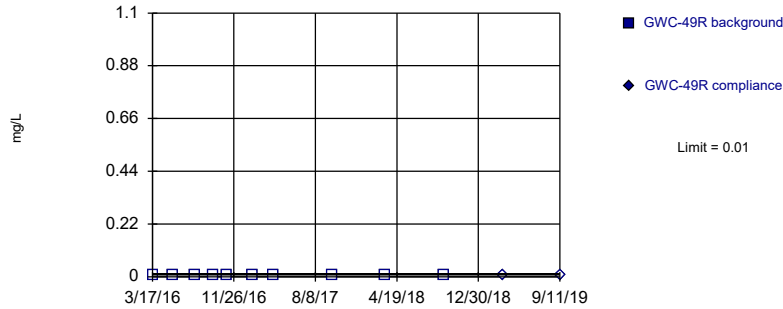
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Nickel Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



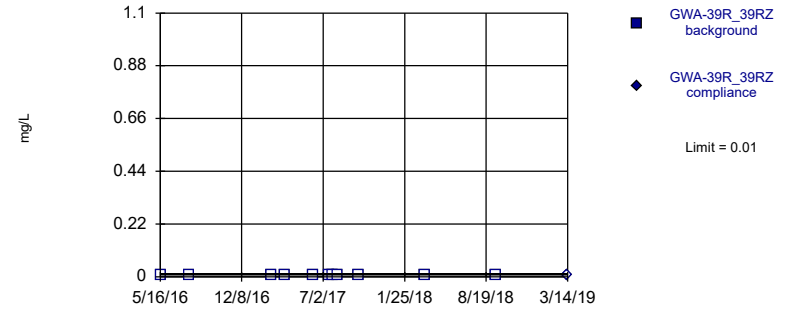
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Nickel Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



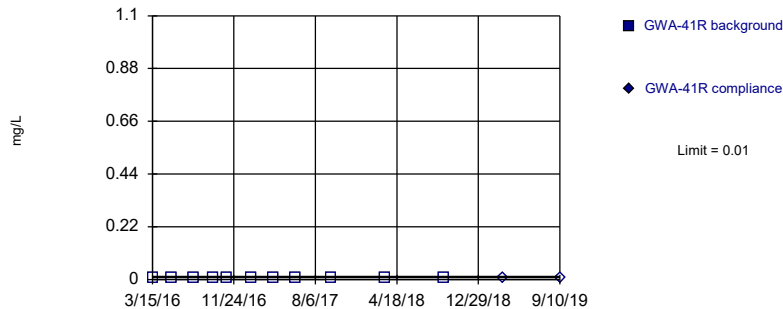
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric



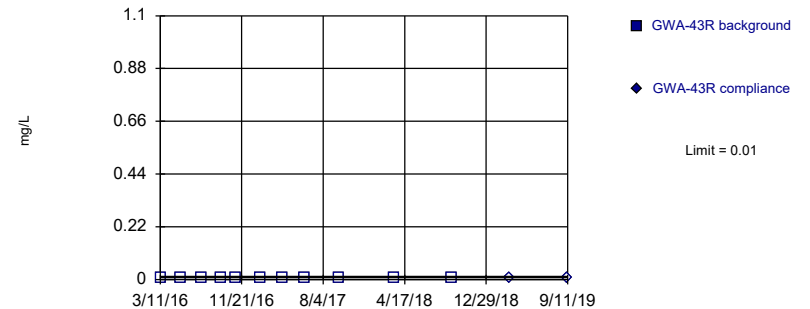
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Sanitas™ v.9.6.23e Sanitas software utilized by Groundwater Stats Consulting, UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit Intrawell Non-parametric

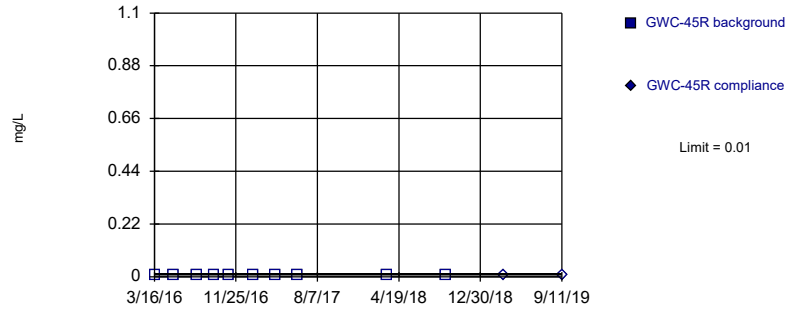


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

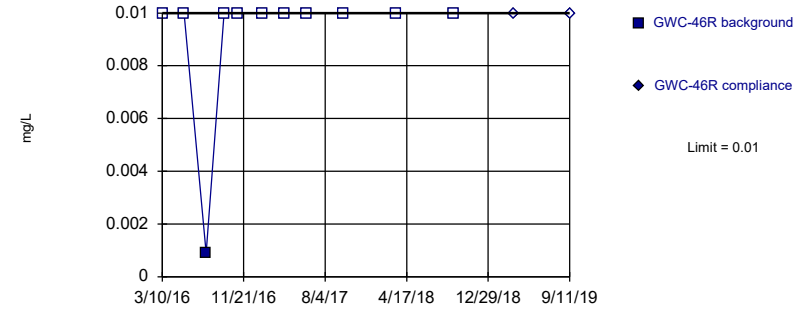


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

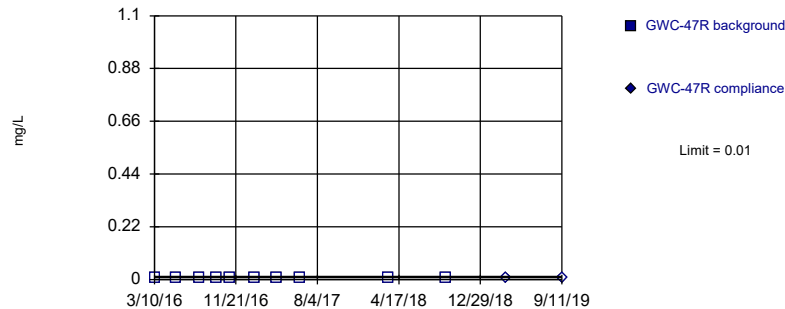


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

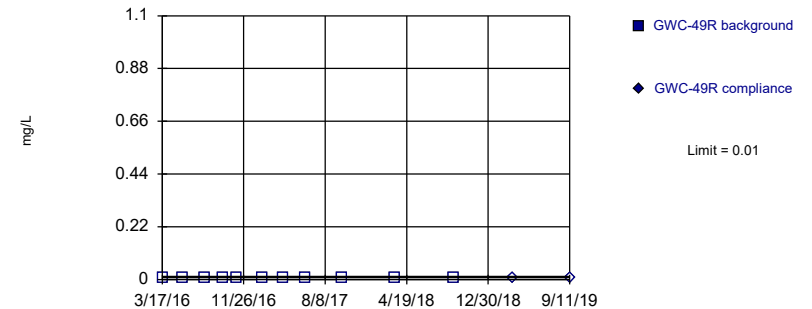


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

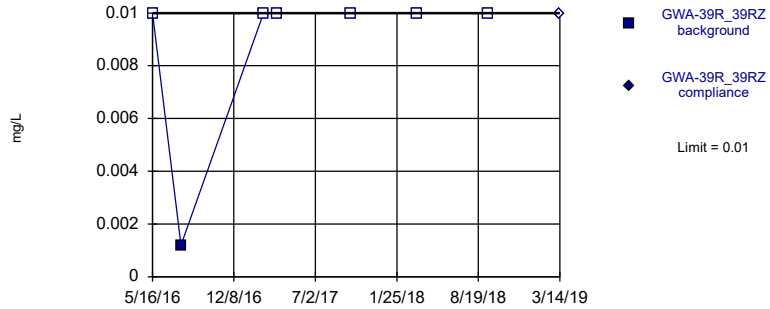


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Selenium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

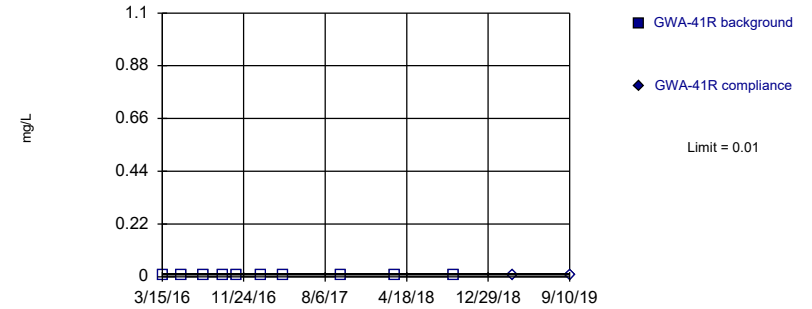


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

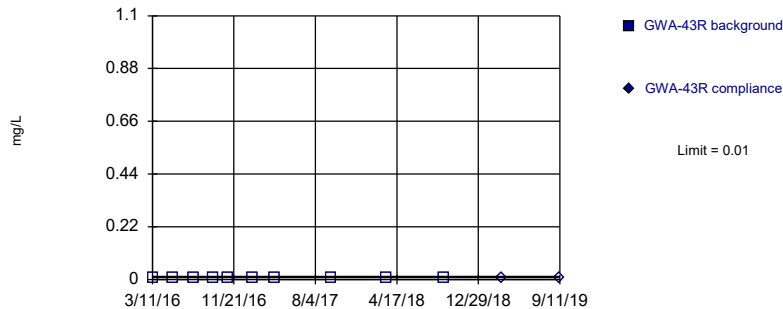


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

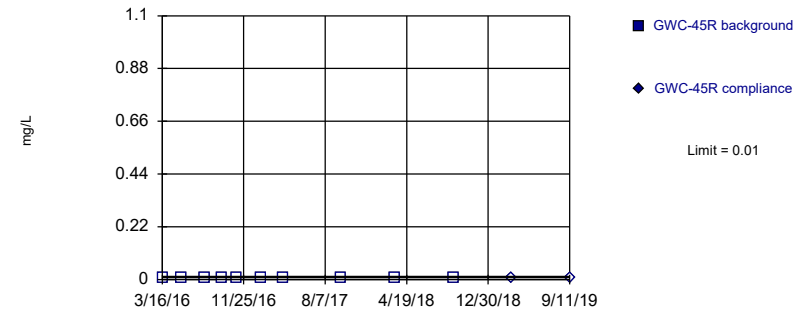


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

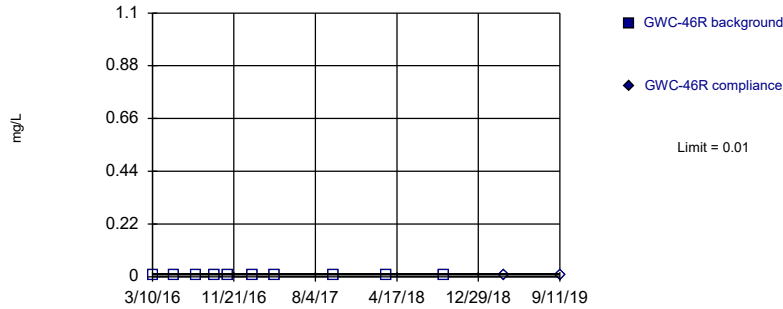


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

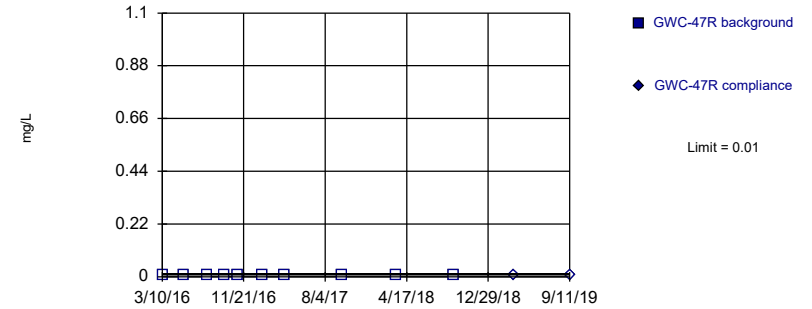


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

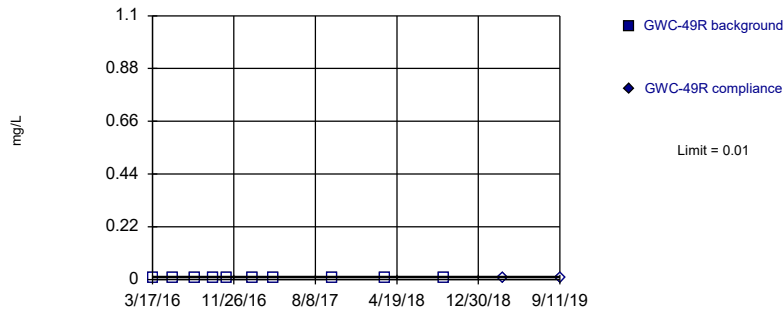


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

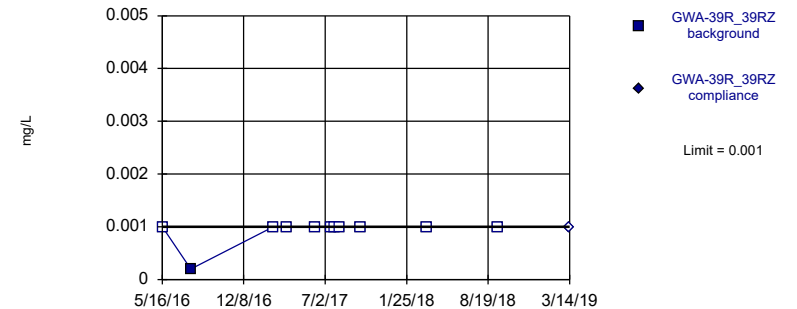


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Silver Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

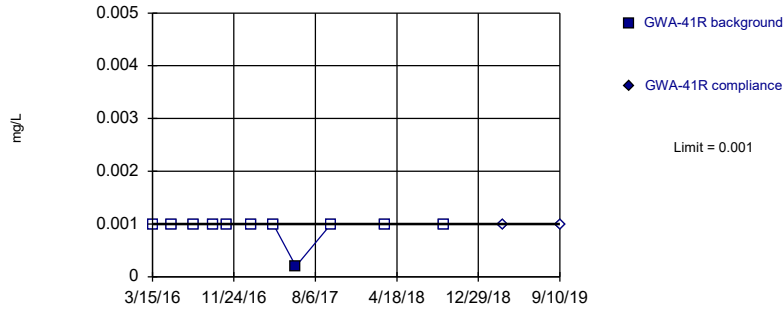


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

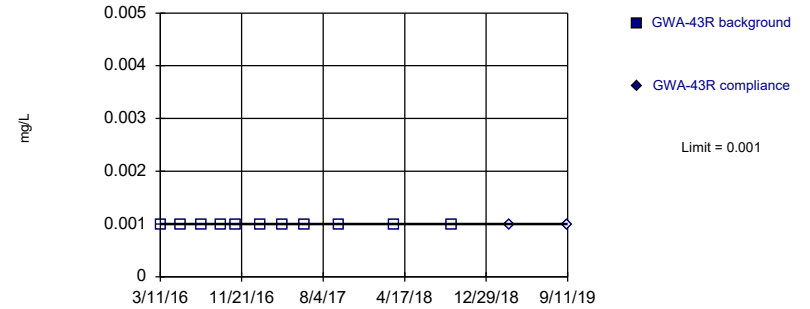


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

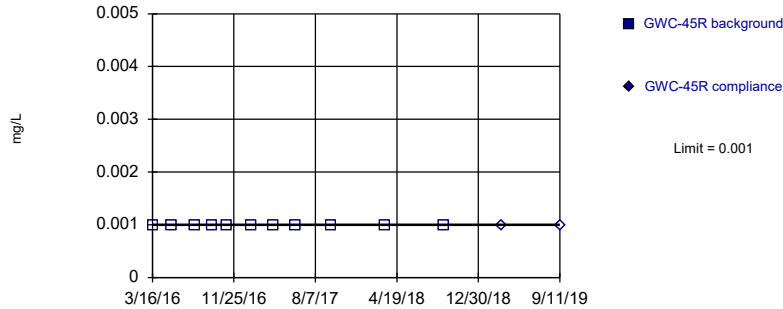


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

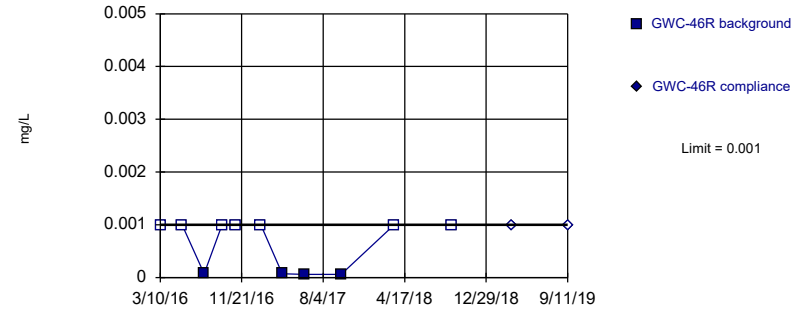


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

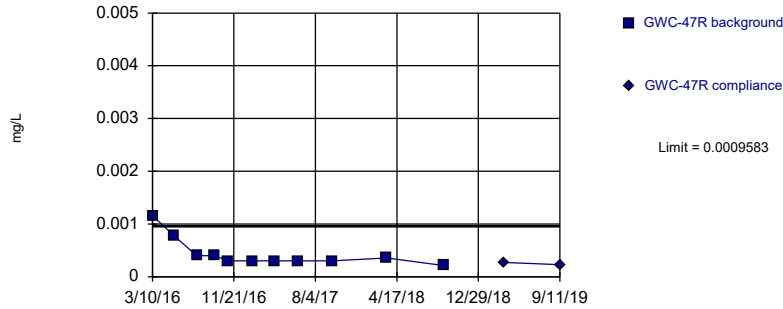


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Thallium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

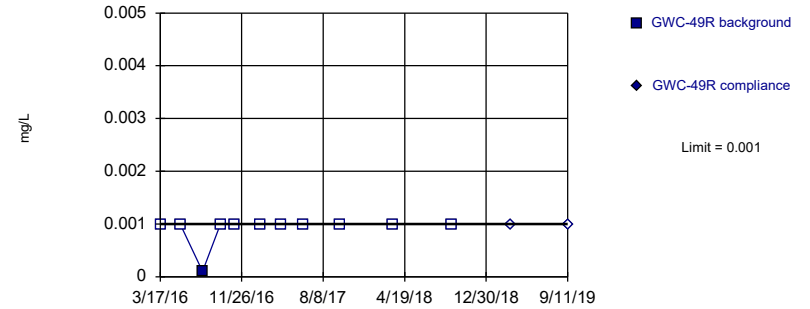


Background Data Summary (based on natural log transformation): Mean=-7.867, Std. Dev.=0.4878, n=11. Insufficient data to test for seasonality; data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8094, critical = 0.792. Kappa = 1.879 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Thallium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



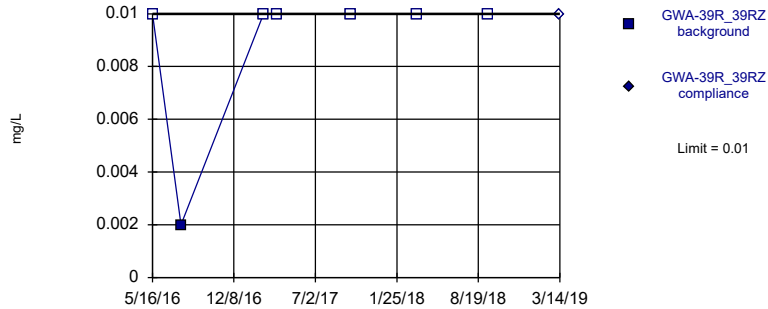
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Thallium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric



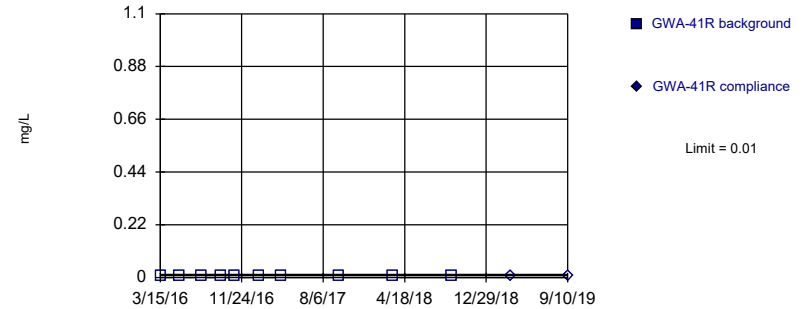
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Intrawell Non-parametric

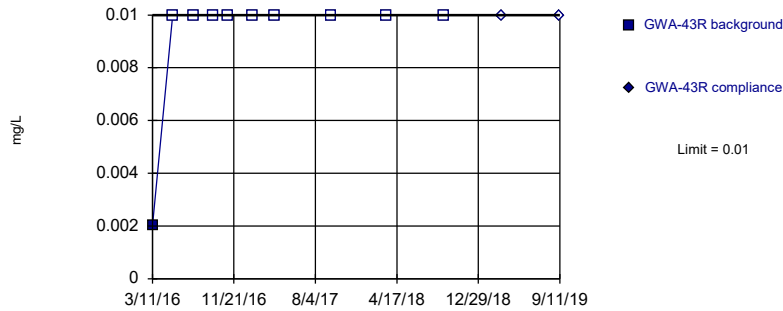


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

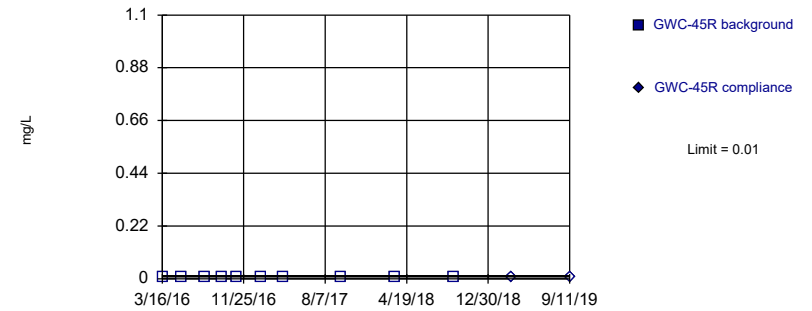


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

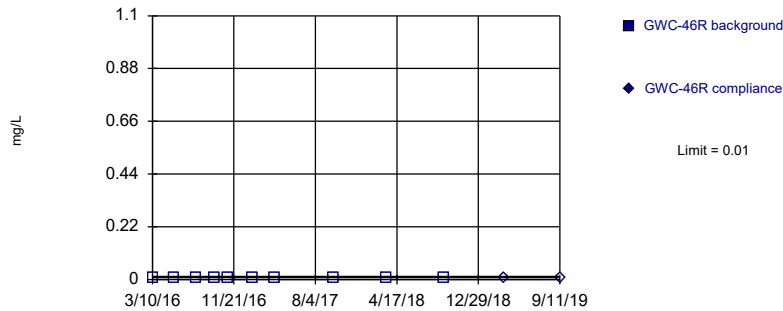


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

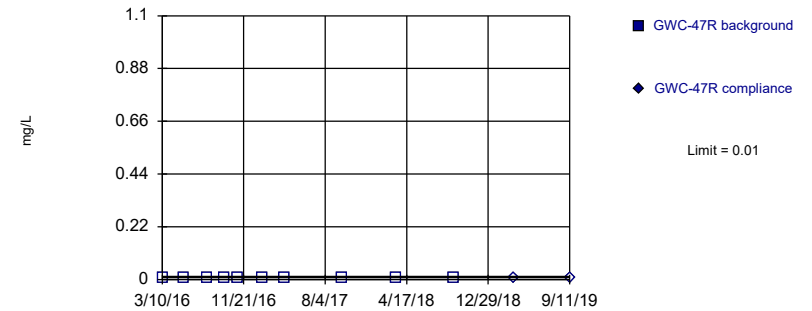


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
 Intrawell Non-parametric

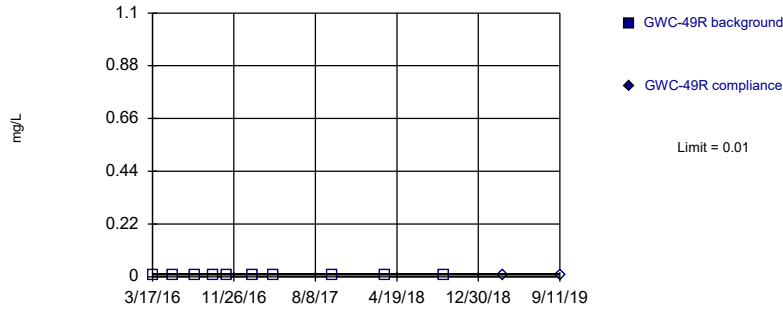


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality; data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
 Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

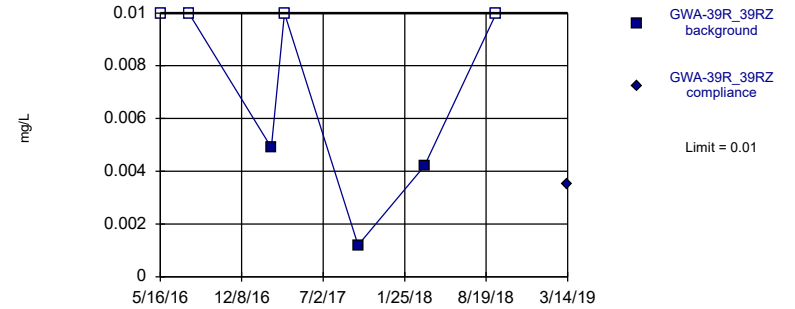


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Vanadium Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

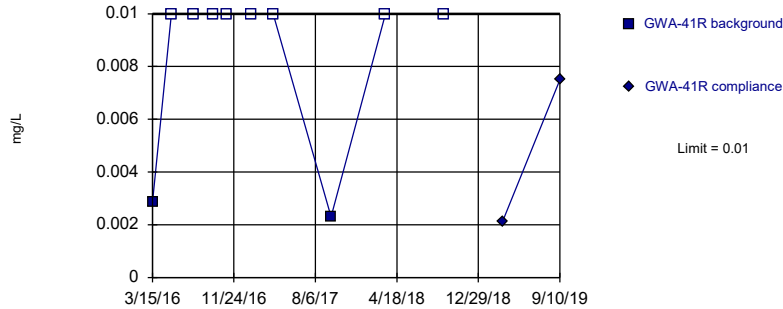


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 57.14% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Zinc Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric

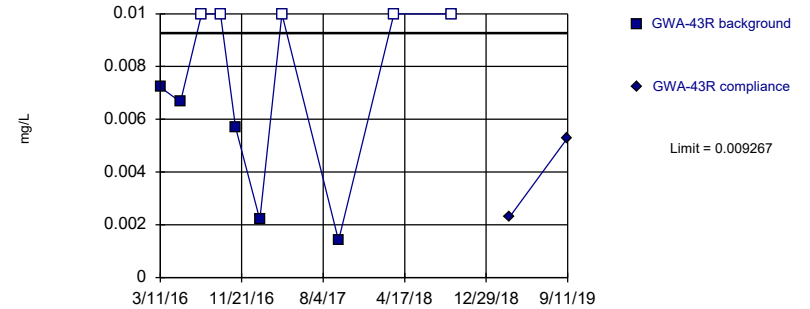


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Zinc Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

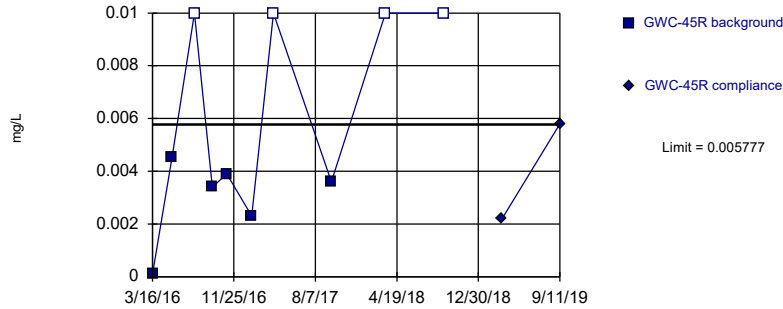


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.004636, Std. Dev.=0.00238, n=10, 50% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7978, critical = 0.781. Kappa = 1.946 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Zinc Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

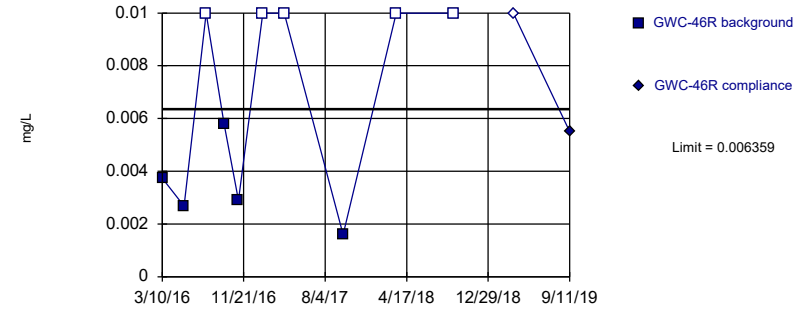


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002972, Std. Dev.=0.001441, n=10, 40% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8303, critical = 0.781. Kappa = 1.946 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Zinc Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

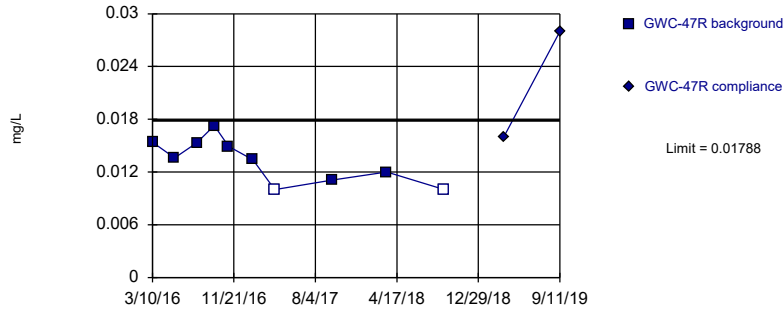


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05657, Std. Dev.=0.01191, n=10, 50% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8007, critical = 0.781. Kappa = 1.946 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Zinc Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Exceeds Limit

Prediction Limit
Intrawell Parametric

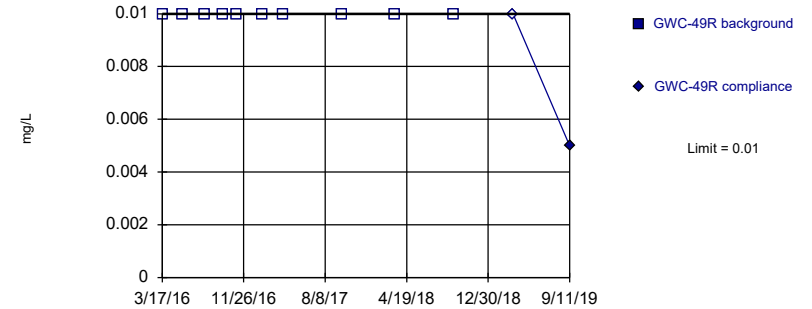


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0133, Std. Dev.=0.002353, n=10, 20% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9436, critical = 0.781. Kappa = 1.946 (c=16, w=4, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008228.

Constituent: Zinc Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Within Limit

Prediction Limit
Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Zinc Analysis Run 1/16/2020 11:58 AM View: Bedrock PLs
Plant Bowen Client: Southern Company Data: Bowen 9 and 10 CCR

Interwell Prediction Limit Summary Table – App. III Cells 9 & 10 Significant Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 1/10/2020, 1:47 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (pH units)	GWC-44	7.9	5.5	9/11/2019	4.36	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-45	7.9	5.5	9/11/2019	4.93	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-48	7.9	5.5	9/11/2019	4.93	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-49R	7.9	5.5	9/11/2019	8.22	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-49Z	7.9	5.5	9/11/2019	5.35	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2

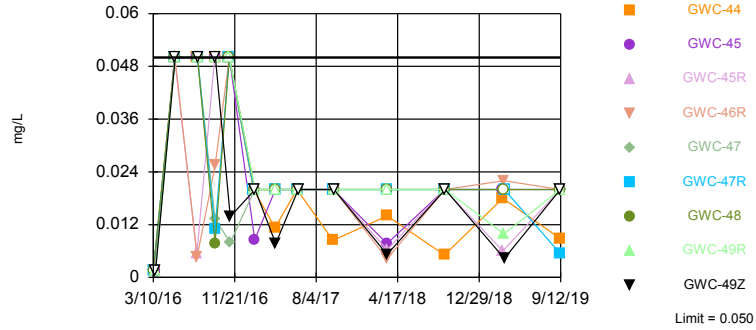
Prediction Limit Summary Table – App. III Cells 9 & 10 All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 1/10/2020, 1:47 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWC-44	0.050	n/a	9/11/2019	0.0088	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Boron (mg/L)	GWC-45	0.050	n/a	9/11/2019	0.02ND	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Boron (mg/L)	GWC-45R	0.050	n/a	9/11/2019	0.02ND	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Boron (mg/L)	GWC-46R	0.050	n/a	9/11/2019	0.02ND	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Boron (mg/L)	GWC-47	0.050	n/a	9/12/2019	0.02ND	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Boron (mg/L)	GWC-47R	0.050	n/a	9/11/2019	0.0054	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Boron (mg/L)	GWC-48	0.050	n/a	9/11/2019	0.02ND	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Boron (mg/L)	GWC-49R	0.050	n/a	9/11/2019	0.02ND	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Boron (mg/L)	GWC-49Z	0.050	n/a	9/11/2019	0.02ND	No	104	65.38	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-44	0.27	n/a	9/11/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-45	0.27	n/a	9/11/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-45R	0.27	n/a	9/11/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-46R	0.27	n/a	9/11/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-47	0.27	n/a	9/12/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-47R	0.27	n/a	9/11/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-48	0.27	n/a	9/11/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-49R	0.27	n/a	9/11/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-49Z	0.27	n/a	9/11/2019	0.15ND	No	104	50.96	n/a	0.000181	NP (NDs) 1 of 2
pH (pH units)	GWC-44	7.9	5.5	9/11/2019	4.36	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-45	7.9	5.5	9/11/2019	4.93	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-45R	7.9	5.5	9/11/2019	7.2	No	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-46R	7.9	5.5	9/11/2019	7.36	No	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-47	7.9	5.5	9/12/2019	7.48	No	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-47R	7.9	5.5	9/11/2019	7.55	No	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-48	7.9	5.5	9/11/2019	4.93	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-49R	7.9	5.5	9/11/2019	8.22	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2
pH (pH units)	GWC-49Z	7.9	5.5	9/11/2019	5.35	Yes	109	0	n/a	0.000...	NP (normality) 1 of 2

Within Limit

Prediction Limit
Interwell Non-parametric

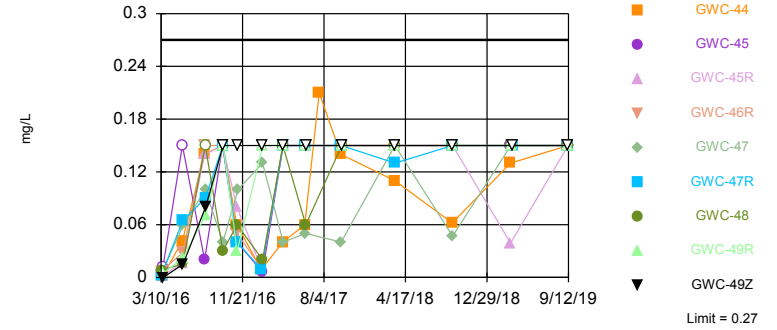


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 104 background values. 65.38% NDs. Annual per-constituent alpha = 0.003253. Individual comparison alpha = 0.000181 (1 of 2). Comparing 9 points to limit.

Constituent: Boron Analysis Run 1/10/2020 1:43 PM View: cells9&10_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Interwell Non-parametric

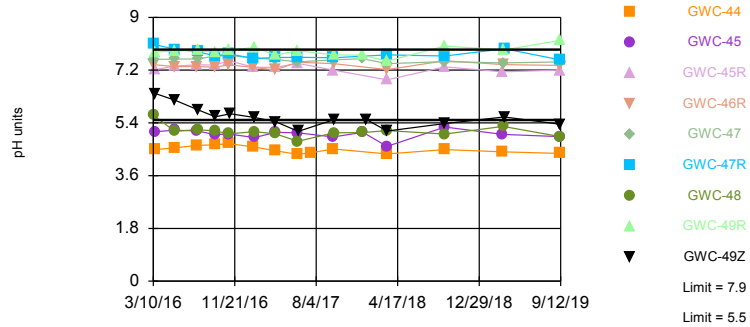


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 104 background values. 50.96% NDs. Annual per-constituent alpha = 0.003253. Individual comparison alpha = 0.000181 (1 of 2). Comparing 9 points to limit.

Constituent: Fluoride Analysis Run 1/10/2020 1:44 PM View: cells9&10_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Exceeds Limits: GWC-44, GWC-45, GWC-48, GWC-49R, GWC-49Z

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 109 background values. Annual per-constituent alpha = 0.005987. Individual comparison alpha = 0.0003331 (1 of 2). Comparing 9 points to limit.

Constituent: pH Analysis Run 1/10/2020 1:44 PM View: cells9&10_AppIII_interwell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 1:48 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-47	GWC-47R	GWC-48	GWA-43R (bg)	GWA-43 (bg)	GWA-42 (bg)	GWA-39Z (bg)	GWA-41R (bg)
9/26/2017							<0.04	<0.04	
9/27/2017		<0.04	<0.04						
9/29/2017	<0.04			<0.04					
3/14/2018						<0.04	<0.04	<0.04	0.014 (J)
3/15/2018	0.0042 (J)	<0.04		<0.04	0.018 (J)				
3/16/2018			<0.04						
9/12/2018					0.018 (J)	<0.04		<0.04	0.013 (J)
9/13/2018	<0.04	<0.04	<0.04	<0.04					
9/14/2018							<0.04		
3/13/2019					0.012 (X)	<0.04			
3/14/2019							<0.04		0.015 (X)
3/15/2019		<0.04		<0.04				0.005 (X)	
3/18/2019	0.022 (X)								
3/19/2019			<0.04						
9/9/2019								<0.04	
9/10/2019							<0.04		0.015 (X)
9/11/2019	<0.04		0.0054 (X)	<0.04	0.021 (X)	0.0059 (X)			
9/12/2019		<0.04							

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 1/10/2020 1:48 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-41 (bg)	GWA-40 (bg)	GWC-45	GWC-44	GWC-45R	GWC-49Z	GWC-49R	GWA-39R_39RZ ...
3/10/2016								
3/11/2016								
3/14/2016								
3/15/2016	<0.003	<0.003						
3/16/2016			<0.003	<0.003	<0.003			
3/17/2016						<0.003	<0.003	
5/11/2016		<0.1						
5/12/2016	<0.1							
5/13/2016								
5/16/2016			<0.1	<0.1	<0.1			<0.1 (D)
5/17/2016								
5/18/2016						<0.1	<0.1	
7/19/2016								
7/20/2016	<0.1							
7/21/2016		<0.1						
7/22/2016								
7/25/2016			<0.1	<0.1	0.0054 (J)			
7/26/2016								
7/27/2016							<0.1 (*)	<0.1 (*)
7/28/2016						<0.1 (*)		
9/15/2016	<0.1	<0.1						
9/16/2016								
9/19/2016			<0.1	<0.1	<0.1			
9/20/2016								
9/21/2016						<0.1 (*)	<0.1 (*)	
11/2/2016								
11/3/2016	<0.1	<0.1 (*)		<0.1	<0.1			
11/4/2016			<0.1				<0.1	
11/7/2016						0.0138 (J)		
1/17/2017		<0.04						
1/18/2017	<0.04							
1/19/2017				<0.04				
1/20/2017					<0.04			
1/23/2017			0.0086 (J)					
1/24/2017						<0.04	<0.04	
2/21/2017								0.0218 (JD)
3/24/2017	0.0154 (J)	<0.04						
3/27/2017								0.0262 (JD)
3/28/2017				0.0113 (J)				
3/29/2017			<0.04		<0.04		<0.04	
3/30/2017						0.0077 (J)		
5/24/2017		<0.04						
6/5/2017				<0.04 (*)				
6/6/2017	<0.04							
6/7/2017			<0.04 (*)		<0.04 (*)			
6/8/2017							<0.04	0.0067 (JD)
6/9/2017						<0.04		
7/17/2017								0.0165 (JD)
7/27/2017								0.0138 (JD)
8/9/2017								0.0069 (JD)
9/22/2017								
9/25/2017	<0.04							

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 1:48 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-46R	GWC-47	GWC-48	GWA-43R (bg)	GWA-43 (bg)	GWA-42 (bg)	GWA-39Z (bg)	GWA-41 (bg)
3/10/2016	0.00202 (J)	0.00697 (J)	0.00337 (J)	0.00797 (J)					
3/11/2016					0.0141 (J)	0.0329 (J)	0.0296 (J)		
3/14/2016								0.0657 (J)	
3/15/2016									0.0285 (J)
3/16/2016									
3/17/2016									
5/11/2016								0.0401 (J)	
5/12/2016									0.022 (J)
5/13/2016					0.0141 (J)	0.0459 (J)			
5/16/2016							0.0287 (J)		
5/17/2016		0.0281 (J)		0.0156 (J)					
5/18/2016	0.065 (J)		0.059 (J)						
7/19/2016					<0.3	<0.3		<0.3	
7/20/2016									<0.3
7/21/2016									
7/22/2016							0.04 (J)		
7/25/2016									
7/26/2016		<0.3							
7/27/2016	0.09 (J)		0.1 (J)	<0.3					
7/28/2016									
9/15/2016								<0.3	<0.3
9/16/2016					<0.3	<0.3			
9/19/2016							<0.3		
9/20/2016	<0.3	<0.3	0.04 (J)	0.03 (J)					
9/21/2016									
11/2/2016					0.04 (J)	0.04 (J)		0.04 (J)	
11/3/2016							0.04 (J)		0.05 (J)
11/4/2016	0.04 (J)	0.05 (J)		0.06 (J)					
11/7/2016			0.1 (J)						
1/17/2017							0.02 (J)		
1/18/2017					0.02 (J)	<0.3		0.03 (J)	0.02 (J)
1/19/2017									
1/20/2017	0.009 (J)	0.01 (J)							
1/23/2017			0.13 (J)	0.02 (J)					
1/24/2017									
2/21/2017									
3/24/2017									<0.3
3/27/2017							<0.3		
3/28/2017		<0.3		<0.3	<0.3	<0.3		0.06 (J)	
3/29/2017	<0.3		0.04 (J)						
3/30/2017									
5/24/2017									
6/5/2017									
6/6/2017					<0.3	<0.3			<0.3
6/7/2017		<0.3					<0.3	0.06 (J)	
6/8/2017	<0.3 (*)		0.05 (J)	0.06 (J)					
6/9/2017									
7/17/2017									
7/20/2017									
7/27/2017									
8/9/2017									
9/22/2017					<0.3	<0.3			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/10/2020 1:48 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-46R	GWC-47	GWC-48	GWA-43R (bg)	GWA-43 (bg)	GWA-42 (bg)	GWA-39Z (bg)	GWA-41 (bg)
9/25/2017									<0.3
9/26/2017							<0.3	0.04 (J)	
9/27/2017	<0.3		0.04 (J)						
9/29/2017		<0.3		<0.3					
3/14/2018						<0.3	0.06 (J)	0.14 (J)	<0.3
3/15/2018		<0.3	<0.3	<0.3	<0.3				
3/16/2018	0.13 (J)								
9/12/2018					<0.3	<0.3		<0.3	<0.3
9/13/2018	<0.3	<0.3	0.047 (J)	<0.3					
9/14/2018							<0.3		
3/13/2019					0.036 (X)	<0.3			
3/14/2019							0.058 (X)		0.039 (X)
3/15/2019			<0.3	<0.3				<0.3	
3/18/2019		<0.3							
3/19/2019	<0.3								
9/9/2019								0.054 (X)	
9/10/2019							<0.3		<0.3
9/11/2019	<0.3	<0.3		<0.3	<0.3	<0.3			
9/12/2019			<0.3						

Prediction Limit

Constituent: pH (pH units) Analysis Run 1/10/2020 1:48 PM View: cells9&10_AppIII_interwell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-48	GWC-47R	GWC-47	GWA-43 (bg)	GWA-42 (bg)	GWA-43R (bg)	GWA-39Z (bg)	GWA-41R (bg)
8/9/2017									
9/22/2017					5.77		7.8		
9/25/2017									6.88
9/26/2017						7.59		7.05	
9/27/2017			7.62	7.55					
9/29/2017	7.42	5.06							
12/28/2017		5.07 (Y)		7.59 (Y)			7.78 (Y)	6.79 (Y)	
12/29/2017									
1/10/2018									
3/14/2018					5.85	7.6		7.42	7.04
3/15/2018	7.22	5.14		7.42			7.66		
3/16/2018			7.72						
9/12/2018					5.65		7.75	6.86	7.02
9/13/2018	7.52	5.02	7.68	7.49					
9/14/2018						7.37			
3/13/2019					5.63		7.84		
3/14/2019						7.57			6.93
3/15/2019		5.28		7.45				6.78	
3/18/2019	7.39								
3/19/2019			7.93						
9/9/2019								6.49	
9/10/2019						7.53			6.72
9/11/2019	7.36	4.93	7.55		5.53		7.75		
9/12/2019				7.48					

Intrawell Prediction Limit Summary Table – App. III Cells 9 & 10 Significant Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 1/10/2020, 1:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Chloride (mg/L)	GWC-48	3	n/a	9/11/2019	3.3	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-49R	3.7	n/a	9/11/2019	5.7	Yes	8	0	No	0.000...	Param 1 of 3

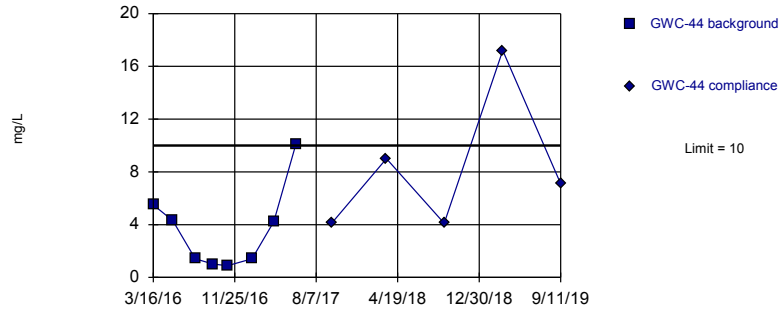
Prediction Limit Summary Table – App. III Cells 9 & 10 All Results

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 1/10/2020, 1:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	GWC-44	10	n/a	9/11/2019	7.1	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-45	0.95	n/a	9/11/2019	0.83	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-45R	40	n/a	9/11/2019	37.2	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-46R	55	n/a	9/11/2019	43.1	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-47	31	n/a	9/12/2019	21.1	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-47R	38	n/a	9/11/2019	33.3	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-48	12	n/a	9/11/2019	2.9	No	8	12.5	sqrt(x)	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-49R	30	n/a	9/11/2019	24.3	No	8	0	No	0.000...	Param 1 of 3
Calcium (mg/L)	GWC-49Z	6.7	n/a	9/11/2019	0.78	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-44	9.7	n/a	9/11/2019	3.7	No	9	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-45	1.3	n/a	9/11/2019	0.81	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-45R	3.3	n/a	9/11/2019	2.9	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-46R	2.8	n/a	9/11/2019	1.4	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-47	2.9	n/a	9/12/2019	2.3	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-47R	3	n/a	9/11/2019	2.1	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-48	3	n/a	9/11/2019	3.3	Yes	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-49R	1.8	n/a	9/11/2019	1.4	No	8	0	No	0.000...	Param 1 of 3
Chloride (mg/L)	GWC-49Z	1.8	n/a	9/11/2019	1	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-44	49	n/a	9/11/2019	19.8	No	9	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-45	1.6	n/a	9/11/2019	0.5ND	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-45R	3.4	n/a	9/11/2019	2.6	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-46R	8.9	n/a	9/11/2019	7	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-47	5.6	n/a	9/12/2019	4.7	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-47R	11	n/a	9/11/2019	10.7	No	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-48	3.3	n/a	9/11/2019	0.86	No	8	12.5	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-49R	3.7	n/a	9/11/2019	5.7	Yes	8	0	No	0.000...	Param 1 of 3
Sulfate (mg/L)	GWC-49Z	9.9	n/a	9/11/2019	1.5	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-44	180	n/a	9/11/2019	58	No	9	22.22	sqrt(x)	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-45	29	n/a	9/11/2019	5ND	No	8	37.5	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-45R	210	n/a	9/11/2019	172	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-46R	280	n/a	9/11/2019	234	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-47	170	n/a	9/12/2019	121	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-47R	180	n/a	9/11/2019	164	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-48	60	n/a	9/11/2019	20	No	8	25	sqrt(x)	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-49R	190	n/a	9/11/2019	138	No	8	0	No	0.000...	Param 1 of 3
Total Dissolved Solids (mg/l)	GWC-49Z	67	n/a	9/11/2019	27	No	8	25	No	0.000...	Param 1 of 3

Within Limit

Prediction Limit
Intrawell Parametric

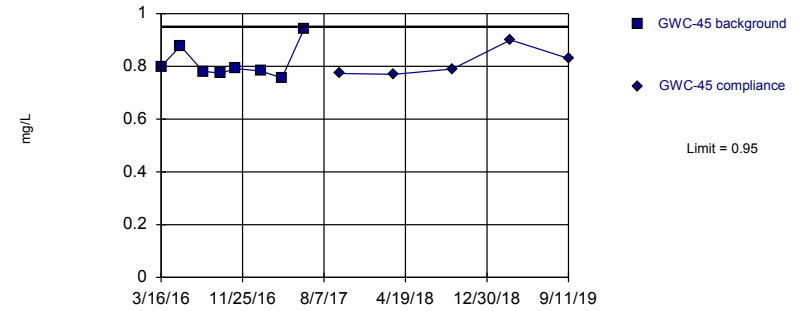


Background Data Summary: Mean=3.606, Std. Dev.=3.172, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8332, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 1/10/2020 1:37 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

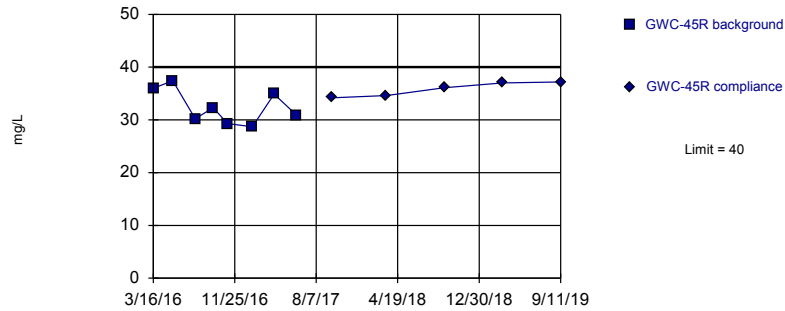


Background Data Summary: Mean=0.8134, Std. Dev.=0.06386, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7875, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 1/10/2020 1:37 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

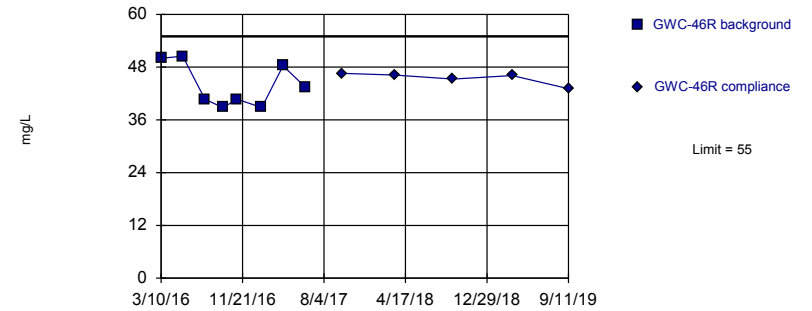


Background Data Summary: Mean=32.46, Std. Dev.=3.264, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9199, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 1/10/2020 1:37 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=43.9, Std. Dev.=4.97, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.847, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 1/10/2020 1:37 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

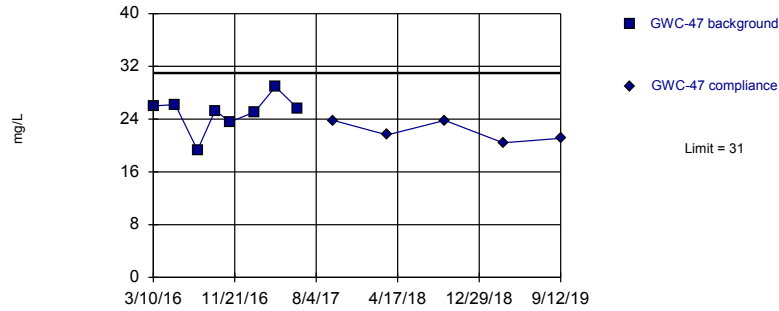
Prediction Limit

Constituent: Calcium Analysis Run 1/10/2020 1:42 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-44	GWC-44	GWC-45	GWC-45	GWC-45R	GWC-45R	GWC-46R	GWC-46R
3/10/2016							50	
3/16/2016	5.5		0.8		36			
5/16/2016	4.3		0.877		37.4			
5/17/2016							50.5	
7/25/2016	1.41		0.781		30.2			
7/26/2016							40.7	
9/19/2016	1.01		0.775		32.3			
9/20/2016							38.8	
11/3/2016	0.884				29.3			
11/4/2016			0.792				40.7	
1/19/2017	1.41							
1/20/2017					28.7		38.8	
1/23/2017			0.782					
3/28/2017	4.23						48.3	
3/29/2017			0.756		34.9			
6/5/2017	10.1							
6/7/2017			0.944		30.9		43.4	
9/26/2017		4.14						
9/27/2017				0.773		34.2		
9/29/2017								46.6
3/15/2018		9		0.77		34.6		46.2
9/12/2018		4.1						
9/13/2018				0.79		36.1		45.3
3/14/2019		17.2 (X)		0.9		37		
3/18/2019								46.1
9/11/2019		7.1		0.83		37.2		43.1

Within Limit

Prediction Limit
Intrawell Parametric



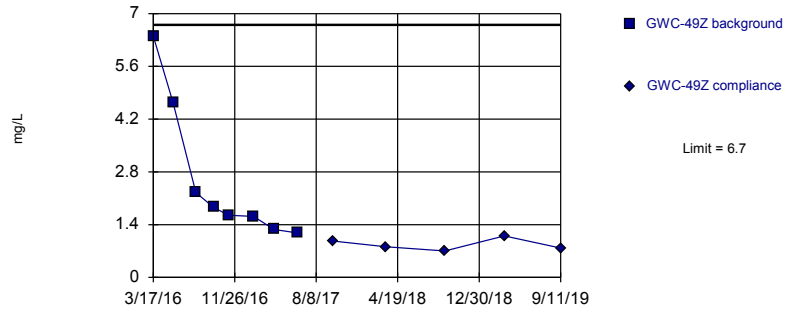
Prediction Limit

Constituent: Calcium Analysis Run 1/10/2020 1:42 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R
3/10/2016	26		25		12			
3/17/2016							24	
5/17/2016					3.25			
5/18/2016	26.2		27.6				27.7	
7/27/2016	19.3		23.9		3.2		21.7	
9/20/2016	25.3		28.9		2.72			
9/21/2016							24.9	
11/4/2016			32.1		1.69		23.6	
11/7/2016	23.6							
1/20/2017			31.8					
1/23/2017	25.1				<0.5			
1/24/2017							23	
3/28/2017					1.72			
3/29/2017	28.9		34.6				27.5	
6/8/2017	25.6		34		3.11		27.1	
9/27/2017		23.8		30.8				
9/29/2017						2.71		25.3
3/15/2018		21.6 (J)				3.5		24.4 (J)
3/16/2018				30.2				
9/13/2018		23.8 (J)		30.9		2.5		22.8 (J)
3/15/2019		20.4 (X)				4.4		
3/18/2019								31
3/19/2019				28.4				
9/11/2019				33.3		2.9		24.3
9/12/2019		21.1						

Within Limit

Prediction Limit
Intrawell Parametric

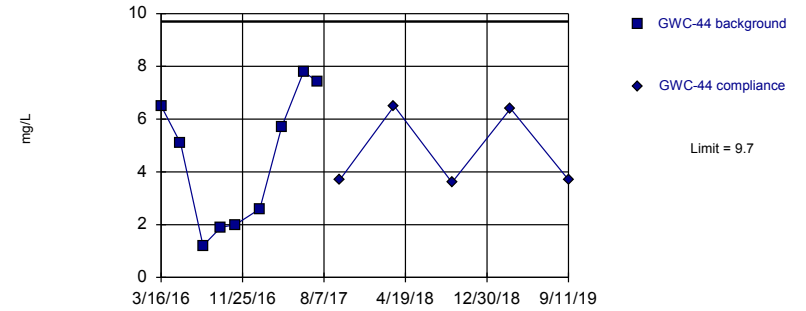


Background Data Summary: Mean=2.608, Std. Dev.=1.885, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7584, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Calcium Analysis Run 1/10/2020 1:37 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

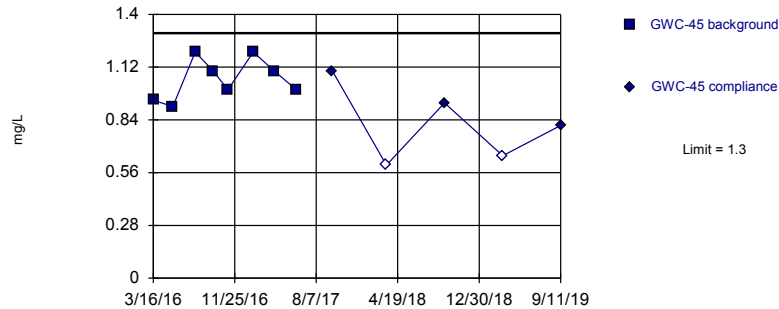


Background Data Summary: Mean=4.465, Std. Dev.=2.564, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8932, critical = 0.764. Kappa = 2.048 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 1/10/2020 1:37 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

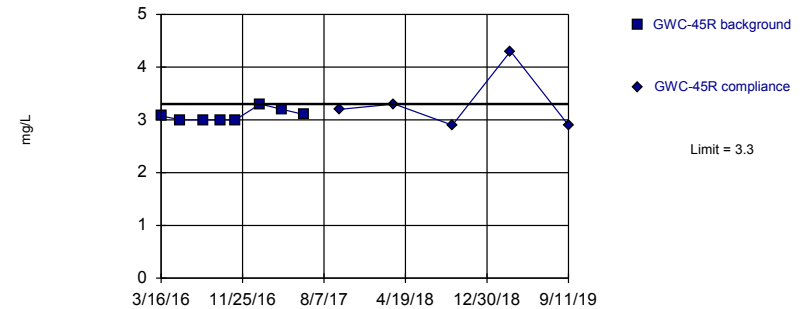


Background Data Summary: Mean=1.057, Std. Dev.=0.1104, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9141, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 1/10/2020 1:37 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=3.085, Std. Dev.=0.1125, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.802, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 1/10/2020 1:37 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Calcium, Chloride Analysis Run 1/10/2020 1:42 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49Z	GWC-49Z	GWC-44	GWC-44	GWC-45	GWC-45	GWC-45R	GWC-45R
3/16/2016			6.505		0.9445		3.0774	
3/17/2016	6.4							
5/16/2016			5.08		0.9104		3	
5/18/2016	4.63							
7/25/2016			1.2		1.2		3	
7/28/2016	2.25							
9/19/2016			1.9		1.1		3	
9/21/2016	1.86							
11/3/2016			2				3	
11/4/2016					1			
11/7/2016	1.65							
1/19/2017			2.6					
1/20/2017							3.3	
1/23/2017					1.2			
1/24/2017	1.62							
3/28/2017			5.7					
3/29/2017					1.1		3.2	
3/30/2017	1.27							
6/5/2017			7.8					
6/7/2017					1		3.1	
6/9/2017	1.18							
7/20/2017			7.4					
9/26/2017				3.7				
9/27/2017						1.1		3.2
9/29/2017		0.967						
3/15/2018		0.81		6.5		<1.2		3.3
9/12/2018				3.6				
9/13/2018						0.93		2.9
9/14/2018		0.7						
3/14/2019				6.4		<1.3		4.3
3/19/2019		1.1						
9/11/2019		0.78		3.7		0.81 (X)		2.9

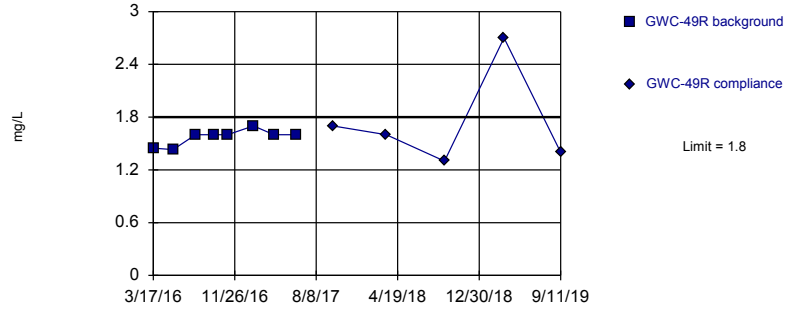
Prediction Limit

Constituent: Chloride Analysis Run 1/10/2020 1:42 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-46R	GWC-46R	GWC-47	GWC-47	GWC-47R	GWC-47R	GWC-48	GWC-48
3/10/2016	1.9859		2.2206		2.5934		2.4266	
5/17/2016	2.37						2.01	
5/18/2016			2.42		2.51			
7/26/2016	2.4							
7/27/2016			2.4		2.5		2.3	
9/20/2016	2.4		2.4		2.4		2.2	
11/4/2016	2.8				2.9		3	
11/7/2016			2.8					
1/20/2017	2.2				2.7			
1/23/2017			2.4				2.5	
3/28/2017	2.3						2.2	
3/29/2017			2.8		2.3			
6/7/2017	2.3							
6/8/2017			2.5		2.3		2.3	
9/27/2017				2.4		2.4		
9/29/2017		2.1						2.5
3/15/2018		2		2.7				2.6
3/16/2018						2.7		
9/13/2018		1.9		2.6		2.5		2.8
3/15/2019				2.8				3.3
3/18/2019		1.8						
3/19/2019						2.6		
9/11/2019		1.4				2.1		3.3
9/12/2019				2.3				

Within Limit

Prediction Limit
Intrawell Parametric

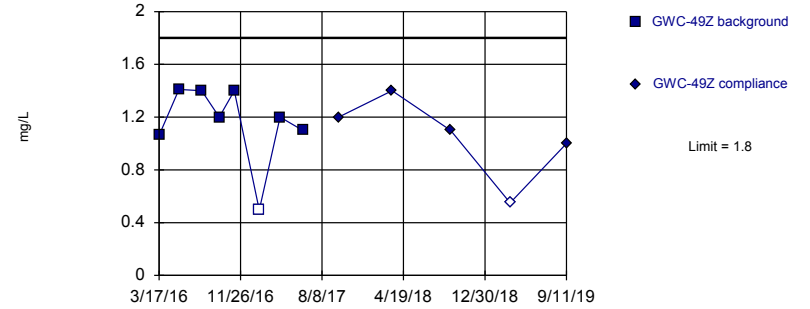


Background Data Summary: Mean=1.572, Std. Dev.=0.0894, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8005, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

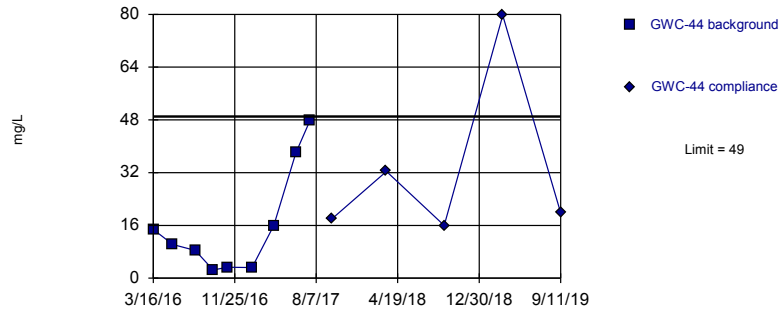


Background Data Summary: Mean=1.158, Std. Dev.=0.3015, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7987, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Chloride Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

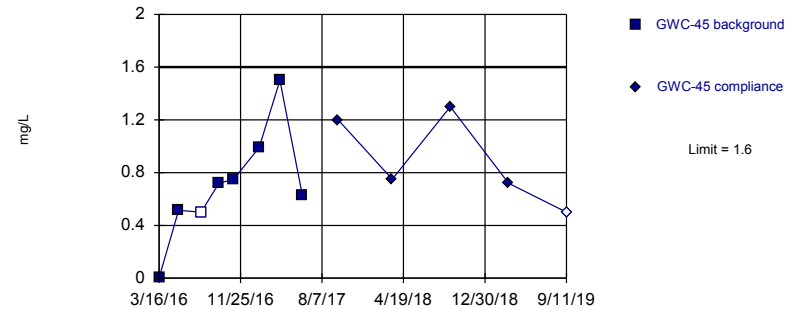


Background Data Summary: Mean=16.04, Std. Dev.=16.23, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8049, critical = 0.764. Kappa = 2.048 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.7012, Std. Dev.=0.4293, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9486, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

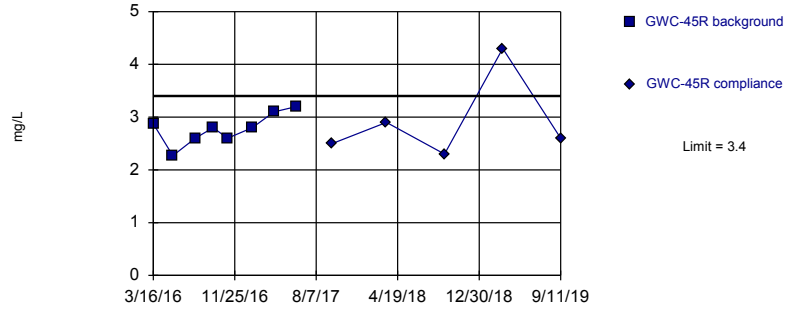
Prediction Limit

Constituent: Chloride, Sulfate Analysis Run 1/10/2020 1:42 PM View: cells9&10_AppIII_intrawell
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z	GWC-44	GWC-44	GWC-45	GWC-45
3/16/2016					14.7828		0.00424 (J)	
3/17/2016	1.4476		1.0624					
5/16/2016					10.2		0.5151 (J)	
5/18/2016	1.43		1.41					
7/25/2016					8.4		<1 (*)	
7/27/2016	1.6							
7/28/2016			1.4					
9/19/2016					2.5		0.72 (J)	
9/21/2016	1.6		1.2					
11/3/2016					3.3			
11/4/2016	1.6						0.75 (J)	
11/7/2016			1.4					
1/19/2017					3.2			
1/23/2017							0.99 (J)	
1/24/2017	1.7		<0.99 (*)					
3/28/2017					16 (J)			
3/29/2017	1.6						1.5	
3/30/2017			1.2					
6/5/2017					38			
6/7/2017							0.63 (J)	
6/8/2017	1.6							
6/9/2017			1.1					
7/20/2017					48			
9/26/2017						18		
9/27/2017								1.2
9/29/2017		1.7		1.2				
3/15/2018		1.6		1.4		32.4		0.75 (J)
9/12/2018						16		
9/13/2018		1.3						1.3
9/14/2018				1.1				
3/14/2019						79.7		0.72 (X)
3/18/2019		2.7						
3/19/2019				<1.1				
9/11/2019		1.4		1		19.8		<1

Within Limit

Prediction Limit
Intrawell Parametric

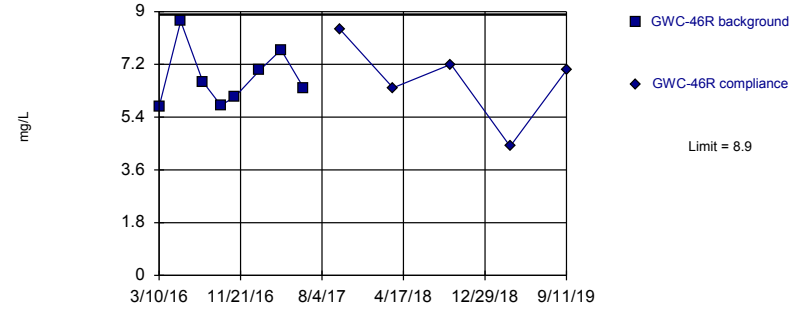


Background Data Summary: Mean=2.78, Std. Dev.=0.2959, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9634, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

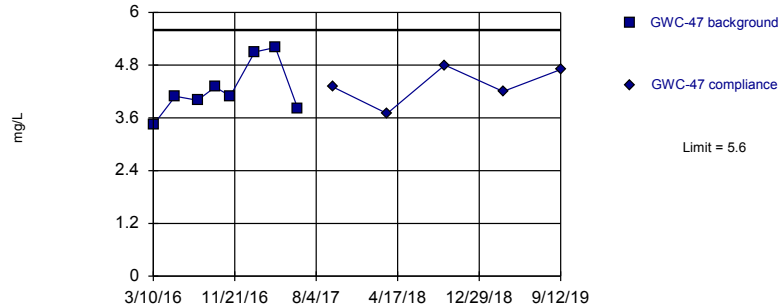


Background Data Summary: Mean=6.753, Std. Dev.=1.008, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9025, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

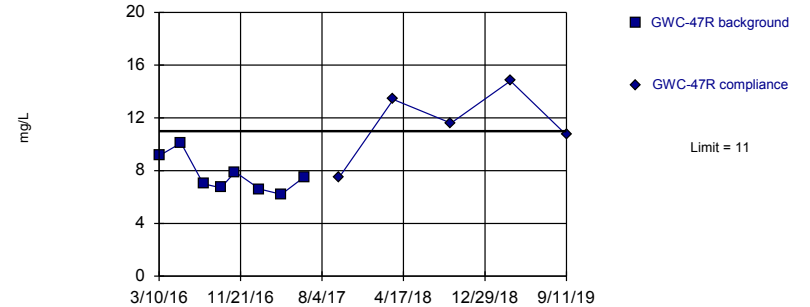


Background Data Summary: Mean=4.254, Std. Dev.=0.6089, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9006, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=7.641, Std. Dev.=1.352, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9016, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

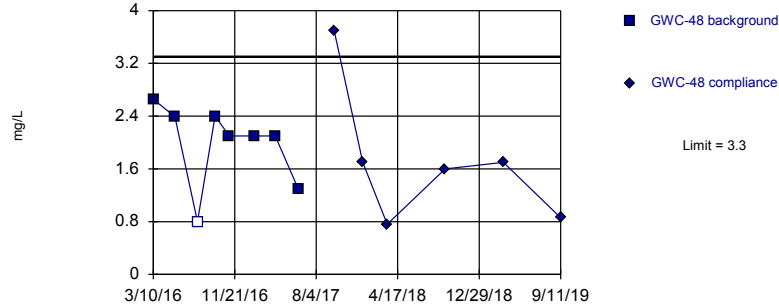
Constituent: Sulfate Analysis Run 1/10/2020 1:42 PM View: cells9&10_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-45R	GWC-45R	GWC-46R	GWC-46R	GWC-47	GWC-47	GWC-47R	GWC-47R
3/10/2016			5.7554		3.4409		9.1279	
3/16/2016	2.8721							
5/16/2016	2.27							
5/17/2016			8.67					
5/18/2016					4.09		10.1	
7/25/2016	2.6							
7/26/2016			6.6					
7/27/2016					4		7	
9/19/2016	2.8							
9/20/2016			5.8		4.3		6.7	
11/3/2016	2.6							
11/4/2016			6.1				7.9	
11/7/2016					4.1			
1/20/2017	2.8		7				6.6	
1/23/2017					5.1			
3/28/2017			7.7					
3/29/2017	3.1				5.2		6.2	
6/7/2017	3.2		6.4					
6/8/2017					3.8		7.5	
9/27/2017		2.5				4.3		7.5
9/29/2017				8.4				
3/15/2018		2.9		6.4		3.7		
3/16/2018								13.4
9/13/2018		2.3		7.2		4.8		11.6
3/14/2019		4.3						
3/15/2019						4.2		
3/18/2019				4.4				
3/19/2019								14.8
9/11/2019		2.6		7				10.7
9/12/2019						4.7		

Within Limit

Prediction Limit
Intrawell Parametric



Prediction Limit

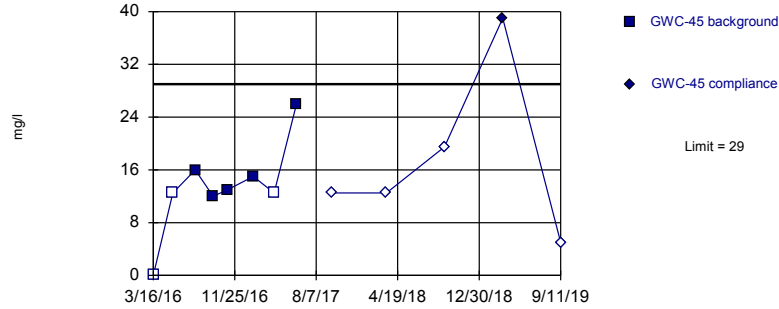
Constituent: Sulfate, Total Dissolved Solids Analysis Run 1/10/2020 1:42 PM View: cells9&10_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z	GWC-44	GWC-44
3/10/2016	2.6569							
3/16/2016							<0.01	
3/17/2016			3.4197		5.3658			
5/16/2016							35	
5/17/2016	2.39							
5/18/2016			3.06		4.44			
7/25/2016							24 (J)	
7/27/2016	<1.6 (*)		2.6					
7/28/2016					9.9			
9/19/2016							19 (J)	
9/20/2016	2.4							
9/21/2016			3.1		2.2			
11/3/2016							34	
11/4/2016	2.1		3.1					
11/7/2016					2.2			
1/19/2017							13 (J)	
1/23/2017	2.1							
1/24/2017			3		1.5			
3/28/2017	2.1						<25	
3/29/2017			2.5					
3/30/2017					1.7			
6/5/2017							206	
6/8/2017	1.3		3.3					
6/9/2017					1.7			
7/20/2017							72	
9/26/2017								35
9/29/2017		3.7		4.2		2.2		
12/28/2017		1.7 (Y)		3.8 (Y)				
3/15/2018		0.76 (J)		3.1		2.4		41
9/12/2018								<36
9/13/2018		1.6		3.6				
9/14/2018						2.4		
3/14/2019								110
3/15/2019		1.7						
3/18/2019				5.8				
3/19/2019						2.2		
9/11/2019		0.86 (X)		5.7		1.5		58

Within Limit

Prediction Limit
Intrawell Parametric

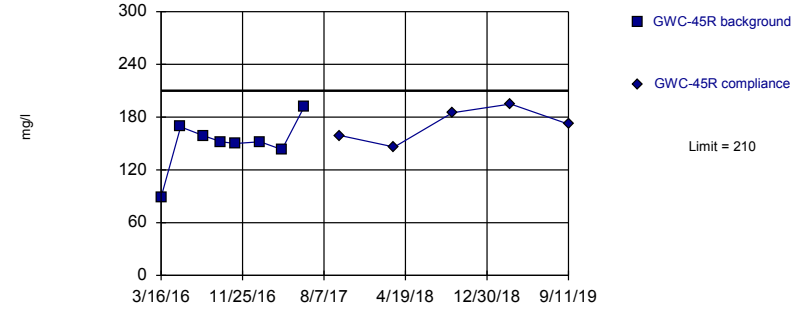


Background Data Summary (after Kaplan-Meier Adjustment): Mean=13.05, Std. Dev.=7.287, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8681, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

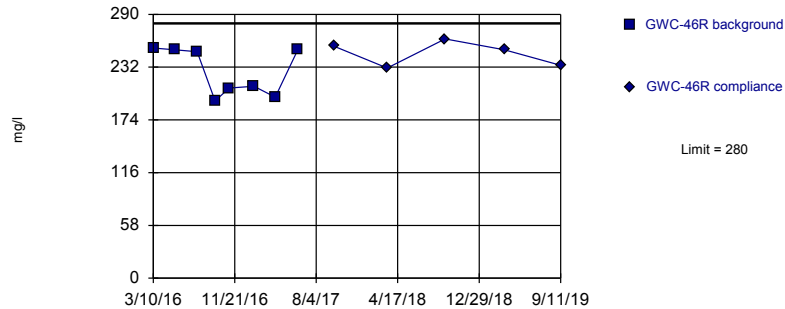


Background Data Summary: Mean=150.8, Std. Dev.=29.23, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8701, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

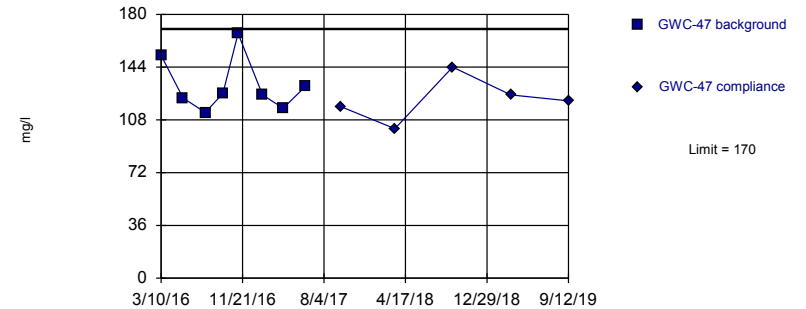


Background Data Summary: Mean=227.3, Std. Dev.=25.91, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.792, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

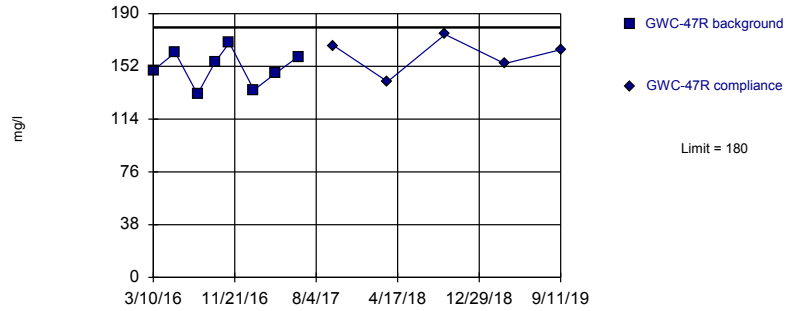


Background Data Summary: Mean=131.6, Std. Dev.=18.55, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8606, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

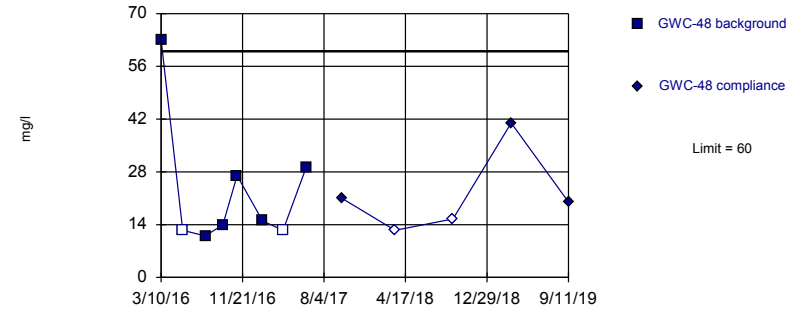


Background Data Summary: Mean=151, Std. Dev.=12.88, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9579, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

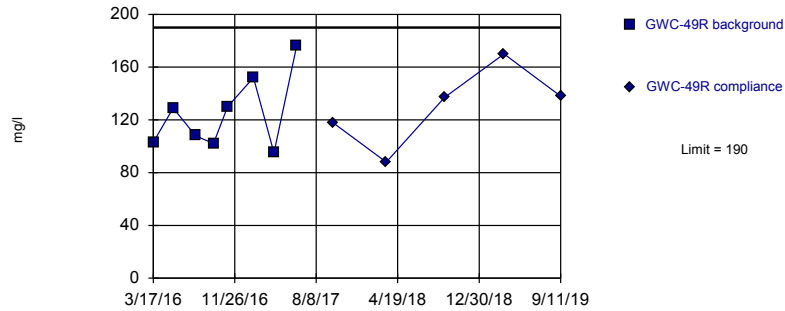


Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=4.592, Std. Dev.=1.456, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7831, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric

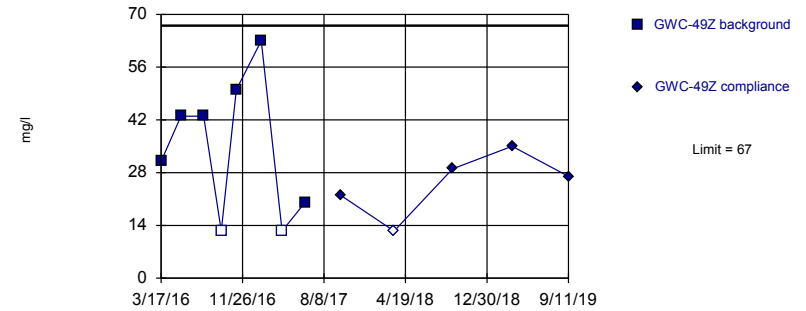


Background Data Summary: Mean=124.4, Std. Dev.=28.21, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8981, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Within Limit

Prediction Limit
Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=33.72, Std. Dev.=15.51, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9296, critical = 0.749. Kappa = 2.164 (c=7, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:38 PM View: cells9&10_AppIII_intrawell
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Prediction Limit

Constituent: Total Dissolved Solids Analysis Run 1/10/2020 1:42 PM View: cells9&10_AppIII_intrawell

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-47R	GWC-47R	GWC-48	GWC-48	GWC-49R	GWC-49R	GWC-49Z	GWC-49Z
3/10/2016	149		63					
3/17/2016					103		31	
5/17/2016			<25					
5/18/2016	162				129		43	
7/27/2016	132		11 (J)		108			
7/28/2016							43	
9/20/2016	155		14 (J)					
9/21/2016					102		<25	
11/4/2016	169		27		130			
11/7/2016							50	
1/20/2017	135							
1/23/2017			15 (J)					
1/24/2017					152		63	
3/28/2017			<25					
3/29/2017	147				95			
3/30/2017							<25	
6/8/2017	159		29		176			
6/9/2017							20 (J)	
9/27/2017		167						
9/29/2017				21 (J)		118		22 (J)
3/15/2018				<25		88		<25
3/16/2018		141						
9/13/2018		175		<31		137		
9/14/2018								29
3/15/2019				41				
3/18/2019						170		
3/19/2019		154						35
9/11/2019		164		20		138		27

Cell 1&2 Background Sen Slopes - Significant

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 12/9/2019, 10:58 AM

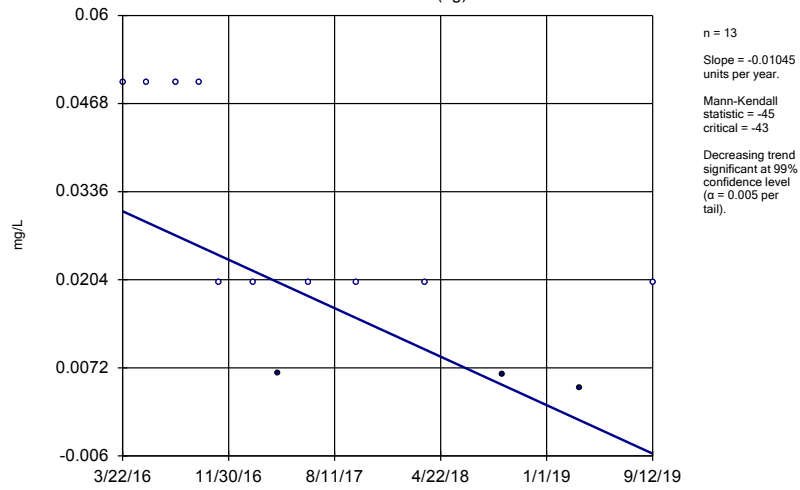
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-1 (bg)	-0.01045	-45	-43	Yes	13	76.92	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2R (bg)	-0.01121	-51	-43	Yes	13	76.92	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-3 (bg)	-0.1888	-47	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	-0.4382	-49	-43	Yes	13	7.692	n/a	n/a	0.01	NP
pH (pH units)	GWA-3 (bg)	-0.1666	-64	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-1 (bg)	-0.3137	-59	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-3 (bg)	-0.1789	-47	-43	Yes	13	7.692	n/a	n/a	0.01	NP

Cell 1&2 Background Sen Slopes - All

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 12/9/2019, 10:58 AM

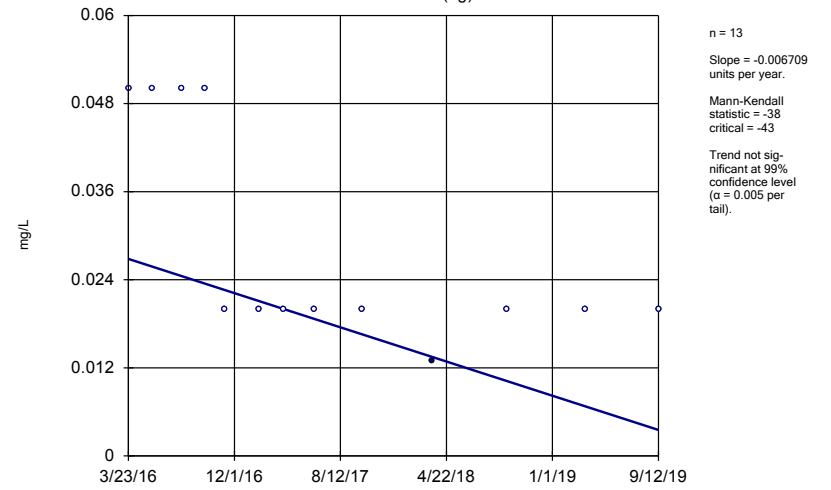
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	GWA-1 (bg)	-0.01045	-45	-43	Yes	13	76.92	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	-0.00...	-38	-43	No	13	92.31	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2R (bg)	-0.01121	-51	-43	Yes	13	76.92	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-3 (bg)	-0.00...	-38	-43	No	13	92.31	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-50 (bg)	0	-32	-43	No	13	92.31	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-50R (bg)	0	-28	-43	No	13	92.31	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-4RZ (bg)	-0.00...	-16	-43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-1 (bg)	0.5337	12	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	-7.738	-28	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2R (bg)	3.947	30	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-3 (bg)	-0.1888	-47	-43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-50 (bg)	0.01409	7	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-50R (bg)	-0.7937	-16	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-4RZ (bg)	-0.4925	-6	-43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-1 (bg)	-0.06896	-18	-43	No	13	7.692	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	-0.4382	-49	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2R (bg)	0.03372	16	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-3 (bg)	-0.02302	-26	-43	No	13	7.692	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-50 (bg)	-0.03626	-15	-43	No	13	7.692	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-50R (bg)	-0.07754	-26	-43	No	13	15.38	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-4RZ (bg)	0.166	8	43	No	13	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-1 (bg)	0.005241	7	43	No	13	23.08	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-2 (bg)	0.03182	22	43	No	13	38.46	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-2R (bg)	0	2	43	No	13	38.46	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-3 (bg)	0	0	43	No	13	100	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-50 (bg)	0	28	43	No	13	69.23	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-50R (bg)	0	24	43	No	13	69.23	n/a	n/a	0.01	NP
Fluoride (mg/L)	GWA-4RZ (bg)	-0.03693	-29	-43	No	13	15.38	n/a	n/a	0.01	NP
pH (pH units)	GWA-1 (bg)	-0.03085	-23	-43	No	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-2 (bg)	-0.3362	-42	-43	No	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-2R (bg)	-0.08562	-31	-43	No	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-3 (bg)	-0.1666	-64	-43	Yes	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-50 (bg)	-0.07925	-21	-43	No	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-50R (bg)	-0.1531	-24	-43	No	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWA-4RZ (bg)	-0.0621	-25	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-1 (bg)	-0.3137	-59	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	-14.04	-24	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2R (bg)	0.6097	20	43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-3 (bg)	-0.1789	-47	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-50 (bg)	-0.07699	-30	-43	No	13	7.692	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-50R (bg)	-0.09535	-27	-43	No	13	7.692	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-4RZ (bg)	2.944	23	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-1 (bg)	4.985	16	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-2 (bg)	-37.48	-30	-43	No	13	7.692	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-2R (bg)	6.162	14	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-3 (bg)	0	8	43	No	13	38.46	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-50 (bg)	0.5597	9	43	No	13	30.77	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-50R (bg)	-0.1862	-4	-43	No	13	23.08	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/l)	GWA-4RZ (bg)	-28.31	-23	-43	No	13	0	n/a	n/a	0.01	NP

Sen's Slope Estimator
GWA-1 (bg)



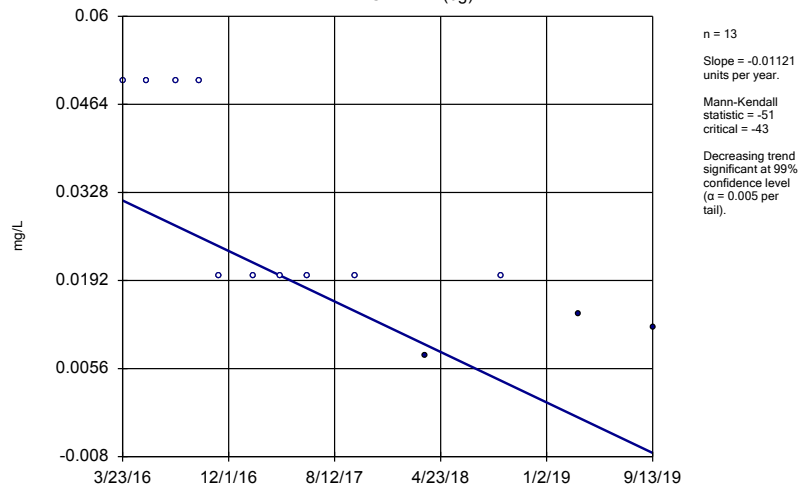
Constituent: Boron Analysis Run 12/9/2019 10:49 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2 (bg)



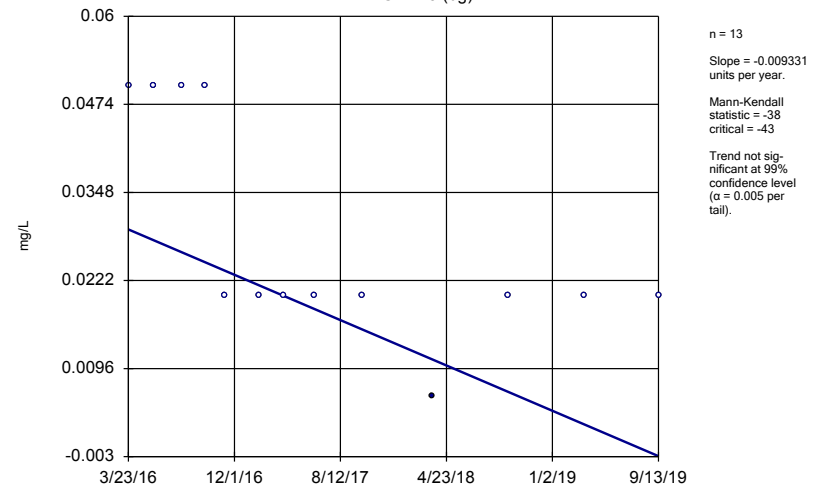
Constituent: Boron Analysis Run 12/9/2019 10:49 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2R (bg)



Constituent: Boron Analysis Run 12/9/2019 10:49 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-3 (bg)



Constituent: Boron Analysis Run 12/9/2019 10:49 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)
3/22/2016	<0.1
5/19/2016	<0.1
7/29/2016	<0.1 (*)
9/23/2016	<0.1 (*)
11/9/2016	<0.04 (*)
1/30/2017	<0.04
3/30/2017	0.0065 (J)
6/9/2017	<0.04
10/2/2017	<0.04
3/16/2018	<0.04
9/17/2018	0.00625 (JD)
3/20/2019	0.0042 (X)
9/12/2019	<0.04

Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	<0.1
5/20/2016	<0.1
7/29/2016	<0.1 (*)
9/23/2016	<0.1 (*)
11/9/2016	<0.04 (*)
1/31/2017	<0.04
3/30/2017	<0.04
6/12/2017	<0.04
10/2/2017	<0.04
3/19/2018	0.013 (J)
9/14/2018	<0.04
3/20/2019	<0.04
9/12/2019	<0.04

Sen's Slope Estimator

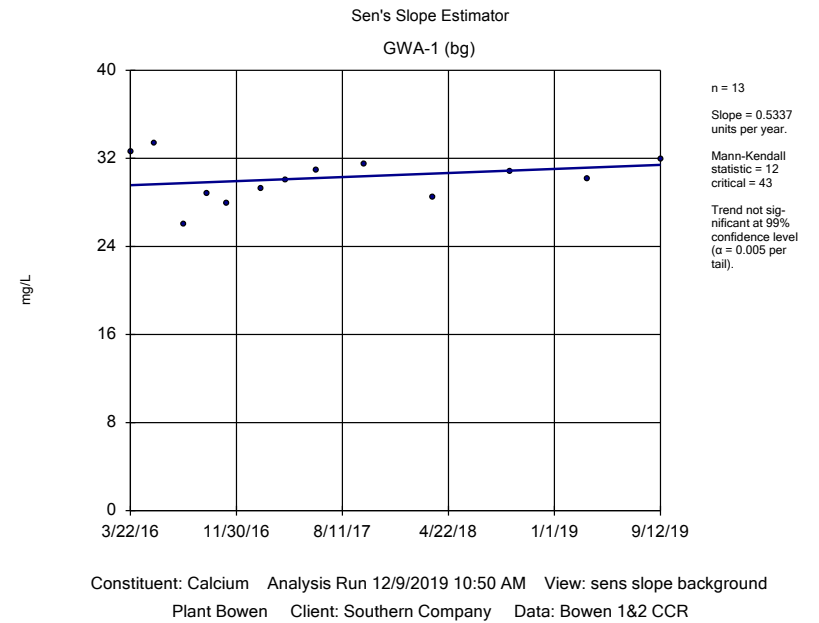
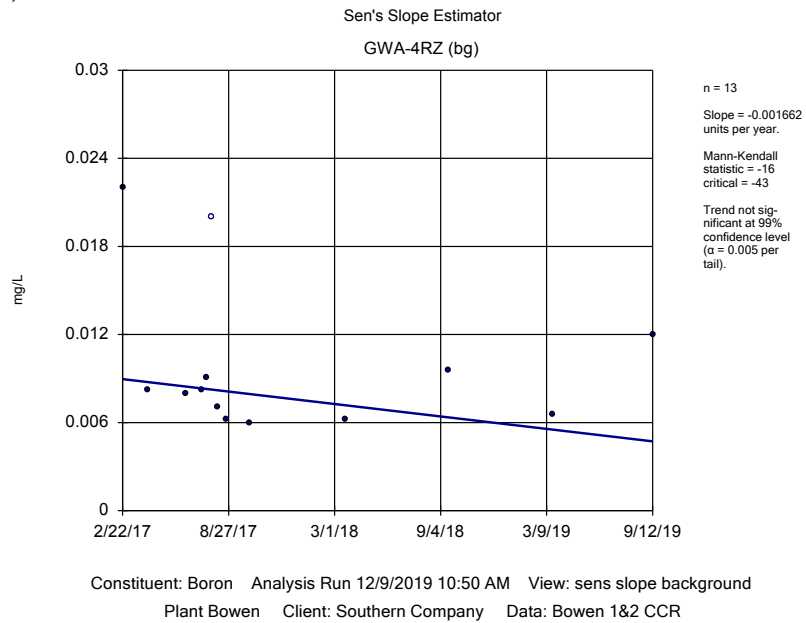
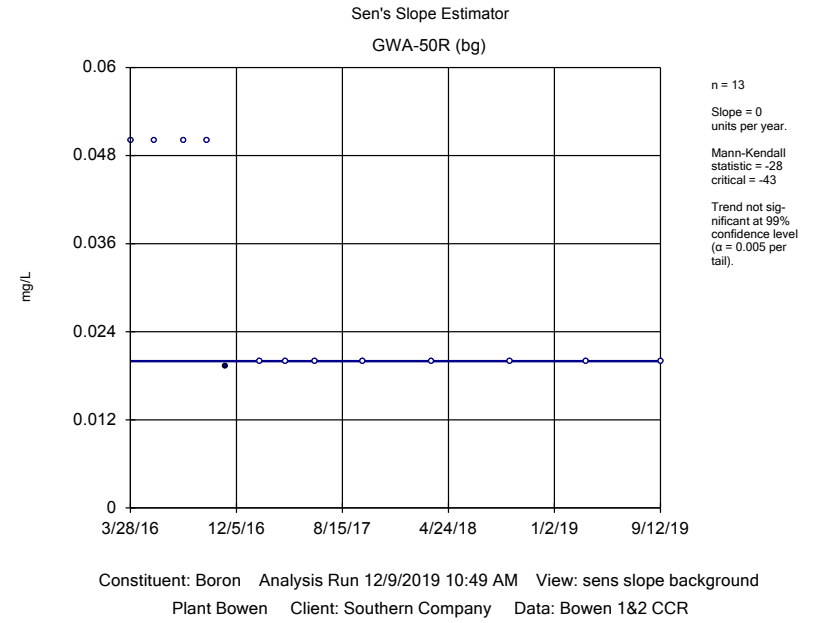
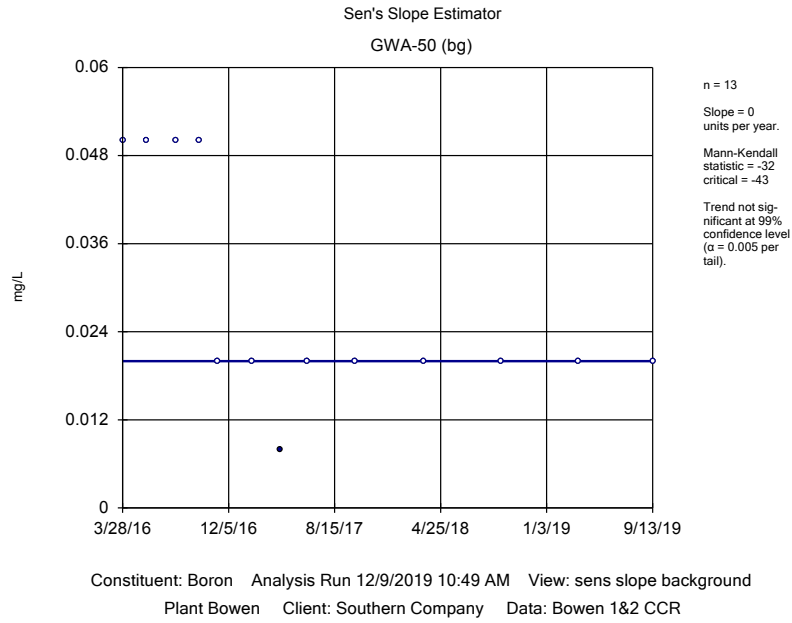
Constituent: Boron (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	<0.1
5/19/2016	<0.1
7/29/2016	<0.1 (*)
9/22/2016	<0.1
11/10/2016	<0.04
1/31/2017	<0.04
4/3/2017	<0.04
6/9/2017	<0.04
10/2/2017	<0.04
3/16/2018	0.0077 (J)
9/14/2018	<0.04
3/19/2019	0.014 (X)
9/13/2019	0.012 (X)

Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
3/23/2016	<0.1
5/23/2016	<0.1
7/29/2016	<0.1 (*)
9/22/2016	<0.1
11/10/2016	<0.04
1/31/2017	<0.04
3/30/2017	<0.04
6/12/2017	<0.04
10/4/2017	<0.04
3/19/2018	0.0057 (J)
9/17/2018	<0.04
3/20/2019	<0.04
9/13/2019	<0.04



Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50 (bg)
3/28/2016	<0.1
5/23/2016	<0.1
8/1/2016	<0.1 (*)
9/26/2016	<0.1
11/10/2016	<0.04 (*)
1/30/2017	<0.04
4/7/2017	0.008 (J)
6/12/2017	<0.04
10/2/2017	<0.04
3/16/2018	<0.04
9/17/2018	<0.04
3/19/2019	<0.04
9/13/2019	<0.04

Sen's Slope Estimator

Constituent: Boron (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
3/28/2016	<0.1
5/25/2016	<0.1
8/1/2016	<0.1 (*)
9/26/2016	<0.1
11/11/2016	0.0193 (J)
1/30/2017	<0.04
4/3/2017	<0.04
6/12/2017	<0.04
10/2/2017	<0.04
3/16/2018	<0.04
9/18/2018	<0.04
3/19/2019	<0.04
9/12/2019	<0.04

Sen's Slope Estimator

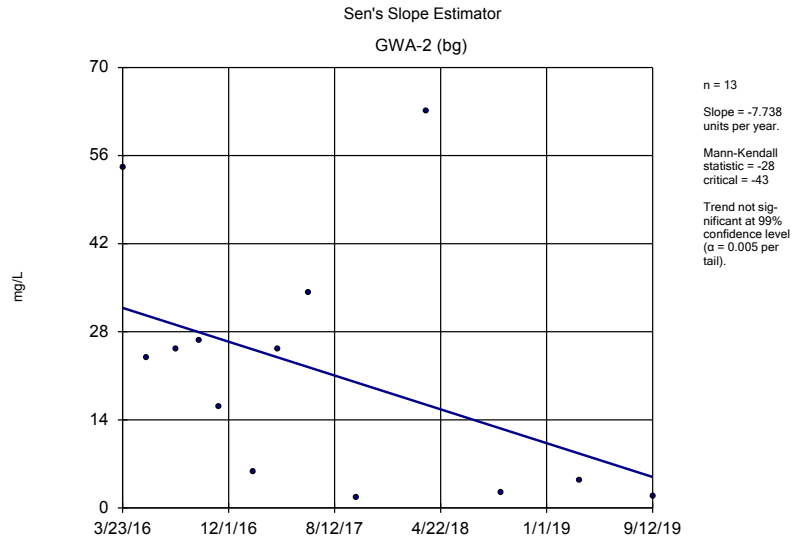
Constituent: Boron (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-4RZ (bg)
2/22/2017	0.022 (J)
4/7/2017	0.0082 (J)
6/14/2017	0.008 (J)
7/12/2017	0.0082 (J)
7/20/2017	0.0091 (J)
7/28/2017	<0.04
8/9/2017	0.0071 (J)
8/24/2017	0.0062 (J)
10/3/2017	0.006 (J)
3/21/2018	0.0062 (J)
9/18/2018	0.0096 (J)
3/21/2019	0.0066 (X)
9/12/2019	0.012 (X)

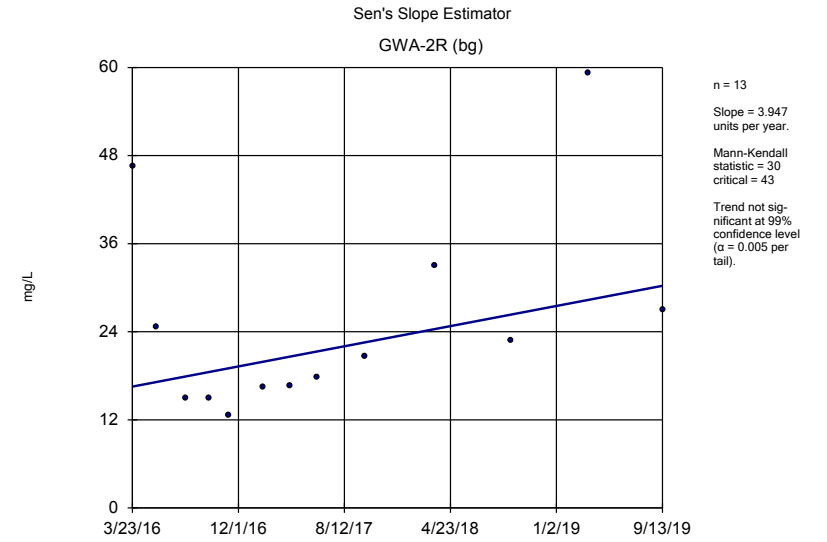
Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

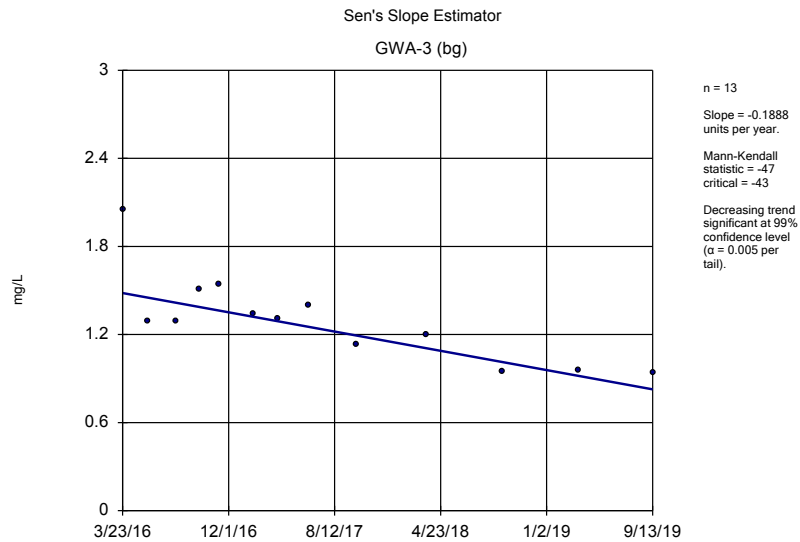
	GWA-1 (bg)
3/22/2016	32.6
5/19/2016	33.4
7/29/2016	26
9/23/2016	28.8
11/9/2016	27.9
1/30/2017	29.2
3/30/2017	30
6/9/2017	30.9
10/2/2017	31.5
3/16/2018	28.5
9/17/2018	30.8
3/20/2019	30.1
9/12/2019	31.9



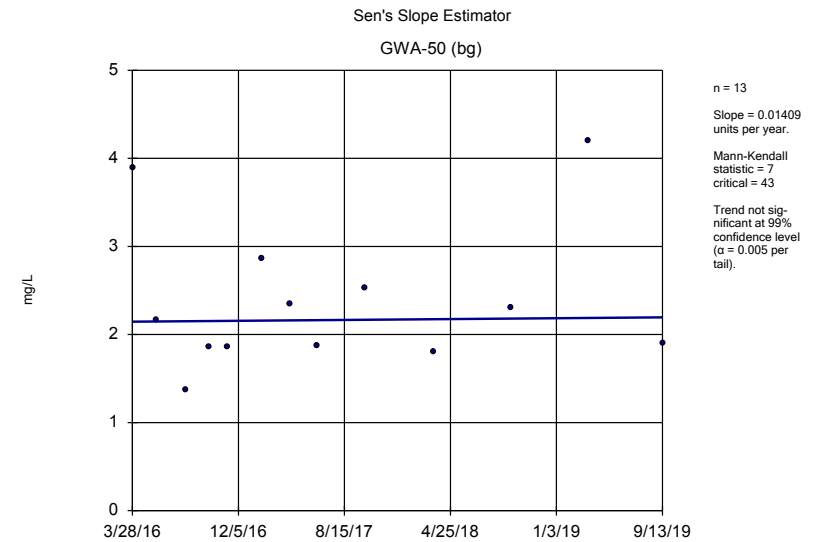
Constituent: Calcium Analysis Run 12/9/2019 10:50 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Calcium Analysis Run 12/9/2019 10:50 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Calcium Analysis Run 12/9/2019 10:50 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Calcium Analysis Run 12/9/2019 10:50 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	54.1
5/20/2016	23.9
7/29/2016	25.3
9/23/2016	26.6
11/9/2016	16.1
1/31/2017	5.68
3/30/2017	25.2
6/12/2017	34.2
10/2/2017	1.69
3/19/2018	63
9/14/2018	2.4
3/20/2019	4.3
9/12/2019	1.8

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	46.5
5/19/2016	24.6
7/29/2016	14.9
9/22/2016	15
11/10/2016	12.6
1/31/2017	16.5
4/3/2017	16.6
6/9/2017	17.8
10/2/2017	20.6
3/16/2018	33
9/14/2018	22.8 (J)
3/19/2019	59.2
9/13/2019	27

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

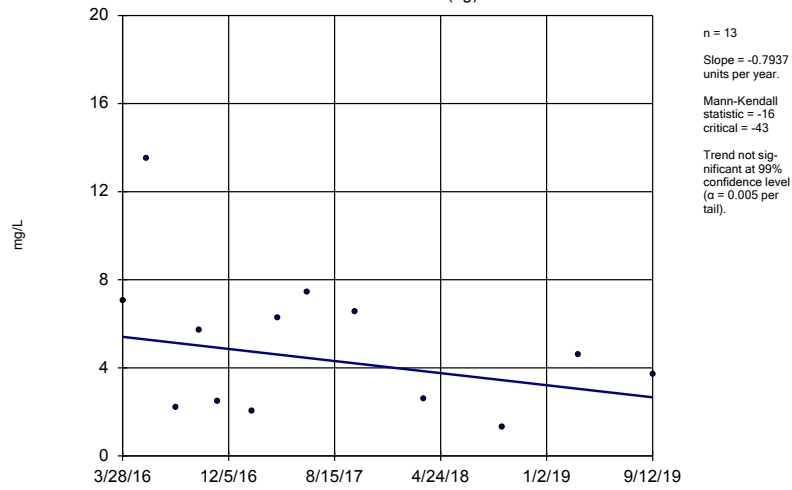
	GWA-3 (bg)
3/23/2016	2.05
5/23/2016	1.29
7/29/2016	1.29
9/22/2016	1.51
11/10/2016	1.54
1/31/2017	1.34
3/30/2017	1.31
6/12/2017	1.4
10/4/2017	1.13
3/19/2018	1.2
9/17/2018	0.95
3/20/2019	0.96
9/13/2019	0.94

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

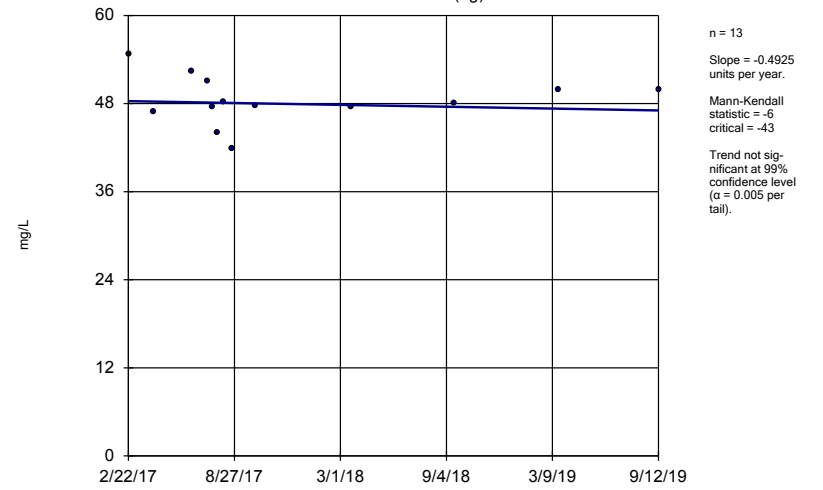
	GWA-50 (bg)
3/28/2016	3.89
5/23/2016	2.16
8/1/2016	1.37
9/26/2016	1.86
11/10/2016	1.86
1/30/2017	2.86
4/7/2017	2.34
6/12/2017	1.87
10/2/2017	2.53
3/16/2018	1.8
9/17/2018	2.3
3/19/2019	4.2
9/13/2019	1.9

Sen's Slope Estimator
GWA-50R (bg)



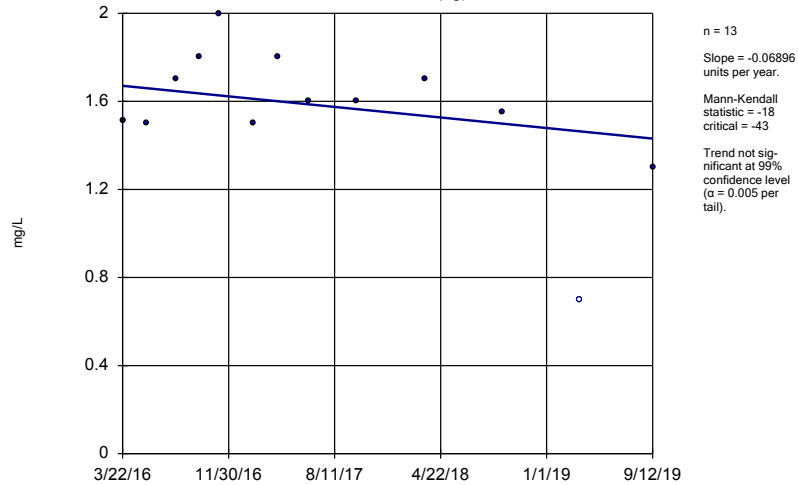
Constituent: Calcium Analysis Run 12/9/2019 10:50 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-4RZ (bg)



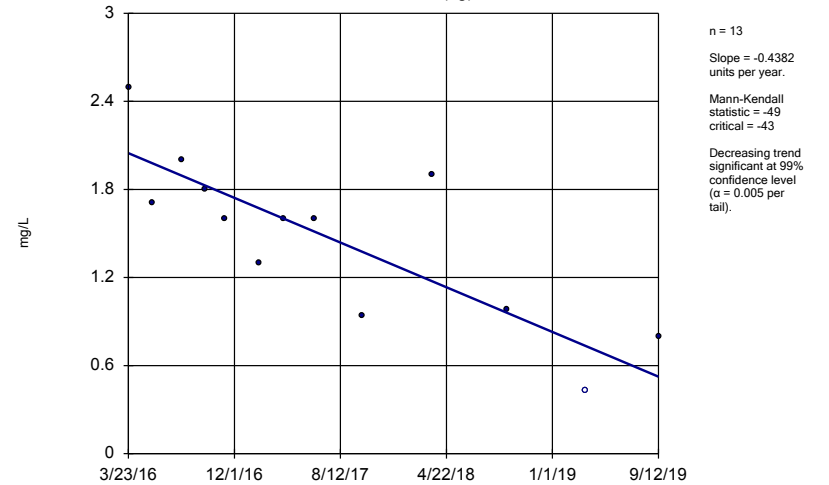
Constituent: Calcium Analysis Run 12/9/2019 10:50 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-1 (bg)



Constituent: Chloride Analysis Run 12/9/2019 10:50 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2 (bg)



Constituent: Chloride Analysis Run 12/9/2019 10:51 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-50R (bg)

3/28/2016	7.04
5/25/2016	13.5
8/1/2016	2.2
9/26/2016	5.72
11/11/2016	2.5
1/30/2017	2.01
4/3/2017	6.26
6/12/2017	7.44
10/2/2017	6.55
3/16/2018	2.6
9/18/2018	1.3
3/19/2019	4.6
9/12/2019	3.7

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

2/22/2017	54.7
4/7/2017	46.8
6/14/2017	52.4
7/12/2017	51.1
7/20/2017	47.5
7/28/2017	44
8/9/2017	48.3
8/24/2017	41.9
10/3/2017	47.7
3/21/2018	47.5
9/18/2018	48.1
3/21/2019	49.9
9/12/2019	49.9

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

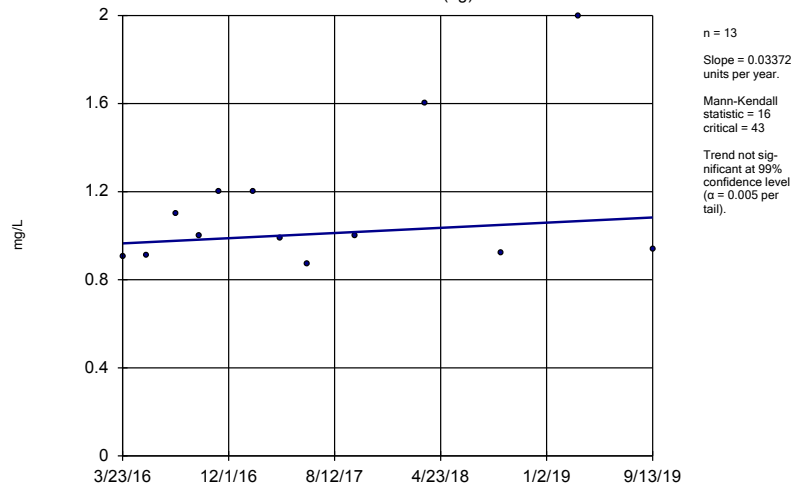
	GWA-1 (bg)
3/22/2016	1.5101
5/19/2016	1.5
7/29/2016	1.7
9/23/2016	1.8
11/9/2016	2
1/30/2017	1.5
3/30/2017	1.8
6/9/2017	1.6
10/2/2017	1.6
3/16/2018	1.7
9/17/2018	1.55 (D)
3/20/2019	<1.4
9/12/2019	1.3

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	2.4904
5/20/2016	1.71
7/29/2016	2
9/23/2016	1.8
11/9/2016	1.6
1/31/2017	1.3
3/30/2017	1.6
6/12/2017	1.6
10/2/2017	0.94
3/19/2018	1.9
9/14/2018	0.98
3/20/2019	<0.86
9/12/2019	0.8 (X)

Sen's Slope Estimator
GWA-2R (bg)



Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	0.9079
5/19/2016	0.9136
7/29/2016	1.1
9/22/2016	1
11/10/2016	1.2
1/31/2017	1.2
4/3/2017	0.99
6/9/2017	0.87
10/2/2017	1
3/16/2018	1.6
9/14/2018	0.92
3/19/2019	2
9/13/2019	0.94 (X)

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
3/23/2016	1.6092
5/23/2016	1.52
7/29/2016	1.5
9/22/2016	1.4
11/10/2016	1.6
1/31/2017	1.6
3/30/2017	1.4
6/12/2017	1.4
10/4/2017	1.5
3/19/2018	1.5
9/17/2018	1.5
3/20/2019	<1.5
9/13/2019	1.5

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

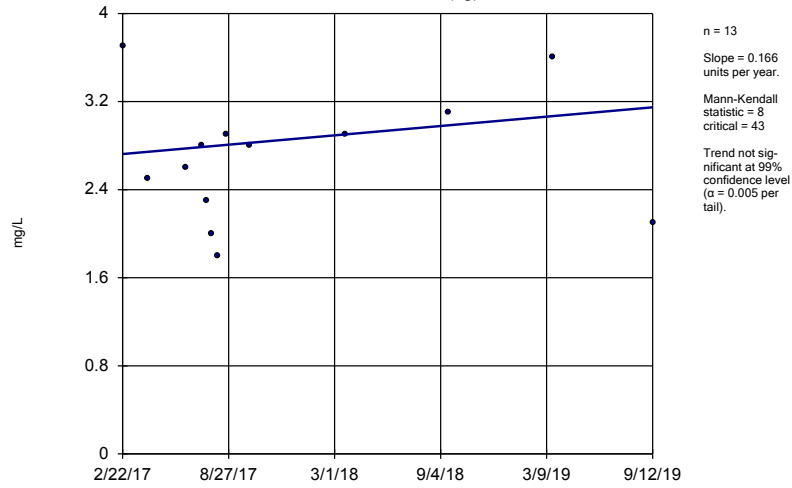
	GWA-50 (bg)
3/28/2016	1.14
5/23/2016	1.19
8/1/2016	1.2
9/26/2016	1.1
11/10/2016	1.3
1/30/2017	1.2
4/7/2017	1.2
6/12/2017	1.1
10/2/2017	1.2
3/16/2018	1.4
9/17/2018	1.1
3/19/2019	<1.2
9/13/2019	1

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

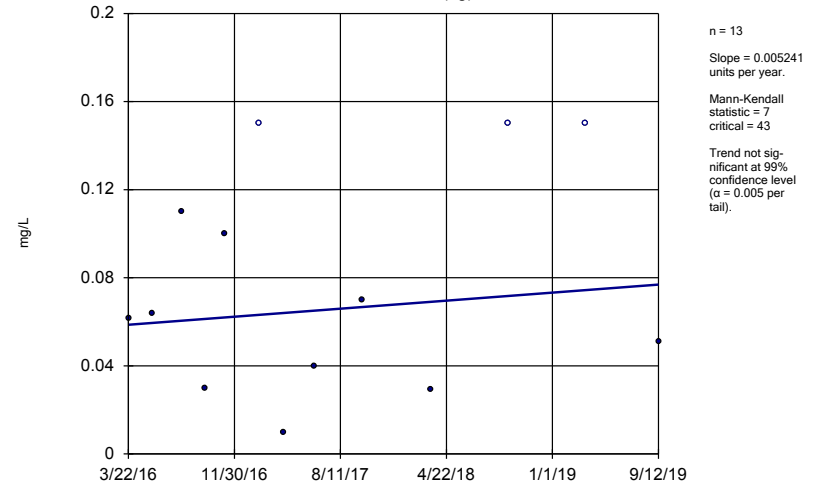
	GWA-50R (bg)
3/28/2016	0.9204
5/25/2016	1.04
8/1/2016	0.85
9/26/2016	0.87
11/11/2016	0.99
1/30/2017	0.95
4/3/2017	0.88
6/12/2017	0.83
10/2/2017	0.94
3/16/2018	<1.1
9/18/2018	1
3/19/2019	<0.88
9/12/2019	0.74 (X)

Sen's Slope Estimator
GWA-4RZ (bg)



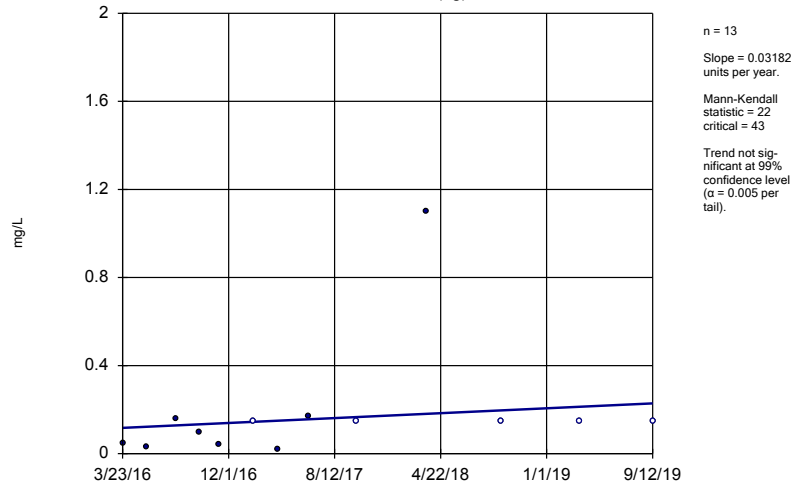
Constituent: Chloride Analysis Run 12/9/2019 10:51 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-1 (bg)



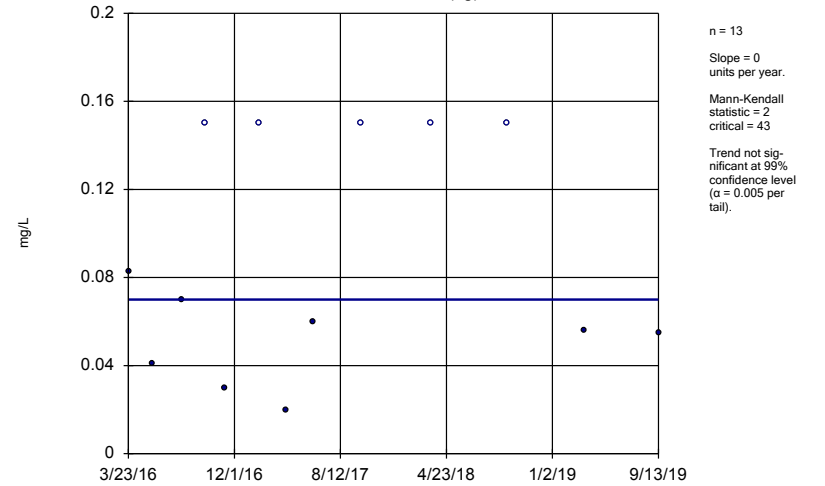
Constituent: Fluoride Analysis Run 12/9/2019 10:51 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2 (bg)



Constituent: Fluoride Analysis Run 12/9/2019 10:51 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2R (bg)



Constituent: Fluoride Analysis Run 12/9/2019 10:52 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

2/22/2017	3.7
4/7/2017	2.5
6/14/2017	2.6
7/12/2017	2.8
7/20/2017	2.3
7/28/2017	2
8/9/2017	1.8
8/24/2017	2.9
10/3/2017	2.8
3/21/2018	2.9
9/18/2018	3.1
3/21/2019	3.6
9/12/2019	2.1

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)
3/22/2016	0.0614 (J)
5/19/2016	0.064 (J)
7/29/2016	0.11 (J)
9/23/2016	0.03 (J)
11/9/2016	0.1 (J)
1/30/2017	<0.3
3/30/2017	0.01 (J)
6/9/2017	0.04 (J)
10/2/2017	0.07 (J)
3/16/2018	0.029 (J)
9/17/2018	<0.3 (D)
3/20/2019	<0.3
9/12/2019	0.051 (X)

Sen's Slope Estimator

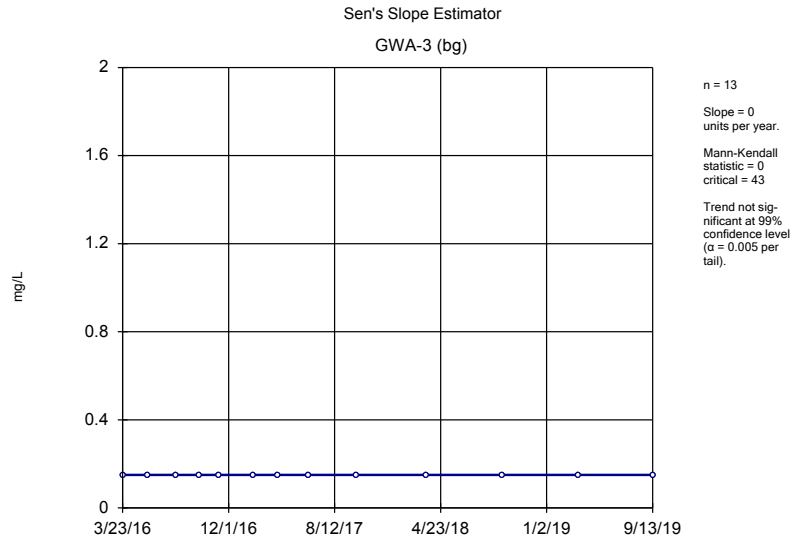
Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	0.0477 (J)
5/20/2016	0.033 (J)
7/29/2016	0.16 (J)
9/23/2016	0.1 (J)
11/9/2016	0.04 (J)
1/31/2017	<0.3
3/30/2017	0.02 (J)
6/12/2017	0.17 (J)
10/2/2017	<0.3
3/19/2018	1.1
9/14/2018	<0.3
3/20/2019	<0.3
9/12/2019	<0.3

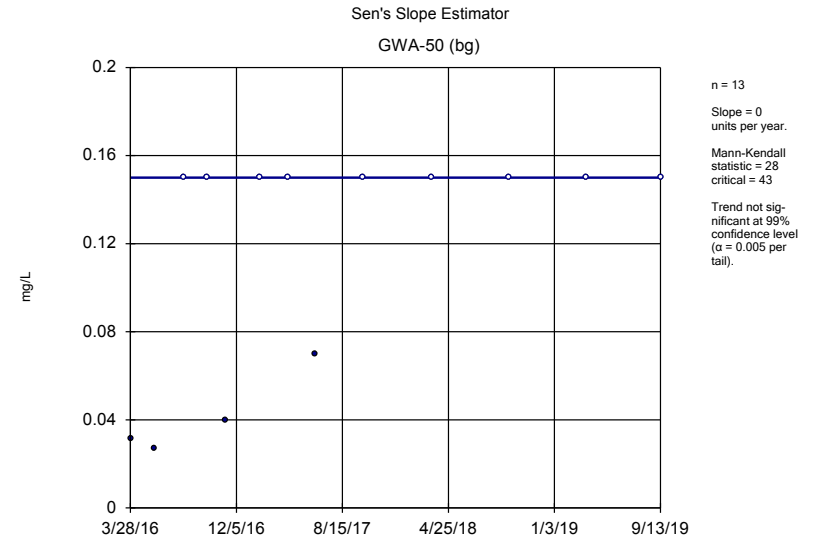
Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

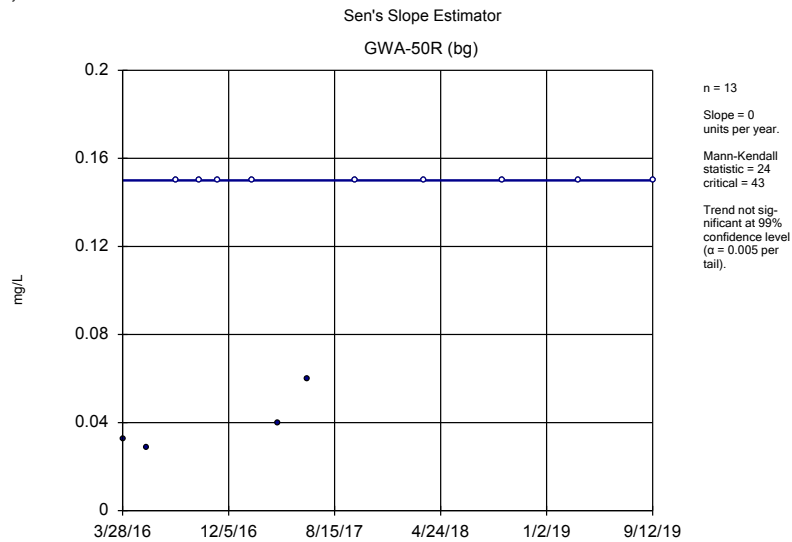
	GWA-2R (bg)
3/23/2016	0.0826 (J)
5/19/2016	0.0409 (J)
7/29/2016	0.07 (J)
9/22/2016	<0.3
11/10/2016	0.03 (J)
1/31/2017	<0.3
4/3/2017	0.02 (J)
6/9/2017	0.06 (J)
10/2/2017	<0.3
3/16/2018	<0.3
9/14/2018	<0.3
3/19/2019	0.056 (X)
9/13/2019	0.055 (X)



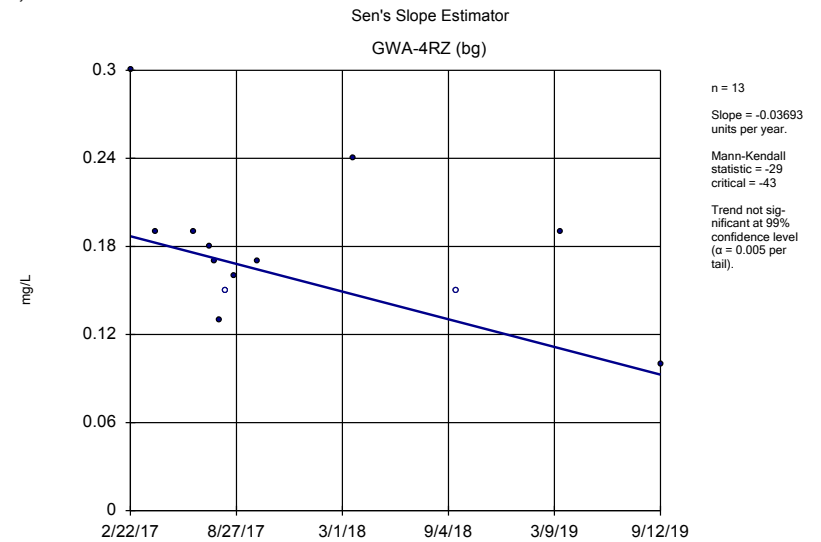
Constituent: Fluoride Analysis Run 12/9/2019 10:52 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Fluoride Analysis Run 12/9/2019 10:52 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Fluoride Analysis Run 12/9/2019 10:52 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Fluoride Analysis Run 12/9/2019 10:52 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-3 (bg)

3/23/2016	<0.3
5/23/2016	<0.3
7/29/2016	<0.3
9/22/2016	<0.3
11/10/2016	<0.3
1/31/2017	<0.3
3/30/2017	<0.3
6/12/2017	<0.3
10/4/2017	<0.3
3/19/2018	<0.3
9/17/2018	<0.3
3/20/2019	<0.3
9/13/2019	<0.3

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50 (bg)
3/28/2016	0.0314 (J)
5/23/2016	0.027 (J)
8/1/2016	<0.3
9/26/2016	<0.3
11/10/2016	0.04 (J)
1/30/2017	<0.3
4/7/2017	<0.3
6/12/2017	0.07 (J)
10/2/2017	<0.3
3/16/2018	<0.3
9/17/2018	<0.3
3/19/2019	<0.3
9/13/2019	<0.3

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
3/28/2016	0.0326 (J)
5/25/2016	0.0285 (J)
8/1/2016	<0.3
9/26/2016	<0.3
11/11/2016	<0.3
1/30/2017	<0.3
4/3/2017	0.04 (J)
6/12/2017	0.06 (J)
10/2/2017	<0.3
3/16/2018	<0.3
9/18/2018	<0.3
3/19/2019	<0.3
9/12/2019	<0.3

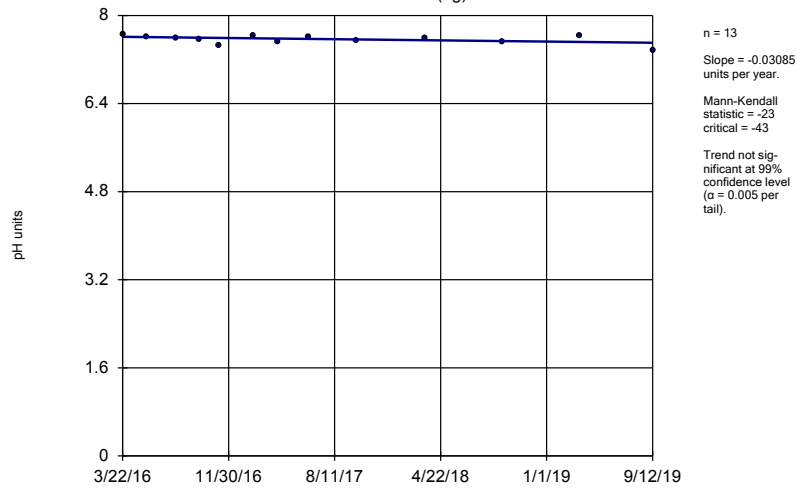
Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

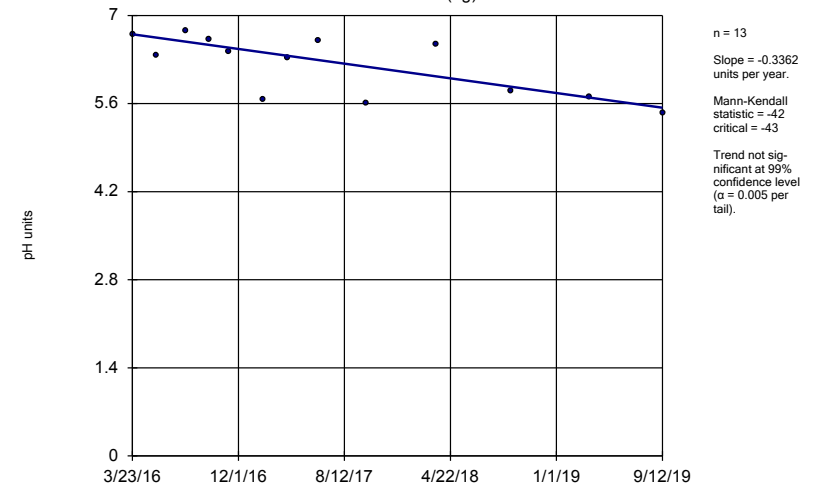
2/22/2017	0.3
4/7/2017	0.19 (J)
6/14/2017	0.19 (J)
7/12/2017	0.18 (J)
7/20/2017	0.17 (J)
7/28/2017	0.13 (J)
8/9/2017	<0.3 (*)
8/24/2017	0.16 (J)
10/3/2017	0.17 (J)
3/21/2018	0.24 (J)
9/18/2018	<0.3
3/21/2019	0.19 (X)
9/12/2019	0.1 (X)

Sen's Slope Estimator
GWA-1 (bg)



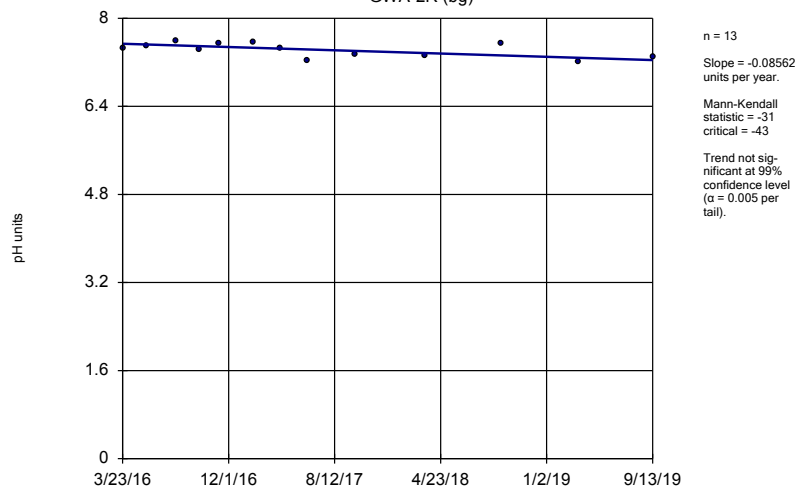
Constituent: pH Analysis Run 12/9/2019 10:52 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2 (bg)



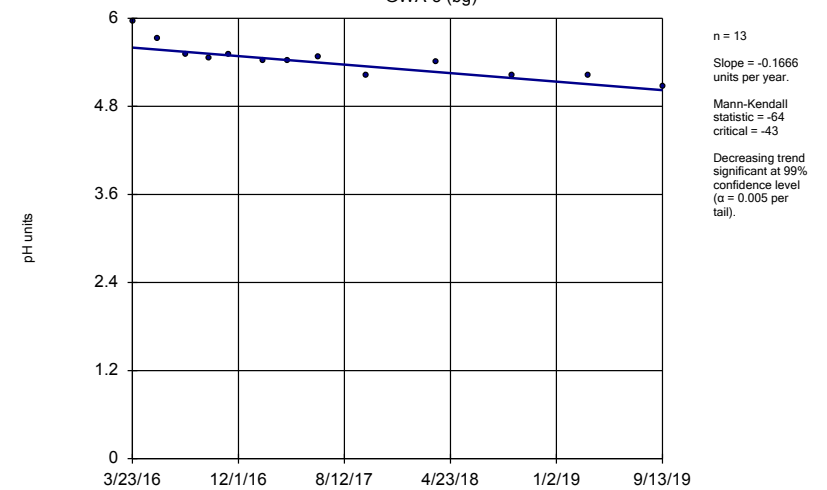
Constituent: pH Analysis Run 12/9/2019 10:52 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2R (bg)



Constituent: pH Analysis Run 12/9/2019 10:53 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-3 (bg)



Constituent: pH Analysis Run 12/9/2019 10:53 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-1 (bg)
3/22/2016	7.65
5/19/2016	7.6
7/29/2016	7.58
9/23/2016	7.57
11/9/2016	7.45
1/30/2017	7.64
3/30/2017	7.51
6/9/2017	7.6
10/2/2017	7.55
3/16/2018	7.58
9/17/2018	7.53 (D)
3/20/2019	7.64
9/12/2019	7.36

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	6.7
5/20/2016	6.36
7/29/2016	6.75
9/23/2016	6.62
11/9/2016	6.42
1/31/2017	5.66
3/30/2017	6.33
6/12/2017	6.6
10/2/2017	5.61
3/19/2018	6.55
9/14/2018	5.81
3/20/2019	5.71
9/12/2019	5.45

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	7.45
5/19/2016	7.5
7/29/2016	7.59
9/22/2016	7.44
11/10/2016	7.55
1/31/2017	7.56
4/3/2017	7.46
6/9/2017	7.24
10/2/2017	7.35
3/16/2018	7.31
9/14/2018	7.55
3/19/2019	7.2
9/13/2019	7.29

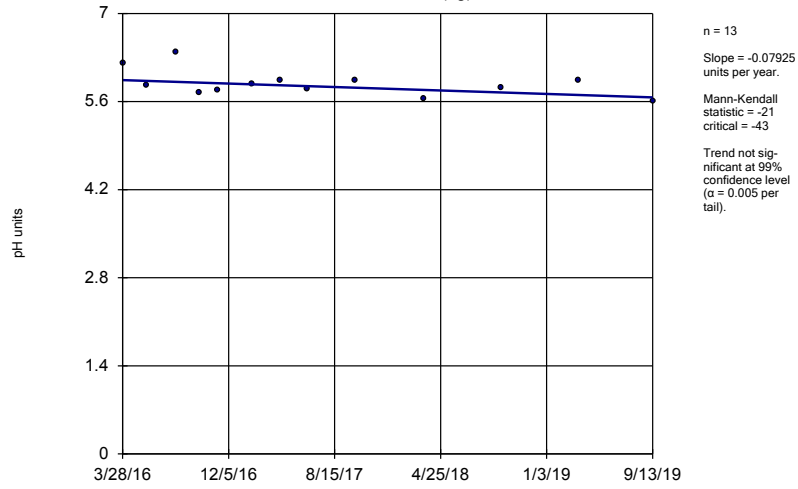
Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-3 (bg)

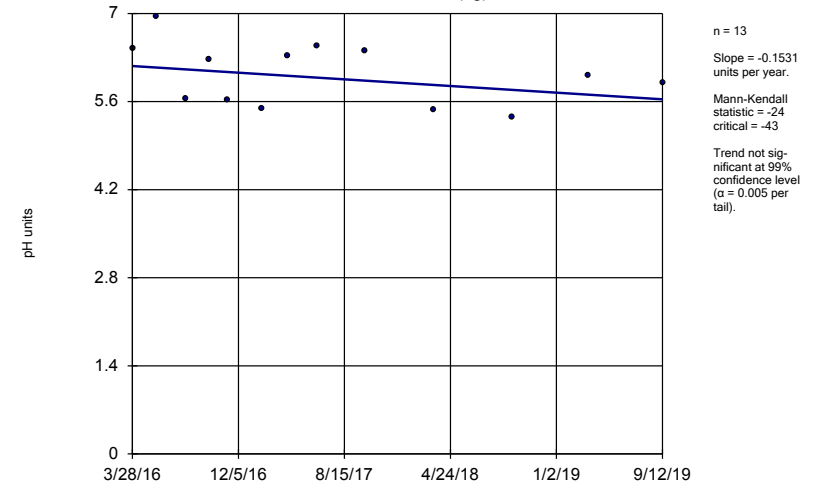
3/23/2016	5.96
5/23/2016	5.73
7/29/2016	5.51
9/22/2016	5.45
11/10/2016	5.51
1/31/2017	5.42
3/30/2017	5.43
6/12/2017	5.47
10/4/2017	5.23
3/19/2018	5.4
9/17/2018	5.22
3/20/2019	5.22
9/13/2019	5.07

Sen's Slope Estimator
GWA-50 (bg)



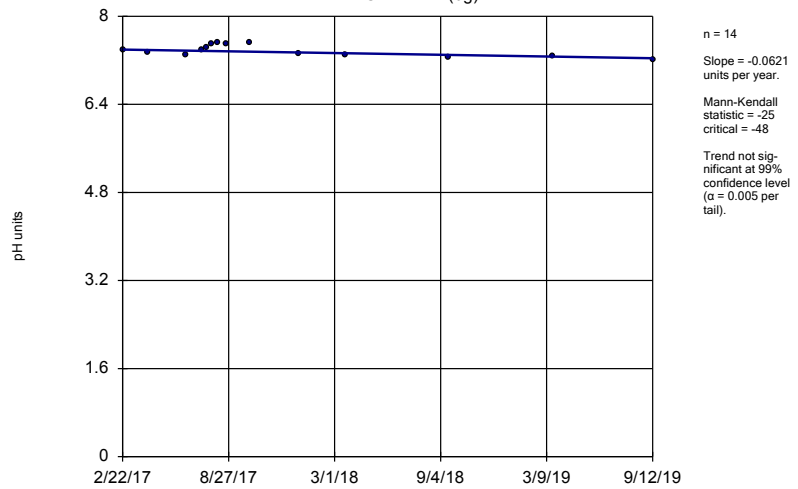
Constituent: pH Analysis Run 12/9/2019 10:53 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-50R (bg)



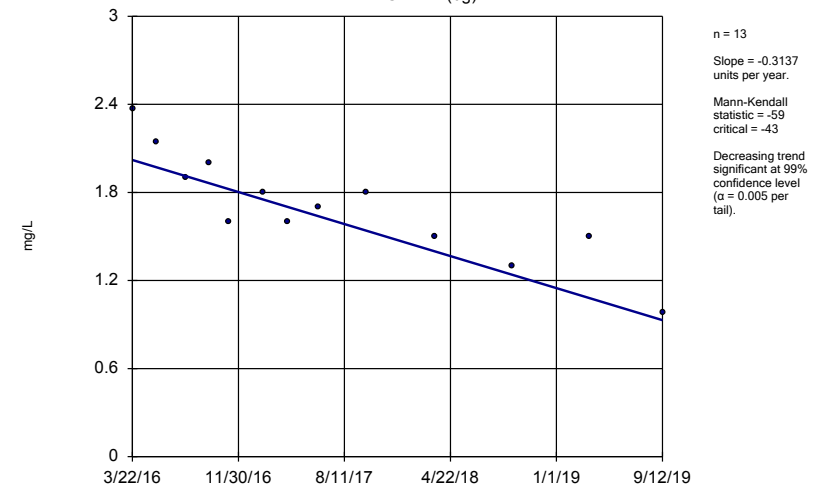
Constituent: pH Analysis Run 12/9/2019 10:53 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-4RZ (bg)



Constituent: pH Analysis Run 12/9/2019 10:53 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-1 (bg)



Constituent: Sulfate Analysis Run 12/9/2019 10:53 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-50 (bg)

3/28/2016	6.22
5/23/2016	5.86
8/1/2016	6.39
9/26/2016	5.74
11/10/2016	5.78
1/30/2017	5.88
4/7/2017	5.94
6/12/2017	5.81
10/2/2017	5.93
3/16/2018	5.64
9/17/2018	5.82
3/19/2019	5.93
9/13/2019	5.61

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-50R (bg)

3/28/2016	6.45 (D)
5/25/2016	6.96
8/1/2016	5.64
9/26/2016	6.26
11/11/2016	5.62
1/30/2017	5.49
4/3/2017	6.32
6/12/2017	6.48
10/2/2017	6.41
3/16/2018	5.46
9/18/2018	5.35
3/19/2019	6.01
9/12/2019	5.89

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

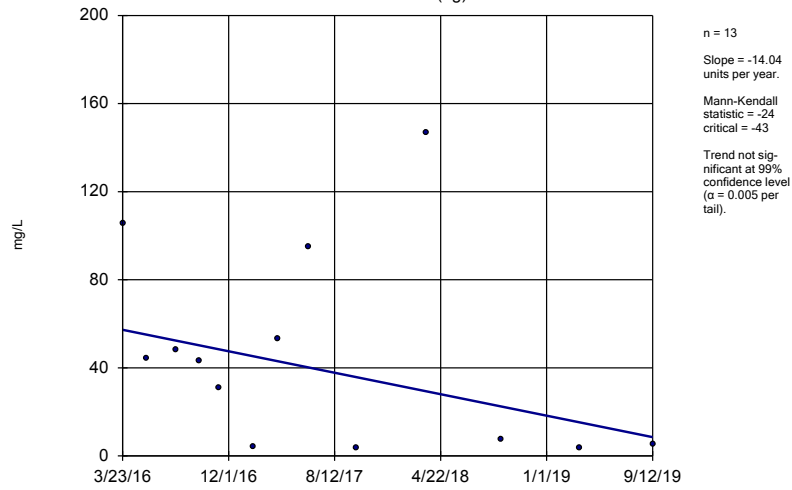
2/22/2017	7.38
4/7/2017	7.35
6/14/2017	7.3
7/12/2017	7.39
7/20/2017	7.44
7/28/2017	7.5
8/9/2017	7.52
8/24/2017	7.5
10/3/2017	7.51
12/28/2017	7.32 (Y)
3/21/2018	7.3
9/18/2018	7.26
3/21/2019	7.28
9/12/2019	7.2

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

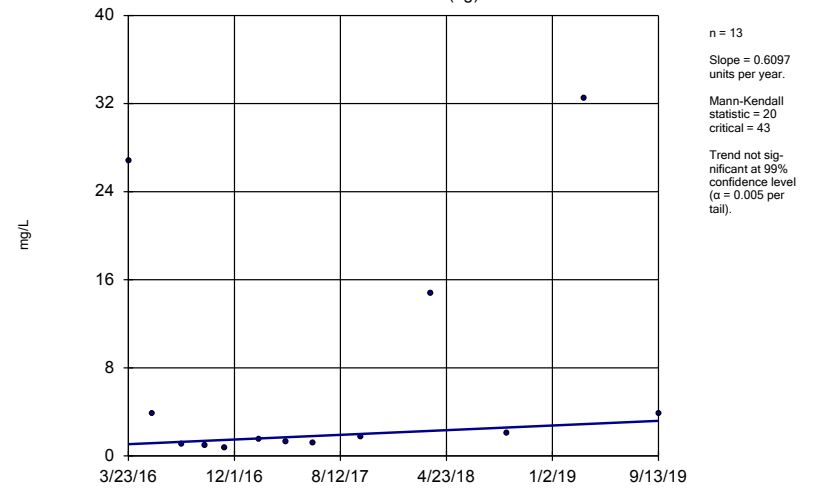
	GWA-1 (bg)
3/22/2016	2.3685
5/19/2016	2.14
7/29/2016	1.9
9/23/2016	2
11/9/2016	1.6
1/30/2017	1.8
3/30/2017	1.6
6/9/2017	1.7
10/2/2017	1.8
3/16/2018	1.5
9/17/2018	1.3 (D)
3/20/2019	1.5
9/12/2019	0.98 (X)

Sen's Slope Estimator
GWA-2 (bg)



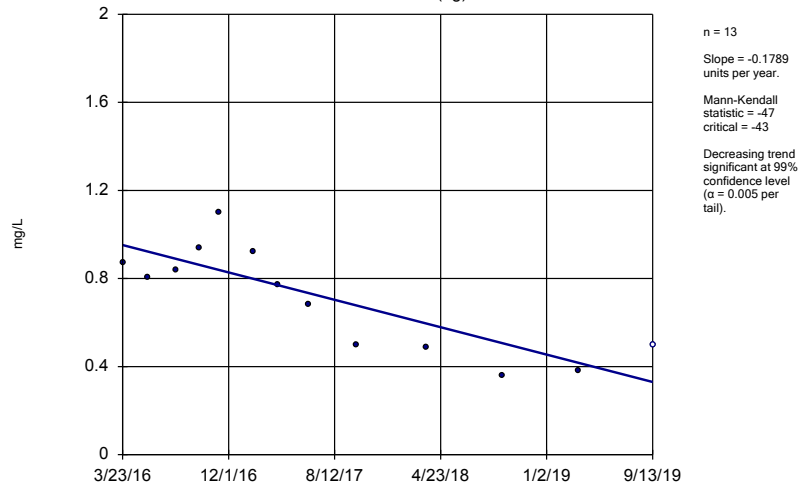
Constituent: Sulfate Analysis Run 12/9/2019 10:53 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-2R (bg)



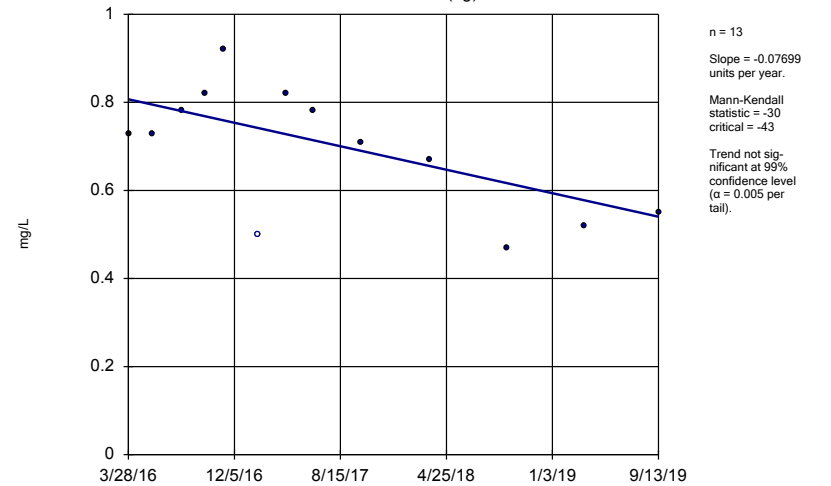
Constituent: Sulfate Analysis Run 12/9/2019 10:54 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-3 (bg)



Constituent: Sulfate Analysis Run 12/9/2019 10:54 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWA-50 (bg)



Constituent: Sulfate Analysis Run 12/9/2019 10:54 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2 (bg)
3/23/2016	105.552
5/20/2016	44.3
7/29/2016	48
9/23/2016	43
11/9/2016	31
1/31/2017	4.2
3/30/2017	53
6/12/2017	95
10/2/2017	3.5
3/19/2018	147
9/14/2018	7.7
3/20/2019	3.6
9/12/2019	5.2

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	26.8249
5/19/2016	3.81
7/29/2016	1.1
9/22/2016	0.96 (J)
11/10/2016	0.72 (J)
1/31/2017	1.5
4/3/2017	1.3
6/9/2017	1.2
10/2/2017	1.7
3/16/2018	14.8 (J)
9/14/2018	2.1
3/19/2019	32.5 (X)
9/13/2019	3.8

Sen's Slope Estimator

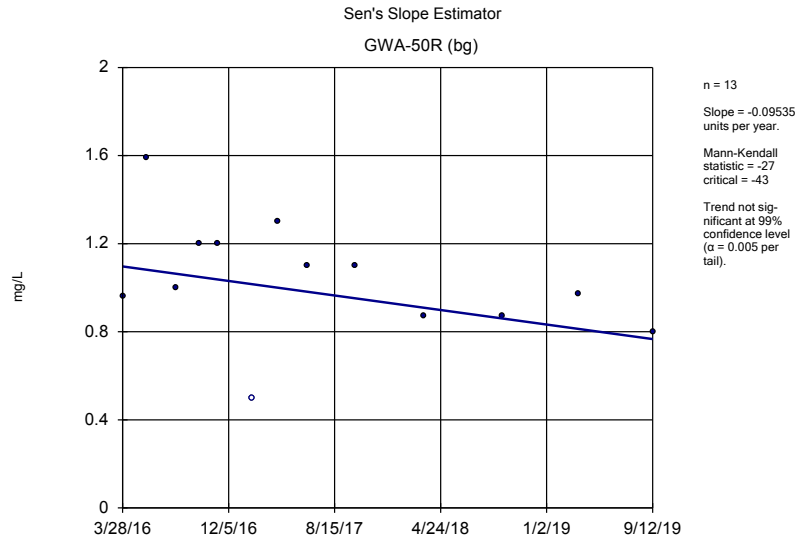
Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
3/23/2016	0.8724 (J)
5/23/2016	0.805 (J)
7/29/2016	0.84 (J)
9/22/2016	0.94 (J)
11/10/2016	1.1
1/31/2017	0.92 (J)
3/30/2017	0.77 (J)
6/12/2017	0.68 (J)
10/4/2017	0.5 (J)
3/19/2018	0.49 (J)
9/17/2018	0.36 (J)
3/20/2019	0.38 (X)
9/13/2019	<1

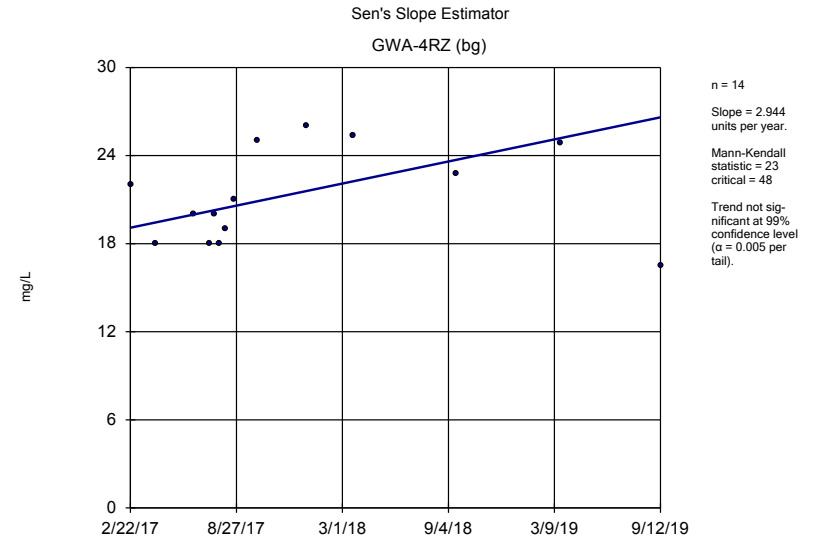
Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

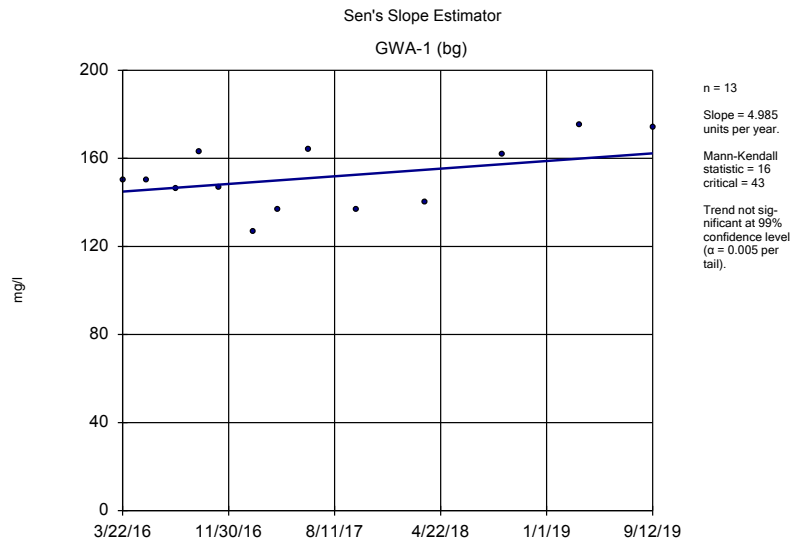
	GWA-50 (bg)
3/28/2016	0.7283 (J)
5/23/2016	0.728 (J)
8/1/2016	0.78 (J)
9/26/2016	0.82 (J)
11/10/2016	0.92 (J)
1/30/2017	<1 (*)
4/7/2017	0.82 (J)
6/12/2017	0.78 (J)
10/2/2017	0.71 (J)
3/16/2018	0.67 (J)
9/17/2018	0.47 (J)
3/19/2019	0.52 (X)
9/13/2019	0.55 (X)



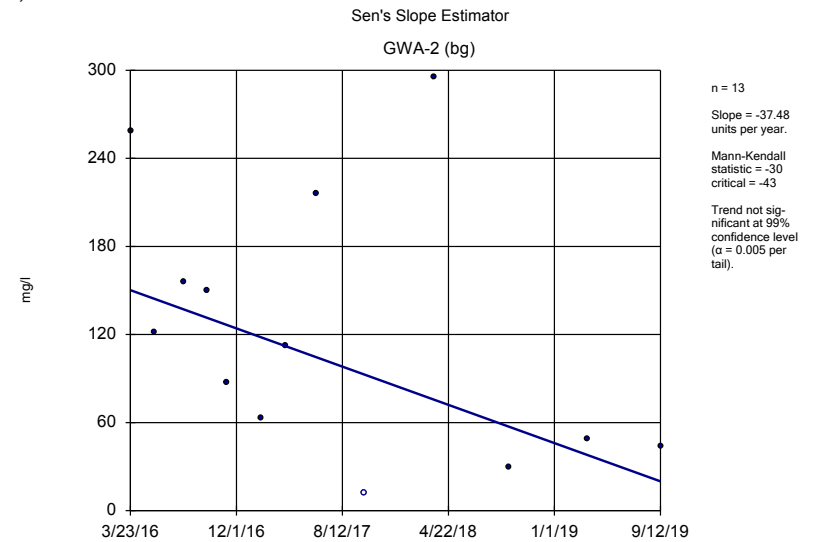
Constituent: Sulfate Analysis Run 12/9/2019 10:54 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Sulfate Analysis Run 12/9/2019 10:54 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 10:54 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 10:54 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
3/28/2016	0.9594 (J)
5/25/2016	1.59
8/1/2016	1
9/26/2016	1.2
11/11/2016	1.2
1/30/2017	<1 (*)
4/3/2017	1.3
6/12/2017	1.1
10/2/2017	1.1
3/16/2018	0.87 (J)
9/18/2018	0.87 (J)
3/19/2019	0.97 (X)
9/12/2019	0.8 (X)

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 10:58 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

2/22/2017	22
4/7/2017	18
6/14/2017	20
7/12/2017	18
7/20/2017	20
7/28/2017	18
8/9/2017	19
8/24/2017	21
10/3/2017	25
12/28/2017	26 (Y)
3/21/2018	25.4
9/18/2018	22.8
3/21/2019	24.9
9/12/2019	16.5

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 10:58 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-1 (bg)

3/22/2016	150
5/19/2016	150
7/29/2016	146
9/23/2016	163
11/9/2016	147
1/30/2017	127
3/30/2017	137
6/9/2017	164
10/2/2017	137
3/16/2018	140
9/17/2018	162
3/20/2019	175
9/12/2019	174

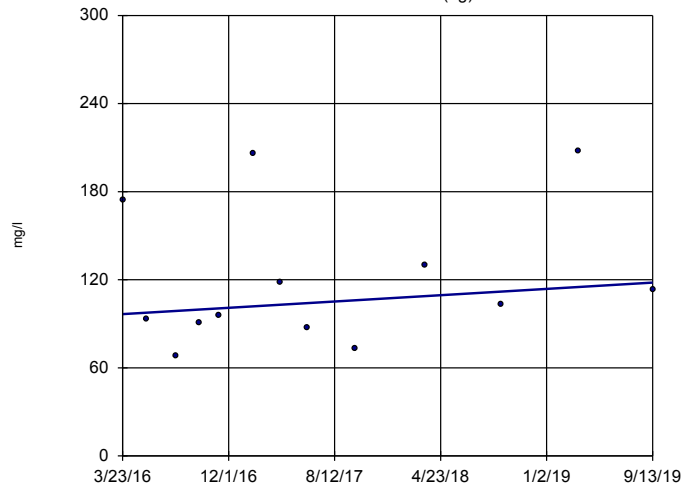
Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 10:58 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

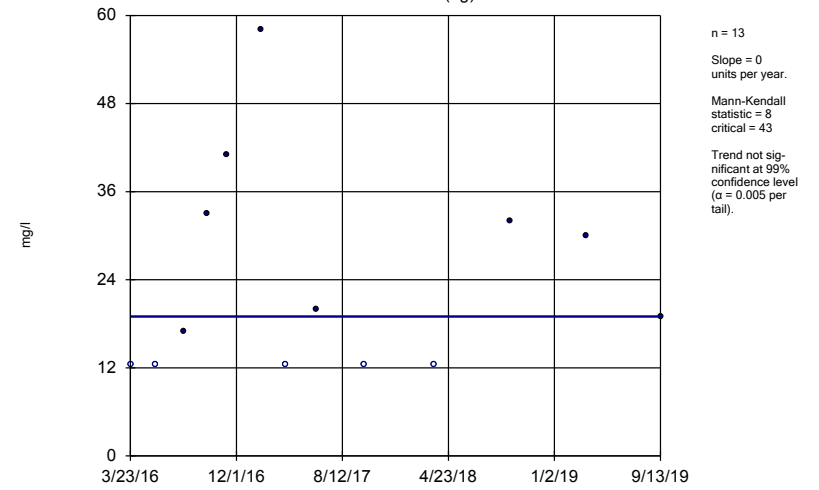
	GWA-2 (bg)
3/23/2016	259
5/20/2016	122
7/29/2016	156
9/23/2016	150
11/9/2016	87
1/31/2017	63
3/30/2017	112
6/12/2017	216
10/2/2017	<25
3/19/2018	295
9/14/2018	30
3/20/2019	49
9/12/2019	44

Sen's Slope Estimator GWA-2R (bg)



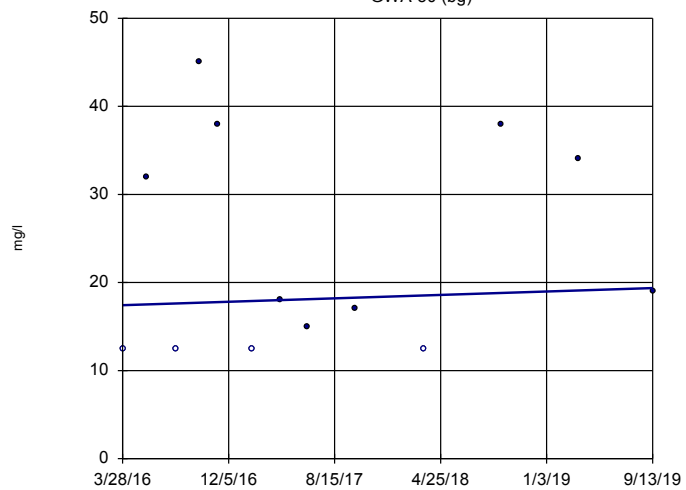
Constituent: Total Dissolved Solids Analysis Run 12/9/2019 10:55 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator GWA-3 (bg)



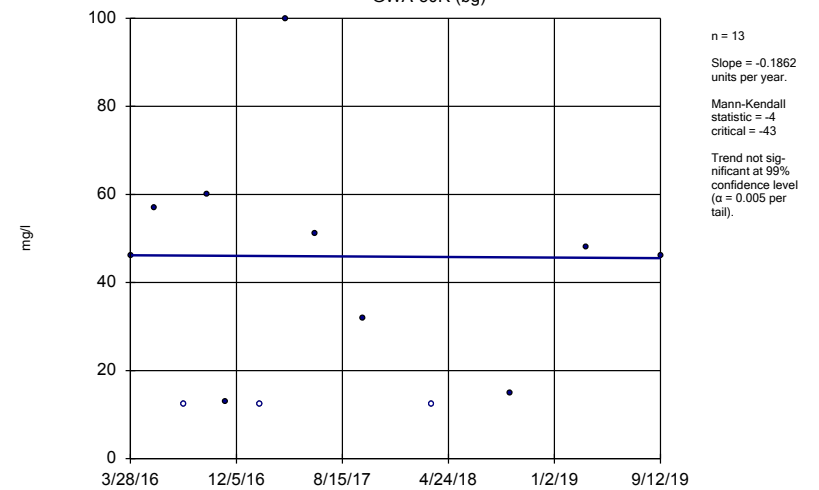
Constituent: Total Dissolved Solids Analysis Run 12/9/2019 10:55 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator GWA-50 (bg)



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 10:55 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator GWA-50R (bg)



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 10:55 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 10:58 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-2R (bg)
3/23/2016	174
5/19/2016	93
7/29/2016	68
9/22/2016	91
11/10/2016	96
1/31/2017	206
4/3/2017	118
6/9/2017	87
10/2/2017	73
3/16/2018	130
9/14/2018	103
3/19/2019	208
9/13/2019	113

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 10:58 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-3 (bg)
3/23/2016	<25
5/23/2016	<25
7/29/2016	17 (J)
9/22/2016	33
11/10/2016	41
1/31/2017	58
3/30/2017	<25
6/12/2017	20 (J)
10/4/2017	<25
3/19/2018	<25
9/17/2018	32
3/20/2019	30
9/13/2019	19

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 10:59 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-50 (bg)

3/28/2016	<25
5/23/2016	32
8/1/2016	<25
9/26/2016	45
11/10/2016	38
1/30/2017	<25
4/7/2017	18 (J)
6/12/2017	15 (J)
10/2/2017	17 (J)
3/16/2018	<25
9/17/2018	38
3/19/2019	34
9/13/2019	19

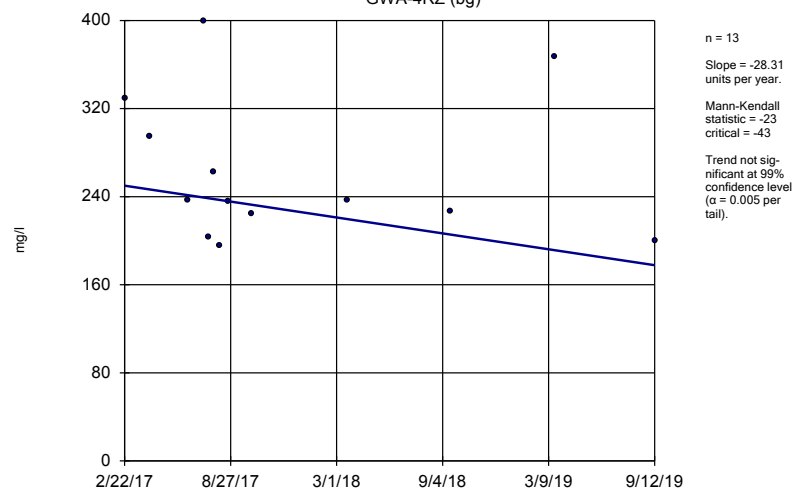
Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 10:59 AM View: sens slope background
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWA-50R (bg)
3/28/2016	46
5/25/2016	57
8/1/2016	<25
9/26/2016	60
11/11/2016	13 (J)
1/30/2017	<25
4/3/2017	100
6/12/2017	51
10/2/2017	32
3/16/2018	<25
9/18/2018	15 (J)
3/19/2019	48
9/12/2019	46

Sen's Slope Estimator

GWA-4RZ (bg)



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 10:55 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 10:59 AM View: sens slope background

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWA-4RZ (bg)

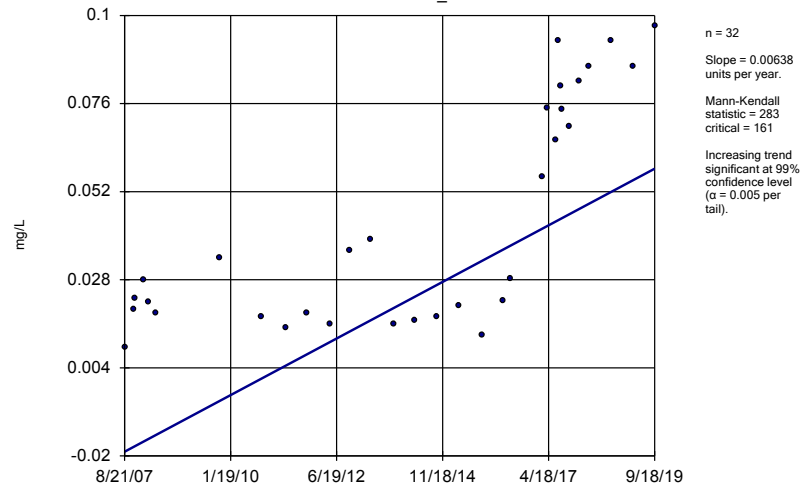
2/22/2017	329
4/7/2017	295
6/14/2017	237
7/12/2017	400
7/20/2017	203
7/28/2017	262
8/9/2017	195
8/24/2017	236
10/3/2017	224
3/21/2018	237
9/18/2018	227
3/21/2019	367
9/12/2019	200

Sen Slope

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 1/22/2020, 9:32 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Barium (mg/L)	GWC-13R_13RZ	0.00638	283	161	Yes	32	0	n/a	n/a	0.01	NP

Sen's Slope Estimator
GWC-13R_13RZ



Constituent: Barium Analysis Run 1/22/2020 9:30 AM View: 13 barium
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 1/22/2020 9:32 AM View: 13 barium

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-13R_13RZ

8/21/2007	0.0095
11/1/2007	0.02
11/19/2007	0.023
1/31/2008	0.028
3/5/2008	0.022
5/7/2008	0.019
12/12/2008	0.19 (O)
4/29/2009	0.14 (O)
10/21/2009	0.034
4/28/2010	0.11 (O)
10/6/2010	0.018
4/20/2011	0.015
10/12/2011	0.019
4/25/2012	0.0158
10/2/2012	0.036
4/2/2013	0.039
10/8/2013	0.016
4/1/2014	0.017
10/1/2014	0.018
3/31/2015	0.021
10/14/2015	0.013
4/4/2016	0.0222
6/1/2016	0.0283
2/22/2017	0.0561
4/11/2017	0.0748
6/16/2017	0.0661
7/12/2017	0.0932
7/28/2017	0.0808
8/10/2017	0.0743
10/6/2017	0.0699
12/28/2017	0.082 (Y)
3/23/2018	0.086
9/20/2018	0.093
3/22/2019	0.086 (D)
9/18/2019	0.097

Cell 1&2 Downgradient Sen Slopes - Significant

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 12/9/2019, 11:23 AM

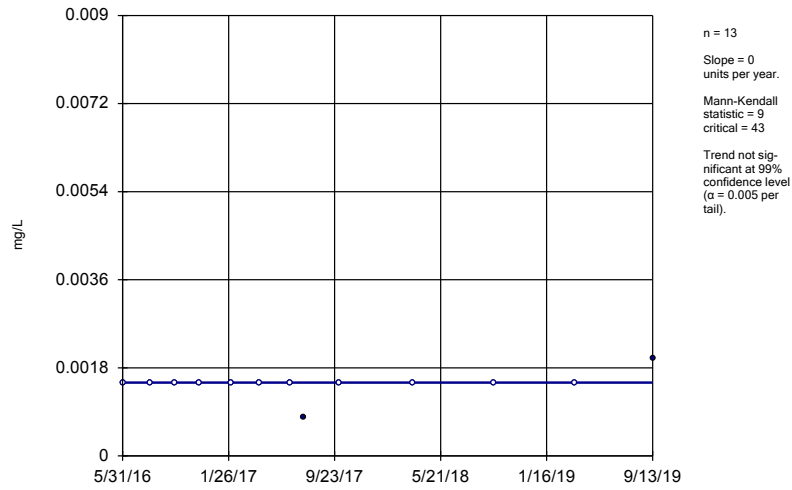
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate (mg/L)	GWC-15R	1.636	54	43	Yes	13	0	n/a	n/a	0.01	NP

Cell 1&2 Downgradient Sen Slopes

Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR Printed 12/9/2019, 11:24 AM

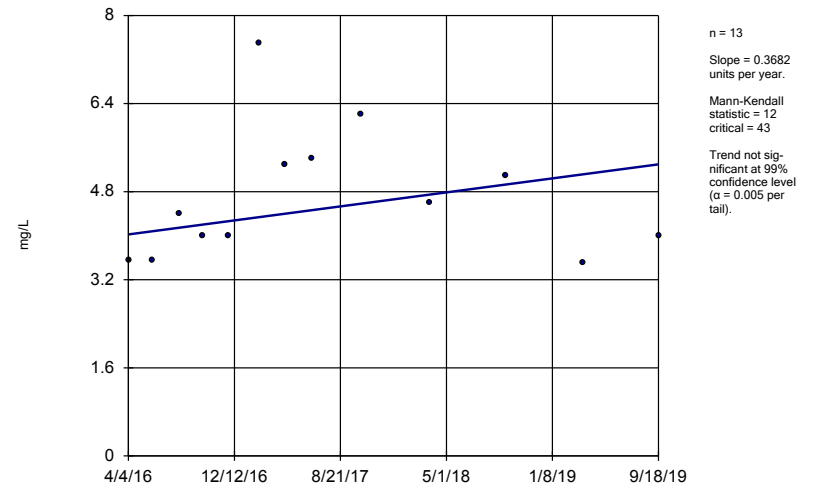
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-7Z	0	9	43	No	13	84.62	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-13	0.3682	12	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-14_14Z	0.4231	36	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-13R_13RZ	1.444	36	43	No	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWC-15_15Z	-0.1366	-30	-43	No	13	0	n/a	n/a	0.01	NP
pH (pH units)	GWC-8RR	-0.06083	-27	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-15R	1.636	54	43	Yes	13	0	n/a	n/a	0.01	NP

Sen's Slope Estimator
GWC-7Z



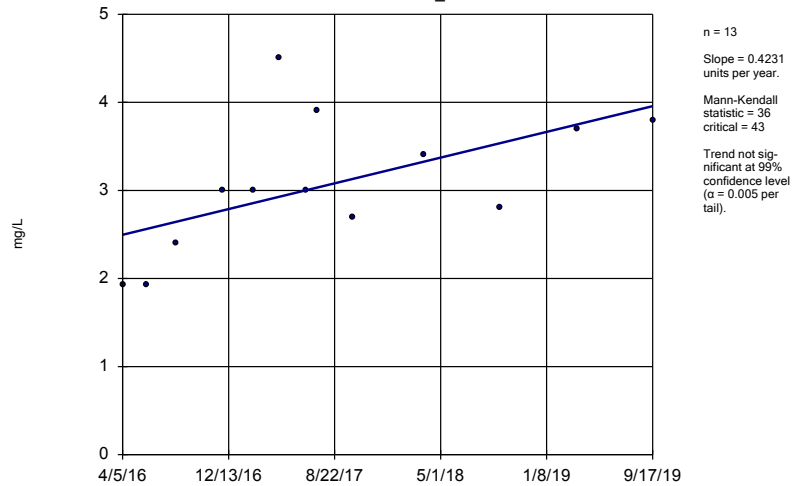
Constituent: Antimony Analysis Run 12/9/2019 11:17 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-13



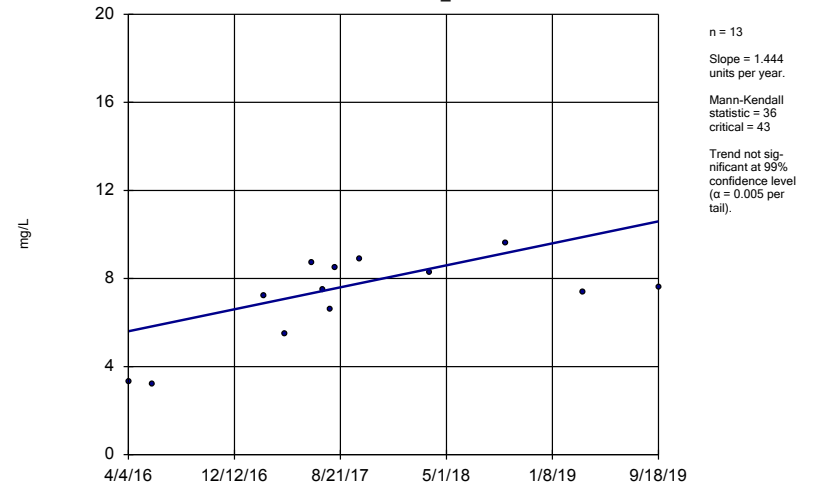
Constituent: Chloride Analysis Run 12/9/2019 11:17 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-14_14Z



Constituent: Chloride Analysis Run 12/9/2019 11:17 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-13R_13RZ



Constituent: Chloride Analysis Run 12/9/2019 11:17 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 11:24 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-7Z
5/31/2016	<0.003
8/2/2016	<0.003
9/27/2016	<0.003
11/21/2016	<0.003
2/1/2017	<0.003
4/6/2017	<0.003
6/13/2017	<0.003 (*)
7/14/2017	0.0008 (J)
10/3/2017	<0.003
3/20/2018	<0.003
9/18/2018	<0.003
3/21/2019	<0.003
9/13/2019	0.002 (X)

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 11:24 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-13
4/4/2016	3.55
5/31/2016	3.55
8/4/2016	4.4
9/29/2016	4
11/28/2016	4
2/9/2017	7.5
4/12/2017	5.3
6/16/2017	5.4
10/9/2017	6.2
3/21/2018	4.6
9/19/2018	5.1
3/23/2019	3.5
9/18/2019	4

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 11:24 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-14_14Z

4/5/2016	1.93
6/1/2016	1.93
8/9/2016	2.4
11/28/2016	3
2/9/2017	3
4/11/2017	4.5
6/14/2017	3
7/12/2017	3.9
10/5/2017	2.7
3/22/2018	3.4
9/19/2018	2.8
3/22/2019	3.7 (D)
9/17/2019	3.8

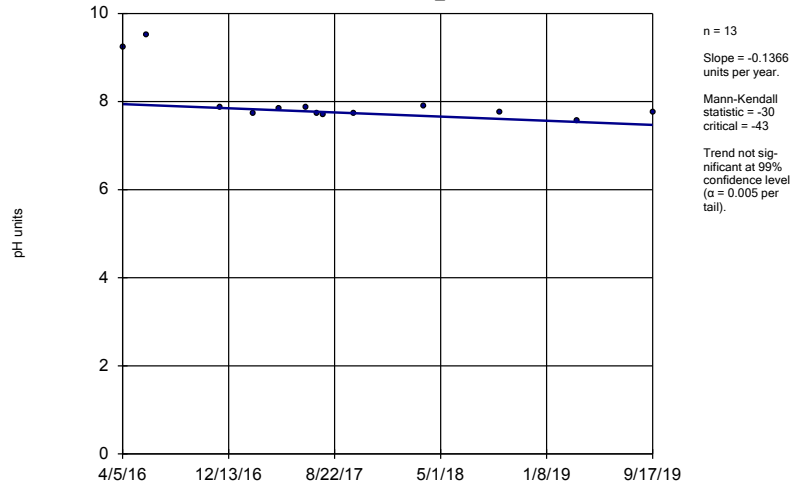
Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 11:24 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-13R_13RZ

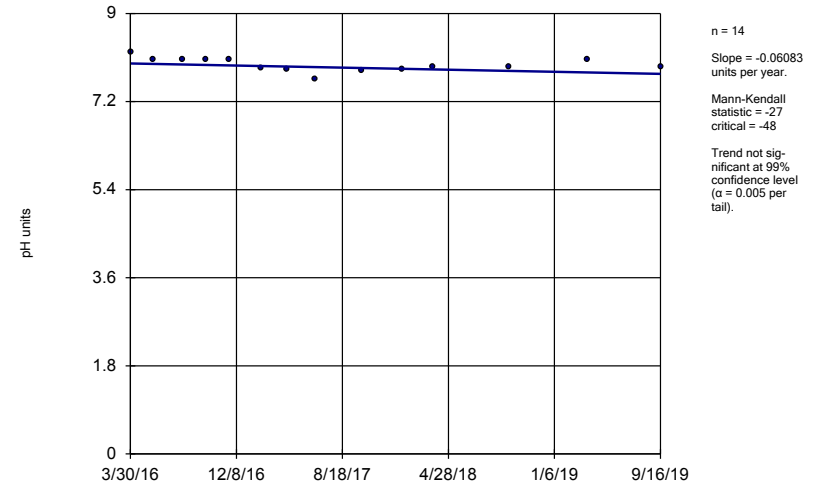
4/4/2016	3.3
6/1/2016	3.18
2/22/2017	7.2
4/11/2017	5.5
6/16/2017	8.7
7/12/2017	7.5
7/28/2017	6.6
8/10/2017	8.5
10/6/2017	8.9
3/23/2018	8.3
9/20/2018	9.6
3/22/2019	7.4 (D)
9/18/2019	7.6

Sen's Slope Estimator
GWC-15_15Z



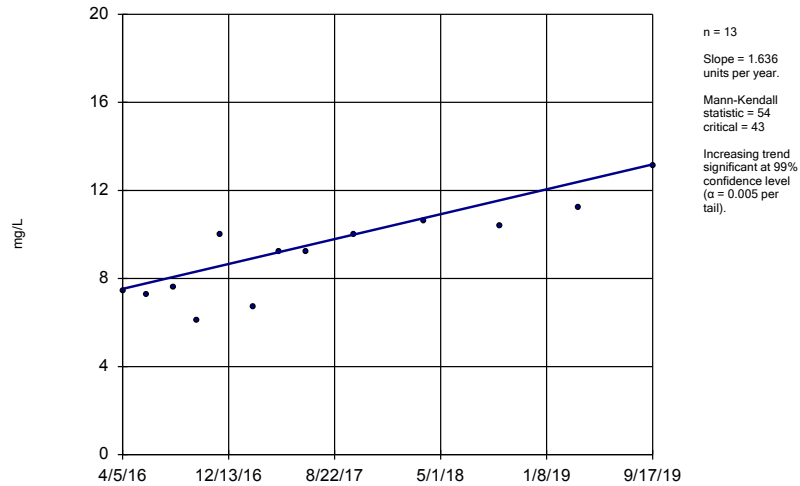
Constituent: pH Analysis Run 12/9/2019 11:17 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-8RR



Constituent: pH Analysis Run 12/9/2019 11:18 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator
GWC-15R



Constituent: Sulfate Analysis Run 12/9/2019 11:18 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 11:24 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15_15Z
4/5/2016	9.23
5/31/2016	9.52
11/23/2016	7.88
2/10/2017	7.72
4/11/2017	7.83
6/15/2017	7.86
7/12/2017	7.73
7/26/2017	7.71
10/6/2017	7.74
3/23/2018	7.89
9/19/2018	7.77
3/22/2019	7.55 (D)
9/17/2019	7.76

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 11:24 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

GWC-8RR

3/30/2016	8.2
5/24/2016	8.07
8/2/2016	8.07
9/27/2016	8.06
11/22/2016	8.07
2/6/2017	7.88
4/6/2017	7.86
6/14/2017	7.66
10/4/2017	7.84
1/9/2018	7.86 (Y)
3/21/2018	7.9
9/18/2018	7.92
3/27/2019	8.07
9/16/2019	7.9

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 11:24 AM View: Sens slope - compliance wells
Plant Bowen Client: Southern Company Data: Bowen 1&2 CCR

	GWC-15R
4/5/2016	7.45
5/31/2016	7.29
8/4/2016	7.6
9/29/2016	6.1
11/23/2016	10
2/10/2017	6.7
4/12/2017	9.2
6/15/2017	9.2
10/6/2017	10
3/23/2018	10.6
9/19/2018	10.4
3/25/2019	11.2
9/17/2019	13.1

Cell 3&4 Background Sen Slopes - Significant

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-36 (bg)	-0.00...	-108	-84	Yes	22	86.36	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-36R (bg)	-0.00...	-117	-84	Yes	22	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-38 (bg)	-0.00...	-117	-84	Yes	22	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-52 (bg)	-0.00...	-117	-84	Yes	22	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-53 (bg)	-0.00...	-113	-84	Yes	22	77.27	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-54 (bg)	-0.00...	-130	-84	Yes	22	90.91	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-55 (bg)	-0.00...	-105	-84	Yes	22	95.45	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-55R (bg)	-0.00...	-113	-84	Yes	22	81.82	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-56 (bg)	-0.00...	-102	-84	Yes	22	95.45	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-36 (bg)	0.001969	131	84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-38 (bg)	-0.00...	-144	-84	Yes	22	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-52 (bg)	-0.00...	-140	-84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-53 (bg)	-0.00...	-171	-84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-55R (bg)	-0.00663	-105	-84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-56 (bg)	0.004189	137	84	Yes	22	4.545	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-37 (bg)	0.000...	111	84	Yes	22	95.45	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-38 (bg)	0.000...	121	84	Yes	22	72.73	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-52 (bg)	0	99	84	Yes	22	100	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-53R (bg)	0	94	84	Yes	22	95.45	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-54 (bg)	0	99	84	Yes	22	100	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-55 (bg)	0	92	84	Yes	22	95.45	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-55R (bg)	0.000...	101	84	Yes	22	86.36	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-51R_5...	0.000...	104	84	Yes	22	95.45	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-36 (bg)	0.000...	135	84	Yes	22	13.64	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-36R (bg)	-0.00...	-129	-84	Yes	22	36.36	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-36 (bg)	-2.683	-51	-39	Yes	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-37 (bg)	-0.06834	-57	-39	Yes	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-37 (bg)	-0.1103	-47	-39	Yes	13	7.692	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-54 (bg)	-0.2096	-52	-39	Yes	13	7.692	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-55R (bg)	0.1724	41	39	Yes	13	0	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-36 (bg)	0.000...	98	84	Yes	22	77.27	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-54 (bg)	0.000...	121	84	Yes	22	40.91	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-55 (bg)	0.000...	93	84	Yes	22	77.27	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-55R (bg)	0.001058	126	84	Yes	22	86.36	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-56 (bg)	0.000...	96	84	Yes	22	86.36	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-51R_5...	-0.00...	-130	-84	Yes	22	54.55	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-37 (bg)	-0.00...	-88	-58	Yes	17	5.882	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-52 (bg)	0.00243	70	58	Yes	17	94.12	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-55 (bg)	0.002375	66	58	Yes	17	94.12	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-55R (bg)	0.003006	78	58	Yes	17	82.35	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-51R_5...	0.00279	57	53	Yes	16	68.75	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-36R (bg)	0.02888	45	39	Yes	13	61.54	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-55 (bg)	0.0365	44	39	Yes	13	53.85	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-36 (bg)	-0.00...	-121	-84	Yes	22	63.64	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-36R (bg)	-0.00...	-119	-84	Yes	22	72.73	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-37 (bg)	-0.00...	-103	-84	Yes	22	86.36	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-38 (bg)	-0.00...	-101	-84	Yes	22	72.73	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-52 (bg)	0	-99	-84	Yes	22	100	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-53 (bg)	-0.00...	-126	-84	Yes	22	72.73	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-53R (bg)	-0.00...	-118	-84	Yes	22	86.36	n/a	n/a	0.02	NP

Cell 3&4 Background Sen Slopes - Significant

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Lead (mg/L)	GWA-54 (bg)	0	-99	-84	Yes	22	100	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-55 (bg)	-0.00...	-104	-84	Yes	22	90.91	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-55R (bg)	-0.00...	-100	-84	Yes	22	81.82	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-56 (bg)	-0.00...	-96	-84	Yes	22	77.27	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-51R_5...	0	-91	-84	Yes	22	95.45	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-36 (bg)	0.000...	110	84	Yes	22	86.36	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-36R (bg)	0.000...	103	84	Yes	22	81.82	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-37 (bg)	0.000...	131	84	Yes	22	86.36	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-38 (bg)	0.000...	133	84	Yes	22	81.82	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-52 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-53 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-53R (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-54 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-55 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-55R (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-56 (bg)	0.000...	105	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-51R_5...	0.000...	111	84	Yes	22	77.27	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-37 (bg)	-0.00331	-99	-58	Yes	17	5.882	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-52 (bg)	0.000...	65	58	Yes	17	94.12	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-53 (bg)	0.000...	66	58	Yes	17	88.24	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-53R (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-54 (bg)	0.000...	64	58	Yes	17	82.35	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-55 (bg)	0.000...	65	58	Yes	17	94.12	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-55R (bg)	0.000...	61	58	Yes	17	70.59	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-51R_5...	0.000...	54	53	Yes	16	87.5	n/a	n/a	0.02	NP
pH (pH units)	GWA-36 (bg)	-0.1873	-42	-39	Yes	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-37 (bg)	-0.1599	-50	-39	Yes	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-52 (bg)	-0.05149	-40	-39	Yes	13	0	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-36 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-36R (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-37 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-38 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-52 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-53 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-53R (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-54 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-56 (bg)	0	101	84	Yes	22	95.45	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-51R_5...	0.000...	111	84	Yes	22	45.45	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-36 (bg)	0.000...	72	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-36R (bg)	0.000...	72	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-37 (bg)	0.000...	72	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-38 (bg)	0.000...	80	58	Yes	17	94.12	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-52 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-53 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-53R (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-54 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-55 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-55R (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-56 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-51R_5...	0.000...	71	53	Yes	16	100	n/a	n/a	0.02	NP

Cell 3&4 Background Sen Slopes - Significant

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate (mg/L)	GWA-36 (bg)	-0.467	-59	-39	Yes	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-37 (bg)	-0.1584	-54	-39	Yes	13	7.692	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-54 (bg)	-1.397	-70	-39	Yes	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-53 (bg)	8.395	43	39	Yes	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-55 (bg)	26.18	42	39	Yes	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-55R (bg)	18.61	46	39	Yes	13	0	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-36 (bg)	0.000...	72	58	Yes	17	100	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-38 (bg)	0.000854	63	58	Yes	17	64.71	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-53 (bg)	0.000...	64	58	Yes	17	94.12	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-53R (bg)	0.000...	64	58	Yes	17	94.12	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-54 (bg)	0.000...	74	58	Yes	17	76.47	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-55 (bg)	0.000669	69	58	Yes	17	88.24	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-55R (bg)	0.000...	70	58	Yes	17	76.47	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-56 (bg)	0.000...	60	58	Yes	17	88.24	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-36 (bg)	0.09087	86	58	Yes	17	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-52 (bg)	0.000...	62	58	Yes	17	52.94	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-53R (bg)	0.001085	77	58	Yes	17	41.18	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-55 (bg)	0.001014	75	58	Yes	17	64.71	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-51R_5...	-0.00...	-65	-53	Yes	16	31.25	n/a	n/a	0.02	NP

Cell 3&4 Background Sen Slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Antimony (mg/L)	GWA-36 (bg)	-0.00...	-108	-84	Yes	22	86.36	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-36R (bg)	-0.00...	-117	-84	Yes	22	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-37 (bg)	0	-12	-84	No	22	40.91	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-38 (bg)	-0.00...	-117	-84	Yes	22	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-52 (bg)	-0.00...	-117	-84	Yes	22	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-53 (bg)	-0.00...	-113	-84	Yes	22	77.27	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-53R (bg)	-0.00...	-45	-84	No	22	54.55	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-54 (bg)	-0.00...	-130	-84	Yes	22	90.91	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-55 (bg)	-0.00...	-105	-84	Yes	22	95.45	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-55R (bg)	-0.00...	-113	-84	Yes	22	81.82	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-56 (bg)	-0.00...	-102	-84	Yes	22	95.45	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-51R_5...	-0.00...	-80	-84	No	22	63.64	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-36 (bg)	0	0	84	No	22	100	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-36R (bg)	0	-18	-84	No	22	81.82	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-37 (bg)	0	-9	-84	No	22	95.45	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-38 (bg)	0	-42	-84	No	22	86.36	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-52 (bg)	0	-27	-84	No	22	90.91	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-53 (bg)	0	-58	-84	No	22	81.82	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-53R (bg)	0	-42	-84	No	22	86.36	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-54 (bg)	0	-66	-84	No	22	81.82	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-55 (bg)	0	-54	-84	No	22	81.82	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-55R (bg)	0	-53	-84	No	22	72.73	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-56 (bg)	0	-70	-84	No	22	68.18	n/a	n/a	0.02	NP
Arsenic (mg/L)	GWA-51R_5...	-0.00...	-52	-84	No	22	36.36	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-36 (bg)	0.001969	131	84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-36R (bg)	0.000...	39	84	No	22	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-37 (bg)	-0.00...	-34	-84	No	22	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-38 (bg)	-0.00...	-144	-84	Yes	22	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-52 (bg)	-0.00...	-140	-84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-53 (bg)	-0.00...	-171	-84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-53R (bg)	0.000...	72	84	No	22	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-54 (bg)	-0.00...	-53	-84	No	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-55 (bg)	-0.00...	-56	-84	No	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-55R (bg)	-0.00663	-105	-84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-56 (bg)	0.004189	137	84	Yes	22	4.545	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-51R_5...	0.002791	59	84	No	22	0	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-36 (bg)	-0.00...	-21	-84	No	22	31.82	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-36R (bg)	0	-5	-84	No	22	50	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-37 (bg)	0.000...	111	84	Yes	22	95.45	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-38 (bg)	0.000...	121	84	Yes	22	72.73	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-52 (bg)	0	99	84	Yes	22	100	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-53 (bg)	0	73	84	No	22	95.45	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-53R (bg)	0	94	84	Yes	22	95.45	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-54 (bg)	0	99	84	Yes	22	100	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-55 (bg)	0	92	84	Yes	22	95.45	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-55R (bg)	0.000...	101	84	Yes	22	86.36	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-56 (bg)	0	82	84	No	22	95.45	n/a	n/a	0.02	NP
Beryllium (mg/L)	GWA-51R_5...	0.000...	104	84	Yes	22	95.45	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-36 (bg)	0.000...	135	84	Yes	22	13.64	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-36R (bg)	-0.00...	-129	-84	Yes	22	36.36	n/a	n/a	0.02	NP

Cell 3&4 Background Sen Slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Cadmium (mg/L)	GWA-37 (bg)	0	-66	-84	No	22	86.36	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-38 (bg)	-0.00...	-64	-84	No	22	72.73	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-52 (bg)	0	-71	-84	No	22	100	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-53 (bg)	0	-71	-84	No	22	100	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-53R (bg)	0	-71	-84	No	22	100	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-54 (bg)	0	-71	-84	No	22	100	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-55 (bg)	0	-71	-84	No	22	100	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-55R (bg)	0	-71	-84	No	22	100	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-56 (bg)	0	-68	-84	No	22	100	n/a	n/a	0.02	NP
Cadmium (mg/L)	GWA-51R_5...	0	-41	-84	No	22	90.91	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-36 (bg)	-2.683	-51	-39	Yes	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-36R (bg)	-0.78	-37	-39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-37 (bg)	-0.06834	-57	-39	Yes	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-38 (bg)	-0.08359	-5	-39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-52 (bg)	-0.0828	-3	-39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-53 (bg)	-0.6598	-13	-39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-53R (bg)	-0.154	-7	-39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-54 (bg)	-0.6984	-27	-39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-55 (bg)	3.374	27	39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-55R (bg)	1.26	12	39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-56 (bg)	-3.444	-36	-39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWA-51R_5...	2.108	25	39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-36 (bg)	-0.1108	-25	-39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-36R (bg)	-0.1475	-36	-39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-37 (bg)	-0.1103	-47	-39	Yes	13	7.692	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-38 (bg)	0.1266	30	39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-52 (bg)	-0.09111	-7	-39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-53 (bg)	-0.0341	-9	-39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-53R (bg)	-0.04917	-13	-39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-54 (bg)	-0.2096	-52	-39	Yes	13	7.692	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-55 (bg)	0.07273	17	39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-55R (bg)	0.1724	41	39	Yes	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-56 (bg)	0.1853	9	39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-51R_5...	0.1345	18	39	No	13	0	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-36 (bg)	0.000...	98	84	Yes	22	77.27	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-36R (bg)	0.000...	72	84	No	22	63.64	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-37 (bg)	0	79	84	No	22	81.82	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-38 (bg)	0	-2	-84	No	22	22.73	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-52 (bg)	0.000...	76	84	No	22	59.09	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-53 (bg)	0	62	84	No	22	77.27	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-53R (bg)	0	61	84	No	22	81.82	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-54 (bg)	0.000...	121	84	Yes	22	40.91	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-55 (bg)	0.000...	93	84	Yes	22	77.27	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-55R (bg)	0.001058	126	84	Yes	22	86.36	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-56 (bg)	0.000...	96	84	Yes	22	86.36	n/a	n/a	0.02	NP
Chromium (mg/L)	GWA-51R_5...	-0.00...	-130	-84	Yes	22	54.55	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-36 (bg)	0	41	58	No	17	88.24	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-36R (bg)	0.001613	39	58	No	17	70.59	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-37 (bg)	-0.00...	-88	-58	Yes	17	5.882	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-38 (bg)	0.002401	50	58	No	17	58.82	n/a	n/a	0.02	NP

Cell 3&4 Background Sen Slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Copper (mg/L)	GWA-52 (bg)	0.00243	70	58	Yes	17	94.12	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-53 (bg)	0	55	58	No	17	94.12	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-53R (bg)	0.002315	51	58	No	17	88.24	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-54 (bg)	0	55	58	No	17	94.12	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-55 (bg)	0.002375	66	58	Yes	17	94.12	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-55R (bg)	0.003006	78	58	Yes	17	82.35	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-56 (bg)	0	34	58	No	17	88.24	n/a	n/a	0.02	NP
Copper (mg/L)	GWA-51R_5...	0.00279	57	53	Yes	16	68.75	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-36 (bg)	0	23	39	No	13	84.62	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-36R (bg)	0.02888	45	39	Yes	13	61.54	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-37 (bg)	0.004345	36	39	No	13	69.23	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-38 (bg)	0	29	39	No	13	76.92	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-52 (bg)	0.02066	30	39	No	13	46.15	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-53 (bg)	0.02931	36	39	No	13	61.54	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-53R (bg)	0.003528	14	39	No	13	38.46	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-54 (bg)	0.0129	16	39	No	13	30.77	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-55 (bg)	0.0365	44	39	Yes	13	53.85	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-55R (bg)	0.03033	37	39	No	13	46.15	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-56 (bg)	0.02081	9	39	No	13	7.692	n/a	n/a	0.02	NP
Fluoride (mg/L)	GWA-51R_5...	0.02148	23	39	No	13	15.38	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-36 (bg)	-0.00...	-121	-84	Yes	22	63.64	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-36R (bg)	-0.00...	-119	-84	Yes	22	72.73	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-37 (bg)	-0.00...	-103	-84	Yes	22	86.36	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-38 (bg)	-0.00...	-101	-84	Yes	22	72.73	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-52 (bg)	0	-99	-84	Yes	22	100	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-53 (bg)	-0.00...	-126	-84	Yes	22	72.73	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-53R (bg)	-0.00...	-118	-84	Yes	22	86.36	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-54 (bg)	0	-99	-84	Yes	22	100	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-55 (bg)	-0.00...	-104	-84	Yes	22	90.91	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-55R (bg)	-0.00...	-100	-84	Yes	22	81.82	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-56 (bg)	-0.00...	-96	-84	Yes	22	77.27	n/a	n/a	0.02	NP
Lead (mg/L)	GWA-51R_5...	0	-91	-84	Yes	22	95.45	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-36 (bg)	0.000...	110	84	Yes	22	86.36	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-36R (bg)	0.000...	103	84	Yes	22	81.82	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-37 (bg)	0.000...	131	84	Yes	22	86.36	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-38 (bg)	0.000...	133	84	Yes	22	81.82	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-52 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-53 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-53R (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-54 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-55 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-55R (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-56 (bg)	0.000...	105	84	Yes	22	100	n/a	n/a	0.02	NP
Mercury (mg/L)	GWA-51R_5...	0.000...	111	84	Yes	22	77.27	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-36 (bg)	0	34	58	No	17	76.47	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-36R (bg)	0.000...	32	58	No	17	58.82	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-37 (bg)	-0.00331	-99	-58	Yes	17	5.882	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-38 (bg)	-0.00...	-21	-58	No	17	29.41	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-52 (bg)	0.000...	65	58	Yes	17	94.12	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-53 (bg)	0.000...	66	58	Yes	17	88.24	n/a	n/a	0.02	NP

Cell 3&4 Background Sen Slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Nickel (mg/L)	GWA-53R (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-54 (bg)	0.000...	64	58	Yes	17	82.35	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-55 (bg)	0.000...	65	58	Yes	17	94.12	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-55R (bg)	0.000...	61	58	Yes	17	70.59	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-56 (bg)	0.000...	57	58	No	17	94.12	n/a	n/a	0.02	NP
Nickel (mg/L)	GWA-51R_5...	0.000...	54	53	Yes	16	87.5	n/a	n/a	0.02	NP
pH (pH units)	GWA-36 (bg)	-0.1873	-42	-39	Yes	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-36R (bg)	-0.05561	-24	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-37 (bg)	-0.1599	-50	-39	Yes	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-38 (bg)	0.03202	6	39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-52 (bg)	-0.05149	-40	-39	Yes	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-53 (bg)	-0.04874	-31	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-53R (bg)	-0.02131	-17	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-54 (bg)	-0.0381	-15	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-55 (bg)	-0.04615	-11	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-55R (bg)	-0.05302	-18	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-56 (bg)	0.08022	35	44	No	14	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-51R_5...	-0.01034	-7	-44	No	14	0	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-36 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-36R (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-37 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-38 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-52 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-53 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-53R (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-54 (bg)	0.000...	117	84	Yes	22	100	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-55 (bg)	0	71	84	No	22	81.82	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-55R (bg)	0	68	84	No	22	86.36	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-56 (bg)	0	101	84	Yes	22	95.45	n/a	n/a	0.02	NP
Selenium (mg/L)	GWA-51R_5...	0.000...	111	84	Yes	22	45.45	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-36 (bg)	0.000...	72	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-36R (bg)	0.000...	72	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-37 (bg)	0.000...	72	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-38 (bg)	0.000...	80	58	Yes	17	94.12	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-52 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-53 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-53R (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-54 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-55 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-55R (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-56 (bg)	0.000...	80	58	Yes	17	100	n/a	n/a	0.02	NP
Silver (mg/L)	GWA-51R_5...	0.000...	71	53	Yes	16	100	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-36 (bg)	-0.467	-59	-39	Yes	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-36R (bg)	0.3152	10	39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-37 (bg)	-0.1584	-54	-39	Yes	13	7.692	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-38 (bg)	-0.281	-22	-39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-52 (bg)	-0.1383	-2	-39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-53 (bg)	-0.04299	-18	-39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-53R (bg)	-0.04882	-12	-39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-54 (bg)	-1.397	-70	-39	Yes	13	0	n/a	n/a	0.02	NP

Cell 3&4 Background Sen Slopes

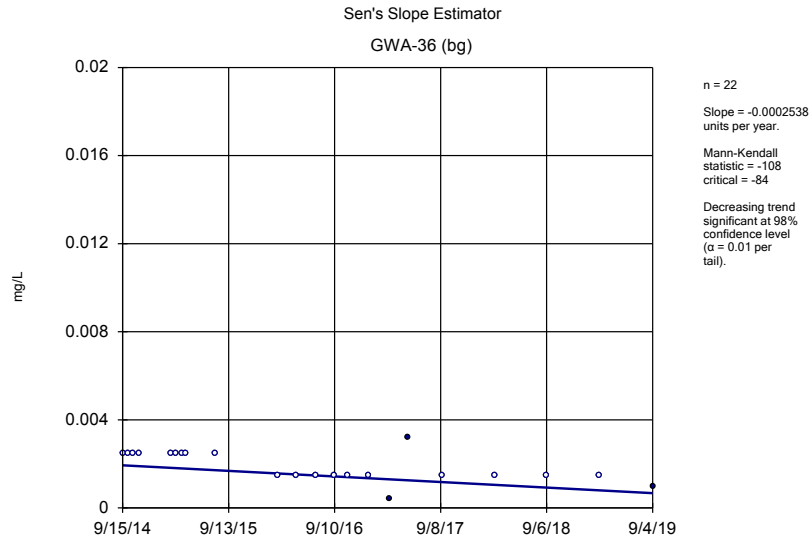
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Sulfate (mg/L)	GWA-55 (bg)	0.1807	0	39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-55R (bg)	1.435	31	39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-56 (bg)	9.859	22	39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-51R_5...	2.388	39	39	No	13	0	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-36 (bg)	0	-11	-84	No	22	90.91	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-36R (bg)	0	21	78	No	21	90.48	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-37 (bg)	0	0	84	No	22	100	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-38 (bg)	0	0	84	No	22	100	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-52 (bg)	0	8	84	No	22	86.36	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-53 (bg)	0	60	84	No	22	59.09	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-53R (bg)	0	0	78	No	21	100	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-54 (bg)	0	72	84	No	22	54.55	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-55 (bg)	0	-1	-84	No	22	63.64	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-55R (bg)	0	-9	-84	No	22	95.45	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-56 (bg)	0	-3	-84	No	22	100	n/a	n/a	0.02	NP
Thallium (mg/L)	GWA-51R_5...	0	-5	-84	No	22	68.18	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-36 (bg)	-6.489	-13	-39	No	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-36R (bg)	-1.015	-1	-39	No	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-37 (bg)	1.247	10	39	No	13	30.77	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-38 (bg)	6.795	20	39	No	13	38.46	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-52 (bg)	8.715	31	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-53 (bg)	8.395	43	39	Yes	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-53R (bg)	5.825	21	35	No	12	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-54 (bg)	4.271	19	39	No	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-55 (bg)	26.18	42	39	Yes	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-55R (bg)	18.61	46	39	Yes	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-56 (bg)	49.43	34	39	No	13	0	n/a	n/a	0.02	NP
Total Dissolved Solids (mg/l)	GWA-51R_5...	20.49	22	39	No	13	0	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-36 (bg)	0.000...	72	58	Yes	17	100	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-36R (bg)	0.000...	50	58	No	17	70.59	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-37 (bg)	0.000...	51	58	No	17	88.24	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-38 (bg)	0.000854	63	58	Yes	17	64.71	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-52 (bg)	0.000...	57	58	No	17	82.35	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-53 (bg)	0.000...	64	58	Yes	17	94.12	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-53R (bg)	0.000...	64	58	Yes	17	94.12	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-54 (bg)	0.000...	74	58	Yes	17	76.47	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-55 (bg)	0.000669	69	58	Yes	17	88.24	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-55R (bg)	0.000...	70	58	Yes	17	76.47	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-56 (bg)	0.000...	60	58	Yes	17	88.24	n/a	n/a	0.02	NP
Vanadium (mg/L)	GWA-51R_5...	0	18	53	No	16	50	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-36 (bg)	0.09087	86	58	Yes	17	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-36R (bg)	-0.00...	-8	-58	No	17	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-37 (bg)	-0.00...	-40	-58	No	17	5.882	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-38 (bg)	-0.00...	-32	-58	No	17	23.53	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-52 (bg)	0.000...	62	58	Yes	17	52.94	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-53 (bg)	0.000...	57	58	No	17	47.06	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-53R (bg)	0.001085	77	58	Yes	17	41.18	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-54 (bg)	0.000...	56	58	No	17	41.18	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-55 (bg)	0.001014	75	58	Yes	17	64.71	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-55R (bg)	0.000...	31	58	No	17	58.82	n/a	n/a	0.02	NP

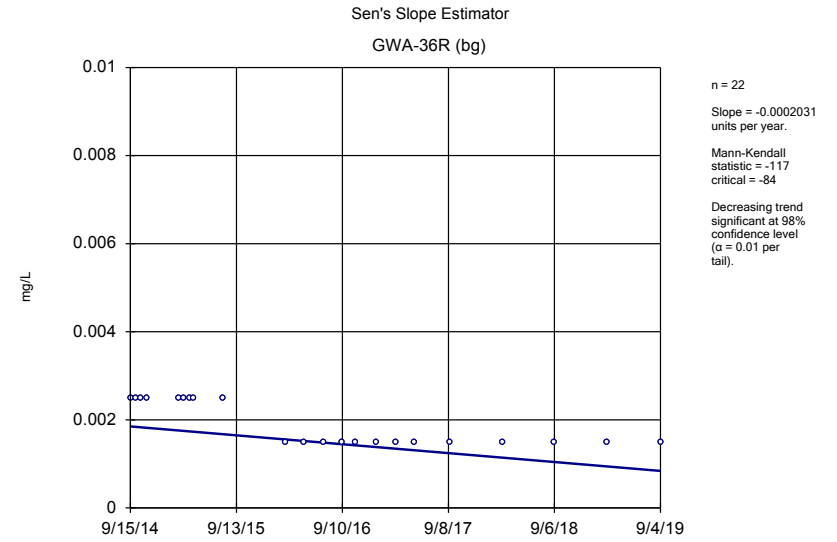
Cell 3&4 Background Sen Slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:11 PM

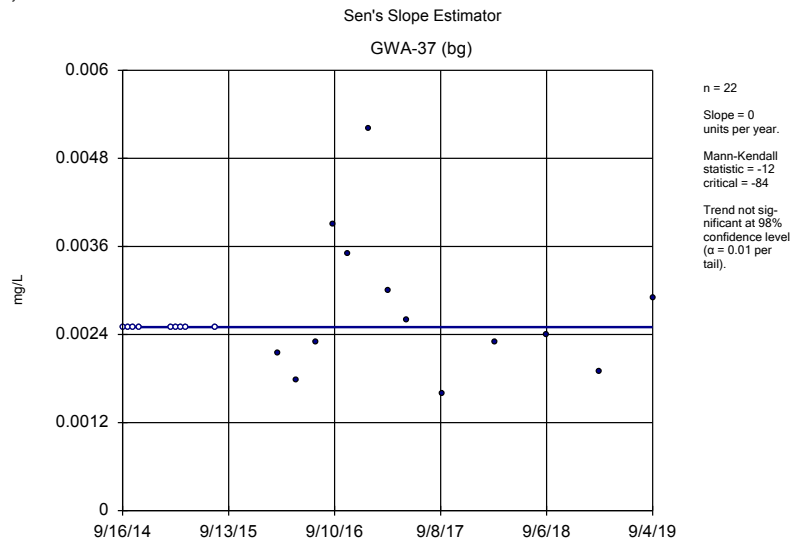
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Zinc (mg/L)	GWA-56 (bg)	0.000...	51	58	No	17	47.06	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-51R_5...	-0.00...	-65	-53	Yes	16	31.25	n/a	n/a	0.02	NP



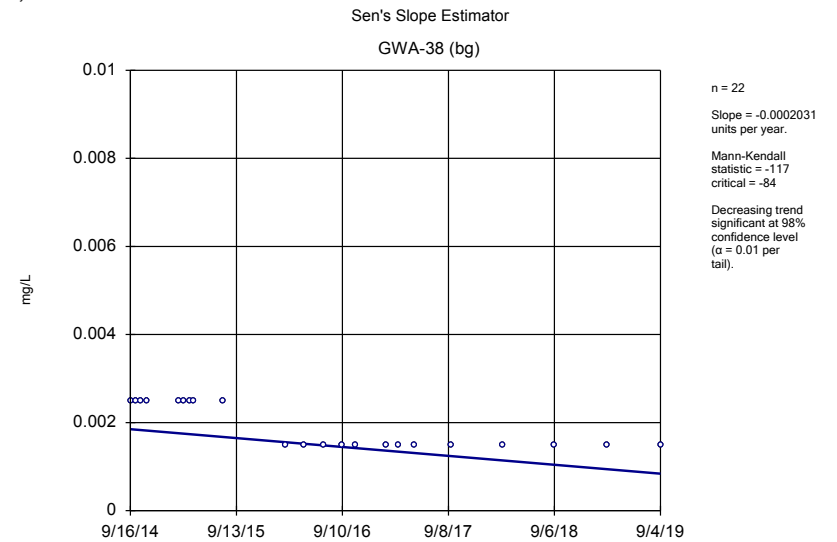
Constituent: Antimony Analysis Run 12/9/2019 1:19 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 12/9/2019 1:19 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 12/9/2019 1:20 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Antimony Analysis Run 12/9/2019 1:20 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.003
5/2/2016	<0.003
7/7/2016	<0.003 (*)
9/7/2016	<0.003
10/25/2016	<0.003
1/5/2017	<0.003
3/15/2017	0.0004 (J)
5/17/2017	0.0032
9/15/2017	<0.003
3/12/2018	<0.003
9/6/2018	<0.003
3/6/2019	<0.003
9/4/2019	0.001 (X)

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.003
5/2/2016	<0.003
7/6/2016	<0.003 (*)
9/7/2016	<0.003
10/25/2016	<0.003
1/5/2017	<0.003
3/14/2017	<0.003
5/16/2017	<0.003
9/15/2017	<0.003
3/12/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003
9/4/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

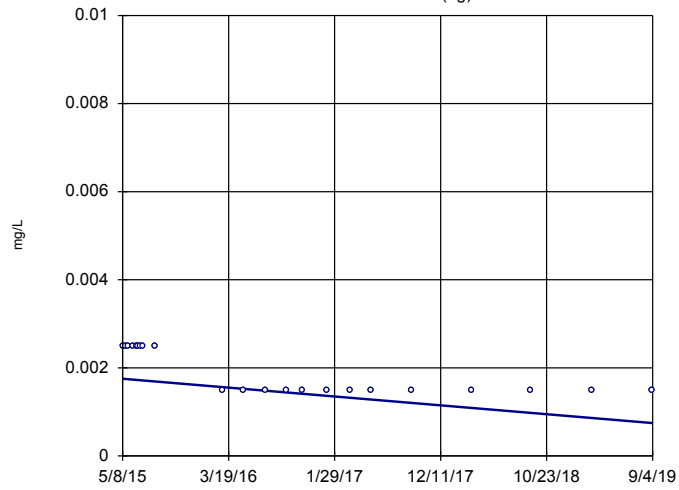
	GWA-37 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/1/2016	0.00214 (J)
5/3/2016	0.00178 (J)
7/8/2016	0.0023 (J)
9/7/2016	0.0039
10/25/2016	0.0035
1/6/2017	0.0052
3/14/2017	0.003
5/16/2017	0.0026 (J)
9/15/2017	0.0016 (J)
3/12/2018	0.0023 (J)
9/6/2018	0.0024 (J)
3/6/2019	0.0019 (X)
9/4/2019	0.0029 (X)

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/6/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/2/2016	<0.003
5/3/2016	<0.003
7/7/2016	<0.003
9/8/2016	<0.003
10/25/2016	<0.003
2/9/2017	<0.003
3/23/2017	<0.003
5/17/2017	<0.003
9/19/2017	<0.003
3/13/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003
9/4/2019	<0.003

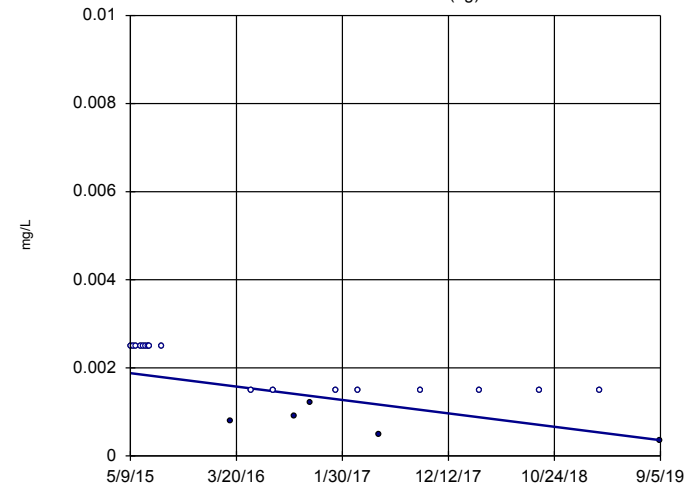
Sen's Slope Estimator
GWA-52 (bg)



n = 22
Slope = -0.0002323
units per year.
Mann-Kendall
statistic = -117
critical = -84
Decreasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Antimony Analysis Run 12/9/2019 1:20 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

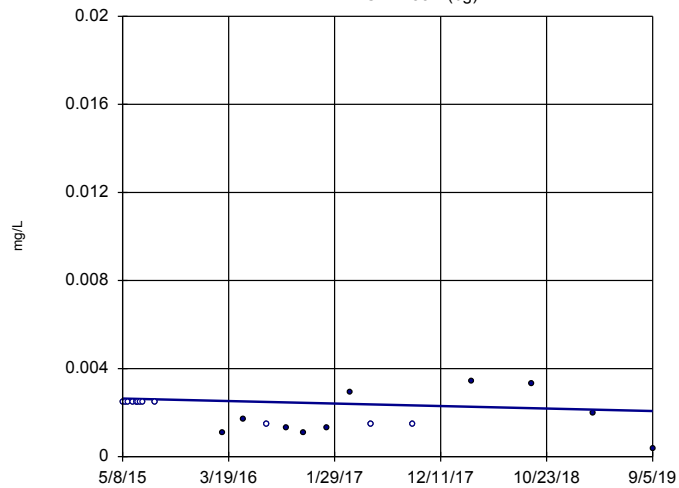
Sen's Slope Estimator
GWA-53 (bg)



n = 22
Slope = -0.0003513
units per year.
Mann-Kendall
statistic = -113
critical = -84
Decreasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Antimony Analysis Run 12/9/2019 1:21 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

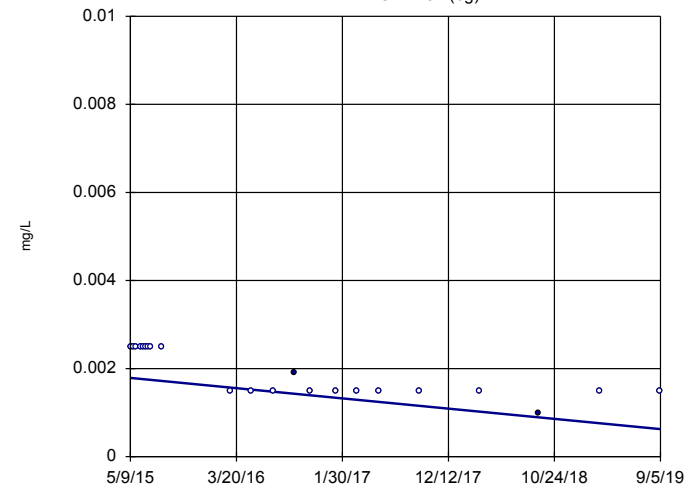
Sen's Slope Estimator
GWA-53R (bg)



n = 22
Slope = -0.0001316
units per year.
Mann-Kendall
statistic = -45
critical = -84
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Antimony Analysis Run 12/9/2019 1:21 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



n = 22
Slope = -0.0002684
units per year.
Mann-Kendall
statistic = -130
critical = -84
Decreasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Antimony Analysis Run 12/9/2019 1:21 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
2/29/2016	<0.003
5/4/2016	<0.003
7/8/2016	<0.003 (*)
9/8/2016	<0.003
10/26/2016	<0.003
1/6/2017	<0.003
3/15/2017	<0.003
5/17/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003
9/4/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/17/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	0.000782 (J)
5/3/2016	<0.003
7/8/2016	<0.003 (*)
9/8/2016	0.0009 (J)
10/26/2016	0.0012 (J)
1/9/2017	<0.003
3/16/2017	<0.003
5/19/2017	0.0005 (J)
9/19/2017	<0.003
3/13/2018	<0.003
9/11/2018	<0.003
3/8/2019	<0.003
9/5/2019	0.00035 (X)

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	0.00106 (J)
5/3/2016	0.00171 (J)
7/11/2016	<0.003 (*)
9/7/2016	0.0013 (J)
10/27/2016	0.0011 (J)
1/6/2017	0.0013 (J)
3/16/2017	0.0029 (J)
5/19/2017	<0.003
9/19/2017	<0.003
3/13/2018	0.0034
9/11/2018	0.0033
3/12/2019	0.002 (X)
9/5/2019	0.00035 (X)

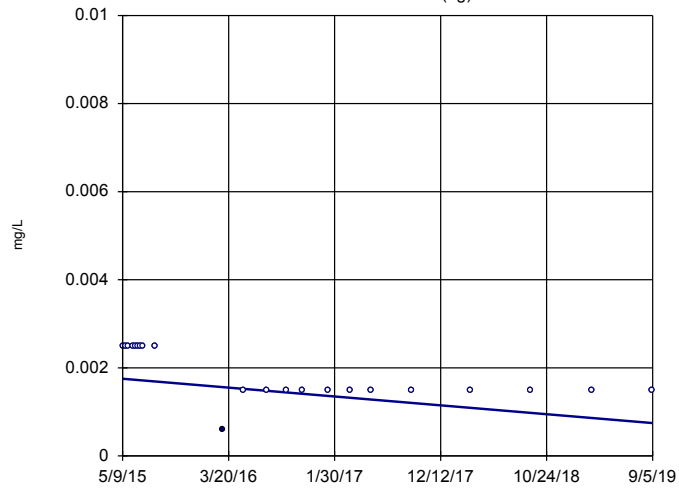
Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.003
5/4/2016	<0.003
7/8/2016	<0.003
9/8/2016	0.0019 (J)
10/26/2016	<0.003
1/9/2017	<0.003
3/15/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/6/2018	0.001 (J)
3/7/2019	<0.003
9/5/2019	<0.003

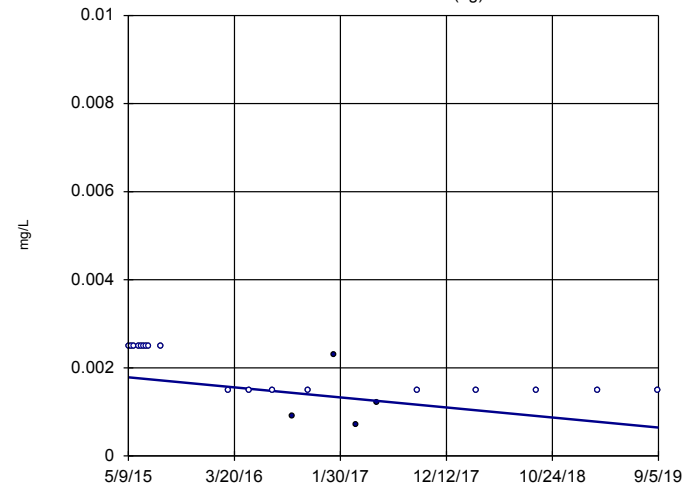
Sen's Slope Estimator
GWA-55 (bg)



n = 22
Slope = -0.0002323
units per year.
Mann-Kendall
statistic = -105
critical = -84
Decreasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Antimony Analysis Run 12/9/2019 1:22 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

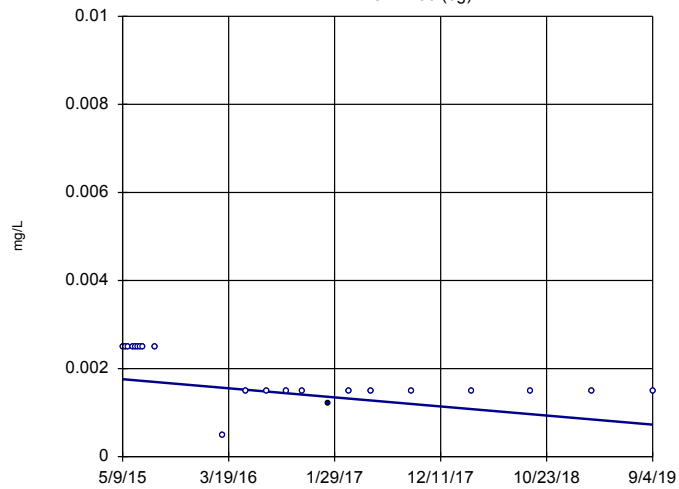
Sen's Slope Estimator
GWA-55R (bg)



n = 22
Slope = -0.0002628
units per year.
Mann-Kendall
statistic = -113
critical = -84
Decreasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Antimony Analysis Run 12/9/2019 1:22 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

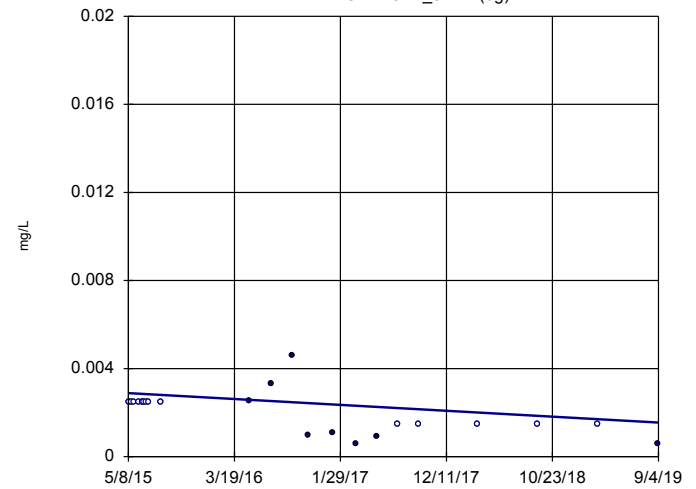
Sen's Slope Estimator
GWA-56 (bg)



n = 22
Slope = -0.0002383
units per year.
Mann-Kendall
statistic = -102
critical = -84
Decreasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Antimony Analysis Run 12/9/2019 1:22 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-51R_51RZ (bg)



n = 22
Slope = -0.0003075
units per year.
Mann-Kendall
statistic = -80
critical = -84
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Antimony Analysis Run 12/9/2019 1:23 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/2/2016	0.000608 (J)
5/3/2016	<0.003
7/11/2016	<0.003 (*)
9/9/2016	<0.003
10/26/2016	<0.003
1/9/2017	<0.003
3/16/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/12/2018	<0.003
9/7/2018	<0.003
3/8/2019	<0.003
9/5/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.003
5/3/2016	<0.003
7/11/2016	<0.003 (*)
9/9/2016	0.0009 (J)
10/27/2016	<0.003
1/9/2017	0.0023 (J)
3/16/2017	0.0007 (J)
5/18/2017	0.0012 (J)
9/18/2017	<0.003
3/12/2018	<0.003
9/7/2018	<0.003
3/7/2019	<0.003
9/5/2019	<0.003

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.005
5/19/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.001
5/9/2016	<0.003
7/11/2016	<0.003
9/9/2016	<0.003
10/26/2016	<0.003
1/9/2017	0.0012 (J)
3/15/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/7/2018	<0.003
3/7/2019	<0.003
9/4/2019	<0.003

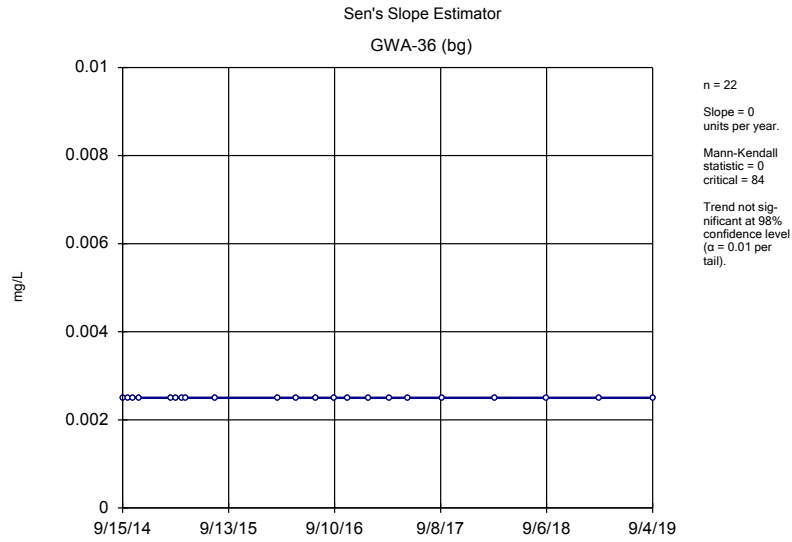
Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

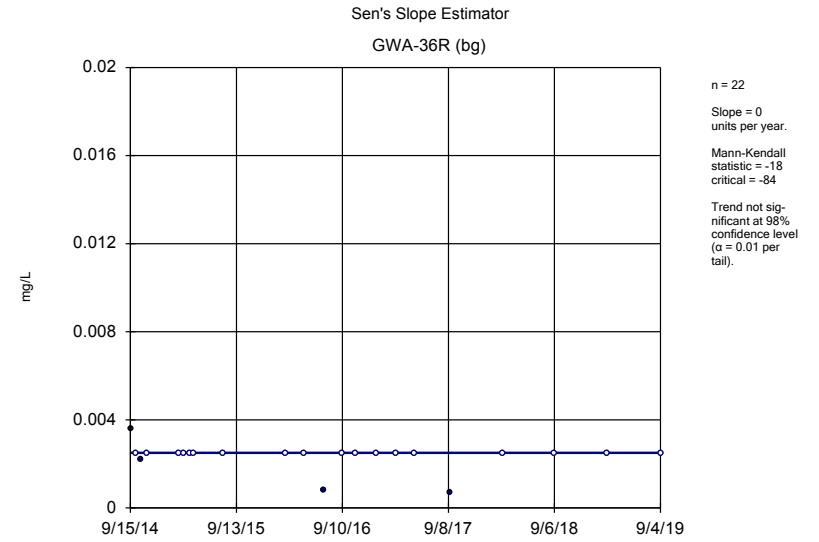
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

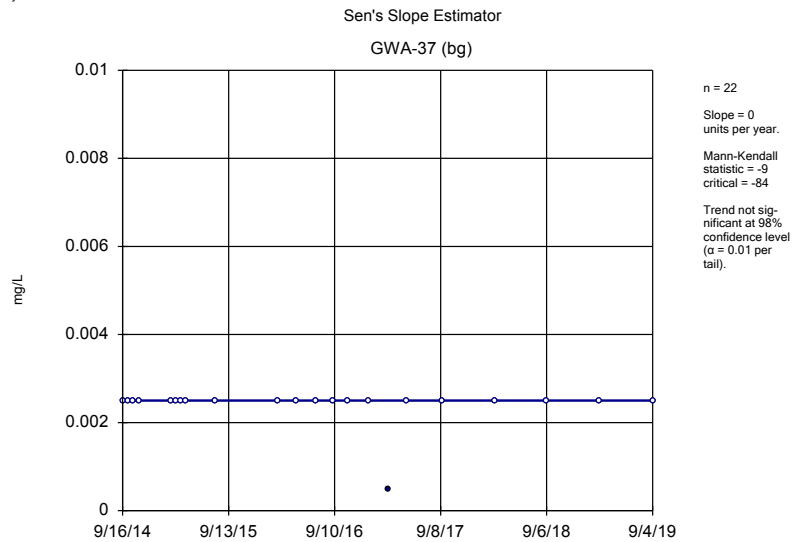
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
5/4/2016	0.00254 (JD)
7/7/2016	0.0033 (D)
9/8/2016	0.0046 (D)
10/26/2016	0.001 (JD)
1/6/2017	0.0011 (JD)
3/15/2017	0.0006 (JD)
5/18/2017	0.0009 (JD)
7/19/2017	<0.003 (D)
9/19/2017	<0.003 (D)
3/13/2018	<0.003
9/7/2018	<0.003
3/8/2019	<0.003
9/4/2019	0.0006 (X)



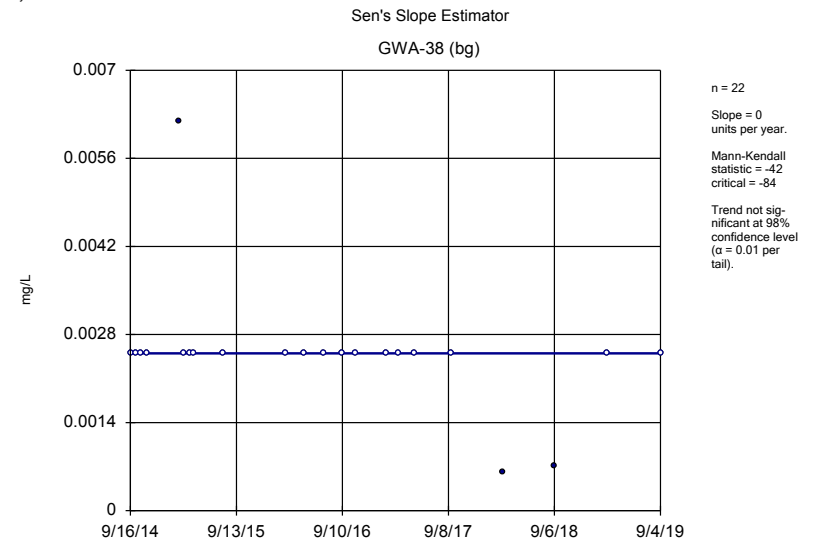
Constituent: Arsenic Analysis Run 12/9/2019 1:23 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Arsenic Analysis Run 12/9/2019 1:23 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Arsenic Analysis Run 12/9/2019 1:24 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Arsenic Analysis Run 12/9/2019 1:24 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.005
5/2/2016	<0.005
7/7/2016	<0.005
9/7/2016	<0.005
10/25/2016	<0.005
1/5/2017	<0.005
3/15/2017	<0.005
5/17/2017	<0.005
9/15/2017	<0.005
3/12/2018	<0.005
9/6/2018	<0.005
3/6/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.0036 (J)
10/3/2014	<0.005
10/20/2014	0.0022 (J)
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.005
5/2/2016	<0.005
7/6/2016	0.0008 (J)
9/7/2016	<0.005
10/25/2016	<0.005
1/5/2017	<0.005
3/14/2017	<0.005
5/16/2017	<0.005
9/15/2017	0.0007 (J)
3/12/2018	<0.005
9/6/2018	<0.005
3/7/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

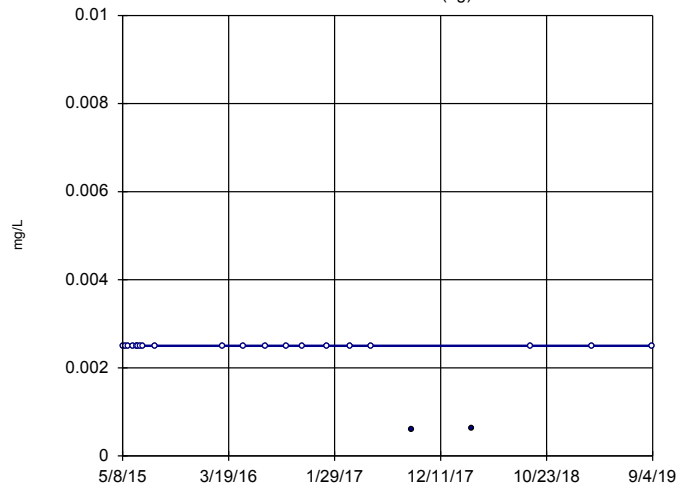
	GWA-37 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.005
5/3/2016	<0.005
7/8/2016	<0.005
9/7/2016	<0.005
10/25/2016	<0.005
1/6/2017	<0.005
3/14/2017	0.0005 (J)
5/16/2017	<0.005
9/15/2017	<0.005
3/12/2018	<0.005
9/6/2018	<0.005
3/6/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

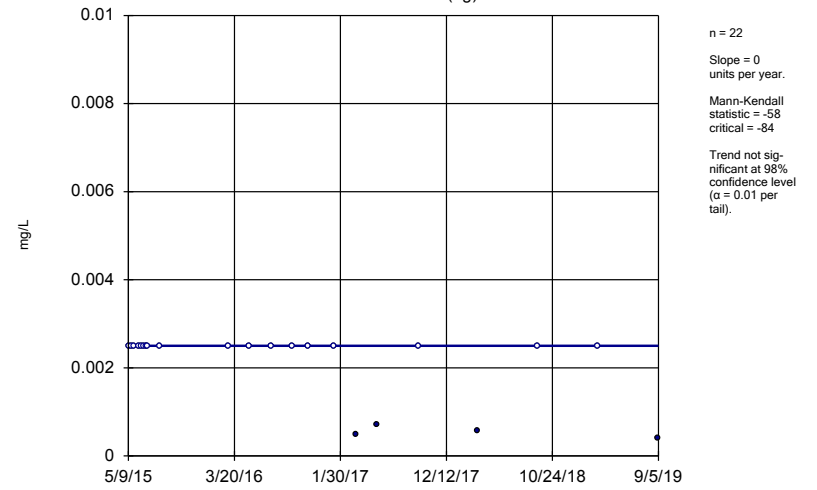
	GWA-38 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	0.0062
3/17/2015	<0.005
4/6/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/2/2016	<0.005
5/3/2016	<0.005
7/7/2016	<0.005
9/8/2016	<0.005
10/25/2016	<0.005
2/9/2017	<0.005
3/23/2017	<0.005
5/17/2017	<0.005
9/19/2017	<0.005
3/13/2018	0.00061 (J)
9/6/2018	0.00071 (J)
3/7/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator
GWA-52 (bg)



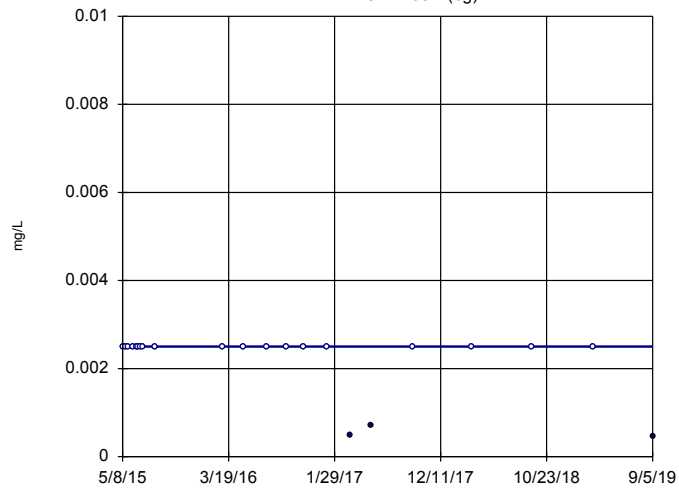
Constituent: Arsenic Analysis Run 12/9/2019 1:24 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53 (bg)



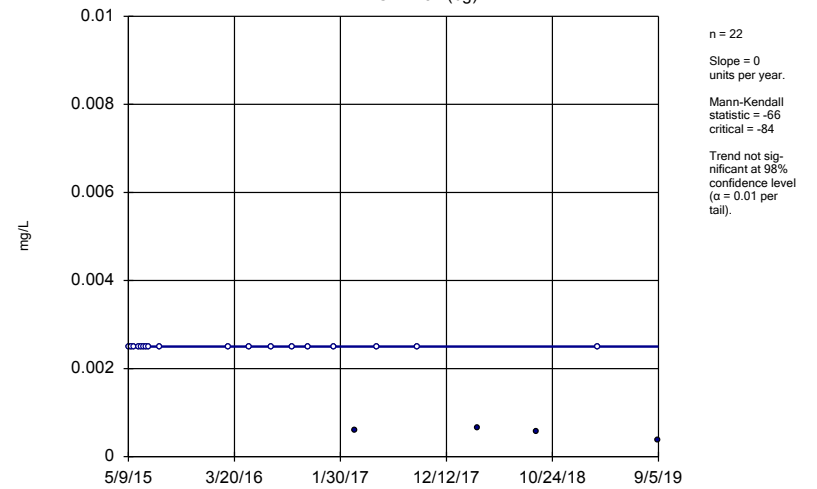
Constituent: Arsenic Analysis Run 12/9/2019 1:25 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



Constituent: Arsenic Analysis Run 12/9/2019 1:25 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



Constituent: Arsenic Analysis Run 12/9/2019 1:25 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
2/29/2016	<0.005
5/4/2016	<0.005
7/8/2016	<0.005
9/8/2016	<0.005
10/26/2016	<0.005
1/6/2017	<0.005
3/15/2017	<0.005
5/17/2017	<0.005
9/15/2017	0.0006 (J)
3/13/2018	0.00063 (J)
9/6/2018	<0.005
3/7/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/17/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.005
5/3/2016	<0.005
7/8/2016	<0.005
9/8/2016	<0.005
10/26/2016	<0.005
1/9/2017	<0.005
3/16/2017	0.0005 (J)
5/19/2017	0.0007 (J)
9/19/2017	<0.005
3/13/2018	0.00058 (J)
9/11/2018	<0.005
3/8/2019	<0.005
9/5/2019	0.00039 (X)

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

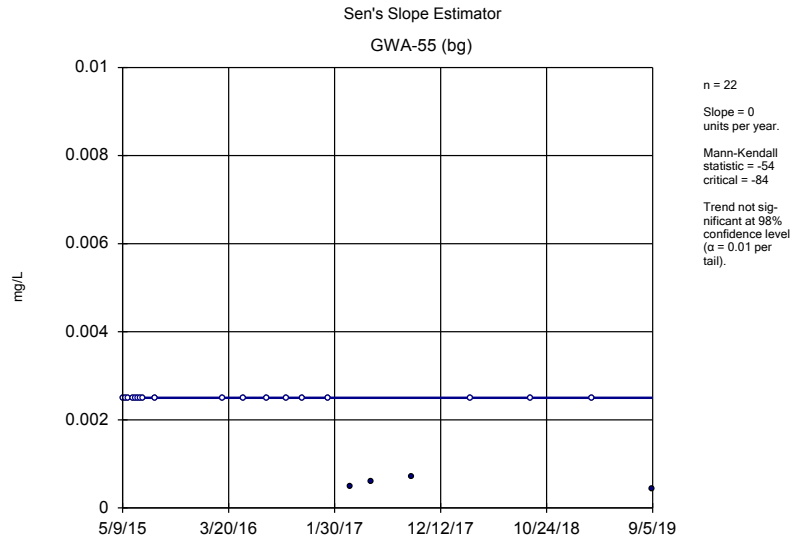
	GWA-53R (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.005
5/3/2016	<0.005
7/11/2016	<0.005
9/7/2016	<0.005
10/27/2016	<0.005
1/6/2017	<0.005
3/16/2017	0.0005 (J)
5/19/2017	0.0007 (J)
9/19/2017	<0.005
3/13/2018	<0.005
9/11/2018	<0.005
3/12/2019	<0.005
9/5/2019	0.00046 (X)

Sen's Slope Estimator

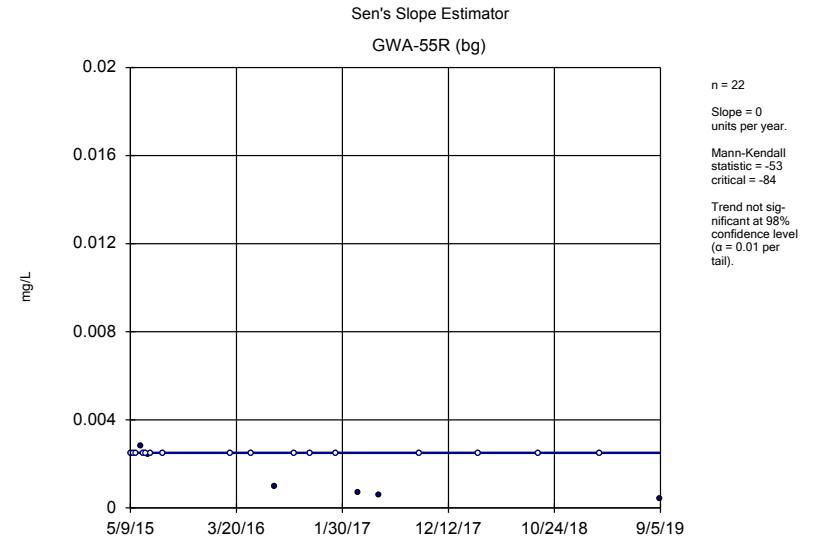
Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:11 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

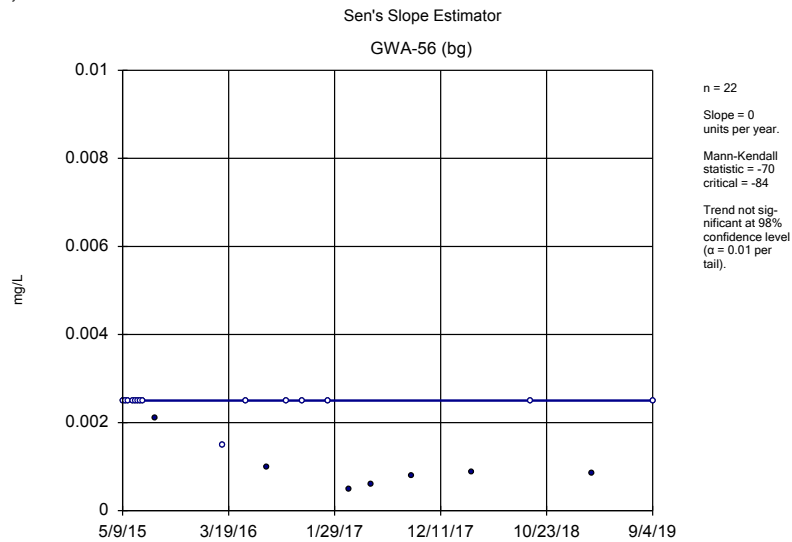
	GWA-54 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.005
5/4/2016	<0.005
7/8/2016	<0.005
9/8/2016	<0.005
10/26/2016	<0.005
1/9/2017	<0.005
3/15/2017	0.0006 (J)
5/18/2017	<0.005
9/15/2017	<0.005
3/13/2018	0.00066 (J)
9/6/2018	0.00057 (J)
3/7/2019	<0.005
9/5/2019	0.00038 (X)



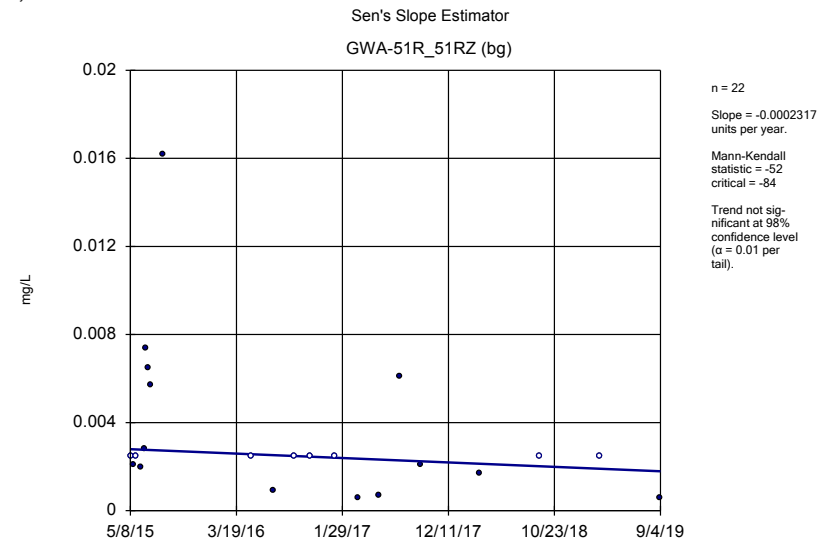
Constituent: Arsenic Analysis Run 12/9/2019 1:26 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Arsenic Analysis Run 12/9/2019 1:26 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Arsenic Analysis Run 12/9/2019 1:26 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Arsenic Analysis Run 12/9/2019 1:27 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/2/2016	<0.005
5/3/2016	<0.005
7/11/2016	<0.005
9/9/2016	<0.005
10/26/2016	<0.005
1/9/2017	<0.005
3/16/2017	0.0005 (J)
5/18/2017	0.0006 (J)
9/15/2017	0.0007 (J)
3/12/2018	<0.005
9/7/2018	<0.005
3/8/2019	<0.005
9/5/2019	0.00044 (X)

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	0.0028 (J)
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	0.0024 (J)
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.005
5/3/2016	<0.005
7/11/2016	0.001 (J)
9/9/2016	<0.005
10/27/2016	<0.005
1/9/2017	<0.005
3/16/2017	0.0007 (J)
5/18/2017	0.0006 (J)
9/18/2017	<0.005
3/12/2018	<0.005
9/7/2018	<0.005
3/7/2019	<0.005
9/5/2019	0.00042 (X)

Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.005
5/19/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	0.0021 (J)
3/3/2016	<0.003
5/9/2016	<0.005
7/11/2016	0.001 (J)
9/9/2016	<0.005
10/26/2016	<0.005
1/9/2017	<0.005
3/15/2017	0.0005 (J)
5/18/2017	0.0006 (J)
9/15/2017	0.0008 (J)
3/13/2018	0.00088 (J)
9/7/2018	<0.005
3/7/2019	0.00085 (X)
9/4/2019	<0.005

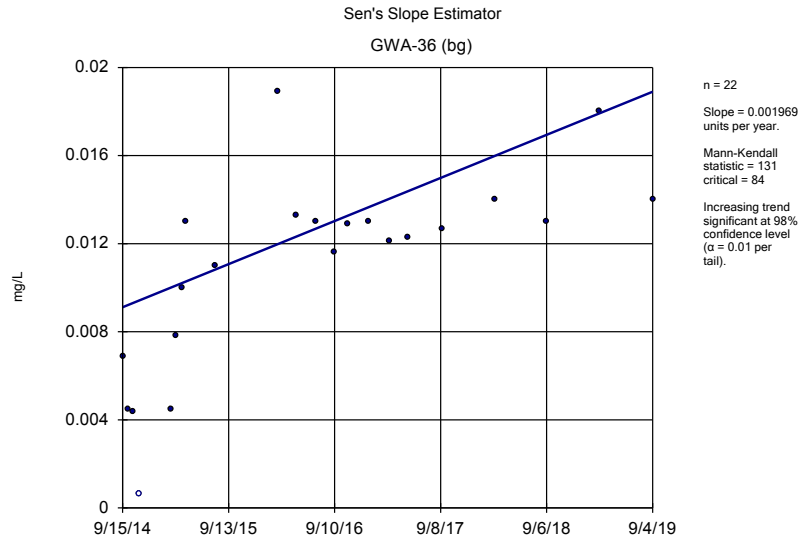
Sen's Slope Estimator

Constituent: Arsenic (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

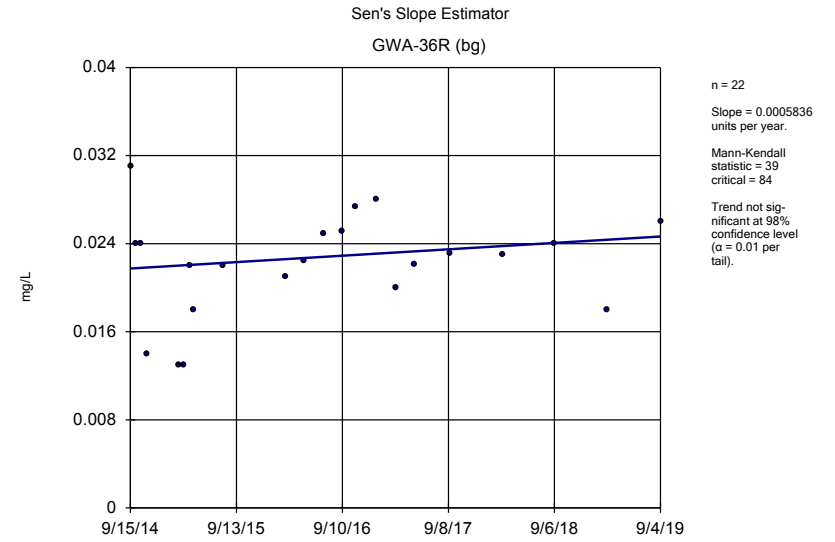
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

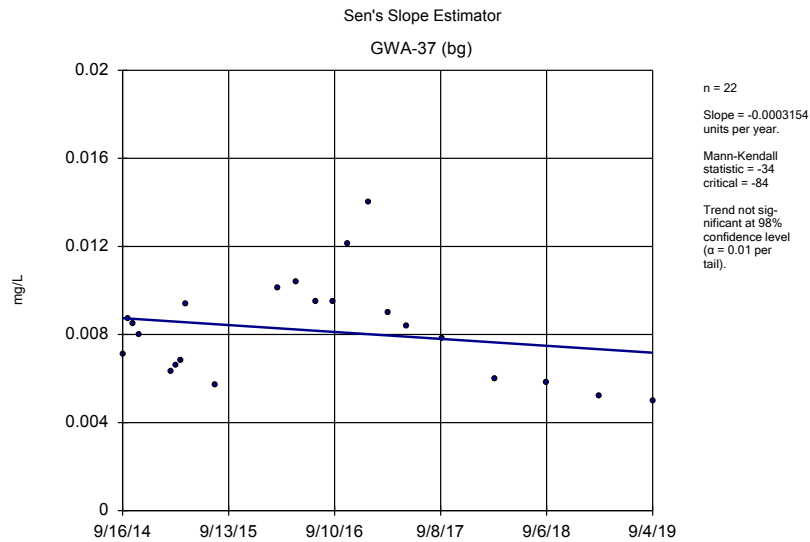
5/8/2015	<0.005
5/17/2015	0.0021 (J)
5/25/2015	<0.005
6/8/2015	0.002 (J)
6/18/2015	0.0028 (J)
6/24/2015	0.0074
6/30/2015	0.0065
7/6/2015	0.0057
8/12/2015	0.0162
5/4/2016	<0.005 (D)
7/7/2016	0.0009 (JD)
9/8/2016	<0.005 (D)
10/26/2016	<0.005 (D)
1/6/2017	<0.005 (D)
3/15/2017	0.0006 (JD)
5/18/2017	0.0007 (JD)
7/19/2017	0.0061 (D)
9/19/2017	0.0021 (JD)
3/13/2018	0.0017 (J)
9/7/2018	<0.005
3/8/2019	<0.005
9/4/2019	0.00061 (X)



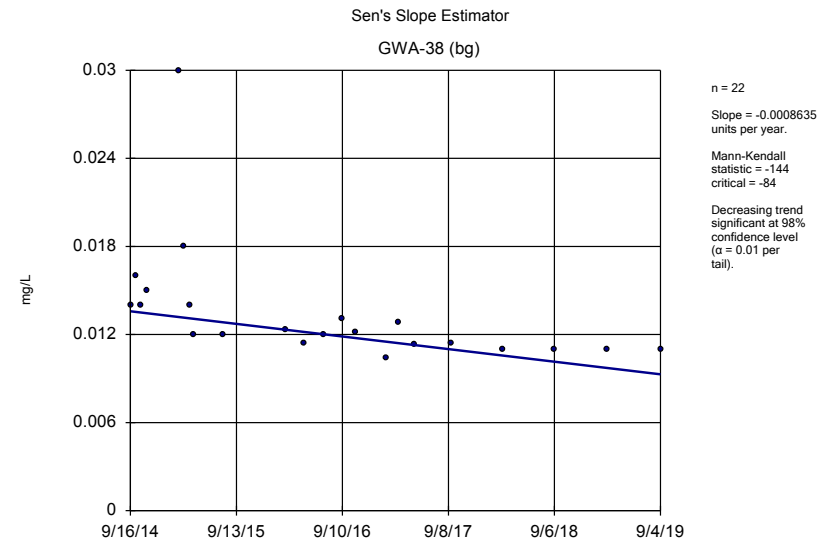
Constituent: Barium Analysis Run 12/9/2019 1:27 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:27 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:28 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:28 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	0.0069
10/3/2014	0.0045
10/20/2014	0.0044
11/10/2014	<0.0013
3/2/2015	0.0045
3/17/2015	0.0078
4/5/2015	0.01
4/21/2015	0.013
7/28/2015	0.011
3/1/2016	0.0189
5/2/2016	0.0133
7/7/2016	0.013
9/7/2016	0.0116
10/25/2016	0.0129
1/5/2017	0.013
3/15/2017	0.0121
5/17/2017	0.0123
9/15/2017	0.0127
3/12/2018	0.014
9/6/2018	0.013
3/6/2019	0.018
9/4/2019	0.014

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.031
10/3/2014	0.024
10/20/2014	0.024
11/10/2014	0.014
3/2/2015	0.013
3/17/2015	0.013
4/5/2015	0.022
4/21/2015	0.018
7/28/2015	0.022
3/1/2016	0.021
5/2/2016	0.0225
7/6/2016	0.0249
9/7/2016	0.0251
10/25/2016	0.0274
1/5/2017	0.028
3/14/2017	0.02
5/16/2017	0.0221
9/15/2017	0.0231
3/12/2018	0.023
9/6/2018	0.024
3/7/2019	0.018
9/4/2019	0.026

Sen's Slope Estimator

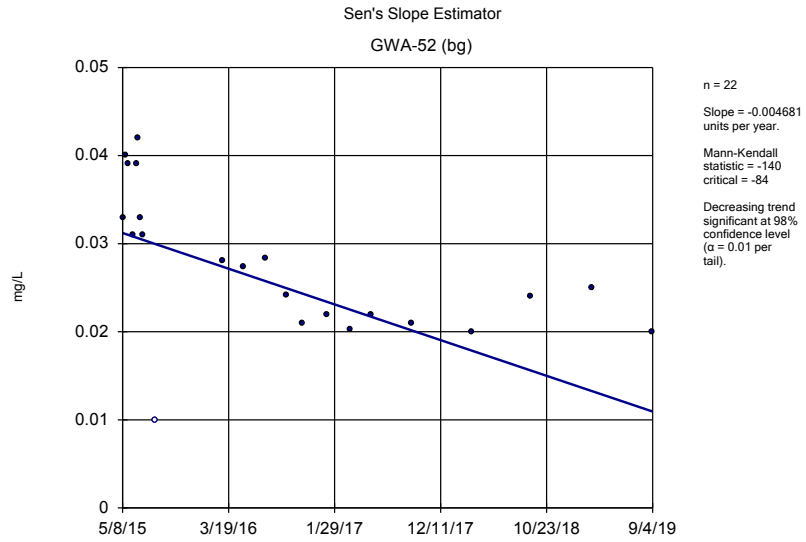
Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	0.0071
10/3/2014	0.0087
10/20/2014	0.0085
11/10/2014	0.008
3/2/2015	0.0063
3/17/2015	0.0066
4/5/2015	0.0068
4/22/2015	0.0094
7/28/2015	0.0057
3/1/2016	0.0101
5/3/2016	0.0104
7/8/2016	0.0095 (J)
9/7/2016	0.0095 (J)
10/25/2016	0.0121
1/6/2017	0.014
3/14/2017	0.009 (J)
5/16/2017	0.0084 (J)
9/15/2017	0.0078 (J)
3/12/2018	0.006 (J)
9/6/2018	0.0058 (J)
3/6/2019	0.0052 (X)
9/4/2019	0.005 (X)

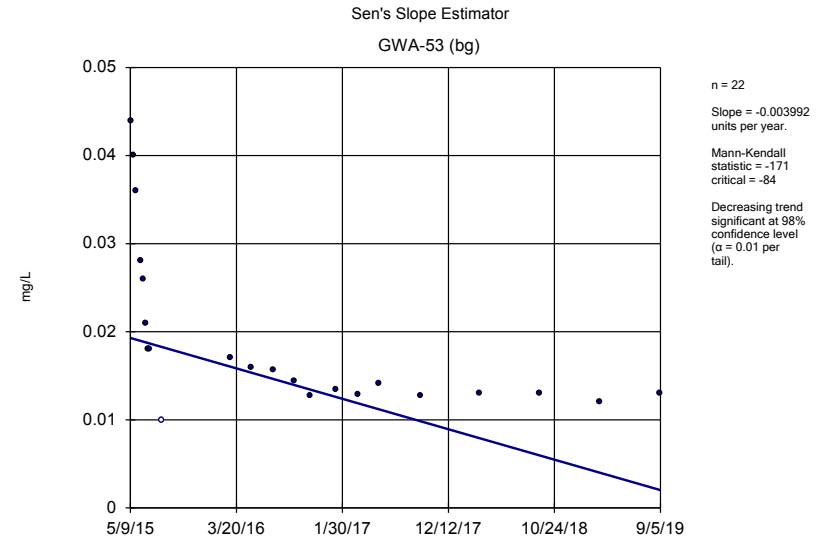
Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

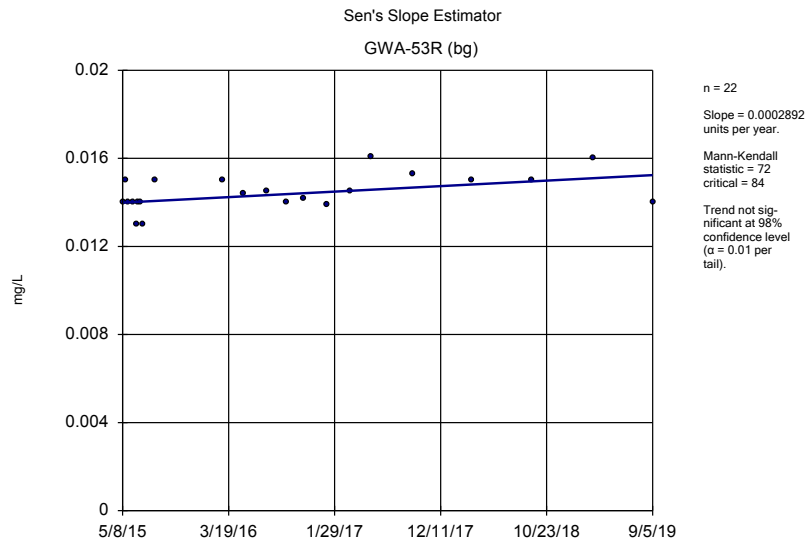
	GWA-38 (bg)
9/16/2014	0.014
10/3/2014	0.016
10/20/2014	0.014
11/10/2014	0.015
3/2/2015	0.03
3/17/2015	0.018
4/6/2015	0.014
4/22/2015	0.012
7/28/2015	0.012
3/2/2016	0.0123
5/3/2016	0.0114
7/7/2016	0.012
9/8/2016	0.0131
10/25/2016	0.0122
2/9/2017	0.0104
3/23/2017	0.0128
5/17/2017	0.0113
9/19/2017	0.0114
3/13/2018	0.011
9/6/2018	0.011
3/7/2019	0.011
9/4/2019	0.011



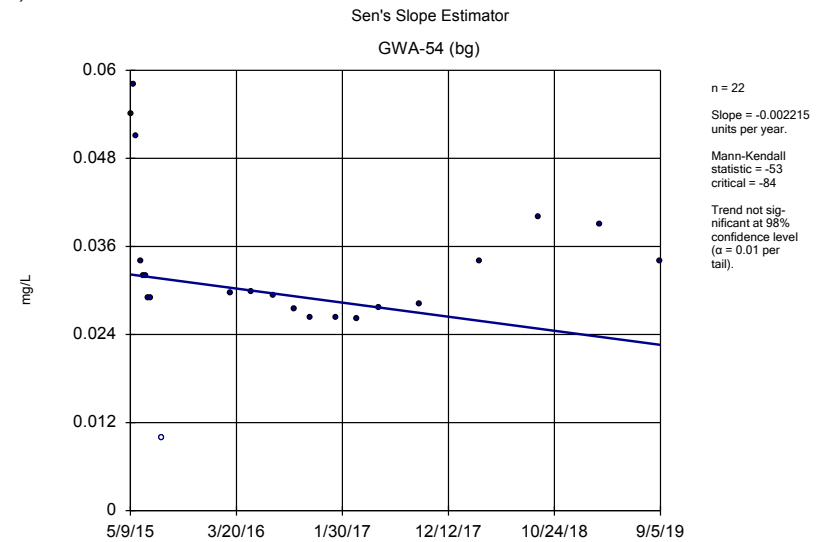
Constituent: Barium Analysis Run 12/9/2019 1:28 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:28 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:29 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:29 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	0.033
5/17/2015	0.04
5/25/2015	0.039
6/8/2015	0.031
6/18/2015	0.039
6/24/2015	0.042
6/30/2015	0.033
7/6/2015	0.031
8/12/2015	<0.02
2/29/2016	0.028
5/4/2016	0.0273
7/8/2016	0.0284
9/8/2016	0.0242
10/26/2016	0.021
1/6/2017	0.0219
3/15/2017	0.0202
5/17/2017	0.0219
9/15/2017	0.0209
3/13/2018	0.02
9/6/2018	0.024
3/7/2019	0.025
9/4/2019	0.02

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	0.044
5/18/2015	0.04
5/25/2015	0.036
6/8/2015	0.028
6/17/2015	0.026
6/24/2015	0.021
6/30/2015	0.018
7/6/2015	0.018
8/12/2015	<0.02
3/2/2016	0.017
5/3/2016	0.016
7/8/2016	0.0156
9/8/2016	0.0144
10/26/2016	0.0128
1/9/2017	0.0134
3/16/2017	0.0129
5/19/2017	0.0141
9/19/2017	0.0127
3/13/2018	0.013
9/11/2018	0.013
3/8/2019	0.012
9/5/2019	0.013

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

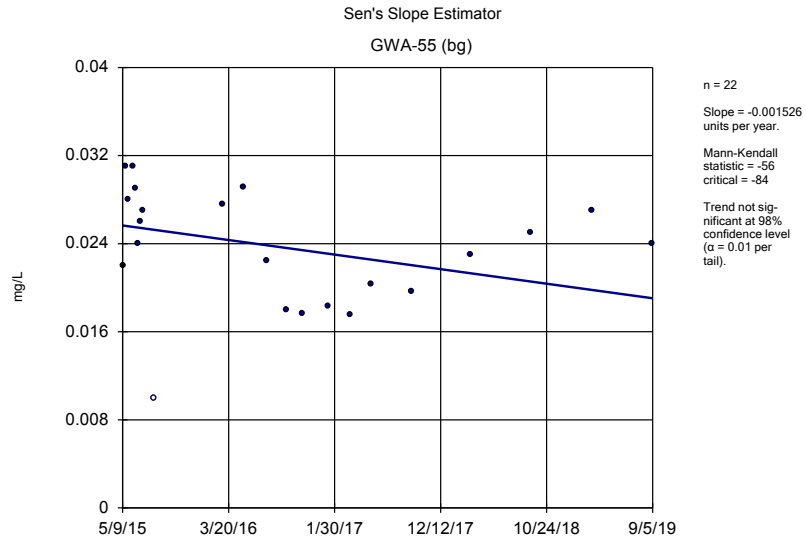
	GWA-53R (bg)
5/8/2015	0.014
5/17/2015	0.015
5/25/2015	0.014
6/8/2015	0.014
6/18/2015	0.013
6/24/2015	0.014
6/30/2015	0.014
7/6/2015	0.013
8/12/2015	0.015 (J)
3/2/2016	0.015
5/3/2016	0.0144
7/11/2016	0.0145
9/7/2016	0.014
10/27/2016	0.0142
1/6/2017	0.0139
3/16/2017	0.0145
5/19/2017	0.0161
9/19/2017	0.0153
3/13/2018	0.015
9/11/2018	0.015
3/12/2019	0.016
9/5/2019	0.014

Sen's Slope Estimator

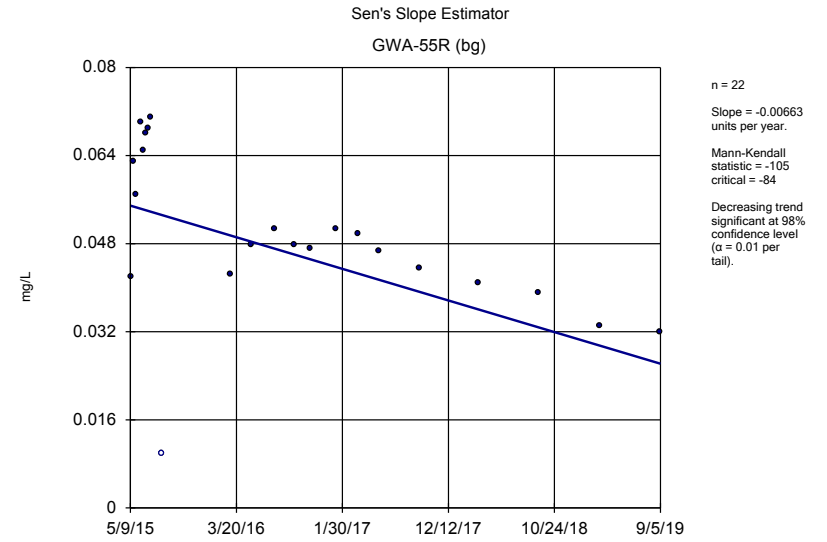
Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

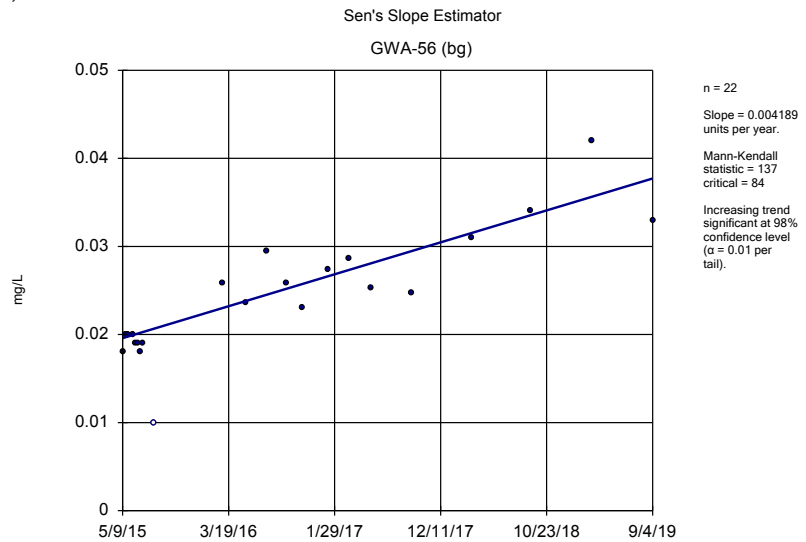
	GWA-54 (bg)
5/9/2015	0.054
5/18/2015	0.058
5/25/2015	0.051
6/9/2015	0.034
6/17/2015	0.032
6/25/2015	0.032
7/1/2015	0.029
7/7/2015	0.029
8/12/2015	<0.02
3/2/2016	0.0297
5/4/2016	0.0299
7/8/2016	0.0294
9/8/2016	0.0275
10/26/2016	0.0263
1/9/2017	0.0263
3/15/2017	0.0262
5/18/2017	0.0276
9/15/2017	0.0281
3/13/2018	0.034
9/6/2018	0.04
3/7/2019	0.039
9/5/2019	0.034



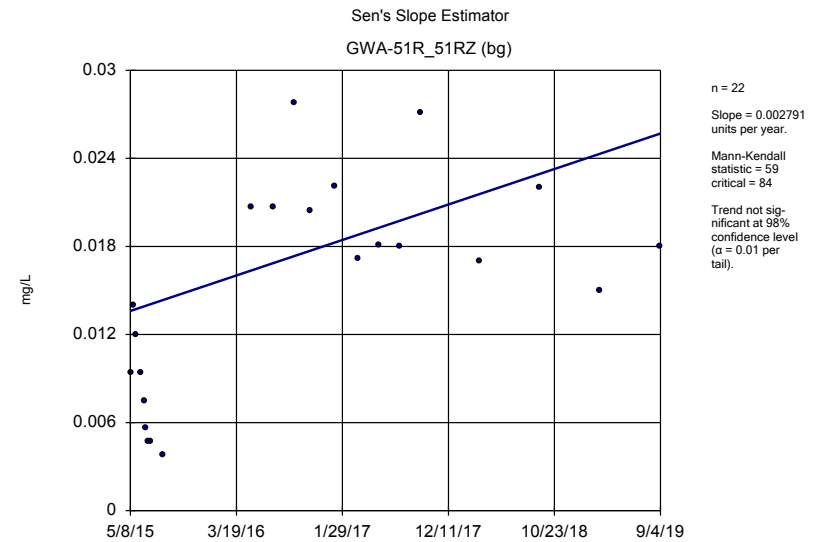
Constituent: Barium Analysis Run 12/9/2019 1:29 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:30 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:30 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 1:30 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	0.022
5/18/2015	0.031
5/26/2015	0.028
6/9/2015	0.031
6/17/2015	0.029
6/25/2015	0.024
7/1/2015	0.026
7/7/2015	0.027
8/12/2015	<0.02
3/2/2016	0.0276
5/3/2016	0.0291
7/11/2016	0.0225
9/9/2016	0.018
10/26/2016	0.0177
1/9/2017	0.0183
3/16/2017	0.0175
5/18/2017	0.0203
9/15/2017	0.0197
3/12/2018	0.023
9/7/2018	0.025
3/8/2019	0.027
9/5/2019	0.024

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	0.042
5/18/2015	0.063
5/26/2015	0.057
6/9/2015	0.07
6/17/2015	0.065
6/25/2015	0.068
7/1/2015	0.069
7/7/2015	0.071
8/12/2015	<0.02
3/3/2016	0.0424
5/3/2016	0.0477
7/11/2016	0.0506
9/9/2016	0.0478
10/27/2016	0.0472
1/9/2017	0.0507
3/16/2017	0.0497
5/18/2017	0.0466
9/18/2017	0.0436
3/12/2018	0.041
9/7/2018	0.039
3/7/2019	0.033
9/5/2019	0.032

Sen's Slope Estimator

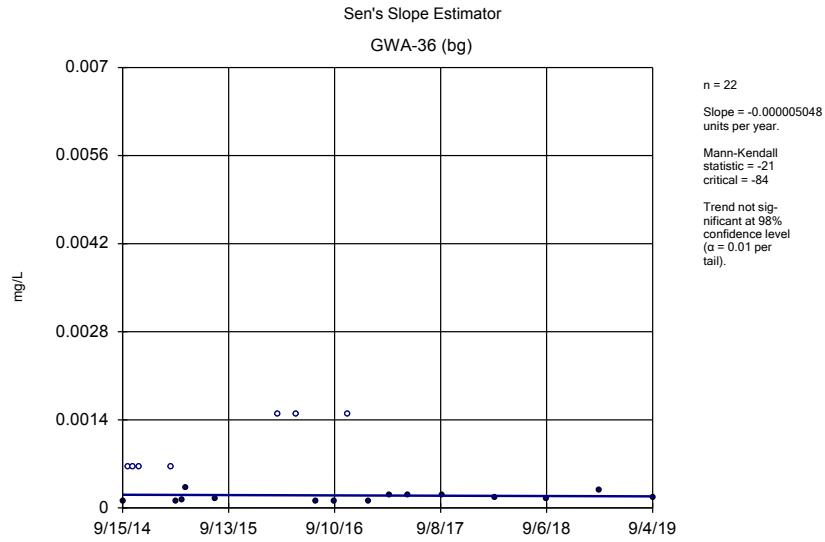
Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	0.018
5/19/2015	0.02
5/26/2015	0.02
6/9/2015	0.02
6/17/2015	0.019
6/25/2015	0.019
7/1/2015	0.018
7/7/2015	0.019
8/12/2015	<0.02
3/3/2016	0.0259
5/9/2016	0.0236
7/11/2016	0.0295
9/9/2016	0.0259
10/26/2016	0.0231
1/9/2017	0.0273
3/15/2017	0.0286
5/18/2017	0.0253
9/15/2017	0.0247
3/13/2018	0.031
9/7/2018	0.034
3/7/2019	0.042
9/4/2019	0.033

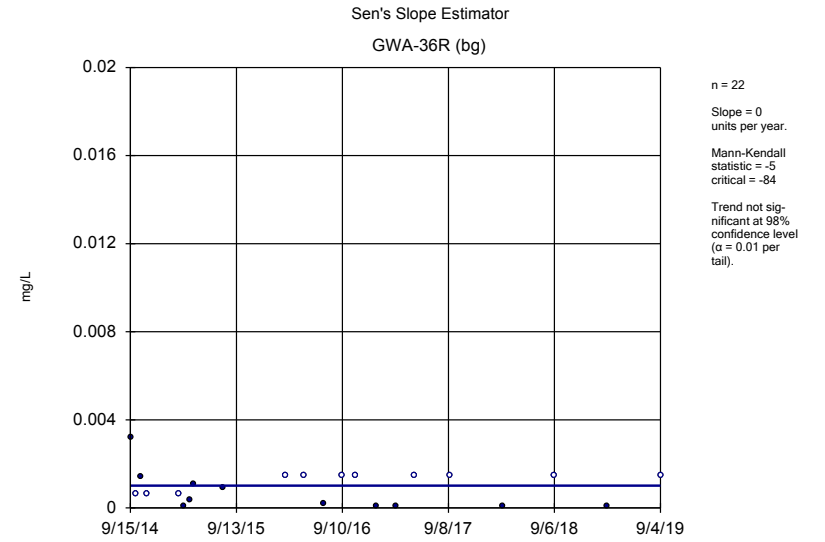
Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

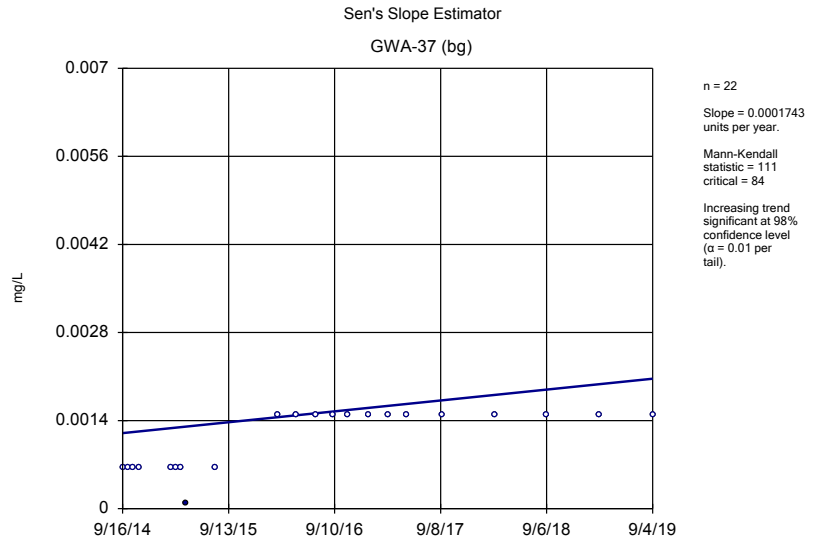
	GWA-51R_51RZ ...
5/8/2015	0.0094
5/17/2015	0.014
5/25/2015	0.012
6/8/2015	0.0094
6/18/2015	0.0075
6/24/2015	0.0056
6/30/2015	0.0047
7/6/2015	0.0047
8/12/2015	0.00383 (J)
5/4/2016	0.0207 (D)
7/7/2016	0.0207 (D)
9/8/2016	0.0278 (D)
10/26/2016	0.0204 (D)
1/6/2017	0.0221 (D)
3/15/2017	0.0172 (D)
5/18/2017	0.0181 (D)
7/19/2017	0.018 (D)
9/19/2017	0.0271 (D)
3/13/2018	0.017
9/7/2018	0.022
3/8/2019	0.015
9/4/2019	0.018



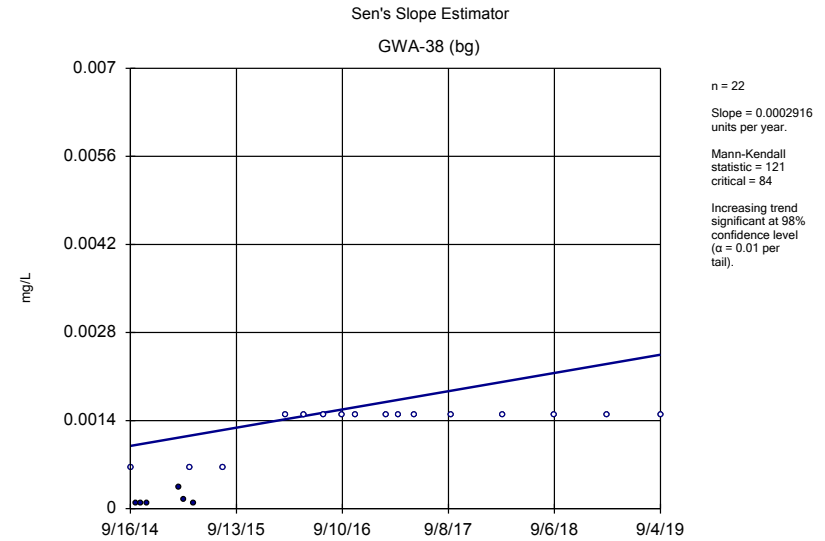
Constituent: Beryllium Analysis Run 12/9/2019 1:30 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:31 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:31 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:31 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	0.00011 (J)
10/3/2014	<0.0013
10/20/2014	<0.0013
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	0.0001 (J)
4/5/2015	0.00012 (J)
4/21/2015	0.00033 (J)
7/28/2015	0.00014 (J)
3/1/2016	<0.003
5/2/2016	<0.003
7/7/2016	0.0001 (J)
9/7/2016	0.0001 (J)
10/25/2016	<0.003
1/5/2017	0.0001 (J)
3/15/2017	0.0002 (J)
5/17/2017	0.0002 (J)
9/15/2017	0.0002 (J)
3/12/2018	0.00017 (J)
9/6/2018	0.00015 (J)
3/6/2019	0.00029 (X)
9/4/2019	0.00016 (X)

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.0032
10/3/2014	<0.0013
10/20/2014	0.0014
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	8.3E-05 (J)
4/5/2015	0.00038 (J)
4/21/2015	0.0011 (J)
7/28/2015	0.00092 (J)
3/1/2016	<0.003
5/2/2016	<0.003
7/6/2016	0.0002 (J)
9/7/2016	<0.003
10/25/2016	<0.003
1/5/2017	0.0001 (J)
3/14/2017	0.0001 (J)
5/16/2017	<0.003
9/15/2017	<0.003
3/12/2018	5.6E-05 (J)
9/6/2018	<0.003
3/7/2019	6.8E-05 (X)
9/4/2019	<0.003

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

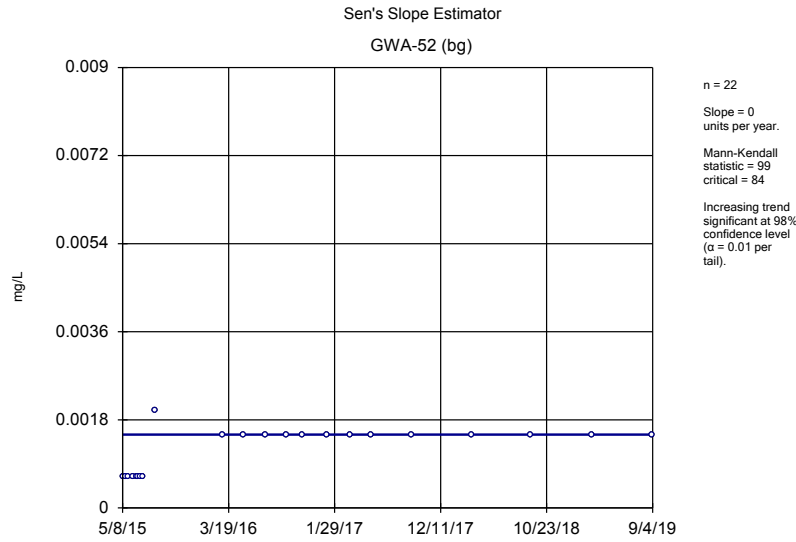
	GWA-37 (bg)
9/16/2014	<0.0013
10/3/2014	<0.0013
10/20/2014	<0.0013
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	<0.0013
4/5/2015	<0.0013
4/22/2015	8.3E-05 (J)
7/28/2015	<0.0013
3/1/2016	<0.003
5/3/2016	<0.003
7/8/2016	<0.003
9/7/2016	<0.003
10/25/2016	<0.003
1/6/2017	<0.003
3/14/2017	<0.003
5/16/2017	<0.003
9/15/2017	<0.003
3/12/2018	<0.003
9/6/2018	<0.003
3/6/2019	<0.003
9/4/2019	<0.003

Sen's Slope Estimator

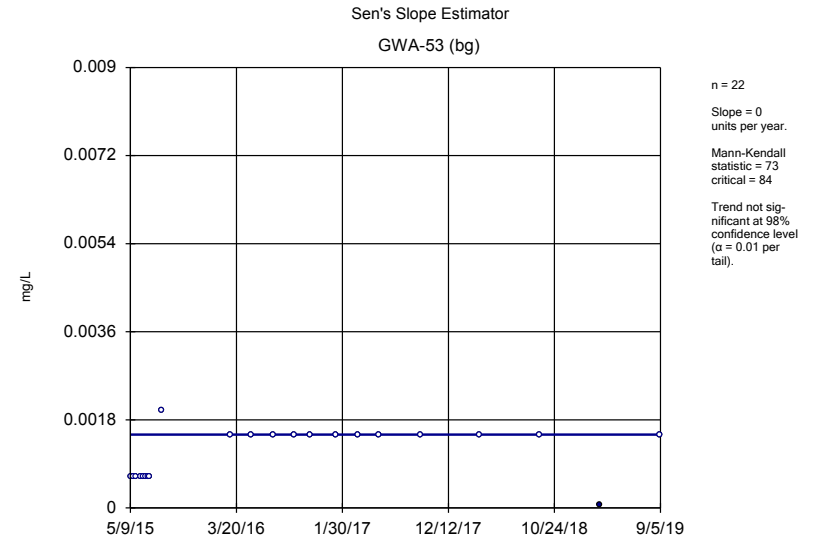
Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

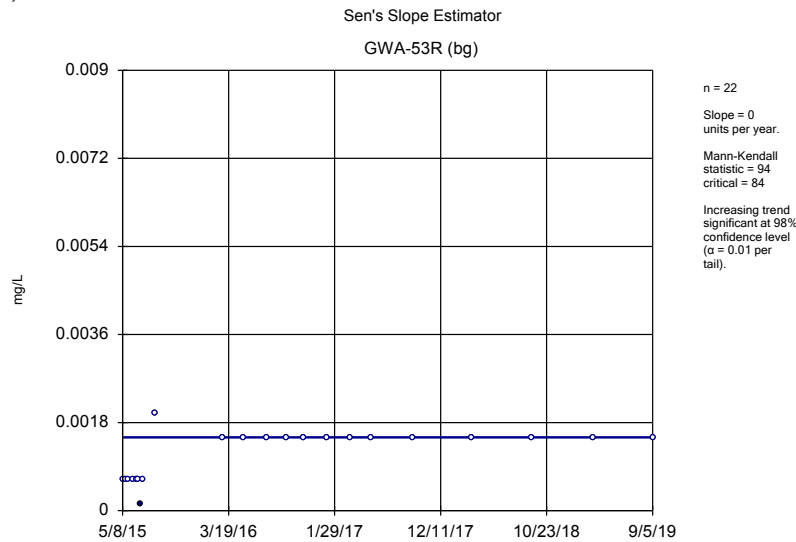
	GWA-38 (bg)
9/16/2014	<0.0013
10/3/2014	8.3E-05 (J)
10/20/2014	7.8E-05 (J)
11/10/2014	8E-05 (J)
3/2/2015	0.00034 (J)
3/17/2015	0.00014 (J)
4/6/2015	<0.0013
4/22/2015	7.8E-05 (J)
7/28/2015	<0.0013
3/2/2016	<0.003
5/3/2016	<0.003
7/7/2016	<0.003
9/8/2016	<0.003
10/25/2016	<0.003
2/9/2017	<0.003
3/23/2017	<0.003
5/17/2017	<0.003
9/19/2017	<0.003
3/13/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003
9/4/2019	<0.003



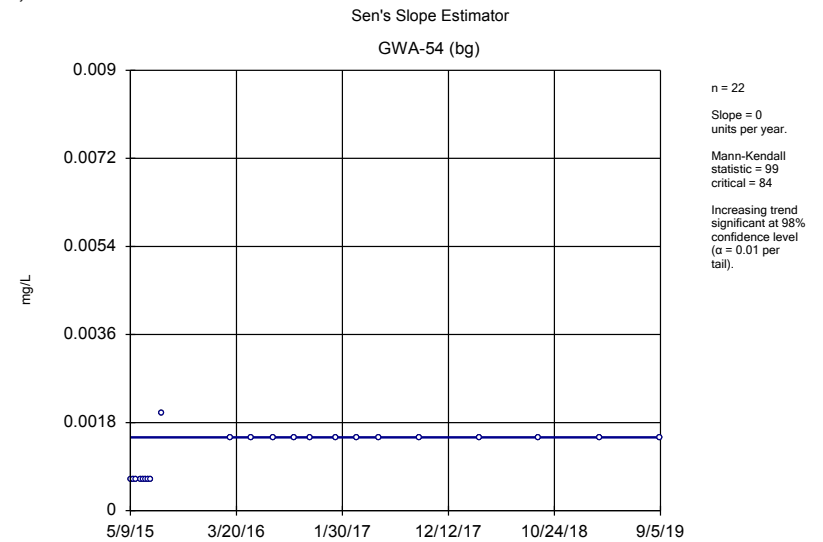
Constituent: Beryllium Analysis Run 12/9/2019 1:31 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:32 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:32 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:32 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.0013
5/17/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/18/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.004
2/29/2016	<0.003
5/4/2016	<0.003
7/8/2016	<0.003
9/8/2016	<0.003
10/26/2016	<0.003
1/6/2017	<0.003
3/15/2017	<0.003
5/17/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003
9/4/2019	<0.003

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/17/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.004
3/2/2016	<0.003
5/3/2016	<0.003
7/8/2016	<0.003
9/8/2016	<0.003
10/26/2016	<0.003
1/9/2017	<0.003
3/16/2017	<0.003
5/19/2017	<0.003
9/19/2017	<0.003
3/13/2018	<0.003
9/11/2018	<0.003
3/8/2019	5.7E-05 (X)
9/5/2019	<0.003

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

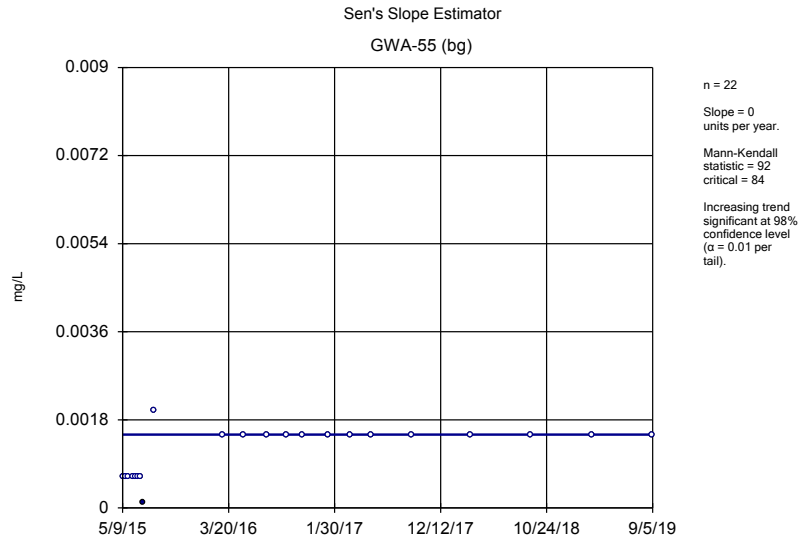
	GWA-53R (bg)
5/8/2015	<0.0013
5/17/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/18/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	0.00014 (J)
7/6/2015	<0.0013
8/12/2015	<0.004
3/2/2016	<0.003
5/3/2016	<0.003
7/11/2016	<0.003
9/7/2016	<0.003
10/27/2016	<0.003
1/6/2017	<0.003
3/16/2017	<0.003
5/19/2017	<0.003
9/19/2017	<0.003
3/13/2018	<0.003
9/11/2018	<0.003
3/12/2019	<0.003
9/5/2019	<0.003

Sen's Slope Estimator

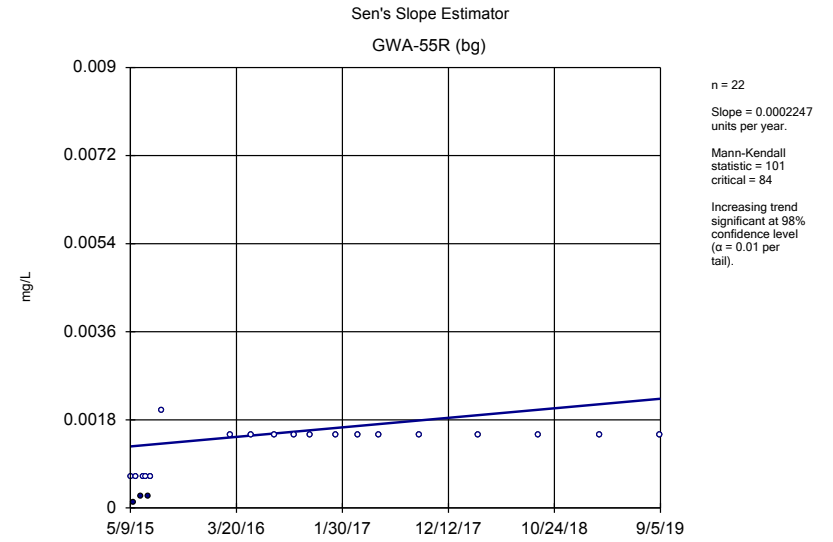
Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

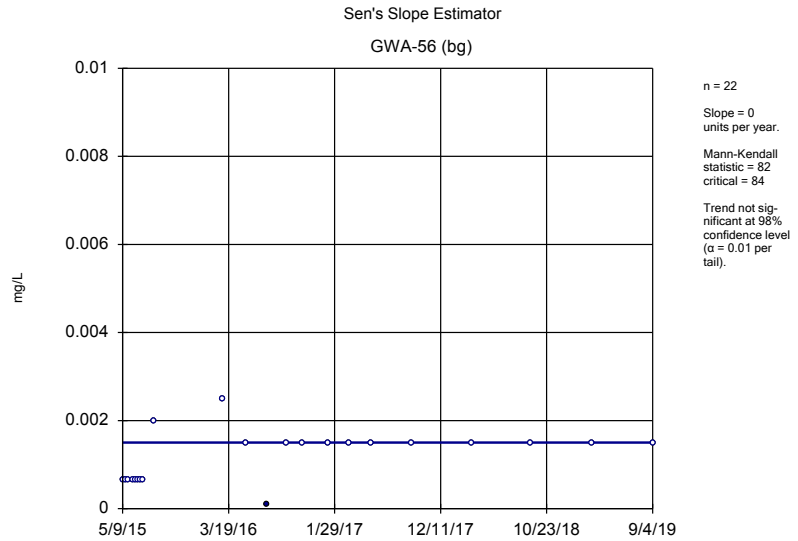
	GWA-54 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/25/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	<0.0013
8/12/2015	<0.004
3/2/2016	<0.003
5/4/2016	<0.003
7/8/2016	<0.003
9/8/2016	<0.003
10/26/2016	<0.003
1/9/2017	<0.003
3/15/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/6/2018	<0.003
3/7/2019	<0.003
9/5/2019	<0.003



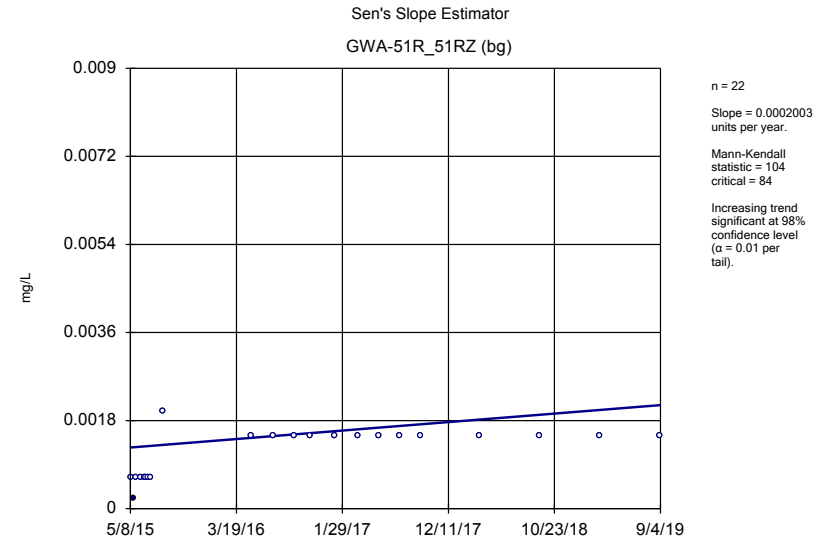
Constituent: Beryllium Analysis Run 12/9/2019 1:33 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:33 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:33 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Beryllium Analysis Run 12/9/2019 1:34 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/26/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	0.00012 (J)
8/12/2015	<0.004
3/2/2016	<0.003
5/3/2016	<0.003
7/11/2016	<0.003
9/9/2016	<0.003
10/26/2016	<0.003
1/9/2017	<0.003
3/16/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/12/2018	<0.003
9/7/2018	<0.003
3/8/2019	<0.003
9/5/2019	<0.003

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.0013
5/18/2015	0.00011 (J)
5/26/2015	<0.0013
6/9/2015	0.00025 (J)
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	0.00024 (J)
7/7/2015	<0.0013
8/12/2015	<0.004
3/3/2016	<0.003
5/3/2016	<0.003
7/11/2016	<0.003
9/9/2016	<0.003
10/27/2016	<0.003
1/9/2017	<0.003
3/16/2017	<0.003
5/18/2017	<0.003
9/18/2017	<0.003
3/12/2018	<0.003
9/7/2018	<0.003
3/7/2019	<0.003
9/5/2019	<0.003

Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.0013
5/19/2015	<0.0013
5/26/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	<0.0013
8/12/2015	<0.004
3/3/2016	<0.005
5/9/2016	<0.003
7/11/2016	0.0001 (J)
9/9/2016	<0.003
10/26/2016	<0.003
1/9/2017	<0.003
3/15/2017	<0.003
5/18/2017	<0.003
9/15/2017	<0.003
3/13/2018	<0.003
9/7/2018	<0.003
3/7/2019	<0.003
9/4/2019	<0.003

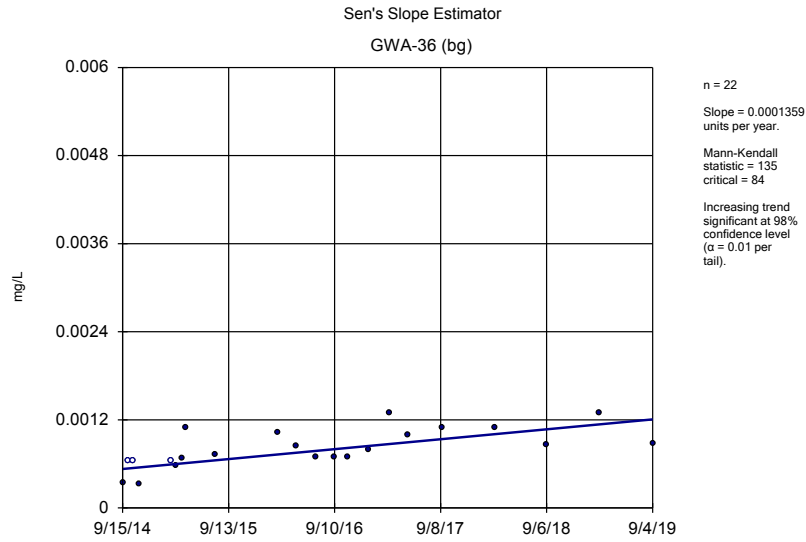
Sen's Slope Estimator

Constituent: Beryllium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

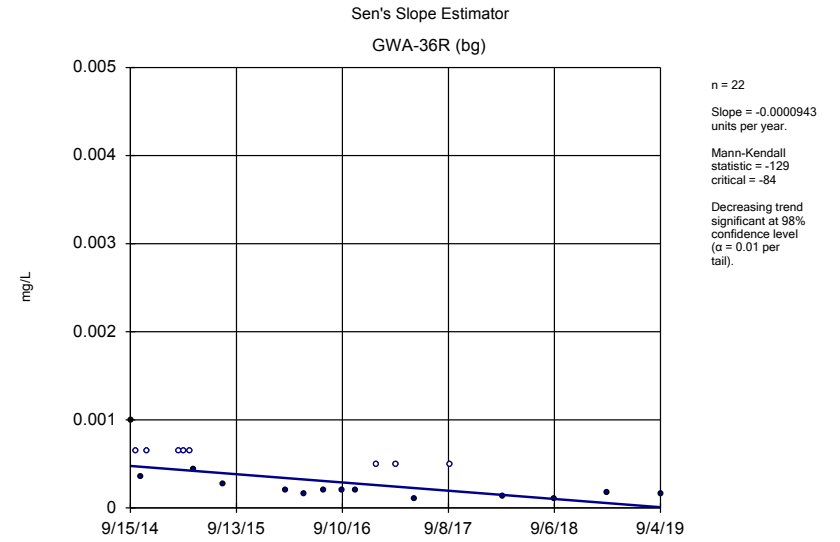
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

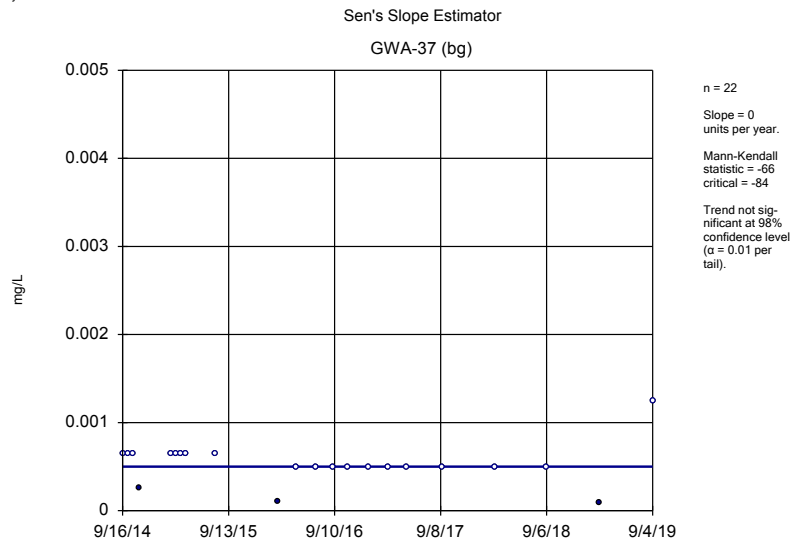
5/8/2015	<0.0013
5/17/2015	0.00022 (J)
5/25/2015	<0.0013
6/8/2015	<0.0013
6/18/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.004
5/4/2016	<0.003 (D)
7/7/2016	<0.003 (D)
9/8/2016	<0.003 (D)
10/26/2016	<0.003 (D)
1/6/2017	<0.003 (D)
3/15/2017	<0.003 (D)
5/18/2017	<0.003 (D)
7/19/2017	<0.003 (D)
9/19/2017	<0.003 (D)
3/13/2018	<0.003
9/7/2018	<0.003
3/8/2019	<0.003
9/4/2019	<0.003



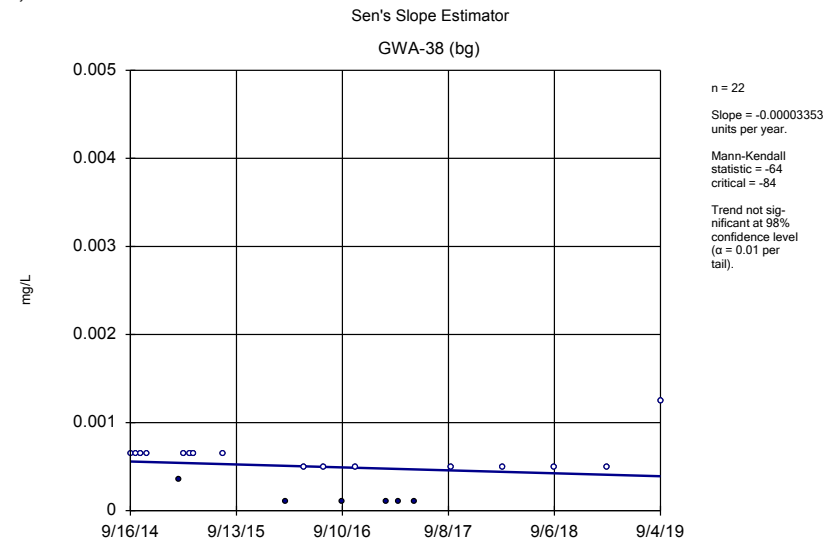
Constituent: Cadmium Analysis Run 12/9/2019 1:34 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Cadmium Analysis Run 12/9/2019 1:34 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Cadmium Analysis Run 12/9/2019 1:35 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Cadmium Analysis Run 12/9/2019 1:35 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	0.00035 (J)
10/3/2014	<0.0013
10/20/2014	<0.0013
11/10/2014	0.00033 (J)
3/2/2015	<0.0013
3/17/2015	0.00057 (J)
4/5/2015	0.00068 (J)
4/21/2015	0.0011 (J)
7/28/2015	0.00073 (J)
3/1/2016	0.00103
5/2/2016	0.000846 (J)
7/7/2016	0.0007 (J)
9/7/2016	0.0007 (J)
10/25/2016	0.0007 (J)
1/5/2017	0.0008 (J)
3/15/2017	0.0013
5/17/2017	0.001
9/15/2017	0.0011
3/12/2018	0.0011
9/6/2018	0.00086 (J)
3/6/2019	0.0013
9/4/2019	0.00088 (X)

Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.001 (J)
10/3/2014	<0.0013
10/20/2014	0.00036 (J)
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	<0.0013
4/5/2015	<0.0013
4/21/2015	0.00044 (J)
7/28/2015	0.00027 (J)
3/1/2016	0.000207 (J)
5/2/2016	0.000154 (J)
7/6/2016	0.0002 (J)
9/7/2016	0.0002 (J)
10/25/2016	0.0002 (J)
1/5/2017	<0.001 (*)
3/14/2017	<0.001 (*)
5/16/2017	0.0001 (J)
9/15/2017	<0.001
3/12/2018	0.00013 (J)
9/6/2018	0.00011 (J)
3/7/2019	0.00017 (X)
9/4/2019	0.00016 (X)

Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	<0.0013
10/3/2014	<0.0013
10/20/2014	<0.0013
11/10/2014	0.00026 (J)
3/2/2015	<0.0013
3/17/2015	<0.0013
4/5/2015	<0.0013
4/22/2015	<0.0013
7/28/2015	<0.0013
3/1/2016	0.000103 (J)
5/3/2016	<0.001
7/8/2016	<0.001
9/7/2016	<0.001
10/25/2016	<0.001
1/6/2017	<0.001 (*)
3/14/2017	<0.001 (*)
5/16/2017	<0.001
9/15/2017	<0.001
3/12/2018	<0.001
9/6/2018	<0.001
3/6/2019	9.3E-05 (X)
9/4/2019	<0.0025

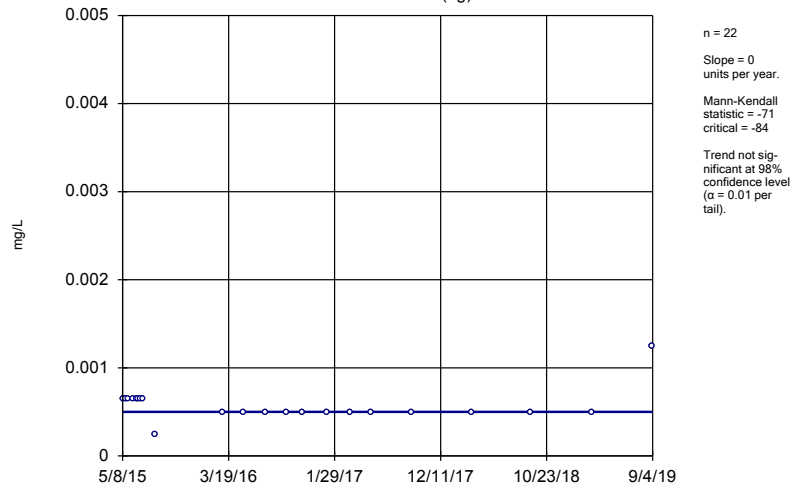
Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

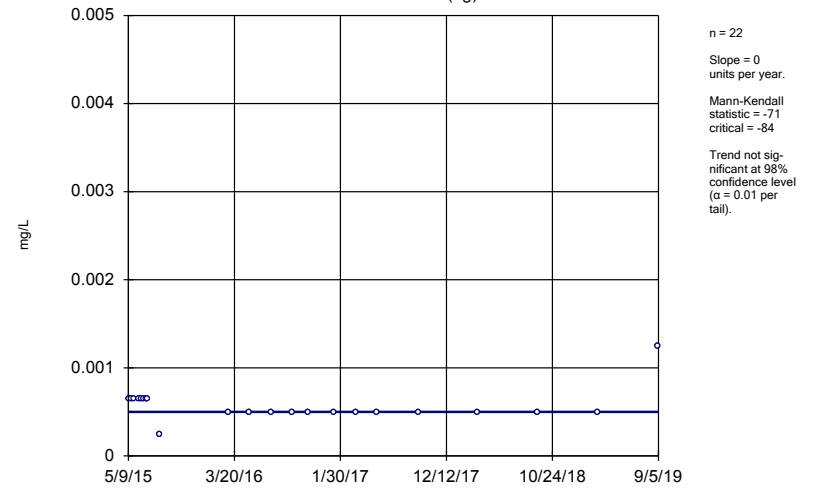
	GWA-38 (bg)
9/16/2014	<0.0013
10/3/2014	<0.0013
10/20/2014	<0.0013
11/10/2014	<0.0013
3/2/2015	0.00035 (J)
3/17/2015	<0.0013
4/6/2015	<0.0013
4/22/2015	<0.0013
7/28/2015	<0.0013
3/2/2016	0.000109 (J)
5/3/2016	<0.001
7/7/2016	<0.001
9/8/2016	0.0001 (J)
10/25/2016	<0.001
2/9/2017	0.0001 (J)
3/23/2017	0.0001 (J)
5/17/2017	0.0001 (J)
9/19/2017	<0.001
3/13/2018	<0.001
9/6/2018	<0.001
3/7/2019	<0.001
9/4/2019	<0.0025

Sen's Slope Estimator
GWA-52 (bg)



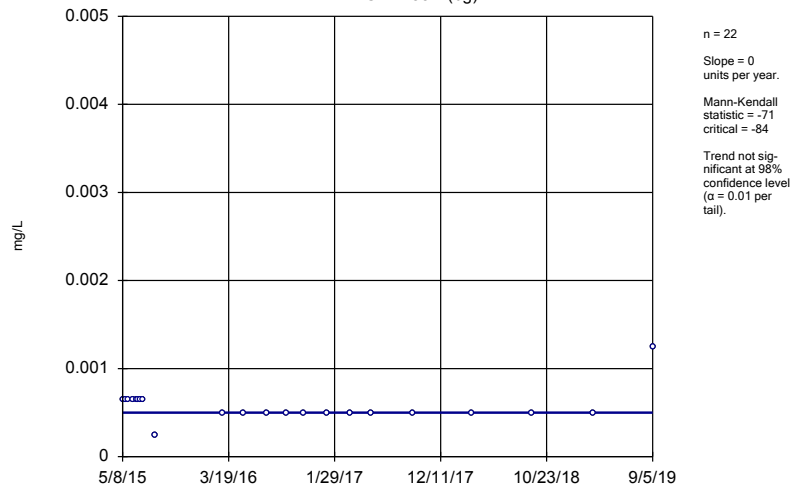
Constituent: Cadmium Analysis Run 12/9/2019 1:35 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53 (bg)



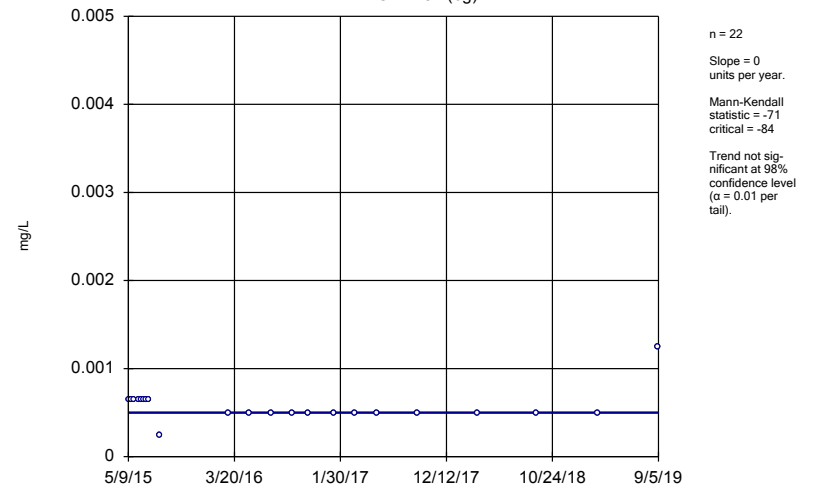
Constituent: Cadmium Analysis Run 12/9/2019 1:35 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



Constituent: Cadmium Analysis Run 12/9/2019 1:36 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



Constituent: Cadmium Analysis Run 12/9/2019 1:36 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:12 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.0013
5/17/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/18/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.0005
2/29/2016	<0.001
5/4/2016	<0.001
7/8/2016	<0.001
9/8/2016	<0.001
10/26/2016	<0.001
1/6/2017	<0.001
3/15/2017	<0.001 (*)
5/17/2017	<0.001
9/15/2017	<0.001
3/13/2018	<0.001
9/6/2018	<0.001
3/7/2019	<0.001
9/4/2019	<0.0025

Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/17/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.0005
3/2/2016	<0.001
5/3/2016	<0.001
7/8/2016	<0.001
9/8/2016	<0.001
10/26/2016	<0.001
1/9/2017	<0.001
3/16/2017	<0.001 (*)
5/19/2017	<0.001
9/19/2017	<0.001
3/13/2018	<0.001
9/11/2018	<0.001
3/8/2019	<0.001
9/5/2019	<0.0025

Sen's Slope Estimator

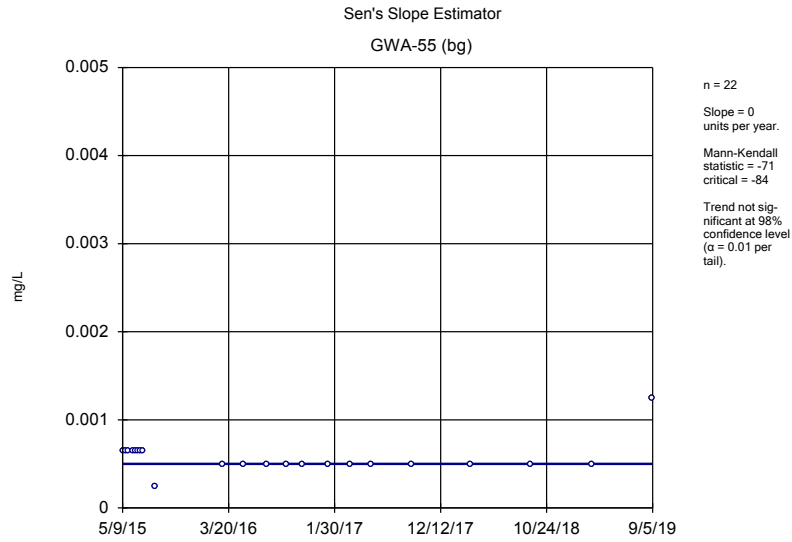
Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	<0.0013
5/17/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/18/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.0005
3/2/2016	<0.001
5/3/2016	<0.001
7/11/2016	<0.001
9/7/2016	<0.001
10/27/2016	<0.001
1/6/2017	<0.001
3/16/2017	<0.001
5/19/2017	<0.001
9/19/2017	<0.001
3/13/2018	<0.001
9/11/2018	<0.001
3/12/2019	<0.001
9/5/2019	<0.0025

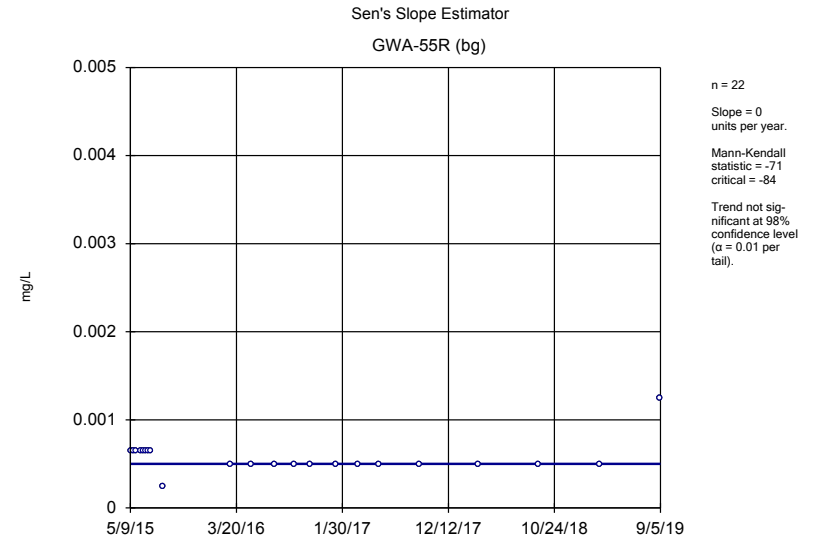
Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

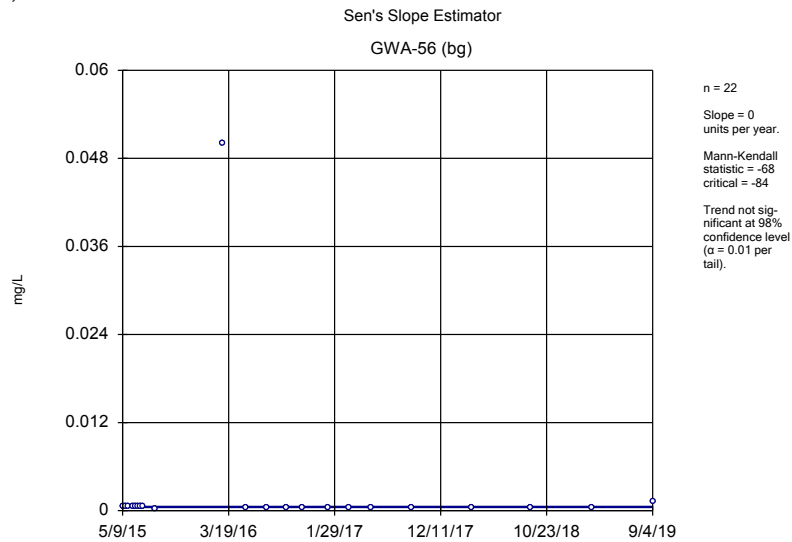
	GWA-54 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/25/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	<0.0013
8/12/2015	<0.0005
3/2/2016	<0.001
5/4/2016	<0.001
7/8/2016	<0.001
9/8/2016	<0.001
10/26/2016	<0.001
1/9/2017	<0.001
3/15/2017	<0.001 (*)
5/18/2017	<0.001
9/15/2017	<0.001
3/13/2018	<0.001
9/6/2018	<0.001
3/7/2019	<0.001
9/5/2019	<0.0025



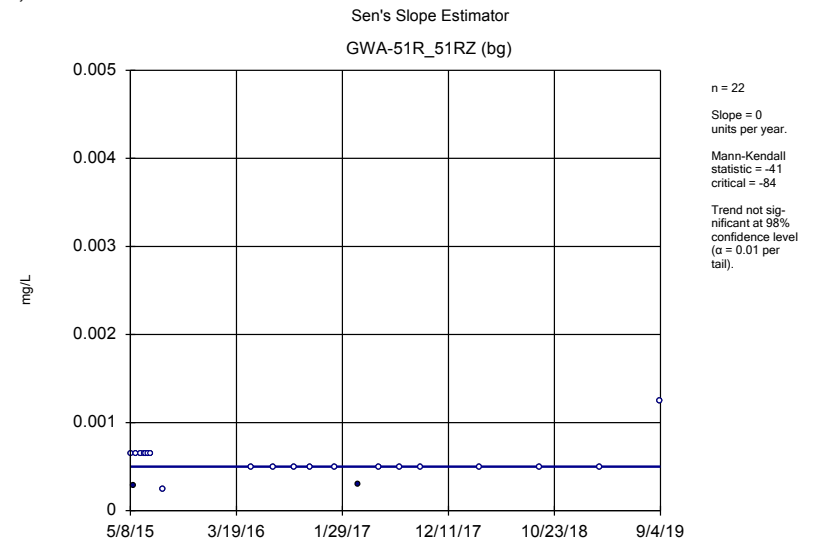
Constituent: Cadmium Analysis Run 12/9/2019 1:36 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Cadmium Analysis Run 12/9/2019 1:36 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Cadmium Analysis Run 12/9/2019 1:37 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Cadmium Analysis Run 12/9/2019 1:37 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/26/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	<0.0013
8/13/2015	<0.0005
3/2/2016	<0.001
5/3/2016	<0.001
7/11/2016	<0.001
9/9/2016	<0.001
10/26/2016	<0.001
1/9/2017	<0.001 (*)
3/16/2017	<0.001
5/18/2017	<0.001
9/15/2017	<0.001
3/12/2018	<0.001
9/7/2018	<0.001
3/8/2019	<0.001
9/5/2019	<0.0025

Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/26/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	<0.0013
8/13/2015	<0.0005
3/3/2016	<0.001
5/3/2016	<0.001
7/11/2016	<0.001
9/9/2016	<0.001
10/27/2016	<0.001
1/9/2017	<0.001 (*)
3/16/2017	<0.001 (*)
5/18/2017	<0.001
9/18/2017	<0.001
3/12/2018	<0.001
9/7/2018	<0.001
3/7/2019	<0.001
9/5/2019	<0.0025

Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.0013
5/19/2015	<0.0013
5/26/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	<0.0013
8/13/2015	<0.0005
3/3/2016	<0.1
5/9/2016	<0.001
7/11/2016	<0.001
9/9/2016	<0.001
10/26/2016	<0.001
1/9/2017	<0.001
3/15/2017	<0.001 (*)
5/18/2017	<0.001
9/15/2017	<0.001
3/13/2018	<0.001
9/7/2018	<0.001
3/7/2019	<0.001
9/4/2019	<0.0025

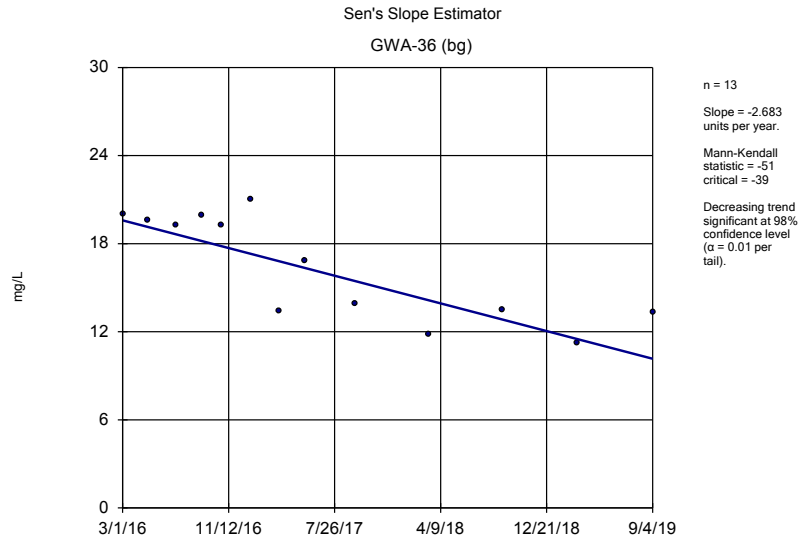
Sen's Slope Estimator

Constituent: Cadmium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

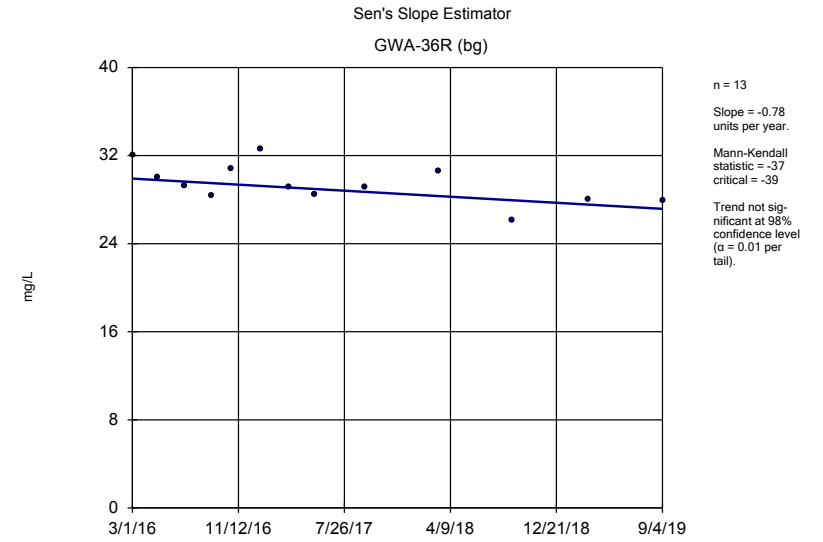
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

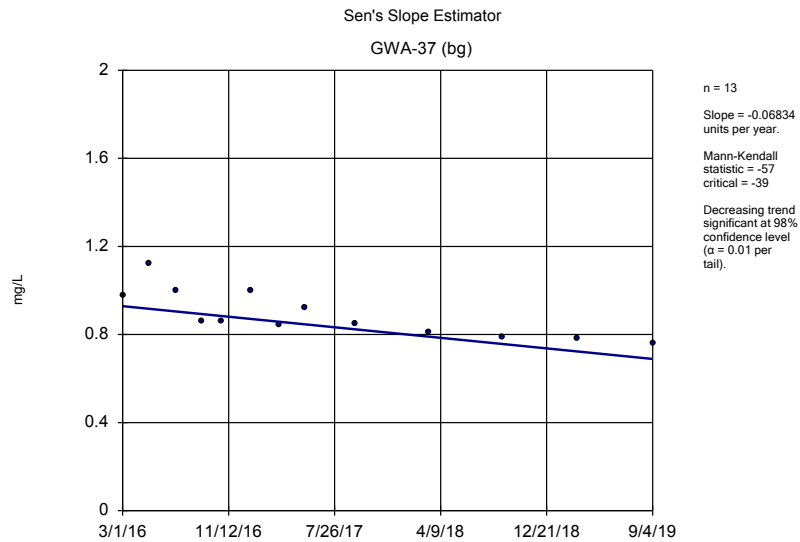
5/8/2015	<0.0013
5/17/2015	0.00029 (J)
5/25/2015	<0.0013
6/8/2015	<0.0013
6/18/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.0005
5/4/2016	<0.001 (D)
7/7/2016	<0.001 (D)
9/8/2016	<0.001 (D)
10/26/2016	<0.001 (D)
1/6/2017	<0.001 (D)
3/15/2017	0.0003 (D)
5/18/2017	<0.001 (D)
7/19/2017	<0.001 (D)
9/19/2017	<0.001 (D)
3/13/2018	<0.001
9/7/2018	<0.001
3/8/2019	<0.001
9/4/2019	<0.0025



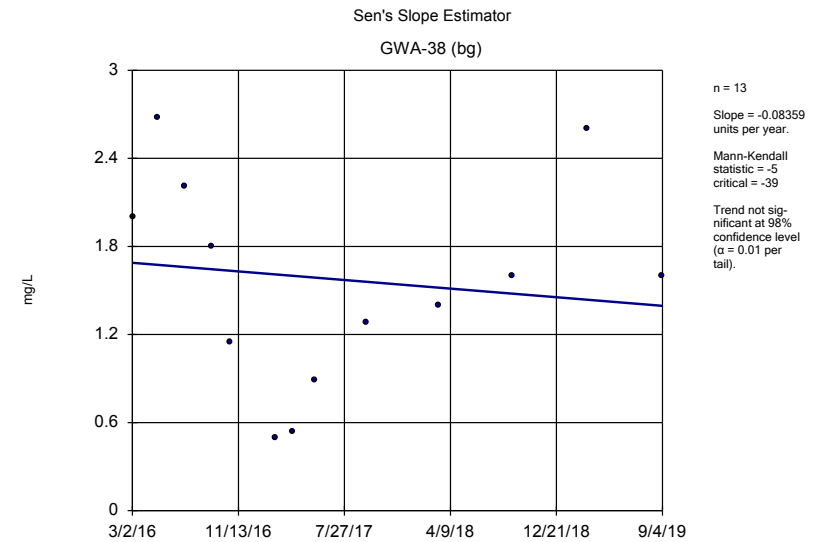
Constituent: Calcium Analysis Run 12/9/2019 1:37 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 1:37 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 1:37 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 1:37 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	20
5/2/2016	19.6
7/7/2016	19.3
9/7/2016	19.9
10/25/2016	19.3
1/5/2017	21
3/15/2017	13.4
5/17/2017	16.8
9/15/2017	13.9
3/12/2018	11.8 (J)
9/6/2018	13.5 (J)
3/6/2019	11.2 (X)
9/4/2019	13.3

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	32
5/2/2016	30
7/6/2016	29.2
9/7/2016	28.4
10/25/2016	30.8
1/5/2017	32.6
3/14/2017	29.1
5/16/2017	28.5
9/15/2017	29.1
3/12/2018	30.6
9/6/2018	26.1
3/7/2019	28
9/4/2019	27.9

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

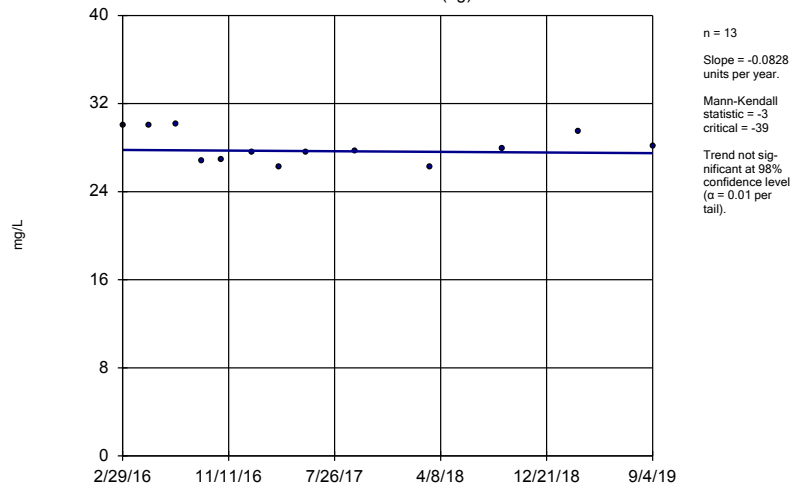
	GWA-37 (bg)
3/1/2016	0.98
5/3/2016	1.12
7/8/2016	1
9/7/2016	0.858
10/25/2016	0.859
1/6/2017	1
3/14/2017	0.844
5/16/2017	0.922
9/15/2017	0.85
3/12/2018	0.81
9/6/2018	0.79
3/6/2019	0.78
9/4/2019	0.76

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

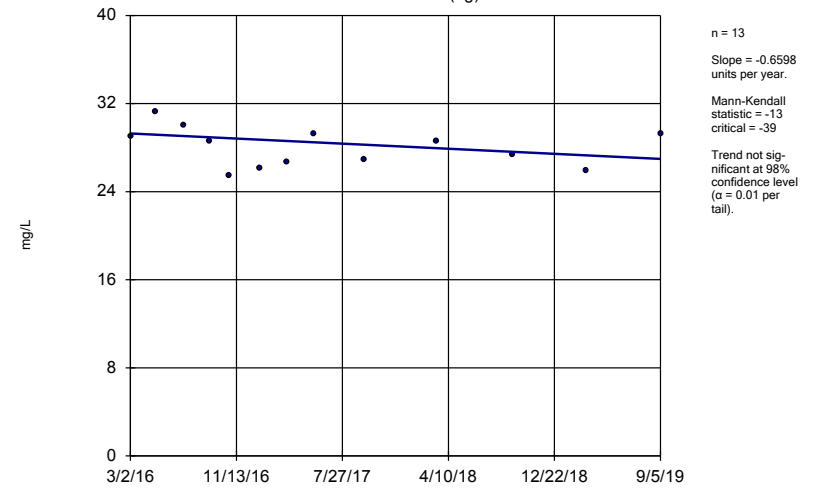
	GWA-38 (bg)
3/2/2016	2
5/3/2016	2.68
7/7/2016	2.21
9/8/2016	1.8
10/25/2016	1.15
2/9/2017	0.495 (J)
3/23/2017	0.543
5/17/2017	0.889
9/19/2017	1.28
3/13/2018	1.4
9/6/2018	1.6
3/7/2019	2.6
9/4/2019	1.6

Sen's Slope Estimator
GWA-52 (bg)



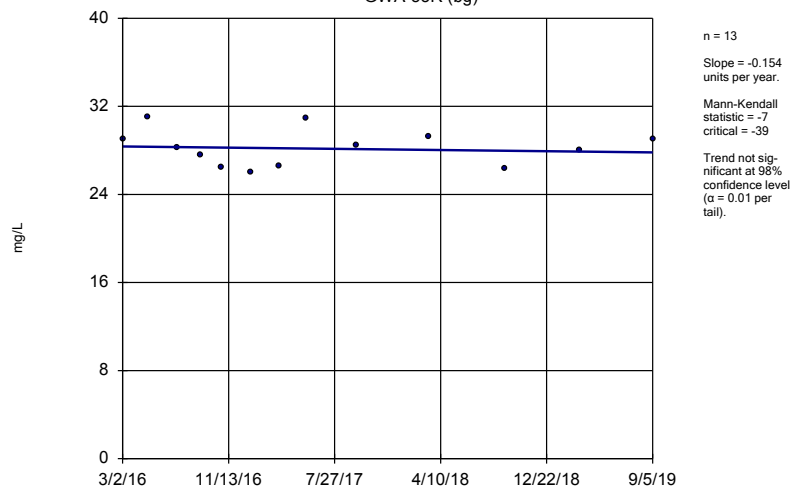
Constituent: Calcium Analysis Run 12/9/2019 1:38 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53 (bg)



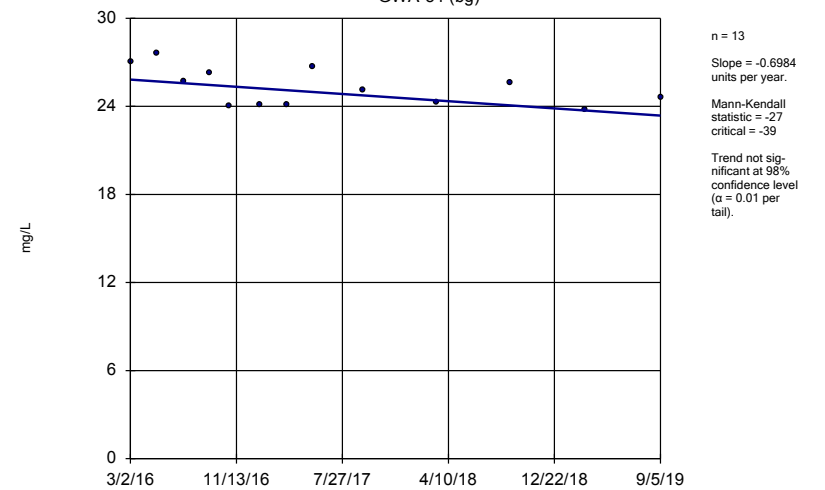
Constituent: Calcium Analysis Run 12/9/2019 1:38 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



Constituent: Calcium Analysis Run 12/9/2019 1:38 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



Constituent: Calcium Analysis Run 12/9/2019 1:38 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	30
5/4/2016	30
7/8/2016	30.1
9/8/2016	26.8
10/26/2016	26.9
1/6/2017	27.6
3/15/2017	26.2
5/17/2017	27.6
9/15/2017	27.7
3/13/2018	26.2
9/6/2018	27.9
3/7/2019	29.5
9/4/2019	28.1

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	29
5/3/2016	31.2
7/8/2016	30
9/8/2016	28.6
10/26/2016	25.5
1/9/2017	26.1
3/16/2017	26.7
5/19/2017	29.2
9/19/2017	26.9
3/13/2018	28.6
9/11/2018	27.3
3/8/2019	25.9
9/5/2019	29.3

Sen's Slope Estimator

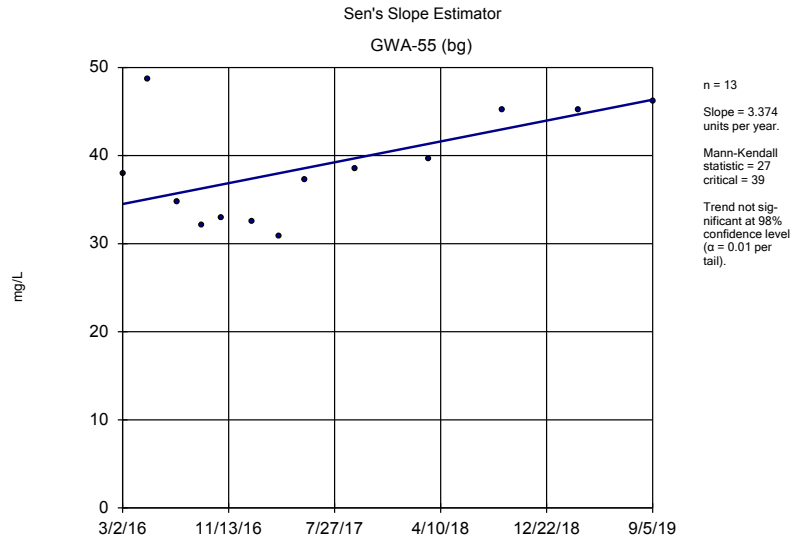
Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
3/2/2016	29
5/3/2016	31
7/11/2016	28.2
9/7/2016	27.6
10/27/2016	26.5
1/6/2017	26
3/16/2017	26.6
5/19/2017	30.9
9/19/2017	28.5
3/13/2018	29.3
9/11/2018	26.3
3/12/2019	28
9/5/2019	29

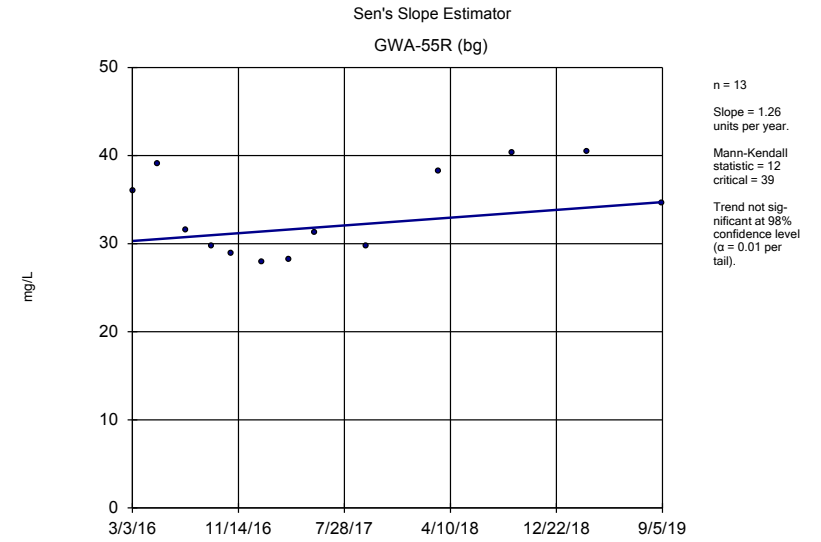
Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

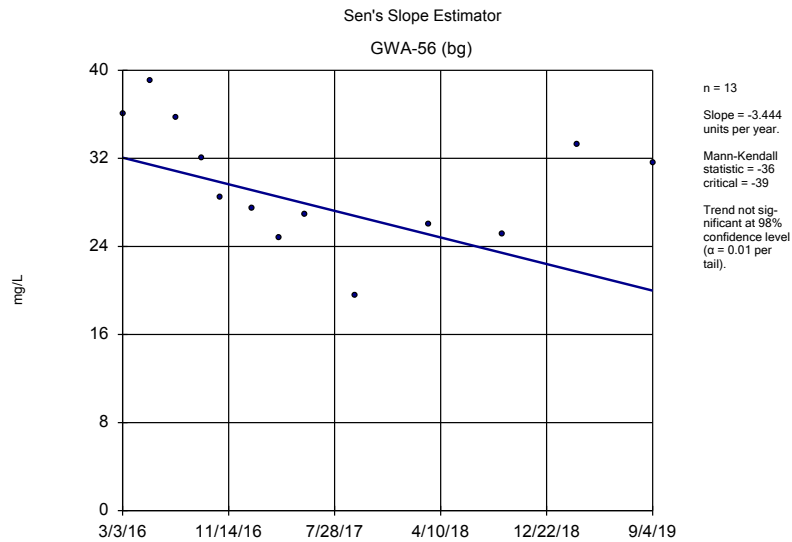
	GWA-54 (bg)
3/2/2016	27
5/4/2016	27.6
7/8/2016	25.7
9/8/2016	26.3
10/26/2016	24
1/9/2017	24.1
3/15/2017	24.1
5/18/2017	26.7
9/15/2017	25.1
3/13/2018	24.3 (J)
9/6/2018	25.6
3/7/2019	23.8 (X)
9/5/2019	24.6



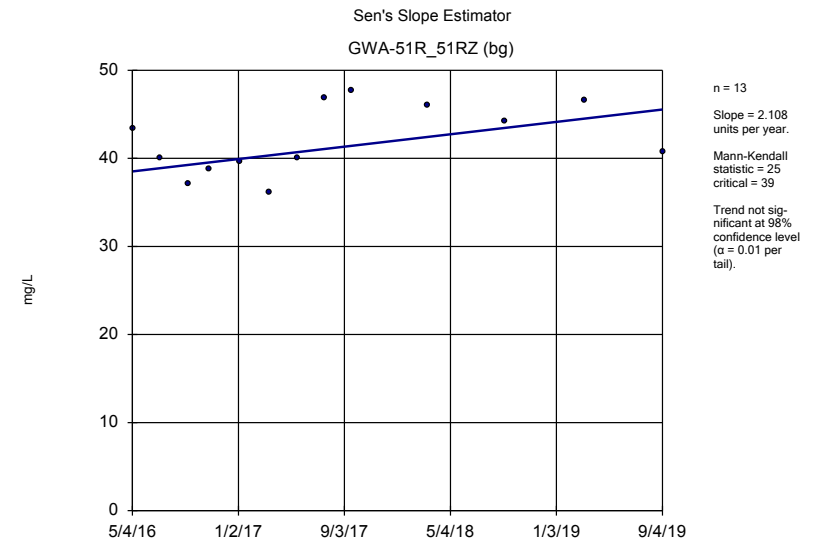
Constituent: Calcium Analysis Run 12/9/2019 1:38 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 1:38 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 1:39 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 1:39 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	38
5/3/2016	48.7
7/11/2016	34.8
9/9/2016	32.1
10/26/2016	32.9
1/9/2017	32.5
3/16/2017	30.8
5/18/2017	37.2
9/15/2017	38.5
3/12/2018	39.6
9/7/2018	45.2
3/8/2019	45.2
9/5/2019	46.2

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
3/3/2016	36
5/3/2016	39.1
7/11/2016	31.6
9/9/2016	29.8
10/27/2016	28.9
1/9/2017	27.9
3/16/2017	28.2
5/18/2017	31.3
9/18/2017	29.7
3/12/2018	38.2
9/7/2018	40.3
3/7/2019	40.4
9/5/2019	34.6

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
3/3/2016	36
5/9/2016	39
7/11/2016	35.7
9/9/2016	32
10/26/2016	28.5
1/9/2017	27.5
3/15/2017	24.8
5/18/2017	26.9
9/15/2017	19.6
3/13/2018	26
9/7/2018	25.1
3/7/2019	33.3
9/4/2019	31.6

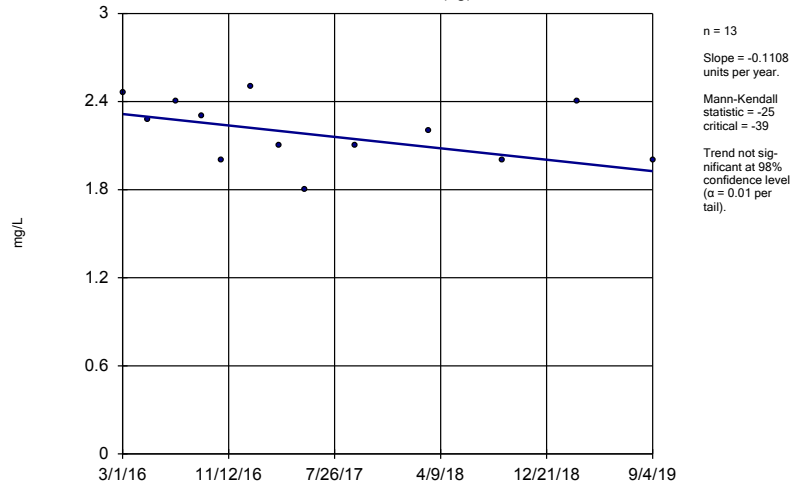
Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

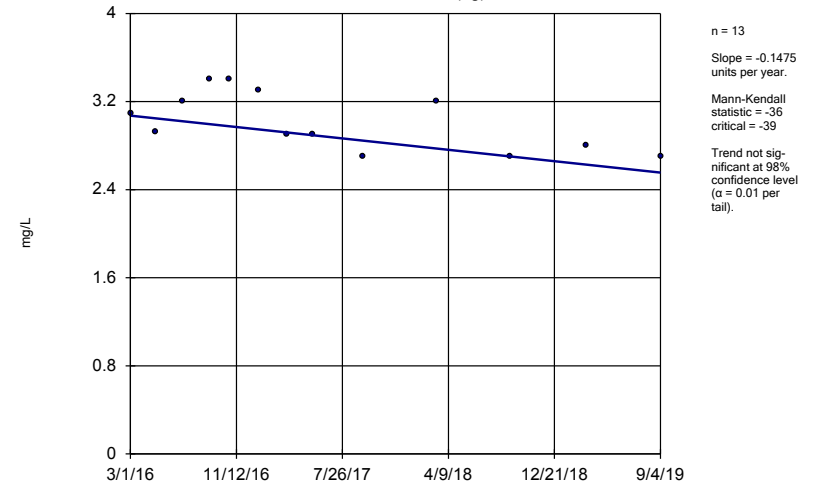
5/4/2016	43.4 (D)
7/7/2016	40.1 (D)
9/8/2016	37.1 (D)
10/26/2016	38.8 (D)
1/6/2017	39.6 (D)
3/15/2017	36.1 (D)
5/18/2017	40.1 (D)
7/19/2017	46.9 (D)
9/19/2017	47.7 (D)
3/13/2018	46.1 (D)
9/7/2018	44.2
3/8/2019	46.6
9/4/2019	40.7

Sen's Slope Estimator
GWA-36 (bg)



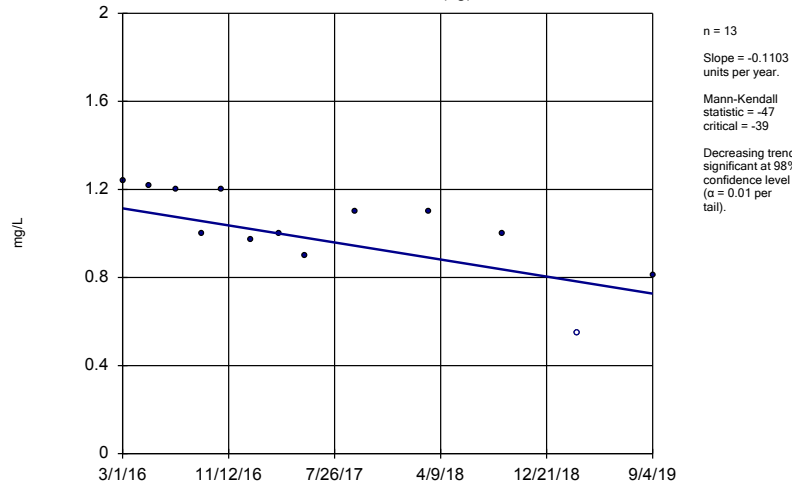
Constituent: Chloride Analysis Run 12/9/2019 1:39 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-36R (bg)



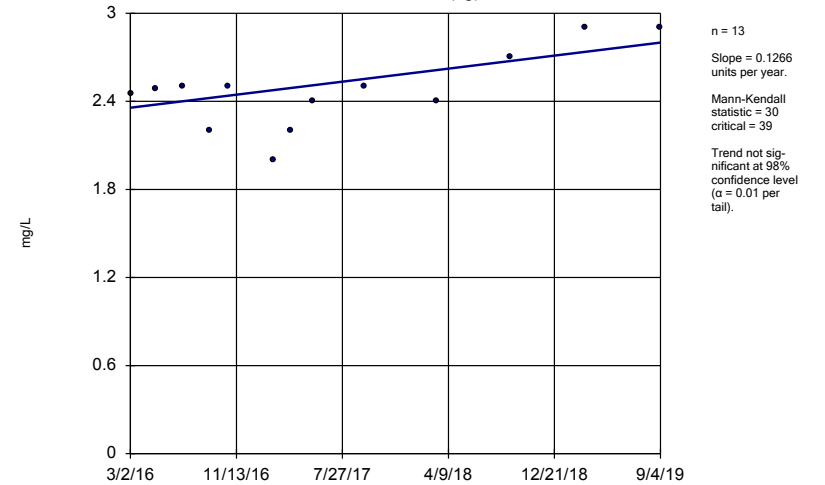
Constituent: Chloride Analysis Run 12/9/2019 1:39 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-37 (bg)



Constituent: Chloride Analysis Run 12/9/2019 1:39 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-38 (bg)



Constituent: Chloride Analysis Run 12/9/2019 1:39 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	2.4587
5/2/2016	2.28
7/7/2016	2.4
9/7/2016	2.3
10/25/2016	2
1/5/2017	2.5 (J)
3/15/2017	2.1
5/17/2017	1.8
9/15/2017	2.1
3/12/2018	2.2
9/6/2018	2
3/6/2019	2.4
9/4/2019	2

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	3.096
5/2/2016	2.92
7/6/2016	3.2
9/7/2016	3.4
10/25/2016	3.4
1/5/2017	3.3
3/14/2017	2.9
5/16/2017	2.9
9/15/2017	2.7
3/12/2018	3.2
9/6/2018	2.7
3/7/2019	2.8
9/4/2019	2.7

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

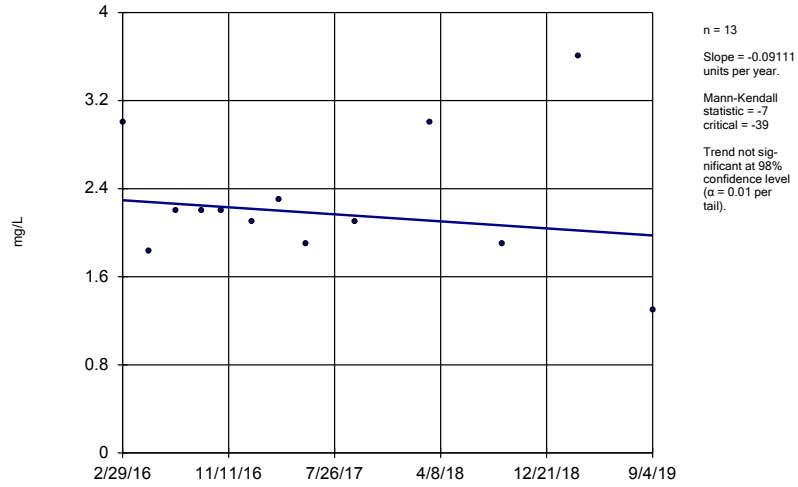
	GWA-37 (bg)
3/1/2016	1.2389
5/3/2016	1.22
7/8/2016	1.2
9/7/2016	1
10/25/2016	1.2
1/6/2017	0.97
3/14/2017	1
5/16/2017	0.9
9/15/2017	1.1
3/12/2018	1.1
9/6/2018	1
3/6/2019	<1.1
9/4/2019	0.81 (X)

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

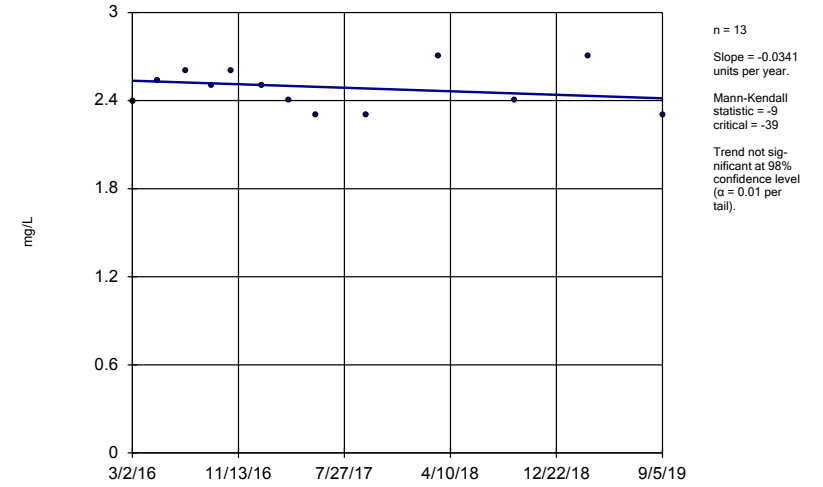
	GWA-38 (bg)
3/2/2016	2.4559
5/3/2016	2.49
7/7/2016	2.5
9/8/2016	2.2
10/25/2016	2.5
2/9/2017	2
3/23/2017	2.2
5/17/2017	2.4
9/19/2017	2.5
3/13/2018	2.4
9/6/2018	2.7
3/7/2019	2.9
9/4/2019	2.9

Sen's Slope Estimator
GWA-52 (bg)



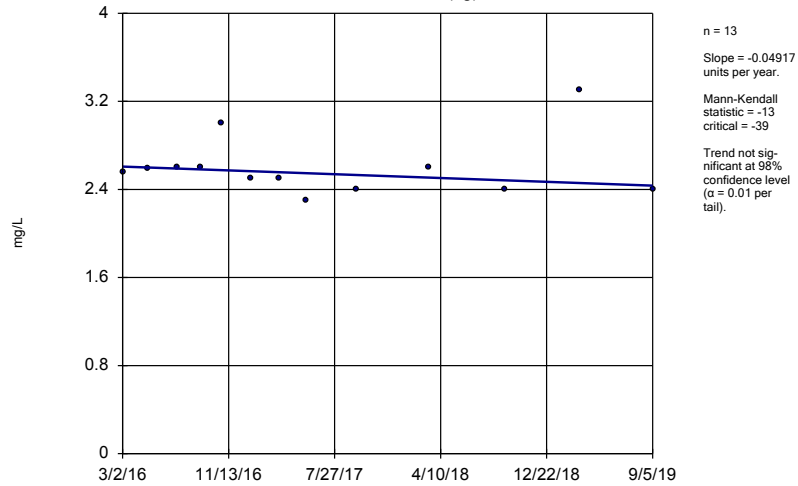
Constituent: Chloride Analysis Run 12/9/2019 1:40 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53 (bg)



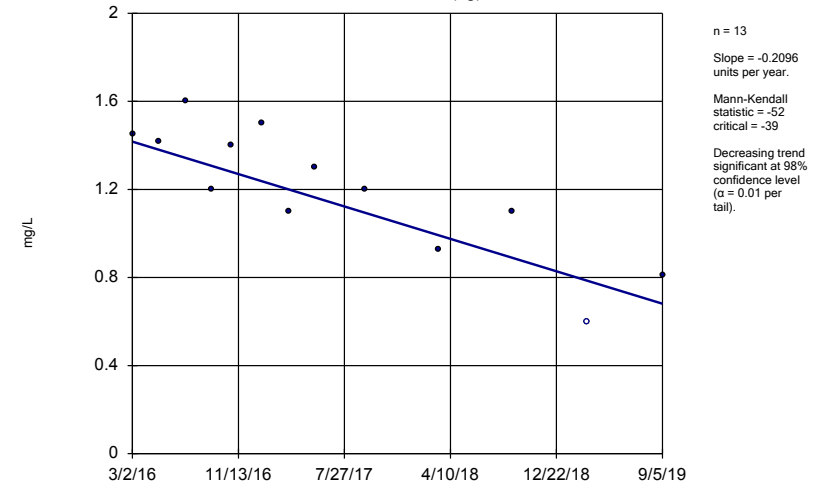
Constituent: Chloride Analysis Run 12/9/2019 1:40 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



Constituent: Chloride Analysis Run 12/9/2019 1:40 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



Constituent: Chloride Analysis Run 12/9/2019 1:40 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	2.9988
5/4/2016	1.83
7/8/2016	2.2
9/8/2016	2.2
10/26/2016	2.2
1/6/2017	2.1
3/15/2017	2.3
5/17/2017	1.9
9/15/2017	2.1
3/13/2018	3
9/6/2018	1.9
3/7/2019	3.6
9/4/2019	1.3

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	2.3976
5/3/2016	2.54
7/8/2016	2.6
9/8/2016	2.5
10/26/2016	2.6
1/9/2017	2.5
3/16/2017	2.4
5/19/2017	2.3
9/19/2017	2.3
3/13/2018	2.7
9/11/2018	2.4
3/8/2019	2.7
9/5/2019	2.3

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

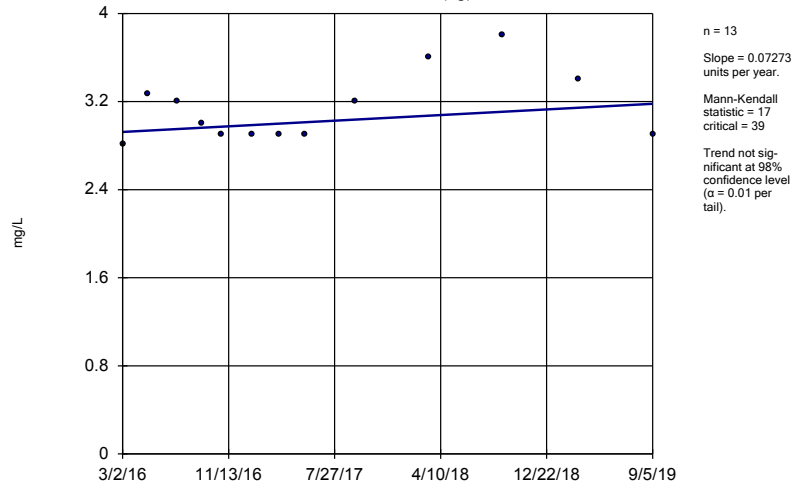
	GWA-53R (bg)
3/2/2016	2.556
5/3/2016	2.59
7/11/2016	2.6
9/7/2016	2.6
10/27/2016	3
1/6/2017	2.5
3/16/2017	2.5
5/19/2017	2.3
9/19/2017	2.4
3/13/2018	2.6
9/11/2018	2.4
3/12/2019	3.3
9/5/2019	2.4

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

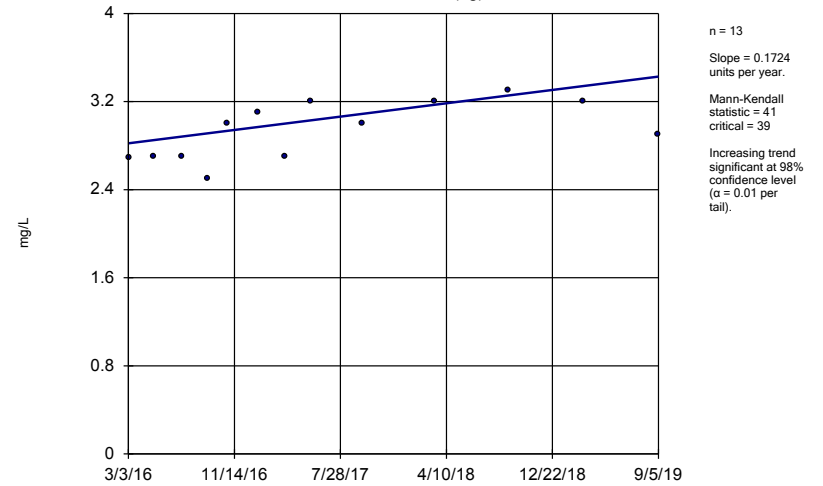
	GWA-54 (bg)
3/2/2016	1.4496
5/4/2016	1.42
7/8/2016	1.6
9/8/2016	1.2
10/26/2016	1.4
1/9/2017	1.5
3/15/2017	1.1
5/18/2017	1.3
9/15/2017	1.2
3/13/2018	0.93
9/6/2018	1.1
3/7/2019	<1.2
9/5/2019	0.81 (X)

Sen's Slope Estimator
GWA-55 (bg)



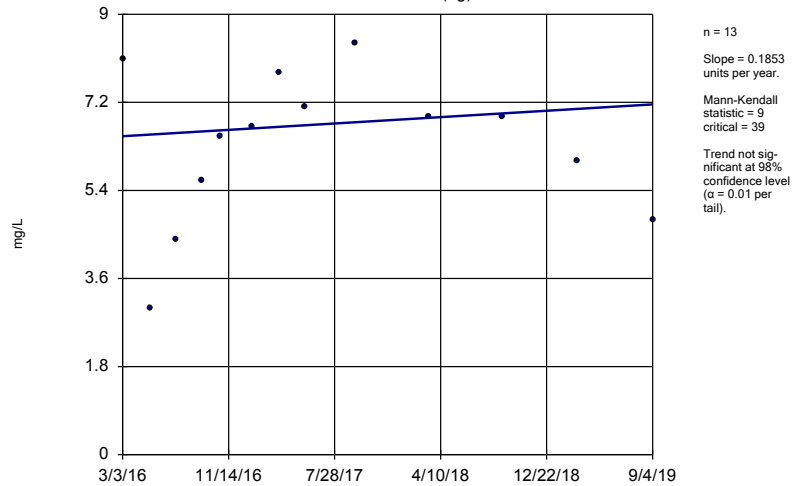
Constituent: Chloride Analysis Run 12/9/2019 1:40 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-55R (bg)



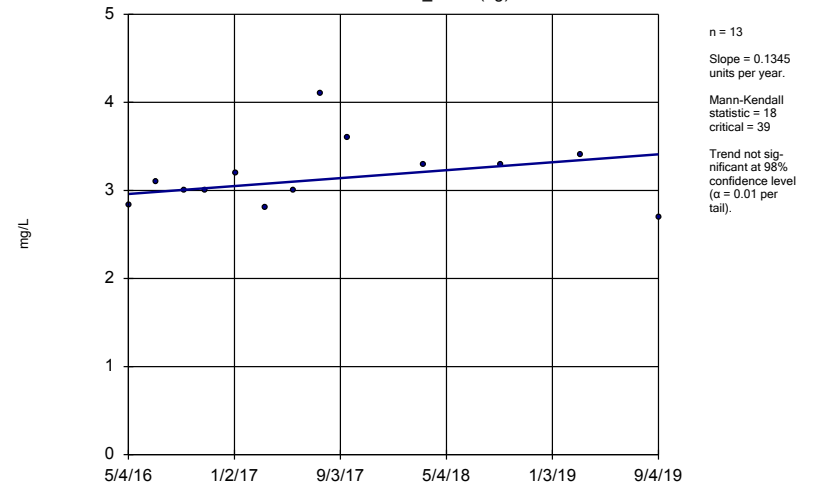
Constituent: Chloride Analysis Run 12/9/2019 1:40 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-56 (bg)



Constituent: Chloride Analysis Run 12/9/2019 1:41 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-51R_51RZ (bg)



Constituent: Chloride Analysis Run 12/9/2019 1:41 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	2.815
5/3/2016	3.27
7/11/2016	3.2
9/9/2016	3
10/26/2016	2.9
1/9/2017	2.9
3/16/2017	2.9
5/18/2017	2.9
9/15/2017	3.2
3/12/2018	3.6
9/7/2018	3.8
3/8/2019	3.4
9/5/2019	2.9

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
3/3/2016	2.6912
5/3/2016	2.7
7/11/2016	2.7
9/9/2016	2.5
10/27/2016	3
1/9/2017	3.1
3/16/2017	2.7
5/18/2017	3.2
9/18/2017	3
3/12/2018	3.2
9/7/2018	3.3
3/7/2019	3.2
9/5/2019	2.9

Sen's Slope Estimator

Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

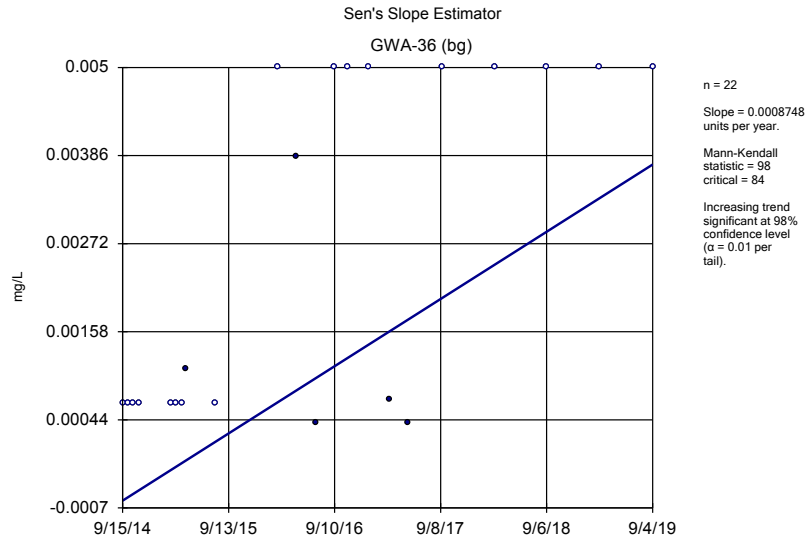
	GWA-56 (bg)
3/3/2016	8.0925
5/9/2016	2.99
7/11/2016	4.4
9/9/2016	5.6
10/26/2016	6.5
1/9/2017	6.7
3/15/2017	7.8
5/18/2017	7.1
9/15/2017	8.4
3/13/2018	6.9
9/7/2018	6.9
3/7/2019	6
9/4/2019	4.8

Sen's Slope Estimator

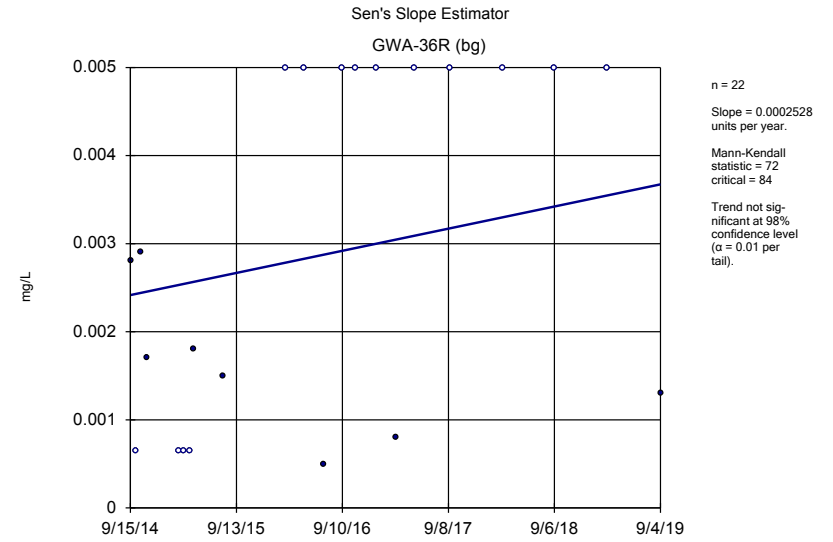
Constituent: Chloride (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

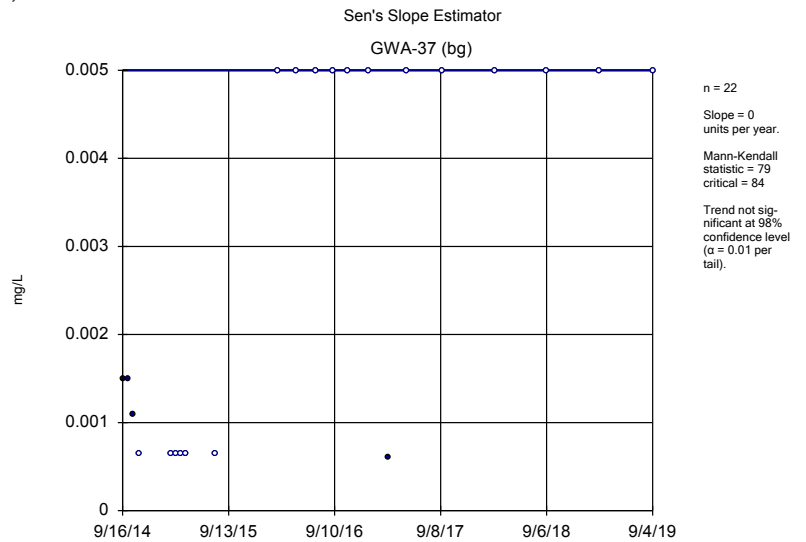
5/4/2016	2.83 (D)
7/7/2016	3.1 (D)
9/8/2016	3 (D)
10/26/2016	3 (D)
1/6/2017	3.2 (D)
3/15/2017	2.8 (D)
5/18/2017	3 (D)
7/19/2017	4.1 (D)
9/19/2017	3.6 (D)
3/13/2018	3.3
9/7/2018	3.3
3/8/2019	3.4
9/4/2019	2.7



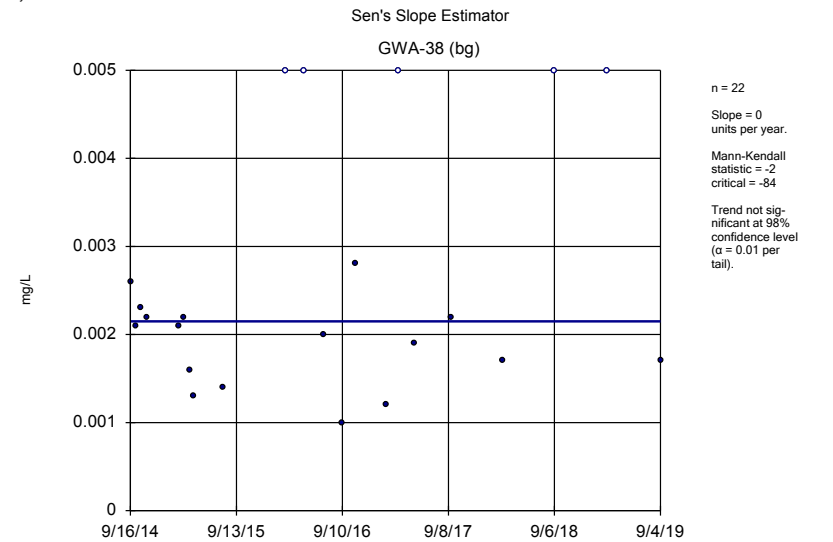
Constituent: Chromium Analysis Run 12/9/2019 1:41 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:41 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:41 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:42 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.0013
10/3/2014	<0.0013
10/20/2014	<0.0013
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	<0.0013
4/5/2015	<0.0013
4/21/2015	0.0011 (J)
7/28/2015	<0.0013
3/1/2016	<0.01
5/2/2016	0.00385 (J)
7/7/2016	0.0004 (J)
9/7/2016	<0.01
10/25/2016	<0.01
1/5/2017	<0.01
3/15/2017	0.0007 (J)
5/17/2017	0.0004 (J)
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.0028
10/3/2014	<0.0013
10/20/2014	0.0029
11/10/2014	0.0017
3/2/2015	<0.0013
3/17/2015	<0.0013
4/5/2015	<0.0013
4/21/2015	0.0018
7/28/2015	0.0015
3/1/2016	<0.01
5/2/2016	<0.01
7/6/2016	0.0005 (J)
9/7/2016	<0.01
10/25/2016	<0.01
1/5/2017	<0.01
3/14/2017	0.0008 (J)
5/16/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.0013 (X)

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

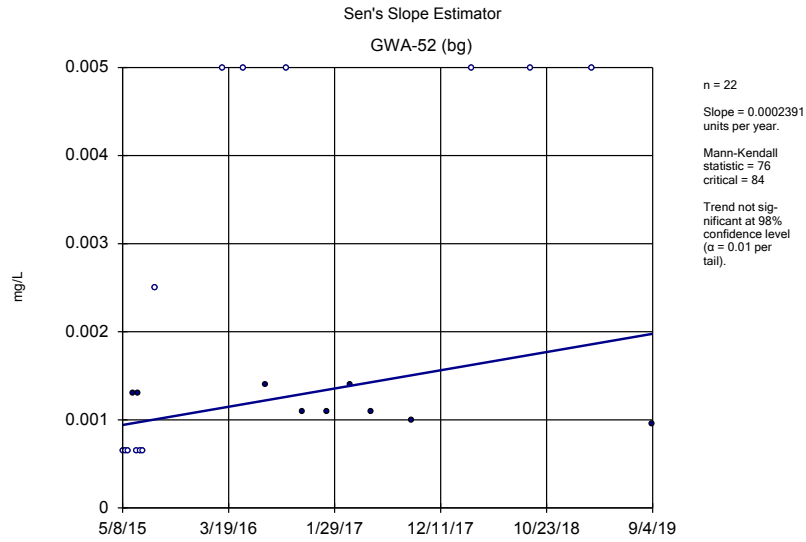
	GWA-37 (bg)
9/16/2014	0.0015
10/3/2014	0.0015
10/20/2014	0.0011 (J)
11/10/2014	<0.0013
3/2/2015	<0.0013
3/17/2015	<0.0013
4/5/2015	<0.0013
4/22/2015	<0.0013
7/28/2015	<0.0013
3/1/2016	<0.01
5/3/2016	<0.01
7/8/2016	<0.01
9/7/2016	<0.01
10/25/2016	<0.01
1/6/2017	<0.01
3/14/2017	0.0006 (J)
5/16/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

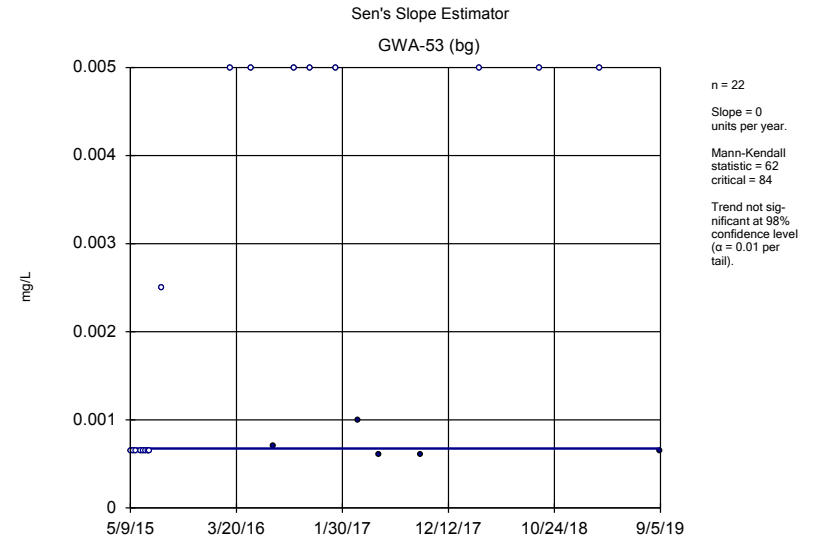
Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

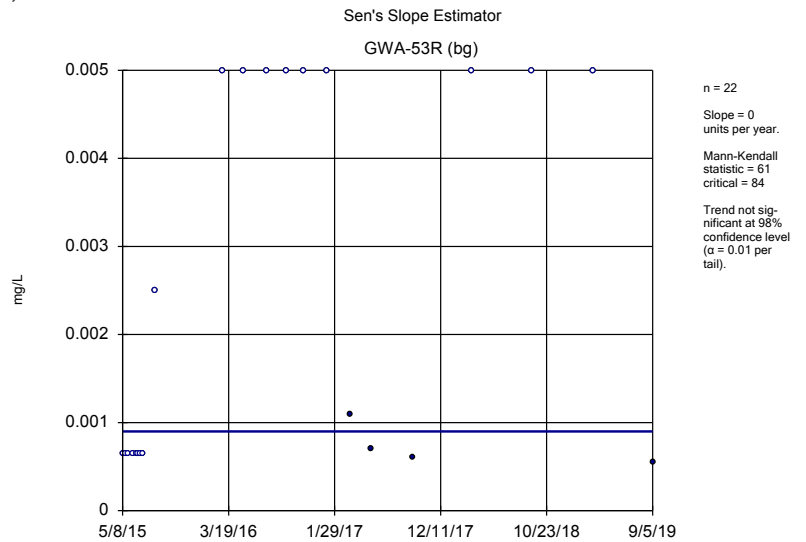
	GWA-38 (bg)
9/16/2014	0.0026
10/3/2014	0.0021
10/20/2014	0.0023
11/10/2014	0.0022
3/2/2015	0.0021
3/17/2015	0.0022
4/6/2015	0.0016
4/22/2015	0.0013
7/28/2015	0.0014
3/2/2016	<0.01
5/3/2016	<0.01
7/7/2016	0.002 (J)
9/8/2016	0.001 (J)
10/25/2016	0.0028 (J)
2/9/2017	0.0012 (J)
3/23/2017	<0.01 (*)
5/17/2017	0.0019 (J)
9/19/2017	0.0022 (J)
3/13/2018	0.0017 (J)
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.0017 (X)



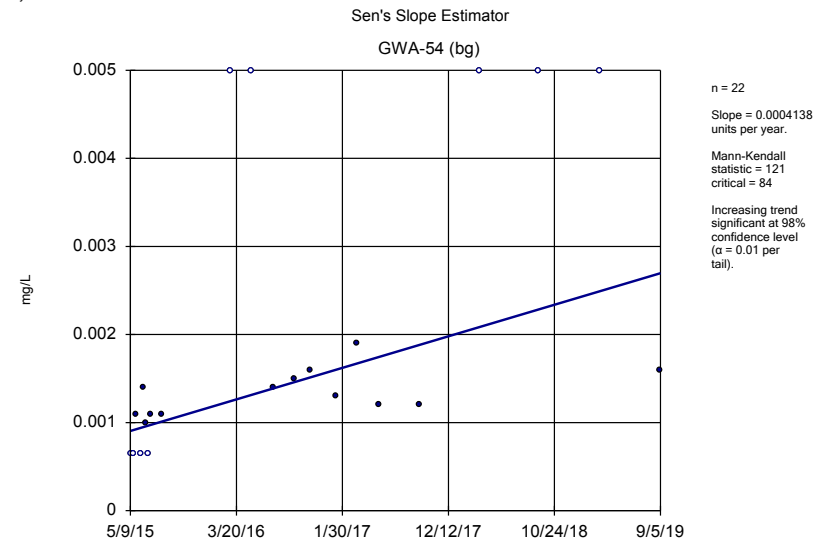
Constituent: Chromium Analysis Run 12/9/2019 1:42 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:42 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:42 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:43 PM View: Sens Slope Background Wells App III and
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.0013
5/17/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	0.0013
6/18/2015	<0.0013
6/24/2015	0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.005
2/29/2016	<0.01
5/4/2016	<0.01
7/8/2016	0.0014 (J)
9/8/2016	<0.01
10/26/2016	0.0011 (J)
1/6/2017	0.0011 (J)
3/15/2017	0.0014 (J)
5/17/2017	0.0011 (J)
9/15/2017	0.001 (J)
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.00096 (X)

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/17/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.005
3/2/2016	<0.01
5/3/2016	<0.01
7/8/2016	0.0007 (J)
9/8/2016	<0.01
10/26/2016	<0.01
1/9/2017	<0.01
3/16/2017	0.001 (J)
5/19/2017	0.0006 (J)
9/19/2017	0.0006 (J)
3/13/2018	<0.01
9/11/2018	<0.01
3/8/2019	<0.01
9/5/2019	0.00065 (X)

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

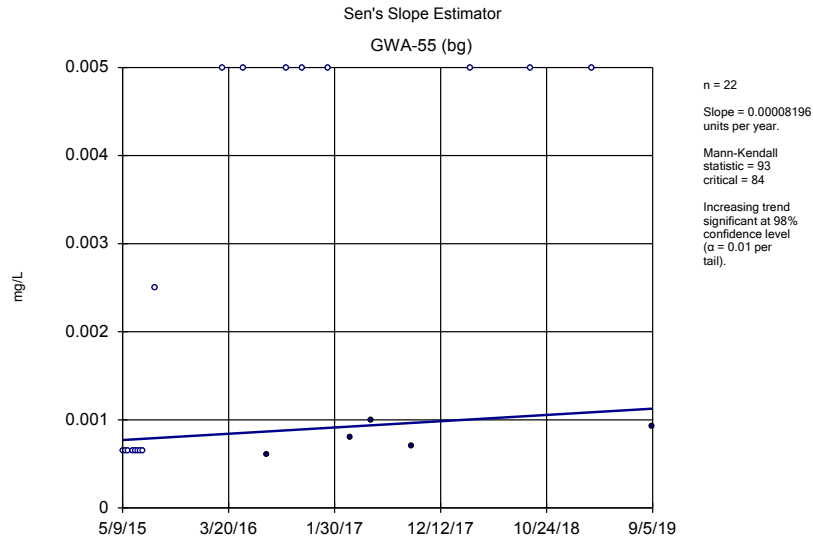
	GWA-53R (bg)
5/8/2015	<0.0013
5/17/2015	<0.0013
5/25/2015	<0.0013
6/8/2015	<0.0013
6/18/2015	<0.0013
6/24/2015	<0.0013
6/30/2015	<0.0013
7/6/2015	<0.0013
8/12/2015	<0.005
3/2/2016	<0.01
5/3/2016	<0.01
7/11/2016	<0.01
9/7/2016	<0.01
10/27/2016	<0.01
1/6/2017	<0.01
3/16/2017	0.0011 (J)
5/19/2017	0.0007 (J)
9/19/2017	0.0006 (J)
3/13/2018	<0.01
9/11/2018	<0.01
3/12/2019	<0.01
9/5/2019	0.00055 (X)

Sen's Slope Estimator

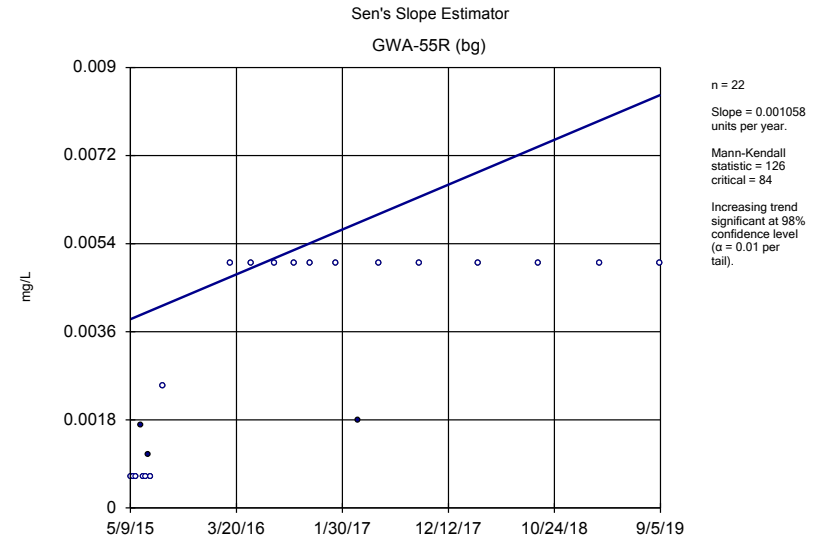
Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

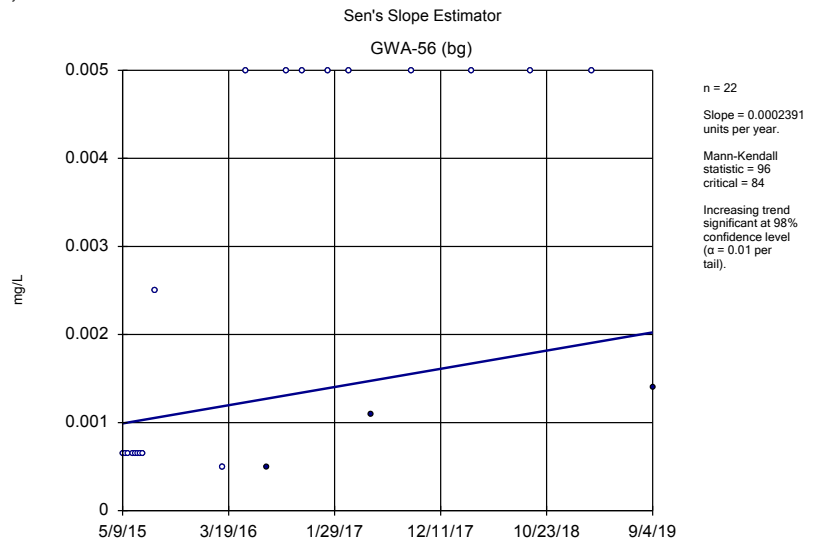
	GWA-54 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/25/2015	0.0011 (J)
6/9/2015	<0.0013
6/17/2015	0.0014
6/25/2015	0.001 (J)
7/1/2015	<0.0013
7/7/2015	0.0011 (J)
8/12/2015	0.0011 (J)
3/2/2016	<0.01
5/4/2016	<0.01
7/8/2016	0.0014 (J)
9/8/2016	0.0015 (J)
10/26/2016	0.0016 (J)
1/9/2017	0.0013 (J)
3/15/2017	0.0019 (J)
5/18/2017	0.0012 (J)
9/15/2017	0.0012 (J)
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/5/2019	0.0016 (X)



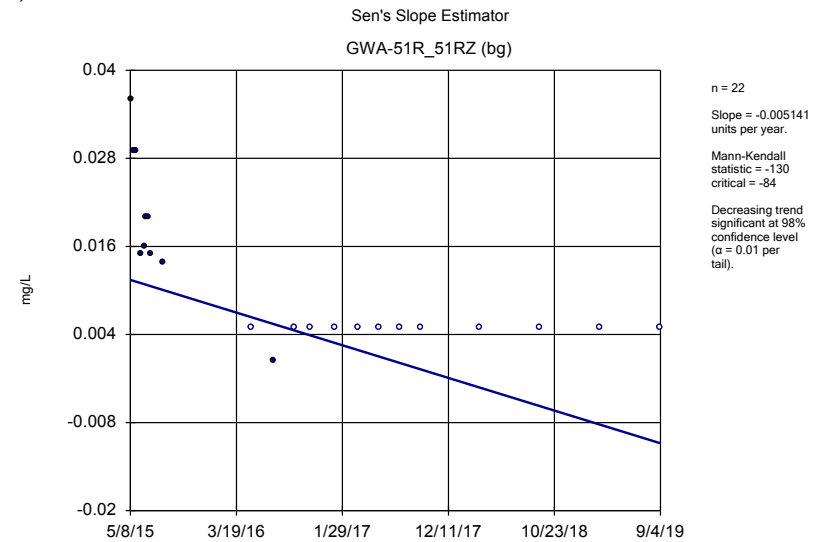
Constituent: Chromium Analysis Run 12/9/2019 1:43 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:43 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:43 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Chromium Analysis Run 12/9/2019 1:44 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/26/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	<0.0013
8/13/2015	<0.005
3/2/2016	<0.01
5/3/2016	<0.01
7/11/2016	0.0006 (J)
9/9/2016	<0.01
10/26/2016	<0.01
1/9/2017	<0.01
3/16/2017	0.0008 (J)
5/18/2017	0.001 (J)
9/15/2017	0.0007 (J)
3/12/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/5/2019	0.00092 (X)

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.0013
5/18/2015	<0.0013
5/26/2015	<0.0013
6/9/2015	0.0017
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	0.0011 (J)
7/7/2015	<0.0013
8/13/2015	<0.005
3/3/2016	<0.01
5/3/2016	<0.01
7/11/2016	<0.01
9/9/2016	<0.01
10/27/2016	<0.01
1/9/2017	<0.01
3/16/2017	0.0018 (J)
5/18/2017	<0.01
9/18/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.0013
5/19/2015	<0.0013
5/26/2015	<0.0013
6/9/2015	<0.0013
6/17/2015	<0.0013
6/25/2015	<0.0013
7/1/2015	<0.0013
7/7/2015	<0.0013
8/13/2015	<0.005
3/3/2016	<0.001
5/9/2016	<0.01
7/11/2016	0.0005 (J)
9/9/2016	<0.01
10/26/2016	<0.01
1/9/2017	<0.01
3/15/2017	<0.01
5/18/2017	0.0011 (J)
9/15/2017	<0.01
3/13/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.0014 (X)

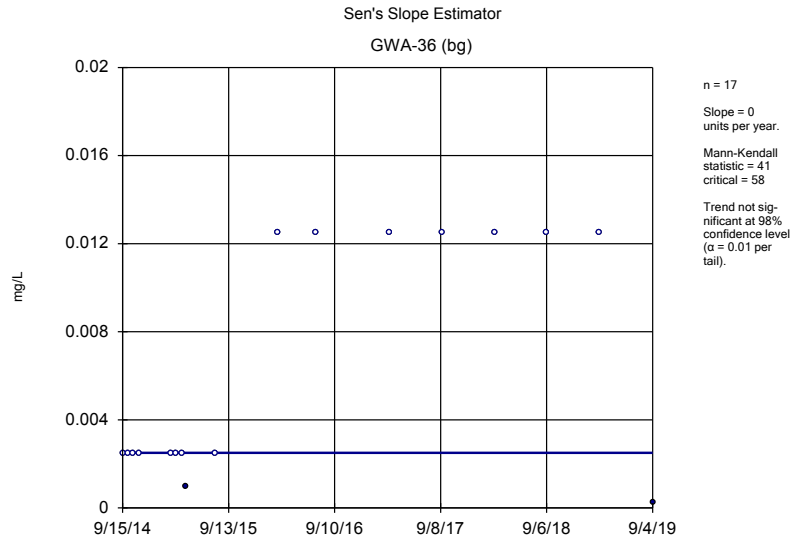
Sen's Slope Estimator

Constituent: Chromium (mg/L) Analysis Run 12/9/2019 3:13 PM View: Sens Slope Background Wells App III and 16 metals

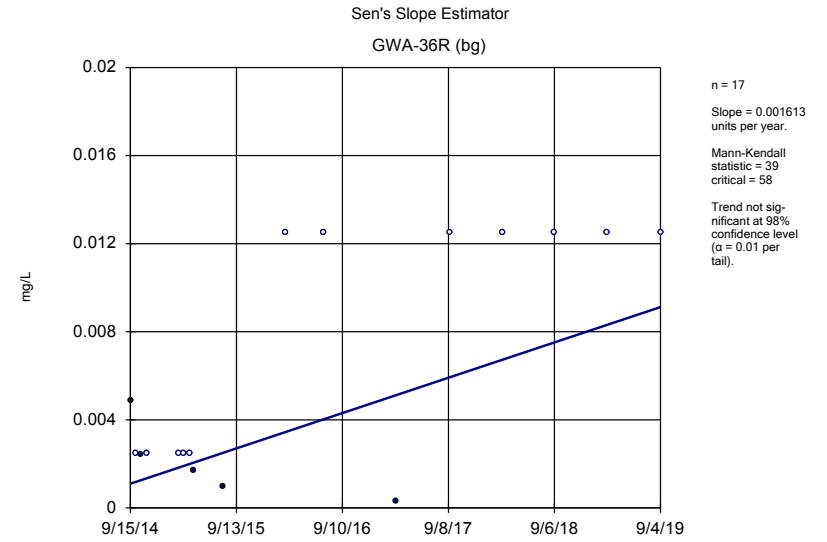
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

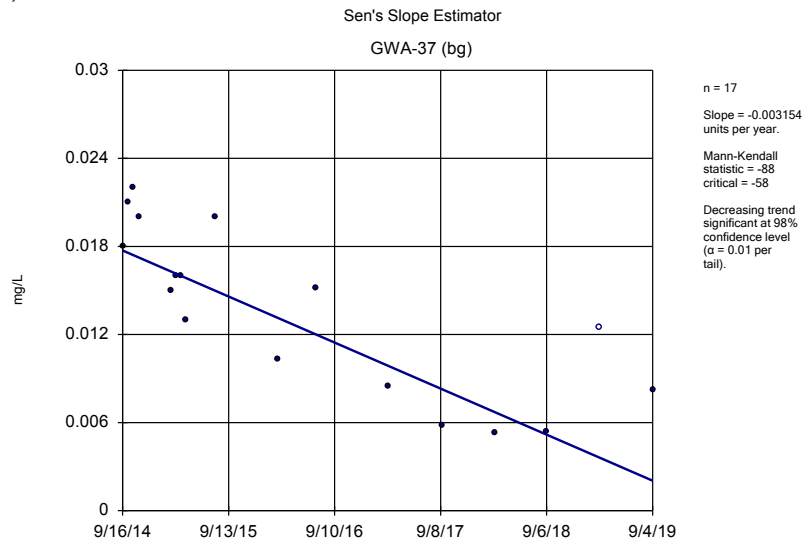
5/8/2015	0.036
5/17/2015	0.029
5/25/2015	0.029
6/8/2015	0.015
6/18/2015	0.016
6/24/2015	0.02
6/30/2015	0.02
7/6/2015	0.015
8/12/2015	0.0139
5/4/2016	<0.01 (D)
7/7/2016	0.0005 (JD)
9/8/2016	<0.01 (D)
10/26/2016	<0.01 (D)
1/6/2017	<0.01 (D)
3/15/2017	<0.01 (D)
5/18/2017	<0.01 (D)
7/19/2017	<0.01 (D)
9/19/2017	<0.01 (D)
3/13/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/4/2019	<0.01



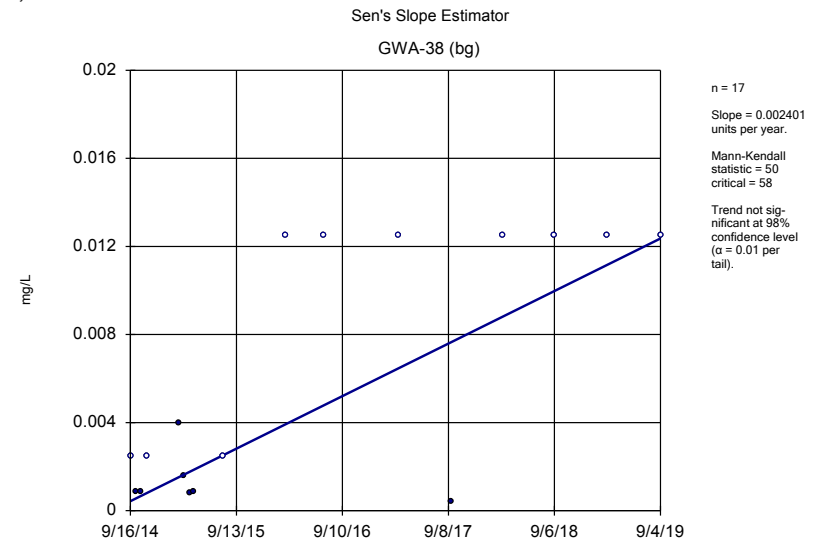
Constituent: Copper Analysis Run 12/9/2019 1:44 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:44 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:44 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:44 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	0.00095 (J)
7/28/2015	<0.005
3/1/2016	<0.025
7/7/2016	<0.025
3/15/2017	<0.025 (*)
9/15/2017	<0.025
3/12/2018	<0.025
9/6/2018	<0.025
3/6/2019	<0.025
9/4/2019	0.00023 (X)

Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.0049 (J)
10/3/2014	<0.005
10/20/2014	0.0024 (J)
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	0.0017 (J)
7/28/2015	0.00097 (J)
3/1/2016	<0.025
7/6/2016	<0.025
3/14/2017	0.0003 (J)
9/15/2017	<0.025
3/12/2018	<0.025
9/6/2018	<0.025
3/7/2019	<0.025
9/4/2019	<0.025

Sen's Slope Estimator

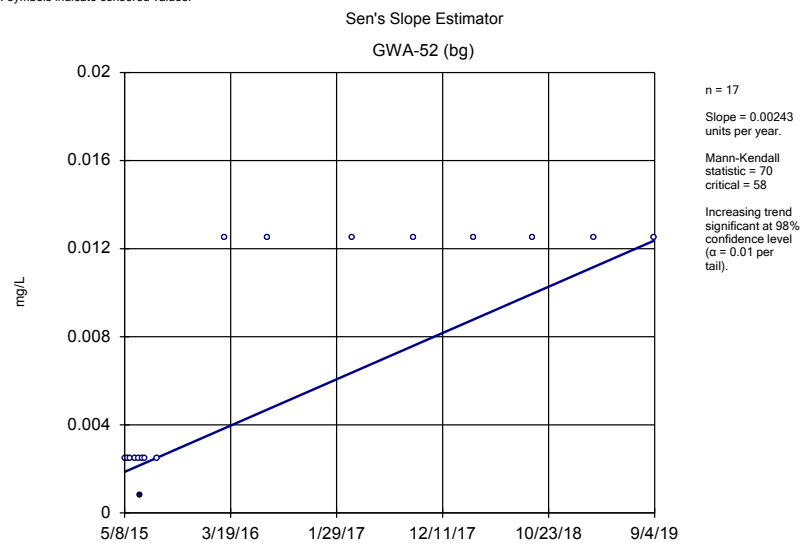
Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	0.018
10/3/2014	0.021
10/20/2014	0.022
11/10/2014	0.02
3/2/2015	0.015
3/17/2015	0.016
4/5/2015	0.016
4/22/2015	0.013
7/28/2015	0.02
3/1/2016	0.0103 (J)
7/8/2016	0.0152 (J)
3/14/2017	0.0085 (J)
9/15/2017	0.0058 (J)
3/12/2018	0.0053 (J)
9/6/2018	0.0054 (J)
3/6/2019	<0.025
9/4/2019	0.0082 (X)

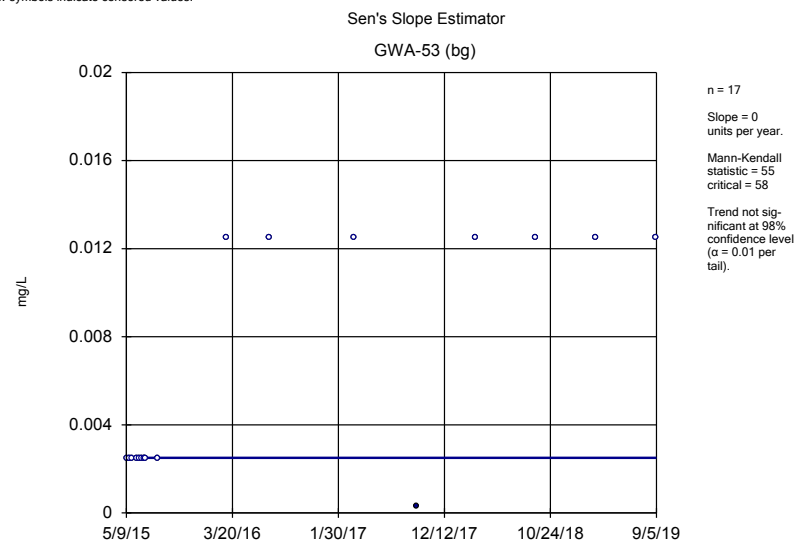
Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

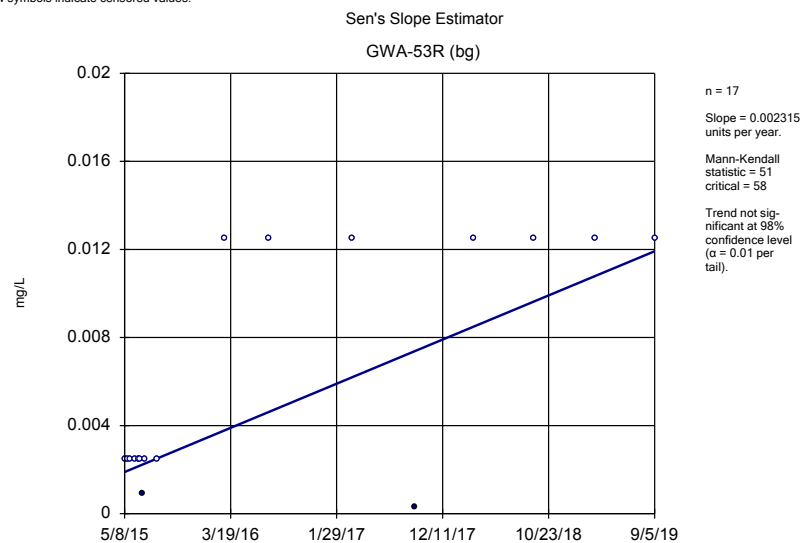
	GWA-38 (bg)
9/16/2014	<0.005
10/3/2014	0.00089 (J)
10/20/2014	0.00087 (J)
11/10/2014	<0.005
3/2/2015	0.004 (J)
3/17/2015	0.0016 (J)
4/6/2015	0.00083 (J)
4/22/2015	0.00085 (J)
7/28/2015	<0.005
3/2/2016	<0.025
7/7/2016	<0.025
3/23/2017	<0.025
9/19/2017	0.0004 (J)
3/13/2018	<0.025
9/6/2018	<0.025
3/7/2019	<0.025
9/4/2019	<0.025



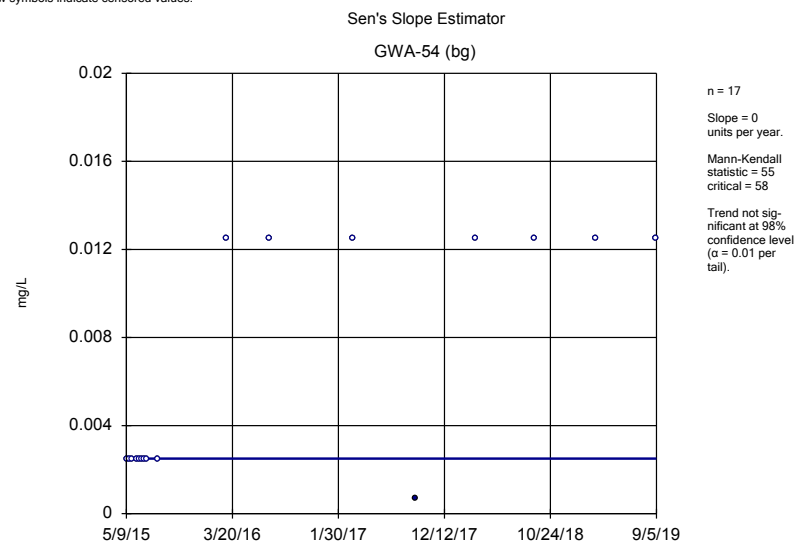
Constituent: Copper Analysis Run 12/9/2019 1:45 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:45 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:45 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:45 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	0.00082 (J)
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
2/29/2016	<0.025
7/8/2016	<0.025
3/15/2017	<0.025
9/15/2017	<0.025
3/13/2018	<0.025
9/6/2018	<0.025
3/7/2019	<0.025
9/4/2019	<0.025

Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/17/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.025
7/8/2016	<0.025
3/16/2017	<0.025
9/19/2017	0.0003 (J)
3/13/2018	<0.025
9/11/2018	<0.025
3/8/2019	<0.025
9/5/2019	<0.025

Sen's Slope Estimator

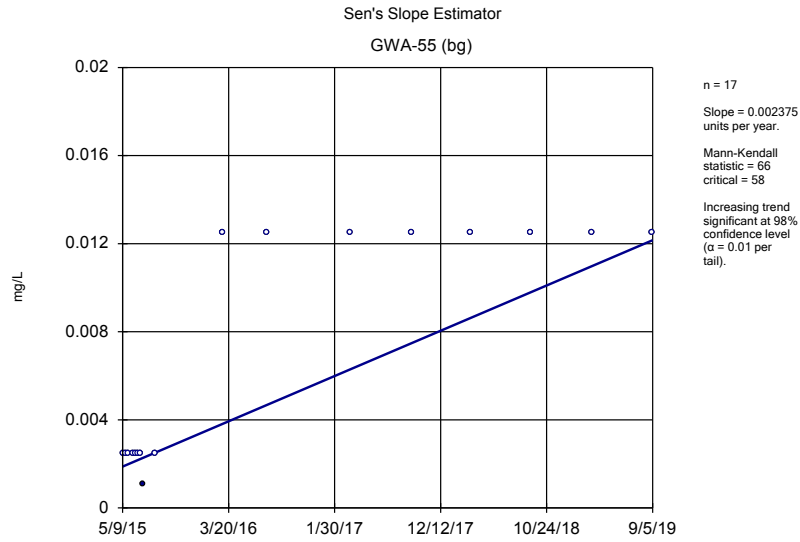
Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	0.00093 (J)
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.025
7/11/2016	<0.025
3/16/2017	<0.025
9/19/2017	0.0003 (J)
3/13/2018	<0.025
9/11/2018	<0.025
3/12/2019	<0.025
9/5/2019	<0.025

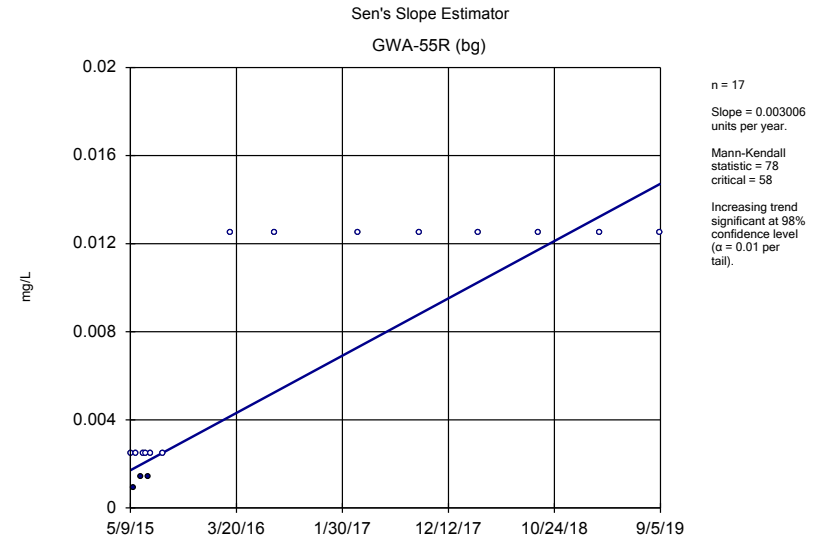
Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

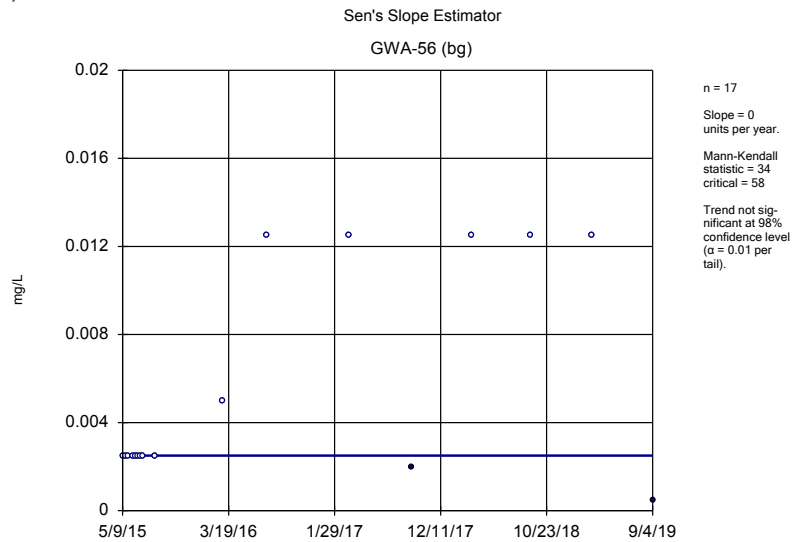
	GWA-54 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.025
7/8/2016	<0.025
3/15/2017	<0.025
9/15/2017	0.0007 (J)
3/13/2018	<0.025
9/6/2018	<0.025
3/7/2019	<0.025
9/5/2019	<0.025



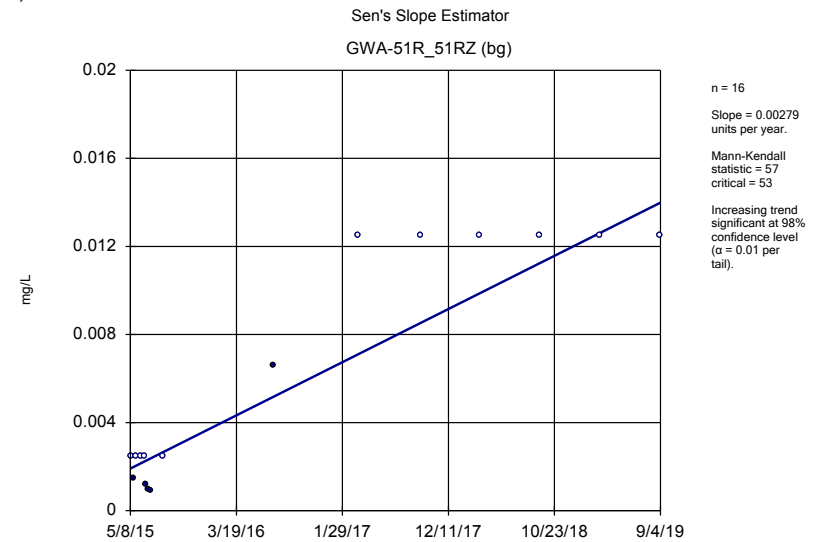
Constituent: Copper Analysis Run 12/9/2019 1:46 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:46 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:46 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Copper Analysis Run 12/9/2019 1:46 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	0.0011 (J)
8/13/2015	<0.005
3/2/2016	<0.025
7/11/2016	<0.025
3/16/2017	<0.025
9/15/2017	<0.025
3/12/2018	<0.025
9/7/2018	<0.025
3/8/2019	<0.025
9/5/2019	<0.025

Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.005
5/18/2015	0.00093 (J)
5/26/2015	<0.005
6/9/2015	0.0014 (J)
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	0.0014 (J)
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.025
7/11/2016	<0.025
3/16/2017	<0.025 (*)
9/18/2017	<0.025
3/12/2018	<0.025
9/7/2018	<0.025
3/7/2019	<0.025
9/5/2019	<0.025

Sen's Slope Estimator

Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

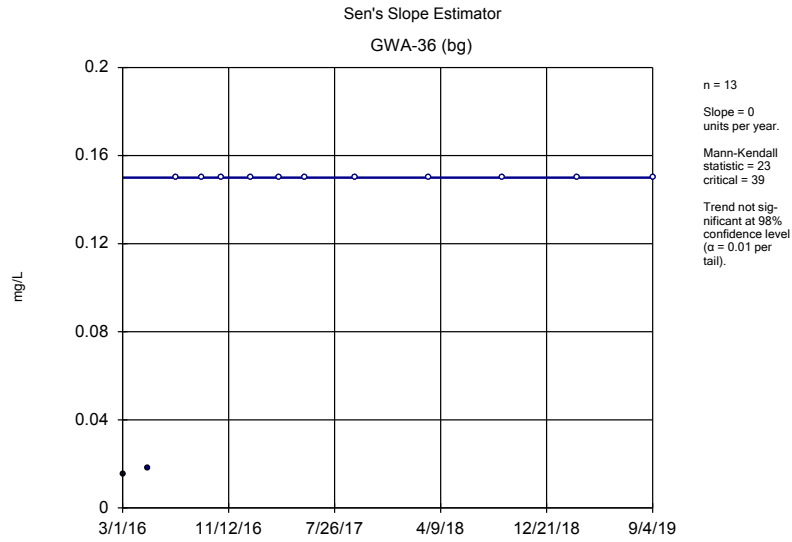
	GWA-56 (bg)
5/9/2015	<0.005
5/19/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.01
7/11/2016	<0.025
3/15/2017	<0.025 (*)
9/15/2017	0.002 (J)
3/13/2018	<0.025
9/7/2018	<0.025
3/7/2019	<0.025
9/4/2019	0.00047 (X)

Sen's Slope Estimator

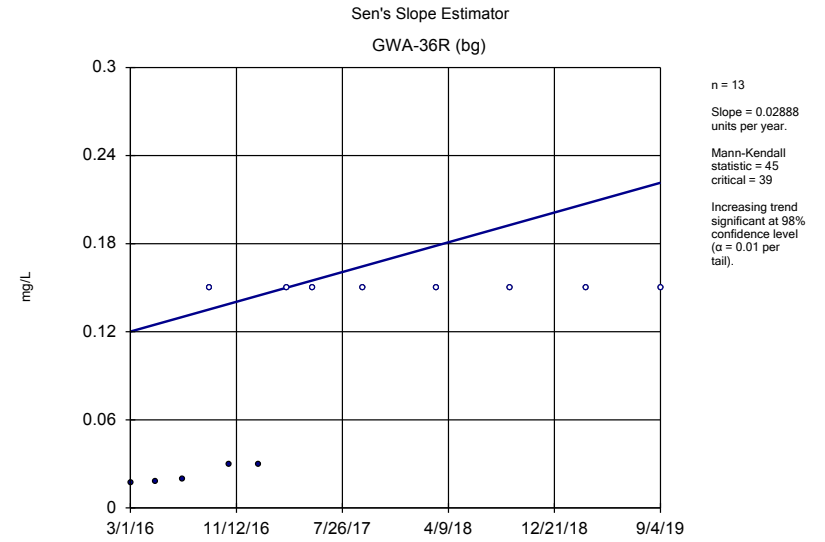
Constituent: Copper (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

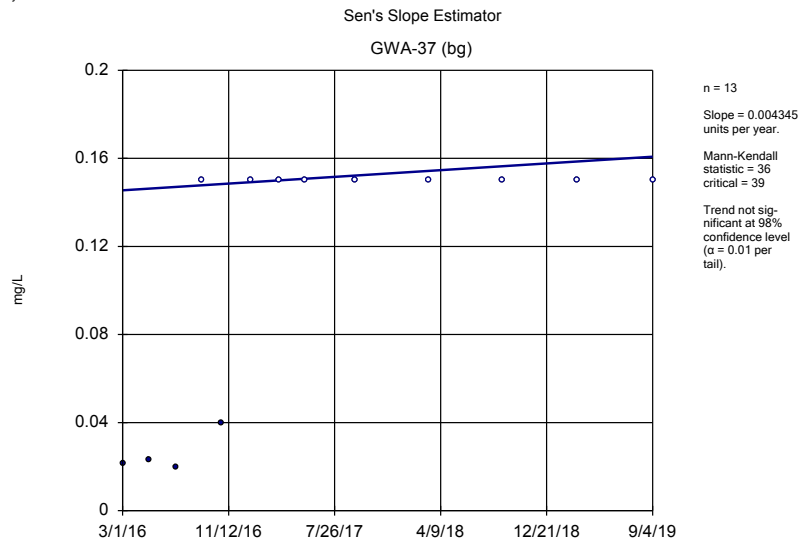
5/8/2015	<0.005
5/17/2015	0.0015 (J)
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	0.0012 (J)
6/30/2015	0.00096 (J)
7/6/2015	0.00091 (J)
8/12/2015	<0.005
7/7/2016	0.0066 (JD)
3/15/2017	<0.025 (D)
9/19/2017	<0.025 (D)
3/13/2018	<0.025
9/7/2018	<0.025
3/8/2019	<0.025
9/4/2019	<0.025



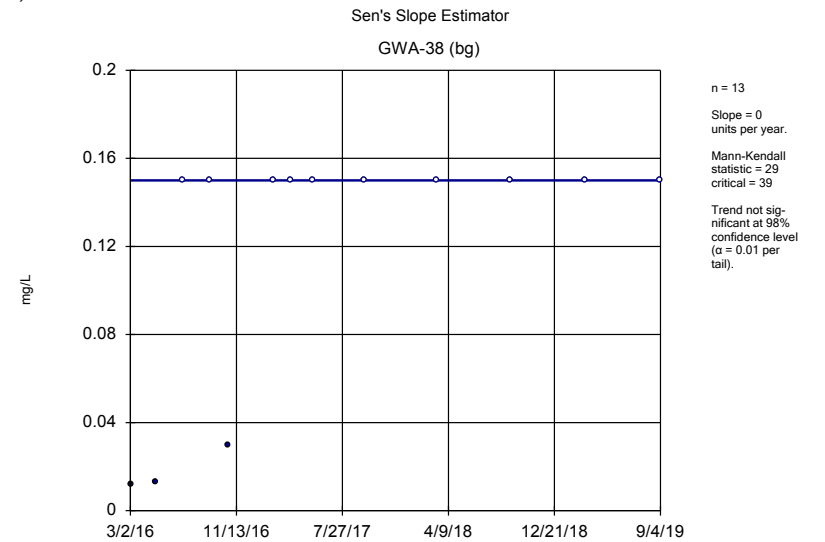
Constituent: Fluoride Analysis Run 12/9/2019 1:46 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:46 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:47 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:47 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	0.0153 (J)
5/2/2016	0.018 (J)
7/7/2016	<0.3
9/7/2016	<0.3
10/25/2016	<0.3
1/5/2017	<0.3
3/15/2017	<0.3
5/17/2017	<0.3
9/15/2017	<0.3
3/12/2018	<0.3
9/6/2018	<0.3
3/6/2019	<0.3
9/4/2019	<0.3

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	0.0172 (J)
5/2/2016	0.018 (J)
7/6/2016	0.02 (J)
9/7/2016	<0.3
10/25/2016	0.03 (J)
1/5/2017	0.03 (J)
3/14/2017	<0.3
5/16/2017	<0.3
9/15/2017	<0.3
3/12/2018	<0.3
9/6/2018	<0.3
3/7/2019	<0.3
9/4/2019	<0.3

Sen's Slope Estimator

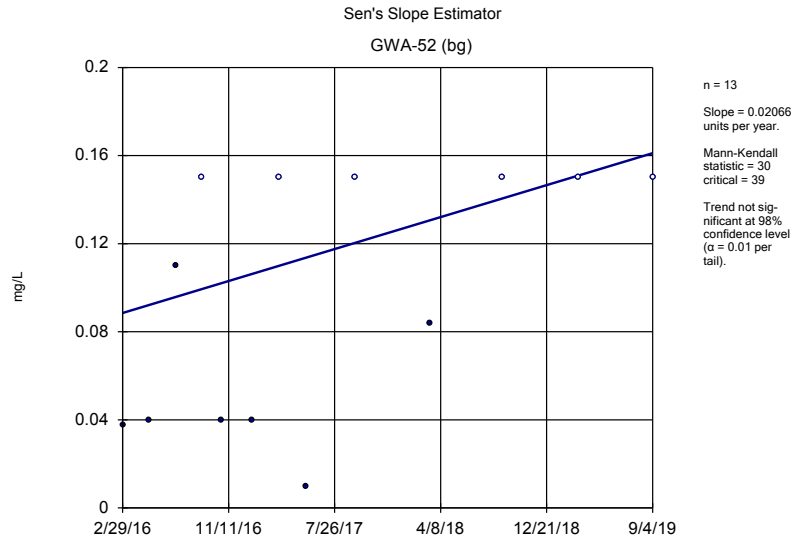
Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
3/1/2016	0.0215 (J)
5/3/2016	0.023 (J)
7/8/2016	0.02 (J)
9/7/2016	<0.3
10/25/2016	0.04 (J)
1/6/2017	<0.3
3/14/2017	<0.3
5/16/2017	<0.3
9/15/2017	<0.3
3/12/2018	<0.3
9/6/2018	<0.3
3/6/2019	<0.3
9/4/2019	<0.3

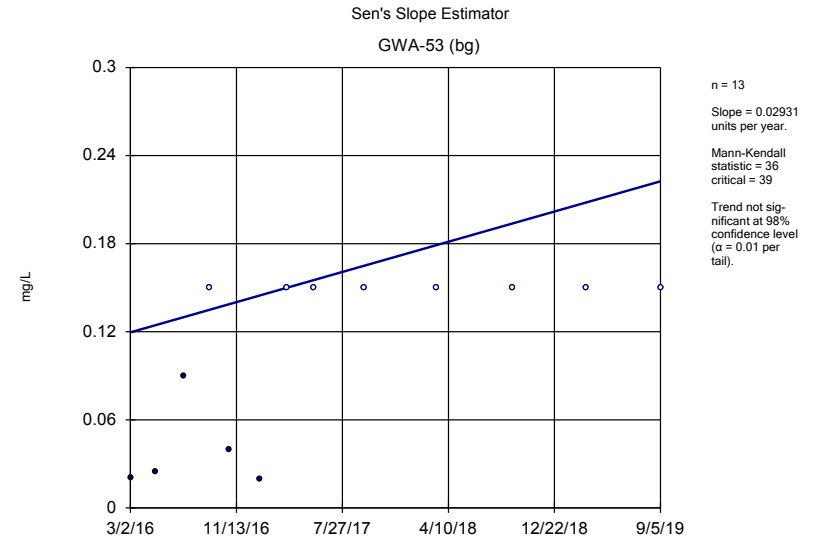
Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

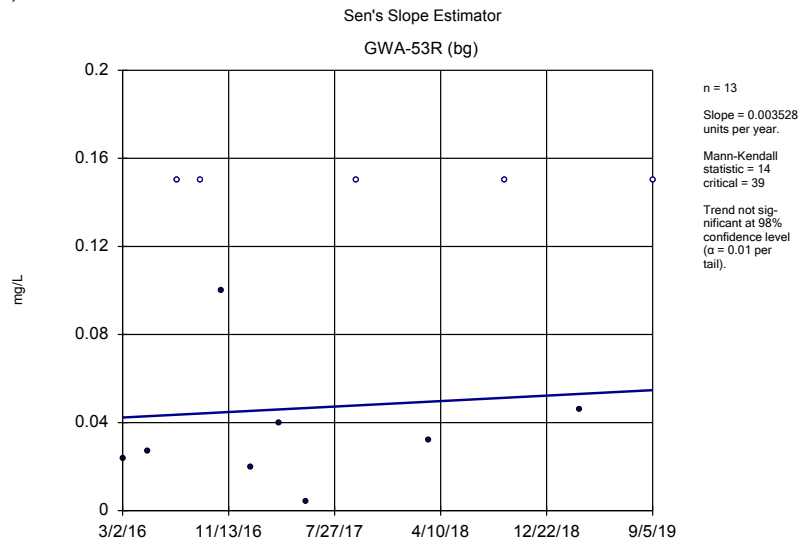
	GWA-38 (bg)
3/2/2016	0.0121 (J)
5/3/2016	0.013 (J)
7/7/2016	<0.3
9/8/2016	<0.3
10/25/2016	0.03 (J)
2/9/2017	<0.3
3/23/2017	<0.3
5/17/2017	<0.3
9/19/2017	<0.3
3/13/2018	<0.3
9/6/2018	<0.3
3/7/2019	<0.3
9/4/2019	<0.3



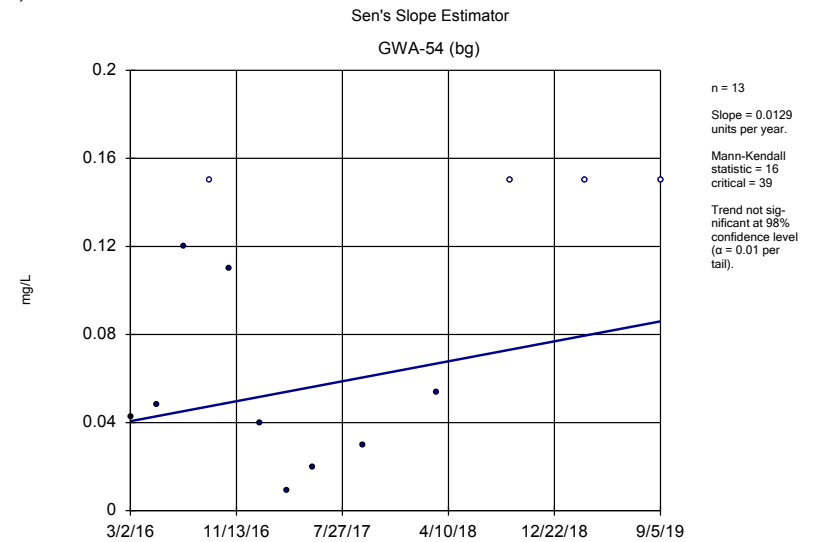
Constituent: Fluoride Analysis Run 12/9/2019 1:47 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:47 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:47 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:47 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	0.0375 (J)
5/4/2016	0.04 (J)
7/8/2016	0.11 (J)
9/8/2016	<0.3
10/26/2016	0.04 (J)
1/6/2017	0.04 (J)
3/15/2017	<0.3
5/17/2017	0.01 (J)
9/15/2017	<0.3
3/13/2018	0.084 (J)
9/6/2018	<0.3
3/7/2019	<0.3
9/4/2019	<0.3

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	0.0202 (J)
5/3/2016	0.025 (J)
7/8/2016	0.09 (J)
9/8/2016	<0.3
10/26/2016	0.04 (J)
1/9/2017	0.02 (J)
3/16/2017	<0.3
5/19/2017	<0.3
9/19/2017	<0.3
3/13/2018	<0.3
9/11/2018	<0.3
3/8/2019	<0.3
9/5/2019	<0.3

Sen's Slope Estimator

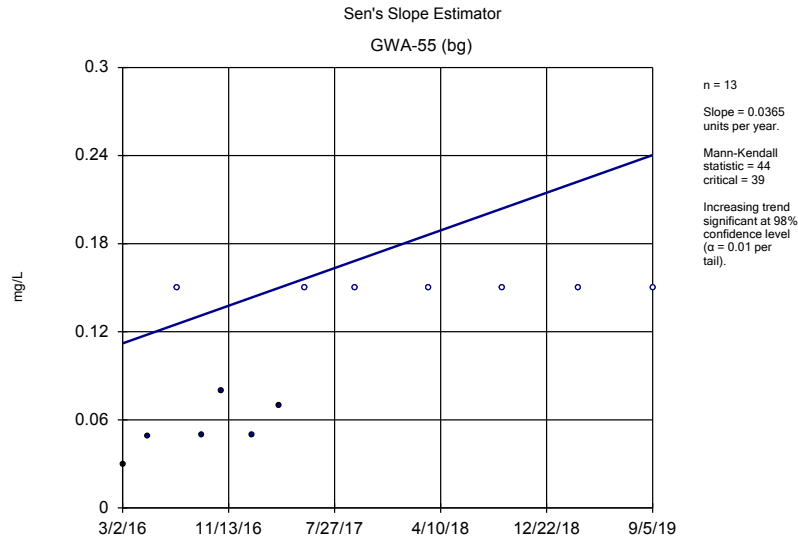
Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
3/2/2016	0.0238 (J)
5/3/2016	0.027 (J)
7/11/2016	<0.3 (*)
9/7/2016	<0.3
10/27/2016	0.1 (J)
1/6/2017	0.02 (J)
3/16/2017	0.04 (J)
5/19/2017	0.004 (J)
9/19/2017	<0.3
3/13/2018	0.032 (J)
9/11/2018	<0.3
3/12/2019	0.046 (X)
9/5/2019	<0.3

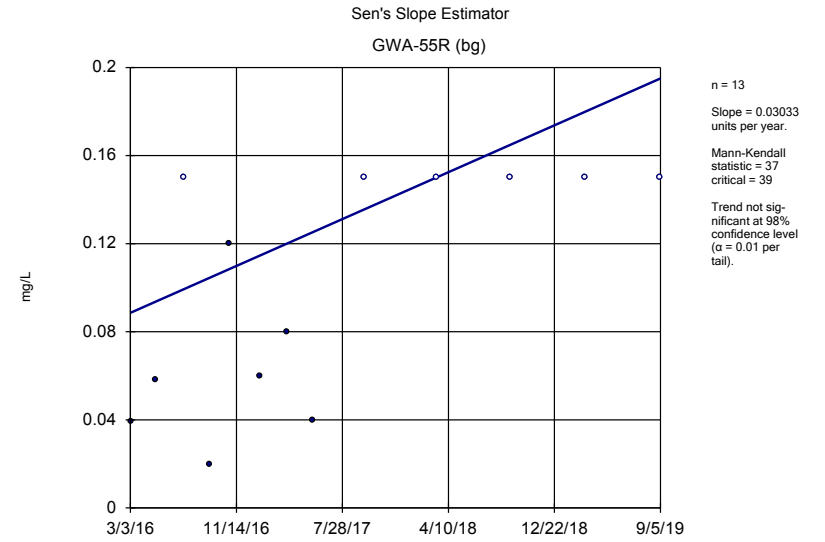
Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

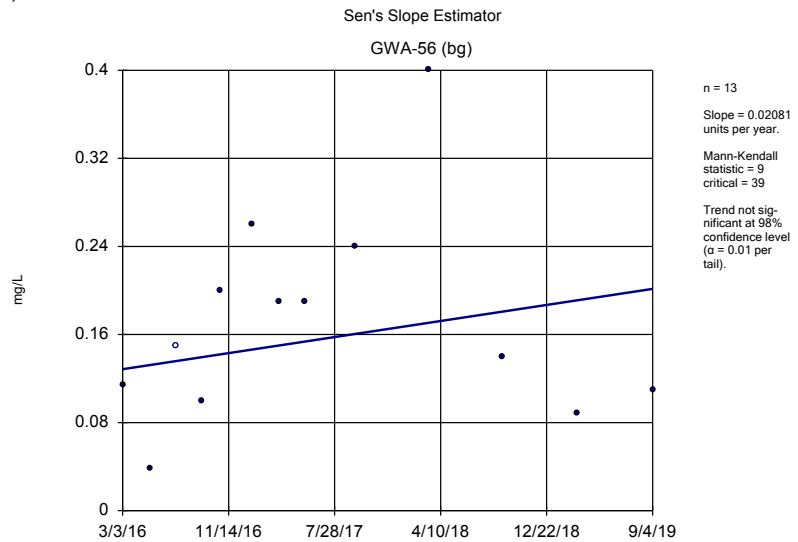
	GWA-54 (bg)
3/2/2016	0.0427 (J)
5/4/2016	0.048 (J)
7/8/2016	0.12 (J)
9/8/2016	<0.3
10/26/2016	0.11 (J)
1/9/2017	0.04 (J)
3/15/2017	0.009 (J)
5/18/2017	0.02 (J)
9/15/2017	0.03 (J)
3/13/2018	0.054 (J)
9/6/2018	<0.3
3/7/2019	<0.3
9/5/2019	<0.3



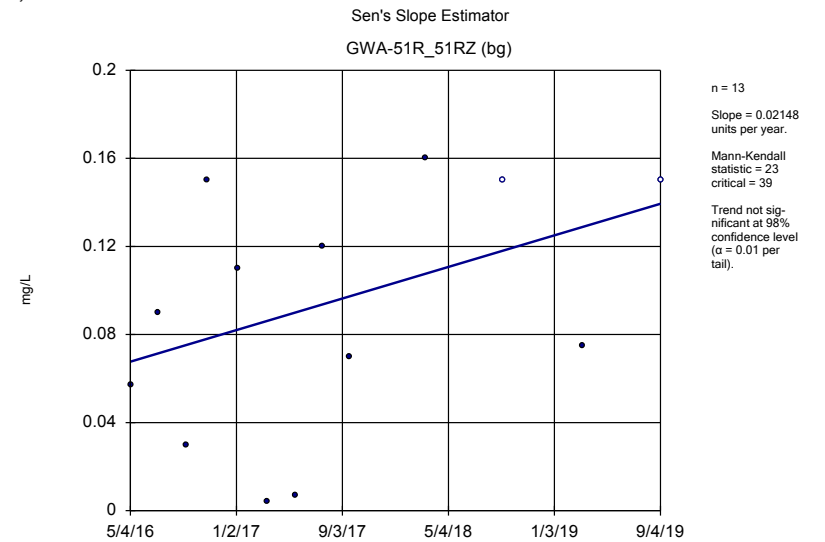
Constituent: Fluoride Analysis Run 12/9/2019 1:48 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:48 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:48 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Fluoride Analysis Run 12/9/2019 1:48 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	0.0293 (J)
5/3/2016	0.049 (J)
7/11/2016	<0.3 (*)
9/9/2016	0.05 (J)
10/26/2016	0.08 (J)
1/9/2017	0.05 (J)
3/16/2017	0.07 (J)
5/18/2017	<0.3
9/15/2017	<0.3
3/12/2018	<0.3
9/7/2018	<0.3
3/8/2019	<0.3
9/5/2019	<0.3

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
3/3/2016	0.0392 (J)
5/3/2016	0.058 (J)
7/11/2016	<0.3 (*)
9/9/2016	0.02 (J)
10/27/2016	0.12 (J)
1/9/2017	0.06 (J)
3/16/2017	0.08 (J)
5/18/2017	0.04 (J)
9/18/2017	<0.3
3/12/2018	<0.3
9/7/2018	<0.3
3/7/2019	<0.3
9/5/2019	<0.3

Sen's Slope Estimator

Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

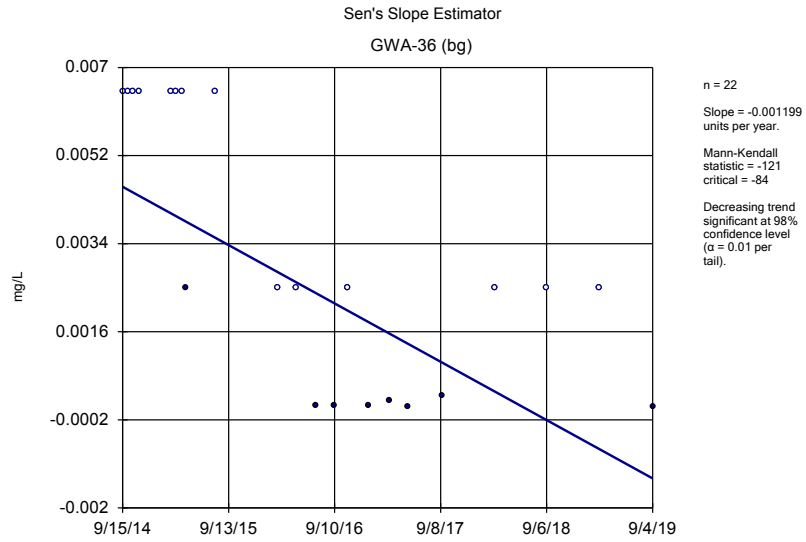
	GWA-56 (bg)
3/3/2016	0.1143 (J)
5/9/2016	0.0383 (J)
7/11/2016	<0.3 (*)
9/9/2016	0.1 (J)
10/26/2016	0.2 (J)
1/9/2017	0.26 (J)
3/15/2017	0.19 (J)
5/18/2017	0.19 (J)
9/15/2017	0.24 (J)
3/13/2018	0.4
9/7/2018	0.14 (J)
3/7/2019	0.089 (X)
9/4/2019	0.11 (X)

Sen's Slope Estimator

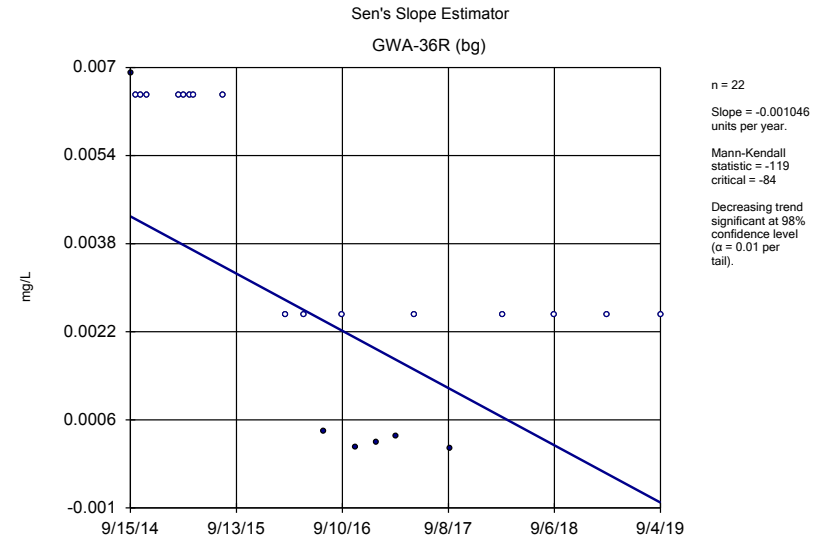
Constituent: Fluoride (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

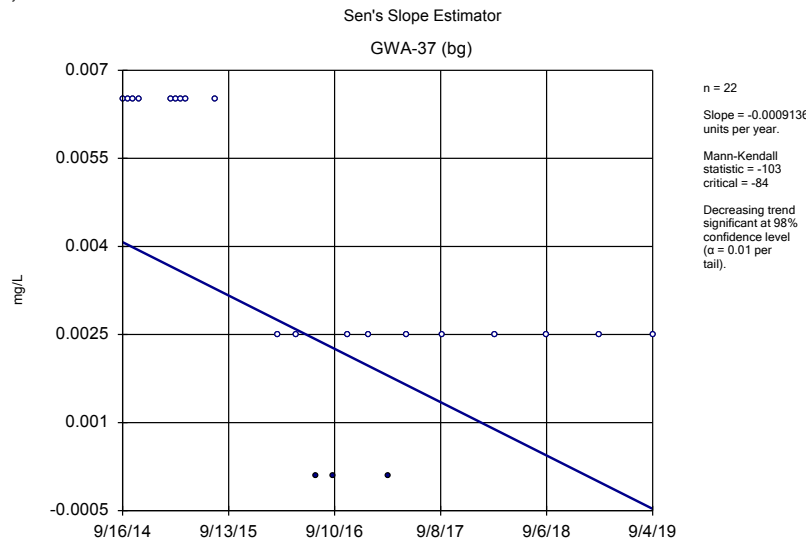
5/4/2016	0.057 (JD)
7/7/2016	0.09 (JD)
9/8/2016	0.03 (JD)
10/26/2016	0.15 (JD)
1/6/2017	0.11 (JD)
3/15/2017	0.004 (JD)
5/18/2017	0.007 (JD)
7/19/2017	0.12 (JD)
9/19/2017	0.07 (JD)
3/13/2018	0.16 (J)
9/7/2018	<0.3
3/8/2019	0.075 (X)
9/4/2019	<0.3



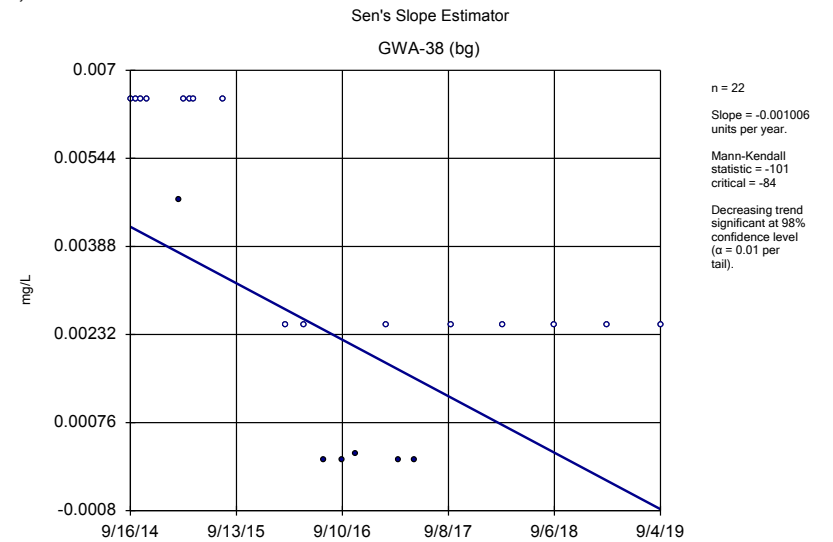
Constituent: Lead Analysis Run 12/9/2019 1:48 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Lead Analysis Run 12/9/2019 1:49 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Lead Analysis Run 12/9/2019 1:49 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Lead Analysis Run 12/9/2019 1:49 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.013
10/3/2014	<0.013
10/20/2014	<0.013
11/10/2014	<0.013
3/2/2015	<0.013
3/17/2015	<0.013
4/5/2015	<0.013
4/21/2015	0.0025 (J)
7/28/2015	<0.013
3/1/2016	<0.005
5/2/2016	<0.005
7/7/2016	0.0001 (J)
9/7/2016	0.0001 (J)
10/25/2016	<0.005
1/5/2017	0.0001 (J)
3/15/2017	0.0002 (J)
5/17/2017	8E-05 (J)
9/15/2017	0.0003 (J)
3/12/2018	<0.005
9/6/2018	<0.005
3/6/2019	<0.005
9/4/2019	7.6E-05 (X)

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.0069 (J)
10/3/2014	<0.013
10/20/2014	<0.013
11/10/2014	<0.013
3/2/2015	<0.013
3/17/2015	<0.013
4/5/2015	<0.013
4/21/2015	<0.013
7/28/2015	<0.013
3/1/2016	<0.005
5/2/2016	<0.005
7/6/2016	0.0004 (J)
9/7/2016	<0.005
10/25/2016	0.0001 (J)
1/5/2017	0.0002 (J)
3/14/2017	0.0003 (J)
5/16/2017	<0.005
9/15/2017	8E-05 (J)
3/12/2018	<0.005
9/6/2018	<0.005
3/7/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	<0.013
10/3/2014	<0.013
10/20/2014	<0.013
11/10/2014	<0.013
3/2/2015	<0.013
3/17/2015	<0.013
4/5/2015	<0.013
4/22/2015	<0.013
7/28/2015	<0.013
3/1/2016	<0.005
5/3/2016	<0.005
7/8/2016	0.0001 (J)
9/7/2016	0.0001 (J)
10/25/2016	<0.005
1/6/2017	<0.005
3/14/2017	0.0001 (J)
5/16/2017	<0.005
9/15/2017	<0.005
3/12/2018	<0.005
9/6/2018	<0.005
3/6/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38 (bg)
9/16/2014	<0.013
10/3/2014	<0.013
10/20/2014	<0.013
11/10/2014	<0.013
3/2/2015	0.0047 (J)
3/17/2015	<0.013
4/6/2015	<0.013
4/22/2015	<0.013
7/28/2015	<0.013
3/2/2016	<0.005
5/3/2016	<0.005
7/7/2016	0.0001 (J)
9/8/2016	0.0001 (J)
10/25/2016	0.0002 (J)
2/9/2017	<0.005
3/23/2017	0.0001 (J)
5/17/2017	0.0001 (J)
9/19/2017	<0.005
3/13/2018	<0.005
9/6/2018	<0.005
3/7/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.013
5/17/2015	<0.013
5/25/2015	<0.013
6/8/2015	<0.013
6/18/2015	<0.013
6/24/2015	<0.013
6/30/2015	<0.013
7/6/2015	<0.013
8/12/2015	<0.0025
2/29/2016	<0.005
5/4/2016	<0.005
7/8/2016	<0.005
9/8/2016	<0.005
10/26/2016	<0.005
1/6/2017	<0.005
3/15/2017	<0.005
5/17/2017	<0.005
9/15/2017	<0.005
3/13/2018	<0.005
9/6/2018	<0.005
3/7/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.013
5/18/2015	<0.013
5/25/2015	<0.013
6/8/2015	<0.013
6/17/2015	<0.013
6/24/2015	<0.013
6/30/2015	<0.013
7/6/2015	<0.013
8/12/2015	<0.0025
3/2/2016	<0.005
5/3/2016	<0.005
7/8/2016	0.0002 (J)
9/8/2016	0.0002 (J)
10/26/2016	<0.005
1/9/2017	<0.005
3/16/2017	0.0001 (J)
5/19/2017	9E-05 (J)
9/19/2017	0.0001 (J)
3/13/2018	<0.005
9/11/2018	<0.005
3/8/2019	<0.005
9/5/2019	8E-05 (X)

Sen's Slope Estimator

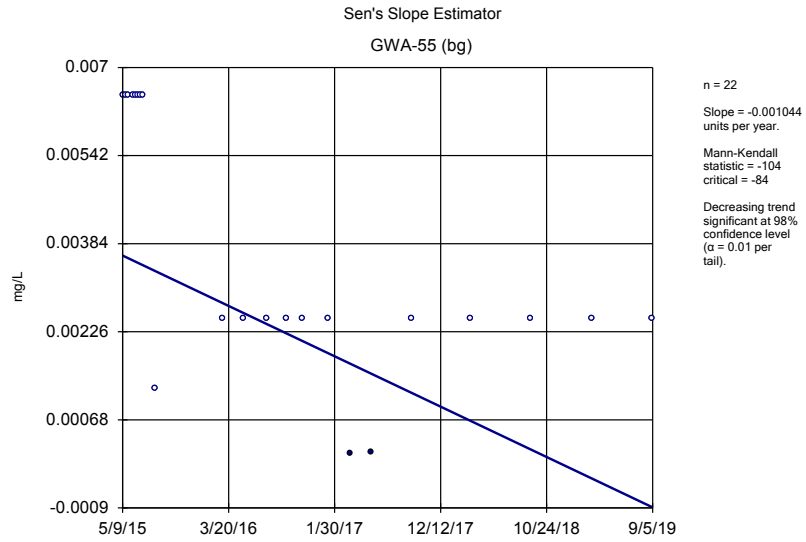
Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	<0.013
5/17/2015	<0.013
5/25/2015	<0.013
6/8/2015	<0.013
6/18/2015	<0.013
6/24/2015	<0.013
6/30/2015	<0.013
7/6/2015	<0.013
8/12/2015	<0.0025
3/2/2016	<0.005
5/3/2016	<0.005
7/11/2016	<0.005
9/7/2016	<0.005
10/27/2016	<0.005
1/6/2017	<0.005
3/16/2017	5E-05 (J)
5/19/2017	0.0001 (J)
9/19/2017	<0.005
3/13/2018	<0.005
9/11/2018	<0.005
3/12/2019	<0.005
9/5/2019	8.3E-05 (X)

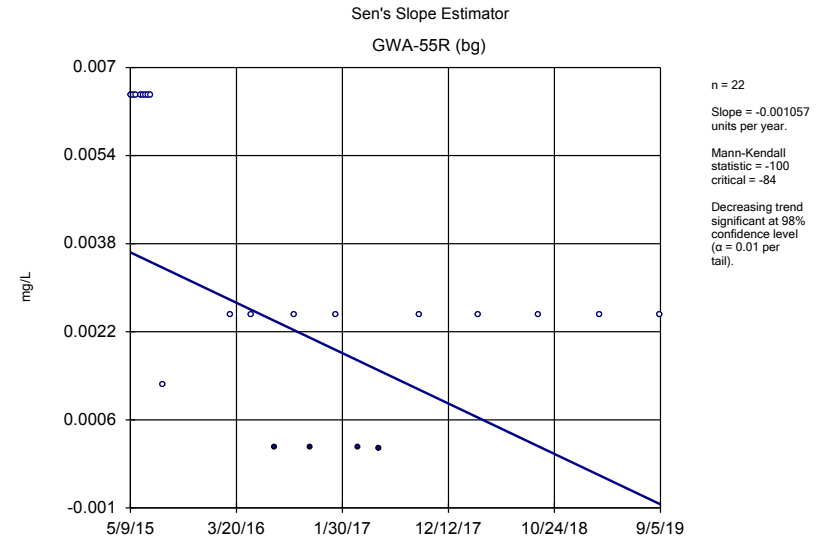
Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

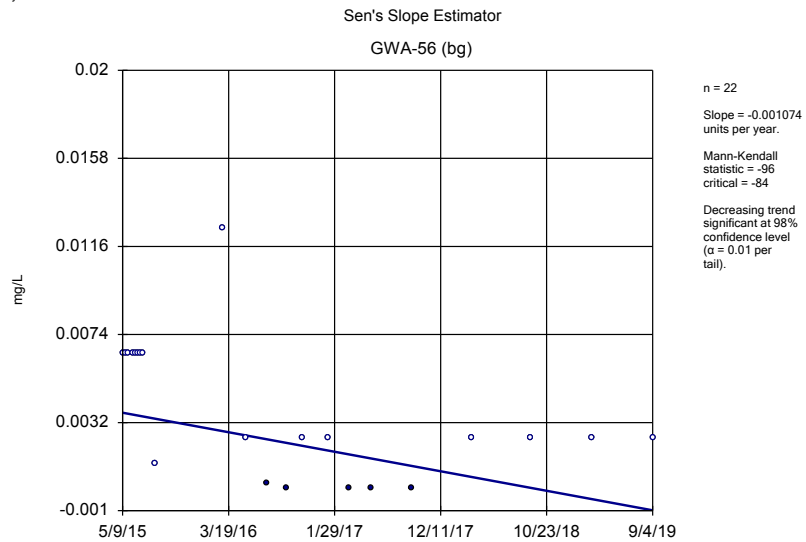
	GWA-54 (bg)
5/9/2015	<0.013
5/18/2015	<0.013
5/25/2015	<0.013
6/9/2015	<0.013
6/17/2015	<0.013
6/25/2015	<0.013
7/1/2015	<0.013
7/7/2015	<0.013
8/12/2015	<0.0025
3/2/2016	<0.005
5/4/2016	<0.005
7/8/2016	<0.005
9/8/2016	<0.005
10/26/2016	<0.005
1/9/2017	<0.005
3/15/2017	<0.005
5/18/2017	<0.005
9/15/2017	<0.005
3/13/2018	<0.005
9/6/2018	<0.005
3/7/2019	<0.005
9/5/2019	<0.005



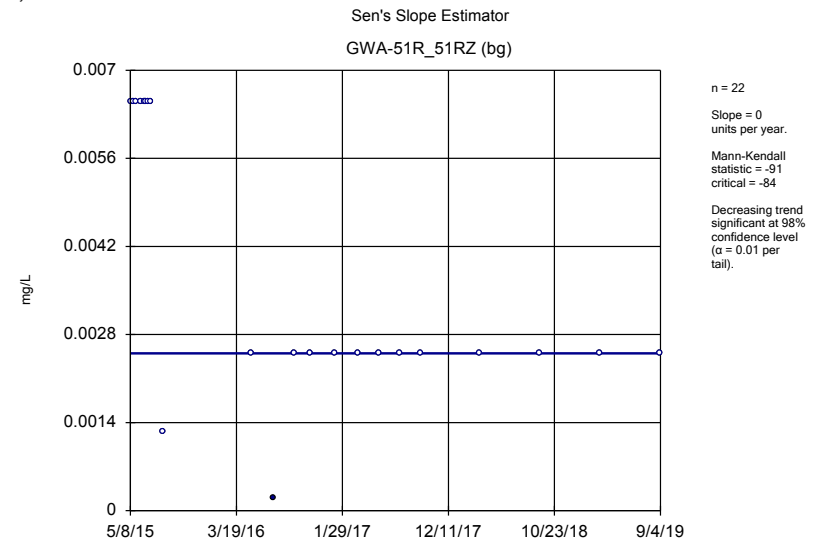
Constituent: Lead Analysis Run 12/9/2019 1:50 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Lead Analysis Run 12/9/2019 1:51 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Lead Analysis Run 12/9/2019 1:51 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Lead Analysis Run 12/9/2019 1:51 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.013
5/18/2015	<0.013
5/26/2015	<0.013
6/9/2015	<0.013
6/17/2015	<0.013
6/25/2015	<0.013
7/1/2015	<0.013
7/7/2015	<0.013
8/13/2015	<0.0025
3/2/2016	<0.005
5/3/2016	<0.005
7/11/2016	<0.005
9/9/2016	<0.005
10/26/2016	<0.005
1/9/2017	<0.005
3/16/2017	7E-05 (J)
5/18/2017	0.0001 (J)
9/15/2017	<0.005
3/12/2018	<0.005
9/7/2018	<0.005
3/8/2019	<0.005
9/5/2019	<0.005

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.013
5/18/2015	<0.013
5/26/2015	<0.013
6/9/2015	<0.013
6/17/2015	<0.013
6/25/2015	<0.013
7/1/2015	<0.013
7/7/2015	<0.013
8/13/2015	<0.0025
3/3/2016	<0.005
5/3/2016	<0.005
7/11/2016	0.0001 (J)
9/9/2016	<0.005
10/27/2016	0.0001 (J)
1/9/2017	<0.005
3/16/2017	0.0001 (J)
5/18/2017	7E-05 (J)
9/18/2017	<0.005
3/12/2018	<0.005
9/7/2018	<0.005
3/7/2019	<0.005
9/5/2019	<0.005

Sen's Slope Estimator

Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

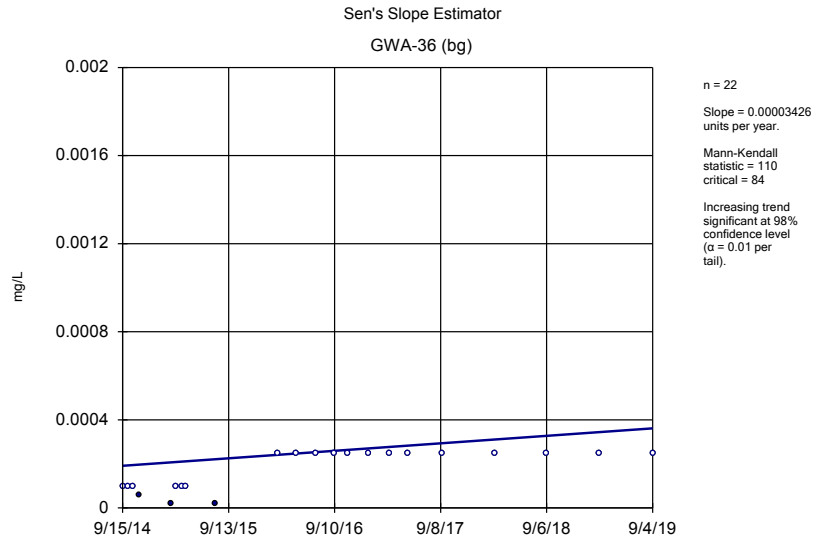
	GWA-56 (bg)
5/9/2015	<0.013
5/19/2015	<0.013
5/26/2015	<0.013
6/9/2015	<0.013
6/17/2015	<0.013
6/25/2015	<0.013
7/1/2015	<0.013
7/7/2015	<0.013
8/13/2015	<0.0025
3/3/2016	<0.025
5/9/2016	<0.005
7/11/2016	0.0003 (J)
9/9/2016	0.0001 (J)
10/26/2016	<0.005
1/9/2017	<0.005
3/15/2017	0.0001 (J)
5/18/2017	0.0001 (J)
9/15/2017	0.0001 (J)
3/13/2018	<0.005
9/7/2018	<0.005
3/7/2019	<0.005
9/4/2019	<0.005

Sen's Slope Estimator

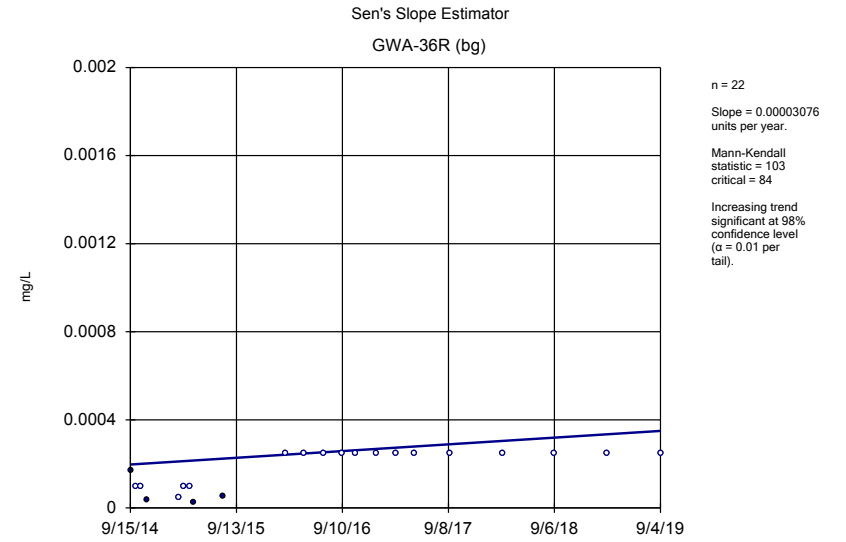
Constituent: Lead (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

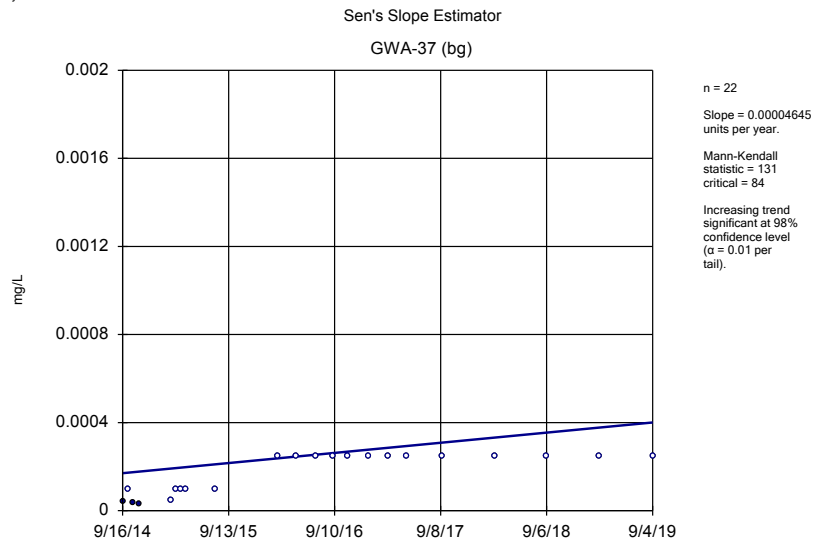
5/8/2015	<0.013
5/17/2015	<0.013
5/25/2015	<0.013
6/8/2015	<0.013
6/18/2015	<0.013
6/24/2015	<0.013
6/30/2015	<0.013
7/6/2015	<0.013
8/12/2015	<0.0025
5/4/2016	<0.005 (D)
7/7/2016	0.0002 (JD)
9/8/2016	<0.005 (D)
10/26/2016	<0.005 (D)
1/6/2017	<0.005 (D)
3/15/2017	<0.005 (D)
5/18/2017	<0.005 (D)
7/19/2017	<0.005 (D)
9/19/2017	<0.005 (D)
3/13/2018	<0.005
9/7/2018	<0.005
3/8/2019	<0.005
9/4/2019	<0.005



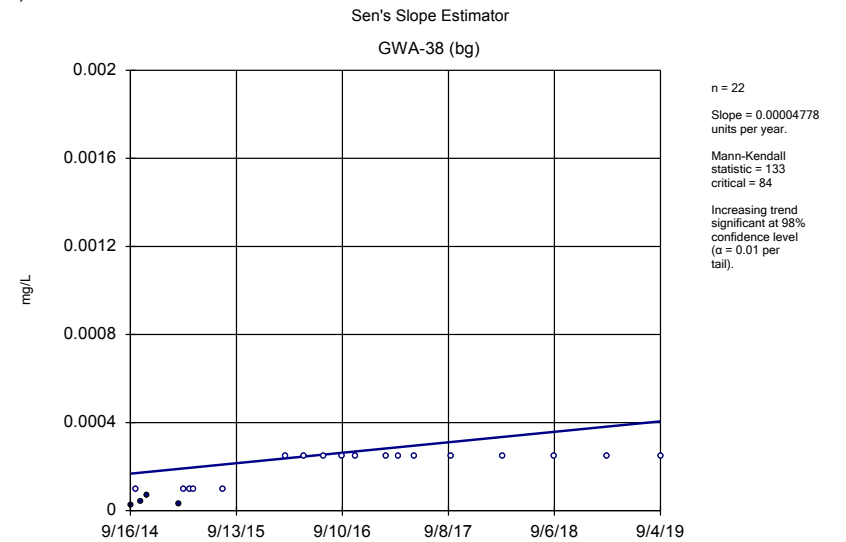
Constituent: Mercury Analysis Run 12/9/2019 1:52 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Mercury Analysis Run 12/9/2019 1:52 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Mercury Analysis Run 12/9/2019 1:52 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Mercury Analysis Run 12/9/2019 1:52 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.0002
10/3/2014	<0.0002
10/20/2014	<0.0002
11/10/2014	5.8E-05 (J)
3/2/2015	2.04E-05 (J)
3/17/2015	<0.0002
4/5/2015	<0.0002
4/21/2015	<0.0002
7/28/2015	2.13E-05 (J)
3/1/2016	<0.0005
5/2/2016	<0.0005
7/7/2016	<0.0005
9/7/2016	<0.0005
10/25/2016	<0.0005
1/5/2017	<0.0005
3/15/2017	<0.0005
5/17/2017	<0.0005
9/15/2017	<0.0005
3/12/2018	<0.0005
9/6/2018	<0.0005
3/6/2019	<0.0005
9/4/2019	<0.0005

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.000172 (J)
10/3/2014	<0.0002
10/20/2014	<0.0002
11/10/2014	3.84E-05 (J)
3/2/2015	<0.0001
3/17/2015	<0.0002
4/5/2015	<0.0002
4/21/2015	2.39E-05 (J)
7/28/2015	5.2E-05 (J)
3/1/2016	<0.0005
5/2/2016	<0.0005
7/6/2016	<0.0005
9/7/2016	<0.0005
10/25/2016	<0.0005
1/5/2017	<0.0005
3/14/2017	<0.0005
5/16/2017	<0.0005
9/15/2017	<0.0005
3/12/2018	<0.0005
9/6/2018	<0.0005
3/7/2019	<0.0005
9/4/2019	<0.0005

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

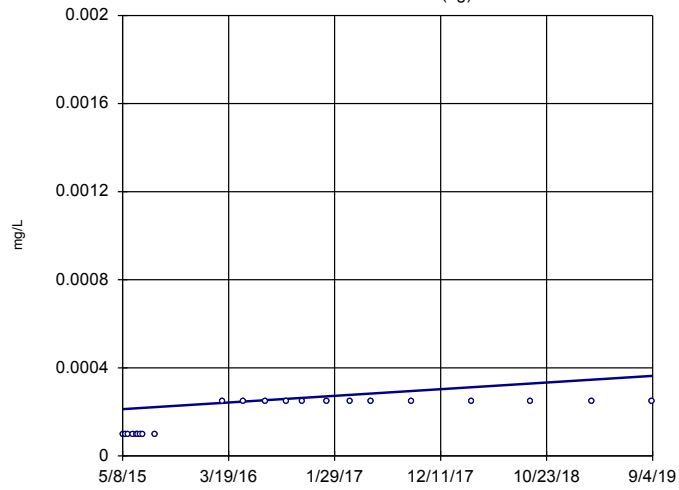
	GWA-37 (bg)
9/16/2014	4.23E-05 (J)
10/3/2014	<0.0002
10/20/2014	3.87E-05 (J)
11/10/2014	3.34E-05 (J)
3/2/2015	<0.0001
3/17/2015	<0.0002
4/5/2015	<0.0002
4/22/2015	<0.0002
7/28/2015	<0.0002
3/1/2016	<0.0005
5/3/2016	<0.0005
7/8/2016	<0.0005
9/7/2016	<0.0005
10/25/2016	<0.0005
1/6/2017	<0.0005
3/14/2017	<0.0005
5/16/2017	<0.0005
9/15/2017	<0.0005
3/12/2018	<0.0005
9/6/2018	<0.0005
3/6/2019	<0.0005
9/4/2019	<0.0005

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38 (bg)
9/16/2014	2.75E-05 (J)
10/3/2014	<0.0002
10/20/2014	4.07E-05 (J)
11/10/2014	6.86E-05 (J)
3/2/2015	3.07E-05 (J)
3/17/2015	<0.0002
4/6/2015	<0.0002
4/22/2015	<0.0002
7/28/2015	<0.0002
3/2/2016	<0.0005
5/3/2016	<0.0005
7/7/2016	<0.0005
9/8/2016	<0.0005
10/25/2016	<0.0005
2/9/2017	<0.0005
3/23/2017	<0.0005
5/17/2017	<0.0005
9/19/2017	<0.0005
3/13/2018	<0.0005
9/6/2018	<0.0005
3/7/2019	<0.0005
9/4/2019	<0.0005

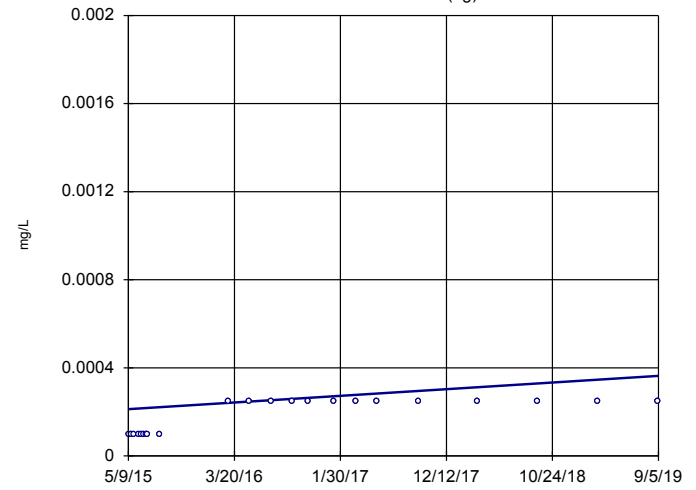
Sen's Slope Estimator
GWA-52 (bg)



n = 22
Slope = 0.00003485
units per year.
Mann-Kendall
statistic = 117
critical = 84
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Mercury Analysis Run 12/9/2019 1:53 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

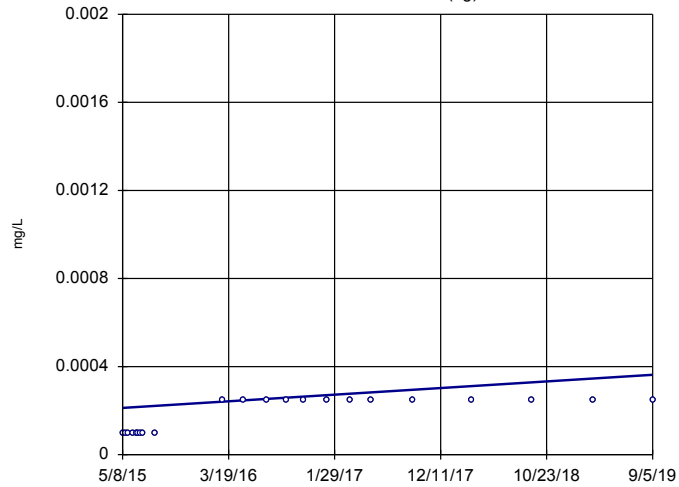
Sen's Slope Estimator
GWA-53 (bg)



n = 22
Slope = 0.00003485
units per year.
Mann-Kendall
statistic = 117
critical = 84
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Mercury Analysis Run 12/9/2019 1:53 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

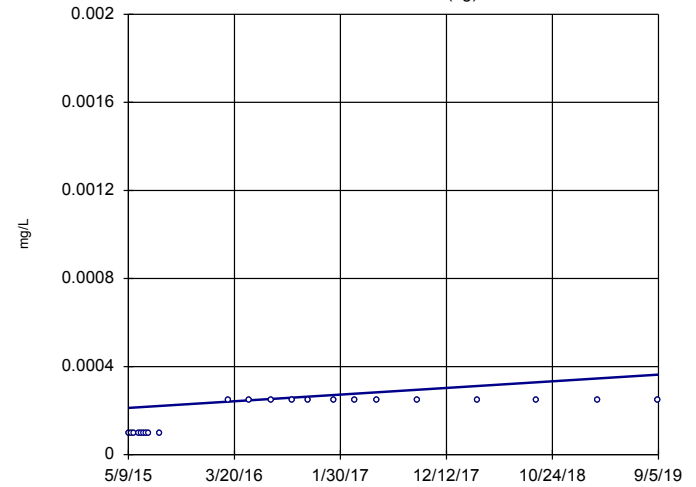
Sen's Slope Estimator
GWA-53R (bg)



n = 22
Slope = 0.00003483
units per year.
Mann-Kendall
statistic = 117
critical = 84
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Mercury Analysis Run 12/9/2019 1:53 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



n = 22
Slope = 0.00003485
units per year.
Mann-Kendall
statistic = 117
critical = 84
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Mercury Analysis Run 12/9/2019 1:53 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.0002
5/17/2015	<0.0002
5/25/2015	<0.0002
6/8/2015	<0.0002
6/18/2015	<0.0002
6/24/2015	<0.0002
6/30/2015	<0.0002
7/6/2015	<0.0002
8/12/2015	<0.0002
2/29/2016	<0.0005
5/4/2016	<0.0005
7/8/2016	<0.0005
9/8/2016	<0.0005
10/26/2016	<0.0005
1/6/2017	<0.0005
3/15/2017	<0.0005
5/17/2017	<0.0005
9/15/2017	<0.0005
3/13/2018	<0.0005
9/6/2018	<0.0005
3/7/2019	<0.0005
9/4/2019	<0.0005

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.0002
5/18/2015	<0.0002
5/25/2015	<0.0002
6/8/2015	<0.0002
6/17/2015	<0.0002
6/24/2015	<0.0002
6/30/2015	<0.0002
7/6/2015	<0.0002
8/12/2015	<0.0002
3/2/2016	<0.0005
5/3/2016	<0.0005
7/8/2016	<0.0005
9/8/2016	<0.0005
10/26/2016	<0.0005
1/9/2017	<0.0005
3/16/2017	<0.0005
5/19/2017	<0.0005
9/19/2017	<0.0005
3/13/2018	<0.0005
9/11/2018	<0.0005
3/8/2019	<0.0005
9/5/2019	<0.0005

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

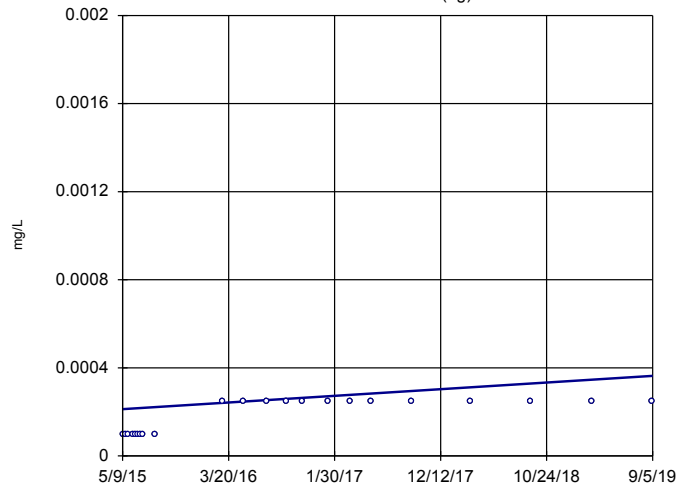
	GWA-53R (bg)
5/8/2015	<0.0002
5/17/2015	<0.0002
5/25/2015	<0.0002
6/8/2015	<0.0002
6/18/2015	<0.0002
6/24/2015	<0.0002
6/30/2015	<0.0002
7/6/2015	<0.0002
8/12/2015	<0.0002
3/2/2016	<0.0005
5/3/2016	<0.0005
7/11/2016	<0.0005
9/7/2016	<0.0005
10/27/2016	<0.0005
1/6/2017	<0.0005
3/16/2017	<0.0005
5/19/2017	<0.0005
9/19/2017	<0.0005
3/13/2018	<0.0005
9/11/2018	<0.0005
3/12/2019	<0.0005
9/5/2019	<0.0005

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:14 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54 (bg)
5/9/2015	<0.0002
5/18/2015	<0.0002
5/25/2015	<0.0002
6/9/2015	<0.0002
6/17/2015	<0.0002
6/25/2015	<0.0002
7/1/2015	<0.0002
7/7/2015	<0.0002
8/12/2015	<0.0002
3/2/2016	<0.0005
5/4/2016	<0.0005
7/8/2016	<0.0005
9/8/2016	<0.0005
10/26/2016	<0.0005
1/9/2017	<0.0005
3/15/2017	<0.0005
5/18/2017	<0.0005
9/15/2017	<0.0005
3/13/2018	<0.0005
9/6/2018	<0.0005
3/7/2019	<0.0005
9/5/2019	<0.0005

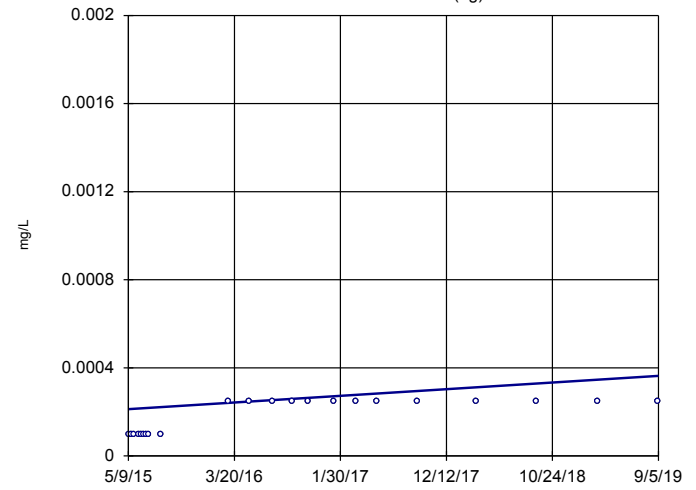
Sen's Slope Estimator
GWA-55 (bg)



n = 22
Slope = 0.00003485
units per year.
Mann-Kendall
statistic = 117
critical = 84
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Mercury Analysis Run 12/9/2019 1:54 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

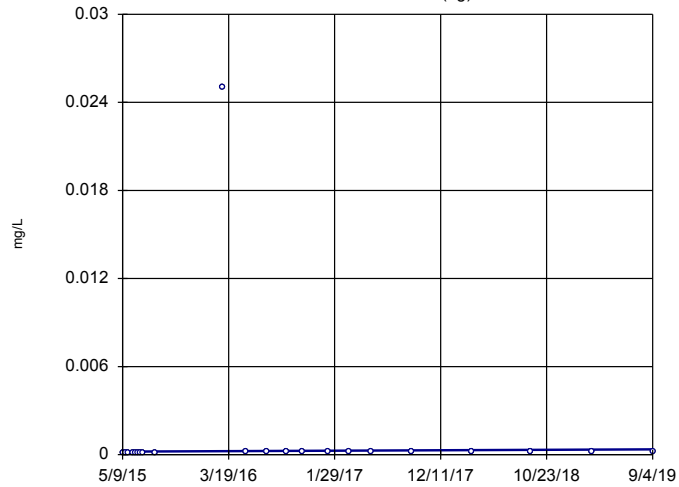
Sen's Slope Estimator
GWA-55R (bg)



n = 22
Slope = 0.00003485
units per year.
Mann-Kendall
statistic = 117
critical = 84
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Mercury Analysis Run 12/9/2019 1:54 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

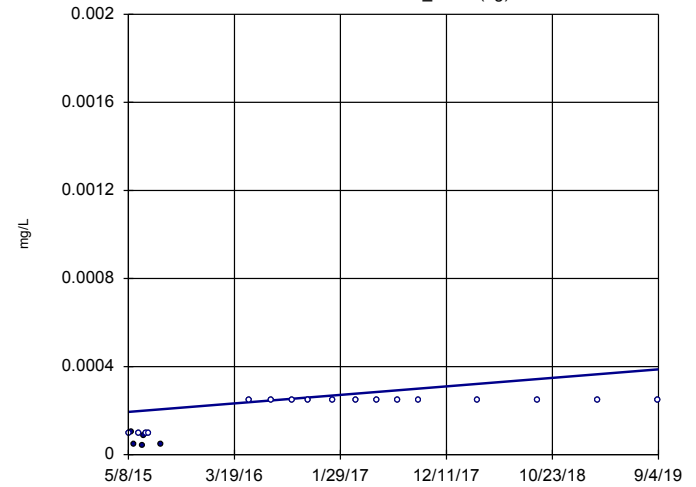
Sen's Slope Estimator
GWA-56 (bg)



n = 22
Slope = 0.00003489
units per year.
Mann-Kendall
statistic = 105
critical = 84
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Mercury Analysis Run 12/9/2019 1:54 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-51R_51RZ (bg)



n = 22
Slope = 0.00004475
units per year.
Mann-Kendall
statistic = 111
critical = 84
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Mercury Analysis Run 12/9/2019 1:54 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.0002
5/18/2015	<0.0002
5/26/2015	<0.0002
6/9/2015	<0.0002
6/17/2015	<0.0002
6/25/2015	<0.0002
7/1/2015	<0.0002
7/7/2015	<0.0002
8/13/2015	<0.0002
3/2/2016	<0.0005
5/3/2016	<0.0005
7/11/2016	<0.0005
9/9/2016	<0.0005
10/26/2016	<0.0005
1/9/2017	<0.0005
3/16/2017	<0.0005
5/18/2017	<0.0005
9/15/2017	<0.0005
3/12/2018	<0.0005
9/7/2018	<0.0005
3/8/2019	<0.0005
9/5/2019	<0.0005

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.0002
5/18/2015	<0.0002
5/26/2015	<0.0002
6/9/2015	<0.0002
6/17/2015	<0.0002
6/25/2015	<0.0002
7/1/2015	<0.0002
7/7/2015	<0.0002
8/13/2015	<0.0002
3/3/2016	<0.0005
5/3/2016	<0.0005
7/11/2016	<0.0005
9/9/2016	<0.0005
10/27/2016	<0.0005
1/9/2017	<0.0005
3/16/2017	<0.0005
5/18/2017	<0.0005
9/18/2017	<0.0005
3/12/2018	<0.0005
9/7/2018	<0.0005
3/7/2019	<0.0005
9/5/2019	<0.0005

Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.0002
5/19/2015	<0.0002
5/26/2015	<0.0002
6/9/2015	<0.0002
6/17/2015	<0.0002
6/25/2015	<0.0002
7/1/2015	<0.0002
7/7/2015	<0.0002
8/13/2015	<0.0002
3/3/2016	<0.05
5/9/2016	<0.0005
7/11/2016	<0.0005
9/9/2016	<0.0005
10/26/2016	<0.0005
1/9/2017	<0.0005
3/15/2017	<0.0005
5/18/2017	<0.0005
9/15/2017	<0.0005
3/13/2018	<0.0005
9/7/2018	<0.0005
3/7/2019	<0.0005
9/4/2019	<0.0005

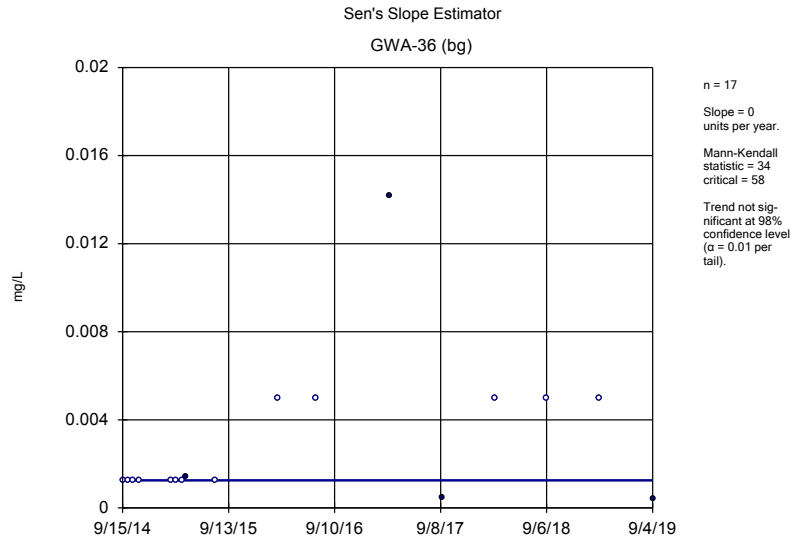
Sen's Slope Estimator

Constituent: Mercury (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

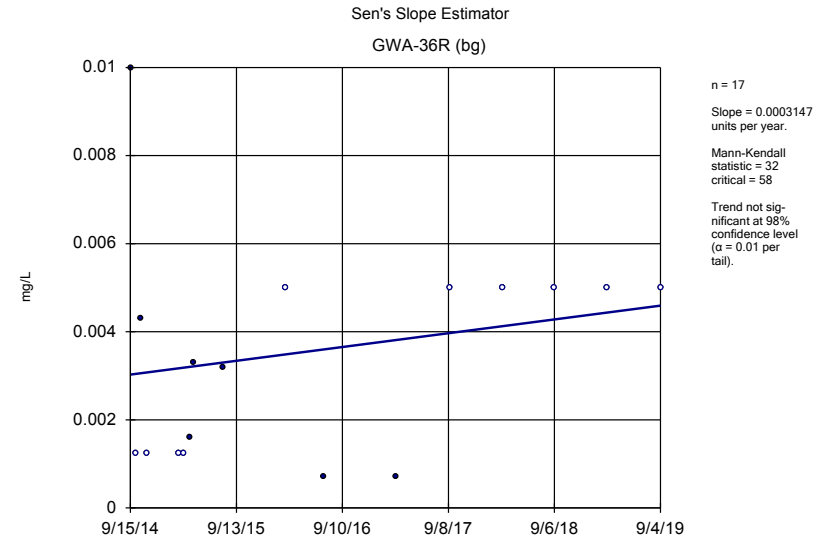
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

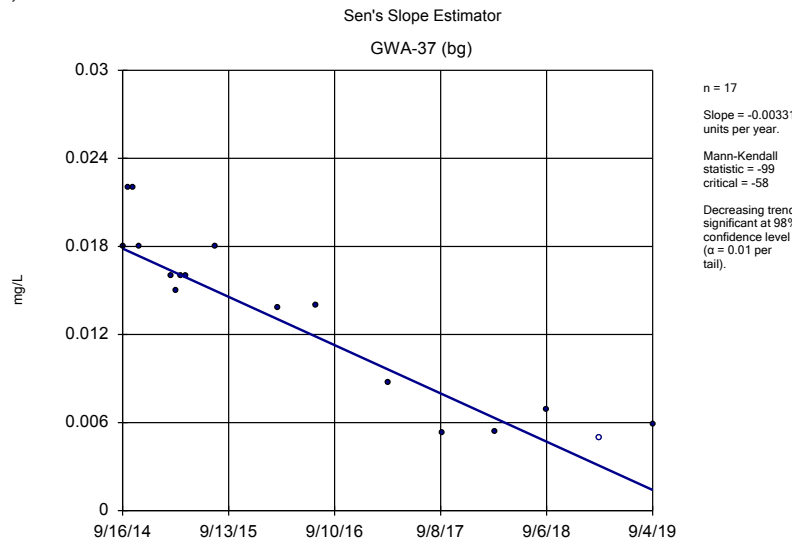
5/8/2015	<0.0002
5/17/2015	0.000101 (J)
5/25/2015	4.88E-05 (J)
6/8/2015	<0.0002
6/18/2015	4.1E-05 (J)
6/24/2015	8.41E-05 (J)
6/30/2015	<0.0002
7/6/2015	<0.0002
8/12/2015	4.91E-05 (J)
5/4/2016	<0.0005 (D)
7/7/2016	<0.0005 (D)
9/8/2016	<0.0005 (D)
10/26/2016	<0.0005 (D)
1/6/2017	<0.0005 (D)
3/15/2017	<0.0005 (D)
5/18/2017	<0.0005 (D)
7/19/2017	<0.0005 (D)
9/19/2017	<0.0005 (D)
3/13/2018	<0.0005
9/7/2018	<0.0005
3/8/2019	<0.0005
9/4/2019	<0.0005



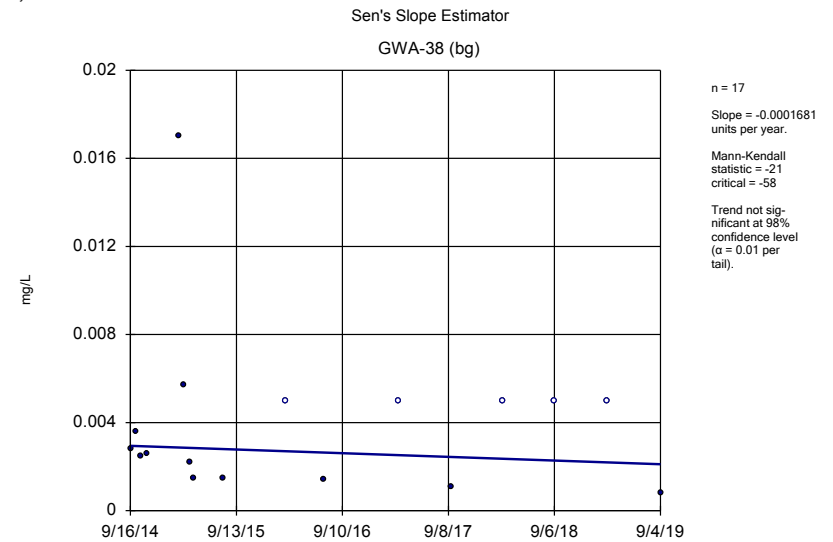
Constituent: Nickel Analysis Run 12/9/2019 1:55 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:55 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:55 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:55 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.0025
10/3/2014	<0.0025
10/20/2014	<0.0025
11/10/2014	<0.0025
3/2/2015	<0.0025
3/17/2015	<0.0025
4/5/2015	<0.0025
4/21/2015	0.0014 (J)
7/28/2015	<0.0025
3/1/2016	<0.01
7/7/2016	<0.01
3/15/2017	0.0142
9/15/2017	0.0005 (J)
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	0.00041 (X)

Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.01
10/3/2014	<0.0025
10/20/2014	0.0043
11/10/2014	<0.0025
3/2/2015	<0.0025
3/17/2015	<0.0025
4/5/2015	0.0016 (J)
4/21/2015	0.0033
7/28/2015	0.0032
3/1/2016	<0.01
7/6/2016	0.0007 (J)
3/14/2017	0.0007 (J)
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

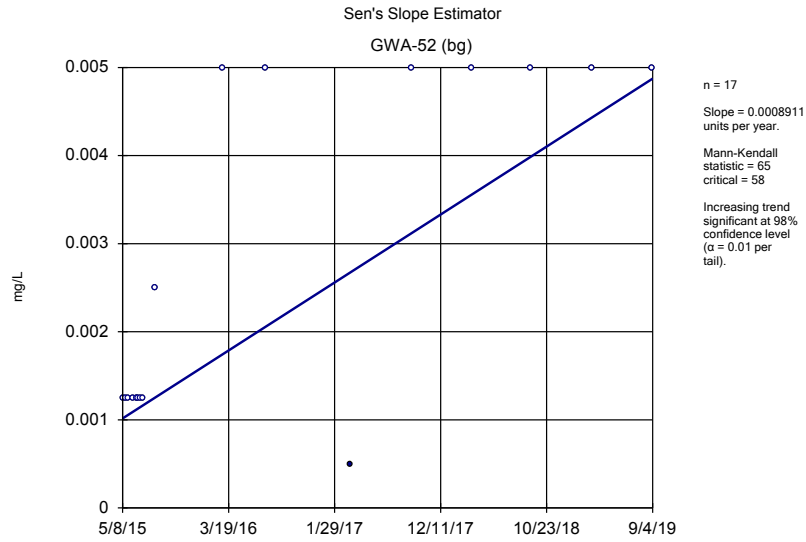
Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	0.018
10/3/2014	0.022
10/20/2014	0.022
11/10/2014	0.018
3/2/2015	0.016
3/17/2015	0.015
4/5/2015	0.016
4/22/2015	0.016
7/28/2015	0.018
3/1/2016	0.0138
7/8/2016	0.014
3/14/2017	0.0087 (J)
9/15/2017	0.0053 (J)
3/12/2018	0.0054 (J)
9/6/2018	0.0069 (J)
3/6/2019	<0.01
9/4/2019	0.0059 (X)

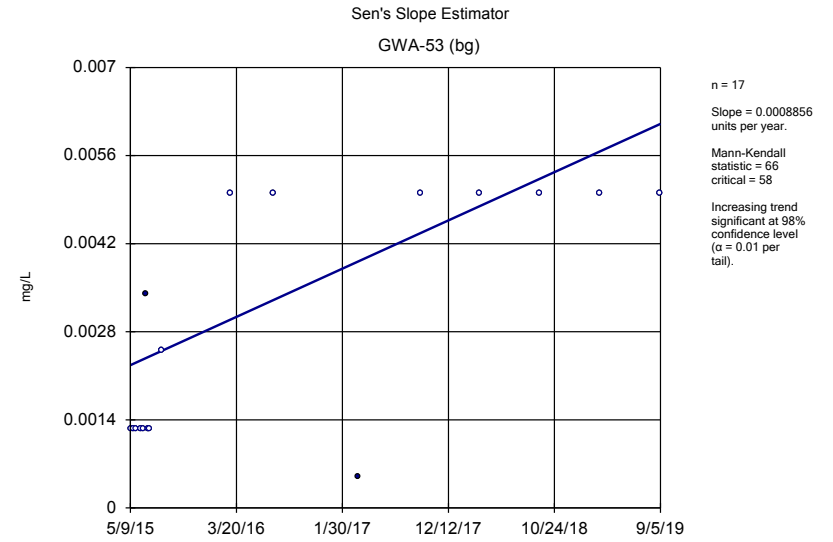
Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

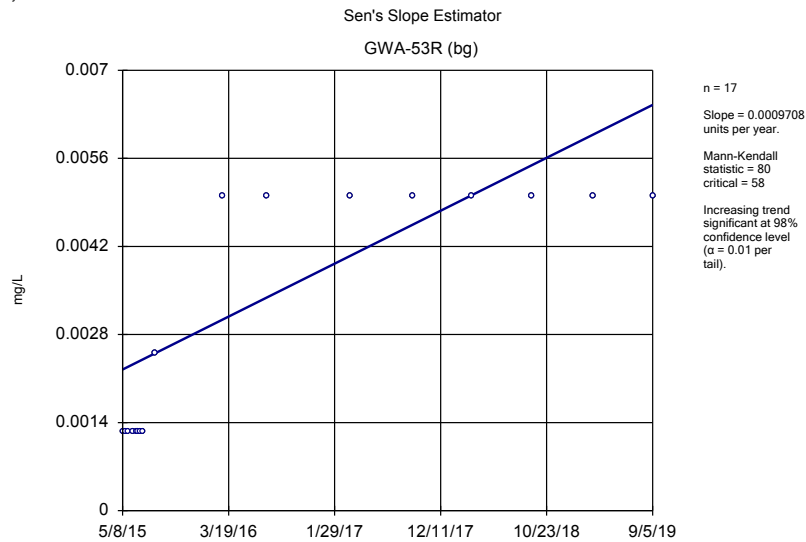
	GWA-38 (bg)
9/16/2014	0.0028
10/3/2014	0.0036
10/20/2014	0.0025
11/10/2014	0.0026
3/2/2015	0.017
3/17/2015	0.0057
4/6/2015	0.0022 (J)
4/22/2015	0.0015 (J)
7/28/2015	0.0015 (J)
3/2/2016	<0.01
7/7/2016	0.0014 (J)
3/23/2017	<0.01 (*)
9/19/2017	0.0011 (J)
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.0008 (X)



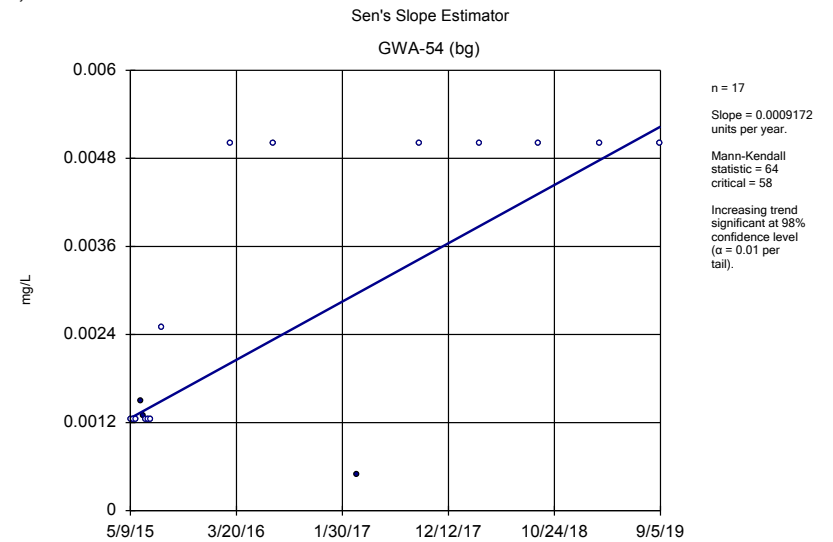
Constituent: Nickel Analysis Run 12/9/2019 1:55 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:56 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:56 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:56 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.0025
5/17/2015	<0.0025
5/25/2015	<0.0025
6/8/2015	<0.0025
6/18/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	<0.005
2/29/2016	<0.01
7/8/2016	<0.01
3/15/2017	0.0005 (J)
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.0025
5/18/2015	<0.0025
5/25/2015	<0.0025
6/8/2015	<0.0025
6/17/2015	<0.0025
6/24/2015	0.0034
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	<0.005
3/2/2016	<0.01
7/8/2016	<0.01
3/16/2017	0.0005 (J)
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/8/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

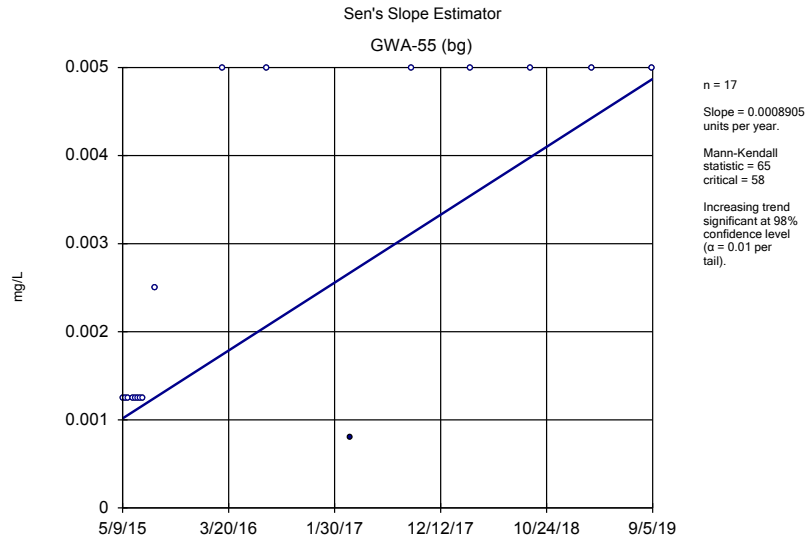
Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	<0.0025
5/17/2015	<0.0025
5/25/2015	<0.0025
6/8/2015	<0.0025
6/18/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	<0.005
3/2/2016	<0.01
7/11/2016	<0.01
3/16/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/12/2019	<0.01
9/5/2019	<0.01

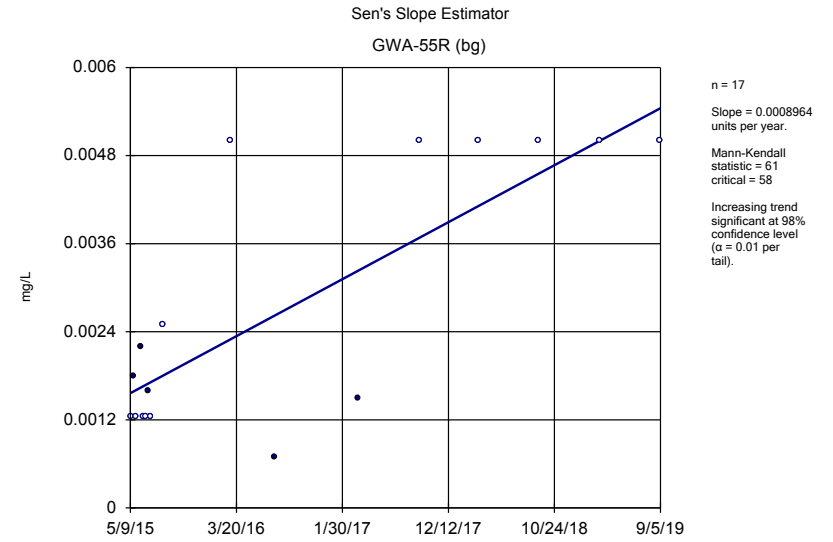
Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

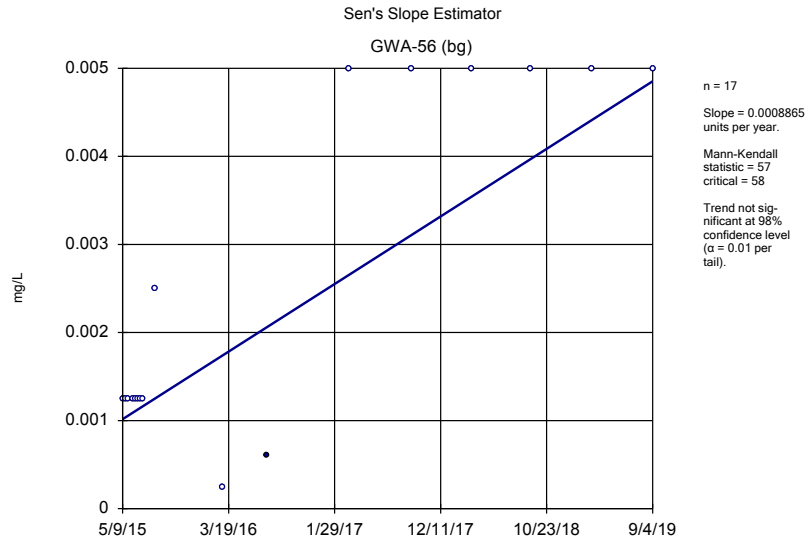
	GWA-54 (bg)
5/9/2015	<0.0025
5/18/2015	<0.0025
5/25/2015	<0.0025
6/9/2015	0.0015 (J)
6/17/2015	0.0013 (J)
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/12/2015	<0.005
3/2/2016	<0.01
7/8/2016	<0.01
3/15/2017	0.0005 (J)
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/5/2019	<0.01



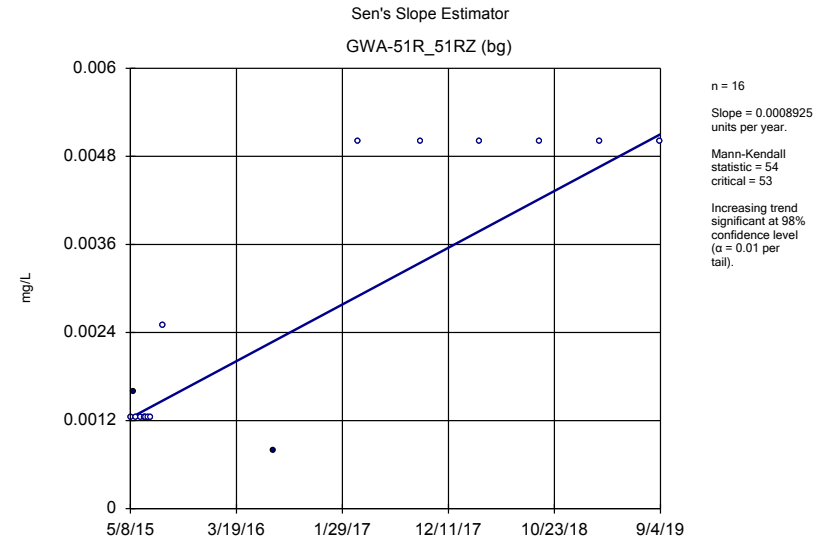
Constituent: Nickel Analysis Run 12/9/2019 1:56 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:57 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:57 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Nickel Analysis Run 12/9/2019 1:57 PM View: Sens Slope Background Wells App III and 16
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.0025
5/18/2015	<0.0025
5/26/2015	<0.0025
6/9/2015	<0.0025
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	<0.005
3/2/2016	<0.01
7/11/2016	<0.01
3/16/2017	0.0008 (J)
9/15/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.0025
5/18/2015	0.0018 (J)
5/26/2015	<0.0025
6/9/2015	0.0022 (J)
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	0.0016 (J)
7/7/2015	<0.0025
8/13/2015	<0.005
3/3/2016	<0.01
7/11/2016	0.0007 (J)
3/16/2017	0.0015 (J)
9/18/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.0025
5/19/2015	<0.0025
5/26/2015	<0.0025
6/9/2015	<0.0025
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	<0.005
3/3/2016	<0.0005
7/11/2016	0.0006 (J)
3/15/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

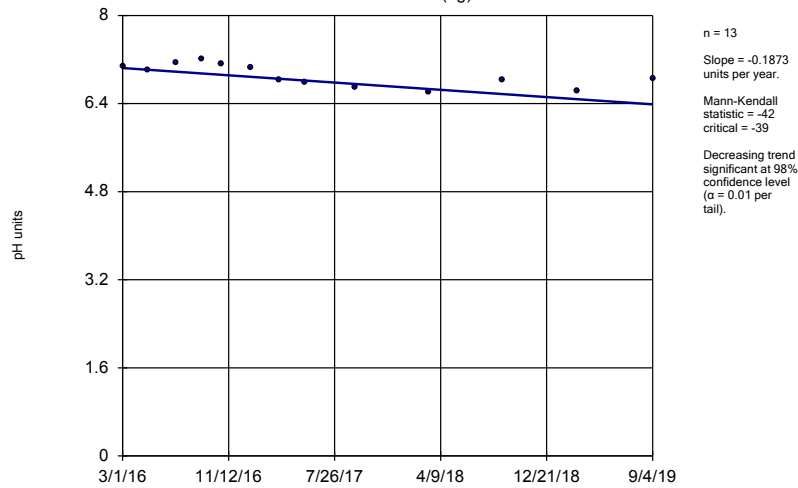
Sen's Slope Estimator

Constituent: Nickel (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

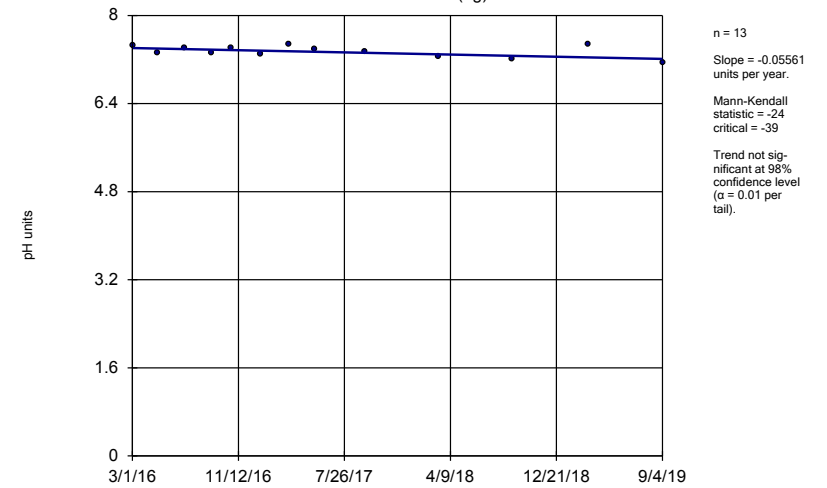
5/8/2015	<0.0025
5/17/2015	0.0016 (J)
5/25/2015	<0.0025
6/8/2015	<0.0025
6/18/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	<0.005
7/7/2016	0.0008 (JD)
3/15/2017	<0.01 (D)
9/19/2017	<0.01 (D)
3/13/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator
GWA-36 (bg)



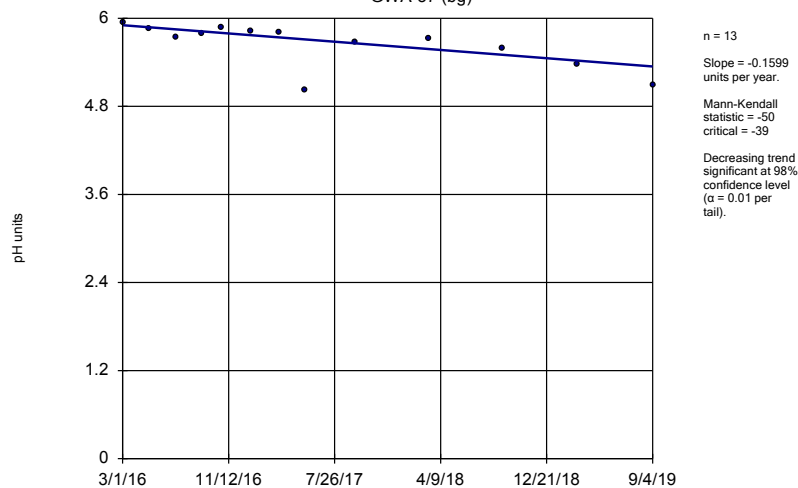
Constituent: pH Analysis Run 12/9/2019 1:57 PM View: Sens Slope Background Wells App III and 16 met
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-36R (bg)



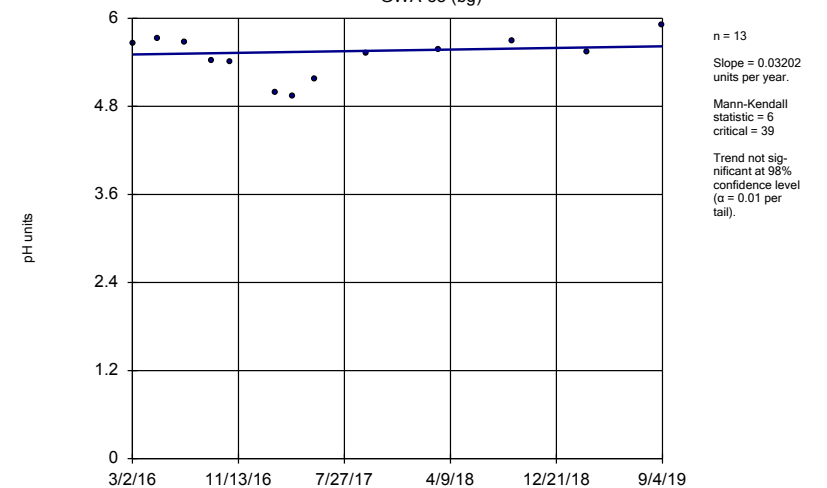
Constituent: pH Analysis Run 12/9/2019 1:57 PM View: Sens Slope Background Wells App III and 16 met
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-37 (bg)



Constituent: pH Analysis Run 12/9/2019 1:57 PM View: Sens Slope Background Wells App III and 16 met
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-38 (bg)



Constituent: pH Analysis Run 12/9/2019 1:58 PM View: Sens Slope Background Wells App III and 16 met
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	7.07
5/2/2016	7
7/7/2016	7.15
9/7/2016	7.2
10/25/2016	7.12
1/5/2017	7.05
3/15/2017	6.84
5/17/2017	6.78
9/15/2017	6.7
3/12/2018	6.6
9/6/2018	6.83
3/6/2019	6.64
9/4/2019	6.85

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	7.45
5/2/2016	7.31
7/6/2016	7.4
9/7/2016	7.32
10/25/2016	7.4
1/5/2017	7.29
3/14/2017	7.48
5/16/2017	7.38
9/15/2017	7.35
3/12/2018	7.26
9/6/2018	7.21
3/7/2019	7.48
9/4/2019	7.14

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

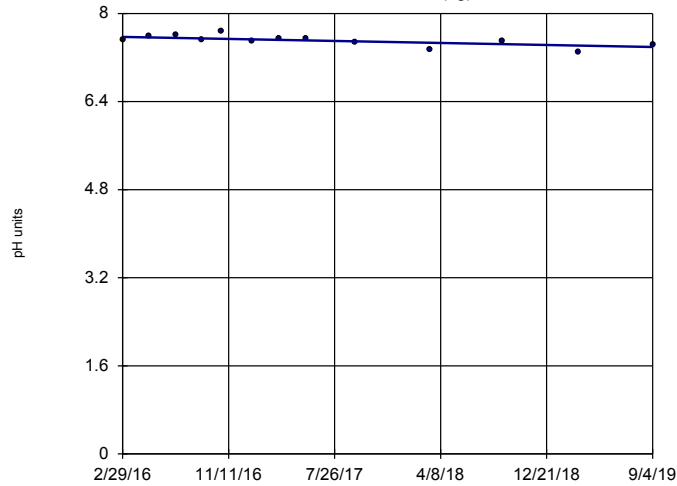
	GWA-37 (bg)
3/1/2016	5.94 (D)
5/3/2016	5.85
7/8/2016	5.74
9/7/2016	5.79
10/25/2016	5.88
1/6/2017	5.82
3/14/2017	5.8
5/16/2017	5.02
9/15/2017	5.68
3/12/2018	5.72
9/6/2018	5.59
3/6/2019	5.38
9/4/2019	5.09

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

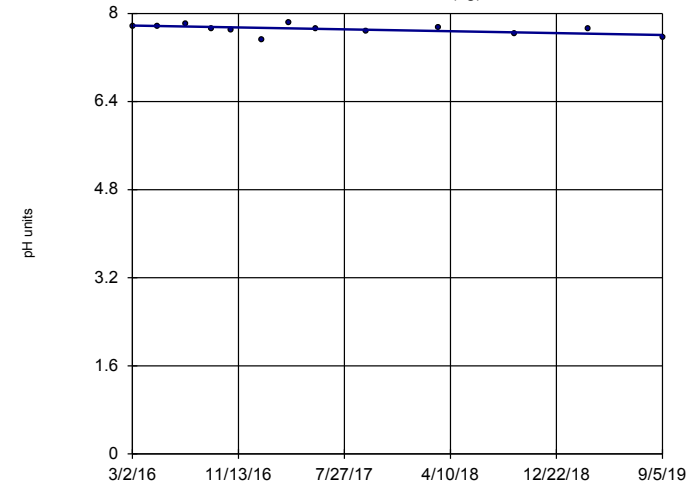
	GWA-38 (bg)
3/2/2016	5.65
5/3/2016	5.72
7/7/2016	5.68
9/8/2016	5.42
10/25/2016	5.41
2/9/2017	4.99
3/23/2017	4.94
5/17/2017	5.18
9/19/2017	5.53
3/13/2018	5.57
9/6/2018	5.69
3/7/2019	5.54
9/4/2019	5.91

Sen's Slope Estimator
GWA-52 (bg)



n = 13
 Slope = -0.05149
 units per year.
 Mann-Kendall
 statistic = -40
 critical = -39
 Decreasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Sen's Slope Estimator
GWA-53 (bg)

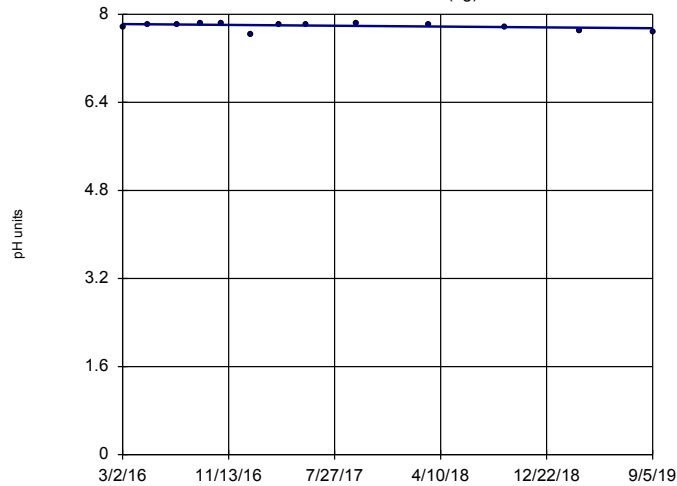


n = 13
 Slope = -0.04874
 units per year.
 Mann-Kendall
 statistic = -31
 critical = -39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: pH Analysis Run 12/9/2019 1:58 PM View: Sens Slope Background Wells App III and 16 met
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

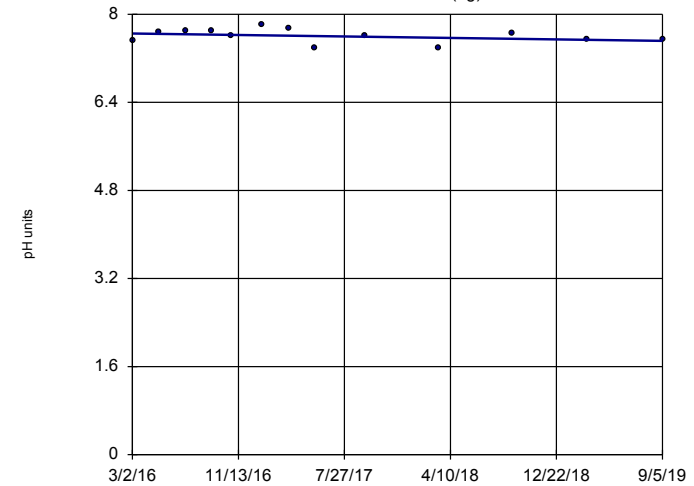
Constituent: pH Analysis Run 12/9/2019 1:58 PM View: Sens Slope Background Wells App III and 16 met
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



n = 13
 Slope = -0.02131
 units per year.
 Mann-Kendall
 statistic = -17
 critical = -39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Sen's Slope Estimator
GWA-54 (bg)



n = 13
 Slope = -0.0381
 units per year.
 Mann-Kendall
 statistic = -15
 critical = -39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: pH Analysis Run 12/9/2019 1:58 PM View: Sens Slope Background Wells App III and 16 met
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Constituent: pH Analysis Run 12/9/2019 1:58 PM View: Sens Slope Background Wells App III and 16 met
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	7.52
5/4/2016	7.59
7/8/2016	7.61
9/8/2016	7.52
10/26/2016	7.67
1/6/2017	7.49
3/15/2017	7.55
5/17/2017	7.55
9/15/2017	7.48
3/13/2018	7.34
9/6/2018	7.5
3/7/2019	7.29
9/4/2019	7.43

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	7.77 (D)
5/3/2016	7.76
7/8/2016	7.82
9/8/2016	7.73
10/26/2016	7.71
1/9/2017	7.52
3/16/2017	7.84
5/19/2017	7.72
9/19/2017	7.68
3/13/2018	7.74
9/11/2018	7.64
3/8/2019	7.73
9/5/2019	7.57

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

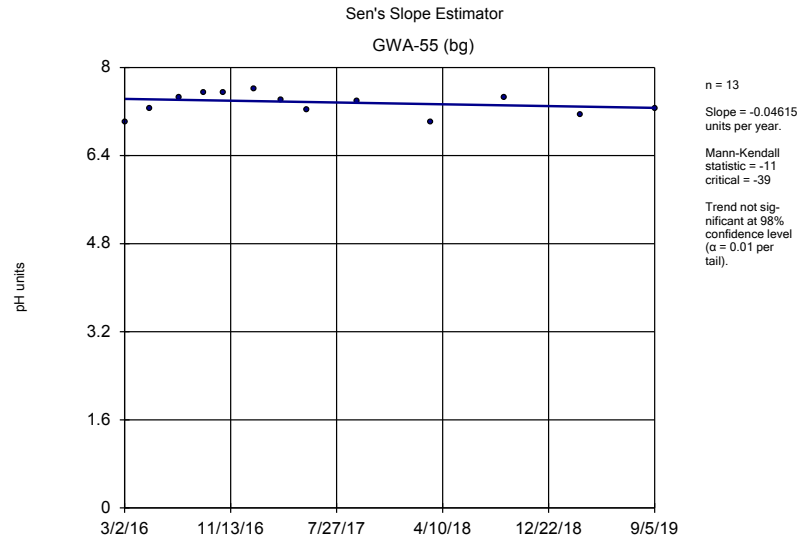
GWA-53R (bg)

3/2/2016	7.76
5/3/2016	7.8
7/11/2016	7.82
9/7/2016	7.83
10/27/2016	7.84
1/6/2017	7.63
3/16/2017	7.8
5/19/2017	7.81
9/19/2017	7.84
3/13/2018	7.8
9/11/2018	7.76
3/12/2019	7.7
9/5/2019	7.68

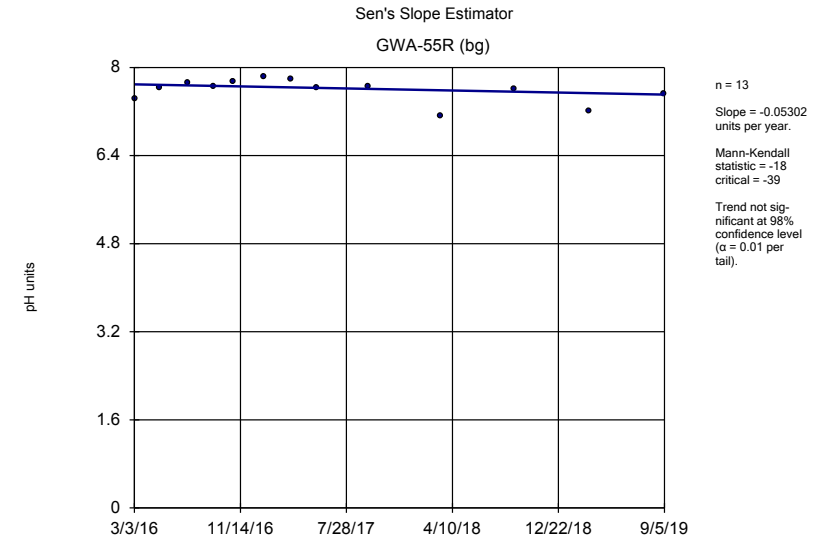
Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

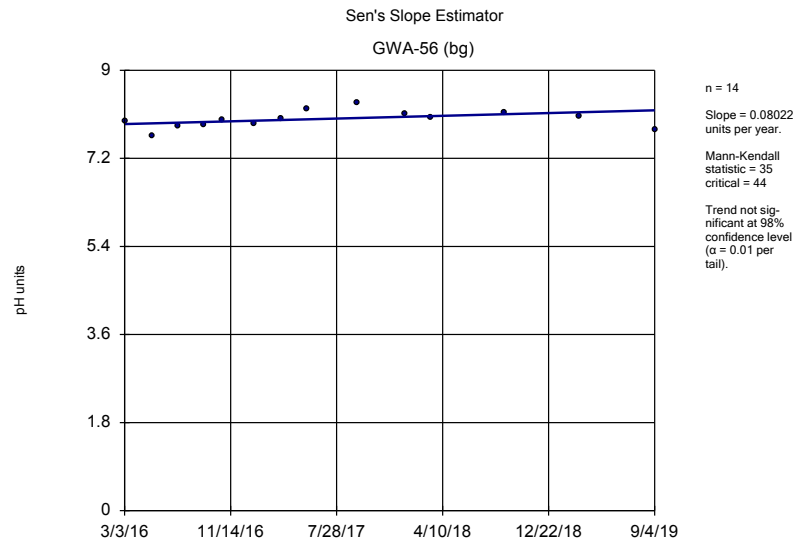
	GWA-54 (bg)
3/2/2016	7.51
5/4/2016	7.68
7/8/2016	7.7
9/8/2016	7.71
10/26/2016	7.6
1/9/2017	7.81
3/15/2017	7.74
5/18/2017	7.39
9/15/2017	7.61
3/13/2018	7.39
9/6/2018	7.66
3/7/2019	7.55
9/5/2019	7.54



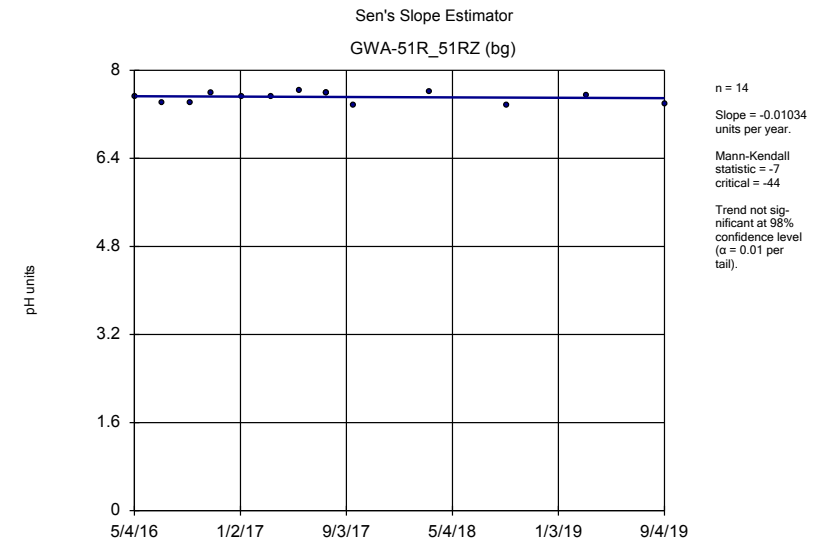
Constituent: pH Analysis Run 12/9/2019 1:58 PM View: Sens Slope Background Wells App III and 16 met
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: pH Analysis Run 12/9/2019 1:59 PM View: Sens Slope Background Wells App III and 16 met
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: pH Analysis Run 12/9/2019 1:59 PM View: Sens Slope Background Wells App III and 16 met
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: pH Analysis Run 12/9/2019 1:59 PM View: Sens Slope Background Wells App III and 16 met
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	7.01
5/3/2016	7.26
7/11/2016	7.45
9/9/2016	7.55
10/26/2016	7.55
1/9/2017	7.62
3/16/2017	7.4
5/18/2017	7.24
9/15/2017	7.38
3/12/2018	7
9/7/2018	7.45
3/8/2019	7.14
9/5/2019	7.26

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
3/3/2016	7.44
5/3/2016	7.64
7/11/2016	7.72
9/9/2016	7.66
10/27/2016	7.75
1/9/2017	7.83
3/16/2017	7.78
5/18/2017	7.64
9/18/2017	7.66
3/12/2018	7.11
9/7/2018	7.6
3/7/2019	7.22
9/5/2019	7.53

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

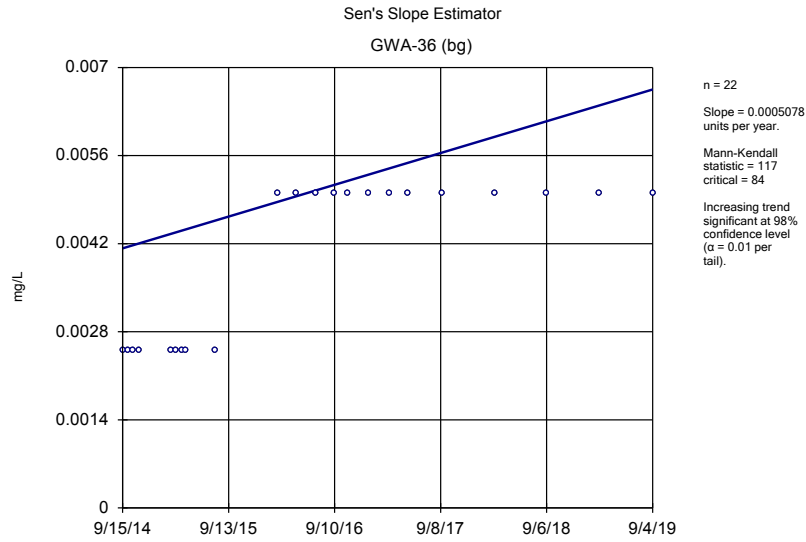
	GWA-56 (bg)
3/3/2016	7.95 (D)
5/9/2016	7.66
7/11/2016	7.86
9/9/2016	7.89
10/26/2016	7.98
1/9/2017	7.9
3/15/2017	8
5/18/2017	8.21
9/15/2017	8.34
1/9/2018	8.1 (Y)
3/13/2018	8.03
9/7/2018	8.14
3/7/2019	8.05
9/4/2019	7.79

Sen's Slope Estimator

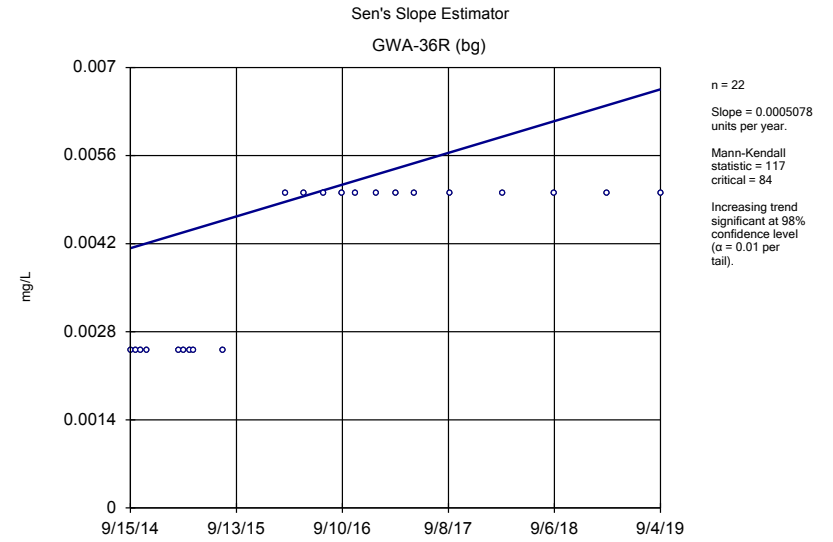
Constituent: pH (pH units) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

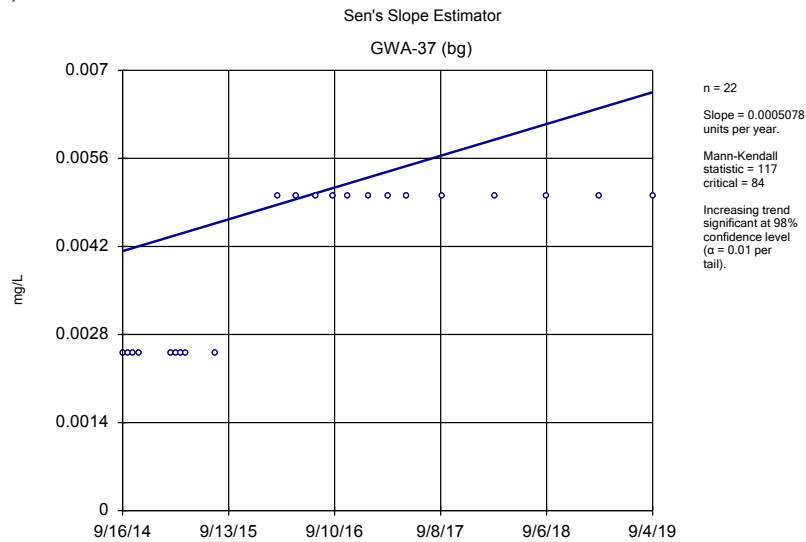
5/4/2016	7.52 (D)
7/7/2016	7.42 (D)
9/8/2016	7.4 (D)
10/26/2016	7.59 (D)
1/6/2017	7.51 (D)
3/15/2017	7.51 (D)
5/18/2017	7.64 (D)
7/18/2017	7.58
7/19/2017	7.58 (D)
9/19/2017	7.37 (D)
3/13/2018	7.62
9/7/2018	7.36
3/8/2019	7.55
9/4/2019	7.39



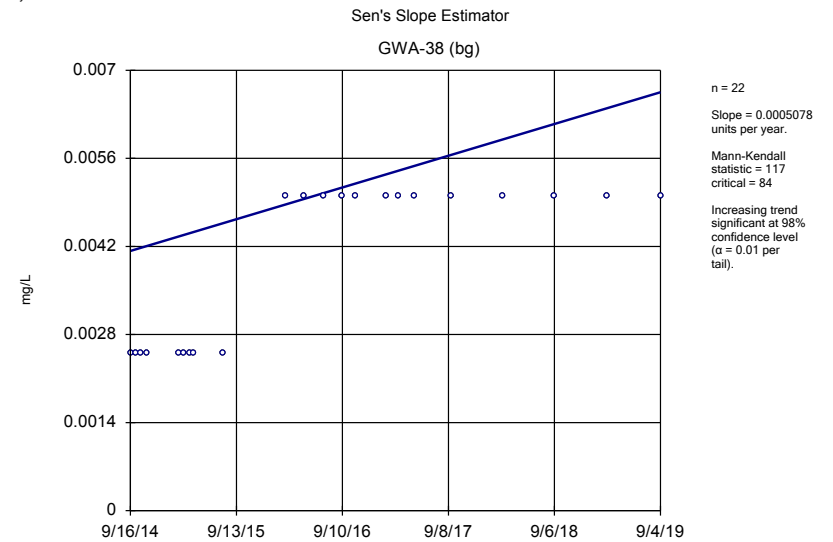
Constituent: Selenium Analysis Run 12/9/2019 1:59 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:00 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:00 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:00 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.01
5/2/2016	<0.01
7/7/2016	<0.01
9/7/2016	<0.01
10/25/2016	<0.01
1/5/2017	<0.01
3/15/2017	<0.01
5/17/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.01
5/2/2016	<0.01
7/6/2016	<0.01
9/7/2016	<0.01
10/25/2016	<0.01
1/5/2017	<0.01
3/14/2017	<0.01
5/16/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

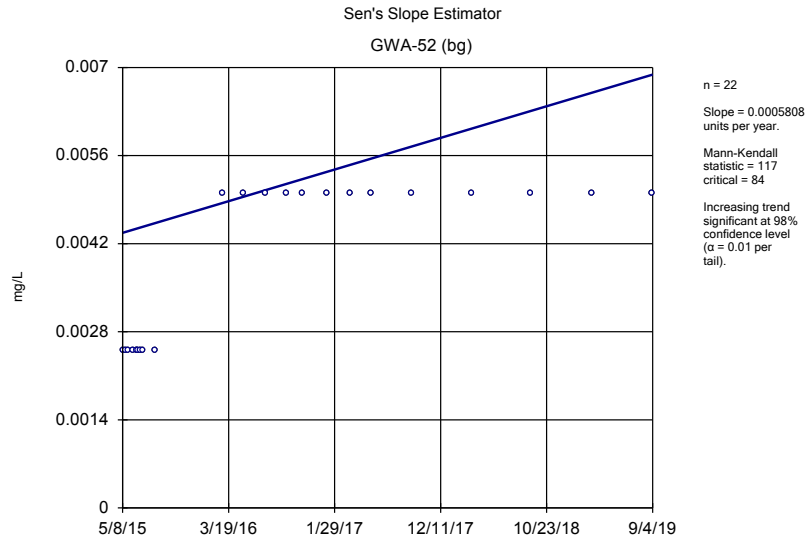
	GWA-37 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.01
5/3/2016	<0.01
7/8/2016	<0.01
9/7/2016	<0.01
10/25/2016	<0.01
1/6/2017	<0.01
3/14/2017	<0.01
5/16/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

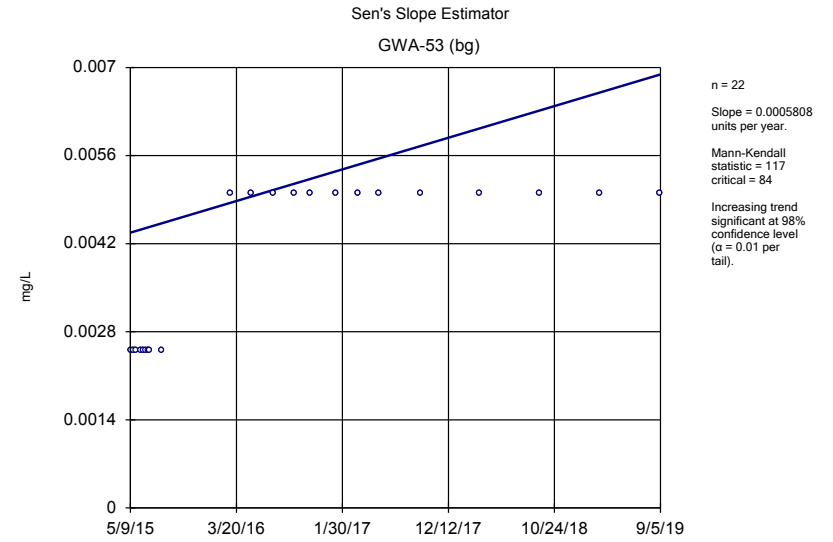
Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

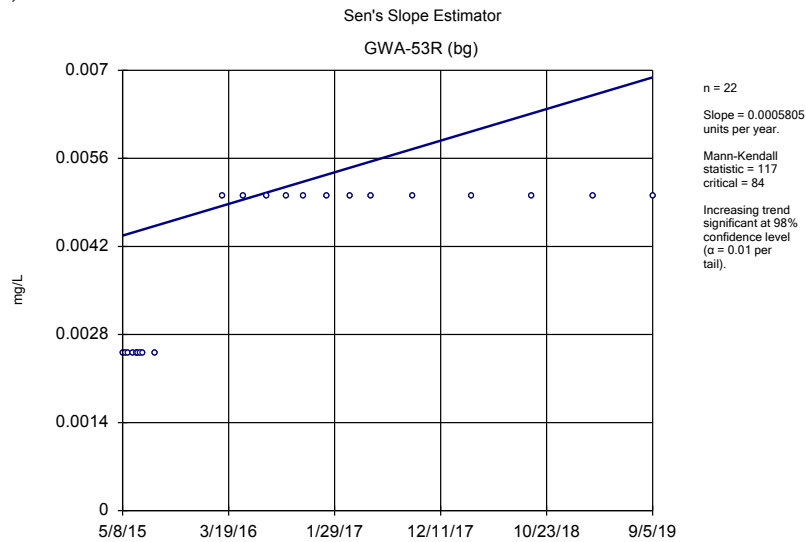
	GWA-38 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/6/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/2/2016	<0.01
5/3/2016	<0.01
7/7/2016	<0.01
9/8/2016	<0.01
10/25/2016	<0.01
2/9/2017	<0.01
3/23/2017	<0.01
5/17/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01



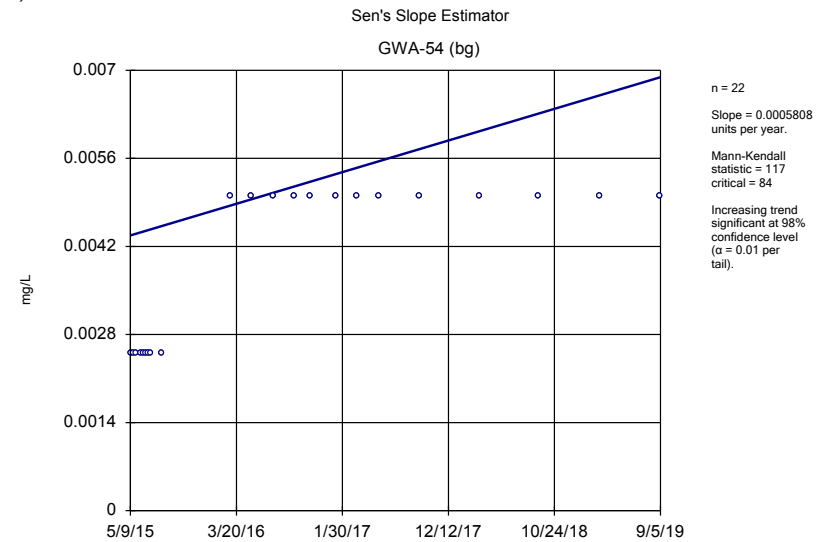
Constituent: Selenium Analysis Run 12/9/2019 2:00 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:01 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:01 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:01 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
2/29/2016	<0.01
5/4/2016	<0.01
7/8/2016	<0.01
9/8/2016	<0.01
10/26/2016	<0.01
1/6/2017	<0.01
3/15/2017	<0.01
5/17/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/17/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.01
5/3/2016	<0.01
7/8/2016	<0.01
9/8/2016	<0.01
10/26/2016	<0.01
1/9/2017	<0.01
3/16/2017	<0.01
5/19/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/8/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

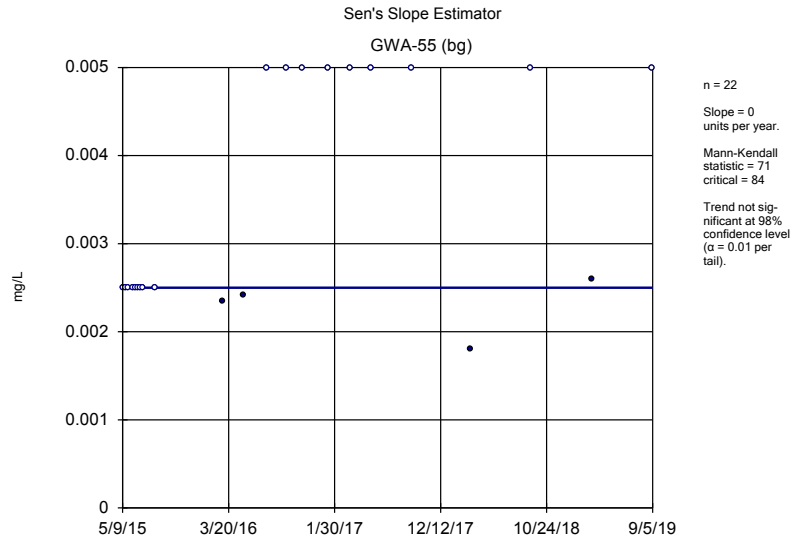
	GWA-53R (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.01
5/3/2016	<0.01
7/11/2016	<0.01
9/7/2016	<0.01
10/27/2016	<0.01
1/6/2017	<0.01
3/16/2017	<0.01
5/19/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/12/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

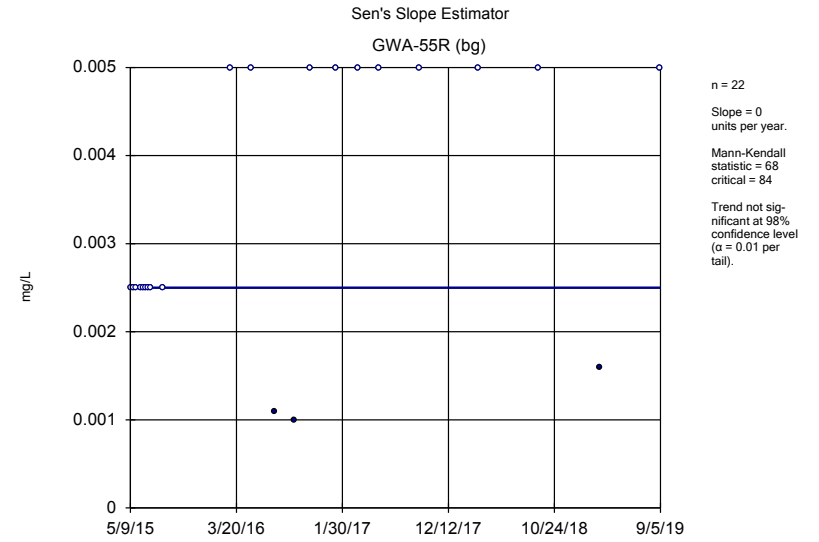
Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

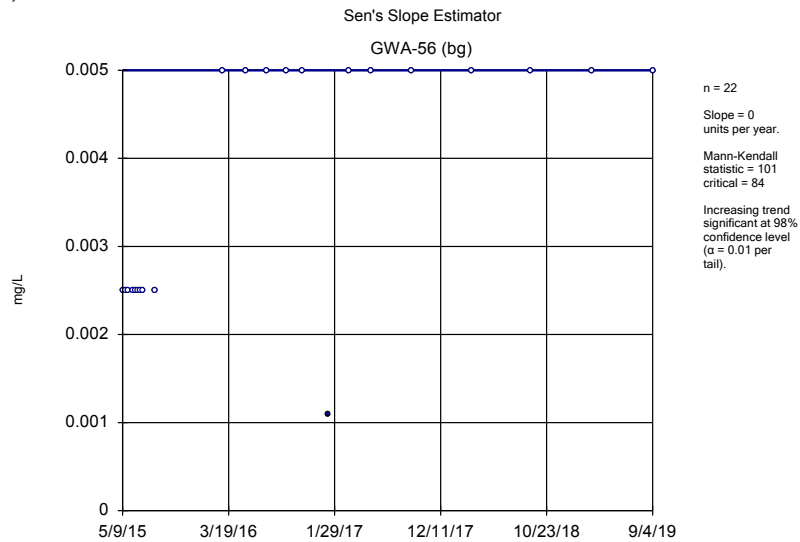
	GWA-54 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/12/2015	<0.005
3/2/2016	<0.01
5/4/2016	<0.01
7/8/2016	<0.01
9/8/2016	<0.01
10/26/2016	<0.01
1/9/2017	<0.01
3/15/2017	<0.01
5/18/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/5/2019	<0.01



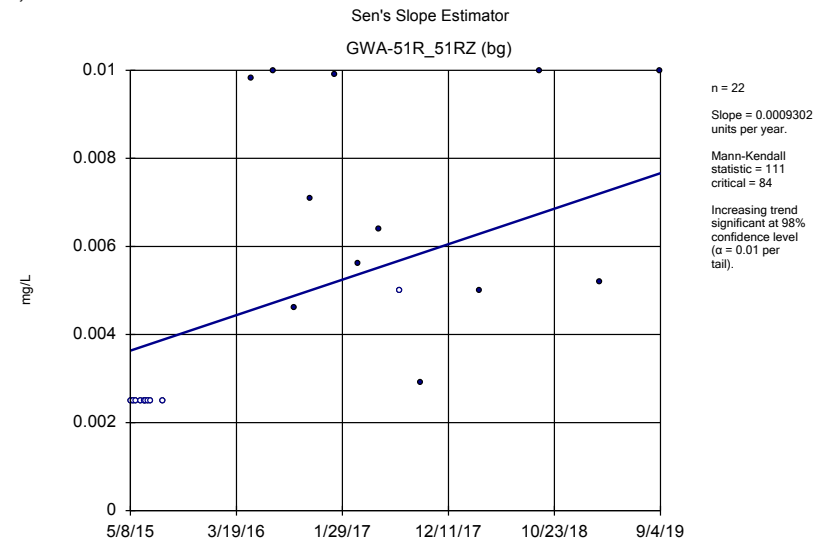
Constituent: Selenium Analysis Run 12/9/2019 2:02 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:02 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:02 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Selenium Analysis Run 12/9/2019 2:03 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/2/2016	0.00234 (J)
5/3/2016	0.00241 (J)
7/11/2016	<0.01
9/9/2016	<0.01
10/26/2016	<0.01
1/9/2017	<0.01
3/16/2017	<0.01
5/18/2017	<0.01
9/15/2017	<0.01
3/12/2018	0.0018 (J)
9/7/2018	<0.01
3/8/2019	0.0026 (X)
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.01
5/3/2016	<0.01
7/11/2016	0.0011 (J)
9/9/2016	0.001 (J)
10/27/2016	<0.01
1/9/2017	<0.01
3/16/2017	<0.01
5/18/2017	<0.01
9/18/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/7/2019	0.0016 (X)
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.005
5/19/2015	<0.005
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/13/2015	<0.005
3/3/2016	<0.01
5/9/2016	<0.01
7/11/2016	<0.01
9/9/2016	<0.01
10/26/2016	<0.01
1/9/2017	0.0011 (J)
3/15/2017	<0.01
5/18/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

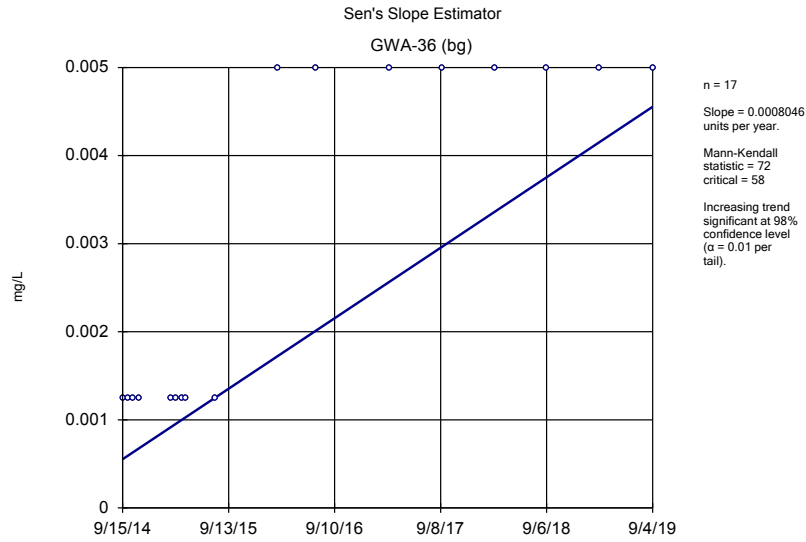
Sen's Slope Estimator

Constituent: Selenium (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals

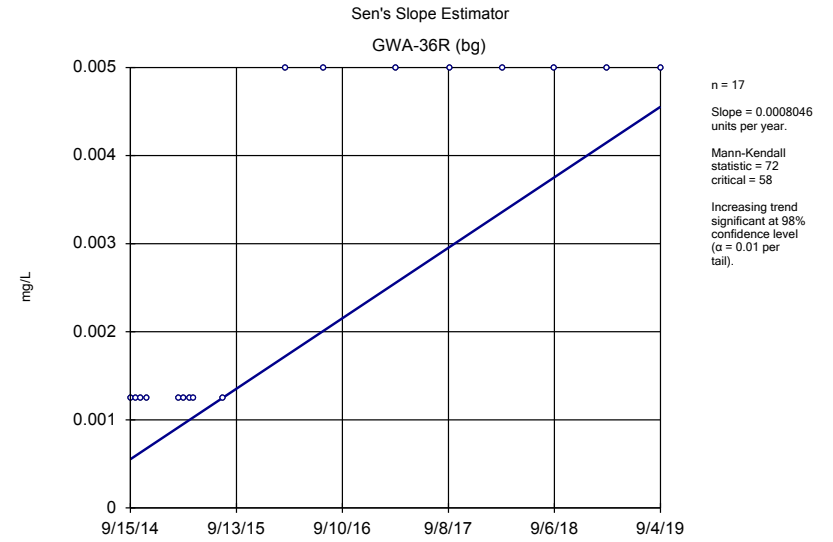
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

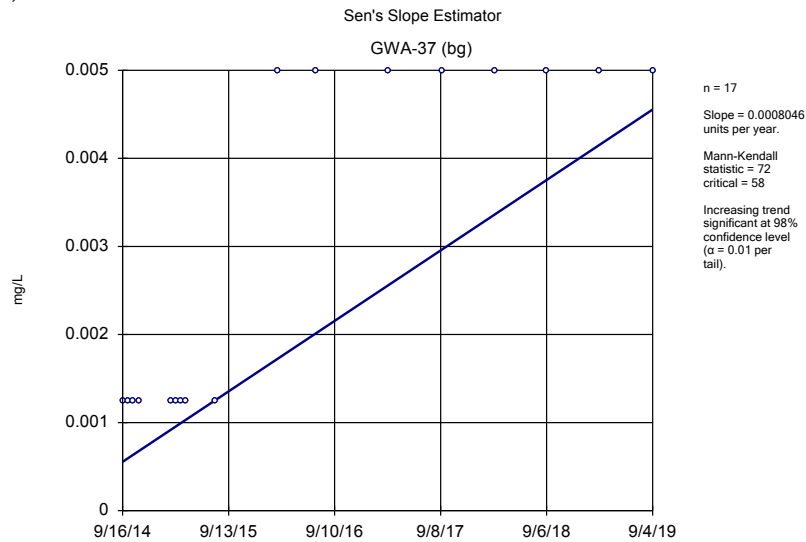
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	<0.005
5/4/2016	0.00982 (JD)
7/7/2016	0.01 (D)
9/8/2016	0.0046 (JD)
10/26/2016	0.0071 (JD)
1/6/2017	0.0099 (JD)
3/15/2017	0.0056 (JD)
5/18/2017	0.0064 (JD)
7/19/2017	<0.01 (D)
9/19/2017	0.0029 (JD)
3/13/2018	0.005 (J)
9/7/2018	0.01
3/8/2019	0.0052 (X)
9/4/2019	0.01



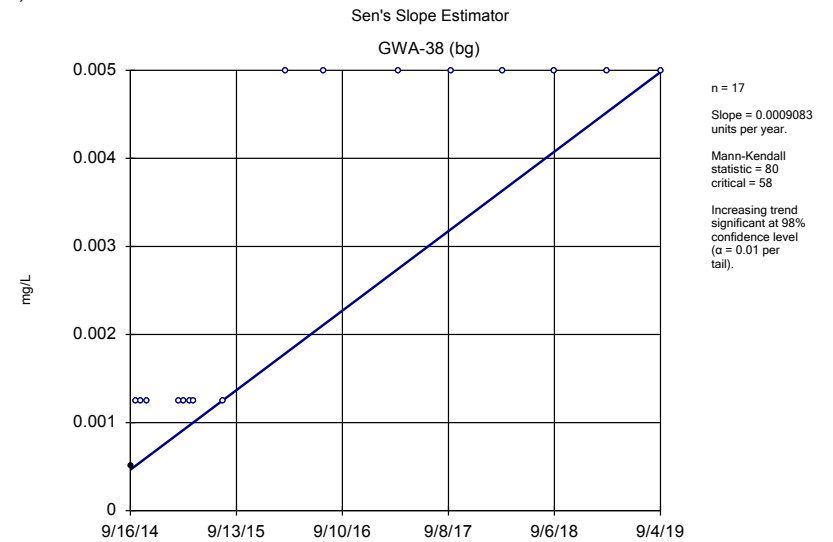
Constituent: Silver Analysis Run 12/9/2019 2:03 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Silver Analysis Run 12/9/2019 2:03 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Silver Analysis Run 12/9/2019 2:03 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Silver Analysis Run 12/9/2019 2:04 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.0025
10/3/2014	<0.0025
10/20/2014	<0.0025
11/10/2014	<0.0025
3/2/2015	<0.0025
3/17/2015	<0.0025
4/5/2015	<0.0025
4/21/2015	<0.0025
7/28/2015	<0.0025
3/1/2016	<0.01
7/7/2016	<0.01
3/15/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	<0.0025
10/3/2014	<0.0025
10/20/2014	<0.0025
11/10/2014	<0.0025
3/2/2015	<0.0025
3/17/2015	<0.0025
4/5/2015	<0.0025
4/21/2015	<0.0025
7/28/2015	<0.0025
3/1/2016	<0.01
7/6/2016	<0.01
3/14/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

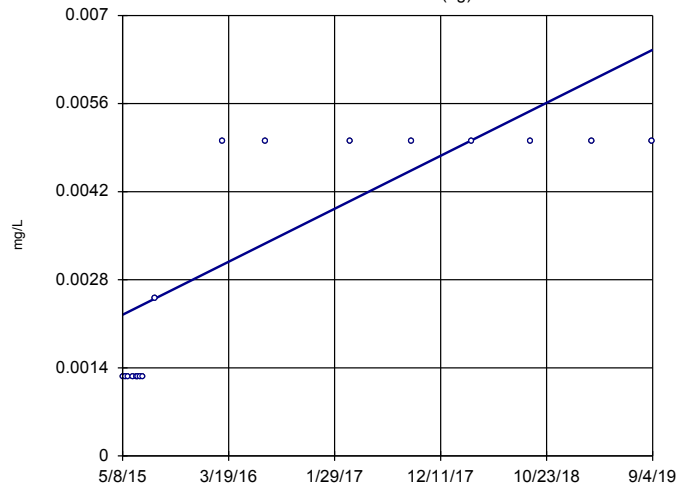
	GWA-37 (bg)
9/16/2014	<0.0025
10/3/2014	<0.0025
10/20/2014	<0.0025
11/10/2014	<0.0025
3/2/2015	<0.0025
3/17/2015	<0.0025
4/5/2015	<0.0025
4/22/2015	<0.0025
7/28/2015	<0.0025
3/1/2016	<0.01
7/8/2016	<0.01
3/14/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-38 (bg)
9/16/2014	0.00051 (J)
10/3/2014	<0.0025
10/20/2014	<0.0025
11/10/2014	<0.0025
3/2/2015	<0.0025
3/17/2015	<0.0025
4/6/2015	<0.0025
4/22/2015	<0.0025
7/28/2015	<0.0025
3/2/2016	<0.01
7/7/2016	<0.01
3/23/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

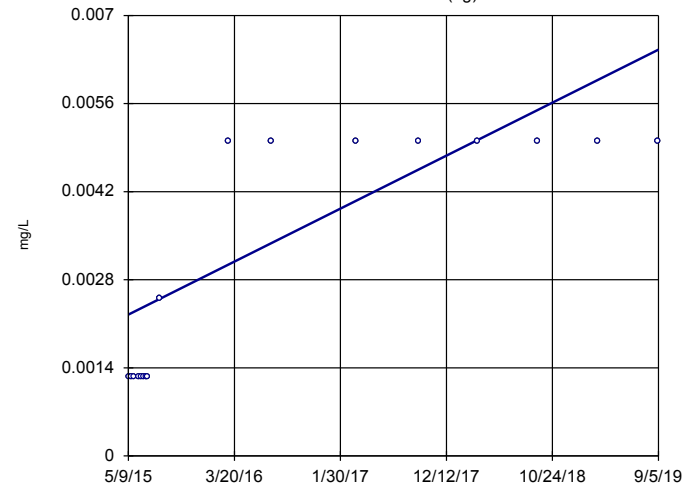
Sen's Slope Estimator
GWA-52 (bg)



n = 17
Slope = 0.0009725
units per year.
Mann-Kendall
statistic = 80
critical = 58
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Silver Analysis Run 12/9/2019 2:04 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

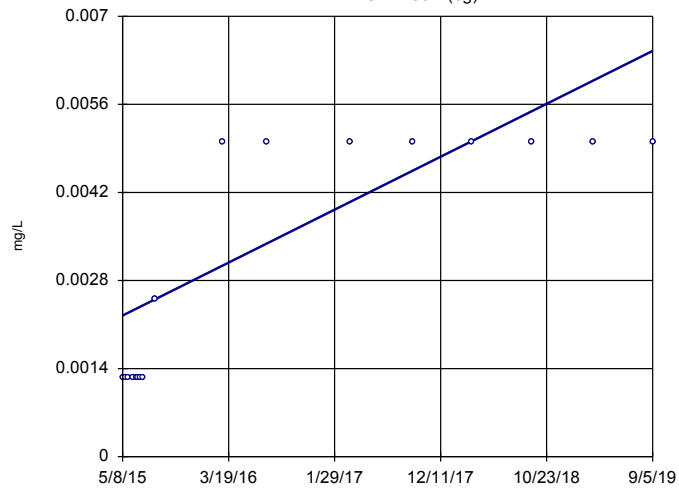
Sen's Slope Estimator
GWA-53 (bg)



n = 17
Slope = 0.0009725
units per year.
Mann-Kendall
statistic = 80
critical = 58
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Silver Analysis Run 12/9/2019 2:05 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

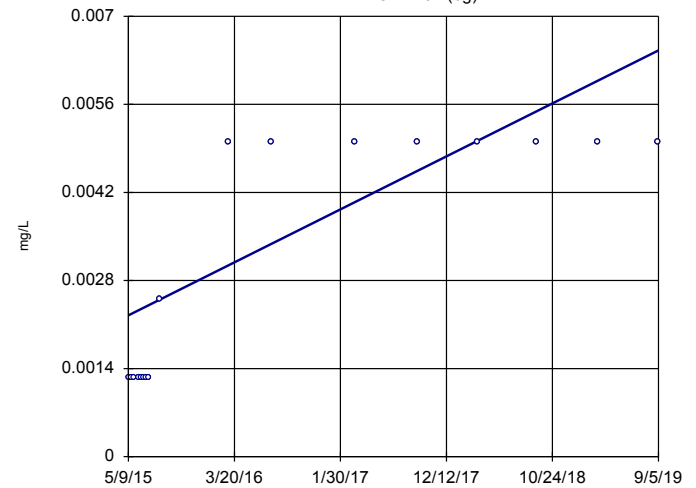
Sen's Slope Estimator
GWA-53R (bg)



n = 17
Slope = 0.0009708
units per year.
Mann-Kendall
statistic = 80
critical = 58
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Silver Analysis Run 12/9/2019 2:05 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



n = 17
Slope = 0.0009729
units per year.
Mann-Kendall
statistic = 80
critical = 58
Increasing trend
significant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Silver Analysis Run 12/9/2019 2:05 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.0025
5/17/2015	<0.0025
5/25/2015	<0.0025
6/8/2015	<0.0025
6/18/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	<0.005
2/29/2016	<0.01
7/8/2016	<0.01
3/15/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.0025
5/18/2015	<0.0025
5/25/2015	<0.0025
6/8/2015	<0.0025
6/17/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	<0.005
3/2/2016	<0.01
7/8/2016	<0.01
3/16/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/8/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

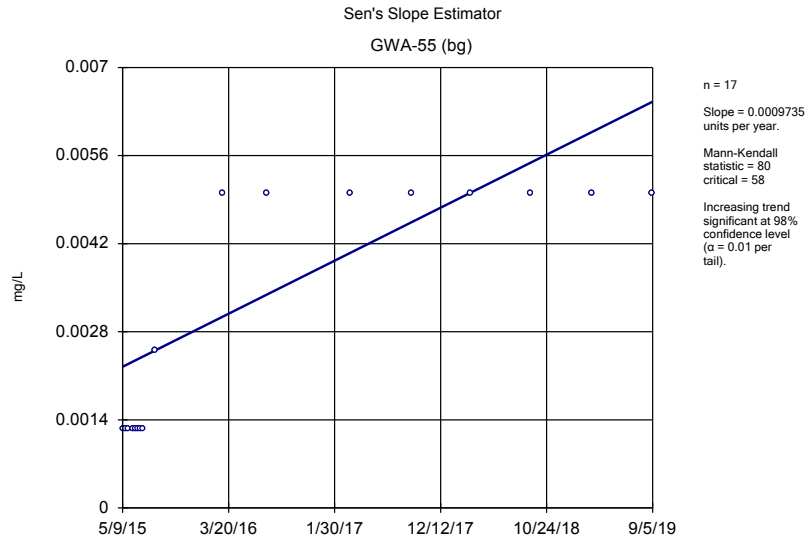
Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	<0.0025
5/17/2015	<0.0025
5/25/2015	<0.0025
6/8/2015	<0.0025
6/18/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	<0.005
3/2/2016	<0.01
7/11/2016	<0.01
3/16/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/12/2019	<0.01
9/5/2019	<0.01

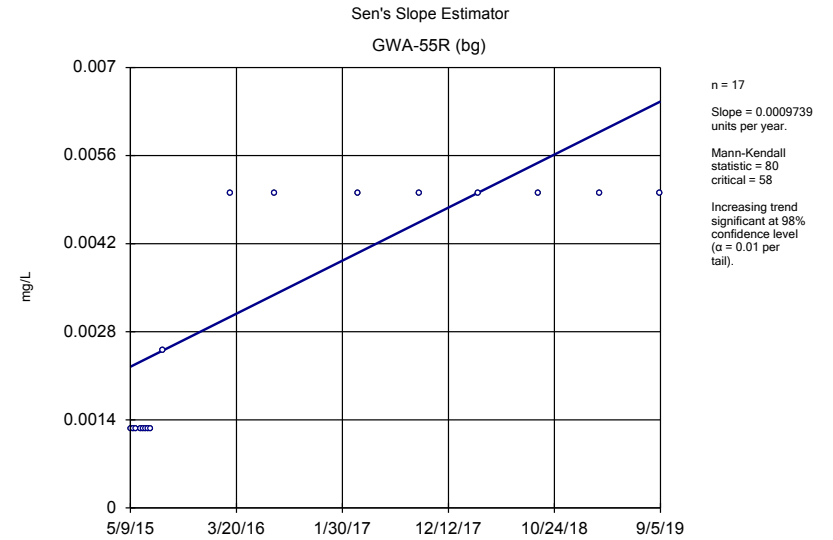
Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:15 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

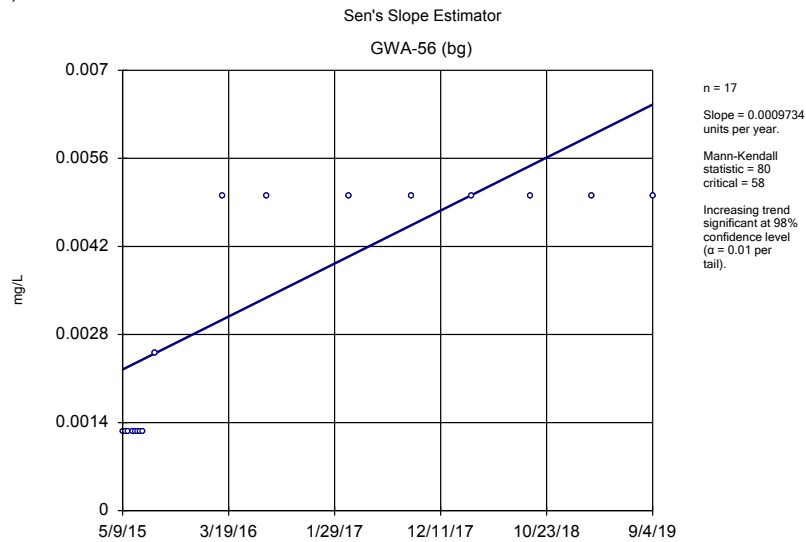
	GWA-54 (bg)
5/9/2015	<0.0025
5/18/2015	<0.0025
5/25/2015	<0.0025
6/9/2015	<0.0025
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/12/2015	<0.005
3/2/2016	<0.01
7/8/2016	<0.01
3/15/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/5/2019	<0.01



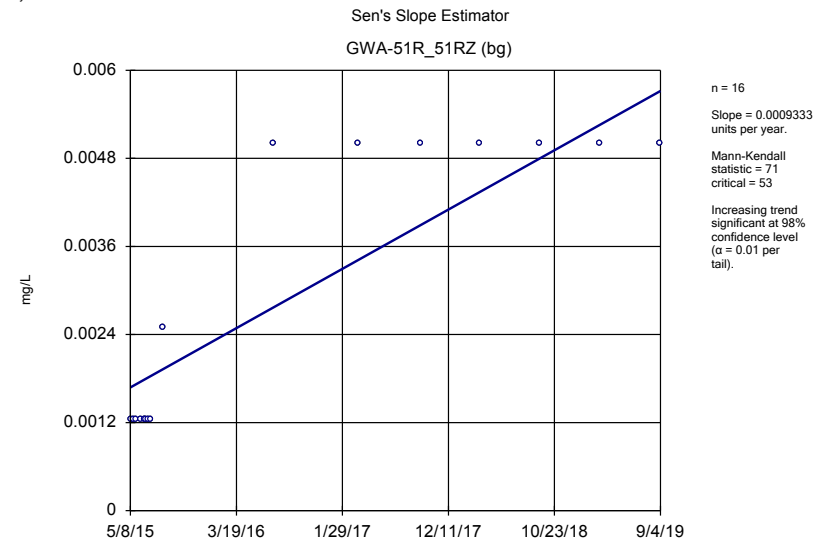
Constituent: Silver Analysis Run 12/9/2019 2:06 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Silver Analysis Run 12/9/2019 2:06 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Silver Analysis Run 12/9/2019 2:06 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Silver Analysis Run 12/9/2019 2:06 PM View: Sens Slope Background Wells App III and 16 m
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.0025
5/18/2015	<0.0025
5/26/2015	<0.0025
6/9/2015	<0.0025
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	<0.005
3/2/2016	<0.01
7/11/2016	<0.01
3/16/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.0025
5/18/2015	<0.0025
5/26/2015	<0.0025
6/9/2015	<0.0025
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	<0.005
3/3/2016	<0.01
7/11/2016	<0.01
3/16/2017	<0.01
9/18/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.0025
5/19/2015	<0.0025
5/26/2015	<0.0025
6/9/2015	<0.0025
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	<0.005
3/3/2016	<0.01
7/11/2016	<0.01
3/15/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

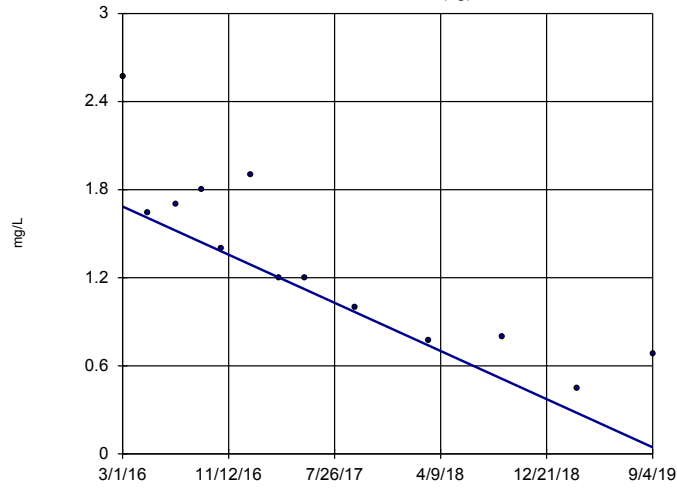
Sen's Slope Estimator

Constituent: Silver (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

5/8/2015	<0.0025
5/17/2015	<0.0025
5/25/2015	<0.0025
6/8/2015	<0.0025
6/18/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	<0.005
7/7/2016	<0.01 (D)
3/15/2017	<0.01 (D)
9/19/2017	<0.01 (D)
3/13/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/4/2019	<0.01

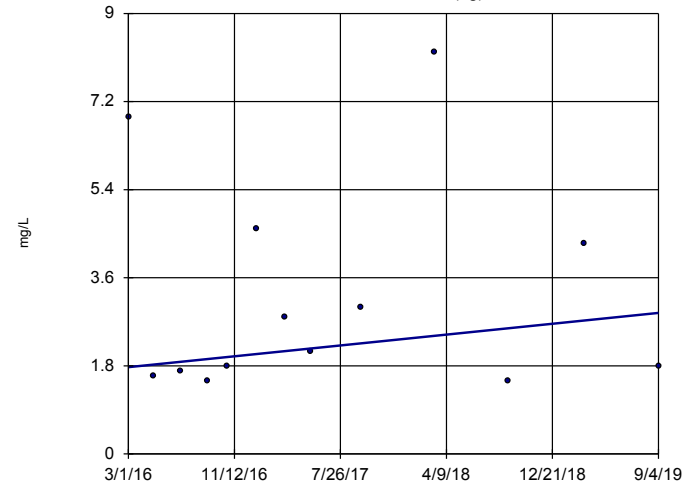
Sen's Slope Estimator
GWA-36 (bg)



n = 13
 Slope = -0.467
 units per year.
 Mann-Kendall
 statistic = -59
 critical = -39
 Decreasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Sulfate Analysis Run 12/9/2019 2:07 PM View: Sens Slope Background Wells App III and 16
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

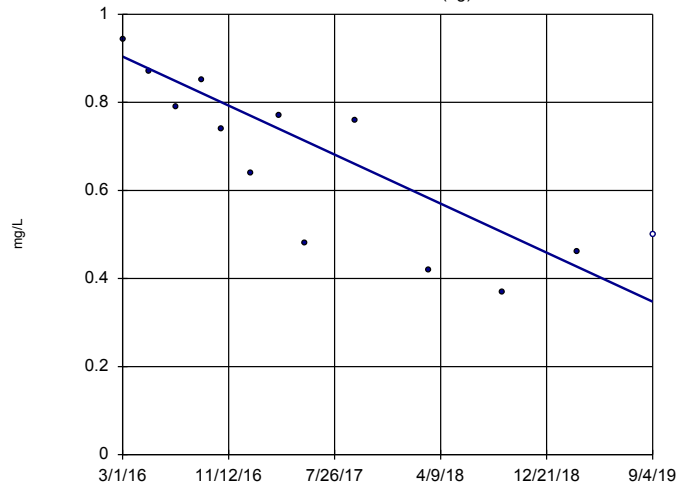
Sen's Slope Estimator
GWA-36R (bg)



n = 13
 Slope = 0.3152
 units per year.
 Mann-Kendall
 statistic = 10
 critical = 39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Sulfate Analysis Run 12/9/2019 2:07 PM View: Sens Slope Background Wells App III and 16
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

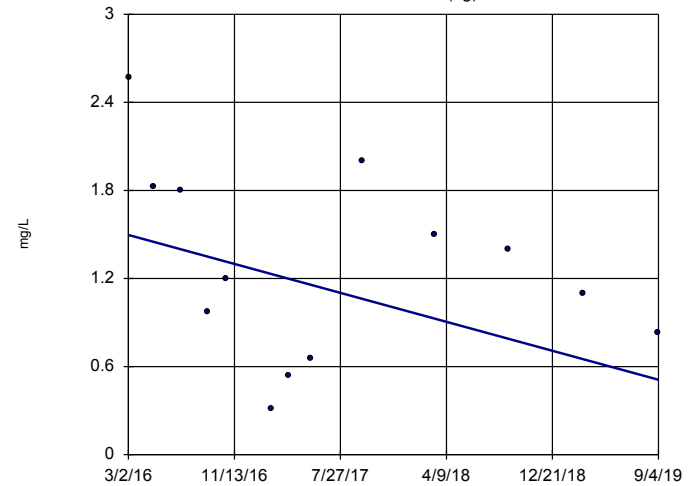
Sen's Slope Estimator
GWA-37 (bg)



n = 13
 Slope = -0.1584
 units per year.
 Mann-Kendall
 statistic = -54
 critical = -39
 Decreasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Sulfate Analysis Run 12/9/2019 2:07 PM View: Sens Slope Background Wells App III and 16
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-38 (bg)



n = 13
 Slope = -0.281
 units per year.
 Mann-Kendall
 statistic = -22
 critical = -39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Sulfate Analysis Run 12/9/2019 2:07 PM View: Sens Slope Background Wells App III and 16
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	2.5655
5/2/2016	1.64
7/7/2016	1.7
9/7/2016	1.8
10/25/2016	1.4
1/5/2017	1.9 (J)
3/15/2017	1.2
5/17/2017	1.2
9/15/2017	1
3/12/2018	0.77 (J)
9/6/2018	0.8 (J)
3/6/2019	0.45 (X)
9/4/2019	0.68 (X)

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
3/1/2016	6.8929
5/2/2016	1.6
7/6/2016	1.7
9/7/2016	1.5
10/25/2016	1.8
1/5/2017	4.6
3/14/2017	2.8
5/16/2017	2.1
9/15/2017	3
3/12/2018	8.2
9/6/2018	1.5
3/7/2019	4.3
9/4/2019	1.8

Sen's Slope Estimator

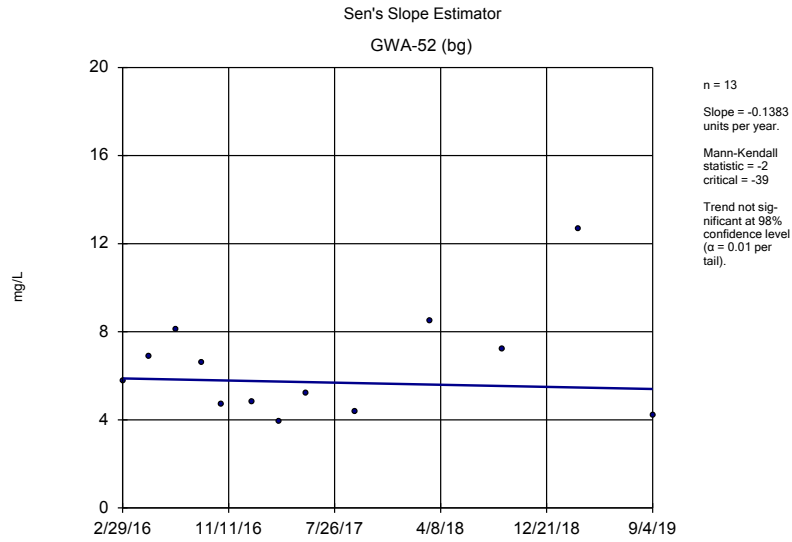
Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
3/1/2016	0.9427 (J)
5/3/2016	0.87 (J)
7/8/2016	0.79 (J)
9/7/2016	0.85 (J)
10/25/2016	0.74 (J)
1/6/2017	0.64 (J)
3/14/2017	0.77 (J)
5/16/2017	0.48 (J)
9/15/2017	0.76 (J)
3/12/2018	0.42 (J)
9/6/2018	0.37 (J)
3/6/2019	0.46 (X)
9/4/2019	<1

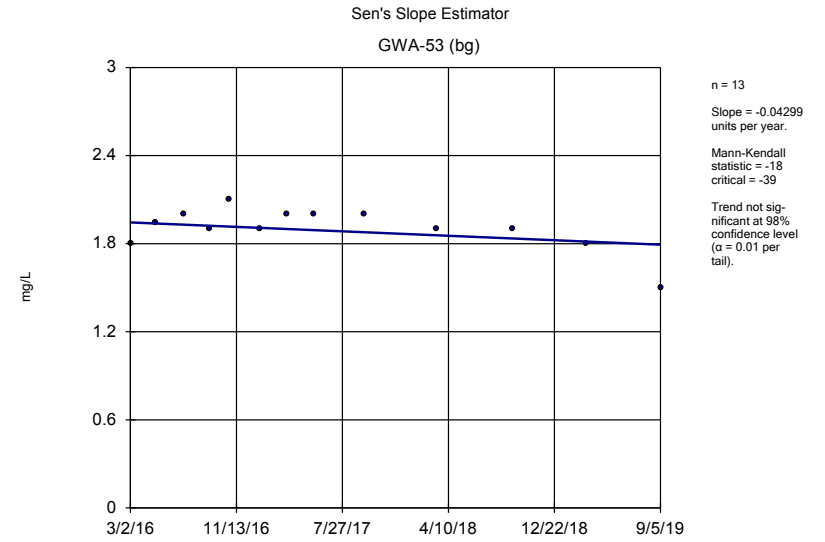
Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

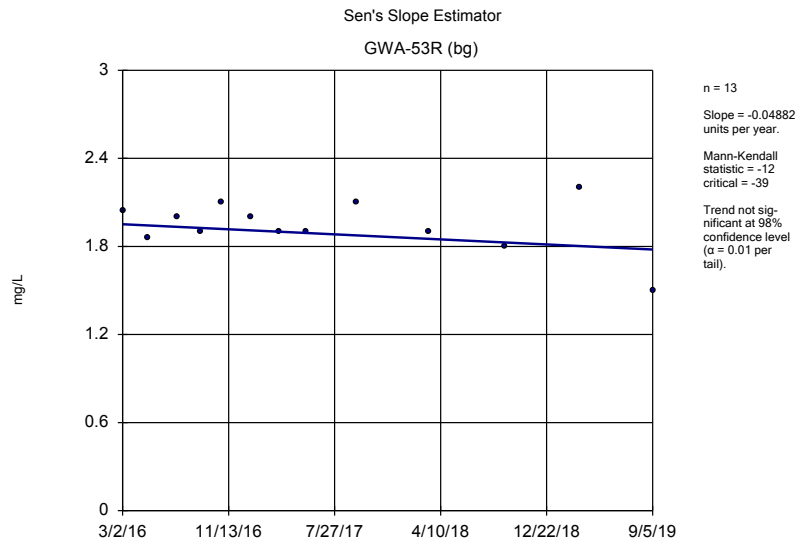
	GWA-38 (bg)
3/2/2016	2.5669
5/3/2016	1.83
7/7/2016	1.8
9/8/2016	0.97 (J)
10/25/2016	1.2
2/9/2017	0.31 (J)
3/23/2017	0.54 (J)
5/17/2017	0.66 (J)
9/19/2017	2
3/13/2018	1.5
9/6/2018	1.4
3/7/2019	1.1
9/4/2019	0.83 (X)



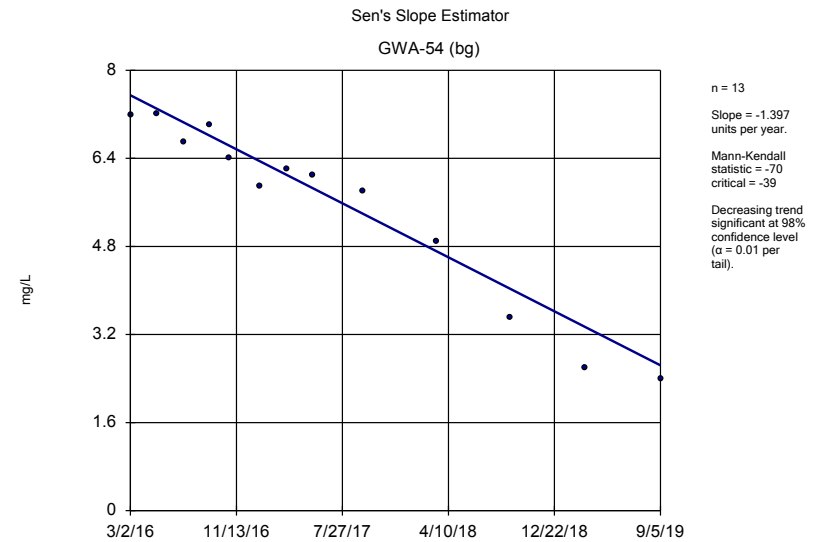
Constituent: Sulfate Analysis Run 12/9/2019 2:07 PM View: Sens Slope Background Wells App III and 16
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 12/9/2019 2:07 PM View: Sens Slope Background Wells App III and 16
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 12/9/2019 2:08 PM View: Sens Slope Background Wells App III and 16
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 12/9/2019 2:08 PM View: Sens Slope Background Wells App III and 16
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	5.7396
5/4/2016	6.87
7/8/2016	8.1
9/8/2016	6.6
10/26/2016	4.7
1/6/2017	4.8
3/15/2017	3.9
5/17/2017	5.2
9/15/2017	4.4
3/13/2018	8.5
9/6/2018	7.2
3/7/2019	12.7
9/4/2019	4.2

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	1.799
5/3/2016	1.94
7/8/2016	2
9/8/2016	1.9
10/26/2016	2.1
1/9/2017	1.9
3/16/2017	2
5/19/2017	2
9/19/2017	2
3/13/2018	1.9
9/11/2018	1.9
3/8/2019	1.8
9/5/2019	1.5

Sen's Slope Estimator

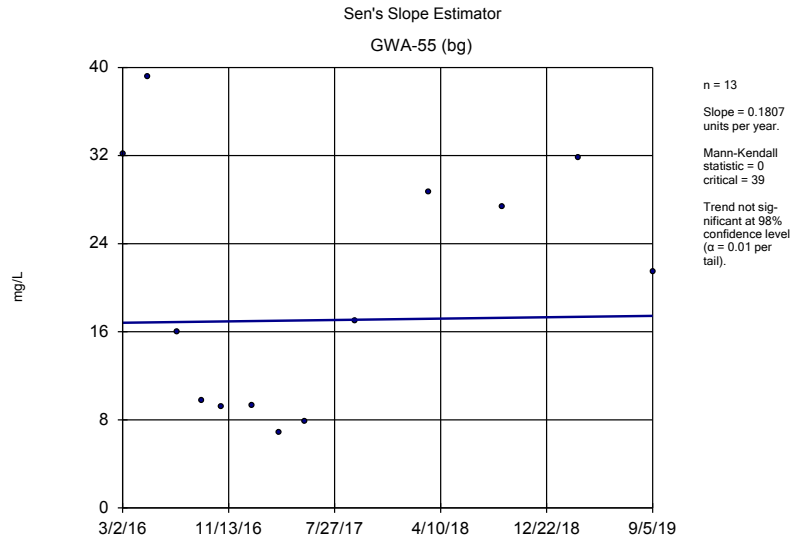
Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
3/2/2016	2.0407
5/3/2016	1.86
7/11/2016	2
9/7/2016	1.9
10/27/2016	2.1
1/6/2017	2
3/16/2017	1.9
5/19/2017	1.9
9/19/2017	2.1
3/13/2018	1.9
9/11/2018	1.8
3/12/2019	2.2
9/5/2019	1.5

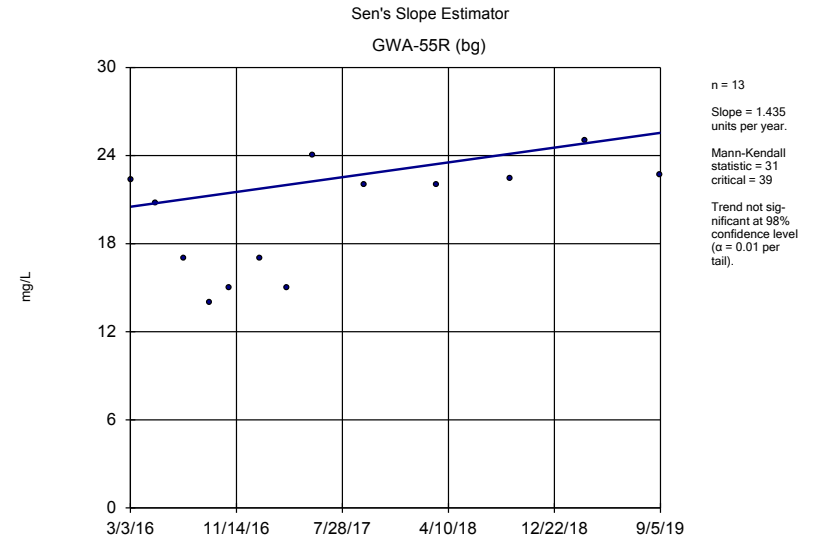
Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

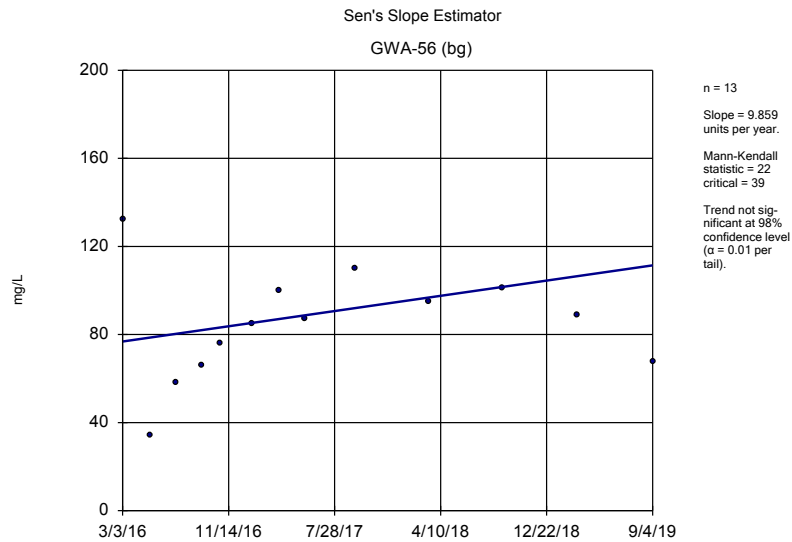
	GWA-54 (bg)
3/2/2016	7.1892
5/4/2016	7.22
7/8/2016	6.7
9/8/2016	7
10/26/2016	6.4
1/9/2017	5.9
3/15/2017	6.2
5/18/2017	6.1
9/15/2017	5.8
3/13/2018	4.9
9/6/2018	3.5
3/7/2019	2.6
9/5/2019	2.4



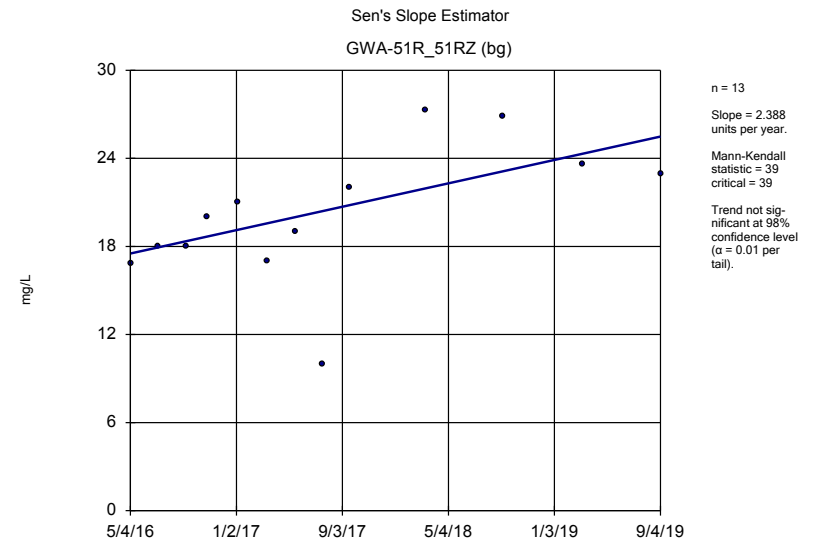
Constituent: Sulfate Analysis Run 12/9/2019 2:08 PM View: Sens Slope Background Wells App III and 16 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 12/9/2019 2:08 PM View: Sens Slope Background Wells App III and 16 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 12/9/2019 2:08 PM View: Sens Slope Background Wells App III and 16 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Sulfate Analysis Run 12/9/2019 2:08 PM View: Sens Slope Background Wells App III and 16 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	32.178
5/3/2016	39.2
7/11/2016	16
9/9/2016	9.7
10/26/2016	9.2
1/9/2017	9.3
3/16/2017	6.9
5/18/2017	7.9
9/15/2017	17
3/12/2018	28.7
9/7/2018	27.4
3/8/2019	31.8
9/5/2019	21.5

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
3/3/2016	22.316
5/3/2016	20.8
7/11/2016	17
9/9/2016	14
10/27/2016	15
1/9/2017	17
3/16/2017	15
5/18/2017	24
9/18/2017	22
3/12/2018	22
9/7/2018	22.4
3/7/2019	25
9/5/2019	22.7

Sen's Slope Estimator

Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
3/3/2016	132.4615
5/9/2016	34.3
7/11/2016	58
9/9/2016	66
10/26/2016	76
1/9/2017	85
3/15/2017	100
5/18/2017	87
9/15/2017	110
3/13/2018	94.8
9/7/2018	101
3/7/2019	88.7
9/4/2019	67.8

Sen's Slope Estimator

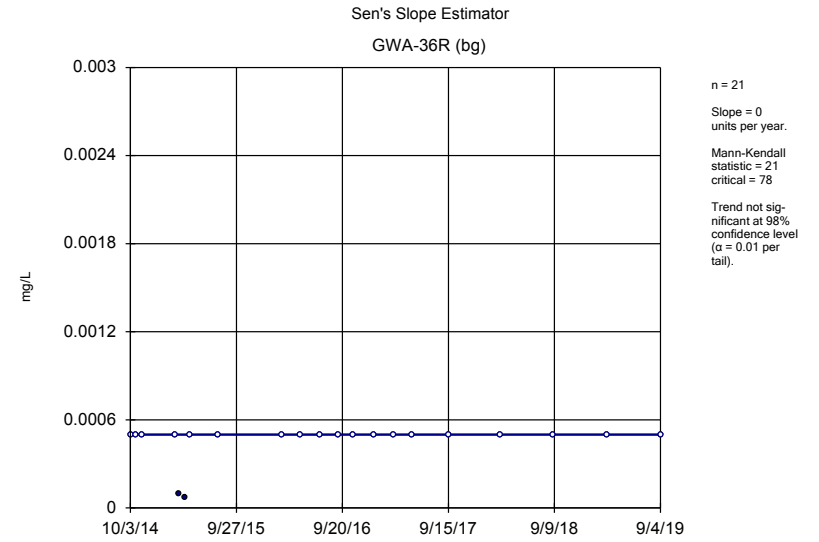
Constituent: Sulfate (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

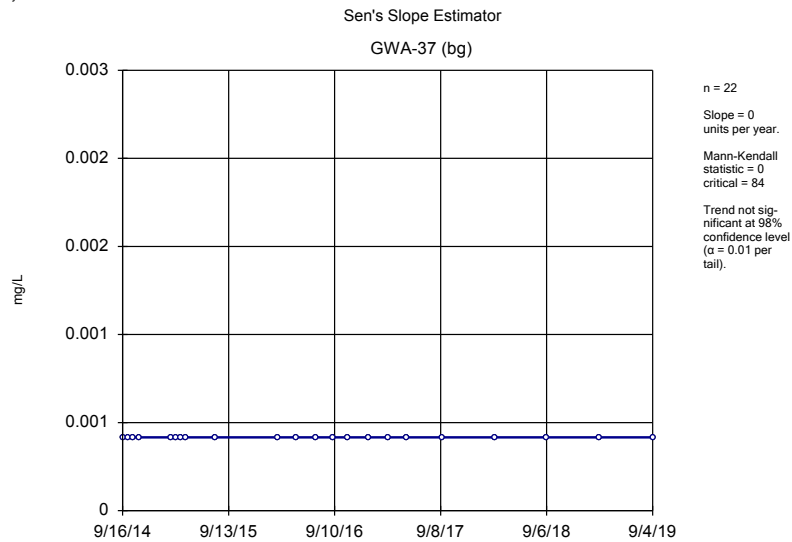
5/4/2016	16.8 (D)
7/7/2016	18 (D)
9/8/2016	18 (D)
10/26/2016	20 (D)
1/6/2017	21 (D)
3/15/2017	17 (D)
5/18/2017	19 (D)
7/19/2017	10 (D)
9/19/2017	22 (D)
3/13/2018	27.3
9/7/2018	26.9
3/8/2019	23.6
9/4/2019	22.9



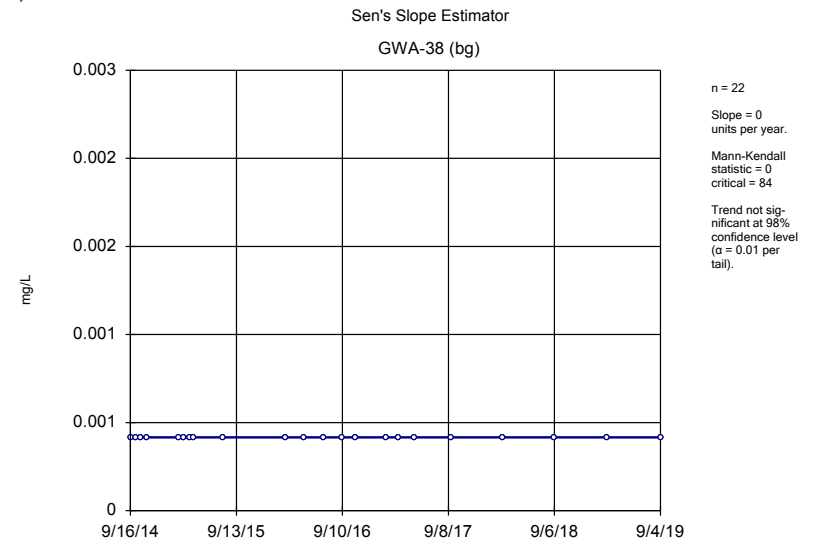
Constituent: Thallium Analysis Run 12/9/2019 2:09 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Thallium Analysis Run 12/9/2019 2:09 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Thallium Analysis Run 12/9/2019 2:09 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Thallium Analysis Run 12/9/2019 2:09 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.001
10/3/2014	<0.001
10/20/2014	<0.001
11/10/2014	<0.001
3/2/2015	<0.001
3/17/2015	<0.001
4/5/2015	<0.001
4/21/2015	<0.001
7/28/2015	<0.001
3/1/2016	<0.001
5/2/2016	<0.001
7/7/2016	9E-05 (J)
9/7/2016	<0.001
10/25/2016	<0.001
1/5/2017	<0.001
3/15/2017	4E-05 (J)
5/17/2017	<0.001
9/15/2017	<0.001
3/12/2018	<0.001
9/6/2018	<0.001
3/6/2019	<0.001
9/4/2019	<0.001

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
10/3/2014	<0.001
10/20/2014	<0.001
11/10/2014	<0.001
3/2/2015	<0.001
3/17/2015	0.0001 (J)
4/5/2015	7E-05 (J)
4/21/2015	<0.001
7/28/2015	<0.001
3/1/2016	<0.001
5/2/2016	<0.001
7/6/2016	<0.001
9/7/2016	<0.001
10/25/2016	<0.001
1/5/2017	<0.001
3/14/2017	<0.001
5/16/2017	<0.001
9/15/2017	<0.001
3/12/2018	<0.001
9/6/2018	<0.001
3/7/2019	<0.001
9/4/2019	<0.001

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	<0.001
10/3/2014	<0.001
10/20/2014	<0.001
11/10/2014	<0.001
3/2/2015	<0.001
3/17/2015	<0.001
4/5/2015	<0.001
4/22/2015	<0.001
7/28/2015	<0.001
3/1/2016	<0.001
5/3/2016	<0.001
7/8/2016	<0.001
9/7/2016	<0.001
10/25/2016	<0.001
1/6/2017	<0.001
3/14/2017	<0.001
5/16/2017	<0.001
9/15/2017	<0.001
3/12/2018	<0.001
9/6/2018	<0.001
3/6/2019	<0.001
9/4/2019	<0.001

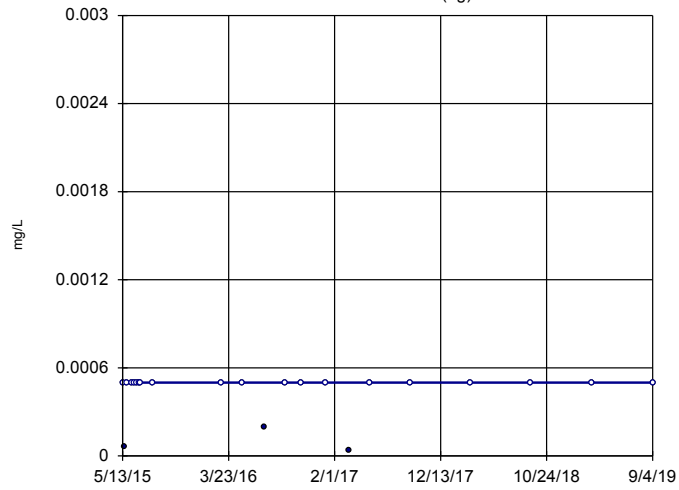
Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

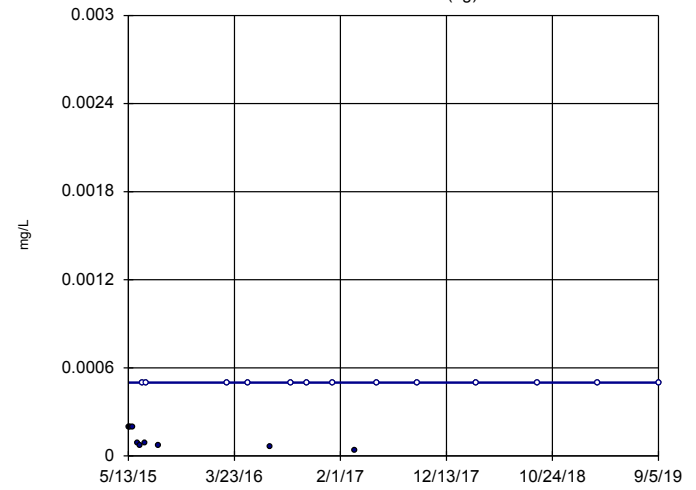
	GWA-38 (bg)
9/16/2014	<0.001
10/6/2014	<0.001
10/20/2014	<0.001
11/10/2014	<0.001
3/2/2015	<0.001
3/17/2015	<0.001
4/6/2015	<0.001
4/22/2015	<0.001
7/28/2015	<0.001
3/2/2016	<0.001
5/3/2016	<0.001
7/7/2016	<0.001
9/8/2016	<0.001
10/25/2016	<0.001
2/9/2017	<0.001
3/23/2017	<0.001
5/17/2017	<0.001
9/19/2017	<0.001
3/13/2018	<0.001
9/6/2018	<0.001
3/7/2019	<0.001
9/4/2019	<0.001

Sen's Slope Estimator
GWA-52 (bg)



n = 22
Slope = 0
units per year.
Mann-Kendall
statistic = 8
critical = 84
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Sen's Slope Estimator
GWA-53 (bg)

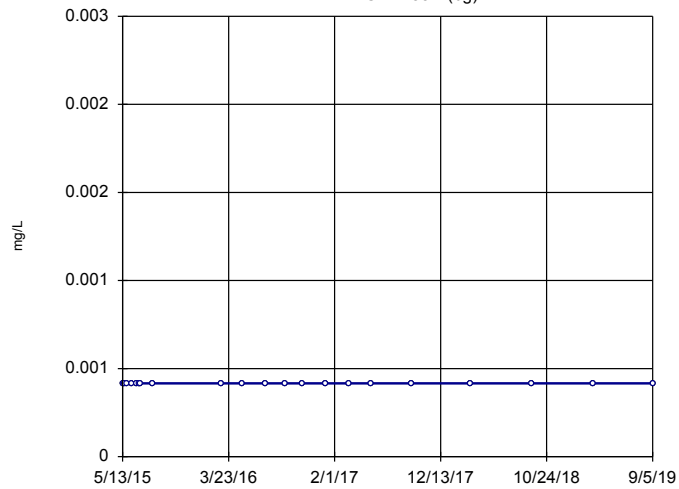


n = 22
Slope = 0
units per year.
Mann-Kendall
statistic = 60
critical = 84
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Thallium Analysis Run 12/9/2019 2:10 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

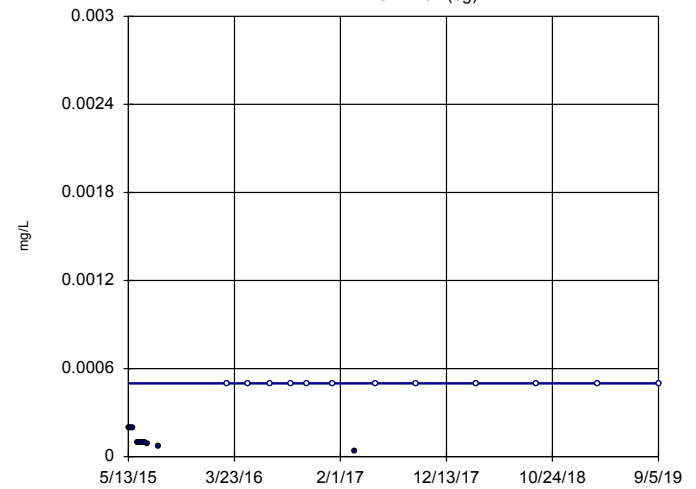
Constituent: Thallium Analysis Run 12/9/2019 2:10 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



n = 21
Slope = 0
units per year.
Mann-Kendall
statistic = 0
critical = 78
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Sen's Slope Estimator
GWA-54 (bg)



n = 22
Slope = 0
units per year.
Mann-Kendall
statistic = 72
critical = 84
Trend not sig-
nificant at 98%
confidence level
($\alpha = 0.01$ per
tail).

Constituent: Thallium Analysis Run 12/9/2019 2:10 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Constituent: Thallium Analysis Run 12/9/2019 2:10 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/13/2015	<0.001
5/20/2015	6E-05 (J)
5/27/2015	<0.001
6/8/2015	<0.001
6/18/2015	<0.001
6/24/2015	<0.001
6/30/2015	<0.001
7/6/2015	<0.001
8/12/2015	<0.001
2/29/2016	<0.001
5/4/2016	<0.001
7/8/2016	0.0002 (J)
9/8/2016	<0.001
10/26/2016	<0.001
1/6/2017	<0.001
3/15/2017	4E-05 (J)
5/17/2017	<0.001
9/15/2017	<0.001
3/13/2018	<0.001
9/6/2018	<0.001
3/7/2019	<0.001
9/4/2019	<0.001

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/13/2015	0.0002 (J)
5/20/2015	0.0002 (J)
5/27/2015	0.0002 (J)
6/8/2015	9E-05 (J)
6/17/2015	7E-05 (J)
6/24/2015	<0.001
6/30/2015	9E-05 (J)
7/6/2015	<0.001
8/12/2015	7E-05 (J)
3/2/2016	<0.001
5/3/2016	<0.001
7/8/2016	6E-05 (J)
9/8/2016	<0.001
10/26/2016	<0.001
1/9/2017	<0.001
3/16/2017	4E-05 (J)
5/19/2017	<0.001
9/19/2017	<0.001
3/13/2018	<0.001
9/11/2018	<0.001
3/8/2019	<0.001
9/5/2019	<0.001

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/13/2015	<0.001
5/20/2015	<0.001
5/27/2015	<0.001
6/8/2015	<0.001 (D)
6/24/2015	<0.001
6/30/2015	<0.001
7/6/2015	<0.001
8/12/2015	<0.001
3/2/2016	<0.001
5/3/2016	<0.001
7/11/2016	<0.001
9/7/2016	<0.001
10/27/2016	<0.001
1/6/2017	<0.001
3/16/2017	<0.001
5/19/2017	<0.001
9/19/2017	<0.001
3/13/2018	<0.001
9/11/2018	<0.001
3/12/2019	<0.001
9/5/2019	<0.001

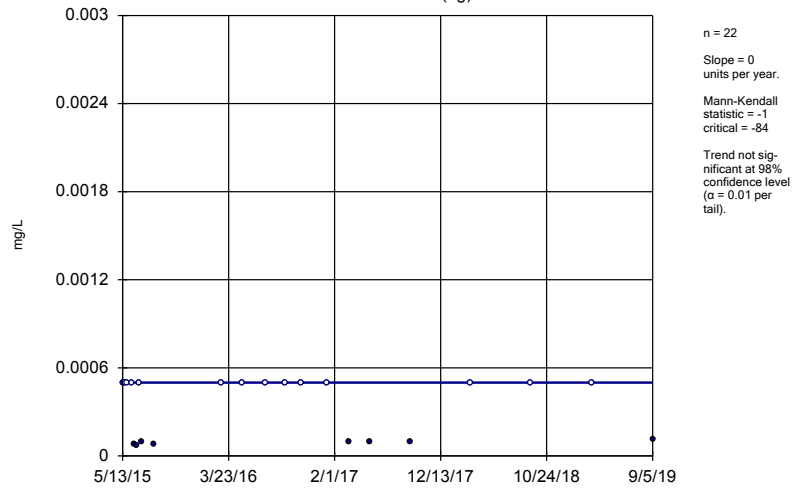
Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

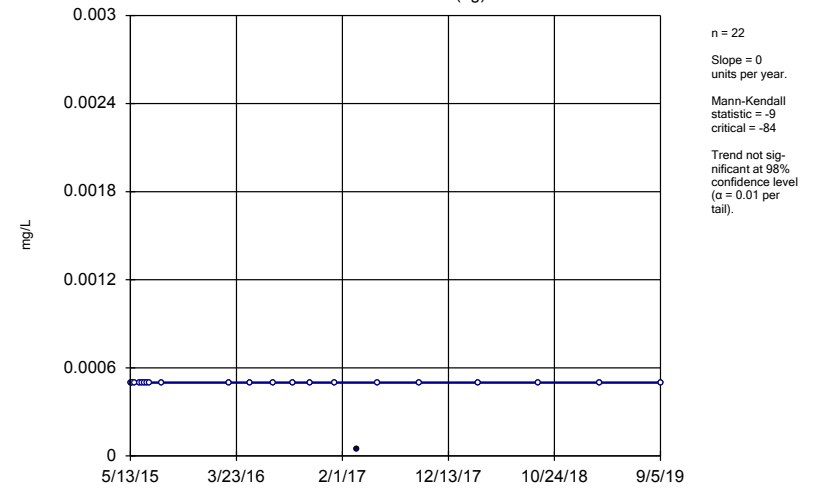
	GWA-54 (bg)
5/13/2015	0.0002 (J)
5/20/2015	0.0002 (J)
5/27/2015	0.0002 (J)
6/9/2015	0.0001 (J)
6/17/2015	0.0001 (J)
6/25/2015	0.0001 (J)
7/1/2015	0.0001 (J)
7/7/2015	9E-05 (J)
8/12/2015	7E-05 (J)
3/2/2016	<0.001
5/4/2016	<0.001
7/8/2016	<0.001
9/8/2016	<0.001
10/26/2016	<0.001
1/9/2017	<0.001
3/15/2017	4E-05 (J)
5/18/2017	<0.001
9/15/2017	<0.001
3/13/2018	<0.001
9/6/2018	<0.001
3/7/2019	<0.001
9/5/2019	<0.001

Sen's Slope Estimator
GWA-55 (bg)



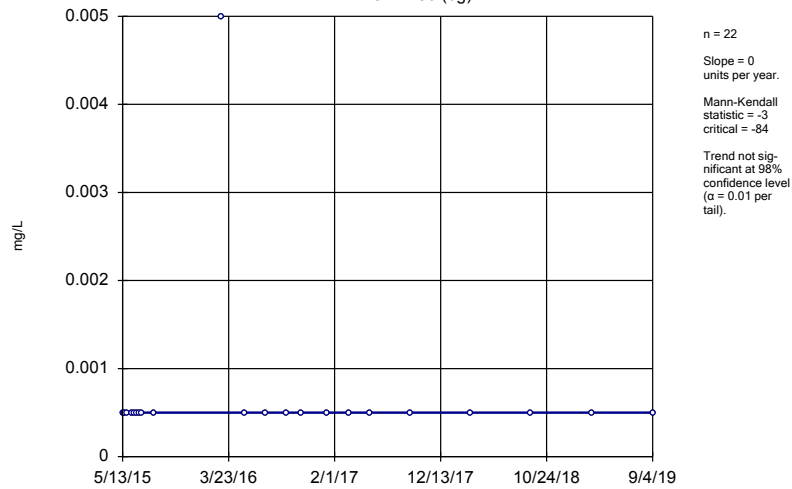
Constituent: Thallium Analysis Run 12/9/2019 2:11 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-55R (bg)



Constituent: Thallium Analysis Run 12/9/2019 2:11 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-56 (bg)



Constituent: Thallium Analysis Run 12/9/2019 2:11 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-51R_51RZ (bg)



Constituent: Thallium Analysis Run 12/9/2019 2:11 PM View: Sens Slope Background Wells App III and 1
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/13/2015	<0.001
5/20/2015	<0.001
5/27/2015	<0.001
6/9/2015	<0.001
6/17/2015	8E-05 (J)
6/25/2015	7E-05 (J)
7/1/2015	<0.001
7/7/2015	0.0001 (J)
8/13/2015	8E-05 (J)
3/2/2016	<0.001
5/3/2016	<0.001
7/11/2016	<0.001 (*)
9/9/2016	<0.001
10/26/2016	<0.001
1/9/2017	<0.001
3/16/2017	0.0001 (J)
5/18/2017	0.0001 (J)
9/15/2017	0.0001 (J)
3/12/2018	<0.001
9/7/2018	<0.001
3/8/2019	<0.001
9/5/2019	0.00011 (X)

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/13/2015	<0.001
5/20/2015	<0.001
5/27/2015	<0.001
6/9/2015	<0.001
6/17/2015	<0.001
6/24/2015	<0.001
7/1/2015	<0.001
7/7/2015	<0.001
8/13/2015	<0.001
3/3/2016	<0.001
5/3/2016	<0.001
7/11/2016	<0.001
9/9/2016	<0.001
10/27/2016	<0.001
1/9/2017	<0.001
3/16/2017	5E-05 (J)
5/18/2017	<0.001
9/18/2017	<0.001
3/12/2018	<0.001
9/7/2018	<0.001
3/7/2019	<0.001
9/5/2019	<0.001

Sen's Slope Estimator

Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/13/2015	<0.001
5/20/2015	<0.001
5/27/2015	<0.001
6/9/2015	<0.001
6/17/2015	<0.001
6/25/2015	<0.001
7/1/2015	<0.001
7/7/2015	<0.001
8/13/2015	<0.001
3/3/2016	<0.01
5/9/2016	<0.001
7/11/2016	<0.001
9/9/2016	<0.001
10/26/2016	<0.001
1/9/2017	<0.001
3/15/2017	<0.001
5/18/2017	<0.001
9/15/2017	<0.001
3/13/2018	<0.001
9/7/2018	<0.001
3/7/2019	<0.001
9/4/2019	<0.001

Sen's Slope Estimator

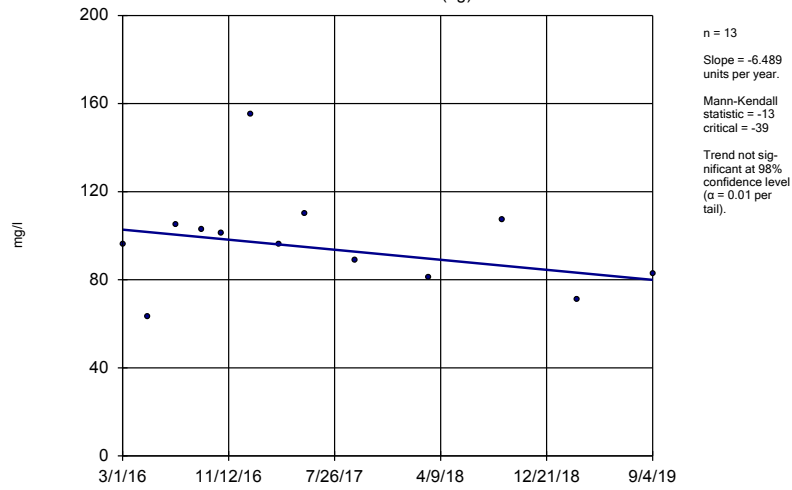
Constituent: Thallium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

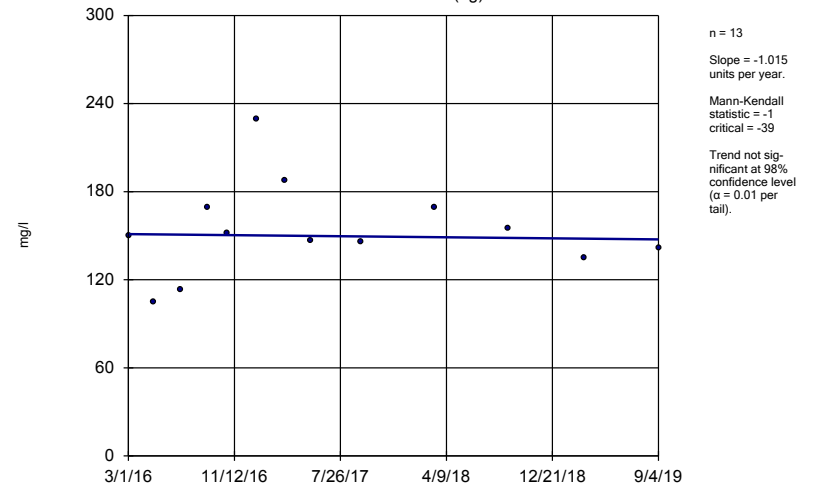
5/13/2015	0.0003 (J)
5/20/2015	9E-05 (J)
5/27/2015	<0.001
6/8/2015	<0.001
6/18/2015	<0.001
6/24/2015	<0.001
6/30/2015	6E-05 (J)
7/6/2015	<0.001
8/12/2015	<0.001
5/4/2016	<0.001 (D)
7/7/2016	<0.001 (D)
9/8/2016	<0.001 (D)
10/26/2016	<0.001 (D)
1/6/2017	<0.001 (D)
3/15/2017	4E-05 (JD)
5/18/2017	6E-05 (JD)
7/19/2017	<0.001 (D)
9/19/2017	6E-05 (JD)
3/13/2018	<0.001
9/7/2018	<0.001
3/8/2019	<0.001
9/4/2019	0.00014 (X)

Sen's Slope Estimator
GWA-36 (bg)



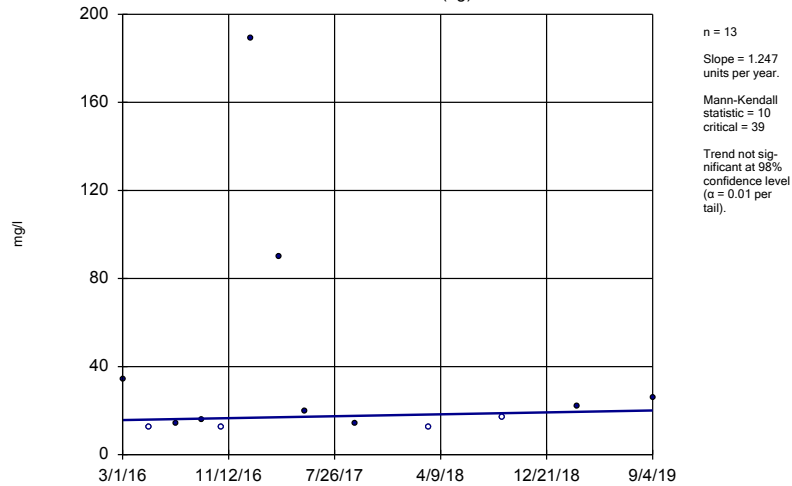
Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:11 PM View: Sens Slope Background Wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-36R (bg)



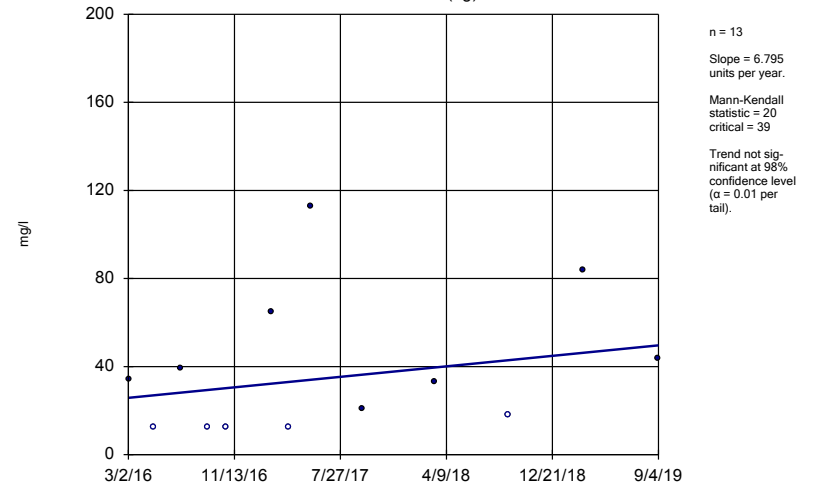
Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:12 PM View: Sens Slope Background Wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-37 (bg)



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:12 PM View: Sens Slope Background Wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-38 (bg)



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:12 PM View: Sens Slope Background Wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
3/1/2016	96 (D)
5/2/2016	63 (D)
7/7/2016	105 (D)
9/7/2016	103 (D)
10/25/2016	101 (D)
1/5/2017	155
3/15/2017	96
5/17/2017	110
9/15/2017	89
3/12/2018	81
9/6/2018	107
3/6/2019	71 (X)
9/4/2019	83

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-36R (bg)

3/1/2016	150 (D)
5/2/2016	105 (D)
7/6/2016	113 (D)
9/7/2016	169 (D)
10/25/2016	152 (D)
1/5/2017	229
3/14/2017	188
5/16/2017	147
9/15/2017	146
3/12/2018	169
9/6/2018	155
3/7/2019	135
9/4/2019	142

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-37 (bg)

3/1/2016	34 (D)
5/3/2016	<25 (D)
7/8/2016	14 (JD)
9/7/2016	16 (JD)
10/25/2016	<25 (D)
1/6/2017	189
3/14/2017	90
5/16/2017	20 (J)
9/15/2017	14 (J)
3/12/2018	<25
9/6/2018	<34
3/6/2019	22 (X)
9/4/2019	26

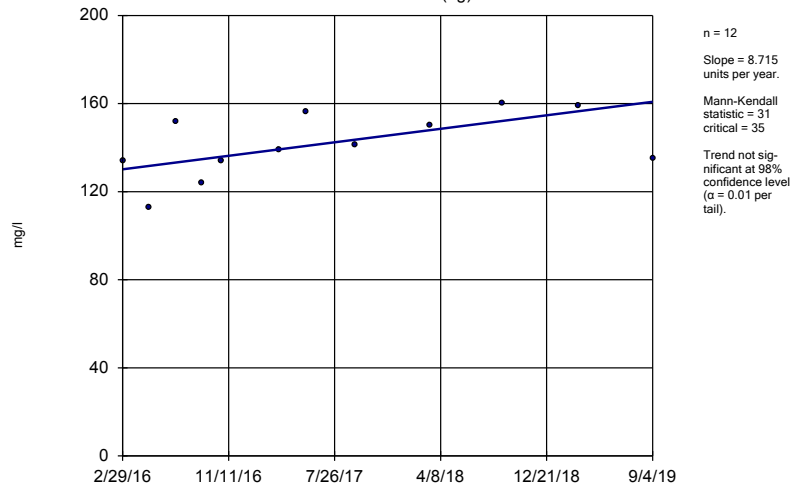
Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

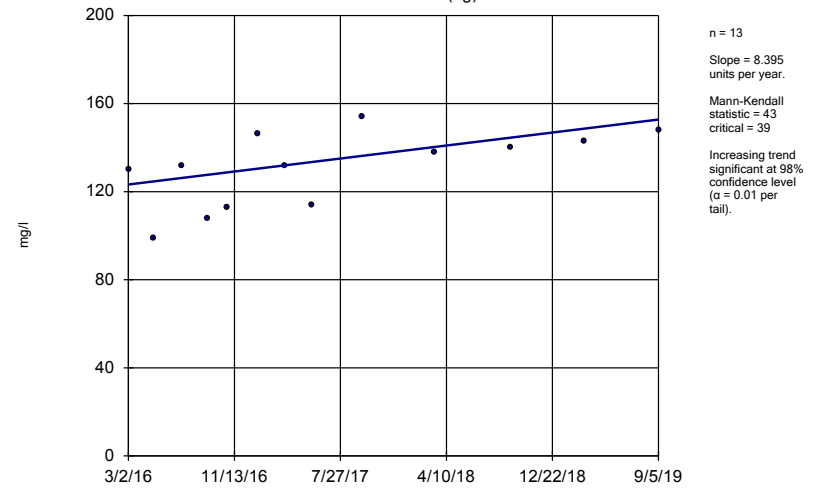
	GWA-38 (bg)
3/2/2016	34 (D)
5/3/2016	<25 (D)
7/7/2016	39 (D)
9/8/2016	<25 (D)
10/25/2016	<25 (D)
2/9/2017	65
3/23/2017	<25
5/17/2017	113
9/19/2017	21 (J)
3/13/2018	33
9/6/2018	<36
3/7/2019	84
9/4/2019	44

Sen's Slope Estimator
GWA-52 (bg)



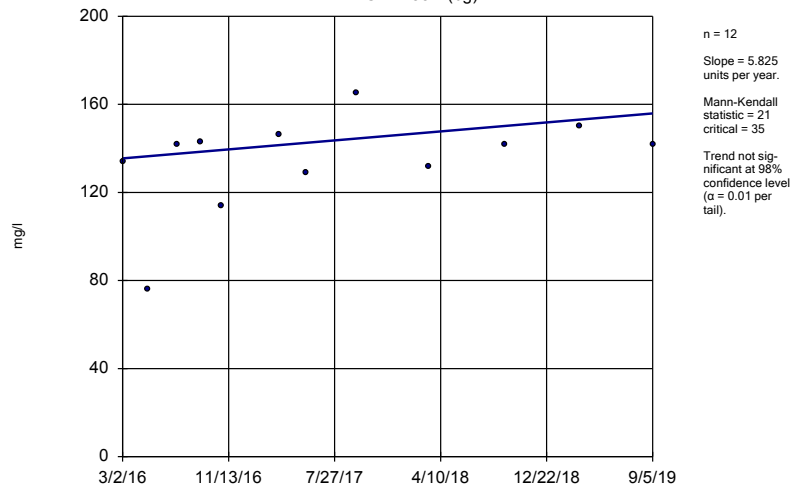
Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:12 PM View: Sens Slope Background Wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53 (bg)



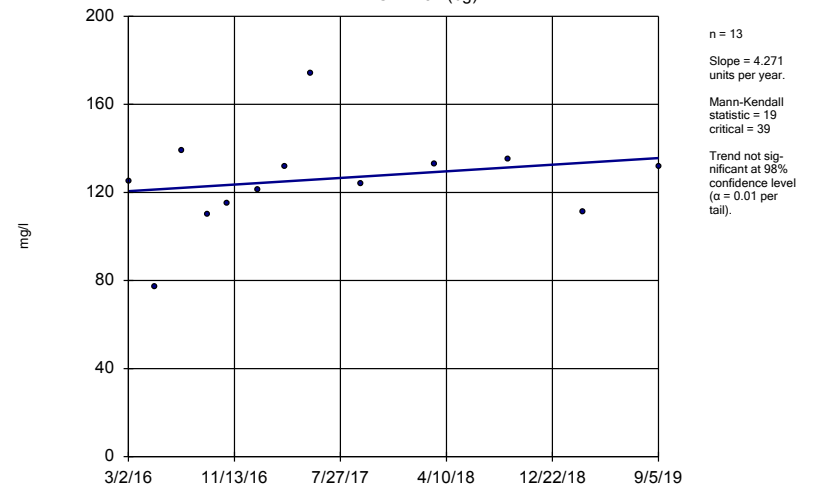
Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:12 PM View: Sens Slope Background Wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-53R (bg)



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:12 PM View: Sens Slope Background Wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-54 (bg)



Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:13 PM View: Sens Slope Background Wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
2/29/2016	134 (D)
5/4/2016	113 (D)
7/8/2016	152 (D)
9/8/2016	124 (D)
10/26/2016	134 (D)
3/15/2017	139
5/17/2017	156
9/15/2017	141
3/13/2018	150
9/6/2018	160
3/7/2019	159
9/4/2019	135

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
3/2/2016	130 (D)
5/3/2016	99 (D)
7/8/2016	132 (D)
9/8/2016	108 (D)
10/26/2016	113 (D)
1/9/2017	146
3/16/2017	132
5/19/2017	114
9/19/2017	154
3/13/2018	138
9/11/2018	140
3/8/2019	143
9/5/2019	148

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-53R (bg)

3/2/2016	134 (D)
5/3/2016	76 (D)
7/11/2016	142 (D)
9/7/2016	143 (D)
10/27/2016	114 (D)
3/16/2017	146
5/19/2017	129
9/19/2017	165
3/13/2018	132
9/11/2018	142
3/12/2019	150 (X)
9/5/2019	142

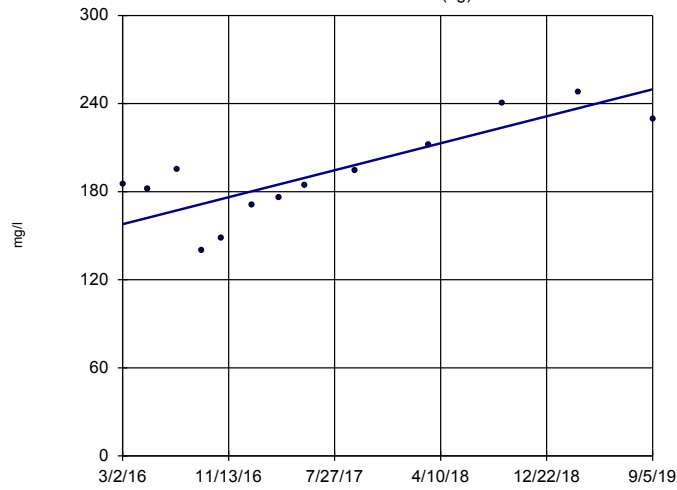
Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-54 (bg)
3/2/2016	125 (D)
5/4/2016	77 (D)
7/8/2016	139 (D)
9/8/2016	110 (D)
10/26/2016	115 (D)
1/9/2017	121
3/15/2017	132
5/18/2017	174
9/15/2017	124
3/13/2018	133
9/6/2018	135
3/7/2019	111
9/5/2019	132

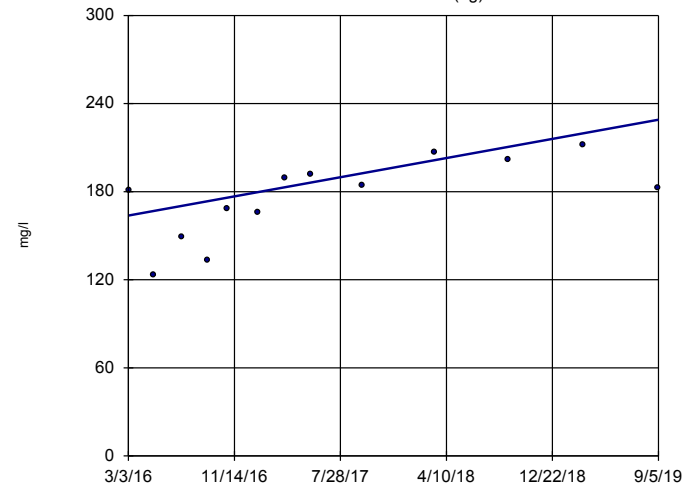
Sen's Slope Estimator
GWA-55 (bg)



n = 13
 Slope = 26.18
 units per year.
 Mann-Kendall
 statistic = 42
 critical = 39
 Increasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:13 PM View: Sens Slope Background Wells
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

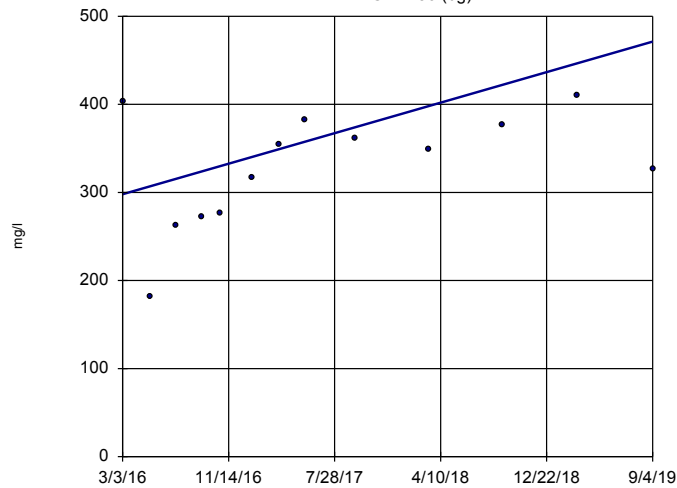
Sen's Slope Estimator
GWA-55R (bg)



n = 13
 Slope = 18.61
 units per year.
 Mann-Kendall
 statistic = 46
 critical = 39
 Increasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:13 PM View: Sens Slope Background Wells
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

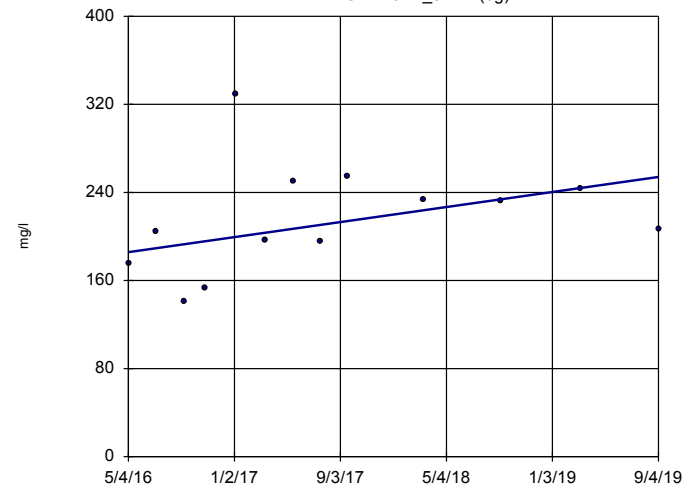
Sen's Slope Estimator
GWA-56 (bg)



n = 13
 Slope = 49.43
 units per year.
 Mann-Kendall
 statistic = 34
 critical = 39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:13 PM View: Sens Slope Background Wells
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator
GWA-51R_51RZ (bg)



n = 13
 Slope = 20.49
 units per year.
 Mann-Kendall
 statistic = 22
 critical = 39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Total Dissolved Solids Analysis Run 12/9/2019 2:13 PM View: Sens Slope Background Wells
 Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
3/2/2016	185 (D)
5/3/2016	182 (D)
7/11/2016	195 (D)
9/9/2016	140 (D)
10/26/2016	148 (D)
1/9/2017	171
3/16/2017	176
5/18/2017	184
9/15/2017	194
3/12/2018	212
9/7/2018	240
3/8/2019	248
9/5/2019	229

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-55R (bg)

3/3/2016	181 (D)
5/3/2016	123 (D)
7/11/2016	149 (D)
9/9/2016	133 (D)
10/27/2016	168 (D)
1/9/2017	166
3/16/2017	189
5/18/2017	192
9/18/2017	184
3/12/2018	207
9/7/2018	202
3/7/2019	212
9/5/2019	183

Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
3/3/2016	403 (D)
5/9/2016	182 (D)
7/11/2016	262 (D)
9/9/2016	272 (D)
10/26/2016	276 (D)
1/9/2017	317
3/15/2017	355
5/18/2017	382
9/15/2017	362
3/13/2018	349
9/7/2018	377
3/7/2019	410
9/4/2019	326

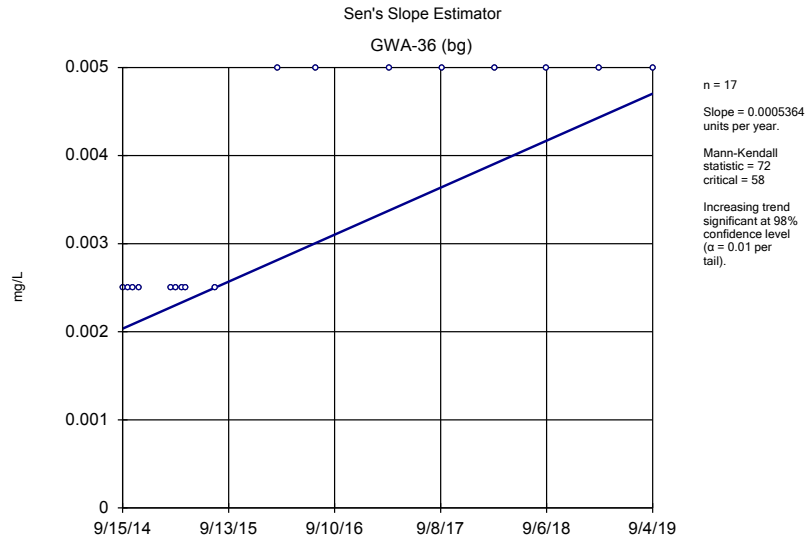
Sen's Slope Estimator

Constituent: Total Dissolved Solids (mg/l) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals

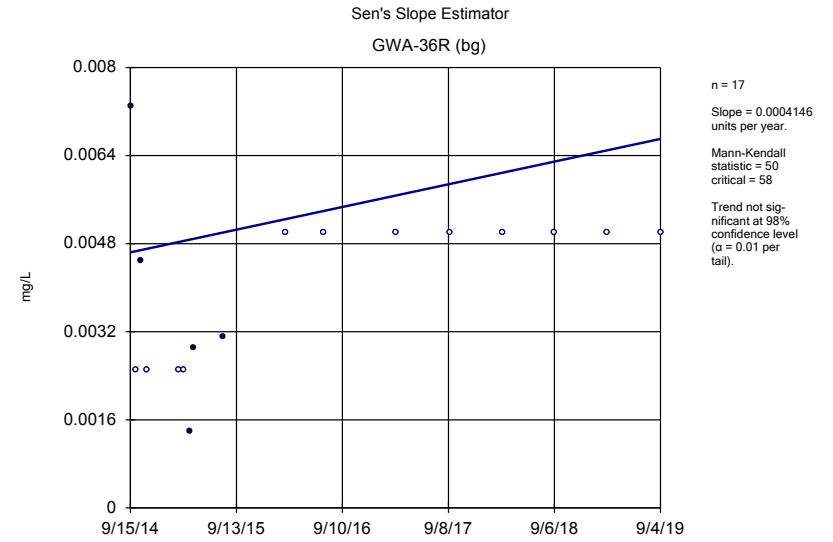
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

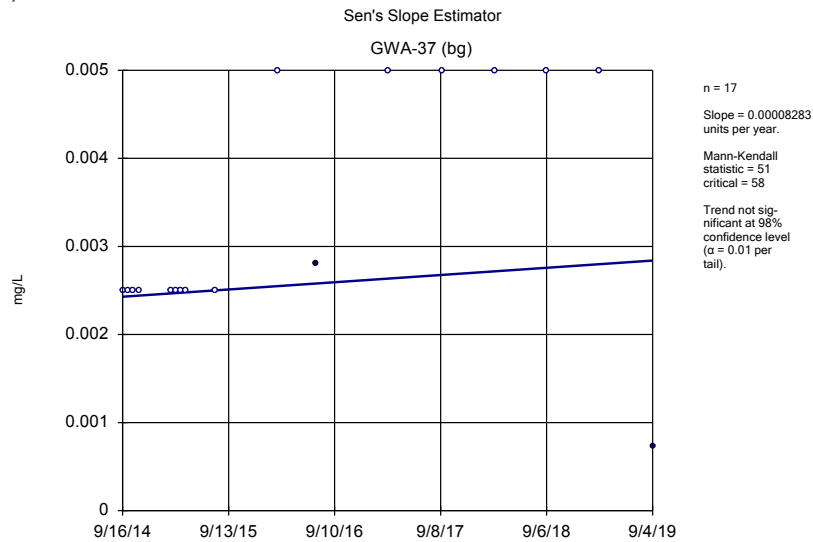
5/4/2016	175 (D)
7/7/2016	204 (D)
9/8/2016	141 (D)
10/26/2016	153 (D)
1/6/2017	329 (D)
3/15/2017	197 (D)
5/18/2017	250 (D)
7/19/2017	195 (D)
9/19/2017	255 (D)
3/13/2018	233
9/7/2018	232
3/8/2019	244
9/4/2019	207



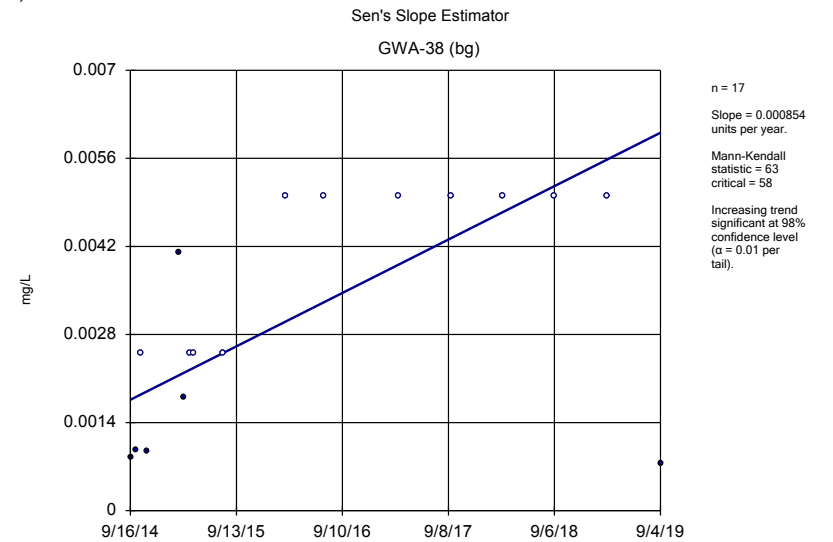
Constituent: Vanadium Analysis Run 12/9/2019 2:14 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:14 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:14 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:14 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/21/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.01
7/7/2016	<0.01
3/15/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.0073
10/3/2014	<0.005
10/20/2014	0.0045 (J)
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	0.0014 (J)
4/21/2015	0.0029 (J)
7/28/2015	0.0031 (J)
3/1/2016	<0.01
7/6/2016	<0.01
3/14/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

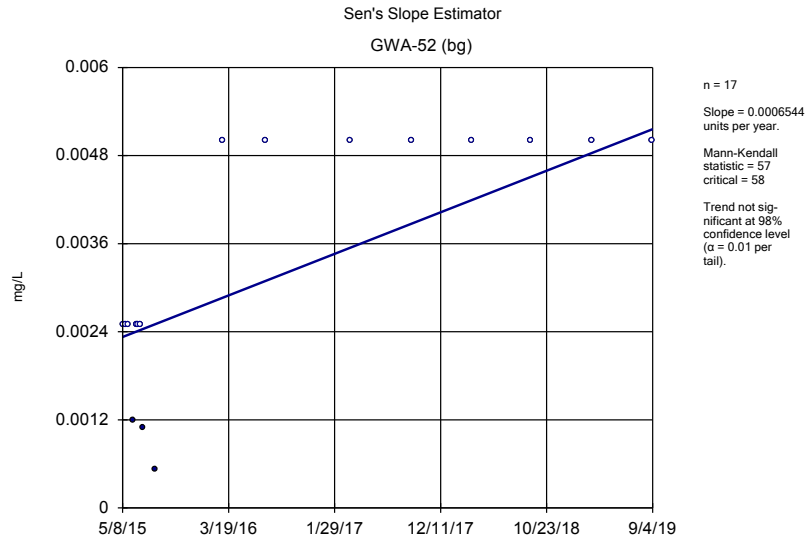
Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	<0.005
10/3/2014	<0.005
10/20/2014	<0.005
11/10/2014	<0.005
3/2/2015	<0.005
3/17/2015	<0.005
4/5/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/1/2016	<0.01
7/8/2016	0.0028 (J)
3/14/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/6/2018	<0.01
3/6/2019	<0.01
9/4/2019	0.00073 (X)

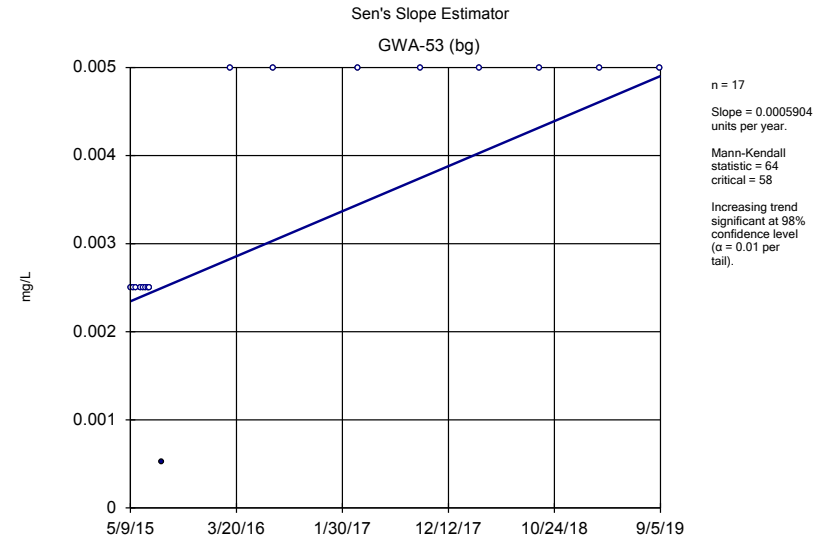
Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

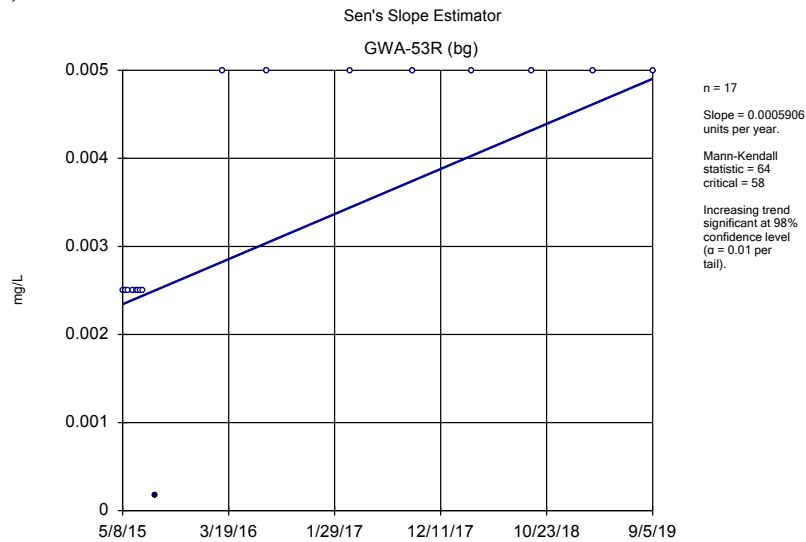
	GWA-38 (bg)
9/16/2014	0.00085 (J)
10/3/2014	0.00096 (J)
10/20/2014	<0.005
11/10/2014	0.00095 (J)
3/2/2015	0.0041 (J)
3/17/2015	0.0018 (J)
4/6/2015	<0.005
4/22/2015	<0.005
7/28/2015	<0.005
3/2/2016	<0.01
7/7/2016	<0.01
3/23/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.00076 (X)



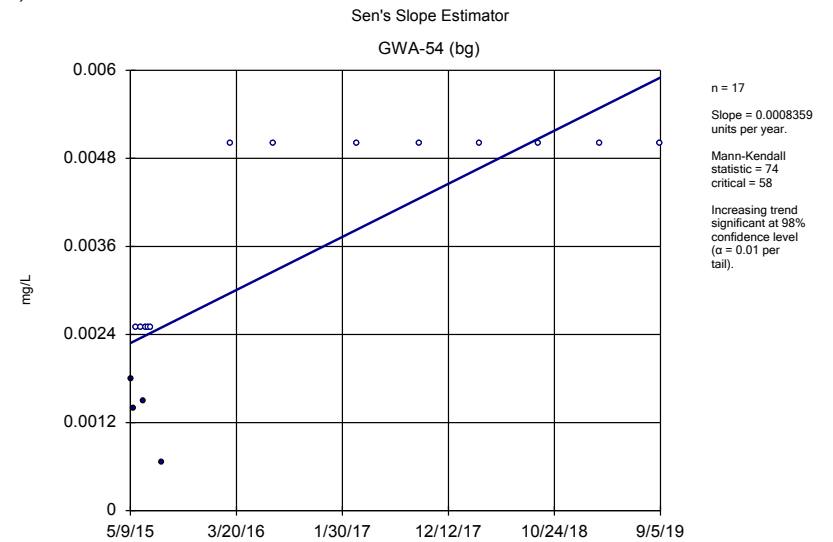
Constituent: Vanadium Analysis Run 12/9/2019 2:14 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:15 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:15 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:15 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	0.0012 (J)
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	0.0011 (J)
8/12/2015	0.000519 (J)
2/29/2016	<0.01
7/8/2016	<0.01
3/15/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	<0.005
5/18/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/17/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	0.000525 (J)
3/2/2016	<0.01
7/8/2016	<0.01
3/16/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/8/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

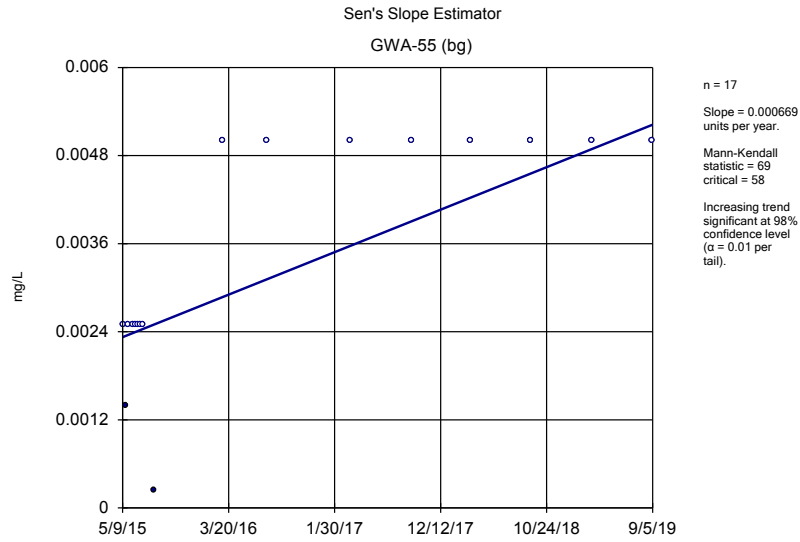
Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	<0.005
5/17/2015	<0.005
5/25/2015	<0.005
6/8/2015	<0.005
6/18/2015	<0.005
6/24/2015	<0.005
6/30/2015	<0.005
7/6/2015	<0.005
8/12/2015	0.000172 (J)
3/2/2016	<0.01
7/11/2016	<0.01
3/16/2017	<0.01
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/12/2019	<0.01
9/5/2019	<0.01

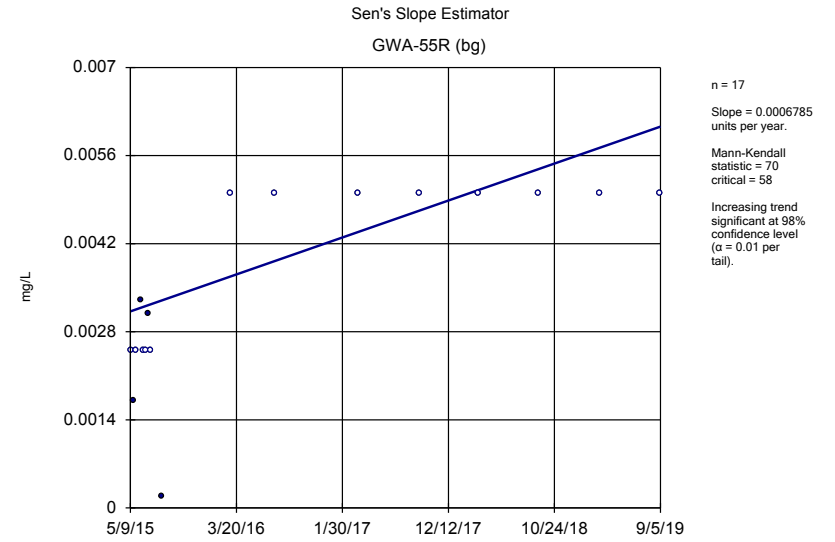
Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:16 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

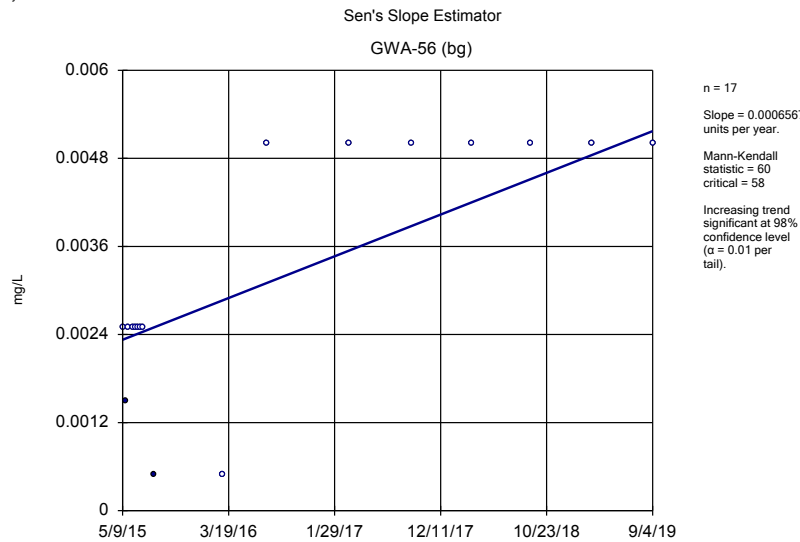
	GWA-54 (bg)
5/9/2015	0.0018 (J)
5/18/2015	0.0014 (J)
5/25/2015	<0.005
6/9/2015	<0.005
6/17/2015	0.0015 (J)
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/12/2015	0.000656 (J)
3/2/2016	<0.01
7/8/2016	<0.01
3/15/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/5/2019	<0.01



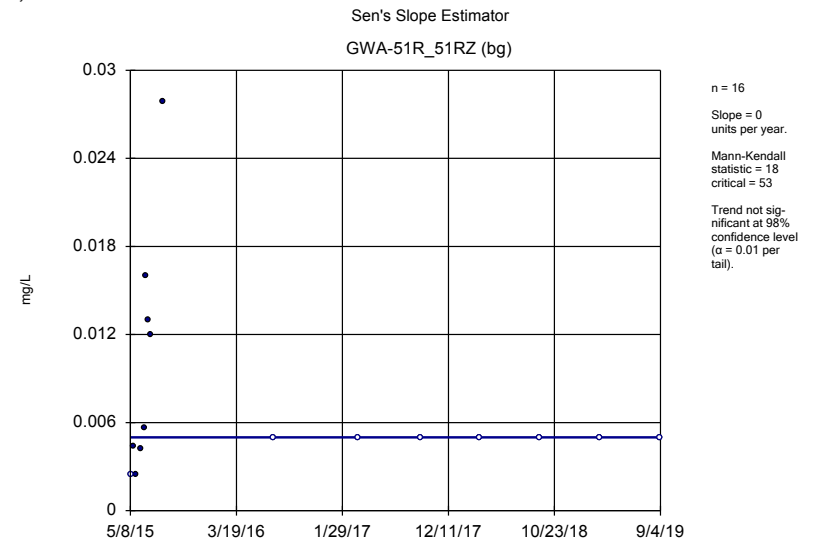
Constituent: Vanadium Analysis Run 12/9/2019 2:15 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:15 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:16 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Vanadium Analysis Run 12/9/2019 2:16 PM View: Sens Slope Background Wells App III and Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.005
5/18/2015	0.0014 (J)
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/12/2015	0.000246 (J)
3/2/2016	<0.01
7/11/2016	<0.01
3/16/2017	<0.01
9/15/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.005
5/18/2015	0.0017 (J)
5/26/2015	<0.005
6/9/2015	0.0033 (J)
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	0.0031 (J)
7/7/2015	<0.005
8/12/2015	0.000187 (J)
3/3/2016	<0.01
7/11/2016	<0.01
3/16/2017	<0.01
9/18/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/5/2019	<0.01

Sen's Slope Estimator

Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

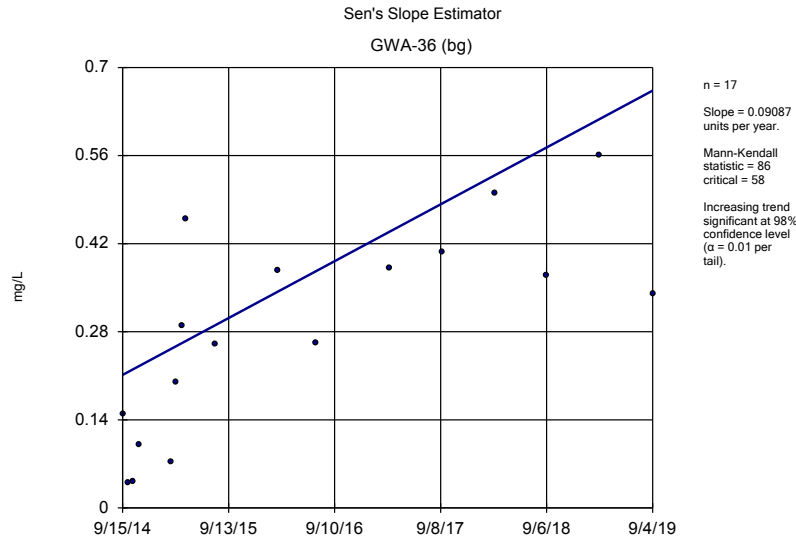
	GWA-56 (bg)
5/9/2015	<0.005
5/19/2015	0.0015 (J)
5/26/2015	<0.005
6/9/2015	<0.005
6/17/2015	<0.005
6/25/2015	<0.005
7/1/2015	<0.005
7/7/2015	<0.005
8/12/2015	0.000497 (J)
3/3/2016	<0.001
7/11/2016	<0.01
3/15/2017	<0.01
9/15/2017	<0.01
3/13/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/4/2019	<0.01

Sen's Slope Estimator

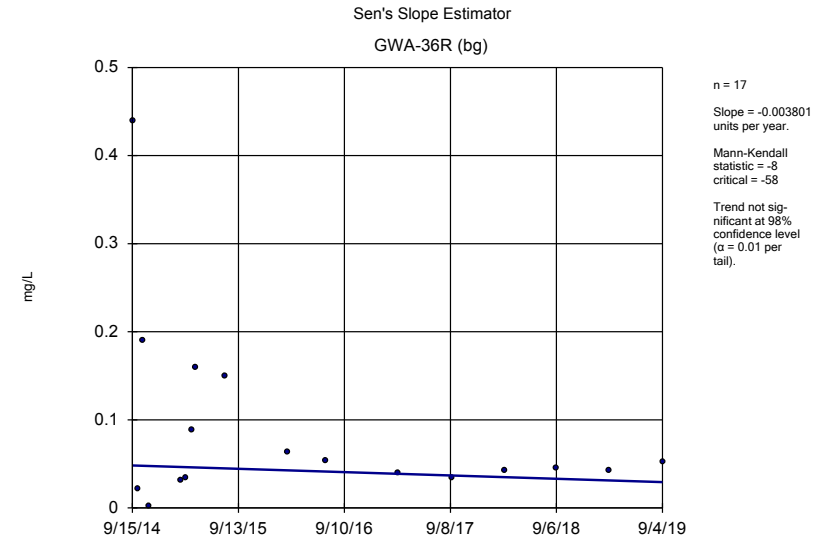
Constituent: Vanadium (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

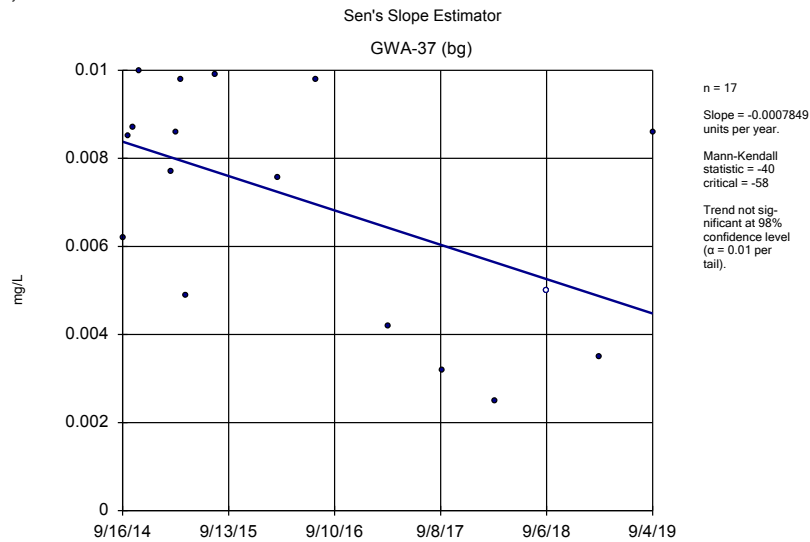
5/8/2015	<0.005
5/17/2015	0.0044 (J)
5/25/2015	0.0025 (J)
6/8/2015	0.0042 (J)
6/18/2015	0.0056
6/24/2015	0.016
6/30/2015	0.013
7/6/2015	0.012
8/12/2015	0.0279 (J)
7/7/2016	<0.01 (D)
3/15/2017	<0.01 (D)
9/19/2017	<0.01 (D)
3/13/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/4/2019	<0.01



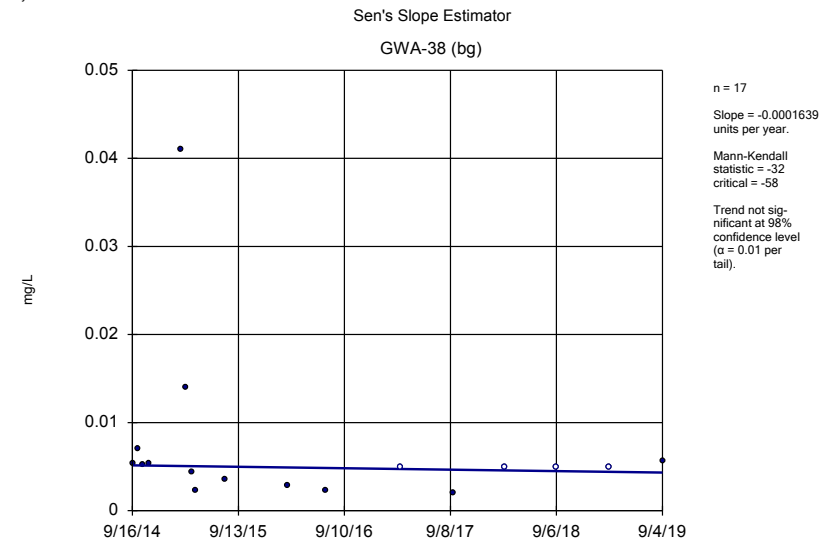
Constituent: Zinc Analysis Run 12/9/2019 2:16 PM View: Sens Slope Background Wells App III and 16 me Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:16 PM View: Sens Slope Background Wells App III and 16 me Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:16 PM View: Sens Slope Background Wells App III and 16 me Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:17 PM View: Sens Slope Background Wells App III and 16 me Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36 (bg)
9/15/2014	0.15
10/3/2014	0.04
10/20/2014	0.042
11/10/2014	0.1
3/2/2015	0.073
3/17/2015	0.2
4/5/2015	0.29
4/21/2015	0.46
7/28/2015	0.26
3/1/2016	0.378
7/7/2016	0.263
3/15/2017	0.382
9/15/2017	0.406
3/12/2018	0.5
9/6/2018	0.37
3/6/2019	0.56
9/4/2019	0.34

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-36R (bg)
9/15/2014	0.44
10/3/2014	0.021
10/20/2014	0.19
11/10/2014	0.0014 (J)
3/2/2015	0.032
3/17/2015	0.034
4/5/2015	0.089
4/21/2015	0.16
7/28/2015	0.15
3/1/2016	0.0627
7/6/2016	0.0532
3/14/2017	0.0401
9/15/2017	0.0338
3/12/2018	0.042
9/6/2018	0.045
3/7/2019	0.043
9/4/2019	0.052

Sen's Slope Estimator

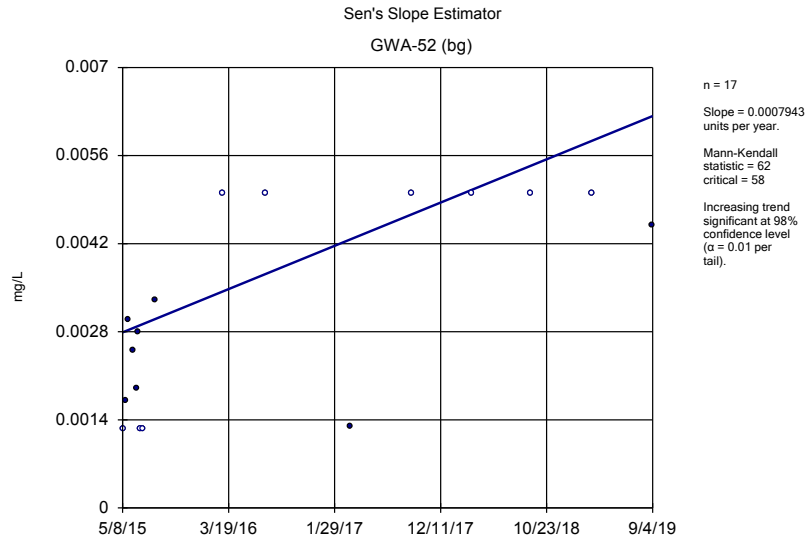
Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-37 (bg)
9/16/2014	0.0062
10/3/2014	0.0085
10/20/2014	0.0087
11/10/2014	0.01
3/2/2015	0.0077
3/17/2015	0.0086
4/5/2015	0.0098
4/22/2015	0.0049
7/28/2015	0.0099
3/1/2016	0.00756 (J)
7/8/2016	0.0098 (J)
3/14/2017	0.0042 (J)
9/15/2017	0.0032 (J)
3/12/2018	0.0025 (J)
9/6/2018	<0.01
3/6/2019	0.0035 (X)
9/4/2019	0.0086 (X)

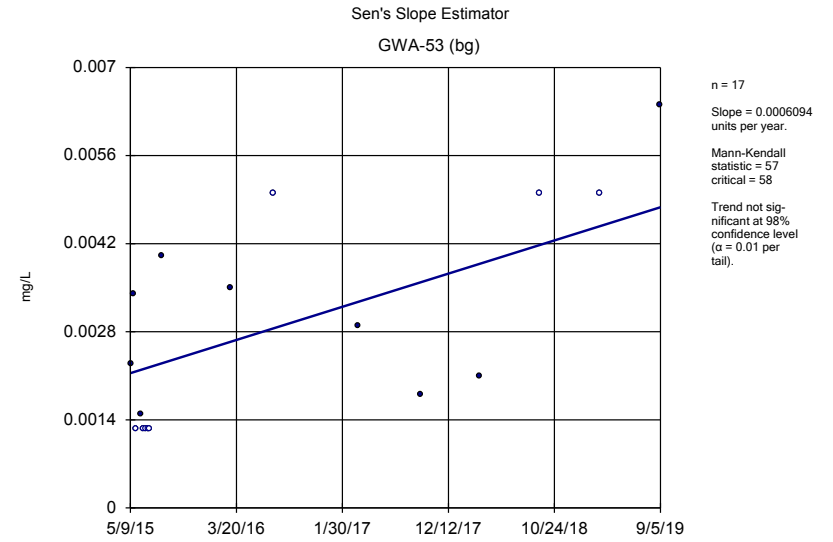
Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

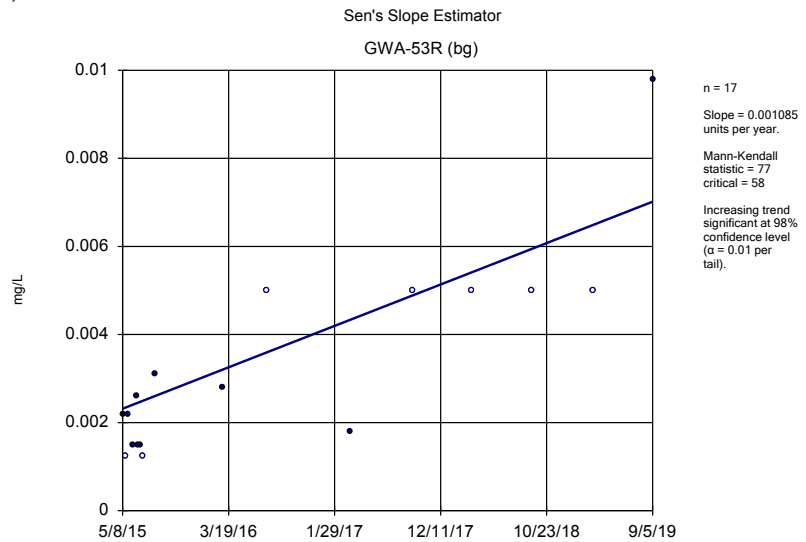
	GWA-38 (bg)
9/16/2014	0.0054
10/3/2014	0.007
10/20/2014	0.0052
11/10/2014	0.0054
3/2/2015	0.041
3/17/2015	0.014
4/6/2015	0.0044
4/22/2015	0.0023 (J)
7/28/2015	0.0035
3/2/2016	0.0029 (J)
7/7/2016	0.0023 (J)
3/23/2017	<0.01 (*)
9/19/2017	0.002 (J)
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.0056 (X)



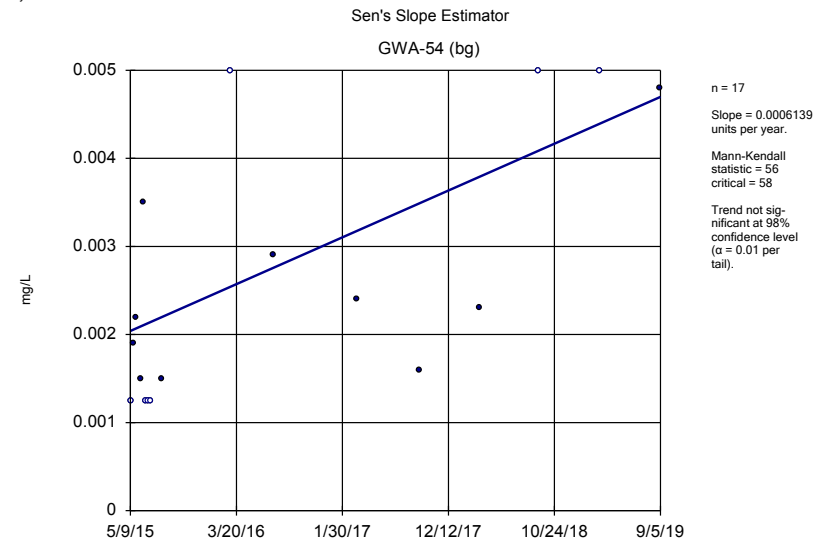
Constituent: Zinc Analysis Run 12/9/2019 2:17 PM View: Sens Slope Background Wells App III and 16 me
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:17 PM View: Sens Slope Background Wells App III and 16 me
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:17 PM View: Sens Slope Background Wells App III and 16 me
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:18 PM View: Sens Slope Background Wells App III and 16 me
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-52 (bg)
5/8/2015	<0.0025
5/17/2015	0.0017 (J)
5/25/2015	0.003
6/8/2015	0.0025
6/18/2015	0.0019 (J)
6/24/2015	0.0028
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	0.0033 (BJ)
2/29/2016	<0.01
7/8/2016	<0.01
3/15/2017	0.0013 (J)
9/15/2017	<0.01
3/13/2018	<0.01
9/6/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.0045 (X)

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53 (bg)
5/9/2015	0.0023 (J)
5/18/2015	0.0034
5/25/2015	<0.0025
6/8/2015	0.0015 (J)
6/17/2015	<0.0025
6/24/2015	<0.0025
6/30/2015	<0.0025
7/6/2015	<0.0025
8/12/2015	0.004 (BJ)
3/2/2016	0.0035 (J)
7/8/2016	<0.01
3/16/2017	0.0029 (J)
9/19/2017	0.0018 (J)
3/13/2018	0.0021 (J)
9/11/2018	<0.01
3/8/2019	<0.01
9/5/2019	0.0064 (X)

Sen's Slope Estimator

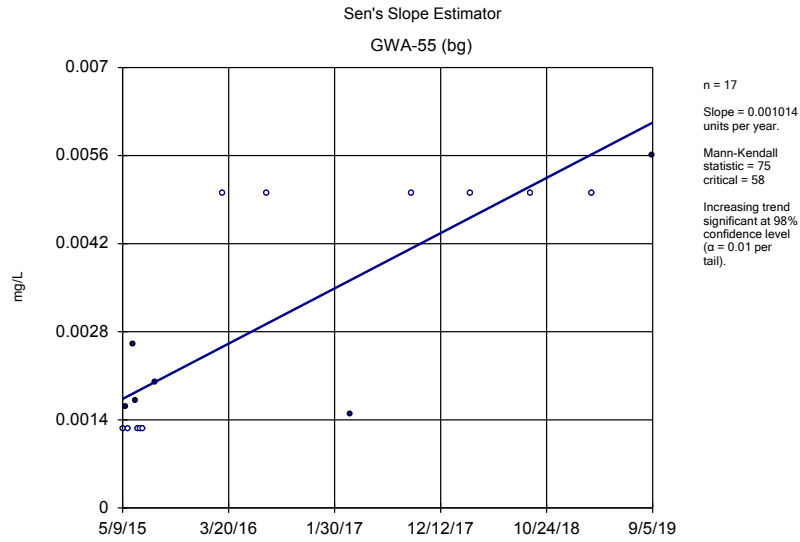
Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-53R (bg)
5/8/2015	0.0022 (J)
5/17/2015	<0.0025
5/25/2015	0.0022 (J)
6/8/2015	0.0015 (J)
6/18/2015	0.0026
6/24/2015	0.0015 (J)
6/30/2015	0.0015 (J)
7/6/2015	<0.0025
8/12/2015	0.0031 (BJ)
3/2/2016	0.0028 (J)
7/11/2016	<0.01
3/16/2017	0.0018 (J)
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/12/2019	<0.01
9/5/2019	0.0098 (X)

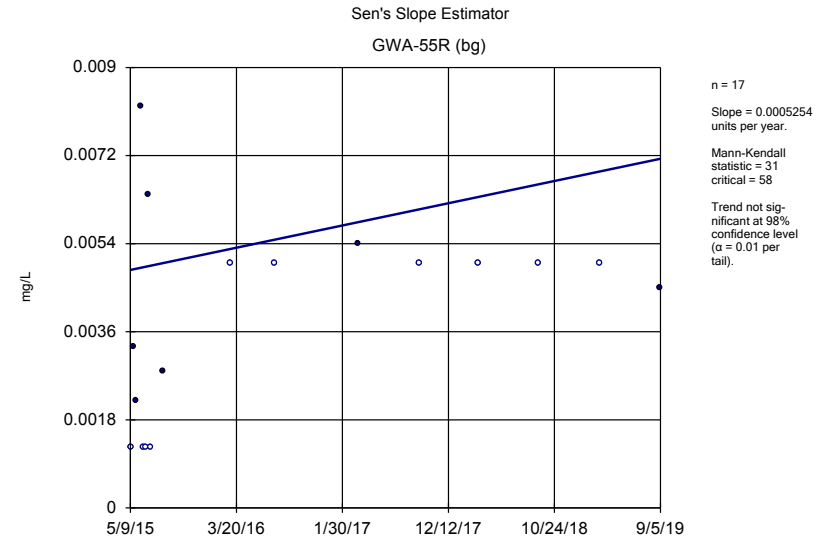
Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

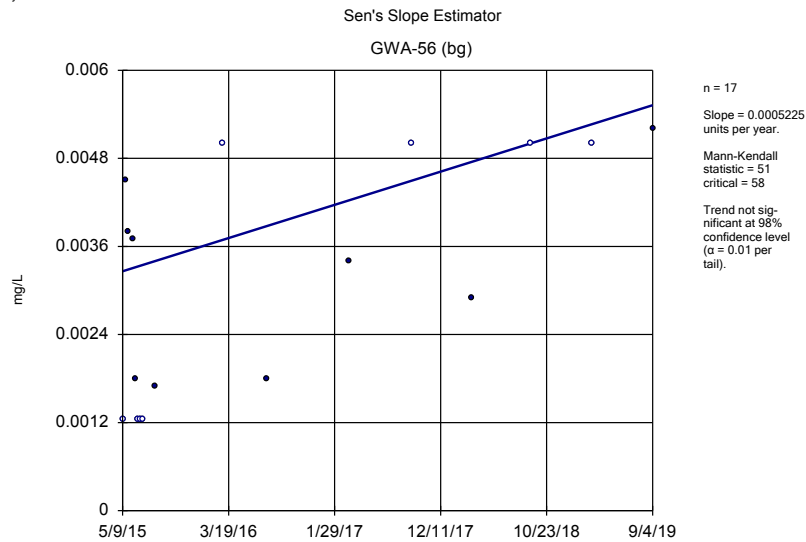
	GWA-54 (bg)
5/9/2015	<0.0025
5/18/2015	0.0019 (J)
5/25/2015	0.0022 (J)
6/9/2015	0.0015 (J)
6/17/2015	0.0035
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/12/2015	0.0015 (BJ)
3/2/2016	<0.01
7/8/2016	0.0029 (J)
3/15/2017	0.0024 (J)
9/15/2017	0.0016 (J)
3/13/2018	0.0023 (J)
9/6/2018	<0.01
3/7/2019	<0.01
9/5/2019	0.0048 (X)



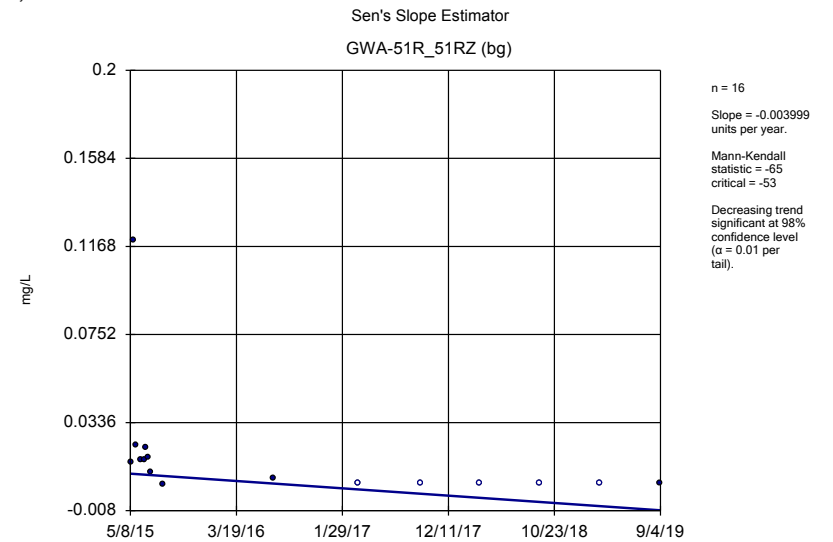
Constituent: Zinc Analysis Run 12/9/2019 2:18 PM View: Sens Slope Background Wells App III and 16 me
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:18 PM View: Sens Slope Background Wells App III and 16 me
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:18 PM View: Sens Slope Background Wells App III and 16 me
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 2:18 PM View: Sens Slope Background Wells App III and 16 me
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55 (bg)
5/9/2015	<0.0025
5/18/2015	0.0016 (J)
5/26/2015	<0.0025
6/9/2015	0.0026
6/17/2015	0.0017 (J)
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	0.002 (BJ)
3/2/2016	<0.01
7/11/2016	<0.01
3/16/2017	0.0015 (J)
9/15/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/5/2019	0.0056 (X)

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-55R (bg)
5/9/2015	<0.0025
5/18/2015	0.0033
5/26/2015	0.0022 (J)
6/9/2015	0.0082
6/17/2015	<0.0025
6/25/2015	<0.0025
7/1/2015	0.0064
7/7/2015	<0.0025
8/13/2015	0.0028 (BJ)
3/3/2016	<0.01
7/11/2016	<0.01
3/16/2017	0.0054 (J)
9/18/2017	<0.01
3/12/2018	<0.01
9/7/2018	<0.01
3/7/2019	<0.01
9/5/2019	0.0045 (X)

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWA-56 (bg)
5/9/2015	<0.0025
5/19/2015	0.0045
5/26/2015	0.0038
6/9/2015	0.0037
6/17/2015	0.0018 (J)
6/25/2015	<0.0025
7/1/2015	<0.0025
7/7/2015	<0.0025
8/13/2015	0.0017 (BJ)
3/3/2016	<0.01
7/11/2016	0.0018 (J)
3/15/2017	0.0034 (J)
9/15/2017	<0.01
3/13/2018	0.0029 (J)
9/7/2018	<0.01
3/7/2019	<0.01
9/4/2019	0.0052 (X)

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:17 PM View: Sens Slope Background Wells App III and 16 metals
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWA-51R_51RZ ...

5/8/2015	0.015
5/17/2015	0.12
5/25/2015	0.023
6/8/2015	0.016
6/18/2015	0.016
6/24/2015	0.022
6/30/2015	0.017
7/6/2015	0.01
8/12/2015	0.0047 (BJ)
7/7/2016	0.0073 (JD)
3/15/2017	<0.01 (D)
9/19/2017	<0.01 (D)
3/13/2018	<0.01
9/7/2018	<0.01
3/8/2019	<0.01
9/4/2019	0.0051 (X)

Cell 3&4 Downgradient Sen Slopes - Significant

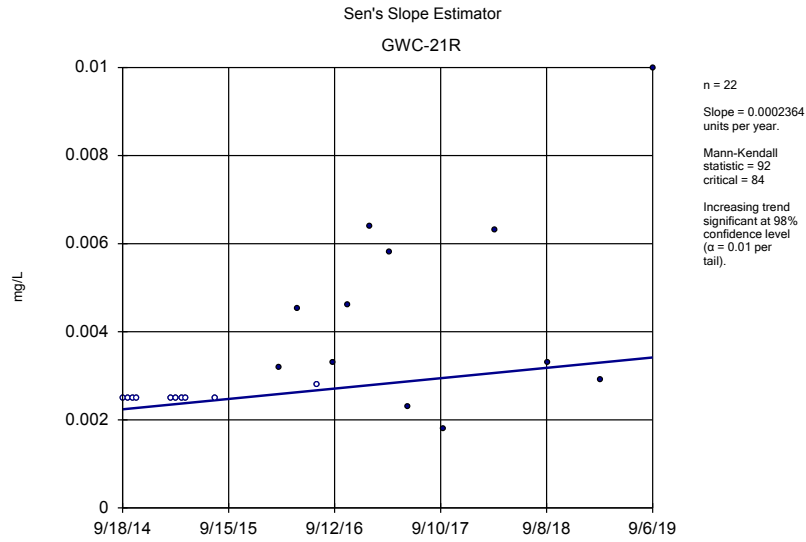
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:33 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-21R	0.000...	92	84	Yes	22	45.45	n/a	n/a	0.02	NP
pH (pH units)	GWC-22R	-0.1251	-48	-44	Yes	14	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWC-25R	0.000...	79	58	Yes	17	58.82	n/a	n/a	0.02	NP

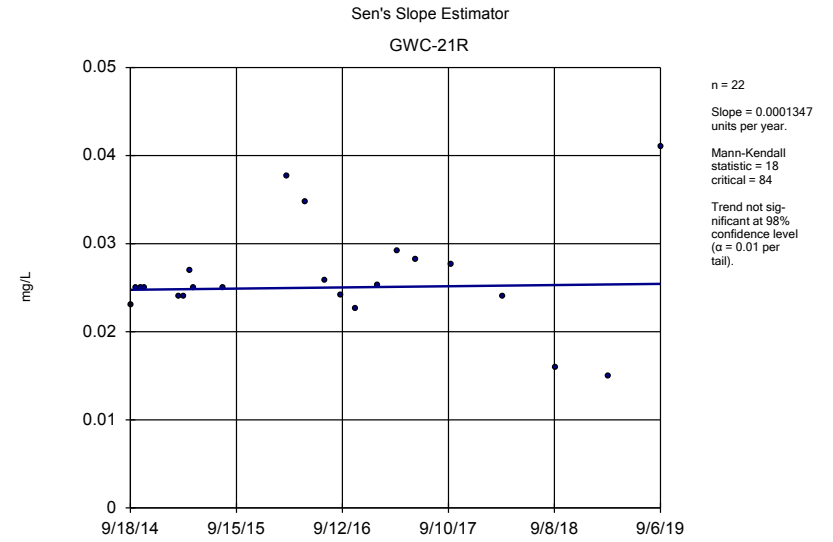
Cell 3&4 Downgradient Sen Slopes

Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR Printed 12/9/2019, 3:33 PM

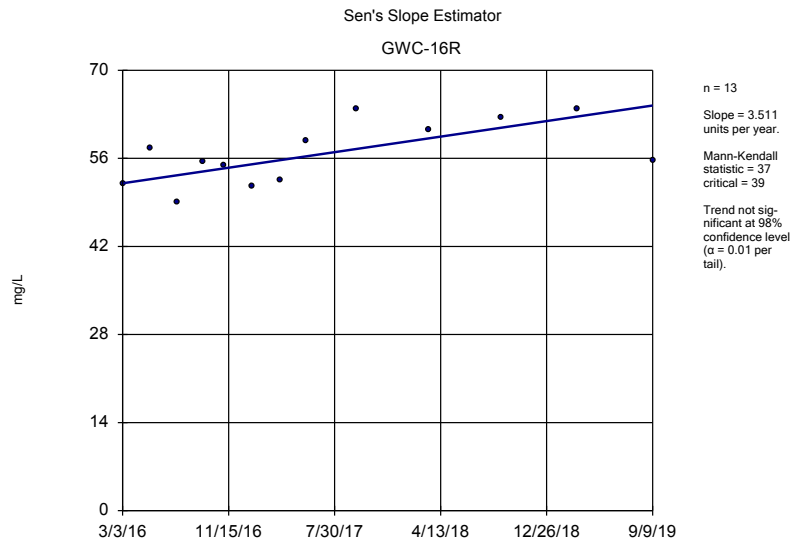
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-21R	0.000...	92	84	Yes	22	45.45	n/a	n/a	0.02	NP
Barium (mg/L)	GWC-21R	0.000...	18	84	No	22	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-16R	3.511	37	39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-17R	0.748	8	39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-21R	2.634	28	39	No	13	0	n/a	n/a	0.02	NP
Calcium (mg/L)	GWC-23R	2.052	24	39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-22R	-0.1251	-48	-44	Yes	14	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWC-21R	0.000...	30	58	No	17	17.65	n/a	n/a	0.02	NP
Zinc (mg/L)	GWC-25R	0.000...	79	58	Yes	17	58.82	n/a	n/a	0.02	NP



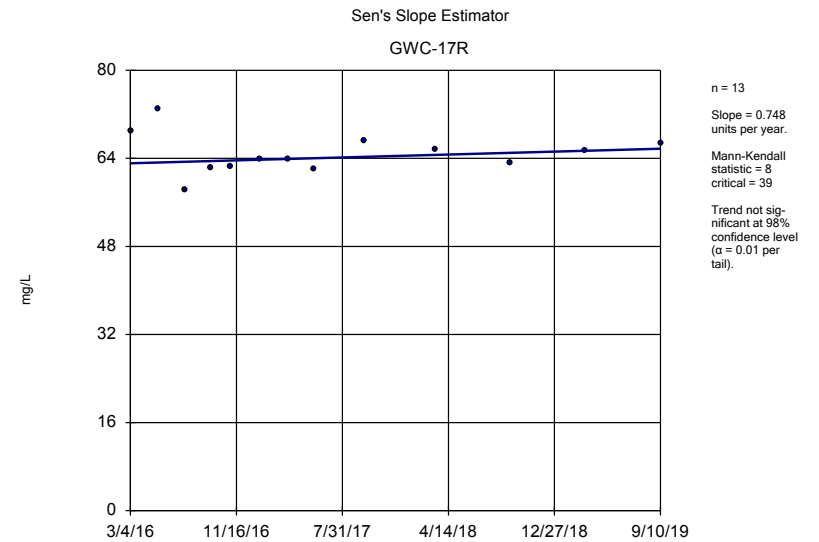
Constituent: Antimony Analysis Run 12/9/2019 3:31 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Barium Analysis Run 12/9/2019 3:31 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 3:31 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 3:31 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Antimony (mg/L) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R
9/18/2014	<0.005
10/5/2014	<0.005
10/22/2014	<0.005
11/5/2014	<0.005
3/4/2015	<0.005
3/19/2015	<0.005
4/8/2015	<0.005
4/24/2015	<0.005
7/30/2015	<0.005
3/8/2016	0.00318
5/9/2016	0.00454
7/15/2016	<0.0056 (*)
9/9/2016	0.0033
10/27/2016	0.0046
1/12/2017	0.0064
3/21/2017	0.0058
5/23/2017	0.0023 (J)
9/19/2017	0.0018 (J)
3/14/2018	0.0063
9/10/2018	0.0033
3/11/2019	0.0029 (X)
9/6/2019	0.01

Sen's Slope Estimator

Constituent: Barium (mg/L) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R
9/18/2014	0.023
10/5/2014	0.025
10/22/2014	0.025
11/5/2014	0.025
3/4/2015	0.024
3/19/2015	0.024
4/8/2015	0.027
4/24/2015	0.025
7/30/2015	0.025
3/8/2016	0.0377
5/9/2016	0.0347
7/15/2016	0.0259
9/9/2016	0.0242
10/27/2016	0.0227
1/12/2017	0.0253
3/21/2017	0.0292
5/23/2017	0.0282
9/19/2017	0.0276
3/14/2018	0.024
9/10/2018	0.016
3/11/2019	0.015
9/6/2019	0.041

Sen's Slope Estimator

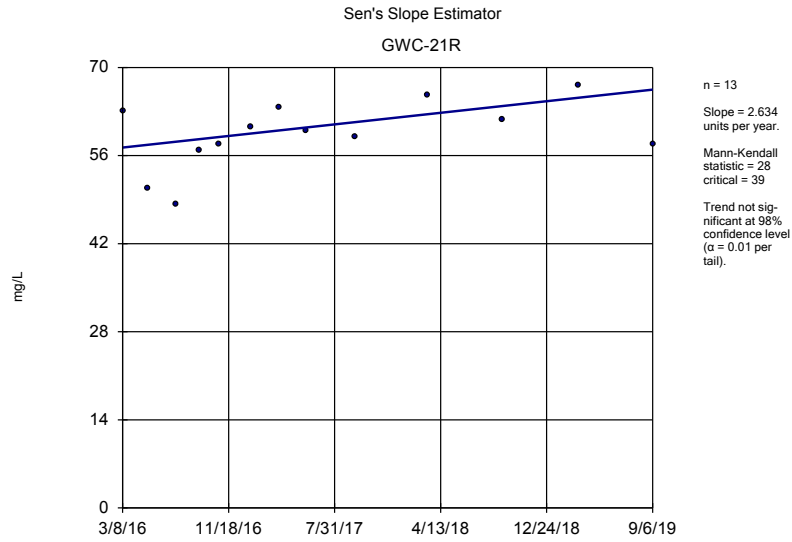
Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-16R
3/3/2016	52 (D)
5/10/2016	57.6
7/13/2016	49
9/15/2016	55.4
11/2/2016	54.8
1/11/2017	51.6
3/20/2017	52.5
5/23/2017	58.7
9/21/2017	63.8
3/14/2018	60.6
9/7/2018	62.4
3/11/2019	63.8
9/9/2019	55.7

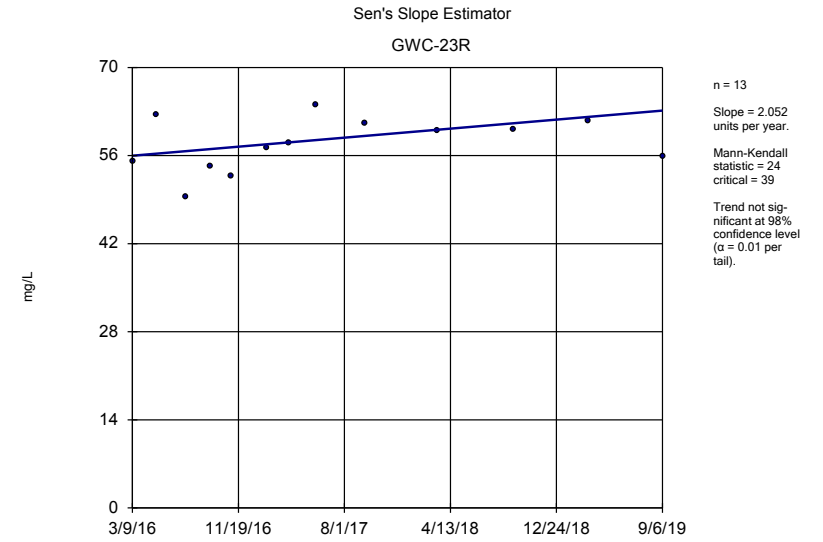
Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

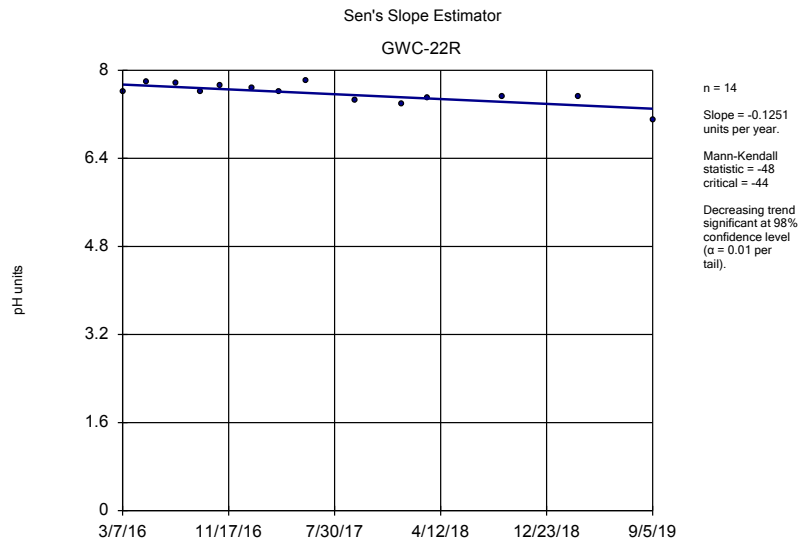
	GWC-17R
3/4/2016	69
5/10/2016	72.9
7/14/2016	58.2
9/14/2016	62.2
11/1/2016	62.5
1/11/2017	63.9
3/21/2017	63.8
5/23/2017	62
9/22/2017	67.2
3/14/2018	65.6
9/11/2018	63.2
3/12/2019	65.3
9/10/2019	66.7



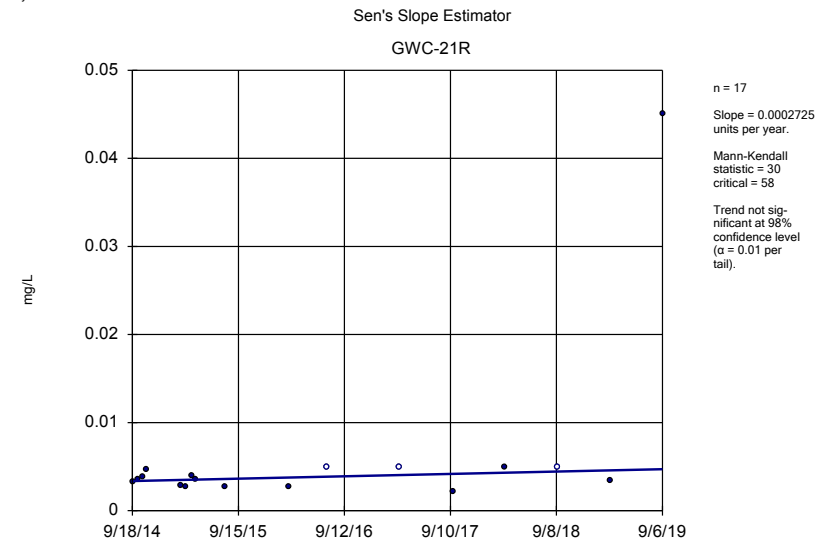
Constituent: Calcium Analysis Run 12/9/2019 3:32 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Calcium Analysis Run 12/9/2019 3:32 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: pH Analysis Run 12/9/2019 3:32 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR



Constituent: Zinc Analysis Run 12/9/2019 3:32 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R
3/8/2016	63
5/9/2016	50.8
7/15/2016	48.2
9/9/2016	56.9
10/27/2016	57.9
1/12/2017	60.5
3/21/2017	63.7
5/23/2017	60
9/19/2017	58.9
3/14/2018	65.6
9/10/2018	61.7
3/11/2019	67.1
9/6/2019	57.8

Sen's Slope Estimator

Constituent: Calcium (mg/L) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-23R
3/9/2016	55
5/6/2016	62.4
7/15/2016	49.5
9/14/2016	54.4
11/1/2016	52.8
1/25/2017	57.2
3/22/2017	58.1
5/24/2017	64
9/21/2017	61.1
3/14/2018	59.9
9/11/2018	60.2
3/12/2019	61.6
9/6/2019	55.9

Sen's Slope Estimator

Constituent: pH (pH units) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

GWC-22R

3/7/2016	7.61
5/5/2016	7.79
7/14/2016	7.76
9/12/2016	7.6
10/27/2016	7.73
1/13/2017	7.68
3/20/2017	7.6
5/23/2017	7.81
9/19/2017	7.46
1/9/2018	7.39 (Y)
3/13/2018	7.49
9/7/2018	7.53
3/11/2019	7.51
9/5/2019	7.09

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

	GWC-21R
9/18/2014	0.0033
10/5/2014	0.0036
10/22/2014	0.0038
11/5/2014	0.0046
3/4/2015	0.0029
3/19/2015	0.0027
4/8/2015	0.0039
4/24/2015	0.0035
7/30/2015	0.0027
3/8/2016	0.00273 (J)
7/15/2016	<0.01 (*)
3/21/2017	<0.01 (*)
9/19/2017	0.0022 (J)
3/14/2018	0.0049 (J)
9/10/2018	<0.01
3/11/2019	0.0034 (X)
9/6/2019	0.045

Sen's Slope Estimator

Constituent: Zinc (mg/L) Analysis Run 12/9/2019 3:33 PM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 3&4 CCR

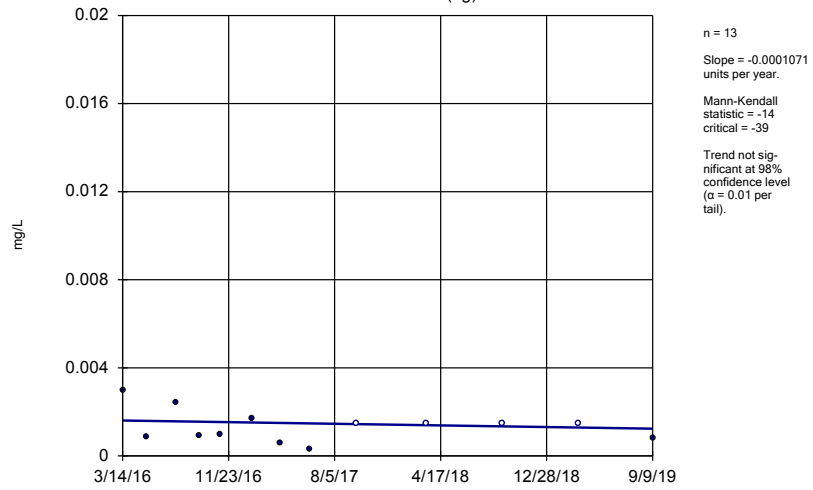
	GWC-25R
9/16/2014	0.004
10/4/2014	0.0011 (J)
10/23/2014	0.0011 (J)
11/10/2014	0.0028
3/4/2015	<0.0025
3/20/2015	<0.0025
4/9/2015	<0.0025
4/23/2015	<0.0025
7/30/2015	<0.0025
3/8/2016	0.00198 (J)
7/18/2016	<0.01 (*)
3/16/2017	0.0026 (J)
9/19/2017	<0.01
3/13/2018	<0.01
9/11/2018	<0.01
3/8/2019	<0.01
9/5/2019	0.0053 (X)

Upgradient Sen Slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 1/22/2020, 9:19 AM

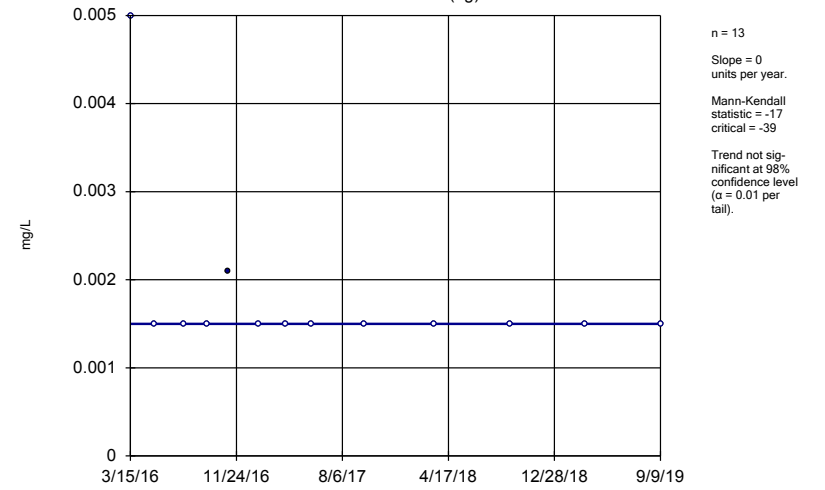
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWA-39Z (bg)	-0.00...	-14	-39	No	13	30.77	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-40 (bg)	0	-17	-39	No	13	92.31	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-41 (bg)	0	-12	-39	No	13	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-41R (bg)	0	4	39	No	13	69.23	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-42 (bg)	0	-9	-35	No	12	91.67	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-43 (bg)	0	0	35	No	12	100	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-43R (bg)	0	-16	-35	No	12	66.67	n/a	n/a	0.02	NP
Antimony (mg/L)	GWA-39R_3...	0.002714	35	39	No	13	15.38	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-39Z (bg)	0.003241	16	39	No	13	7.692	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-40 (bg)	-0.00...	-40	-39	Yes	13	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-41 (bg)	-0.00...	-36	-39	No	13	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-41R (bg)	0.003109	12	39	No	13	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-42 (bg)	0.000...	36	35	Yes	12	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-43 (bg)	-0.00...	-56	-35	Yes	12	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-43R (bg)	0.000...	6	35	No	12	0	n/a	n/a	0.02	NP
Barium (mg/L)	GWA-39R_3...	0.001424	26	39	No	13	0	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-39Z (bg)	0	-11	-35	No	12	50	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-40 (bg)	0	7	35	No	12	83.33	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-41 (bg)	0	15	35	No	12	83.33	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-41R (bg)	0	4	35	No	12	66.67	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-42 (bg)	0	-1	-31	No	11	36.36	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-43 (bg)	0.000...	11	31	No	11	45.45	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-43R (bg)	-0.00014	-11	-31	No	11	45.45	n/a	n/a	0.02	NP
Zinc (mg/L)	GWA-39R_3...	0	-2	-23	No	9	44.44	n/a	n/a	0.02	NP

Sen's Slope Estimator
GWA-39Z (bg)



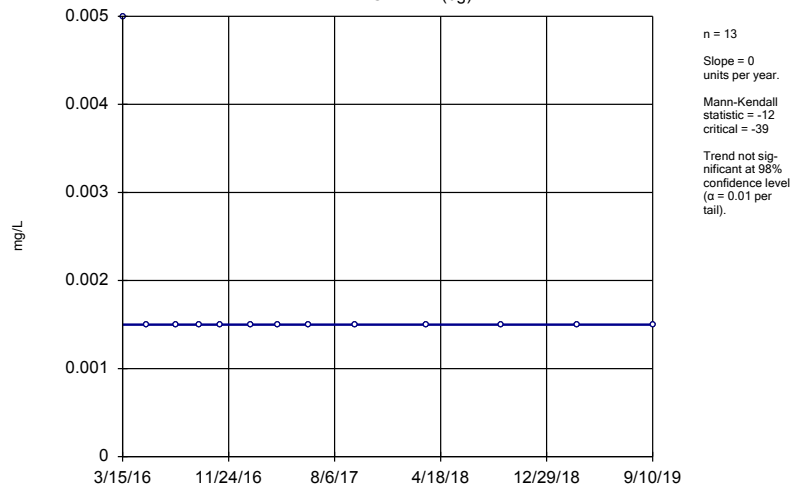
Constituent: Antimony Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-40 (bg)



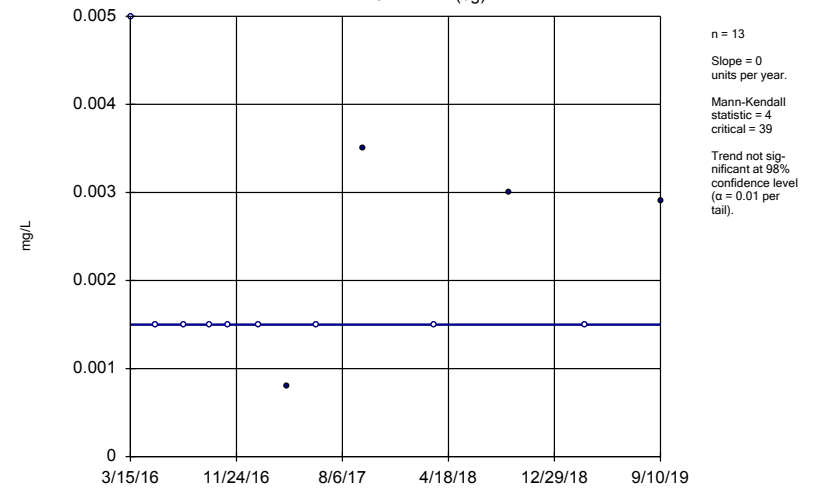
Constituent: Antimony Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41 (bg)



Constituent: Antimony Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41R (bg)



Constituent: Antimony Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

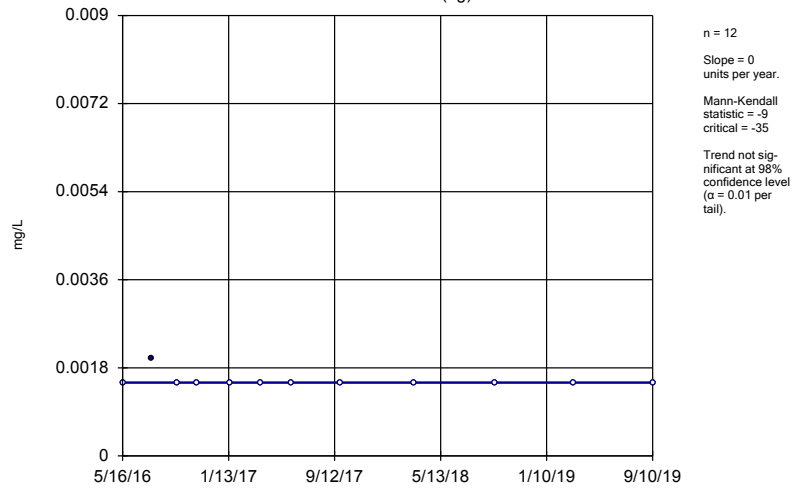
Sen's Slope Estimator

Constituent: Antimony Analysis Run 1/22/2020 9:19 AM View: Sen slope background wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

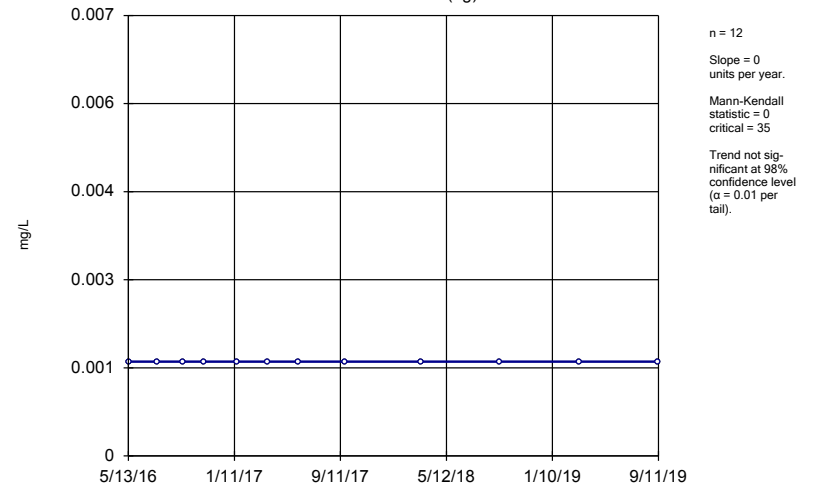
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	0.003			
3/15/2016		<0.01	<0.01	<0.01
5/11/2016	0.000839 (J)	<0.003		
5/12/2016			<0.003	
5/13/2016				<0.003
7/19/2016	0.0024 (J)			
7/20/2016			<0.003	
7/21/2016		<0.003		<0.003 (*)
9/15/2016	0.0009 (J)	<0.003	<0.003	
9/21/2016				<0.003
11/2/2016	0.001 (J)			
11/3/2016		0.0021 (J)	<0.003	<0.003
1/17/2017		<0.003		<0.003
1/18/2017	0.0017 (J)		<0.003	
3/24/2017		<0.003	<0.003	
3/27/2017				0.0008 (J)
3/28/2017	0.0006 (J)			
5/24/2017		<0.003		
6/6/2017			<0.003	<0.003
6/7/2017	0.0003 (J)			
9/25/2017			<0.003	0.0035
9/26/2017	<0.003	<0.003		
3/14/2018	<0.003	<0.003	<0.003	<0.003
9/12/2018	<0.003	<0.003	<0.003	0.003
3/13/2019		<0.003		
3/14/2019			<0.003	<0.003
3/15/2019	<0.003			
9/9/2019	0.00079 (X)	<0.003		
9/10/2019			<0.003	0.0029 (X)

Sen's Slope Estimator
GWA-42 (bg)



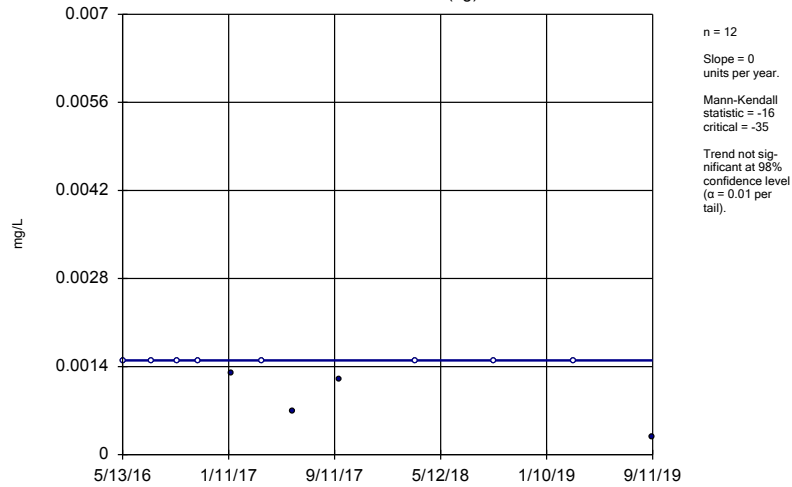
Constituent: Antimony Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43 (bg)



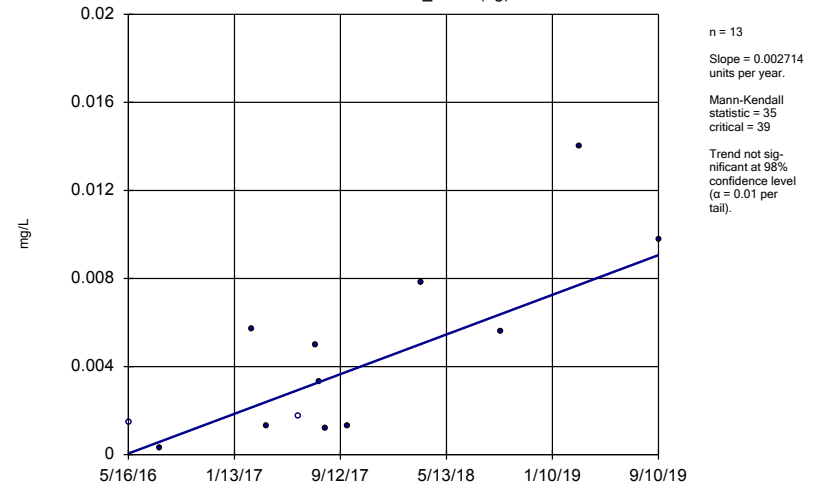
Constituent: Antimony Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43R (bg)



Constituent: Antimony Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-39R_39RZ (bg)

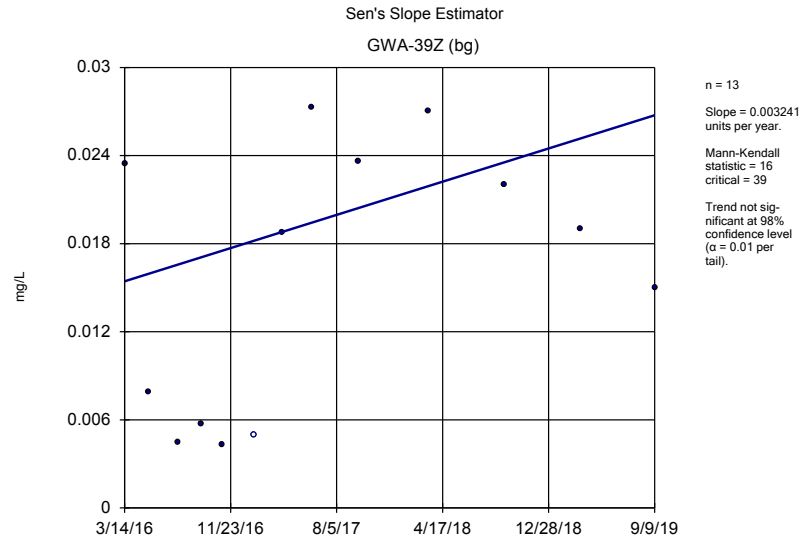


Constituent: Antimony Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

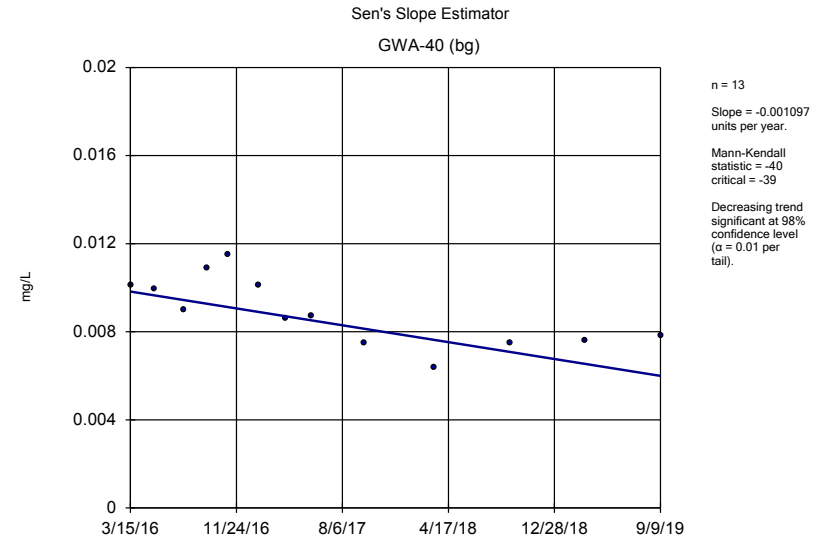
Sen's Slope Estimator

Constituent: Antimony Analysis Run 1/22/2020 9:19 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

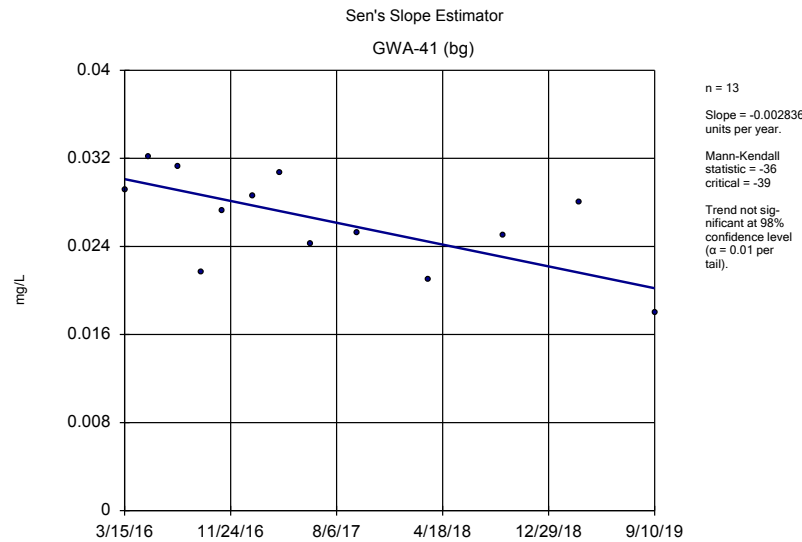
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
5/13/2016		<0.003	<0.003	
5/16/2016	<0.003			<0.003 (D)
7/19/2016		<0.003 (*)	<0.003	
7/22/2016	0.002 (J)			
7/27/2016				0.0003 (JD)
9/16/2016		<0.003	<0.003	
9/19/2016	<0.003			
11/2/2016		<0.003	<0.003	
11/3/2016	<0.003			
1/17/2017	<0.003			
1/18/2017		<0.003	0.0013 (J)	
2/21/2017				0.0057
3/27/2017	<0.003			0.0013 (JD)
3/28/2017		<0.003	<0.003	
6/6/2017		<0.003	0.0007 (J)	
6/7/2017	<0.003			
6/8/2017				<0.0035 (*)
7/17/2017				0.005 (D)
7/27/2017				0.0033
8/9/2017				0.0012 (J)
9/22/2017		<0.003	0.0012 (J)	
9/26/2017	<0.003			
9/29/2017				0.0013 (JD)
3/14/2018	<0.003	<0.003		
3/15/2018			<0.003	
3/16/2018				0.0078
9/12/2018		<0.003	<0.003	
9/14/2018	<0.003			0.0056
3/13/2019		<0.003	<0.003	
3/14/2019	<0.003			0.014
9/10/2019	<0.003			0.0098
9/11/2019		<0.003	0.00029 (X)	



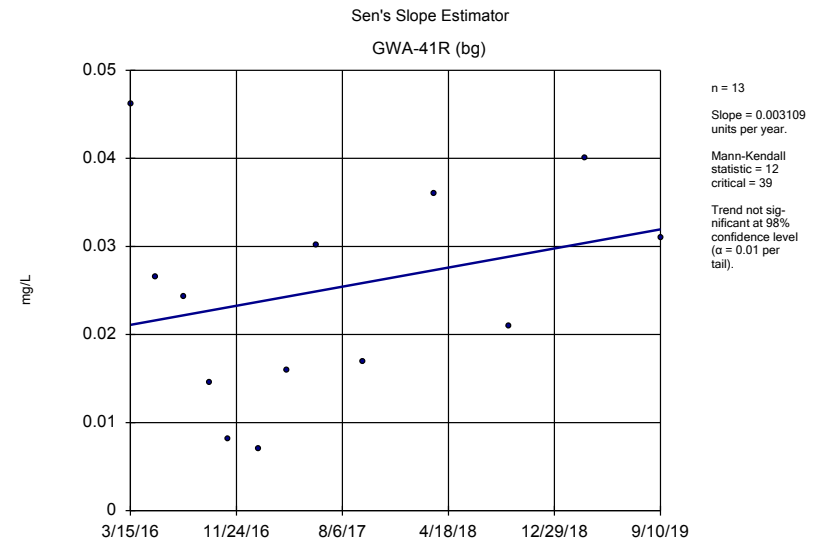
Constituent: Barium Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

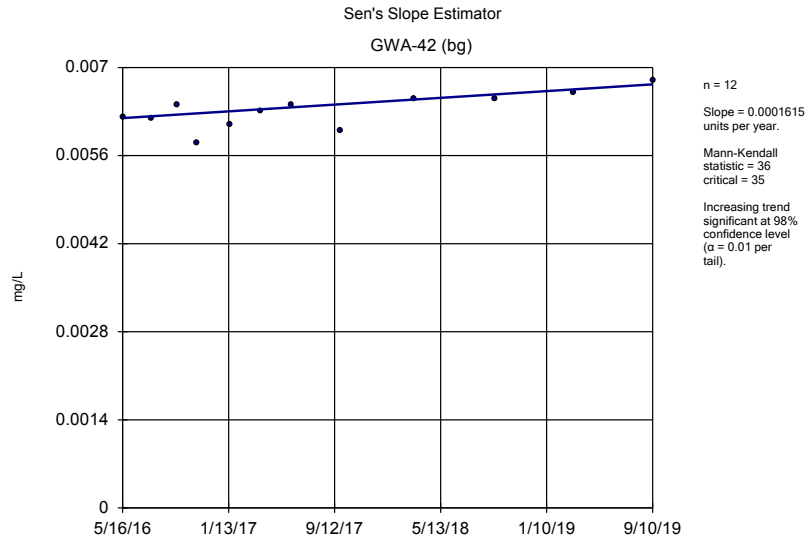


Constituent: Barium Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

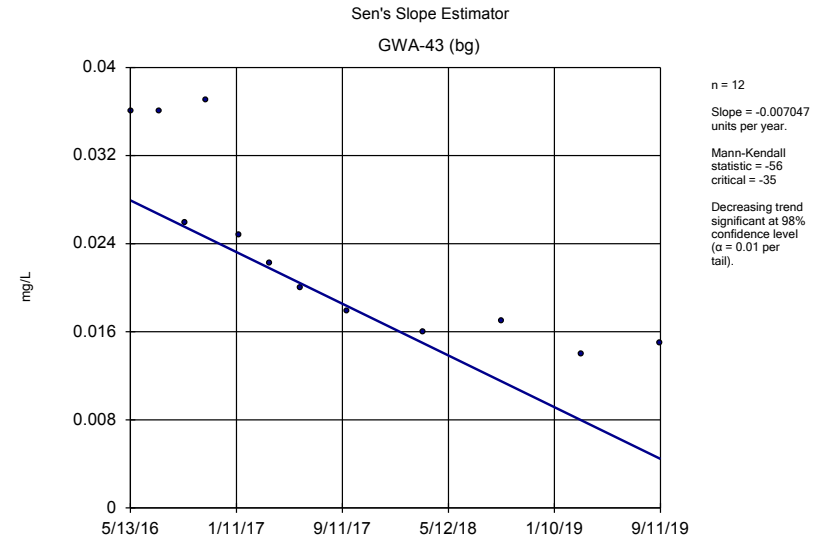
Sen's Slope Estimator

Constituent: Barium Analysis Run 1/22/2020 9:19 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

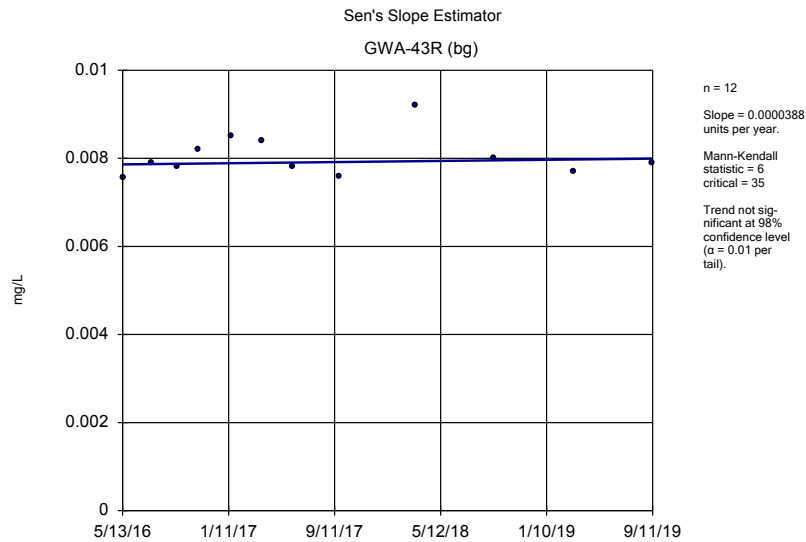
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	0.0234			
3/15/2016		0.0101	0.0291	0.0462
5/11/2016	0.00793 (J)	0.00992 (J)		
5/12/2016			0.0322	
5/13/2016				0.0265
7/19/2016	0.0045 (J)			
7/20/2016			0.0313	
7/21/2016		0.009 (J)		0.0243
9/15/2016	0.0057 (J)	0.0109	0.0217	
9/21/2016				0.0145
11/2/2016	0.0043 (J)			
11/3/2016		0.0115	0.0272	0.0082 (J)
1/17/2017		0.0101		0.007 (J)
1/18/2017	<0.01 (*)		0.0286 (J)	
3/24/2017		0.0086 (J)	0.0307	
3/27/2017				0.016
3/28/2017	0.0188			
5/24/2017		0.0087 (J)		
6/6/2017			0.0242	0.0301
6/7/2017	0.0273			
9/25/2017			0.0252	0.0169
9/26/2017	0.0236	0.0075 (J)		
3/14/2018	0.027	0.0064 (J)	0.021	0.036
9/12/2018	0.022	0.0075 (J)	0.025	0.021
3/13/2019		0.0076 (X)		
3/14/2019			0.028	0.04
3/15/2019	0.019			
9/9/2019	0.015	0.0078 (X)		
9/10/2019			0.018	0.031



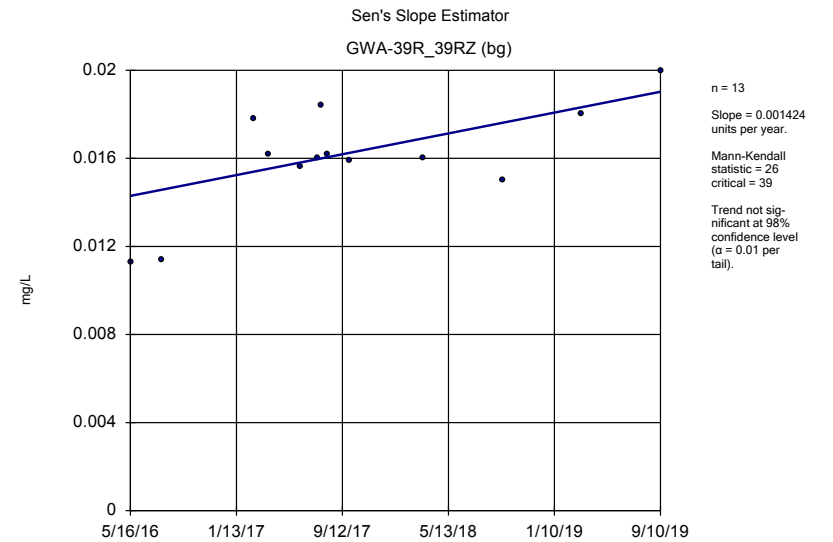
Constituent: Barium Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Barium Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

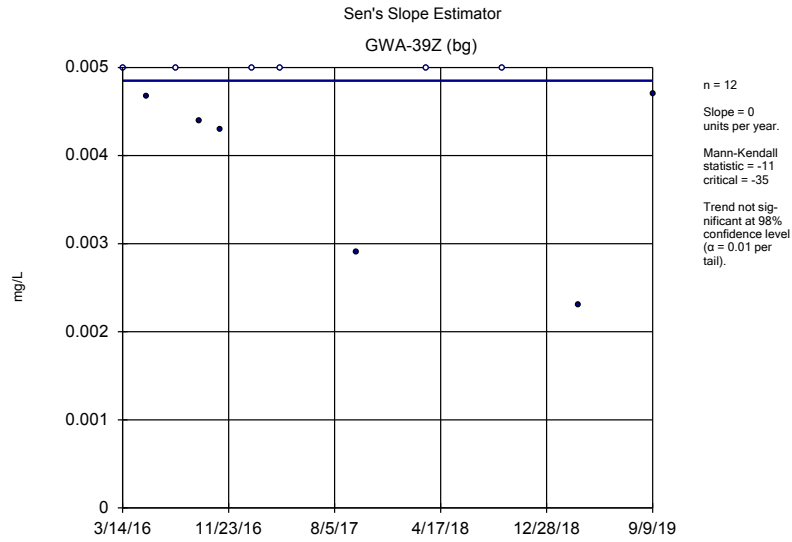


Constituent: Barium Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

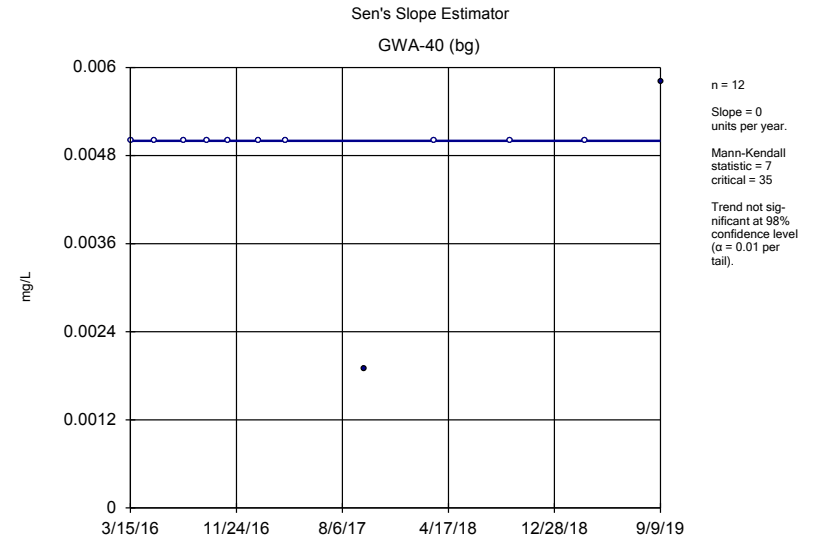
Sen's Slope Estimator

Constituent: Barium Analysis Run 1/22/2020 9:19 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

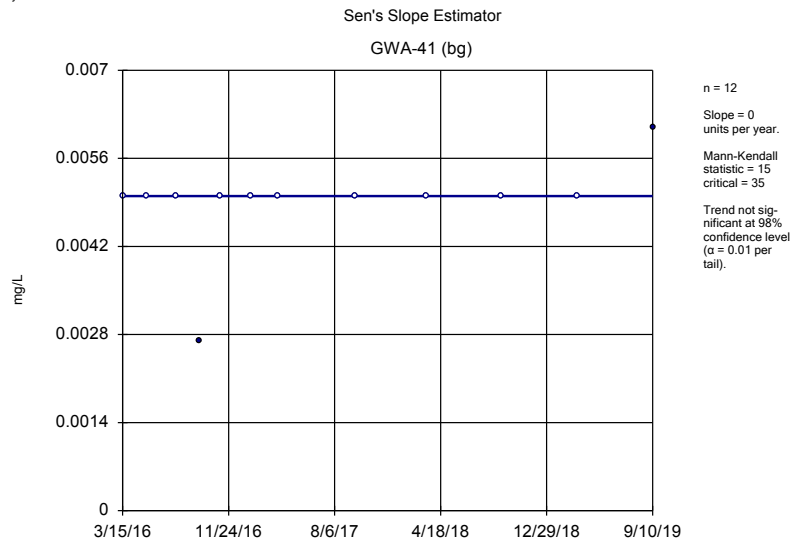
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
5/13/2016		0.0361	0.00756 (J)	
5/16/2016	0.00622 (J)			0.0113 (D)
7/19/2016		0.036	0.0079 (J)	
7/22/2016	0.0062 (J)			
7/27/2016				0.0114 (D)
9/16/2016		0.0259	0.0078 (J)	
9/19/2016	0.0064 (J)			
11/2/2016		0.037	0.0082 (J)	
11/3/2016	0.0058 (J)			
1/17/2017	0.0061 (J)			
1/18/2017		0.0248	0.0085 (J)	
2/21/2017				0.0178
3/27/2017	0.0063 (J)			0.0162 (D)
3/28/2017		0.0222	0.0084 (J)	
6/6/2017		0.02	0.0078 (J)	
6/7/2017	0.0064 (J)			
6/8/2017				0.0156 (D)
7/17/2017				0.016 (D)
7/27/2017				0.0184
8/9/2017				0.0162
9/22/2017		0.0179	0.0076 (J)	
9/26/2017	0.006 (J)			
9/29/2017				0.0159 (D)
3/14/2018	0.0065 (J)	0.016		
3/15/2018			0.0092 (J)	
3/16/2018				0.016
9/12/2018		0.017	0.008 (J)	
9/14/2018	0.0065 (J)			0.015
3/13/2019		0.014	0.0077 (X)	
3/14/2019	0.0066 (X)			0.018
9/10/2019	0.0068 (X)			0.02
9/11/2019		0.015	0.0079 (X)	



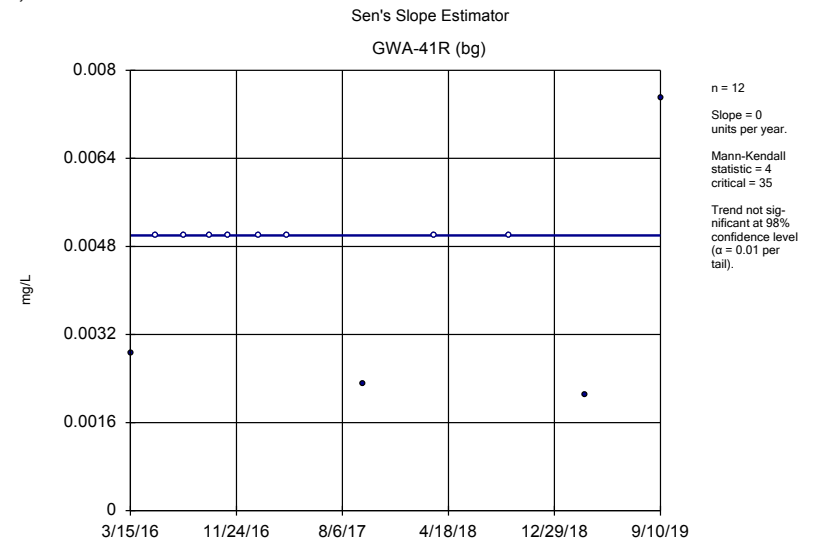
Constituent: Zinc Analysis Run 1/22/2020 9:17 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Zinc Analysis Run 1/22/2020 9:18 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Zinc Analysis Run 1/22/2020 9:18 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Zinc Analysis Run 1/22/2020 9:18 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

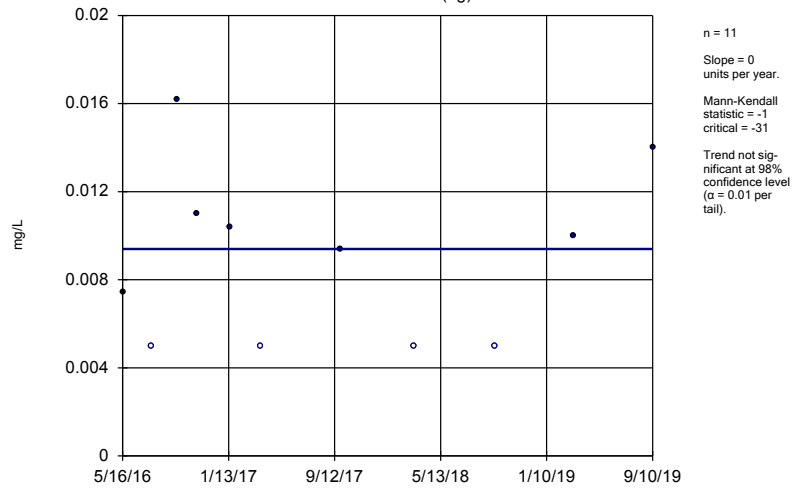
Sen's Slope Estimator

Constituent: Zinc Analysis Run 1/22/2020 9:19 AM View: Sen slope background wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

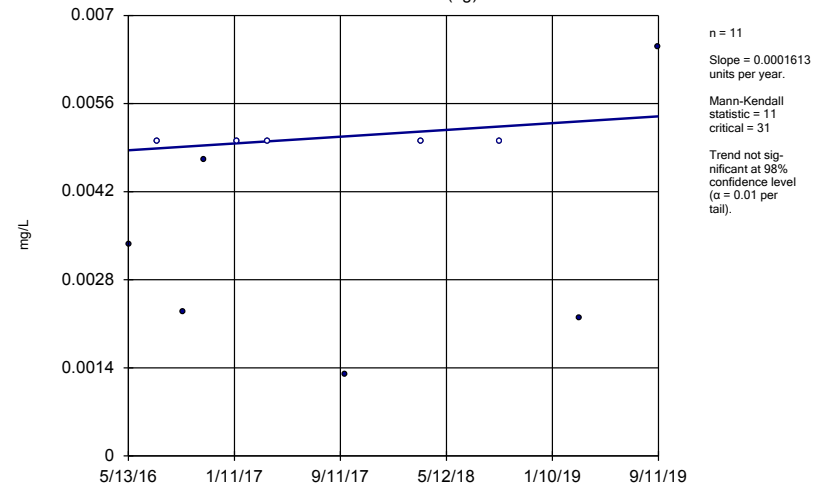
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	<0.01			
3/15/2016		<0.01	<0.01	0.00286 (J)
5/11/2016	0.00467 (J)	<0.01		
5/12/2016			<0.01	
5/13/2016				<0.01
7/19/2016	<0.01 (*)			
7/20/2016			<0.01	
7/21/2016		<0.01 (*)		<0.01 (*)
9/15/2016	0.0044 (J)	<0.01	0.0027 (J)	
9/21/2016				<0.01
11/2/2016	0.0043 (J)			
11/3/2016		<0.01	<0.01	<0.01
1/17/2017		<0.01		<0.01
1/18/2017	<0.01 (*)		<0.01 (*)	
3/24/2017		<0.01 (*)	<0.01 (*)	
3/27/2017				<0.01 (*)
3/28/2017	<0.01 (*)			
9/25/2017			<0.01	0.0023 (J)
9/26/2017	0.0029 (J)	0.0019 (J)		
3/14/2018	<0.01	<0.01	<0.01	<0.01
9/12/2018	<0.01	<0.01	<0.01	<0.01
3/13/2019		<0.01		
3/14/2019			<0.01	0.0021 (X)
3/15/2019	0.0023 (X)			
9/9/2019	0.0047 (X)	0.0058 (X)		
9/10/2019			0.0061 (X)	0.0075 (X)

Sen's Slope Estimator
GWA-42 (bg)



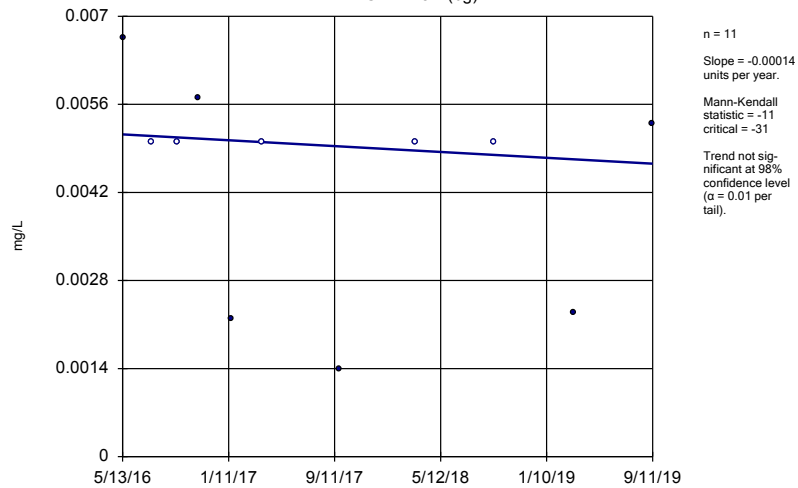
Constituent: Zinc Analysis Run 1/22/2020 9:18 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43 (bg)



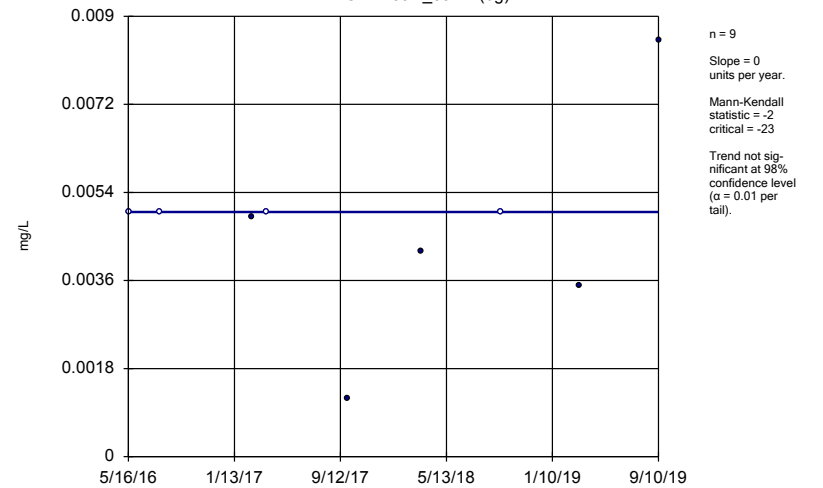
Constituent: Zinc Analysis Run 1/22/2020 9:18 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43R (bg)



Constituent: Zinc Analysis Run 1/22/2020 9:18 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-39R_39RZ (bg)



Constituent: Zinc Analysis Run 1/22/2020 9:18 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: Zinc Analysis Run 1/22/2020 9:19 AM View: Sen slope background wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

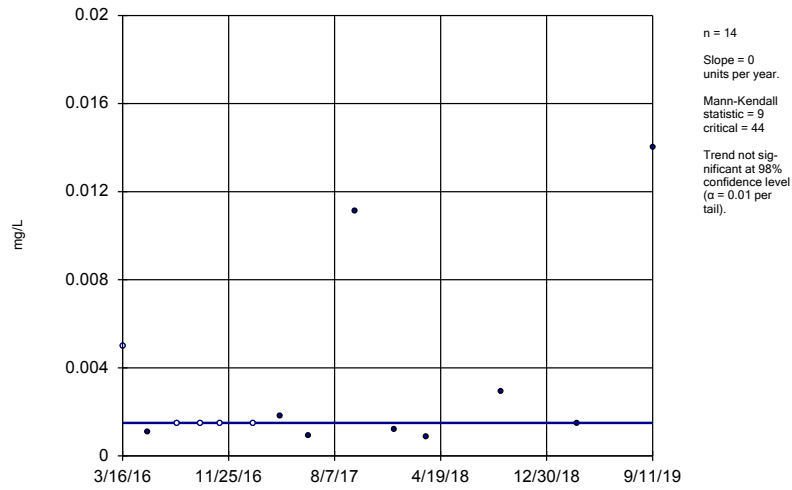
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
5/13/2016		0.00336 (J)	0.00666 (J)	
5/16/2016	0.00744 (J)			<0.01 (D)
7/19/2016		<0.01 (*)	<0.01 (*)	
7/22/2016	<0.01 (*)			
7/27/2016				<0.01 (*)
9/16/2016		0.0023 (J)	<0.01	
9/19/2016	0.0162			
11/2/2016		0.0047 (J)	0.0057 (J)	
11/3/2016	0.011			
1/17/2017	0.0104			
1/18/2017		<0.01	0.0022 (J)	
2/21/2017				0.0049 (J)
3/27/2017	<0.01 (*)			<0.01 (*)
3/28/2017		<0.01 (*)	<0.01	
9/22/2017		0.0013 (J)	0.0014 (J)	
9/26/2017	0.0094 (J)			
9/29/2017				0.0012 (JD)
3/14/2018	<0.01	<0.01		
3/15/2018			<0.01	
3/16/2018				0.0042 (J)
9/12/2018		<0.01	<0.01	
9/14/2018	<0.01			<0.01
3/13/2019		0.0022 (X)	0.0023 (X)	
3/14/2019	0.01			0.0035 (X)
9/10/2019	0.014			0.0085 (X)
9/11/2019		0.0065 (X)	0.0053 (X)	

Downgradient Sen Slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 1/22/2020, 9:25 AM

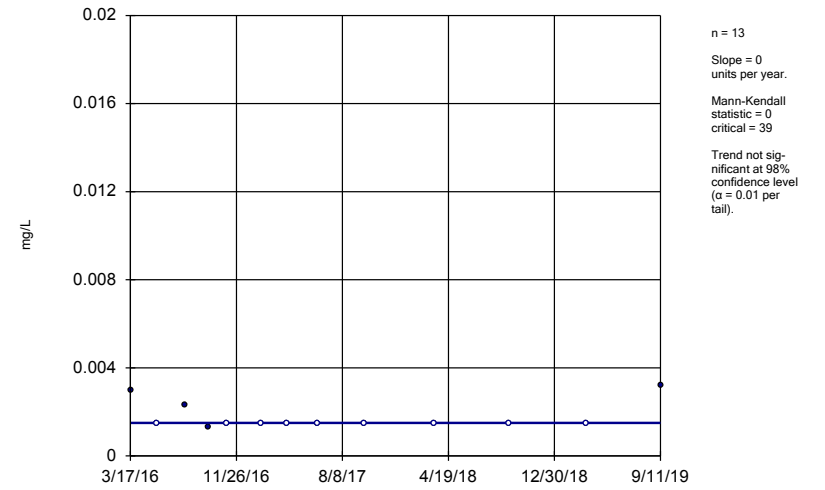
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	GWC-45	0	9	44	No	14	35.71	n/a	n/a	0.02	NP
Antimony (mg/L)	GWC-49R	0	0	39	No	13	69.23	n/a	n/a	0.02	NP
Barium (mg/L)	GWC-49R	-0.00...	-12	-39	No	13	7.692	n/a	n/a	0.02	NP
Zinc (mg/L)	GWC-47R	-0.00...	-10	-35	No	12	16.67	n/a	n/a	0.02	NP
Zinc (mg/L)	GWC-48	0.000...	12	35	No	12	41.67	n/a	n/a	0.02	NP

Sen's Slope Estimator
GWC-45



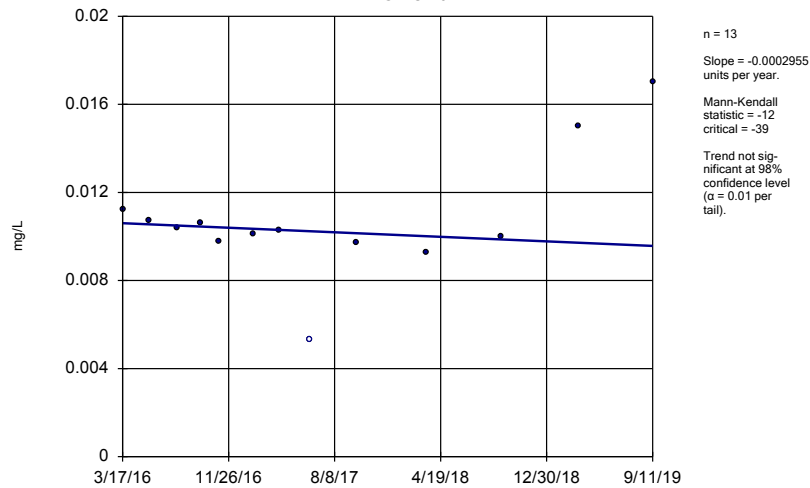
Constituent: Antimony Analysis Run 1/22/2020 9:24 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-49R



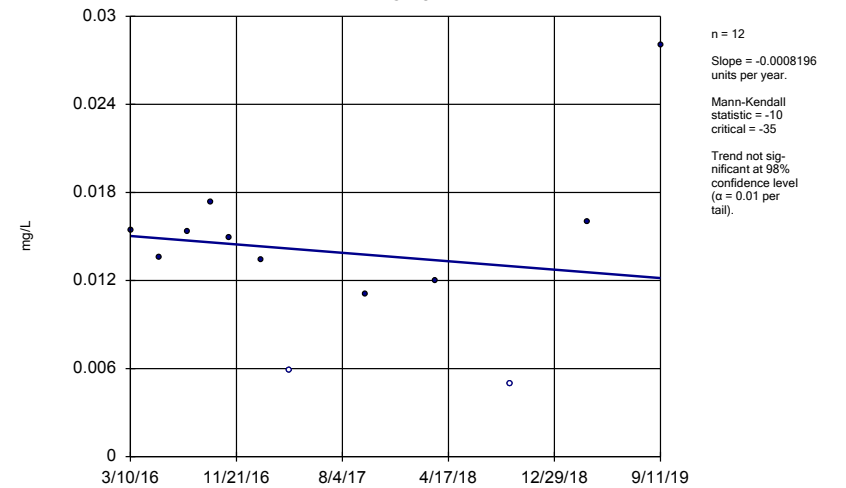
Constituent: Antimony Analysis Run 1/22/2020 9:24 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-49R



Constituent: Barium Analysis Run 1/22/2020 9:24 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-47R



Constituent: Zinc Analysis Run 1/22/2020 9:24 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

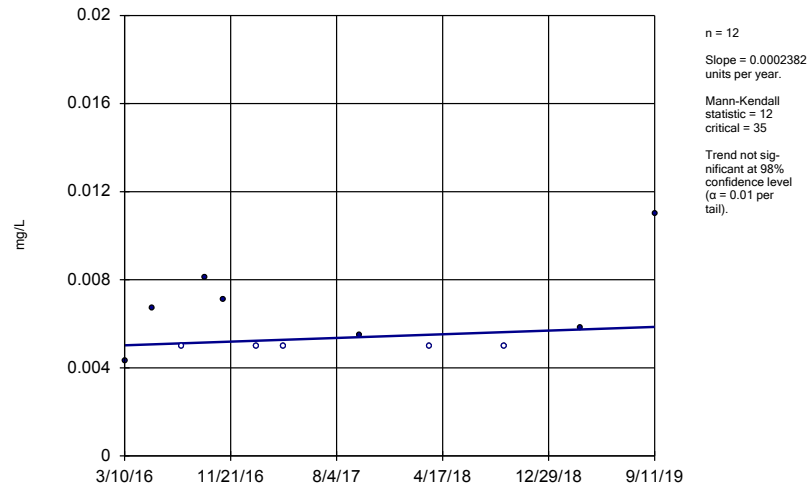
Sen's Slope Estimator

Constituent: Antimony, Barium, Zinc Analysis Run 1/22/2020 9:25 AM View: Sens slope compliance wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-45	GWC-49R	GWC-49R	GWC-47R
3/10/2016				0.0154
3/16/2016	<0.01			
3/17/2016		0.003	0.0112	
5/16/2016	0.00109 (J)			
5/18/2016		<0.003	0.0107	0.0136
7/25/2016	<0.003 (*)			
7/27/2016		0.0023 (J)	0.0104	0.0153
9/19/2016	<0.003			
9/20/2016				0.0173
9/21/2016		0.0013 (J)	0.0106	
11/4/2016	<0.003	<0.003	0.0098 (J)	0.0149
1/20/2017				0.0134
1/23/2017	<0.003			
1/24/2017		<0.003	0.0101	
3/29/2017	0.0018 (J)	<0.003	0.0103	<0.0117 (*)
6/7/2017	0.0009 (J)			
6/8/2017		<0.003 (*)	<0.0106 (*)	
9/27/2017	0.0111			0.0111
9/29/2017		<0.003	0.0097 (J)	
12/29/2017	0.0012 (Y)			
3/15/2018	0.00086 (J)	<0.003	0.0093 (J)	
3/16/2018				0.012
9/13/2018	0.0029 (J)	<0.003	0.01	<0.01
3/14/2019	0.0015 (X)			
3/18/2019		<0.003	0.015	
3/19/2019				0.016
9/11/2019	0.014	0.0032	0.017	0.028

Sen's Slope Estimator
GWC-48



Constituent: Zinc Analysis Run 1/22/2020 9:24 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: Zinc Analysis Run 1/22/2020 9:25 AM View: Sens slope compliance wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

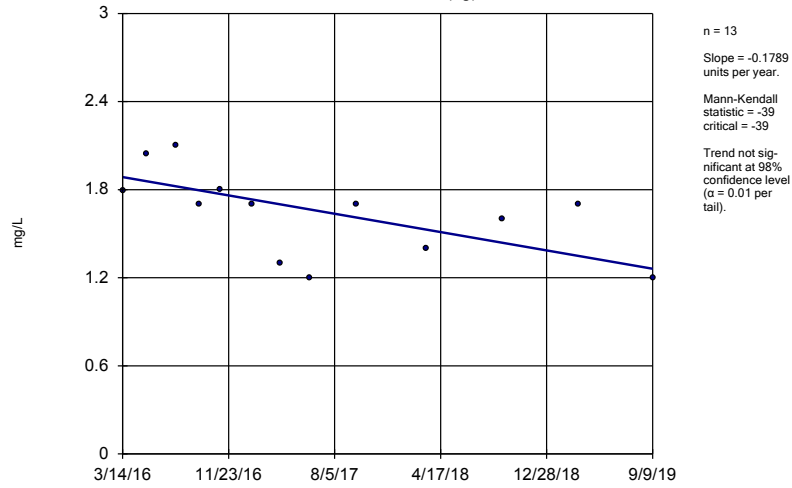
	GWC-48
3/10/2016	0.00432 (J)
5/17/2016	0.00672 (J)
7/27/2016	<0.01 (*)
9/20/2016	0.0081 (J)
11/4/2016	0.0071 (J)
1/23/2017	<0.01
3/28/2017	<0.01 (*)
9/29/2017	0.0055 (J)
3/15/2018	<0.01
9/13/2018	<0.01
3/15/2019	0.0058 (X)
9/11/2019	0.011

Upgradient Sen Slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 1/22/2020, 9:15 AM

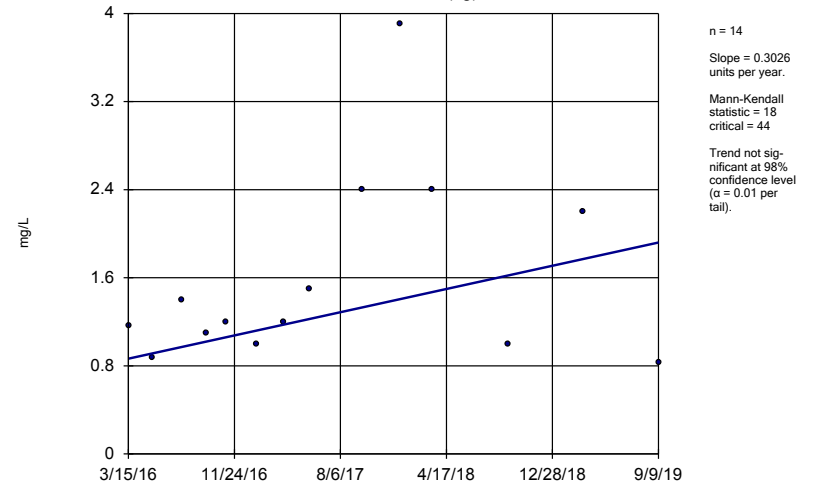
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Chloride (mg/L)	GWA-39Z (bg)	-0.1789	-39	-39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-40 (bg)	0.3026	18	44	No	14	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-41 (bg)	-0.1365	-14	-39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-41R (bg)	-0.4173	-25	-39	No	13	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-42 (bg)	0.2604	21	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-43 (bg)	0	6	35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-43R (bg)	-0.1576	-7	-35	No	12	0	n/a	n/a	0.02	NP
Chloride (mg/L)	GWA-39R_3...	0.07867	9	39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-39Z (bg)	0.1715	25	44	No	14	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-40 (bg)	-0.03534	-14	-48	No	15	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-41 (bg)	-0.01353	-2	-35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-41R (bg)	-0.1265	-46	-39	Yes	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-42 (bg)	0.006725	8	35	No	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-43 (bg)	-0.3073	-58	-35	Yes	12	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-43R (bg)	-0.01694	-13	-39	No	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWA-39R_3...	-0.06636	-30	-48	No	15	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-39Z (bg)	-1.167	-40	-39	Yes	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-40 (bg)	0.3227	33	44	No	14	7.143	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-41 (bg)	-0.04225	-1	-39	No	13	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-41R (bg)	0.9745	18	39	No	13	7.692	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-42 (bg)	0.1696	22	35	No	12	8.333	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-43 (bg)	-0.4121	-50	-35	Yes	12	8.333	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-43R (bg)	-0.3775	-7	-35	No	12	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWA-39R_3...	3.056	17	39	No	13	0	n/a	n/a	0.02	NPUpgUpgr

Sen's Slope Estimator
GWA-39Z (bg)



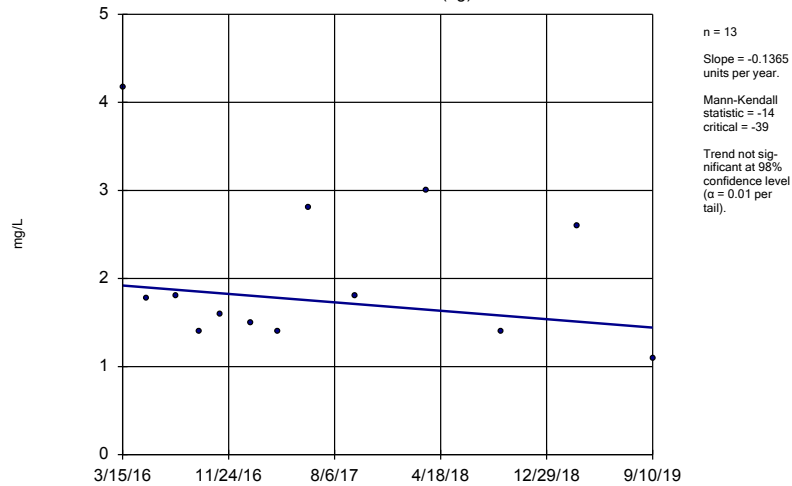
Constituent: Chloride Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-40 (bg)



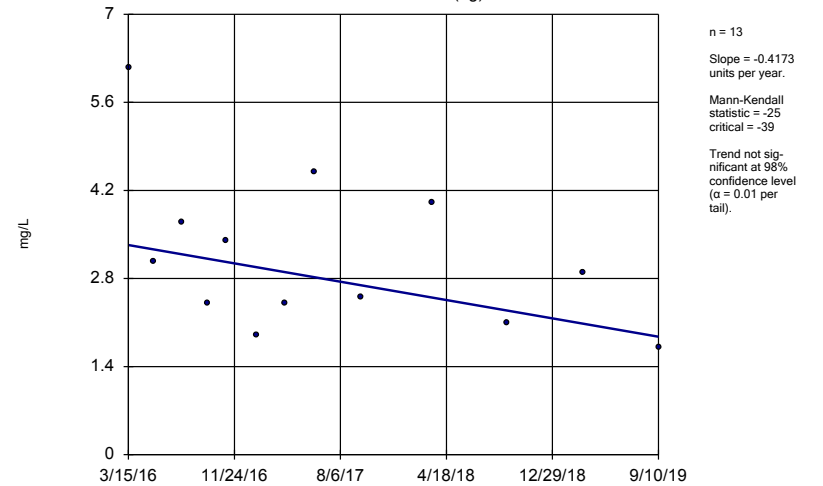
Constituent: Chloride Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41 (bg)



Constituent: Chloride Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41R (bg)

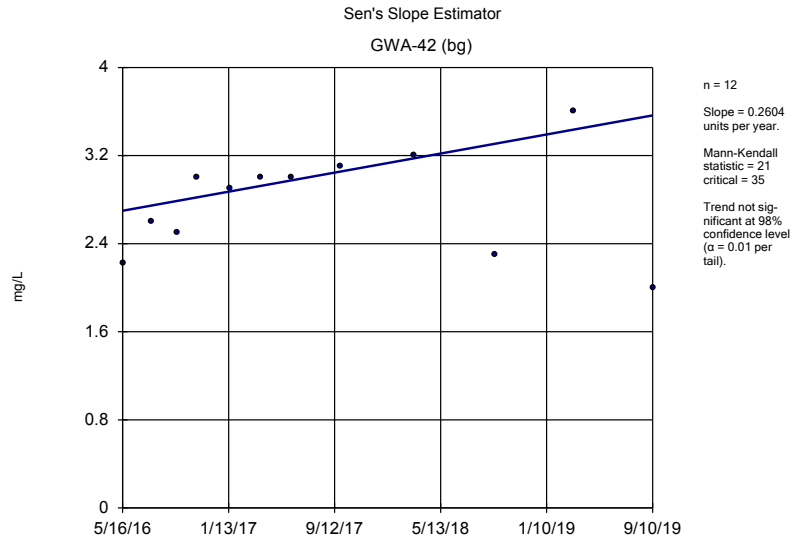


Constituent: Chloride Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

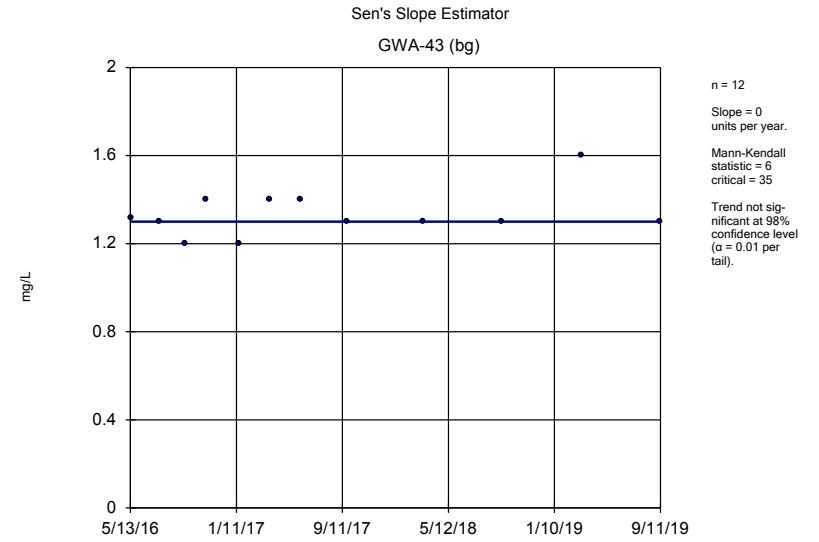
Sen's Slope Estimator

Constituent: Chloride Analysis Run 1/22/2020 9:15 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

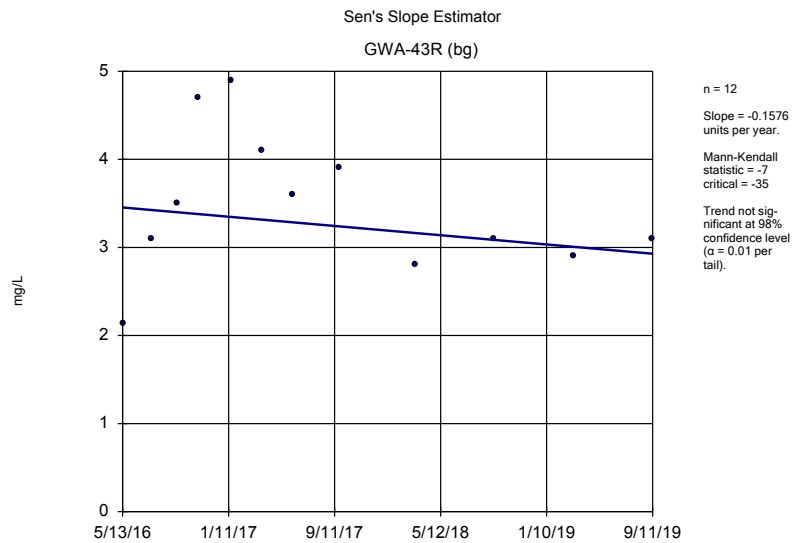
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	1.795			
3/15/2016		1.1671	4.1666	6.1465
5/11/2016	2.04	0.8763		
5/12/2016			1.78	
5/13/2016				3.08
7/19/2016	2.1			
7/20/2016			1.8	
7/21/2016		1.4		3.7
9/15/2016	1.7		1.4	
9/19/2016		1.1		
9/21/2016				2.4
11/2/2016	1.8			
11/3/2016		1.2	1.6	3.4
1/17/2017		1		1.9
1/18/2017	1.7		1.5	
3/24/2017		1.2	1.4	
3/27/2017				2.4
3/28/2017	1.3			
5/24/2017		1.5		
6/6/2017			2.8	4.5
6/7/2017	1.2			
9/25/2017			1.8	2.5
9/26/2017	1.7	2.4		
12/28/2017		3.9 (Y)		
3/14/2018	1.4	2.4	3	4 (J)
9/12/2018	1.6	1	1.4	2.1
3/13/2019		2.2		
3/14/2019			2.6	2.9
3/15/2019	1.7			
9/9/2019	1.2	0.83 (X)		
9/10/2019			1.1	1.7



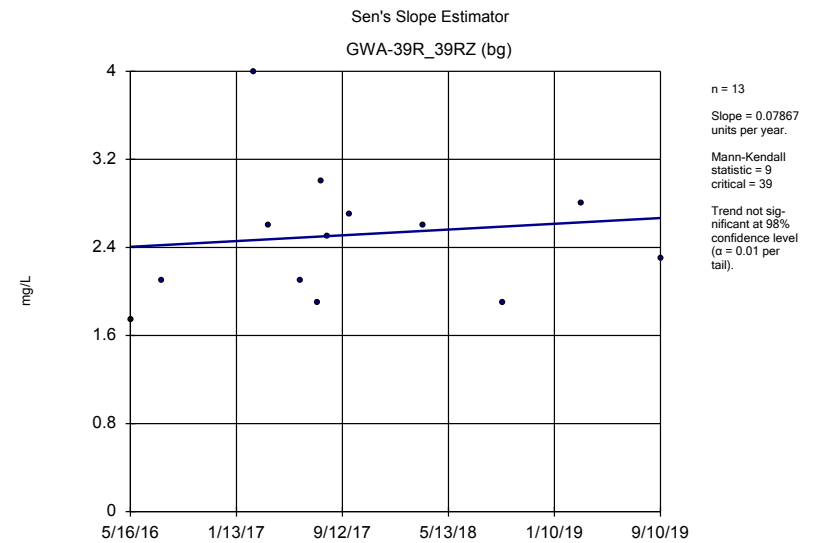
Constituent: Chloride Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Chloride Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Chloride Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



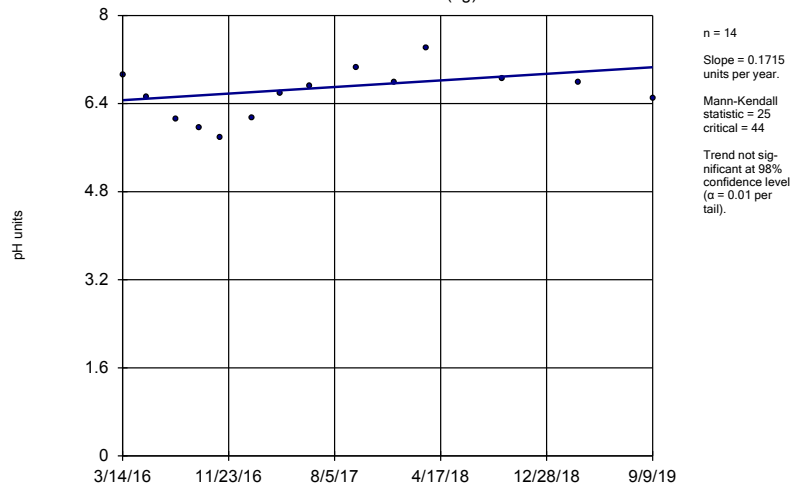
Constituent: Chloride Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: Chloride Analysis Run 1/22/2020 9:15 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

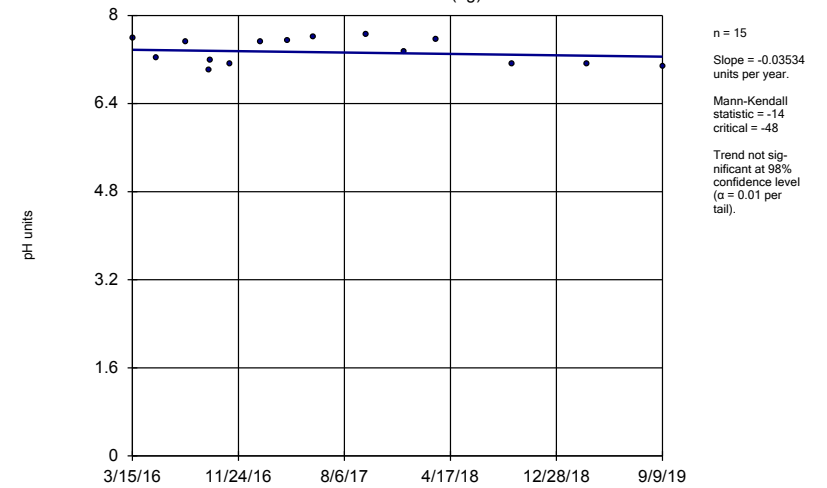
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
5/13/2016		1.32	2.14	
5/16/2016	2.22			1.74 (D)
7/19/2016		1.3	3.1	
7/22/2016	2.6			
7/27/2016				2.1 (D)
9/16/2016		1.2	3.5	
9/19/2016	2.5			
11/2/2016		1.4	4.7	
11/3/2016	3			
1/17/2017	2.9			
1/18/2017		1.2	4.9	
2/21/2017				4 (D)
3/27/2017	3			2.6 (D)
3/28/2017		1.4	4.1	
6/6/2017		1.4	3.6	
6/7/2017	3			
6/8/2017				2.1 (D)
7/17/2017				1.9 (D)
7/27/2017				3 (D)
8/9/2017				2.5 (D)
9/22/2017		1.3	3.9	
9/26/2017	3.1			
9/29/2017				2.7 (D)
3/14/2018	3.2	1.3		
3/15/2018			2.8	
3/16/2018				2.6
9/12/2018		1.3	3.1	
9/14/2018	2.3			1.9
3/13/2019		1.6	2.9	
3/14/2019	3.6			2.8
9/10/2019	2			2.3
9/11/2019		1.3	3.1	

Sen's Slope Estimator
GWA-39Z (bg)



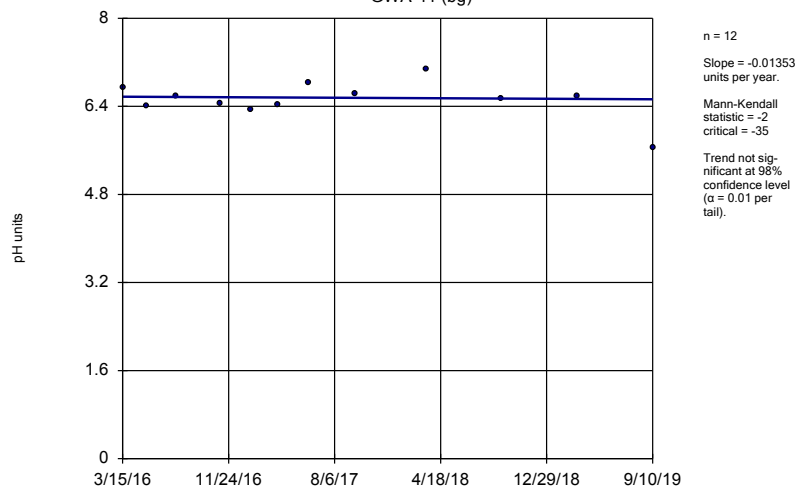
Constituent: pH Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-40 (bg)



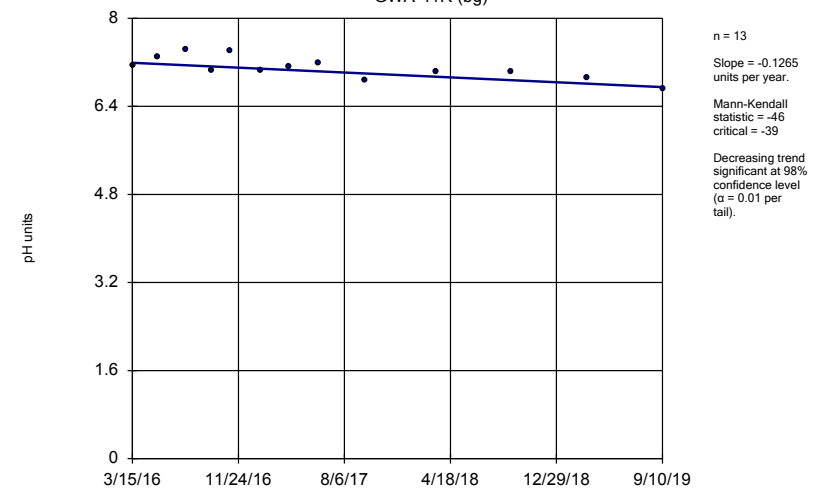
Constituent: pH Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41 (bg)



Constituent: pH Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41R (bg)



Constituent: pH Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

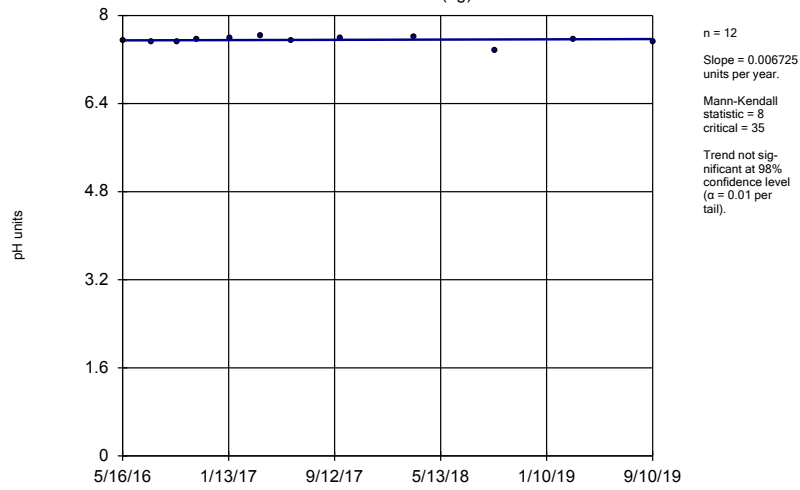
Sen's Slope Estimator

Constituent: pH Analysis Run 1/22/2020 9:15 AM View: Sen slope background wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

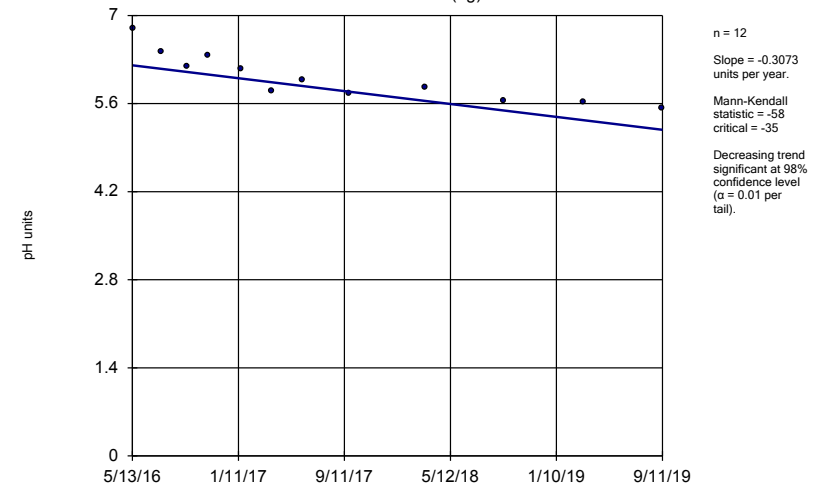
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	6.91			
3/15/2016		7.58	6.74	7.15
5/11/2016	6.51	7.24		
5/12/2016			6.41	
5/13/2016				7.29
7/19/2016	6.12			
7/20/2016			6.59	
7/21/2016		7.53		7.43
9/15/2016	5.96	7		
9/19/2016		7.19		
9/21/2016				7.05
11/2/2016	5.78			
11/3/2016		7.13	6.45	7.4
1/17/2017		7.51		7.06
1/18/2017	6.13		6.34	
3/24/2017		7.55	6.42	
3/27/2017				7.13
3/28/2017	6.59			
5/24/2017		7.6		
6/6/2017			6.82	7.18
6/7/2017	6.72			
9/25/2017			6.63	6.88
9/26/2017	7.05	7.66		
12/28/2017	6.79 (Y)	7.34 (Y)		
3/14/2018	7.42	7.56	7.08	7.04
9/12/2018	6.86	7.12	6.54	7.02
3/13/2019		7.12		
3/14/2019			6.58	6.93
3/15/2019	6.78			
9/9/2019	6.49	7.07		
9/10/2019			5.66	6.72

Sen's Slope Estimator
GWA-42 (bg)



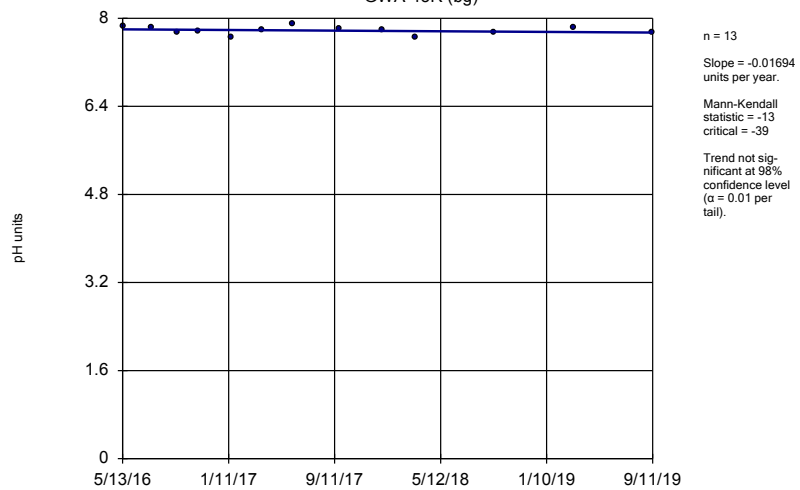
Constituent: pH Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43 (bg)



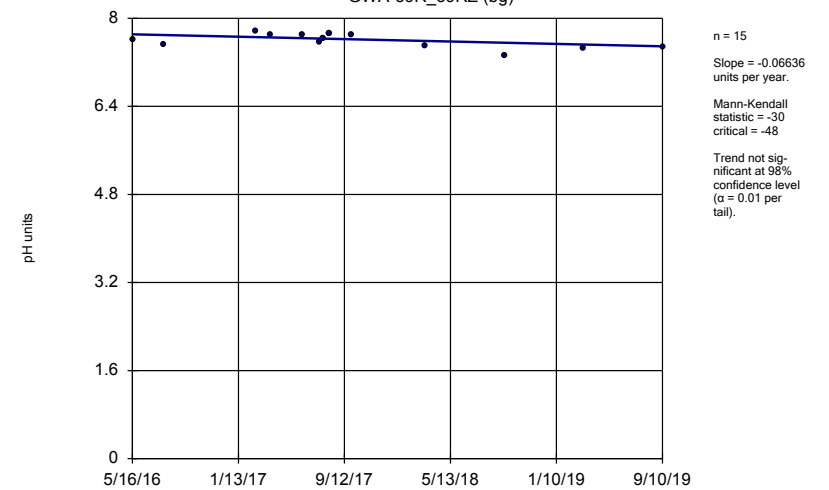
Constituent: pH Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-43R (bg)



Constituent: pH Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-39R_39RZ (bg)



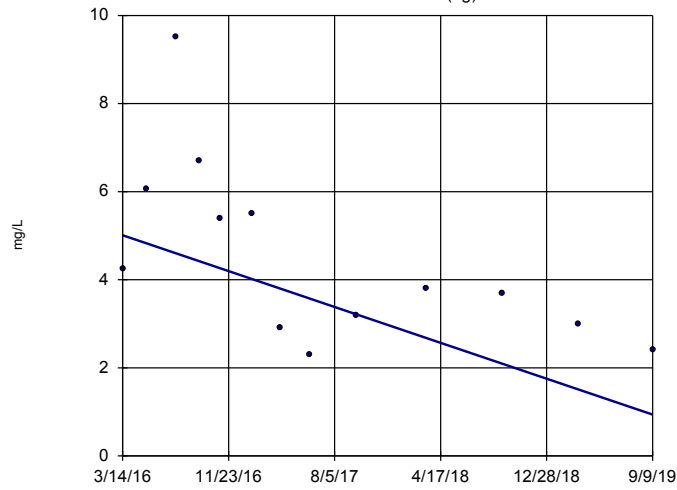
Constituent: pH Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: pH Analysis Run 1/22/2020 9:15 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
5/13/2016		6.8	7.86	
5/16/2016	7.55			7.61 (D)
7/19/2016		6.42	7.83	
7/22/2016	7.51			
7/27/2016				7.51 (D)
9/16/2016		6.19	7.75	
9/19/2016	7.52			
11/2/2016		6.36	7.77	
11/3/2016	7.56			
1/17/2017	7.59			
1/18/2017		6.16	7.65	
2/21/2017				7.76 (D)
3/27/2017	7.63			7.7 (D)
3/28/2017		5.8	7.79	
6/6/2017		5.97	7.89	
6/7/2017	7.55			
6/8/2017				7.69 (D)
7/17/2017				7.57 (D)
7/26/2017				7.63
7/27/2017				7.63
8/8/2017				7.73
8/9/2017				7.73
9/22/2017		5.77	7.8	
9/26/2017	7.59			
9/29/2017				7.7 (D)
12/28/2017			7.78 (Y)	
3/14/2018	7.6	5.85		
3/15/2018			7.66	
3/16/2018				7.49
9/12/2018		5.65	7.75	
9/14/2018	7.37			7.32
3/13/2019		5.63	7.84	
3/14/2019	7.57			7.46
9/10/2019	7.53			7.48
9/11/2019		5.53	7.75	

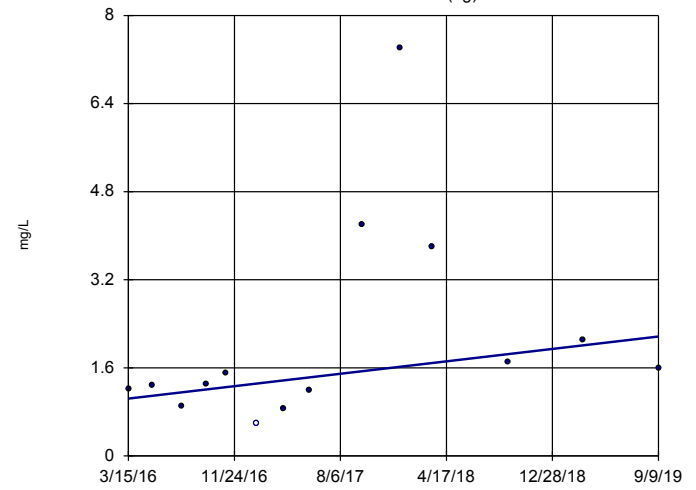
Sen's Slope Estimator
GWA-39Z (bg)



n = 13
 Slope = -1.167
 units per year.
 Mann-Kendall
 statistic = -40
 critical = -39
 Decreasing trend
 significant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Sulfate Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

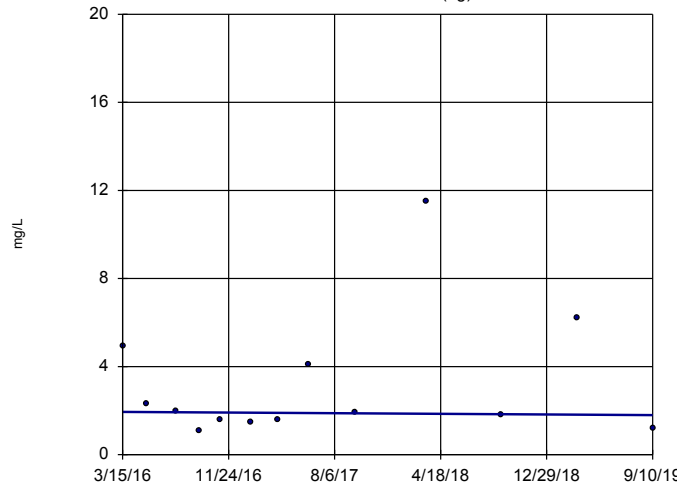
Sen's Slope Estimator
GWA-40 (bg)



n = 14
 Slope = 0.3227
 units per year.
 Mann-Kendall
 statistic = 33
 critical = 44
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Sulfate Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

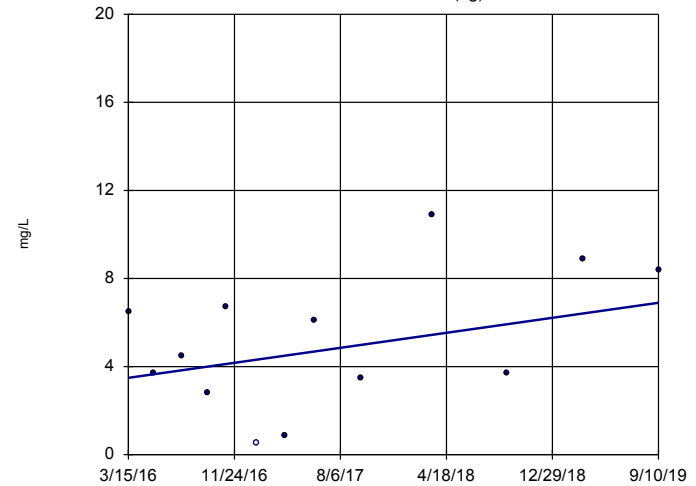
Sen's Slope Estimator
GWA-41 (bg)



n = 13
 Slope = -0.04225
 units per year.
 Mann-Kendall
 statistic = -1
 critical = -39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Sulfate Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWA-41R (bg)



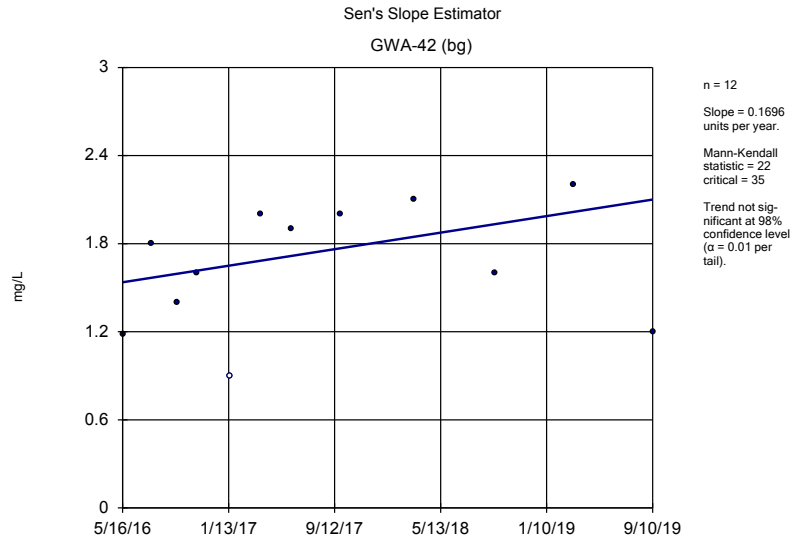
n = 13
 Slope = 0.9745
 units per year.
 Mann-Kendall
 statistic = 18
 critical = 39
 Trend not sig-
 nificant at 98%
 confidence level
 ($\alpha = 0.01$ per
 tail).

Constituent: Sulfate Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

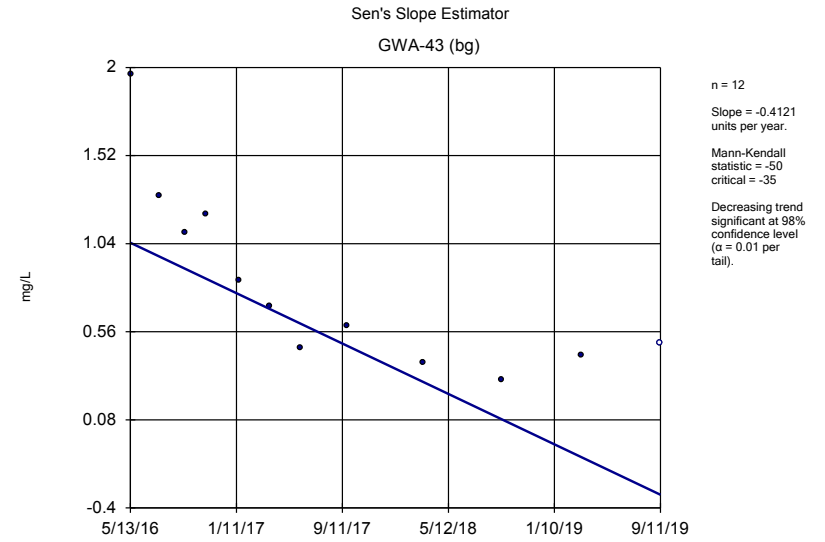
Sen's Slope Estimator

Constituent: Sulfate Analysis Run 1/22/2020 9:15 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

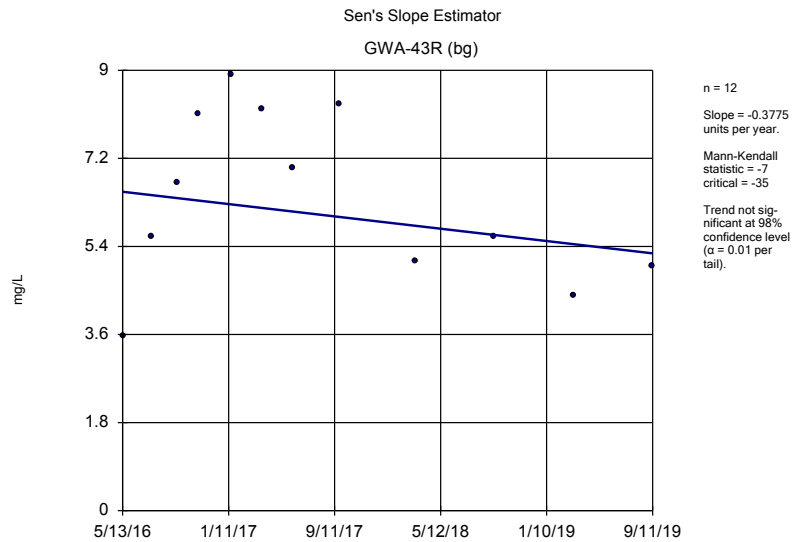
	GWA-39Z (bg)	GWA-40 (bg)	GWA-41 (bg)	GWA-41R (bg)
3/14/2016	4.2598			
3/15/2016		1.2104	4.9347	6.4987
5/11/2016	6.05	1.28		
5/12/2016			2.3	
5/13/2016				3.68
7/19/2016	9.5			
7/20/2016			2	
7/21/2016		0.91 (J)		4.5
9/15/2016	6.7		1.1	
9/19/2016		1.3		
9/21/2016				2.8
11/2/2016	5.4			
11/3/2016		1.5	1.6	6.7
1/17/2017		<1.2 (*)		<1.1 (*)
1/18/2017	5.5		1.5	
3/24/2017		0.86 (J)	1.6	
3/27/2017				0.85 (J)
3/28/2017	2.9			
5/24/2017		1.2		
6/6/2017			4.1	6.1
6/7/2017	2.3			
9/25/2017			1.9	3.5
9/26/2017	3.2	4.2		
12/28/2017		7.4 (Y)		
3/14/2018	3.8	3.8	11.5	10.9 (J)
9/12/2018	3.7	1.7	1.8	3.7
3/13/2019		2.1		
3/14/2019			6.2	8.9
3/15/2019	3			
9/9/2019	2.4	1.6		
9/10/2019			1.2	8.4



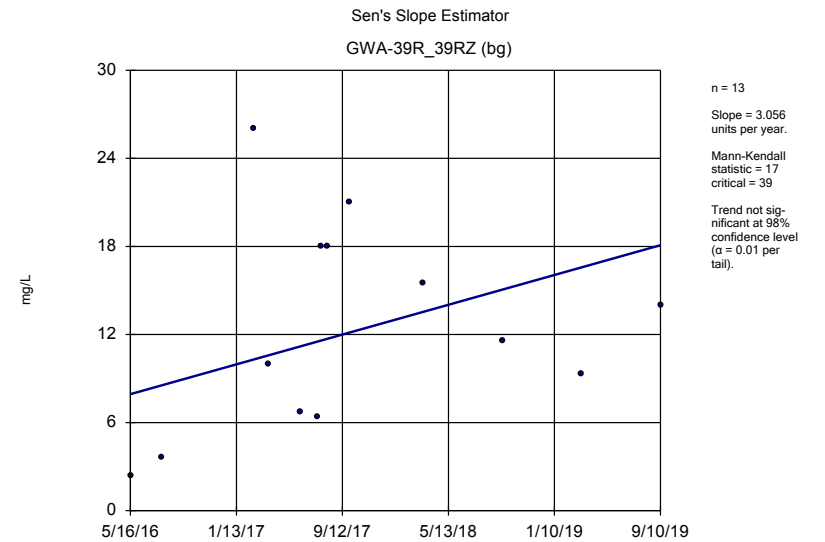
Constituent: Sulfate Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR



Constituent: Sulfate Analysis Run 1/22/2020 9:14 AM View: Sen slope background wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: Sulfate Analysis Run 1/22/2020 9:15 AM View: Sen slope background wells
 Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

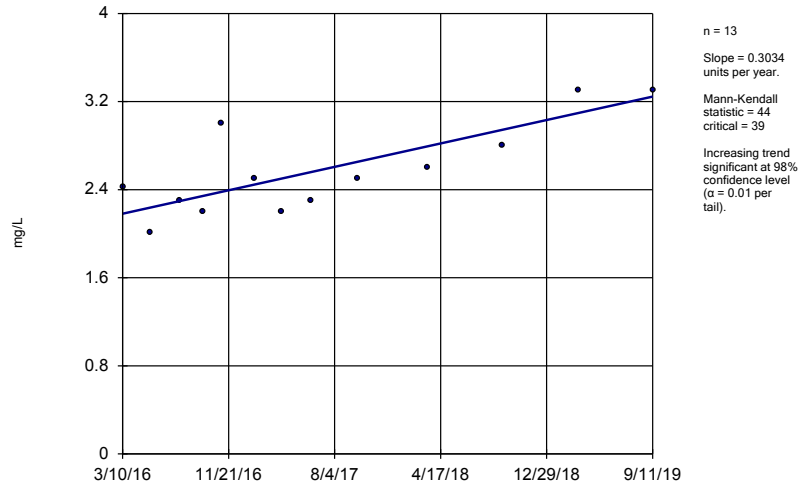
	GWA-42 (bg)	GWA-43 (bg)	GWA-43R (bg)	GWA-39R_39RZ ...
5/13/2016		1.96	3.56	
5/16/2016	1.18			2.4 (D)
7/19/2016		1.3	5.6	
7/22/2016	1.8			
7/27/2016				3.6 (D)
9/16/2016		1.1	6.7	
9/19/2016	1.4			
11/2/2016		1.2	8.1	
11/3/2016	1.6			
1/17/2017	<1.8 (*)			
1/18/2017		0.84 (J)	8.9	
2/21/2017				26 (D)
3/27/2017	2			10 (D)
3/28/2017		0.7 (J)	8.2	
6/6/2017		0.47 (J)	7	
6/7/2017	1.9			
6/8/2017				6.7 (D)
7/17/2017				6.4 (D)
7/27/2017				18 (D)
8/9/2017				18 (D)
9/22/2017		0.59 (J)	8.3	
9/26/2017	2			
9/29/2017				21 (D)
3/14/2018	2.1	0.39 (J)		
3/15/2018			5.1	
3/16/2018				15.5
9/12/2018		0.3 (J)	5.6	
9/14/2018	1.6			11.6
3/13/2019		0.43 (X)	4.4	
3/14/2019	2.2			9.3
9/10/2019	1.2			14
9/11/2019		<1	5	

Downgradient Sen Slope

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR Printed 1/22/2020, 9:28 AM

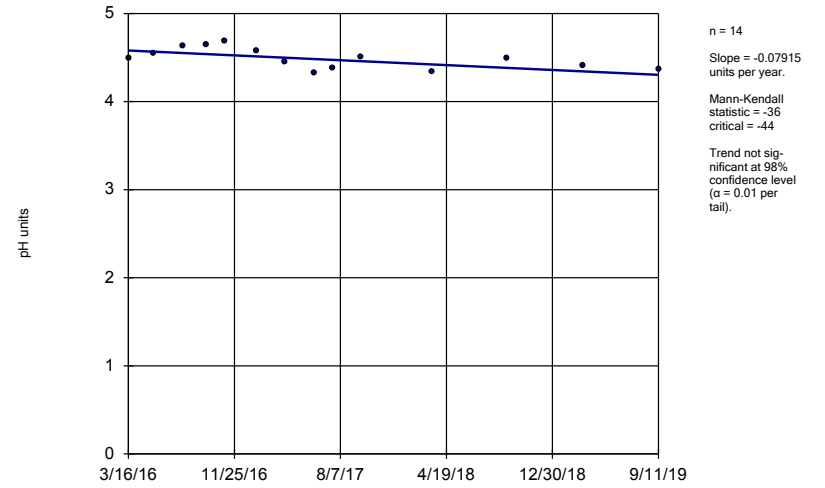
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Chloride (mg/L)	GWC-48	0.3034	44	39	Yes	13	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-44	-0.07915	-36	-44	No	14	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-45	-0.04553	-24	-44	No	14	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-48	-0.05048	-28	-44	No	14	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-49R	0.01984	11	44	No	14	0	n/a	n/a	0.02	NP
pH (pH units)	GWC-49Z	-0.2472	-56	-44	Yes	14	0	n/a	n/a	0.02	NP
Sulfate (mg/L)	GWC-49R	0.5518	40	44	No	14	0	n/a	n/a	0.02	NP

Sen's Slope Estimator
GWC-48



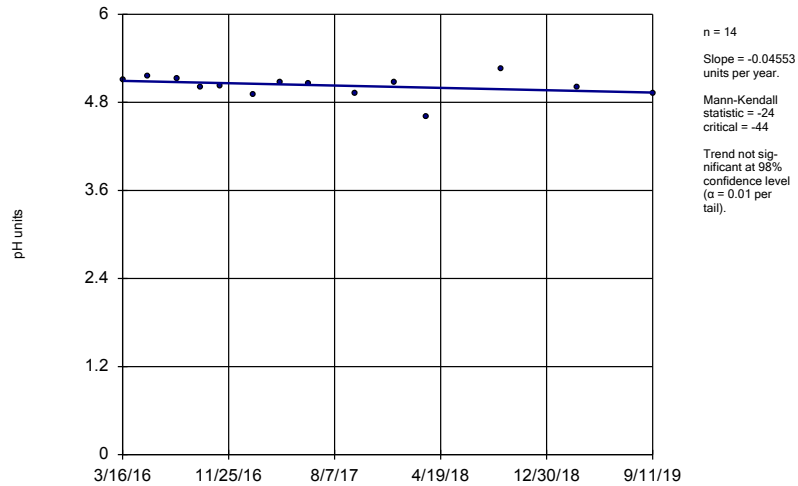
Constituent: Chloride Analysis Run 1/22/2020 9:27 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-44



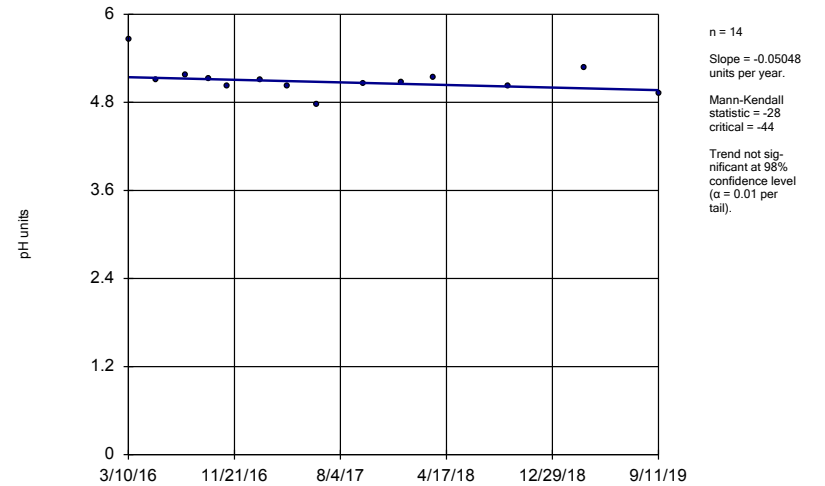
Constituent: pH Analysis Run 1/22/2020 9:27 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-45



Constituent: pH Analysis Run 1/22/2020 9:27 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-48



Constituent: pH Analysis Run 1/22/2020 9:27 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

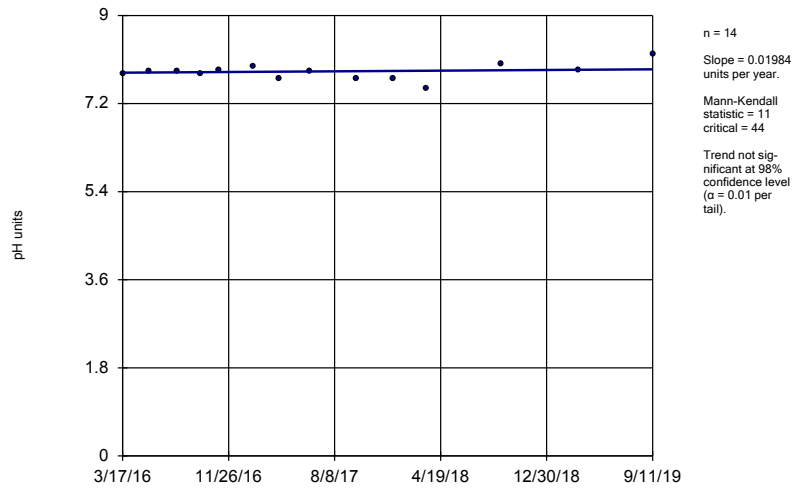
Sen's Slope Estimator

Constituent: Chloride, pH Analysis Run 1/22/2020 9:28 AM View: Sens slope compliance wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

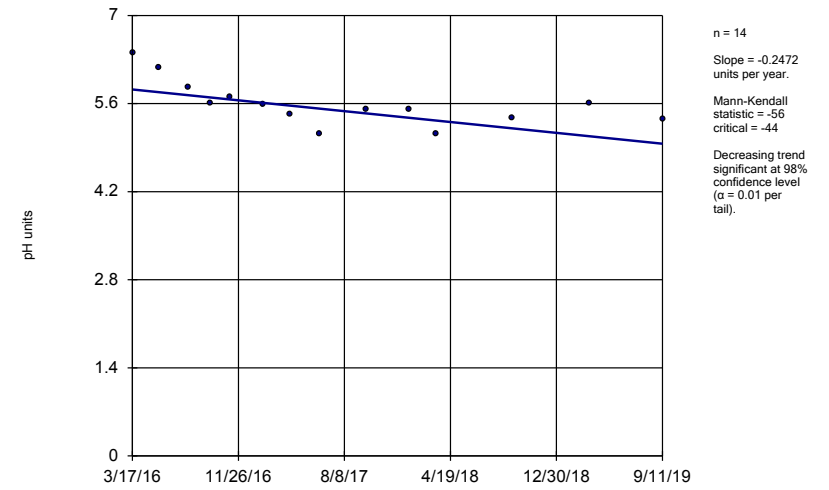
	GWC-48	GWC-44	GWC-45	GWC-48
3/10/2016	2.4266			5.66
3/16/2016		4.49	5.1	
5/16/2016		4.55	5.15	
5/17/2016	2.01			5.11
7/25/2016		4.63	5.13	
7/27/2016	2.3			5.17
9/19/2016		4.65	5	
9/20/2016	2.2			5.12
11/3/2016		4.69		
11/4/2016	3		5.02	5.03
1/19/2017		4.58		
1/23/2017	2.5		4.9	5.1
3/28/2017	2.2	4.45		5.03
3/29/2017			5.08	
6/5/2017		4.33		
6/7/2017			5.06	
6/8/2017	2.3			4.77
7/20/2017		4.38		
9/26/2017		4.51		
9/27/2017			4.92	
9/29/2017	2.5			5.06
12/28/2017				5.07 (Y)
12/29/2017			5.08 (Y)	
3/15/2018	2.6	4.34	4.6	5.14
9/12/2018		4.49		
9/13/2018	2.8		5.26	5.02
3/14/2019		4.41	5.01	
3/15/2019	3.3			5.28
9/11/2019	3.3	4.36	4.93	4.93

Sen's Slope Estimator
GWC-49R



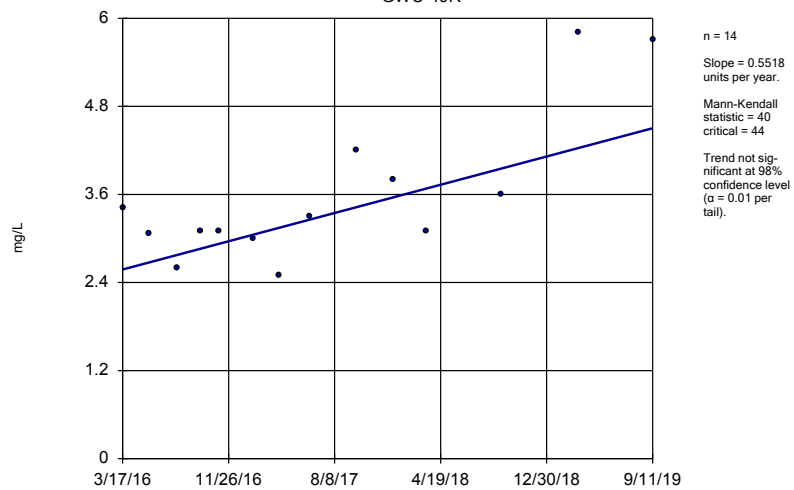
Constituent: pH Analysis Run 1/22/2020 9:27 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-49Z



Constituent: pH Analysis Run 1/22/2020 9:27 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator
GWC-49R



Constituent: Sulfate Analysis Run 1/22/2020 9:27 AM View: Sens slope compliance wells
Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

Sen's Slope Estimator

Constituent: pH, Sulfate Analysis Run 1/22/2020 9:28 AM View: Sens slope compliance wells

Plant Bowen Client: Southern Company Data: Bowen 9&10 CCR

	GWC-49R	GWC-49Z	GWC-49R
3/17/2016	7.82	6.4	3.4197
5/18/2016	7.85	6.17	3.06
7/27/2016	7.87		2.6
7/28/2016		5.85	
9/21/2016	7.8	5.61	3.1
11/4/2016	7.89		3.1
11/7/2016		5.71	
1/24/2017	7.97	5.58	3
3/29/2017	7.71		2.5
3/30/2017		5.44	
6/8/2017	7.86		3.3
6/9/2017		5.11	
9/29/2017	7.72	5.51	4.2
12/28/2017	7.71 (Y)		3.8 (Y)
1/10/2018		5.51 (Y)	
3/15/2018	7.51	5.12	3.1
9/13/2018	8.02		3.6
9/14/2018		5.38	
3/18/2019	7.89		5.8
3/19/2019		5.6	
9/11/2019	8.22	5.35	5.7

APPENDIX D
MEMORANDUM ON HYDROGEOLOGIC MONITORING PROGRAM



Memo

To: Joju Abraham, P.G.
Southern Company Services, Inc.

From: Rhonda Quinn, P.G. Wood Environment & Infrastructure Solutions, Inc.

CC: Greg Wrenn, P.E. Wood Environment & Infrastructure Solutions, Inc.

Re: Solid Waste Disposal Facility Permit No. 008-018D (LI) - Hydrogeological Monitoring Program May 1, 2019 through October 31, 2019
1/24 /2020

Background

Wood Environment & Infrastructure Solutions, Inc. (Wood) was retained by Southern Company Services, Inc. (SCS), to assist with the hydrogeological (water level) monitoring program at Georgia Power Company's Plant Bowen (Site) monofill landfill cells 1 & 2, 3 & 4, 9 & 10. The work is being conducted to comply with Georgia Department of Natural Resources Environmental Protection Division (EPD) Solid Waste Permit No. 008-018D (LI) to assist with early detection of subsurface changes that might indicate land subsidence or sinkhole formation. Groundwater level fluctuations are monitored in accordance with Section 3.6.5 of the *Plant Bowen Proposed Coal Combustion By-Product Monofill Addendum I Site Acceptability Report – Hydrogeological Assessment and Demonstration of Engineering Measures* (SCS 2004).¹

The Site utilizes In-Situ[®] Instruments, Inc. Win-Situ[®] telemetry and reporting software and pressure transducers to collect and record groundwater elevations from monitoring wells located around the perimeter of the landfill cells. At Cells 1 & 2 of the solid waste landfill, transducers are deployed in five soil wells (GWA-1 (soil/rock), GWA-3, GWC-7Z, GWC-11, GWC-13, and GWC-15) and six rock wells (GWA-2R, GWC-6RZ, GWC-8RR, GWC-11R, GWC-13R, and GWC-15R). In 2015, the program was expanded to include Cells 3 & 4 where five soil wells (GWC-18, GWA-36, GWA-37, GWA-53, and GWA-55) and eight rock wells (GWC-16R, GWC-18R, GWC-21R, GWC-24R, GWC-25R, GWA-36R, GWA-53R, and GWA-55R) are equipped with transducers. In 2016, the program was expanded further to include Cells 9 & 10 where currently six soil wells (GWA-39Z, GWA-41, GWA-43, GWC-45, GWC-47, and GWC-49Z)

and six rock wells (GWA-39RZ, GWA-41R, GWA-43R, GWC-45R, GWC-47R, and GWC-49R) are equipped with transducers. Etowah River levels for the reporting period were obtained from a U.S. Geological Survey gauge (02394670) near Cartersville, Georgia. Rainfall data for this monitoring period was collected from U.S. Geological Survey gauge (02394670) rain gage monitoring station.

Water level data are electronically logged multiple times daily by each transducer. Most logged data are uploaded after each reading via satellite telemetry to a central In-Situ® database. Automated reports are accessible via the In-Situ® database website where the telemetry data are stored and compiled. Data from wells not connected to the site telemetry system are manually downloaded directly from the transducer because the transducers are set to log and store data internally multiple times throughout each day. Water level data are monitored for unusual groundwater level fluctuations.

Maintenance Observations

During the reporting period, the following well locations (GWC-7Z, GWC-11, GWC-11R, GWC-13, GWC-13R, GWA-37, GWC-49R, and GWC-49Z) were visited on two or more occasions for maintenance, manual data downloads, battery change outs, removal of transducer or controller unit and returned to In-Situ® for repairs. The data, during this reporting period, for these transducer locations are not continuous due to transducers being offline during repairs. During the past six-month period, a transducer at location GWC-11R was returned to In-Situ® for repair. Ants infested the external battery compartment of the transducers in wells GWC-11 and GWC-11R resulting in the communication signal being interrupted for GWC-11 and data was omitted between May 29, 2019 through September 3, 2019 on Figure 1B. Ants were also observed at location GWC-13 and GWC13R which also led to intermittent signals observed on Figure 1B. Due to Net Hub adjustments, some data gaps of data were observed at location GWC-49Z from July 18, 2019 to July 25, 2019 and from July 26, 2019 to July 29, 2019. Wood has continued to update the firmware to current versions at each location since November 2018 to improve communication.

Water Level Fluctuations

Continuous groundwater level data and river stage elevations were recorded between May 1, 2019 and October 31, 2019. Reporting period hydrographs for Cells 1 & 2, 3 & 4, and 9 & 10 are shown in Figures 1A through 3B.

Table 1 lists the groundwater sampling, water level gaging and transducer maintenance activities during the reporting period and are considered known disruptions. Figures 1A through 3B show

the transducer water level data for the reporting period. Table 2 summarizes the data gaps or maintenance issues for the reporting period and recommendations for repairs and includes the most recent repairs completed up to October 31, 2019. Repairs consisted of resetting reference water elevation depth, resealing boxes, ant infestation control, and replacing power controller units and batteries. Over time the transducer elevation drifts, possibly attributed to the transducer being periodically removed for sampling, gauging or maintenance activities. To remedy this, in June 2018 through January 2019, maintenance was initiated to mark and mount the transducer cable to a fixed location such that the transducer is consistently returned to the same depth. When an adjustment is made, the reference depth to actual water elevation is re-set and the logging cycle re-started. The marking and securing of the transducers continued during this reporting period. Table 2 is a record of the maintenance completed during the reporting period.

The water levels in monitoring wells equipped with transducers exhibited similar overall trends during the reporting period. Groundwater elevations show an overall declining trend during this six month period with four increasing trends of short-duration. Two small increasing trends (one beginning July 2019, another beginning August 2019) in the groundwater elevations were in response to two significant summer rainfall events. These increases were then followed by decreasing trends and then two increasing trend events in October 2019, which mimic the Etowah River levels in response to rain events and dry conditions (lack of rainfall). Within Cells 9 & 10, monitoring wells GWA-41R and GWA-41 show the most noticeable reaction to rainfall and Etowah River hydrograph activity observed on four rain events. Some of this hydrograph response may be attributable to the fluctuations in water levels in the nearby General Service Water Pond. Groundwater in both the overburden and bedrock aquifers responded to rainfall events; however, the time to peak groundwater elevations varied between wells. During this monitoring period, the potentiometric surface of the bedrock aquifer remained above the top of competent bedrock in the instrumented monitoring wells. This higher hydrostatic pressure of the bedrock aquifer limits removal of material from the overburden that could result in subsidence issues. The observed variations in groundwater elevations are attributed to rainfall variations, or due to sampling or maintenance activities at the monitoring points. A comparison of river stage and precipitation data with recorded groundwater elevations (Figures 1A through 3B) shows that both sets of data follow similar overall patterns.

Conclusions and Recommendations

Observed disruptions in the transducer water level were found to be directly attributed to drawdown during sampling events, water level gauging, maintenance of wells, transducers, or

telemetry units, or significant rainfall events. The May 1, 2019 to October 31, 2019 hydrologic monitoring data did not show water level fluctuations attributed to subsurface changes that might be indicative of land subsidence or sinkhole formation. Based on data for the current reporting period (May 1, 2019 and October 31, 2019), Wood recommends the following actions:

- Periodically calibrate elevations to correct for transducer elevation drift.
- Perform the necessary maintenance or replacement of non-functioning transducer equipment in wells to restore function and continue with routine transducer/telemetry system maintenance to ensure that future data are consistent.
- Manually download data, monthly, when a telemetry unit is offline (i.e. not transmitting data to the remote database). This will ensure that data are being reviewed on a consistent and timely basis.
- Trim tree branches as necessary to allow more sunlight to reach the solar panels and charge batteries.
- Field check equipment to make certain insect infestation is not damaging equipment.

¹ SCS (Southern Company Services, Inc.), 2004. Plant Bowen Proposed Coal Combustion By-Product Monofill Addendum I Site Acceptability Report – Hydrogeological Assessment and Demonstration of Engineering Measures.

Table 1
Known Sampling and Gauging Events Relative to Water Level Fluctuations
May 1, 2019 through October 31, 2019
Georgia Power - Plant Bowen
Wood Project No. 6122160287

Solid Waste Disposal Cells	Well ID	Date Well Gauged	Date Well Sampled	Sampling Comments	Most Recent Transducer Network Maintenance Per Well	Comments
1&2	GWA-1	9/3/2019	9/12/2019	Groundwater CCR Event #13		
	GWA-2R	9/3/2019	9/13/2019	Groundwater CCR Event #13		
	GWA-3	9/3/2019	9/13/2019	Groundwater CCR Event #13		
	GWC-6RZ	9/3/2019	9/16/2019	Groundwater CCR Event #13		
	GWC-7Z	9/3/2019	9/13/2019	Groundwater CCR Event #13	5/9/2019	Reinstalled repaired telemetry unit
					5/29/2019	Manuel Download of Data
	GWC-8RR	9/3/2019	9/16/2019	Groundwater CCR Event #13		
	GWC-11	9/3/2019	9/17/2019	Groundwater CCR Event #13	5/29/2019 to 9/3/2019	External battery compartment was infested with ants causing interruption in data recording and data omission. 5/29 and 9/3 Manuel Download of Data and water level reference reset
	GWC-11R	9/3/2019	9/17/2019	Groundwater CCR Event #13	5/29/2019 to 9/3/2019	External battery compartment was infested with ants causing interruption in data recording and data omission. 5/29 and 9/3 Manuel Download of Data and water level reference reset
	GWC-13	9/3/2019	9/18/2019	Groundwater CCR Event #13	5/29/2019	External battery compartment was infested with ants causing interruption in data recording and data omission. Manuel Download of Data
	GWC-13R	9/3/2019	no longer sampled		5/29/2019	External battery compartment was infested with ants causing interruption in data recording and data omission. Manuel Download of Data
	GWC-13RZ	9/3/2019	9/18/2019	Groundwater CCR Event #13		Well GWC-13RZ does not have a transducer, but gauging and sampling in this well influences adjacent well GWC-13R which is equipped with a transducer. GWC-13RZ was sampled on the dates shown.
	GWC-15 and GWC-15Z	9/3/2019 (GWC-15 and GWC-15Z)	9/17/2019	Groundwater CCR Event #13		GWC-15 is equipped with a transducer. GWC-15 is no longer sampled, but is measured for water levels. Nearby well GWC-15Z is not equipped with a transducer, but gauging and sampling in this well influences adjacent well GWC-15. GWC-15Z was sampled on the dates shown.
GWC-15R	9/3/2019	9/17/2019	Groundwater CCR Event #13			
3&4	GWC-16R	9/3/2019	9/9/2019	Groundwater CCR Event #13		
	GWC-18	9/3/2019	9/9/2019	Groundwater CCR Event #13		
	GWC-18R	9/3/2019	9/6/2019	Groundwater CCR Event #13		
	GWC-21R	9/3/2019	6/18/2019, 9/6/2019 and 10/21/2019	Confirmation Sampling Event #12, Groundwater CCR Event #13, Confirmation Sampling Event #13		
	GWC-24R	9/3/2019	9/5/2019	Groundwater CCR Event #13		
	GWC-25R	9/3/2019	9/5/2019	Groundwater CCR Event #13		
	GWA-36	9/3/2019	9/4/2019	Groundwater CCR Event #13		
	GWA-36R	9/3/2019	9/4/2019	Groundwater CCR Event #13		
	GWA-37	9/3/2019	9/4/2019	Groundwater CCR Event #13	9/3/2019	Cleaned out rain gage tipping buckets and moved buckets to other side of pole away from solar panel. Manual download of data.
	GWA-53	9/3/2019	9/5/2019	Groundwater CCR Event #13		
	GWA-53R	9/3/2019	9/5/2019	Groundwater CCR Event #13		
	GWA-55	9/3/2019	9/5/2019	Groundwater CCR Event #13		
GWA-55R	9/3/2019	9/5/2019	Groundwater CCR Event #13			

Table 1
Known Sampling and Gauging Events Relative to Water Level Fluctuations
May 1, 2019 through October 31, 2019
Georgia Power - Plant Bowen
Wood Project No. 6122160287

Solid Waste Disposal Cells	Well ID	Date Well Gauged	Date Well Sampled	Sampling Comments	Most Recent Transducer Network Maintenance Per Well	Comments
9 & 10	GWA-39RZ	9/3/2019	9/10/2019	Groundwater CCR Event #13	5/9/2019	Manuel Download of Data
	GWA-39Z	9/3/2019	9/9/2019	Groundwater CCR Event #13	5/9/2019	Manuel Download of Data
	GWA-41	9/3/2019	9/10/2019	Groundwater CCR Event #13	9/3/2019	field check
	GWA-41R	9/3/2019	9/10/2019	Groundwater CCR Event #13	9/3/2019	field check
	GWA-42	9/3/2019	9/10/2019	Groundwater CCR Event #13		
	GWA-43	9/3/2019	9/11/2019	Groundwater CCR Event #13		
	GWA-43R	9/3/2019	9/11/2019	Groundwater CCR Event #13		
	GWC-45	9/3/2019	9/11/2019 and 10/21/2019	Groundwater CCR Event #13 and Confirmation Sampling Event #13		
	GWC-45R	9/3/2019	9/11/2019	Groundwater CCR Event #13		
	GWC-47	9/3/2019	9/12/2019	Groundwater CCR Event #13		
	GWC-47R	9/3/2019	9/11/2019	Groundwater CCR Event #13		
	GWC-49R	9/3/2019	9/11/2019	Groundwater CCR Event #13	5/10/2019	field check
					6/25/2019	field check
					7/26/2019	field check
					9/3/2019	Manuel Download of Data
	GWC-49Z	9/3/2019	9/11/2019	Groundwater CCR Event #13	5/9/2019	Manuel Download of Data
9/3/2019					Manuel Download of Data	

Prepared by/Date: TRK_11/18/2019
Checked by/Date: RNQ_11/20/2019

Table 2
Maintenance Information and Recommendations
May 1, 2019 to October 31, 2019
Georgia Power - Plant Bowen
Project Number: 6122-16-0287

Cell	Monitoring Well	Date	Maintenance Information	Recommendations
Cells 1&2	GWA-1		No functional issues during this reporting period.	No action needed
Cells 1&2	GWA-2R		No functional issues during this reporting period.	No action needed
Cells 1&2	GWA-3		No functional issues during this reporting period.	No action needed
Cells 1&2	GWC-6RZ		No functional issues during this reporting period.	No action needed
Cells 1&2	GWC-7Z	5/9/2019	Reinstalled repaired telemetry unit	No action needed
Cells 1&2	GWC-8RR		No functional issues during this reporting period	No action needed
Cells 1&2	GWC-11	5/29/2019	Ants infesting external battery compartment are causing problems with data recording	Field check next visit
Cells 1&2	GWC-11R	5/29/2019	Ants infesting external battery compartment are causing problems with data recording. New transducer installed.	Field check next visit
Cells 1&2	GWC-13	5/29/2019	Ants infesting external battery compartment are causing problems with data recording	Field check next visit
Cells 1&2	GWC-13R	5/29/2019	Ants infesting external battery compartment are causing problems with data recording	Field check next visit
Cells 1&2	GWC-15		No functional issues during this reporting period	No action needed
Cells 1&2	GWC-15R		No functional issues during this reporting period	No action needed
Cells 3&4	GWC-16R		No functional issues during this reporting period	Field check next visit to check water level
Cells 3&4	GWC-18		No functional issues during this reporting period	No action needed
Cells 3&4	GWC-18R		No functional issues during this reporting period	No action needed
Cells 3&4	GWC-21R		No functional issues during this reporting period	No action needed
Cells 3&4	GWC-24R		No functional issues during this reporting period	No action needed
Cells 3&4	GWC-25R		No functional issues during this reporting period	No action needed
Cells 3&4	GWA-36		No functional issues during this reporting period	No action needed
Cells 3&4	GWA-36R		No functional issues during this reporting period	No action needed
Cells 3&4	GWA-37		No functional issues during this reporting period	Check periodically
		9/3/2019	Cleaned out tipping buckets on rain gage located at GWA-37 and relocated gage away from solar panel	
Cells 3&4	GWA-53		No functional issues during this reporting period	No action needed
Cells 3&4	GWA-53R		No functional issues during this reporting period	No action needed
Cells 3&4	GWA-55		No functional issues during this reporting period	No action needed
Cells 3&4	GWA-55R		No functional issues during this reporting period	No action needed
Cells 9&10	GWA-39RZ		No functional issues during this reporting period	No action needed
Cells 9&10	GWA-39Z		No functional issues during this reporting period	No action needed
Cells 9&10	GWA-41		No functional issues during this reporting period	No action needed
Cells 9&10	GWA-41R		No functional issues during this reporting period	No action needed
Cells 9&10	GWA-42		No longer equipped with transducer	Not needed in monitoring network
Cells 9&10	GWA-43		No functional issues during this reporting period	No action needed
Cells 9&10	GWA-43R		No functional issues during this reporting period	No action needed
Cells 9&10	GWC-45		No functional issues during this reporting period	No action needed
Cells 9&10	GWC-45R		No functional issues during this reporting period	No action needed
Cells 9&10	GWC-47		No functional issues during this reporting period	No action needed
Cells 9&10	GWC-47R		No functional issues during this reporting period	No action needed
Cells 9&10	GWC-49R	9/4/2019	Net hub restored so telemetry signal is working	No action needed
Cells 9&10	GWC-49Z	9/3/2019	Manuel download of data	No action needed
	River		Not updating on website since August 12, 2015. The status of this transducer is unknown.	Check with GPC/SCS on the status of this transducer. A USGS river gauge is currently being used as the source of the river water level data.

Notes:

TOC - Top of Casing

Prepared by/Date: TRK_11/18/19

Checked by/Date: RNQ_11/20/19

Figure 1A - Cell 1&2 Transducer Level Monitoring

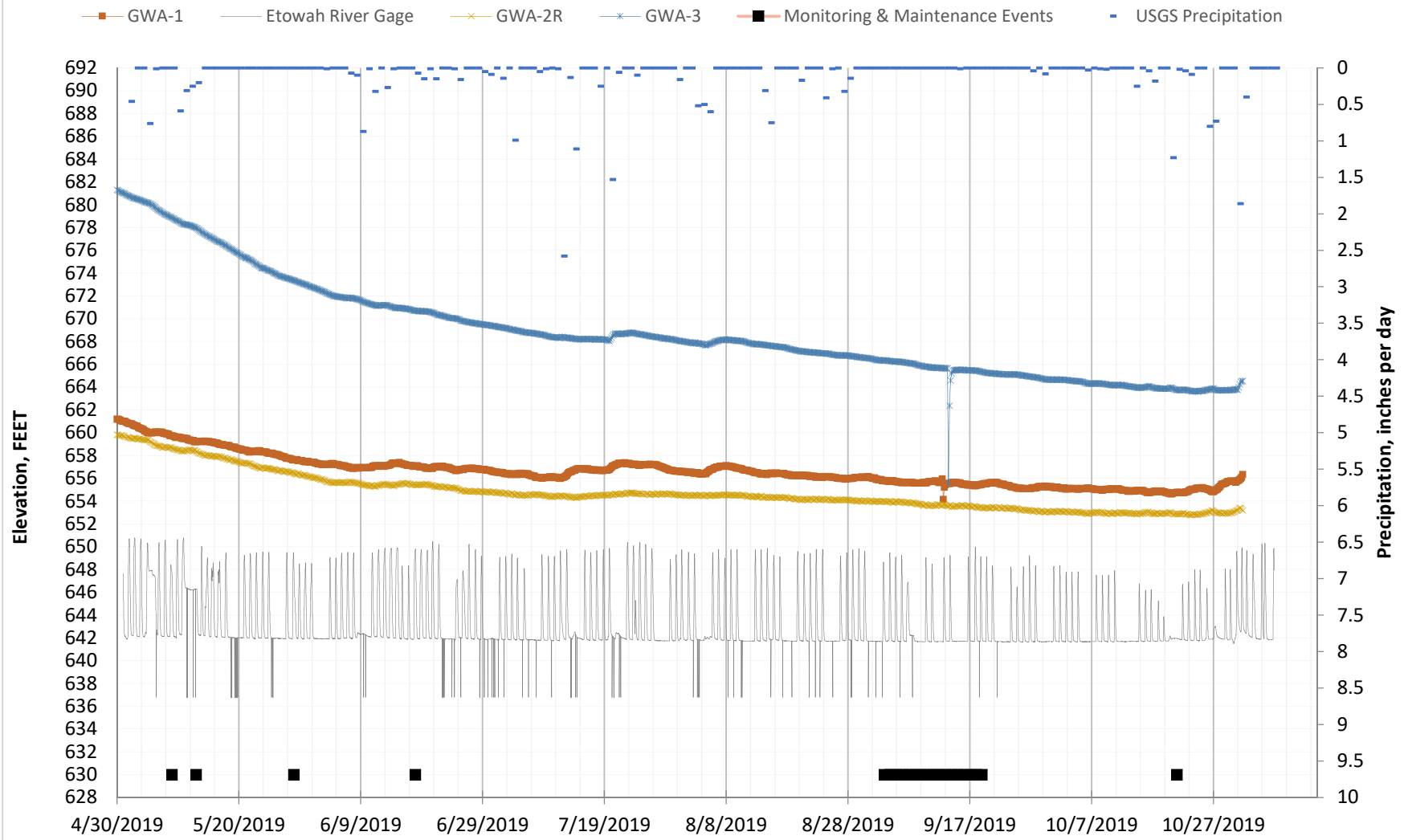


Figure 1B - Cell 1&2 Transducer Level Monitoring

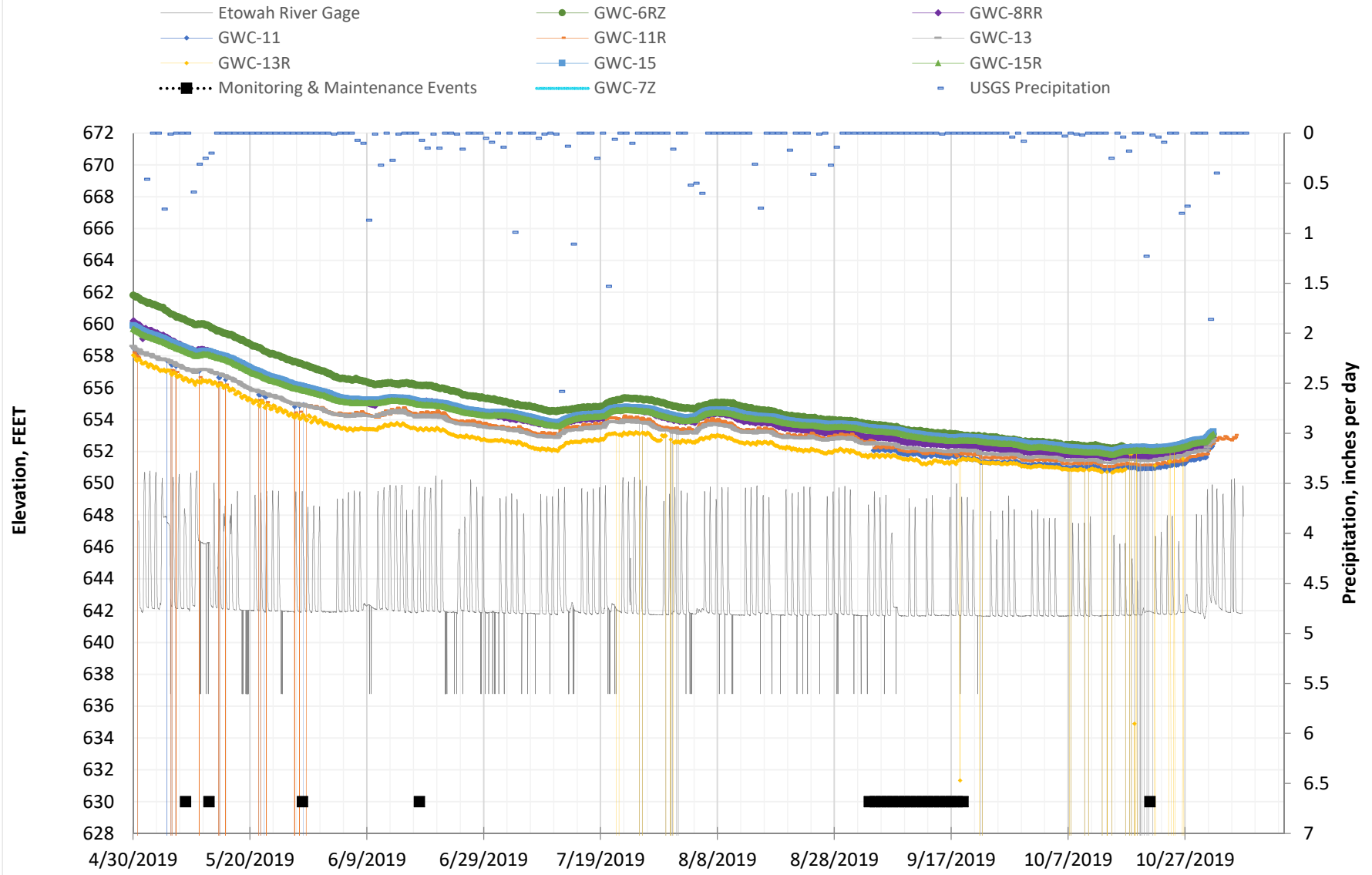


Figure 2A Cell 3 & 4 Transducer Level Monitoring

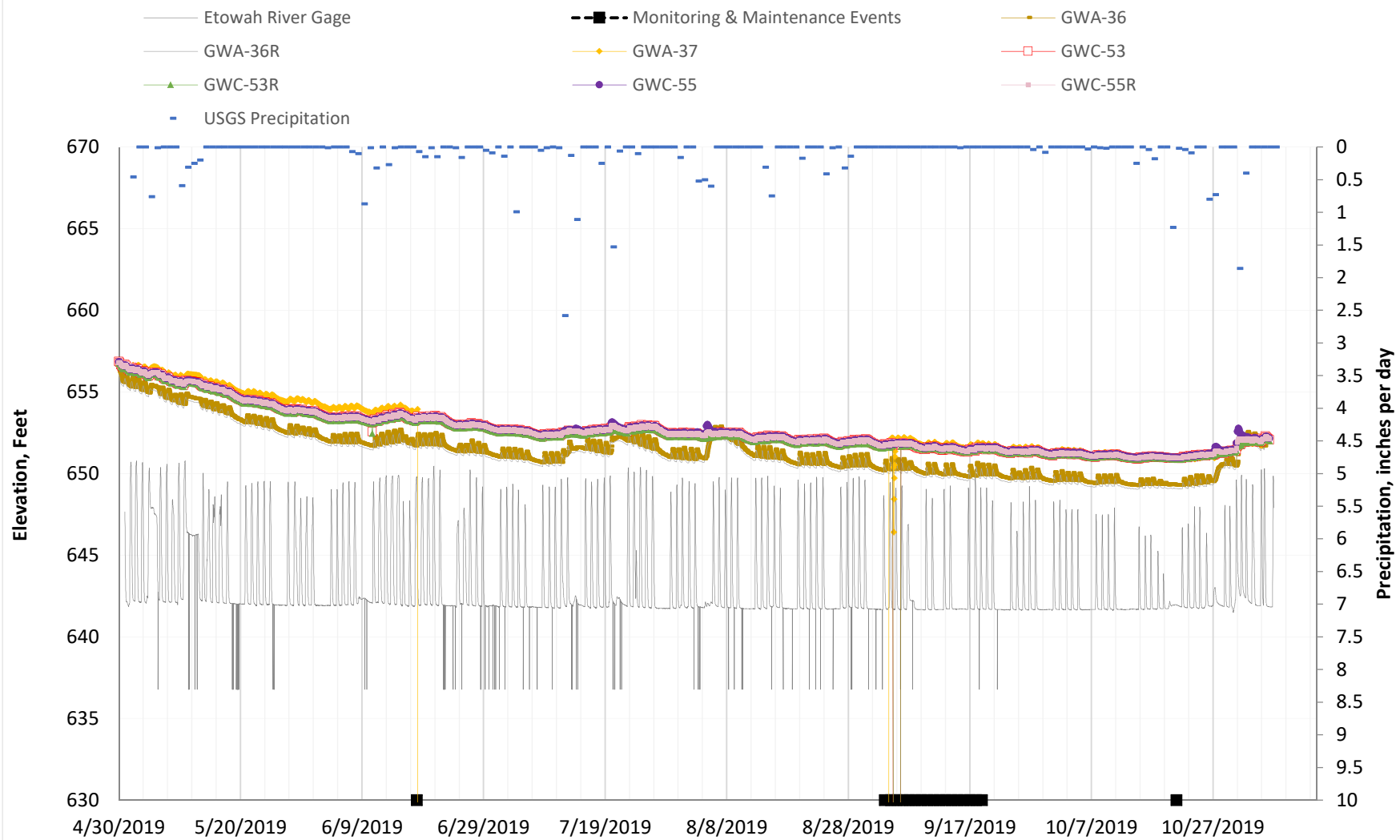


Figure 2B Cell 3 & 4 Transducer Level Monitoring

- Etowah River Gage
- Monitoring & Maintenance Events
- GWC-16R
- GWC-18
- GWC-24R
- GWC-25R
- USGS 02394670 Precipitation_2
- ×— GWC-18R
- ×— GWC-21R
- USGS Precipitation

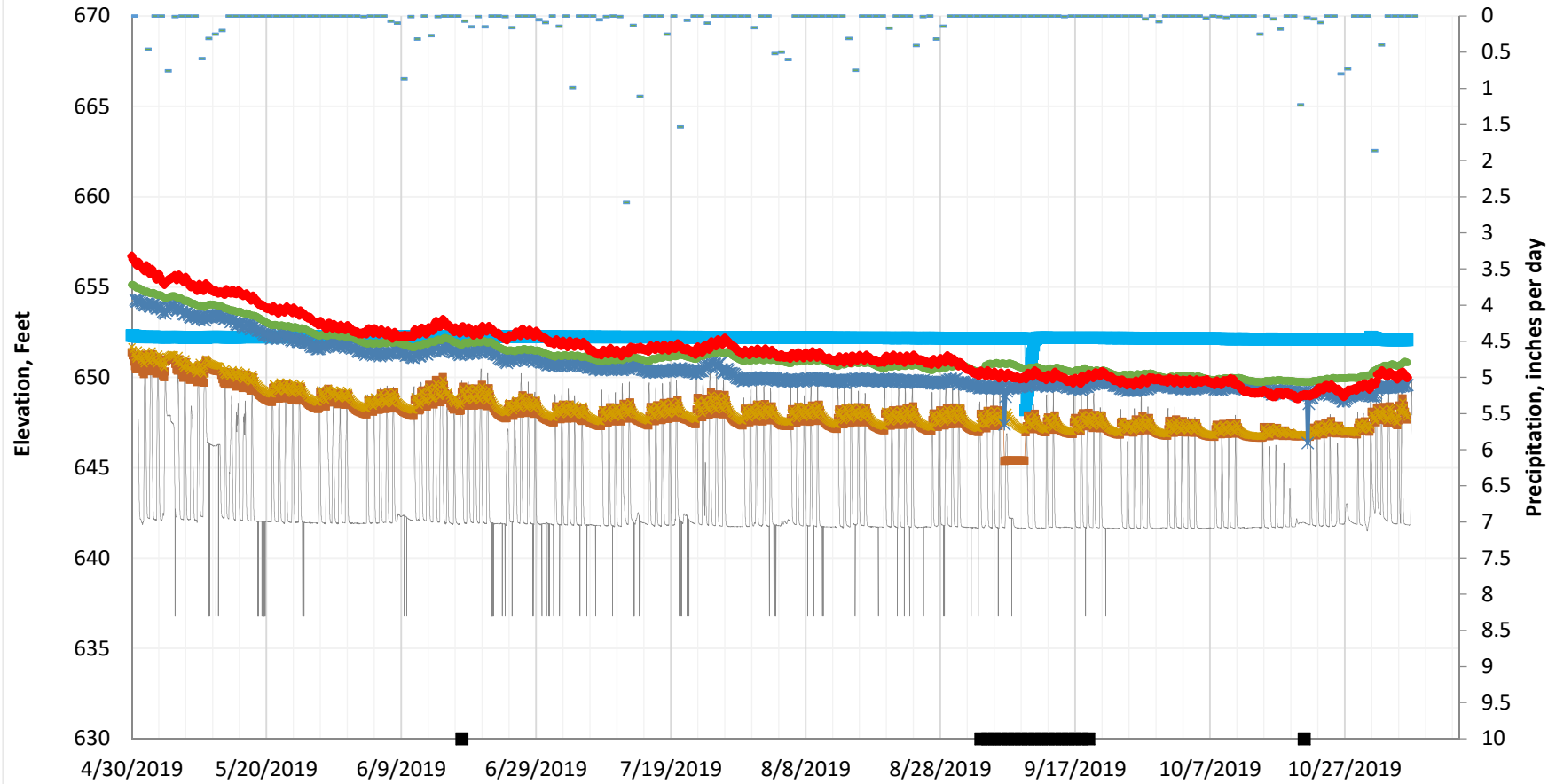


Figure 3A Cell 9 & 10 Transducer Level Monitoring

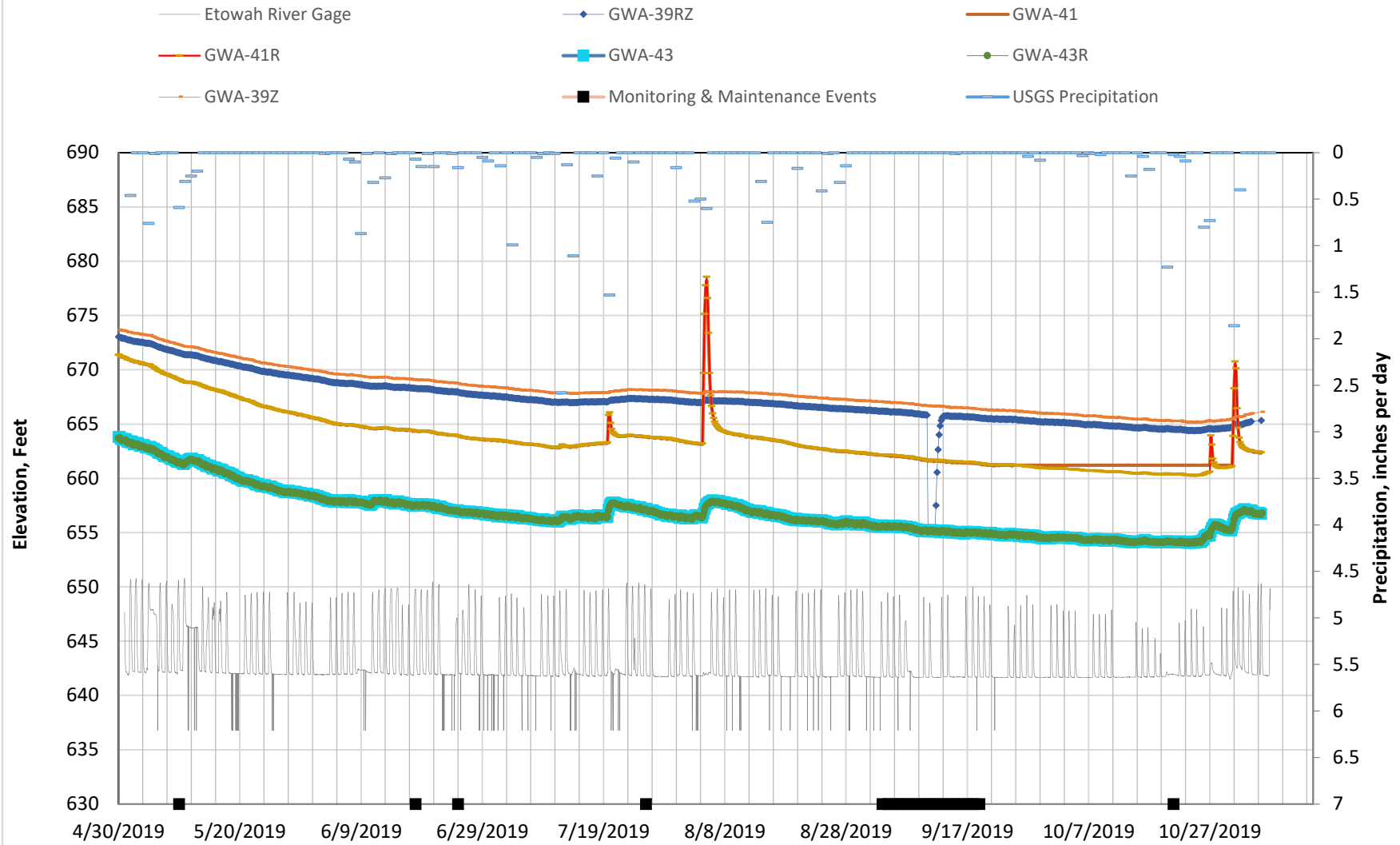
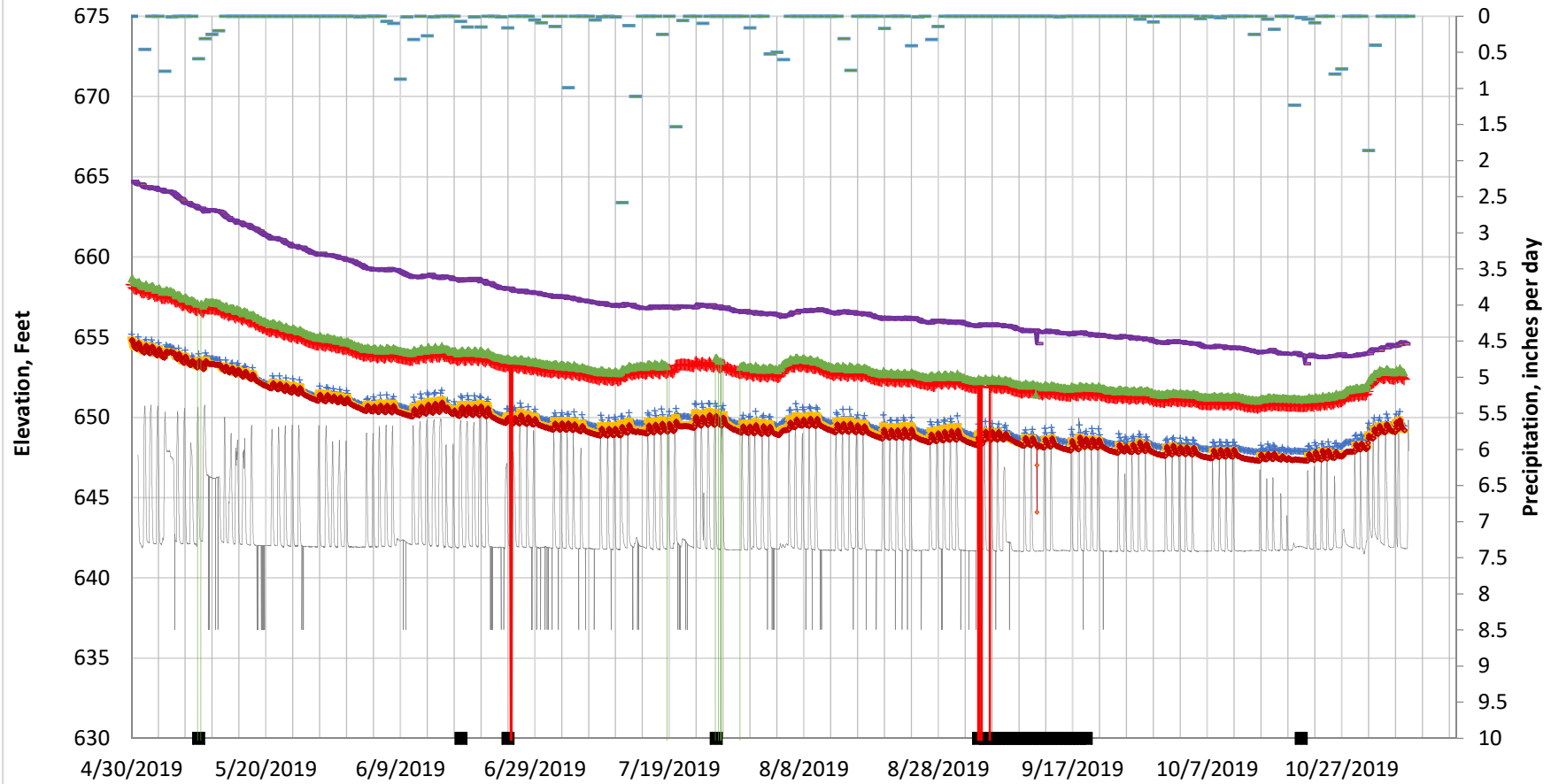


Figure 3B Cell 9 & 10 Transducer Level Monitoring

- Etowah River Gage
- GWC-45
- GWC-49R
- USGS Precipitation
- Monitoring & Maintenance Events
- GWC-47
- GWC-49Z
- GWC-45R
- GWC-47R
- USGS Precipitation 2394670_2



APPENDIX E
ALTERNATE SOURCE DEMONSTRATIONS

Alternate Source Demonstration

Plant Bowen

Cells 3 & 4

Solid Waste Disposal Facility

Permit No. 008-018D (LI)

Prepared for:



Date: August 30, 2017

Prepared by: Amec Foster Wheeler Environment & Infrastructure, Inc.
1075 Big Shanty Road NW, Suite 100, Kennesaw, Georgia 30144

Project No.: 6122-16-0287



amec
foster
wheeler

August 30, 2017

Mr. David Hamilton
Georgia Power Company – Environmental Affairs
241 Ralph McGill Blvd
Atlanta, Georgia 30308

**Subject: Alternate Source Demonstration
Plant Bowen - Solid Waste Disposal Facility Landfill Cells 3 & 4
Amec Foster Wheeler Project 6122-09-0287**

Dear Mr. Hamilton:

Amec Foster Wheeler Environment & Infrastructure, Inc. is pleased to submit the attached Alternate Source Demonstration for the Plant Bowen - Solid Waste Disposal Facility Landfill Cells 3 & 4 in Cartersville, Georgia. The enclosed report is for your submittal to the Georgia Environmental Protection Division. This report was prepared in accordance with 391-3-4.14.23c of the Georgia Solid Waste Management Rules

We appreciate the opportunity to provide environmental consulting services to the Georgia Power Company and Southern Company Services. Please feel free to contact us at (770) 421-3400 if you have questions or require additional information.

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.

Rhonda N. Quinn, P.G.
Senior Geologist

Gregory J. Wrenn, P.E.
Associate Engineer/Project Manager

Enclosure: Alternate Source Demonstration for the Plant Bowen - Solid Waste Disposal Facility
Landfill Cells 3 & 4 (3 Paper & 3 PDF copies)

cc: Mr. Joju Abraham, SCS (via e-mail)

Professional Ground Water Scientist Certification

I certify that I am a qualified ground-water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in ground-water hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding ground-water monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction.



Rhonda N. Quinn, P.G.
Registered Professional Geologist
Georgia Registration #1031

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	ALTERNATE SOURCE DEMONSTRATION	2
2.1	Evaluation of a Metals Impact	2
2.2	Other Naturally-Occurring Sources of Antimony and Nickel.....	5
2.2.1	Natural Occurrence.....	5
2.2.2	Comparison to Upgradient Concentrations	5
2.2.3	Temporal Concentration Variability	6
2.2.4	Alternative Statistical Evaluation	7
2.3	Conclusion and Recommendations	7

LIST OF FIGURES

Figure 1	Plant Bowen Solid Waste Disposal Facilities Monitoring Well Network March 2017
Figure 2	Antimony and Nickel Trends in Wells GWC-16R and GWC-21R
Figure 3	Comparison of Antimony in Downgradient Wells Screened in the Similar Interval as Wells GWC-16R and GWC-21R
Figure 4	Box Plot for Antimony, Total

LIST OF TABLES

Table 1	Analytical Data Summary – Cells 3 & 4 (March 2017)
Table 2	Antimony Concentrations
Table 3	Nickel Concentrations

LIST OF APPENDICES

Appendix A	Statistical Evaluation Using Upper Simultaneous Limit
------------	---

1.0 INTRODUCTION

This Alternate Source Demonstration (ASD) has been prepared in accordance with 391-3-4.14.23c of the Georgia Solid Waste Management Rules to support the position that statistically significant increases (SSIs) are a result of the natural variability in groundwater quality and not a release from the landfill cells.

Georgia Power Company's (GPC) Plant Bowen solid waste disposal facility is located in south Bartow County off State Highway 113, approximately 7 miles west-southwest of Cartersville and 20 miles southeast of Rome. The disposal facility is approximately 300 acres located on a previously undeveloped, contiguous portion of the plant property. Plant Bowen has four coal burning units equipped with flue gas desulfurization (FGD) technology. The disposal facility (**Figure 1: Plant Bowen Solid Waste Disposal Facilities Monitoring Well Network March 2017**) receives coal combustion by-products, coal ash and gypsum, from coal-burning and FGD processes at the site.

The Plant Bowen solid waste disposal facility is operated in accordance with Georgia Environmental Protection Division's (EPD) Permit No. 008-018D (LI). Groundwater monitoring is conducted as per the permit requirements specified in the Design and Operation (D&O) plan. This includes semi-annual groundwater sampling and continuous groundwater level measurements at the site. In addition, background sampling for the U.S. Environmental Protection Agency's (USEPA) Coal Combustion Residuals (CCR) Rule has been conducted from February 2016 through June 2017.

In March and April 2017, the first semi-annual groundwater monitoring event for 2017 was conducted in accordance with the solid waste permit monitoring requirements. Antimony was detected in Cells 3 & 4 downgradient bedrock monitoring wells GWC-16R and GWC-21R at concentrations of 0.0187 and 0.0058 mg/L, respectively. These concentrations indicated an initial statistically significant increase (SSI) above the interwell prediction limit, constructed from upgradient bedrock wells at Cells 3 & 4, of 0.0046 mg/L. The prediction limit for antimony at Cells 3 & 4 is less than the established maximum contaminant level (MCL) of 0.006 mg/L. Nickel was detected in well GWC-16R at a concentration of 0.0111 mg/L, resulting in an initial SSI which was slightly above the interwell prediction limit of 0.01 mg/L constructed from upgradient bedrock wells at Cells 3 & 4. The prediction limit for nickel at Cells 3 & 4 is less than the established MCL of 0.1 mg/L.

2.0 ALTERNATE SOURCE DEMONSTRATION

The ASD is presented in two parts. The first part is an evaluation of whether or not the antimony and nickel concentrations are an indication of a release from Cells 3 & 4. The second part is an evaluation of other sources, besides Cells 3 & 4, that are contributing to the antimony and nickel concentration above their respective interwell prediction limits.

2.1 Evaluation of a Metals Impact

Per the Georgia Solid Waste Management Rules, to evaluate if the detection(s) of naturally-occurring metals in groundwater downgradient of a disposal unit are an indication of a release, concentrations are compared to statistically-derived levels based on concentrations from background or upgradient wells. A statistically significant increase (SSI) over background levels is not the exclusive criteria for determining a metals impact to groundwater downgradient of a landfill cell. Other factors need to be evaluated to discern if there is evidence of an impact from the landfill cell. A review of the GWC-16R and GWC-21R data indicates the following:

- Construction of disposal Cells 3 & 4 was completed in February 2015 and includes a liner system to prevent waste materials from leaching into underlying groundwater.
- An impact from a landfill cell would typically be expected to result in SSIs of multiple metals concentrations. In March 2017 only antimony and nickel concentrations in wells GWC-16R (antimony and nickel) and GWC-21R (antimony) were above background levels. No other metals concentrations were above background levels in these two wells or in other Cells 3 & 4 downgradient wells, see **Table 1: Analytical Data Summary – Cells 3 & 4 (March 2017)**. All other target metals are present at low concentrations, most of which are present at concentrations below the analytical reporting limit.
- The placement of waste in Cells 3 & 4 began February 2015 and continues to the present. Because the size of the source is increasing over time, which would add more constituents to the groundwater, concentration trends would be expected to increase accordingly if the release was from the landfill cells. As indicated on **Figure 2: Antimony and Nickel Trends in Wells GWC-16R and GWC-21R**, the antimony concentration in GWC-16R is variable over time and does not show an increasing trend indicative of a release. Nickel was detected in GWC-16R and upgradient wells GWA-36R, GWA-37, and GWA-38 prior to waste placement. The nickel concentration in well GWC-16R has decreased since the placement of waste began, thus indicating that the waste is not the source and that there is not an on-going release. The well GWC-21R antimony concentrations also do not show an increasing trend. A comparison of the patterns of concentration trends do not show a correlation between the two metals (nickel decreasing while antimony varies up and down) nor is there consistency of patterns between the two wells as would be expected if the waste cell was the source (**Figure 2**).
- **Figure 3 Comparison of Antimony in Downgradient Wells Screened in the Same Interval as Wells GWC-16R and GWC-21R** shows the antimony concentration time-trends of Cells 3 & 4 downgradient wells (GWC-16R, GWC-21R, GWC-17R, GWC-18, GWC-20R, GWC-23R, and GWC-24R) which are screened across similar elevations (652 to 631 feet, msl). Well GWC-21R is located over 1100 feet to the east of GWC-16R, as shown on **Figure 1** the wells are located on opposite corners of the Cell 3 & 4 area. Well GWC-17R is located about 230 feet east of GWC-16R and well GWC-20R is located about

260 feet west of well GWC-21R. If there had been an antimony impact from the waste placed in Cells 3 & 4, antimony would be expected to be detected at a similar frequency in the adjacent wells GWC-17R and GWC-20R (which were mostly non-detect for antimony over time) as is reported in wells GWC-16R and GWC-21R. As shown on **Figure 3** the GWC-17R and GWC-20R trends do not have the same pattern as GWC-16R and GWC-21R.

The above lines of evidences, namely, (1) a lined landfill designed to limit leaching, (2) a lack of other metals showing SSI, (3) an inconsistent pattern of the detection between antimony and nickel, and (4) an inconsistent detection pattern with other metals to the detection of antimony and nickel do not indicate a release of antimony and nickel to the groundwater downgradient from Cells 3 & 4. Rather, the initial SSIs of antimony and nickel in wells GWC-16R and GWC-21R likely reflect naturally-occurring sources in the geological formation and natural variability of groundwater chemistry underlying the site.

Table 1. Analytical Data Summary – Cells 3 & 4 (March 2017)

Wells	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
	<i>MCL/ SMCL</i>	<i>0.006*</i>	<i>0.01*</i>	<i>2.0*</i>	<i>0.004*</i>	<i>0.005*</i>	<i>0.1*</i>	<i>N/R</i>	<i>1.0 ***</i>	<i>0.015 ***</i>	<i>0.002*</i>	<i>0.1*</i>	<i>0.05*</i>	<i>0.1 **</i>	<i>0.002*</i>	<i>N/R</i>	<i>5.0 **</i>
Overburden Interwell Prediction Limits		0.0052	0.0062	0.03536	0.01192	0.001337	0.01598	0.02179	0.022	0.01822	0.00025	0.03164	0.005346	0.005352	0.0005376	0.005166	0.4687
Bedrock Interwell Prediction Limits		0.0046	0.0162	0.071	0.0032	0.0009843	0.036	0.005	0.0125	0.0069	0.00025	0.01	0.01	0.01	0.0005598	0.0279	0.44
GWA-36	3/15/2017	0.0004 (J)	< 0.005	0.0121	0.0002 (J)	0.0013	0.0007 (J)	< 0.01	0.0008 (J)	0.0002 (J)	< 0.0005	0.0142	< 0.01	< 0.01	0.00004 (J)	< 0.01	0.382
GWA-36R	3/14/2017	< 0.003	< 0.005	0.02	0.0001 (J)	0.0001 (J)	0.0008 (J)	< 0.01	0.0003 (J)	0.0003 (J)	< 0.0005	0.0007 (J)	< 0.01	< 0.01	< 0.001	< 0.01	0.0401
GWA-37	3/14/2017	0.003	0.0005 (J)	0.009 (J)	< 0.003	0.00007 (J)	0.0006 (J)	0.0009 (J)	0.0085 (J)	0.0001 (J)	< 0.0005	0.0087 (J)	< 0.01	< 0.01	< 0.001	< 0.01	0.0042 (J)
GWA-38	3/23/2017	< 0.003	< 0.005	0.0128	< 0.003	0.0001 (J)	0.0016 (J)	0.0018 (J)	< 0.025	0.0001 (J)	< 0.0005	0.0022 (J)	< 0.01	< 0.01	< 0.001	< 0.01	0.0049 (J)
GWA-51RZ	3/15/2017	0.0006 (J)	0.0006 (J)	0.0172	< 0.003	0.0001 (J)	< 0.01	< 0.01	< 0.025	< 0.005	< 0.0005	< 0.01	0.0056 (J)	< 0.01	0.00004 (J)	< 0.01	< 0.01
GWA-52	3/15/2017	< 0.003	< 0.005	0.0202	< 0.003	0.0001 (J)	0.0014 (J)	< 0.01	< 0.025	< 0.005	< 0.0005	0.0005 (J)	< 0.01	< 0.01	0.00004 (J)	< 0.01	0.0013 (J)
GWA-53	3/16/2017	< 0.003	0.0005 (J)	0.0129	< 0.003	0.0001 (J)	0.001 (J)	< 0.01	< 0.025	0.0001 (J)	< 0.0005	0.0005 (J)	< 0.01	< 0.01	0.00004 (J)	< 0.01	0.0029 (J)
GWA-53R	3/16/2017	0.0029 (J)	0.0005 (J)	0.0145	< 0.003	< 0.001	0.0011 (J)	< 0.01	< 0.025	0.00005 (J)	< 0.0005	< 0.01	< 0.01	< 0.01	< 0.001	< 0.01	0.0018 (J)
GWA-54	3/15/2017	< 0.003	0.0006 (J)	0.0262	< 0.003	0.00007 (J)	0.0019 (J)	< 0.01	< 0.025	< 0.005	< 0.0005	0.0005 (J)	< 0.01	< 0.01	0.00004 (J)	< 0.01	0.0024 (J)
GWA-55	3/16/2017	< 0.003	0.0005 (J)	0.0175	< 0.003	< 0.001	0.0008 (J)	0.0006 (J)	< 0.025	0.00007 (J)	< 0.0005	0.0008 (J)	< 0.01	< 0.01	0.0001 (J)	< 0.01	0.0015 (J)
GWA-55R	3/16/2017	0.0007 (J)	0.0007 (J)	0.0497	< 0.003	0.0001 (J)	0.0018 (J)	< 0.01	0.0003 (J)	0.0001 (J)	< 0.0005	0.0015 (J)	< 0.01	< 0.01	0.00005 (J)	< 0.01	0.0054 (J)
GWA-56	3/15/2017	< 0.003	0.0005 (J)	0.0286	< 0.003	0.0001 (J)	< 0.01	< 0.01	0.0003 (J)	0.0001 (J)	< 0.0005	< 0.01	< 0.01	< 0.01	< 0.001	< 0.01	0.0034 (J)
GWC-16R	3/20/2017	0.0187	0.0012 (J)	0.0383	< 0.003	< 0.001	0.0013 (J)	< 0.01	0.002 (J)	< 0.005	< 0.0005	0.0111	< 0.01	< 0.01	0.0003 (J)	0.0019 (J)	0.0465
GWC-17R	3/21/2017	< 0.003	0.0009 (J)	0.0201	< 0.003	< 0.001	0.0005 (J)	< 0.01	0.0005 (J)	< 0.005	< 0.0005	< 0.01	< 0.01	< 0.01	< 0.001	< 0.01	0.0016 (J)
GWC-18	3/23/2017	< 0.003	< 0.005	0.0254	< 0.003	< 0.001	0.0026 (J)	< 0.01	< 0.025	0.0002 (J)	< 0.0005	0.0006 (J)	< 0.01	< 0.01	0.0001 (J)	< 0.01	0.0025 (J)
GWC-18R	3/20/2017	0.0005 (J)	0.0006 (J)	0.0147	< 0.003	< 0.001	0.0005 (J)	< 0.01	< 0.025	0.00007 (J)	< 0.0005	< 0.01	< 0.01	< 0.01	< 0.001	< 0.01	< 0.01
GWC-19R	3/21/2017	< 0.003	0.0007 (J)	0.0159	< 0.003	< 0.001	0.0009 (J)	< 0.01	0.0006 (J)	0.00007 (J)	< 0.0005	0.0008 (J)	< 0.01	< 0.01	< 0.001	< 0.01	0.0028 (J)
GWC-20R	3/22/2017	< 0.003	< 0.005	0.025	< 0.003	< 0.001	0.0007 (J)	< 0.01	< 0.025	< 0.005	< 0.0005	< 0.01	< 0.01	< 0.01	0.00004 (J)	< 0.01	< 0.01
GWC-21R	3/21/2017	0.0058	0.0021 (J)	0.0292	< 0.003	< 0.001	0.0004 (J)	0.0005 (J)	0.0009 (J)	0.00006 (J)	< 0.0005	0.0017 (J)	< 0.01	< 0.01	0.0002 (J)	< 0.01	0.0043 (J)
GWC-22R	3/20/2017	< 0.003	0.0012 (J)	0.033	< 0.003	< 0.001	0.0004 (J)	< 0.01	0.0012 (J)	0.00007 (J)	< 0.0005	< 0.01	< 0.01	< 0.01	0.0001 (J)	< 0.01	0.0075 (J)
GWC-23R	3/22/2017	0.0006 (J)	< 0.005	0.0211	< 0.003	< 0.001	0.0008 (J)	< 0.01	0.0005 (J)	< 0.005	< 0.0005	0.0005 (J)	< 0.01	< 0.01	0.0001 (J)	< 0.01	0.0021 (J)
GWC-24R	3/20/2017	0.0014 (J)	0.0013 (J)	0.029	< 0.003	< 0.001	< 0.01	< 0.01	0.0003 (J)	0.0001 (J)	< 0.0005	0.0003 (J)	< 0.01	< 0.01	0.00004 (J)	< 0.01	< 0.01
GWC-25R	3/16/2017	0.0009 (J)	0.0004 (J)	0.0163	< 0.003	0.00007 (J)	0.0008 (J)	< 0.01	0.0002 (J)	0.0003 (J)	< 0.0005	0.0012 (J)	< 0.01	< 0.01	< 0.001	< 0.01	0.0026 (J)

*MCL – Georgia Primary Maximum Contaminant Limit (MCL) for drinking water.

** Georgia Secondary MCL for drinking water. *** U.S. USEPA Action Level for lead. ^ For copper, the action level is 1.3 mg/L. J – Estimated concentration between Method Detection Limit and Practical Quantitation Limit. N/R – does not have a Primary or Secondary MCL. Bold and shaded cells indicate MCL exceedance. Double boxed cells indicate concentration above interwell prediction limit.

2.2 Other Naturally-Occurring Sources of Antimony and Nickel

2.2.1 Natural Occurrence

Antimony and nickel occur naturally in the local geologic formations. The Cartersville mining district in Bartow County contains residual deposits of arsenic-bearing minerals, barite, manganese, and iron oxide minerals along with metal sulfides (Geology and Mineral Deposits of the Cartersville District Georgia, U.S. Geological Survey Professional Paper 224, Kesler, T.L. 1950). Arsenic, copper, lead, nickel, and zinc are found in varying amounts throughout the residual clays of the region due to the weathering of sulfides (Kesler, 1950). The overlying residual clays of the regional carbonate rocks contain deposits of coarsely crystalline barite (Kesler, 1950). The barite encloses sulfides such as enargite, tennantite, chalcocite, chalcopyrite, galena, cerussite, and sphalerite. Enargite often contains traces of antimony, and tennantite (copper-arsenic sulfide) forms a series with the much more common mineral tetrahedrite, which is a copper-antimony sulfide. Tennantite and tetrahedrite share the same crystal structure, but differ in the percentage of arsenic versus antimony (Anthony, Bideaux, Bladh, Nichols. 1990. Handbook of Mineralogy, Vol. I, Elements, Sulfides, Sulfosalts. Mineral Data Publishing). Limestones and dolomites can have antimony concentrations of 0.3 parts per million (Trace Elements in Soils and Plants, 3rd Edition, Table 119, Alina Kabata-Pendias, CRC Press, 2001), which could result in naturally occurring concentrations in groundwater at levels similar to those observed at the site.

2.2.2 Comparison to Upgradient Concentrations

Antimony and nickel have been detected in both upgradient and downgradient wells around Cells 1 & 2, 3 & 4, and 9 & 10 and the two metals are naturally occurring in the minerals present in the area. **Table 2: Antimony Concentrations** below summarizes the antimony concentrations from 2007 to June 2017 from wells in Cells 3 & 4 and other upgradient wells. Upgradient wells GWA-1 and GWA-2R had antimony detected at concentrations of 0.017 and 0.011 mg/L, respectively, and similar to well GWC-16R March 2017 concentration of 0.0187 mg/L.

Table 2: Antimony Concentrations

Antimony in Wells GWC-16R and GWC-21R	Antimony in Cells 3 & 4 Wells (2014 to June 2017)	Antimony in Upgradient Wells Cells 1&2, 3&4, and 9&10 (2007 to June 2017)	Highest Antimony in Upgradient Wells GWA-1, GWA-2R, and GWA-3
GWC-16R March 2017 SSI: 0.0187	0.0002 to 0.0271 mg/L	0.0002 to 0.017 mg/L	0.017, 0.011, and 0.0068 mg/L
Concentrations 2014 to June 2017: <0.005 to 0.0187	Overburden Background: 0.0004 to 0.0052 mg/L		
GWC-21R March 2017 SSI: 0.0058	Bedrock Background: 0.0002 to 0.0046 mg/L		
Concentrations 2014 to June 2017: <0.005 to 0.0058			

Figure 4 Box Plot for Antimony, Total shows that the antimony concentrations in well GWC-16R fall within the antimony concentrations reported in upgradient wells across the landfill area, with the exception being the March 2017 concentration. However, the March 2017 concentration is very close to the concentration in upgradient well GWA-1, which is indicative of natural variability in groundwater quality. Additionally, it is thought that the best estimate of the true value of antimony in GWC-16R is the average value for all the results for the well, which is 0.0054 mg/L. This value is well below the highest detected background antimony value of 0.017 mg/L. The 0.018 mg/L antimony detection in GWC-16R, which resulted in the SSI, was not confirmed by later sampling (0.0097 mg/L in May 2017) and does not appear to be representative of on-going conditions at the well.

Table 3: Nickel Concentrations below summarizes the nickel concentrations from 2007 to March 2017 from wells in Cells 3 & 4, wells across the landfill area, and upgradient wells. Upgradient wells GWA-1, GWA-2R, and GWA-3 had nickel detected at concentrations of 0.054 to 0.14 mg/L. In March 2017 the Cells 3 & 4 overburden and bedrock upgradient wells' nickel concentrations ranged from 0.0005 to 0.0142 mg/L. The GWC-16R nickel concentration of 0.0111 mg/L, which was slightly above the Cell 3 & 4 bedrock interwell prediction limit of 0.01 mg/L, is within the range of site-wide background overburden and bedrock well concentrations observed over time.

Table 3: Nickel Concentrations

Nickel in Wells GWC-16R and GWC-21R	Nickel in Cells 3 & 4 Wells (2014 to March 2017)	Nickel in Upgradient Wells Cells 1&2, 3&4, and 9&10 (2007 to March 2017)	Highest Nickel in Upgradient Wells GWA-1, GWA-2R, and GWA-3
GWC-16R March 2017 SSI: 0.0111 Concentrations 2014 to March 2017: 0.0111 to 0.03	0.0003 to 0.03 mg/L March 2017 Upgradient Wells	0.0004 to 0.14 mg/L	0.14, 0.11, and 0.054 mg/L
GWC-21R March 2016: 0.0017 J (not a SSI) Concentrations 2014 to March 2017: <0.0025 to 0.0261	(Overburden and Bedrock) 0.0005 to 0.0142 mg/L		

2.2.3 Temporal Concentration Variability

An evaluation of nickel and antimony concentrations over time; particularly the detection of these metals in both upgradient and downgradient wells prior to waste placement is further evidence of the natural variability in the groundwater.

As shown on **Figure 2**, nickel was being detected in wells GWC-16R and GWC-21R starting in September 2014 when background monitoring for the solid waste permit began and approximately five months before the initial placement of waste in Cells 3 & 4 in February 2015. Nickel was also detected in the upgradient wells GWA-36R, GWA-37, GWA-38 starting in

September 2014 when monitoring began. The detection of nickel in upgradient and downgradient wells prior to waste placement indicates the nickel was present in the groundwater naturally. Antimony was sampled and analyzed starting in September 2014 also. The first detection of antimony was in March 2016 in upgradient wells (GWA-37, GWA-53, GWA-53R, GWA-55, and GWA-56) and in wells GWC-16R and GWC-21R and other Cells 3 & 4 monitoring wells (GWC-18, GWC-23R, GWC-24R, GWC-25R). Prior to March 2016 antimony was not detected in the upgradient nor the downgradient wells. The simultaneous detection of antimony in upgradient and downgradient Cells 3 & 4 wells starting in March 2016 would indicate that antimony is also naturally present in the groundwater.

2.2.4 Alternative Statistical Evaluation

A statistical evaluation using ProUCL (Appendix A) of all of the antimony data (2007 to June 2017) from all of the upgradient monitoring wells across the landfill area yields an upper simultaneous limit (USL) of 0.039 mg/L. An USL is a number defined as the upper boundary of the largest value in the background data set and that no true background sample (current or future) would exceed with 95% certainty (USL95). The USL is a conservative estimate of the background threshold value especially when the sample size exceeds 20 (the Bowen landfill background data set is 436 samples with 108 detects and 328 non-detects). The SSI antimony results of GWC-16R and GWC-21R (0.0187 and 0.0058 mg/L, respectively) are below the USL-background threshold value (0.039 mg/L).

For this demonstration, combining upgradient wells across each of the cells provides a better representation of constituent concentrations as well as demonstrates the natural background variability in groundwater quality.

2.3 Conclusion and Recommendations

- Antimony and nickel SSIs are not the result of a release from Cells 3 & 4, but are likely the result of natural variability in groundwater quality that is not properly accommodated by the existing statistical method.
- We will likely be moving to intrawell methods, or at least a mix of both interwell and intrawell. A statistician is evaluating the data now and will make a recommendation for future statistical methods.
- In the future, GPC anticipates submitting a request to modify the existing statistical approach for the CCR permit, which will be based on the characteristics of groundwater quality upgradient of the facility.
- Based on the lines of evidences presented in this demonstration report, this site will remain in detection monitoring.

FIGURES

Legend

Approximate Property Boundary

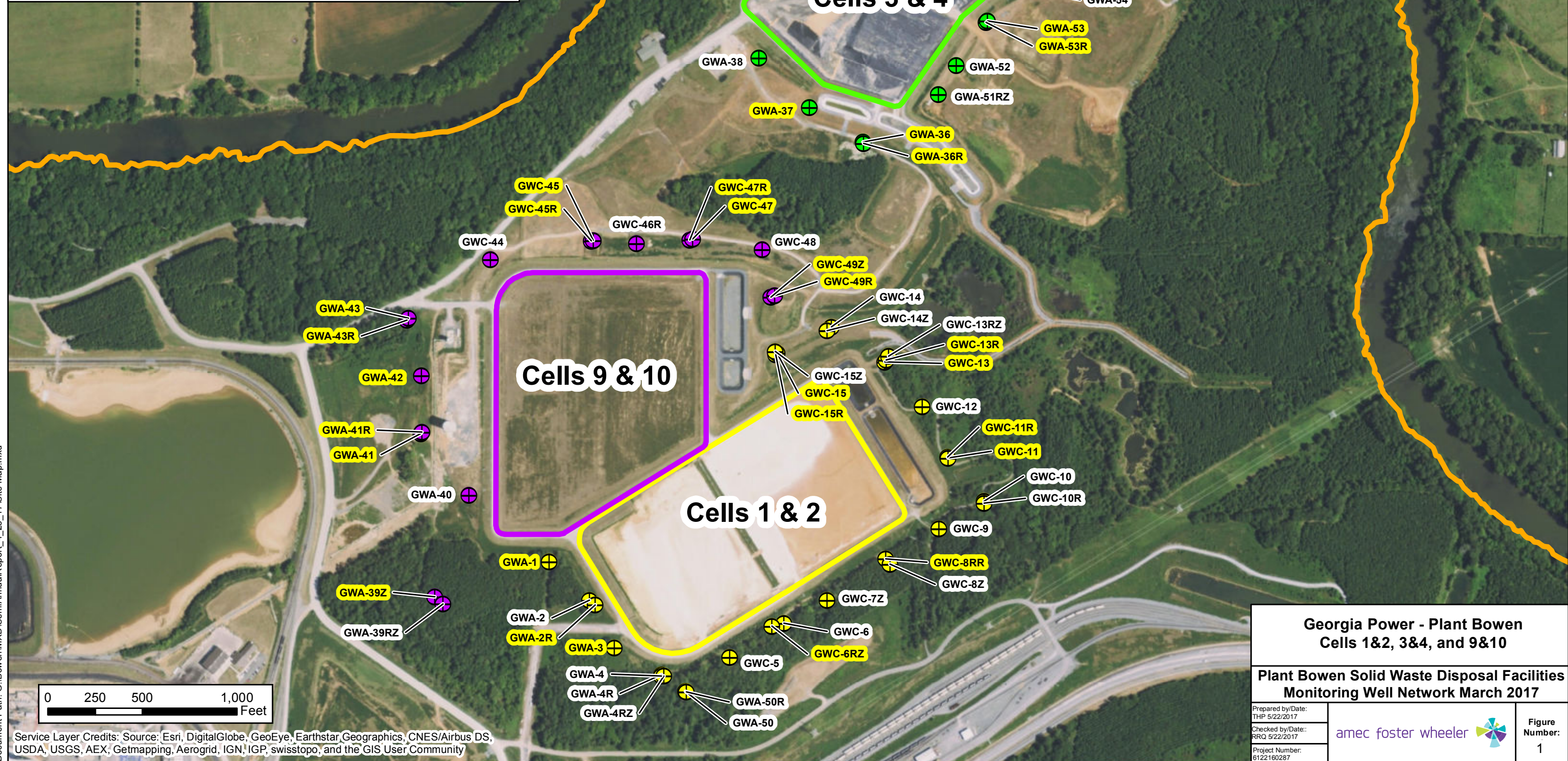
Well Location

Cells 1 & 2

Cells 3 & 4

Cells 9 & 10

GWC-45 Water Level Digitally Monitored and Reported by Telemetry



Georgia Power - Plant Bowen Cells 1&2, 3&4, and 9&10	
Plant Bowen Solid Waste Disposal Facilities Monitoring Well Network March 2017	
Prepared by/Date: THP 5/22/2017	
Checked by/Date: RRQ 5/22/2017	
Project Number: 6122160287	
Figure Number: 1	

Document Path: G:\Bowen\MXD\AnnualReport_4_25_17\Site Map.mxd

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 2: Antimony and Nickel Trends in Wells GWC-16R and GWC-21R

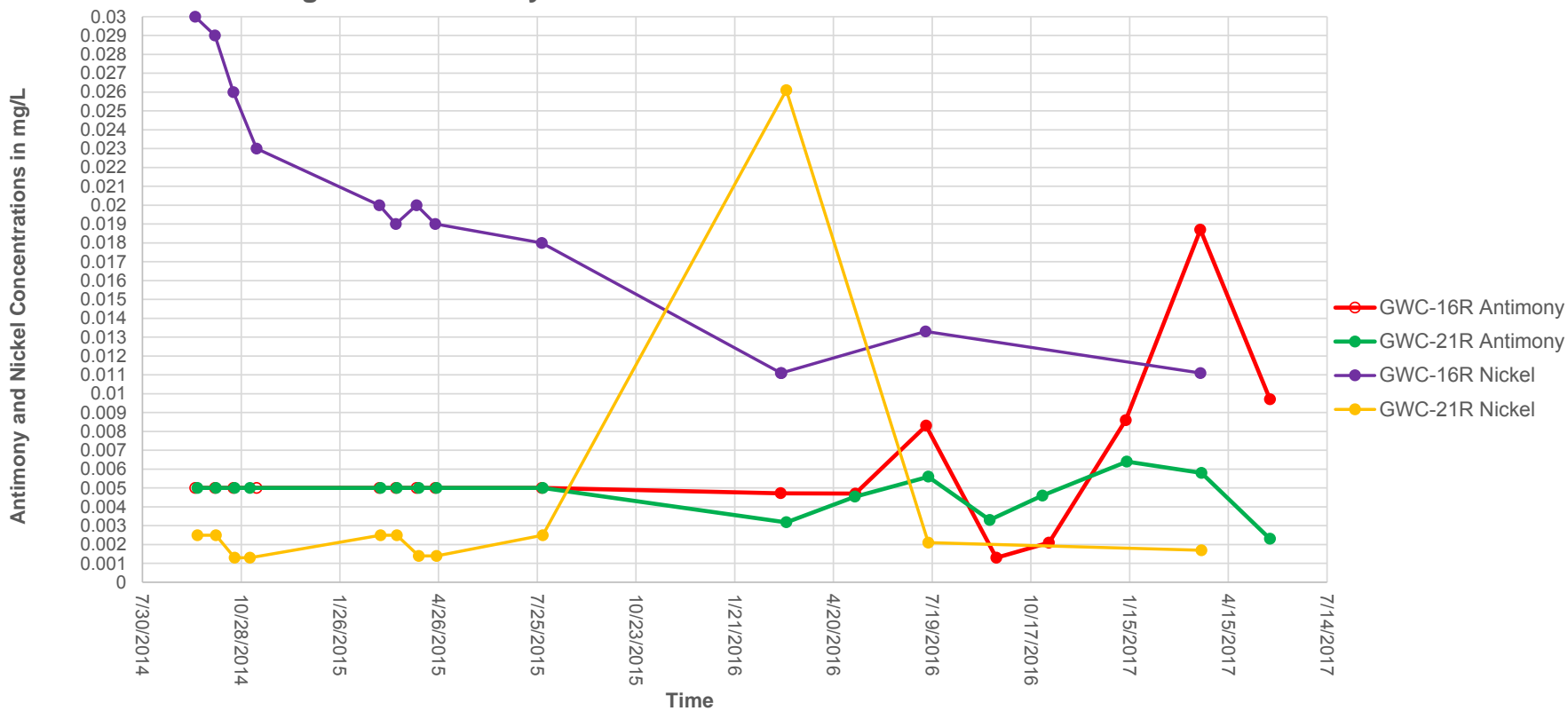


Figure 3: Comparison of Antimony in Downgradient Wells Screened in the Similar Interval as Wells GWC-16R and GWC-21R

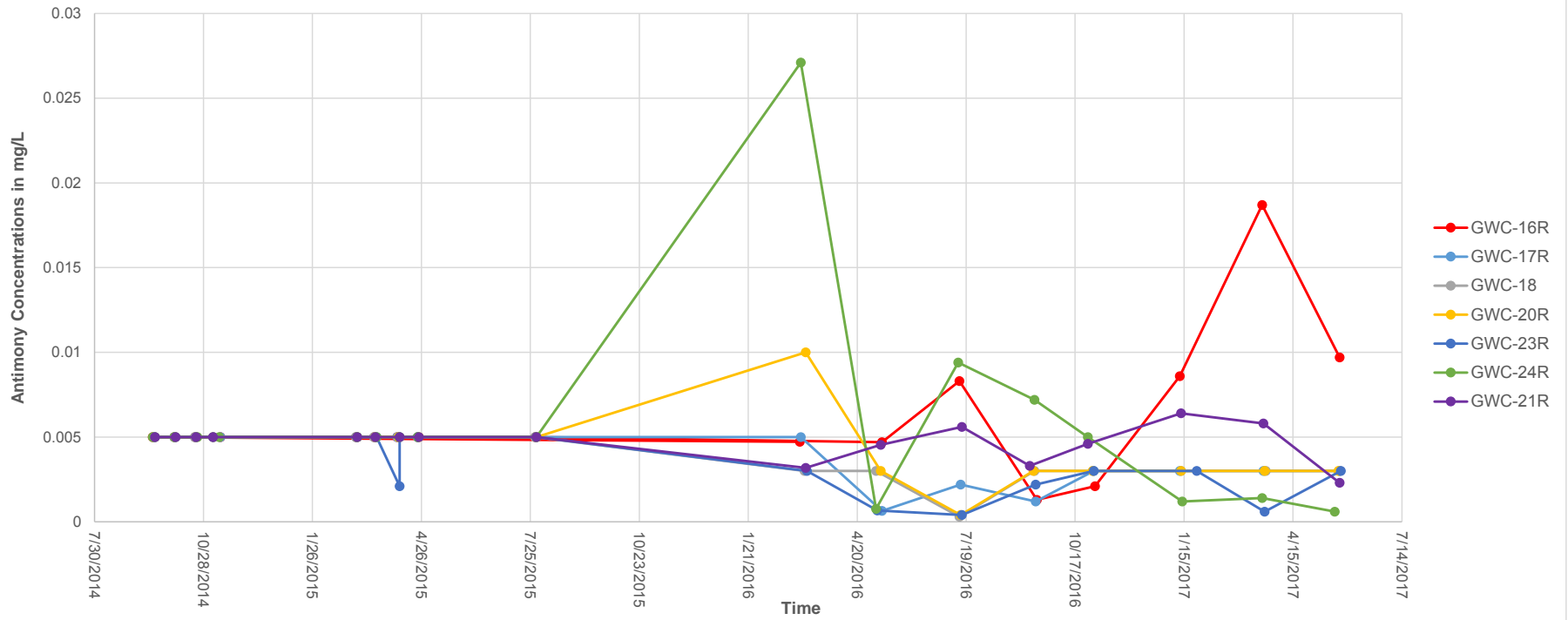
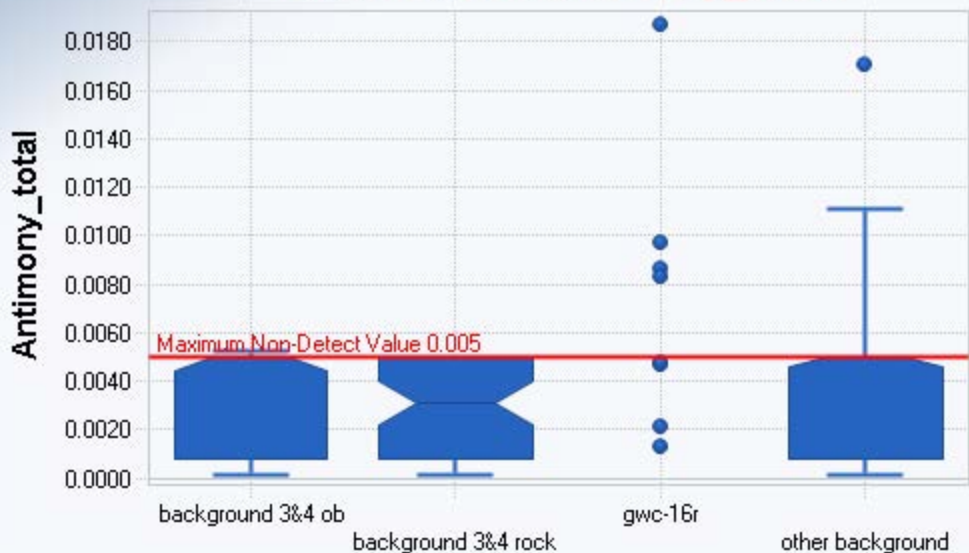


Figure 4: Box Plot for Antimony_total



APPENDIX A
STATISTICAL EVALUATION USING UPPER SIMULTANEOUS LIMIT

	A	B	C	D	E	F	G	H	I	J	K	L
1				A-1: ProUCL USL Background Threshold Level Calculation for Antimony Background Statistics for Data Sets with Non-Detects								
2	User Selected Options											
3	Date/Time of Computation			ProUCL 5.17/21/2017 11:03:53 AM								
4	From File			Antimony Background Site Data_d.xls								
5	Full Precision			OFF								
6	Confidence Coefficient			95%								
7	Coverage			95%								
8	Different or Future K Observations			1								
9	Number of Bootstrap Operations			2000								
10												
11	Antimony_total											
12												
13	General Statistics											
14	Total Number of Observations				436		Number of Missing Observations				0	
15	Number of Distinct Observations				68							
16	Number of Detects				108		Number of Non-Detects				328	
17	Number of Distinct Detects				68		Number of Distinct Non-Detects				6	
18	Minimum Detect				2.0000E-4		Minimum Non-Detect				2.0000E-4	
19	Maximum Detect				0.017		Maximum Non-Detect				0.005	
20	Variance Detected				7.3312E-6		Percent Non-Detects				75.23%	
21	Mean Detected				0.00281		SD Detected				0.00271	
22	Mean of Detected Logged Data				-6.28		SD of Detected Logged Data				0.926	
23												
24	Critical Values for Background Threshold Values (BTVs)											
25	Tolerance Factor K (For UTL)				1.771		d2max (for USL)				3.658	
26												
27	Normal GOF Test on Detects Only											
28	Shapiro Wilk Test Statistic				0.795		Normal GOF Test on Detected Observations Only					
29	5% Shapiro Wilk P Value				0		Data Not Normal at 5% Significance Level					
30	Lilliefors Test Statistic				0.168		Lilliefors GOF Test					
31	5% Lilliefors Critical Value				0.0855		Data Not Normal at 5% Significance Level					
32	Data Not Normal at 5% Significance Level											
33												
34	Kaplan Meier (KM) Background Statistics Assuming Normal Distribution											
35	KM Mean				0.00119		KM SD				0.00181	
36	95% UTL95% Coverage				0.00441		95% KM UPL (t)				0.00419	
37	90% KM Percentile (z)				0.00352		95% KM Percentile (z)				0.00418	
38	99% KM Percentile (z)				0.00541		95% KM USL				0.00783	
39												
40	DL/2 Substitution Background Statistics Assuming Normal Distribution											
41	Mean				0.00198		SD				0.00169	
42	95% UTL95% Coverage				0.00498		95% UPL (t)				0.00477	
43	90% Percentile (z)				0.00415		95% Percentile (z)				0.00476	
44	99% Percentile (z)				0.00592		95% USL				0.00817	
45	DL/2 is not a recommended method. DL/2 provided for comparisons and historical reasons											
46												
47	Gamma GOF Tests on Detected Observations Only											
48	A-D Test Statistic				1.092		Anderson-Darling GOF Test					
49	5% A-D Critical Value				0.773		Data Not Gamma Distributed at 5% Significance Level					

	A	B	C	D	E	F	G	H	I	J	K	L
50	K-S Test Statistic					0.118	Kolmogorov-Smirnov GOF					
51	5% K-S Critical Value					0.0892	Data Not Gamma Distributed at 5% Significance Level					
52	Data Not Gamma Distributed at 5% Significance Level											
53												
54	Gamma Statistics on Detected Data Only											
55	k hat (MLE)					1.381	k star (bias corrected MLE)					1.349
56	Theta hat (MLE)					0.00203	Theta star (bias corrected MLE)					0.00208
57	nu hat (MLE)					298.3	nu star (bias corrected)					291.3
58	MLE Mean (bias corrected)					0.00281						
59	MLE Sd (bias corrected)					0.00242	95% Percentile of Chisquare (2kstar)					7.283
60												
61	Gamma ROS Statistics using Imputed Non-Detects											
62	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
63	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
64	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
65	This is especially true when the sample size is small.											
66	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
67	Minimum					2.0000E-4	Mean					0.00822
68	Maximum					0.017	Median					0.01
69	SD					0.00339	CV					0.412
70	k hat (MLE)					2.442	k star (bias corrected MLE)					2.426
71	Theta hat (MLE)					0.00337	Theta star (bias corrected MLE)					0.00339
72	nu hat (MLE)					2129	nu star (bias corrected)					2116
73	MLE Mean (bias corrected)					0.00822	MLE Sd (bias corrected)					0.00528
74	95% Percentile of Chisquare (2kstar)					10.84	90% Percentile					0.0153
75	95% Percentile					0.0184	99% Percentile					0.0251
76	The following statistics are computed using Gamma ROS Statistics on Imputed Data											
77	Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods											
78				WH	HW					WH	HW	
79	95% Approx. Gamma UTL with 95% Coverage				0.0194	0.021	95% Approx. Gamma UPL				0.0183	0.0197
80	95% Gamma USL				0.0423	0.0514						
81												
82	Estimates of Gamma Parameters using KM Estimates											
83	Mean (KM)					0.00119	SD (KM)					0.00181
84	Variance (KM)					3.2885E-6	SE of Mean (KM)					1.0136E-4
85	k hat (KM)					0.434	k star (KM)					0.432
86	nu hat (KM)					378.4	nu star (KM)					377.1
87	theta hat (KM)					0.00275	theta star (KM)					0.00276
88	80% gamma percentile (KM)					0.00194	90% gamma percentile (KM)					0.00333
89	95% gamma percentile (KM)					0.00483	99% gamma percentile (KM)					0.00858
90												
91	The following statistics are computed using gamma distribution and KM estimates											
92	Upper Limits using Wilson Hilferty (WH) and Hawkins Wixley (HW) Methods											
93				WH	HW					WH	HW	
94	95% Approx. Gamma UTL with 95% Coverage				0.00397	0.00401	95% Approx. Gamma UPL				0.00363	0.00363
95	95% KM Gamma Percentile				0.00362	0.00361	95% Gamma USL				0.0125	0.0147
96												
97	Lognormal GOF Test on Detected Observations Only											
98	Shapiro Wilk Approximate Test Statistic					0.978	Shapiro Wilk GOF Test					
99	5% Shapiro Wilk P Value					0.381	Detected Data appear Lognormal at 5% Significance Level					

	A	B	C	D	E	F	G	H	I	J	K	L
100	Lilliefors Test Statistic					0.0795	Lilliefors GOF Test					
101	5% Lilliefors Critical Value					0.0855	Detected Data appear Lognormal at 5% Significance Level					
102	Detected Data appear Lognormal at 5% Significance Level											
103												
104	Background Lognormal ROS Statistics Assuming Lognormal Distribution Using Imputed Non-Detects											
105	Mean in Original Scale					0.00117	Mean in Log Scale					-7.555
106	SD in Original Scale					0.00178	SD in Log Scale					1.302
107	95% UTL95% Coverage					0.00525	95% BCA UTL95% Coverage					0.0054
108	95% Bootstrap (%) UTL95% Coverage					0.0054	95% UPL (t)					0.00449
109	90% Percentile (z)					0.00278	95% Percentile (z)					0.00446
110	99% Percentile (z)					0.0108	95% USL					0.0612
111												
112	Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution											
113	KM Mean of Logged Data					-7.486	95% KM UTL (Lognormal)95% Coverage					0.00437
114	KM SD of Logged Data					1.159	95% KM UPL (Lognormal)					0.0038
115	95% KM Percentile Lognormal (z)					0.00378	95% KM USL (Lognormal)					0.039
116												
117	Background DL/2 Statistics Assuming Lognormal Distribution											
118	Mean in Original Scale					0.00198	Mean in Log Scale					-6.657
119	SD in Original Scale					0.00169	SD in Log Scale					1.075
120	95% UTL95% Coverage					0.00863	95% UPL (t)					0.00758
121	90% Percentile (z)					0.0051	95% Percentile (z)					0.00754
122	99% Percentile (z)					0.0157	95% USL					0.0657
123	DL/2 is not a Recommended Method. DL/2 provided for comparisons and historical reasons.											
124												
125	Nonparametric Distribution Free Background Statistics											
126	Data appear to follow a Discernible Distribution at 5% Significance Level											
127												
128	Nonparametric Upper Limits for BTVs(no distinction made between detects and nondetects)											
129	Order of Statistic, r					421	95% UTL with95% Coverage					0.0054
130	Approx, f used to compute achieved CC					1.385	Approximate Actual Confidence Coefficient achieved by UTL					0.922
131	Approximate Sample Size needed to achieve specified CC					458	95% UPL					0.005
132	95% USL					0.017	95% KM Chebyshev UPL					0.00911
133												
134	Note: The use of USL tends to yield a conservative estimate of BTV, especially when the sample size starts exceeding 20.											
135	Therefore, one may use USL to estimate a BTV only when the data set represents a background data set free of outliers											
136	and consists of observations collected from clean unimpacted locations.											
137	The use of USL tends to provide a balance between false positives and false negatives provided the data											
138	represents a background data set and when many onsite observations need to be compared with the BTV.											
139												

Alternate Source Demonstration

Plant Bowen
Landfill Cells 1 & 2, 3 & 4, and 9 & 10
Solid Waste Disposal Facility
Permit No. 008-018D (LI)

Prepared for:



Date: April 19, 2018

Prepared by:

Wood Environment & Infrastructure Solutions, Inc.
1075 Big Shanty Road NW, Suite 100, Kennesaw, Georgia 30144

Project No.: 6122-16-0287



Environment & Infrastructure Solutions
1075 Big Shanty Road, Suite 100
Kennesaw, Georgia 30144
USA

April 19, 2018

T: +11 770-421-3400

Ms. Alexandria Wild, P.E.
Georgia Power Company – Environmental Affairs
241 Ralph McGill Blvd
Atlanta, Georgia 30308

www.woodplc.com

**RE: Alternate Source Demonstration
Plant Bowen - Solid Waste Disposal Facility Landfill Cells 1 & 2, 3 & 4, and 9 & 10
Amec Foster Wheeler Project 6122-09-0287**

Dear Ms. Wild:

Wood Environment & Infrastructure Solutions, Inc. is pleased to submit the attached Alternate Source Demonstration for the Plant Bowen - Solid Waste Disposal Facility Landfill Cells 1 & 2, 3 & 4, and 9 & 10 in Cartersville, Georgia. The enclosed report is for your submittal to the Georgia Environmental Protection Division. This report was prepared in accordance with 391-3-4.14.23c of the Georgia Solid Waste Management Rules

We appreciate the opportunity to provide environmental consulting services to the Georgia Power Company and Southern Company Services. Please feel free to contact us at (770) 421-3400 if you have questions or require additional information.

Sincerely,

Wood Environment & Infrastructure Solutions, Inc.

Rhonda N. Quinn, P.G.
Senior Geologist

Gregory J. Wrenn, P.E.
Associate Engineer/Project Manager

Enclosure: Alternate Source Demonstration for the Plant Bowen - Solid Waste Disposal Facility
Landfill Cells 1 & 2, 3 & 4, and 9 & 10 (2 Paper & 2 PDF copies)

cc: Mr. Joju Abraham, SCS (via Share Point)



CERTIFICATION STATEMENT

This *Alternate Source Demonstration, Georgia Power Company - Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10* has been prepared in compliance with applicable Georgia Solid Waste Management Rule 391-3-4.14.23c by a qualified groundwater scientist or engineer with Wood Environment & Infrastructure Solutions, Inc. References to the appropriate Georgia Solid Waste Management 391-3-4 Rules are incorporated throughout this document.



Gregory J. Wrenn, P.E.
Registered Professional Engineer
Professional Engineer No. 025565

April 18, 2018
Date



PROFESSIONAL GROUND WATER SCIENTIST CERTIFICATION

I certify that I am a qualified ground-water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in ground-water hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding ground-water monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction.



Rhonda N. Quinn, P.G.
Registered Professional Geologist
Georgia Registration #1031

April 19, 2018
Date

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Background.....	1
2.0	SUMMARY OF STATISTICAL EXCEEDANCES.....	2
3.0	ALTERNATE SOURCE DEMONSTRATION.....	3
3.1	General Evaluation of the Statistical Exceedances	3
3.2	Barium at GWC-13RZ.....	4
3.3	Zinc at GWC-47	5
3.4	pH at GWC-8RR, GWC-11R, GWC-15Z, GWC-22R, GWC-44, GWC-45, GWC-48, and GWC-49Z.....	7
3.5	Calcium at GWC-16R, GWC-17R, GWC-21R, and GWC-23R.....	8
3.6	Chloride at GWC-13, GWC-13RZ, and GWA-40	8
3.7	Sulfate at GWA-4RZ, GWA-40, and GWC-49R.....	9
3.8	Total Dissolved Solids at GWA-53 and GWA-39Z.....	9
4.0	CONCLUSIONS AND RECOMMENDATIONS.....	10

LIST OF TABLES

Table 1	Summary of Statistical Exceedances
Table 2	Evaluation of Statistical Exceedances for Landfill Cells 1 & 2
Table 3	Evaluation of Statistical Exceedances for Landfill Cells 3 & 4
Table 4	Evaluation of Statistical Exceedances for Landfill Cells 9 & 10
Table 5	Summary of Geochemical Data

LIST OF FIGURES

Figure 1	Monitoring Well Network September 2017
Figure 2	GWC-13RZ Metals Data
Figure 3	GWC-47 Metals Data
Figure 4	Trends in pH for GWC-11R, GWC-8RR and GWC-15Z

LIST OF APPENDICES

Appendix A	USGS Regional Data
------------	--------------------

1.0 INTRODUCTION

This Alternate Source Demonstration (ASD) has been prepared in accordance with 391-3-4.14.23(c) of the Georgia Solid Waste Management Rules to support the position that statistically significant increases (SSIs) in constituent concentrations over background as presented in the 2017 Second Semi-Annual Groundwater Monitoring Report, Georgia Power Company Plant Bowen Cells 1 & 2, 3 & 4, and 9 & 10, dated March 2, 2018.

This document satisfies the requirements of 391-3-4.14.23(c) which allows an owner or operator to demonstrate that a source other than the Landfill Cell has caused an SSI and that the apparent SSI was the result of an alternate source or resulted from errors in “sampling, analysis, statistical evaluation, or natural variation in groundwater quality”.

This report demonstrates that the reported SSIs do not indicate a release from the Landfill Cells, but rather reflect natural variation in groundwater quality.

1.1 Background

The Georgia Power Company (GPC) Plant Bowen solid waste disposal facility is located in south Bartow County off State Highway 113, approximately 7 miles west-southwest of Cartersville and 20 miles southeast of Rome. The disposal facility is approximately 300 acres located on a previously undeveloped, contiguous portion of the plant property. The disposal facility (**Figure 1: Monitoring Well Network September 2017**) receives coal combustion by-products, coal ash and gypsum, from coal-burning and Flue Gas Desulfurization processes at the site.

The Plant Bowen solid waste disposal facility is operated in accordance with Georgia Environmental Protection Division (EPD) Permit No. 008-018D (LI). Groundwater monitoring is conducted as per the permit requirements specified in the Design and Operation (D&O) Plan. This includes semi-annual groundwater sampling and continuous groundwater level measurements at the site. In addition, background sampling for the U.S. Environmental Protection Agency’s (USEPA) Coal Combustion Residuals (CCR) Rule has been conducted from February 2016 through June 2017.

In September-October 2017, the second semi-annual groundwater monitoring event for 2017 was conducted in accordance with the D&O Plan. Barium, zinc, pH, calcium, chloride, sulfate, Total Dissolved Solids (TDS) were detected a concentrations outside of their statistical prediction limits in some wells. This report demonstrates that these SSIs do not indicate a release from the lined Landfill Cells, but rather the SSIs reflect natural variation in groundwater quality.

2.0 SUMMARY OF STATISTICAL EXCEEDANCES

As presented in the 2017 Second Semi-Annual Groundwater Monitoring Report, Georgia Power Company Plant Bowen Cells 1 & 2, 3 & 4, and 9 & 10 (March 2018), there were two metals and five CCR Appendix III parameters, as listed below, exhibiting SSIs outside their statistical prediction limits.

- GWC-13RZ Barium and Chloride
- GWC-47 Zinc
- GWC-11R pH
- GWC-15Z pH
- GWC-8RR pH
- GWC-22R pH
- GWC-44 pH
- GWC-45 pH
- GWC-48 pH
- GWC-49Z pH
- GWC-16R Calcium
- GWC-17R Calcium
- GWC-21R Calcium
- GWC-23R Calcium
- GWC-13 Chloride
- GWA-40 Chloride and Sulfate
- GWA-4RZ Sulfate
- GWC-49R Sulfate
- GWA-53 Total Dissolved Solids
- GWA-39Z Total Dissolved Solids

In addition, antimony was detected in bedrock monitoring well GWC-16R downgradient Cells 3 & 4 at a concentration of 0.0078 (seasonality adjusted concentration of 0.01813 mg/L), which was above the seasonality-adjusted interwell prediction limit of 0.01545 mg/L. The statistical exceedance of antimony in GWC-16R has been determined to be the result of the natural variability of groundwater quality, as shown in the Alternate Source Demonstration, dated August 28, 2017. The SSI for antimony in GWC-16R is not addressed in this report.

Additional details regarding the statistical exceedances are summarized on **Table 1: Summary of Statistical Exceedances**.

3.0 ALTERNATE SOURCE DEMONSTRATION

Georgia Solid Waste Management Rule 391-3-4.14.23(c) allows the owner to demonstrate that a source other than the Landfill Cells caused the SSI or that the apparent statistical exceedance resulted from error in sampling, analysis, statistical evaluation, or from natural variation in groundwater quality. Pursuant to 391-3-4.14.23(c), the following is provided as a demonstration that the listed SSIs are due to natural variation in groundwater chemistry and is not a release from the disposal units.

3.1 General Evaluation of the Statistical Exceedances

Barium and zinc in two wells exceeded their statistical prediction limits (excluding antimony in well GWC-16R). Five of the seven Appendix III parameters (calcium, chloride, pH, sulfate, and TDS) were sporadically detected in several wells at concentrations above their statistical prediction limits. Boron and fluoride (Appendix III) concentrations did not exceed statistical prediction limits. **Tables 2, 3, and 4: Evaluation of Statistical Exceedances for Landfill Cells 1 & 2, 3 & 4, and 9 & 10** show which wells and parameters exhibit a statistical exceedance on a grid format. The purpose of the tables is to present a comprehensive snapshot of all of the data for each subject Landfill Cell. The table for each Landfill Cell shows a red square where there is a statistical exceedance; and as indicated on **Tables 2, 3, and 4** the red squares are scattered across each of the Landfill Cells. The tables highlight the following line of information that demonstrates that the SSIs are the result of natural variability in groundwater quality and not a release from the Landfill Cells.

If a release were present, the data would exhibit multiple exceedances for more than one well within each Landfill Cell. Each downgradient compliance well exhibiting an SSI only had an exceedance for a single parameter, except for downgradient well GWC-13RZ and upgradient background well GWA-40, which had SSIs for two parameters. Review of the SSIs presented on the tables does not show a grouping of exceedances, as would be expected from a release, they show a scattered distribution, which is not an indication of a release from the Landfill Cells.

In March 2018, as part of the 2018 1st semi-annual sampling event, additional parameters, namely, magnesium, sodium, potassium, and alkalinity were analyzed from the Landfill Cells upgradient wells and from the downgradient wells with statistical exceedances. The geochemical data was used to evaluate if the upgradient (background) and downgradient groundwater had consistent chemical characteristics and if the background wells were geochemically representative of downgradient wells. The data is summarized on **Table 5: Summary of Geochemical Data**. The table is color-coded to show similarities and differences. The colors depict a ranking of the concentrations from highest to lowest along a column for a single parameter. The highest concentrations are shown in dark red and the lowest concentration are shown in dark green with the concentrations between the highest and lowest shown in yellow. Lighter shadings of red, green, and yellow indicate the next highest or next lowest concentration. **Table 5** highlights the following.

- The majority of wells indicate a calcium-bicarbonate type groundwater across the three Landfill Cells; a few wells show sodium-bicarbonate or magnesium-bicarbonate type water; two wells show calcium-sulfate type groundwater and one well shows sodium-chloride type groundwater.
- There are differences in groundwater composition between upgradient and downgradient groundwater, particularly at Cells 3 & 4 and Cells 9 & 10, due to variable lithology and groundwater flow.

As indicated on **Table 5**, there are some geochemical differences between the upgradient and downgradient wells that contributes to the natural variation in the groundwater quality. The current statistical methods do not take geochemical differences into account and may not explain the natural variability for applicable parameters. As additional data are collected semi-annually, the working assumptions and statistical approach currently used may periodically be re-evaluated, and the statistical methods adjusted as necessary.

3.2 Barium at GWC-13RZ

The SSI of barium at GWC-13RZ is likely the result of natural variation in groundwater quality and not the result of a release from the disposal unit. The following information supports this conclusion.

- Barium concentrations in well GWC-13RZ are similar to barium concentrations at this location before placement of waste in Cells 1 & 2.

Current barium concentration (0.082 mg/L) in GWC-13RZ is within the range of barium concentrations (0.0055 to 0.45 mg/L) detected prior to waste placement, as shown in the table below. Bedrock well GWC-13RZ replaced bedrock well GWC-13R, due to elevated pH from potential leakage of grout that was used to seal the borehole. The new bedrock well was installed about five feet deeper than GWC-13R and the GWC-13RZ screened interval overlapped with the GWC-13R screened interval. Barium concentrations in both old well GWC-13R and new well GWC-13R are within the range of barium levels measured prior to waste placement in Cells 1 & 2.

- Barium concentrations in well GWC-13RZ are within the range of background concentrations at other Landfill Cells, and are similar to barium in other Cells 1 & 2 wells.

Barium concentrations in well GWC-13RZ are comparable to barium levels in the upgradient wells at other Landfill Cells onsite, as show in the table below.

Barium Concentrations in Well GWC-13RZ	Barium Concentrations Prior to Waste Placement in Cells 1 & 2 (November 2008)	Barium Concentrations in Sitewide Background Wells 2007 to October 2017	Barium Concentrations in Cells 1 & 2 Background and Downgradient Wells 2007 to October 2017
GWC-13RZ October 2017: 0.0699 mg/L December 2017: 0.082 mg/L	GWC-13R prior to waste placement (August 2007 to May 2008): 0.0095 to 0.028 mg/L GWC-13R August 2007 to June 2016: 0.0095 to 0.19 mg/L	August 2007 to October 2017: 0.003 to 0.15 mg/L	August 2007 to October 2017: 0.0033 to 0.45 mg/L
GWC-13RZ: February to December 2017: 0.0561 to 0.0932 mg/L	Background wells prior to waste placement (August 2007 to May 2008): 0.0066 to 0.13 mg/L Downgradient wells prior to waste placement (August 2007 to May 2008): 0.0055 to 0.45 mg/L Cells 1 & 2 wells, before waste placement in November 2008: 0.0055 to 0.45 mg/L		

- Absence of other metals in GWC-13RZ having a similar concentration trend as barium.

The target metals (per site D&O Plan) in well GWC-13RZ occur in low concentrations at the site with only barium showing consistently detectable concentrations, but at levels significantly below the Maximum Contaminant Level (MCL) of 2 mg/L. Well GWC-13RZ has been analyzed 8 times for barium and 7 times for antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, mercury, selenium, and thallium. Of these metals only barium had positive detections above the laboratory practical quantitation limit (PQL). Other constituents were below the PQL or present in low concentrations. The metals (antimony, arsenic, and selenium) with more than two detections out of the seven results are graphed on **Figure 2: GWC-13RZ Metals Data**. If there had been a groundwater impact from the waste placed in Cells 1 & 2, barium and other metals would show a similar detection pattern and increasing concentration trend. A comparison of the patterns of concentration trends for the three other metals in well GWC-13RZ do not show a correlation between barium and the other three metals, and there are no increasing trends.

- Barium occurs naturally in minerals beneath the site.

Barium occurs naturally in the local geologic formations. The Cartersville mining district in Bartow County contains residual deposits of arsenic-bearing minerals, barite, manganese, and iron oxide minerals along with metal sulfides (Geology and Mineral Deposits of the Cartersville District Georgia, U.S. Geological Survey Professional Paper 224, Kesler, T.L. 1950). Arsenic, barium, copper, lead, nickel, and zinc are found in varying amounts throughout the residual clays of the region due to the weathering of sulfides (Kesler, 1950). The overlying residual clays of the regional carbonate rocks contain deposits of coarsely crystalline barite (Kesler, 1950). The barite (barium sulfate) encloses sulfides such as enargite, tennantite, chalcocite, chalcopyrite, galena, cerussite, and sphalerite. Enargite often contains traces of antimony, and tennantite (copper-arsenic sulfide) forms a series with the much more common mineral tetrahedrite, which is a copper-antimony sulfide. Tennantite and tetrahedrite share the same crystal structure but differ in the percentage of arsenic versus antimony (Anthony et al., 1990). Limestones and dolomites can have barium concentrations of 50 to 200 parts per million (Trace Elements in Soils and Plants, 3rd Edition, Table 119, Alina Kabata-Pendias, CRC Press, 2001), which could result in naturally occurring concentrations in groundwater at levels similar to those observed at the site.

3.3 Zinc at GWC-47

The SSI of zinc at GWC-47 is likely the result of natural variation in groundwater quality and not the result of a release from the disposal unit. The following information supports this conclusion.

- Zinc concentrations in overburden well GWC-47 are similar to zinc concentrations before placement of waste in Cells 9 & 10.

The initial waste placement began in November 2015 for Cells 9 & 10. Current zinc concentration (0.0315 mg/L) in well GWC-47 is within the range of zinc concentrations (0.003 to 0.31 mg/L) detected in overburden well GWC-45 prior to waste placement, as shown in the table below.

- Zinc concentrations in well GWC-47 are within the range of background concentrations at other Landfill Cells, and are similar to zinc in other Cells 9 & 10 wells.

Zinc concentrations in well GWC-47 are comparable to zinc levels in the upgradient wells at other Landfill Cells onsite, as show in the table below.

Zinc Concentrations in Well GWC-47	Zinc Concentrations Prior to Waste Placement in Cells 9 & 10 (November 2015)	Zinc Concentrations in Sitewide Background Wells 2016 to October 2017	Zinc Concentrations in Cells 9 & 10 Background and Downgradient Wells 2016 to October 2017
GWC-47 October 2017: 0.0196 mg/L December 2017: 0.0315 mg/L	GWC-45 prior to waste placement (May 2007 to May 2015): 0.003 to 0.31 mg/L GWC-45R (May 2007 to May 2015): 0.0027 to 0.017 mg/L	March 2016 to October 2017: 0.0012 to 0.406 mg/L Cells 9 & 10 Background March 2016 to October 2017 0.0012 to 0.0162 mg/L	March 2016 to October 2017 0.0012 to 0.0315 mg/L
GWC-47: 2016 to December 2017: 0.0156 to 0.0315 mg/L			

- Absence of other metals in GWC-47 having a similar trend as zinc.

The target metals (per site D&O Plan) in well GWC-47 occur in low concentrations at the site with only barium and zinc showing consistently detectable concentrations, but at levels significantly below the primary MCL of 2 mg/L for barium and secondary MCL of 5 mg/L for zinc. Well GWC-47 has been analyzed nine times for zinc and nine times for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, lead, mercury, selenium, and thallium. Copper, nickel, silver, and vanadium have been analyzed eight times. Of these metals only barium and zinc had positive detections above the laboratory PQL. Other constituents were below the PQL or present in low concentrations. The metals (barium, chromium, and zinc) with more than three detections out of the eight to nine results were graphed on **Figure 3: GWC-47 Metals Data**. If there had been a groundwater impact from the waste placed in Cells 9 & 10, zinc and other metals would show a similar pattern and an increasing concentration trend. A comparison of the patterns of concentration trends in well GWC-47 do not show a correlation between zinc and the other two metals and most of the analyzed metals have less than three detections out of eight to nine analyses. There is not an indication of increasing concentration trends in the metals detected in GWC-47. Also, the zinc detection pattern in background overburden well GWA-42 is similar to downgradient overburden well GWC-47 as shown on **Figure 3**.

- Zinc is present in naturally occurring minerals beneath the site.

The Cartersville mining district in Bartow County contains residual deposits of arsenic-bearing minerals, barite, manganese, and iron oxide minerals along with metal sulfides (Geology and Mineral Deposits of the Cartersville District Georgia, U.S. Geological Survey Professional Paper 224, Kesler, T.L. 1950). Arsenic, barium, copper, lead, nickel, and zinc are found in varying amounts throughout the residual clays of the region due to the weathering of sulfides (Kesler, 1950). Zinc chiefly occurs as a sulfide mineral. Limestones and dolomites can have zinc concentrations of 10 to 25 parts per million (Trace Elements in Soils and Plants, 3rd Edition, Table 119, Alina Kabata-Pendias, CRC Press, 2001), which could result in naturally occurring concentrations in groundwater at levels similar to those observed at the site.

3.4 pH at GWC-8RR, GWC-11R, GWC-15Z, GWC-22R, GWC-44, GWC-45, GWC-48, and GWC-49Z

The statistical exceedances of pH values in wells GWC-8RR, GWC-11R, GWC-15Z, GWC-22R, GWC-44, GWC-45, GWC-48, and GWC-49Z are likely the result of natural variation in groundwater quality and not the result of a release from the disposal units. The following information supporting this conclusion include.

- Landfill Cells 1 & 2, Cells 3 & 4, and Cells 9 & 10 were constructed with liner systems to prevent waste materials from leaching into underlying groundwater.
- The wells with pH statistical excursions are within the range of pH values (4.33 to 10.61 standard units (su)) for all wells during the background monitoring events and are similar to pH ranges prior to waste placement in the cells (see table below).
- At Cells 1 & 2, the pH values for GWC-15Z, GWC-8RR, and GWC-11R are within the range of 4.92 to 10.61 su noted for all downgradient wells. **Figure 4: Trends in pH for GWC-11R, GWC-8RR and GWC-15Z** shows that wells GWC-15Z, GWC-8RR, and GWC-11R have a narrow range of fluctuation in pH values which reflect natural variation in groundwater pH due to variable recharge events.
- At Cells 3 & 4, the pH values in the downgradient wells range from 6.0 to 7.87 su, while upgradient wells range from 4.94 to 8.34 su. GWC-22R pH values are within these ranges.
- United States Geological Survey data from water supply wells in the Cartersville, Georgia area of the Valley and Ridge Providence have pH values ranging from 6.2 to 8.4 su. The pH values in the Cells 1 & 2 and Cells 3 & 4 wells are similar to the off-site water-supply wells.
- At Cells 9 & 10, the pH values in GWC-44, GWC-45, GWC-48, and GWC-49Z are slightly less than the lower prediction limit based on comparison to upgradient concentrations. However, the values are similar to those present prior to waste placement and similar to the range detected across the site in February 2016. Lower pH can be attributed to rainfall influence on the downgradient groundwater. This is reflected in the geochemical differences between the upgradient and downgradient groundwater at Cells 9 & 10 (**Table 5**). Downgradient wells GWC-44, GWC-45, GWC-48, and GWC-49Z contain very low alkalinity, low TDS, low calcium, and low pH that reflect recent recharge water affecting the groundwater composition. As the residence time of groundwater increases at these locations, groundwater composition is expected to evolve into predominantly calcium-bicarbonate type following water-rock interactions in the carbonate bedrock.

pH SSIs	Predictive Limits	pH Range Prior to Waste Placement	pH Range February 2016 to March 2018 (all wells)	pH Regional Reference Range
Cells 1 & 2 GWC-11R (7.74 su) GWC-15Z (7.74 su) GWC-8RR (7.86 su)	7.65 to 5.23 su	>8.5 to 4.6 su (August 2007 to December 2008)	4.88 to 10.61 su	6.2 to 8.4 su
Cells 3 & 4 GWC-22R (7.39 su)	7.87 to 7.52 su	8.21 to 5.34 su (Aug 2011)	4.94 to 8.34 su	

pH SSIs	Predictive Limits	pH Range Prior to Waste Placement	pH Range February 2016 to March 2018 (all wells)	pH Regional Reference Range
Cells 9 & 10 GWC-44 (4.51 su) GWC-45 (5.08 su) GWC-48 (5.07 su) GWC-49Z (5.51 su)	7.89 to 5.77 su	>8.5 to 4.52 su (Aug 2011)	4.33 to 8.08 su	6.2 to 8.4 su

3.5 Calcium at GWC-16R, GWC-17R, GWC-21R, and GWC-23R

The statistical exceedances of calcium concentrations in wells GWC-16R, GWC-17R, GWC-21R, and GWC-23R are likely the result of natural variation in groundwater quality and not the result of a release from the disposal unit. The following information supporting this conclusion include.

Calcium concentrations in wells GWC-16R, GWC-17R, GWC-21R, and GWC-23R ranged from 58.9 to 67.2 mg/L. These concentrations exceed the interwell prediction limit of 48.7 mg/L for Cells 3 & 4. However, these concentrations are due to differences in aquifer lithologies affecting the groundwater chemistry as shown by site-specific data. Additionally, the calcium concentrations are comparable to regional concentrations of calcium in wells within the Knox Dolomite and Newala Limestone.

Site-specific major ion data collected in March 2018 indicate that aquifer lithologies affect the groundwater geochemistry. The March 2018 geochemical data on **Table 5** shows the upgradient wells have a different geochemical profile than the downgradient wells. Wells GWC-16R, GWC-17R, GWC-21R, and GWC-23R are screened in dolomite, a rock with a high magnesium content. The geochemical data (**Table 5**) indicates the groundwater in these four wells is a combination of calcium bicarbonate and magnesium bicarbonate, which confirms the downgradient groundwater chemistry is characteristic of a dolomite aquifer. The groundwater in the upgradient wells is a combination of calcium bicarbonate and sodium bicarbonate. The upgradient wells are screened in a variety of lithologies ranging from clayey sands, silty sandy clays, lean clay, and dolomite with chert. Groundwater flow through variable lithologies facilitate natural variation in groundwater quality at the site. USGS data from water-supply wells in the Cartersville area of the Valley and Ridge have calcium concentrations up to 58 mg/L (**Appendix A: USGS Regional Data**).

3.6 Chloride at GWC-13, GWC-13RZ, and GWA-40

Reported chloride concentrations in wells GWC-13, GWC-13RZ, and GWA-40 were 6.2 mg/L, 8.9 mg/L, and 2.4 mg/L, respectively. These concentrations exceeded the prediction limits as shown in **Table 1**. The statistical exceedances of chloride at wells GWC-13, GWC-13RZ, and GWA-40 are likely the result of natural variation in groundwater quality and not the result of a release from the Landfill Cells. The following information supporting this conclusion include.

- Well GWA-40 is an upgradient well as demonstrated by groundwater flow direction based on measured water level elevations. The groundwater flow directions have been consistent with historical data from the site. Variations in chloride concentrations reflect natural variations in groundwater quality at the site. Statistical exceedances noted for this upgradient well cannot be attributed to the lined Landfill Cell.

- Chloride exceedances in GWC-13 and GWC-13RZ appear to be affected by recharge effects due its location near a drainage ditch that includes surface runoff from the landfill perimeter roads and adjacent slopes. The chloride concentrations in these wells are relatively low, and comparable to regional concentrations in water supply wells (average 4.5 mg/L in wells screened in Knox Dolomite, USGS Water Supply Paper 1619-FF), and these wells do not show other indicator parameters such as boron and fluoride. For these reasons, chloride concentrations in wells GWC-13 and GWC-13RZ are attributed to natural variations in groundwater quality.

3.7 Sulfate at GWA-4RZ, GWA-40, and GWC-49R

The statistical exceedances of sulfate at wells GWA-4RZ, GWA-40, and GWC-49R are likely the result of natural variation in groundwater quality and not the result of a release from the disposal units. The following information supporting this conclusion include.

- The sulfate statistical exceedances were reported in upgradient wells GWA-4RZ and GWA-40 at 26 mg/L and 7.4 mg/L, respectively. Wells GWA-4RZ and GWA-40 are upgradient wells as demonstrated by groundwater flow direction based on measured water level elevations. The groundwater flow directions have been consistent with historical data from the site. Variations in sulfate concentrations reflect natural variations in groundwater quality at the site. Statistical exceedances noted for these upgradient wells cannot be attributed to the lined landfill cells.
- Sulfate concentrations in Cells 1 & 2 upgradient wells have ranged from 0.5 to 105.552 mg/L, and sulfate concentrations in Cells 9 & 10 upgradient wells have ranged from 0.47 to 26 mg/L, which are within the range sulfate concentrations in bedrock well GWC-49R (3.8 mg/L) downgradient of Cells 9 & 10.
- Intrawell analysis calls for a 1-of-3 resampling strategy to be used when there is a statistical exceedance to verify the initial exceedance. The March 2018 sulfate result in GWC-49R was 3.1 mg/L, which is less than the prediction limit of 3.61 mg/L, thus the statistical exceedance was not verified.

3.8 Total Dissolved Solids at GWA-53 and GWA-39Z

Total Dissolved Solids (TDS) concentrations of 154 mg/L and 107 mg/L, respectively, in wells GWA-53 and GWA-39Z slightly exceed the intrawell prediction limits of 152.9 mg/L and 105.2 mg/L, respectively. Wells GWA-53 and GWA-39Z are upgradient wells as demonstrated by groundwater flow direction based on measured water level elevations. The groundwater flow directions have been consistent with historical data from the site. Variations in TDS concentrations reflect natural variations in groundwater quality at the site. Statistical exceedances noted for these upgradient wells cannot be attributed to the lined Landfill Cells.

4.0 CONCLUSIONS AND RECOMMENDATIONS

This ASD has been prepared in response to apparent SSIs presented in the 2017 Second Semi-Annual Groundwater Monitoring Report, Georgia Power Company Plant Bowen Cells 1 & 2, 3 & 4, and 9 & 10, dated March 2, 2018. Alternate sources were identified for the statistical exceedances for each of the following wells and constituents.

- GWC-13RZ Barium and Chloride
- GWC-47 Zinc
- GWC-11R pH
- GWC-15Z pH
- GWC-8RR pH
- GWC-22R pH
- GWC-44 pH
- GWC-45 pH
- GWC-48 pH
- GWC-49Z pH
- GWC-16R Calcium
- GWC-17R Calcium
- GWC-21R Calcium
- GWC-23R Calcium
- GWC-13 Chloride
- GWA-40 Chloride and Sulfate
- GWA-4RZ Sulfate
- GWC-49R Sulfate
- GWA-53 Total Dissolved Solids
- GWA-39Z Total Dissolved Solids

An ASD for well GWC-16R antimony statistical exceedance was previously submitted in August 28, 2017.

As outlined in Section 3, the statistical exceedances are due to variability in the groundwater quality and are not an indication of a release from the lined Landfill Cells. All locations have met the requirements for a demonstration listed in 391-3-4.14.23(c). Therefore, all locations should remain in CCR detection monitoring at this time. Detection monitoring results and D&O Plan target metals results should continue to be presented in the subsequent semi-annual groundwater monitoring reports.

TABLES

TABLE 1
SUMMARY OF STATISTICAL EXCEEDANCES - Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10

Parameter	Landfill Cell	Well	Initial Result	Resampled Result	Prediction Limit	Statistical Method
Barium	Cells 1 & 2	GWC-13RZ	0.0699 mg/L	0.082 mg/L	0.052 mg/L	Interwell
Zinc	Cells 9 & 10	GWC-47	0.0196 mg/L	0.0315 mg/L	0.0162 mg/L	Interwell
pH	Cells 1 & 2	GWC-11R	7.74 su	Not resampled	7.65-5.23 su	Interwell
pH	Cells 1 & 2	GWC-15Z	7.74 su	Not resampled	7.65-5.23 su	Interwell
pH	Cells 1 & 2	GWC-8RR	7.84 su	7.86 su	7.65-5.23 su	Interwell
pH	Cells 3 & 4	GWC-22R	7.46 su	7.39 su	7.87-7.52 su	Intrawell
pH	Cells 9 & 10	GWC-44	4.51 su	Not resampled	7.89-5.77 su	Interwell
pH	Cells 9 & 10	GWC-45	4.92 su	5.08 su	7.89-5.77 su	Interwell
pH	Cells 9 & 10	GWC-48	5.06 su	5.07 su	7.89-5.77 su	Interwell
pH	Cells 9 & 10	GWC-49Z	5.51 su	5.51 su	7.89-5.77 su	Interwell
Calcium	Cells 3 & 4	GWC-16R	63.8 mg/L	Not resampled	48.7 mg/L	Interwell
Calcium	Cells 3 & 4	GWC-17R	67.2 mg/L	Not resampled	48.7 mg/L	Interwell
Calcium	Cells 3 & 4	GWC-21R	58.9 mg/L	Not resampled	48.7 mg/L	Interwell
Calcium	Cells 3 & 4	GWC-23R	61.1 mg/L	Not resampled	48.7 mg/L	Interwell
Chloride	Cells 1 & 2	GWC-13	6.2 mg/L	Not resampled	2.86 mg/L	Interwell
Chloride	Cells 1 & 2	GWC-13RZ	8.9 mg/L	Not resampled	2.86 mg/L	Interwell
Chloride	Cells 9 & 10	GWA-40	2.4 mg/L	3.9 mg/L	1.56 mg/L	Intrawell
Sulfate	Cells 1 & 2	GWA-4RZ	25 mg/L	26 mg/L	22.61 mg/L	Intrawell
Sulfate	Cells 9 & 10	GWA-40	4.2 mg/L	7.4 mg/L	1.66 mg/L	Intrawell
Sulfate	Cells 9 & 10	GWC-49R	4.2 mg/L	3.8 mg/L	3.61 mg/L	Intrawell
TDS	Cells 3 & 4	GWA-53	154 mg/L	Not resampled	152.9 mg/L	Intrawell
TDS	Cells 9 & 10	GWA-39Z	107 mg/L	Not resampled	105.2 mg/L	Intrawell

Notes:

TDS = Total Dissolved Solids

su = pH standard units

mg/L = milligrams per liter

TABLE 2
EVALUATION OF STATISTICAL EXCEEDANCES FOR LANDFILL CELLS 1 & 2 - Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10

Parameters		Barium	Barium	Boron	Boron	Calcium	Calcium	Chloride	Chloride	Fluoride	Fluoride	pH	pH	Sulfate	Sulfate	TDS	TDS
Statistical Method		Interwell Prediction Limits	Interwell Evaluation	Interwell Prediction Limits	Interwell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation	Interwell Prediction Limits	Interwell Evaluation	Interwell Prediction Limits	Interwell Evaluation	Interwell Prediction Limits	Interwell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation
Wells	Date																
GWA-1	10/2/2017	0.052	0	0.05	0	34.85	0	2.864	0	0.3	0	5.23-7.65	0	2.447	0	173.2	0
GWA-2	10/2/2017	0.052	0	0.05	0	55.16	0	2.864	0	0.3	0	5.23-7.65	0	120.7	0	279.9	0
GWA-2R	10/2/2017	0.052	0	0.05	0	43.46	0	2.864	0	0.3	0	5.23-7.65	0	21.29	0	215.4	0
GWA-3	10/4/2017	0.052	0	0.05	0	1.993	0	2.864	0	0.3	0	5.23-7.65	0	1.125	0	65.42	0
GWA-4RZ	10/3/2017	0.052	0	0.05	0	57.12	0	2.864	0	0.3	0	5.23-7.65	0	22.61	1	411.6	0
GWA-4RZ	12/28/2017	0.052	na	0.05	na	57.12	na	2.864	na	0.3	na	5.23-7.65	0	22.61	1	411.6	na
GWA-50	10/2/2017	0.052	0	0.05	0	3.886	0	2.864	0	0.3	0	5.23-7.65	0	1.009	0	55.78	0
GWA-50R	10/2/2017	0.052	0	0.05	0	13.68	0	2.864	0	0.3	0	5.23-7.65	0	1.751	0	111.9	0
GWC-10	10/4/2017	0.052	0	0.05	0	41.08	0	2.864	0	0.3	0	5.23-7.65	0	2.133	0	178.8	0
GWC-10R	10/4/2017	0.052	0	0.05	0	45.67	0	2.864	0	0.3	0	5.23-7.65	0	1.99	0	214	0
GWC-11	10/4/2017	0.052	0	0.05	0	25.65	0	2.864	0	0.3	0	5.23-7.65	0	3.797	0	148.5	0
GWC-11R	10/4/2017	0.052	0	0.05	0	34.53	0	2.864	0	0.3	0	5.23-7.65	1	4.681	0	163.1	0
GWC-12	10/4/2017	0.052	0	0.05	0	9.694	0	2.864	0	0.3	0	5.23-7.65	0	0.762	0	111.6	0
GWC-13	10/9/2017	0.052	0	0.05	0	71.25	0	2.864	1	0.3	0	5.23-7.65	0	185.1	0	406.9	0
GWC-13RZ	10/6/2017	0.052	1	0.05	0	65.46	0	2.864	1	0.3	0	5.23-7.65	0	78.55	0	406.2	0
GWC-13RZ	12/28/2017	0.052	1	0.05	na	65.46	na	2.864	na	0.3	na	5.23-7.65	0	78.55	na	406.2	na
GWC-14Z	10/5/2017	0.052	0	0.05	0	44.46	0	2.864	0	0.3	0	5.23-7.65	0	5.627	0	288.3	0
GWC-15R	10/6/2017	0.052	0	0.05	0	59.29	0	2.864	0	0.3	0	5.23-7.65	0	10.76	0	240.9	0
GWC-15Z	10/6/2017	0.052	0	0.05	0	32.19	0	2.864	0	0.3	0	5.23-7.65	1	13.43	0	228.5	0
GWC-5	10/3/2017	0.052	0	0.05	0	7.563	0	2.864	0	0.3	0	5.23-7.65	0	2.161	0	122.5	0
GWC-6	10/3/2017	0.052	0	0.05	0	15.55	0	2.864	0	0.3	0	5.23-7.65	0	3.92	0	164.8	0
GWC-6RZ	10/3/2017	0.052	0	0.05	0	14.26	0	2.864	0	0.3	0	5.23-7.65	0	3.268	0	163.5	0
GWC-7Z	10/3/2017	0.052	0	0.05	0	26.45	0	2.864	0	0.3	0	5.23-7.65	0	2.004	0	171.9	0
GWC-8RR	10/4/2017	0.052	0	0.05	0	25.14	0	2.864	0	0.3	0	5.23-7.65	1	1.887	0	128.9	0
GWC-8RR	1/9/2018	0.052	na	0.05	na	25.14	na	2.864	na	0.3	0	5.23-7.65	1	1.887	na	166.6	na
GWC-8Z	10/3/2017	0.052	0	0.05	0	26.02	0	2.864	0	0.3	0	5.23-7.65	0	3.903	0	183.9	0
GWC-9	10/3/2017	0.052	0	0.05	0	32.7	0	2.864	0	0.3	0	5.23-7.65	0	4.554	0	183.9	0

Notes:

- 0 Indicates the parameter concentration did not exceed a statistical prediction limit
- 1 Indicates the parameter concentration was above the statistical prediction limit
- 1 Indicates the initial result of the parameter concentration was above the statistical prediction limit and was later re-sampled
- na parameter was not analyzed

TABLE 3
EVALUATION OF STATISTICAL EXCEEDANCES FOR LANDFILL CELLS 3 & 4 - Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10

Parameters		Boron	Boron	Calcium	Calcium	Chloride	Chloride	Fluoride	Fluoride	pH		pH		Sulfate	Sulfate	TDS	TDS
Statistical Method		Interwell Prediction Limits	Interwell Evaluation	Interwell Prediction Limits	Interwell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation	Interwell Prediction Limits	Interwell Evaluation	Intrawell Prediction Limits		Intrawell Evaluation		Intrawell Prediction Limits	Intrawell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation
Wells	Date																
GWA-36	9/15/2017	0.05	0	48.7	0	2.716	0	0.284	0	7.321	6.732	0	0	2.563	0	153.9	0
GWA-36R	9/15/2017	0.05	0	48.7	0	3.572	0	0.284	0	7.514	7.243	0	0	6.698	0	236	0
GWA-37	9/15/2017	0.05	0	48.7	0	1.363	0	0.284	0	5.94	5.02	0	0	1.05	0	284.6	0
GWA-38	9/19/2017	0.05	0	48.7	0	2.716	0	0.284	0	5.989	4.759	0	0	2.776	0	113.2	0
GWA-51RZ	9/19/2017	0.05	0	48.7	0	3.948	0	0.284	0	7.678	7.377	0	0	24.14	0	325.2	0
GWA-52	9/15/2017	0.05	0	48.7	0	2.924	0	0.284	0	7.679	7.446	0	0	8.478	0	169.1	0
GWA-53	9/19/2017	0.05	0	48.7	0	2.691	0	0.284	0	7.929	7.539	0	0	2.136	0	152.9	1
GWA-53R	9/19/2017	0.05	0	48.7	0	2.971	0	0.284	0	7.84	7.63	0	0	2.131	0	180.8	0
GWA-54	9/15/2017	0.05	0	48.7	0	1.696	0	0.284	0	7.914	7.371	0	0	7.61	0	178.9	0
GWA-55	9/15/2017	0.05	0	48.7	0	3.31	0	0.284	0	7.792	6.978	0	0	41.03	0	210.7	0
GWA-55R	9/18/2017	0.05	0	48.7	0	3.31	0	0.284	0	7.921	7.444	0	0	25.61	0	213.7	0
GWA-56	9/15/2017	0.05	0	48.7	0	9.613	0	0.284	0	8.239	7.624	1	0	138.2	0	451.1	0
GWA-56	1/9/2018	0.05	na	48.7	na	9.613	na	0.284	na	8.239	7.624	0	0	138.2	na	451.1	na
GWC-16R	9/21/2017	0.05	0	48.7	1	2.541	0	0.284	0	7.484	6.836	0	0	12.03	0	334.4	0
GWC-17R	9/22/2017	0.05	0	48.7	1	7.286	0	0.284	0	7.278	7.107	0	0	8.924	0	383.2	0
GWC-18	9/25/2017	0.05	0	48.7	0	2.411	0	0.284	0	7.4	5.888	0	0	2.451	0	134.3	0
GWC-18R	9/21/2017	0.05	0	48.7	0	2.888	0	0.284	0	8.014	7.529	0	0	2.607	0	184.5	0
GWC-19R	9/20/2017	0.05	0	48.7	0	2.935	0	0.284	0	7.855	7.545	0	0	3.669	0	229.7	0
GWC-20R	9/19/2017	0.05	0	48.7	0	2.212	0	0.284	0	7.832	7.366	0	0	1.84	0	219.3	1
GWC-20R	12/29/2017	0.05	na	48.7	na	2.212	na	0.284	na	7.832	7.366	0	0	1.84	na	219.3	0
GWC-21R	9/19/2017	0.05	0	48.7	1	4.953	0	0.284	0	7.318	6.819	0	0	5.979	0	415.4	0
GWC-22R	9/19/2017	0.05	0	48.7	0	3.234	0	0.284	0	7.871	7.524	0	1	2.529	0	196.6	0
GWC-22R	1/9/2018	0.05	na	48.7	na	3.234	na	0.284	na	7.871	7.524	0	1	2.529	na	196.6	na
GWC-23R	9/21/2017	0.05	0	48.7	1	2.547	0	0.284	0	7.67	7.063	0	0	25.38	0	352.1	0
GWC-24R	9/19/2017	0.05	0	48.7	0	3.052	0	0.284	0	7.898	6.859	0	0	13.86	0	216.9	0
GWC-25R	9/19/2017	0.05	0	48.7	0	3.148	0	0.284	0	7.786	7.271	0	0	1.98	0	197.9	0

Notes:

- 0 Indicates the parameter concentration did not exceed a statistical prediction limit
- 1 Indicates the parameter concentration was above the statistical prediction limit
- 1 Indicates the initial result of the parameter concentration was above the statistical prediction limit and was later re-sampled
- na parameter was not analyzed

TABLE 4
EVALUATION OF STATISTICAL EXCEEDANCES FOR LANDFILL CELLS 9 & 10 - Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10

Parameters		Boron	Boron	Calcium	Calcium	Chloride	Chloride	Fluoride	Fluoride	pH	pH	Sulfate	Sulfate	TDS	TDS
Statistical Method		Interwell Prediction Limits	Interwell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation	Interwell Prediction Limits	Interwell Evaluation	Interwell Prediction Limits	Interwell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation	Intrawell Prediction Limits	Intrawell Evaluation
Wells	Date														
GWA-39RZ	9/29/2017	0.0651	0	40.84	0	3.889	0	0.1286	0	5.77- 7.89	0	27.34	0	265.2	0
GWA-39Z	9/26/2017	0.0651	0	22.08	1	2.308	0	0.1286	0	5.77- 7.89	0	9.647	0	105.2	1
GWA-39Z	12/28/2017	0.0651	na	22.08	0	2.308	na	0.1286	na	5.77- 7.89	na	9.647	na	105.2	na
GWA-40	9/26/2017	0.0651	0	25.37	0	1.563	1	0.1286	0	5.77- 7.89	0	1.664	1	153	0
GWA-40	12/28/2017	0.0651	na	25.37	na	1.563	1	0.1286	na	5.77- 7.89	0	1.664	1	153	na
GWA-41	9/25/2017	0.0651	0	30.24	0	3.92	0	0.1286	0	5.77- 7.89	0	5.013	0	136.8	0
GWA-41R	9/25/2017	0.0651	0	42.84	0	6.054	0	0.1286	0	5.77- 7.89	0	8.599	0	231.4	0
GWA-42	9/26/2017	0.0651	0	33.11	0	3.286	0	0.1286	0	5.77- 7.89	0	2.241	0	179.8	0
GWA-43	9/22/2017	0.0651	0	18.86	0	1.473	0	0.1286	0	5.77- 7.89	0	1.943	0	92.51	0
GWA-43R	9/22/2017	0.0651	0	30.83	1	5.558	0	0.1286	0	5.77- 7.89	0	10.3	0	166.5	0
GWA-43R	12/28/2017	0.0651	na	30.83	0	5.558	na	0.1286	na	5.77- 7.89	0	10.3	na	166.5	na
GWC-44	9/26/2017	0.0651	0	9.645	0	9.108	0	0.1286	0	5.77- 7.89	1	45.44	0	173.9	0
GWC-45	9/27/2017	0.0651	0	0.935	0	1.267	0	0.1286	0	5.77- 7.89	1	1.519	0	28.31	0
GWC-45	12/29/2017	0.0651	na	0.935	na	1.267	na	0.1286	na	5.77- 7.89	1	1.519	na	28.31	na
GWC-45R	9/27/2017	0.0651	0	38.68	0	3.299	0	0.1286	0	5.77- 7.89	0	3.344	0	206.4	0
GWC-46R	9/29/2017	0.0651	0	53.36	0	2.781	0	0.1286	0	5.77- 7.89	0	8.672	0	276.6	0
GWC-47	9/27/2017	0.0651	0	30.22	0	2.883	0	0.1286	0	5.77- 7.89	0	5.413	0	166.9	0
GWC-47	12/28/2017	0.0651	na	30.22	na	2.883	na	0.1286	na	5.77- 7.89	0	5.413	na	166.9	na
GWC-47R	9/27/2017	0.0651	0	37.4	0	2.915	0	0.1286	0	5.77- 7.89	0	10.22	0	175.5	0
GWC-48	9/29/2017	0.0651	0	10.82	0	2.931	0	0.1286	0	5.77- 7.89	1	3.164	1	77.44	0
GWC-48	12/28/2017	0.0651	na	10.82	na	2.931	na	0.1286	na	5.77- 7.89	1	3.164	0	77.44	na
GWC-49R	9/29/2017	0.0651	0	29.24	0	1.742	0	0.1286	0	5.77- 7.89	0	3.612	1	178.1	0
GWC-49R	12/28/2017	0.0651	na	29.24	na	1.742	na	0.1286	na	5.77- 7.89	0	3.612	1	178.1	na
GWC-49Z	9/29/2017	0.0651	0	6.197	0	1.732	0	0.1286	0	5.77- 7.89	1	9.157	0	75.12	0
GWC-49Z	1/10/2018	0.0651	na	6.197	na	1.732	na	0.1286	na	5.77- 7.89	1	9.157	na	75.12	na

Notes:

- 0 Indicates the parameter concentration did not exceed a statistical prediction limit
- 1 Indicates the parameter concentration was above the statistical prediction limit
- 1 Indicates the initial result of the parameter concentration was above the statistical prediction limit and was later re-sampled
- na parameter was not analyzed

TABLE 5
SUMMARY OF GEOCHEMICAL DATA - Plant Bowen Landfill Cells 1 & 2, 3 & 4, and 9 & 10

Landfill Cell	Type	Water Unit	Well	Alkalinity Carbonate as CaCO3	Calcium	Chloride	Magnesium	pH	Potassium	Sodium	Sulfate	Total Dissolved Solids	Major Cation	Major Anion	Major Charge Balance Percent
Cells 1&2	UP	OB	GWA-3	1	1.2	1.5	0.35	5.4	0.26	1.7	1	25	Sodium	Bicarbonate	4.8
Cells 1&2	UP	OB	GWA-50	1	1.8	1.4	0.33	5.64	0.34	2.5	1	25	Sodium	Bicarbonate	-3.1
Cells 1&2	DOWN	OB	GWC-13	1	40.9	4.6	11.7	7.33	2.4	2.3	59.1	211	Calcium	Bicarbonate	1.9
Cells 1&2	DOWN	OB	GWC-15Z	1	25	0.8	14.4	7.89	0.97	2	1.6	119	Calcium	Bicarbonate	8.7
Cells 1&2	UP	ROCK	GWA-1	1	28.5	1.7	16.6	7.58	1.3	6.1	1.5	140	Calcium	Bicarbonate	5.7
Cells 1&2	UP	ROCK	GWA-2	1	63	1.9	17.8	6.55	1	2	147	295	Calcium	Sulfate	7.4
Cells 1&2	UP	ROCK	GWA-2R	1	33	1.6	12	7.31	0.37	2.2	14.8	130	Calcium	Bicarbonate	13.4
Cells 1&2	UP	ROCK	GWA-4RZ	1	47.5	2.9	22.4	7.3	0.73	5.4	25.4	237	Calcium	Bicarbonate	6.5
Cells 1&2	UP	ROCK	GWA-50R	1	2.6	1.1	1.1	5.46	0.26	1.1	1	25	Calcium	Bicarbonate	10.1
Cells 1&2	DOWN	ROCK	GWC-11R	1	27.5	2	15.2	7.72	1.2	0.91	2.2	139	Calcium	Bicarbonate	7.2
Cells 1&2	DOWN	ROCK	GWC-13RZ	1	41.4	8.3	19.4	7.58	1.2	29.1	75.8	281	Calcium	Bicarbonate	2.7
Cells 1&2	DOWN	ROCK	GWC-8RR	1	25	1.3	10.8	7.9	1.2	1.1	1.2	117	Calcium	Bicarbonate	10.3
Cells 3&4	UP	OB	GWA-36	1	25	2.2	7.3	6.6	0.49	3.5	1	81	Calcium	Bicarbonate	28.0
Cells 3&4	UP	OB	GWA-37	1	0.81	1.1	0.33	5.72	0.84	3.2	1	25	Sodium	Bicarbonate	0.8
Cells 3&4	UP	OB	GWA-38	1	1.4	2.4	0.4	5.57	0.41	4.7	1.5	33	Sodium	Bicarbonate	7.8
Cells 3&4	UP	OB	GWA-52	1	26.2	3	15	7.34	0.96	3.7	8.5	150	Calcium	Bicarbonate	6.5
Cells 3&4	UP	OB	GWA-53	1	28.6	2.7	17.1	7.74	0.68	1.5	1.9	138	Calcium	Bicarbonate	10.2
Cells 3&4	UP	OB	GWA-54	1	25	0.93	14.3	7.39	0.9	3.3	4.9	133	Calcium	Bicarbonate	15.4
Cells 3&4	UP	OB	GWA-55	1	39.6	3.6	23.2	7	1.2	0.85	28.7	212	Calcium	Bicarbonate	7.5
Cells 3&4	UP	OB	GWA-56	1	26	6.9	21.1	8.03	2.2	72.8	94.8	349	Sodium	Bicarbonate	5.6
Cells 3&4	UP	ROCK	GWA-36R	1	30.6	3.2	17.8	7.26	1.2	1.7	8.2	169	Calcium	Bicarbonate	7.7
Cells 3&4	UP	ROCK	GWA-51RZ	1	46.1	3.3	22.5	7.62	1.1	3.5	27.3	233	Calcium	Bicarbonate	5.2
Cells 3&4	UP	ROCK	GWA-53R	1	29.3	2.6	16.9	7.8	0.7	1.5	1.9	132	Calcium	Bicarbonate	11.2
Cells 3&4	UP	ROCK	GWA-55R	1	38.2	3.2	23	7.11	0.97	1.2	22	207	Calcium	Bicarbonate	8.5
Cells 3&4	DOWN	ROCK	GWC-16R	1	60.6	2.1	35.8	7.11	1.1	8.2	8.8	312	Calcium	Bicarbonate	7.9
Cells 3&4	DOWN	ROCK	GWC-17R	1	65.6	6.1	38.9	7.16	0.73	2.5	7	323	Calcium	Bicarbonate	10.9
Cells 3&4	DOWN	ROCK	GWC-21R	1	65.6	4.4	40.4	6.99	1.1	1.5	1	306	Magnesium	Bicarbonate	10.8
Cells 3&4	DOWN	ROCK	GWC-22R	1	32.1	2.8	18.7	7.49	0.88	1.7	2.4	159	Calcium	Bicarbonate	7.8
Cells 3&4	DOWN	ROCK	GWC-23R	1	59.9	2.2	39.1	7.4	0.7	7.5	14	290	Magnesium	Bicarbonate	9.0
Cells 9&10	UP	OB	GWA-39Z	1	26.4	1.4	15.5	7.42	1.2	1.2	3.8	126	Calcium	Bicarbonate	8.6
Cells 9&10	UP	OB	GWA-40	1	25.7	2.4	14.8	7.56	0.73	1.1	3.8	123	Calcium	Bicarbonate	7.4
Cells 9&10	UP	OB	GWA-41	1	39.6	3	23.2	7.08	1.8	0.97	11.5	192	Calcium	Bicarbonate	10.1
Cells 9&10	UP	OB	GWA-42	1	32.6	3.2	15.6	7.6	0.34	2.3	2.1	134	Calcium	Bicarbonate	8.9
Cells 9&10	UP	OB	GWA-43	1	3.6	1.3	0.46	5.85	0.51	1.3	1	25	Calcium	Bicarbonate	2.9
Cells 9&10	DOWN	OB	GWC-44	1	9	6.5	2.1	4.34	1.7	2.2	32.4	41	Calcium	Sulfate	-8.8
Cells 9&10	DOWN	OB	GWC-45	1	0.77	1.2	0.48	4.6	0.23	1.9	1	25	Sodium	Chloride	22.9
Cells 9&10	DOWN	OB	GWC-47	1	25	2.7	12.6	7.42	0.69	3	3.7	102	Calcium	Bicarbonate	9.6
Cells 9&10	DOWN	OB	GWC-48	1	3.5	2.6	0.35	5.14	0.27	2.3	1	25	Calcium	Bicarbonate	-2.2
Cells 9&10	DOWN	OB	GWC-49Z	1	0.81	1.4	0.24	5.12	0.55	3.5	2.4	25	Sodium	Bicarbonate	9.2
Cells 9&10	UP	ROCK	GWA-39RZ	1	32.6	2.6	17.6	7.49	1.1	5.8	15.5	150	Calcium	Bicarbonate	6.6
Cells 9&10	UP	ROCK	GWA-41R	1	41.4	4	23.8	7.04	2.4	0.74	10.9	210	Calcium	Bicarbonate	8.1
Cells 9&10	UP	ROCK	GWA-43R	1	28	2.8	16	7.66	0.55	1.4	5.1	117	Calcium	Bicarbonate	7.9
Cells 9&10	DOWN	ROCK	GWC-49R	1	25	1.6	14	7.51	0.75	1.9	3.1	88	Calcium	Bicarbonate	6.6

Notes:

UP = Upgradient well (background well)

DOWN = Downgradient well

OB = overburden water unit

ROCK = bedrock water unit

Data shown is from the March 2018 sampling event

The table is color-coded to show similarities and differences. The colors depict a ranking of the concentrations from highest to lowest along a column for a single parameter.





The highest concentrations are shown in dark red and the lowest concentration are shown in dark green with the concentrations between the highest and lowest shown in yellow.

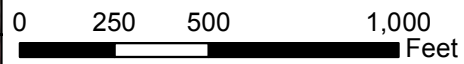
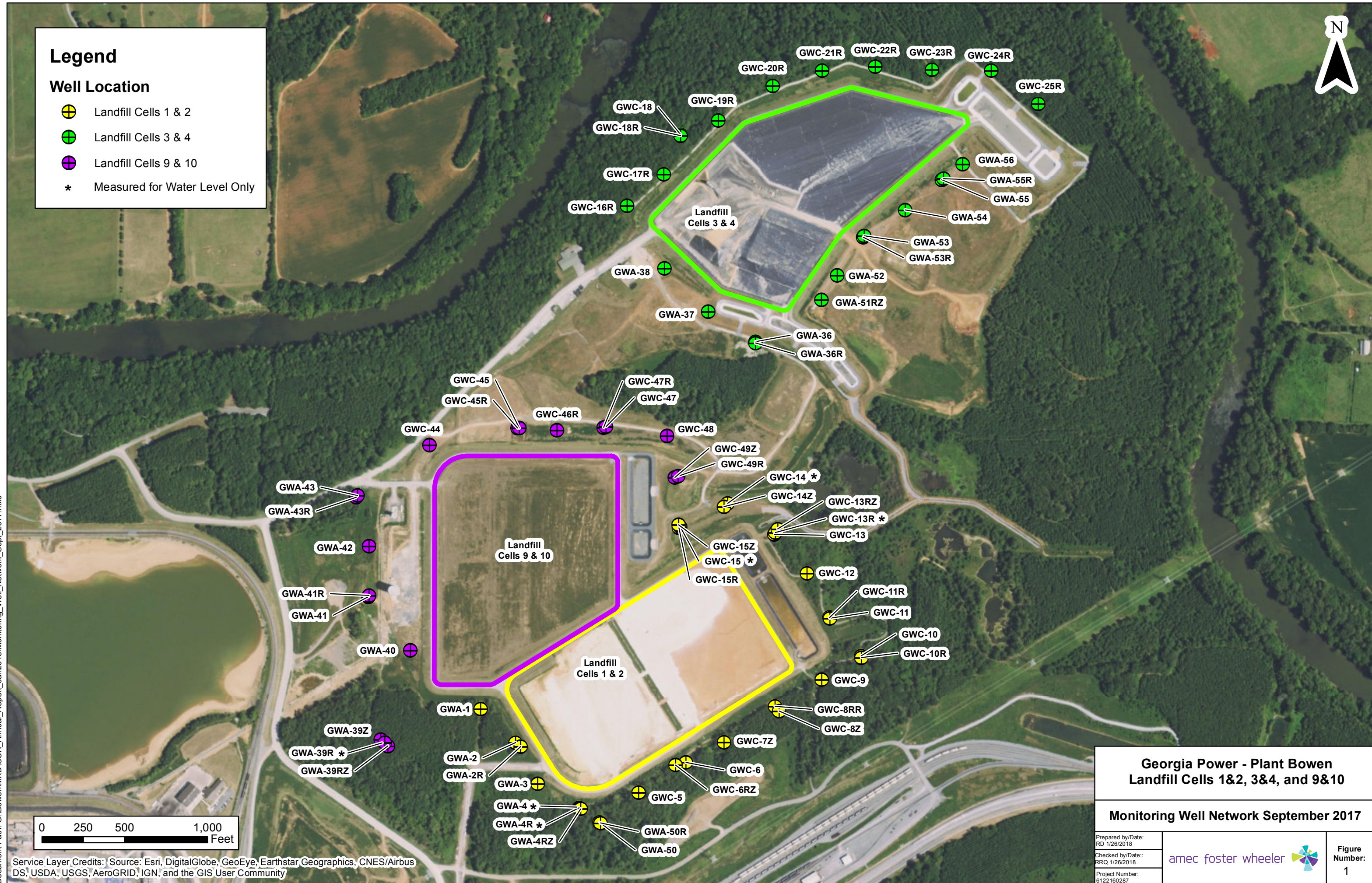
Lighter shadings of red, green, and yellow indicate the next highest or next lowest concentration.

FIGURES


Legend

Well Location

-  Landfill Cells 1 & 2
-  Landfill Cells 3 & 4
-  Landfill Cells 9 & 10
-  Measured for Water Level Only



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Georgia Power - Plant Bowen Landfill Cells 1&2, 3&4, and 9&10	
Monitoring Well Network September 2017	
Prepared by/Date: RD 1/26/2018	
Checked by/Date: RRQ 1/26/2018	
Project Number: 6122160287	
Figure Number: 1	

Document Path: G:\Bowen\MXD\CCR_Annual_Report_Jan2018\Monitoring_Well_Network_Sept_2017.mxd

Figure 2: GWC-13RZ Metals Data

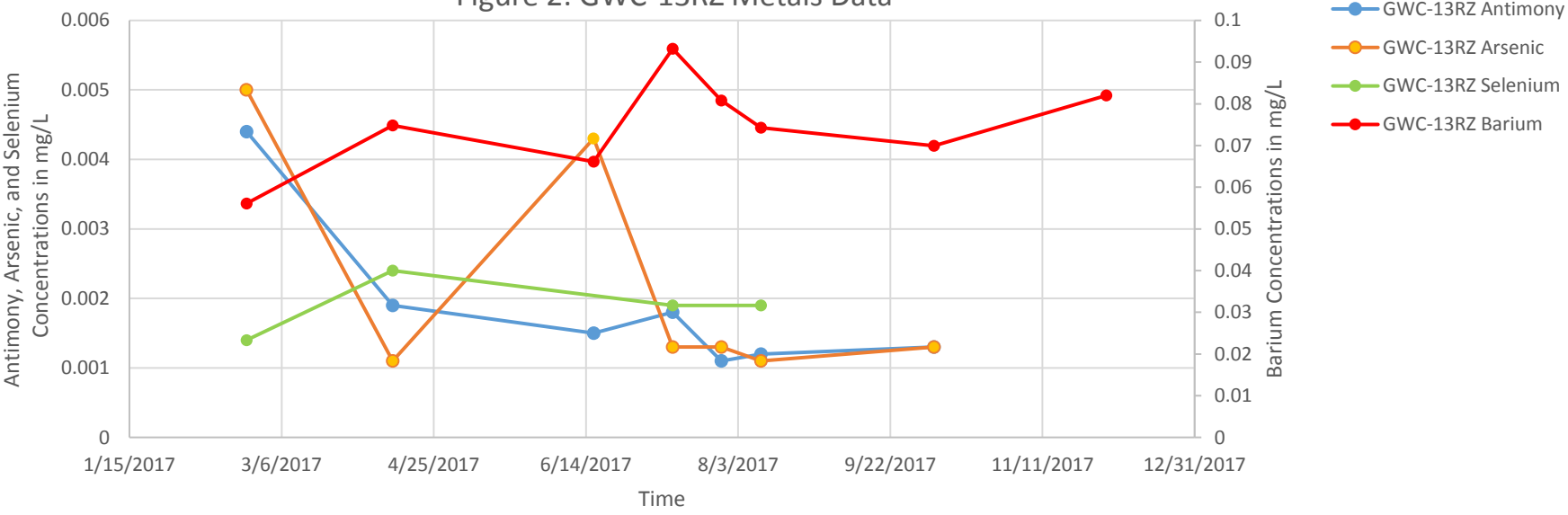


Figure 3: GWC-47 Metals Data

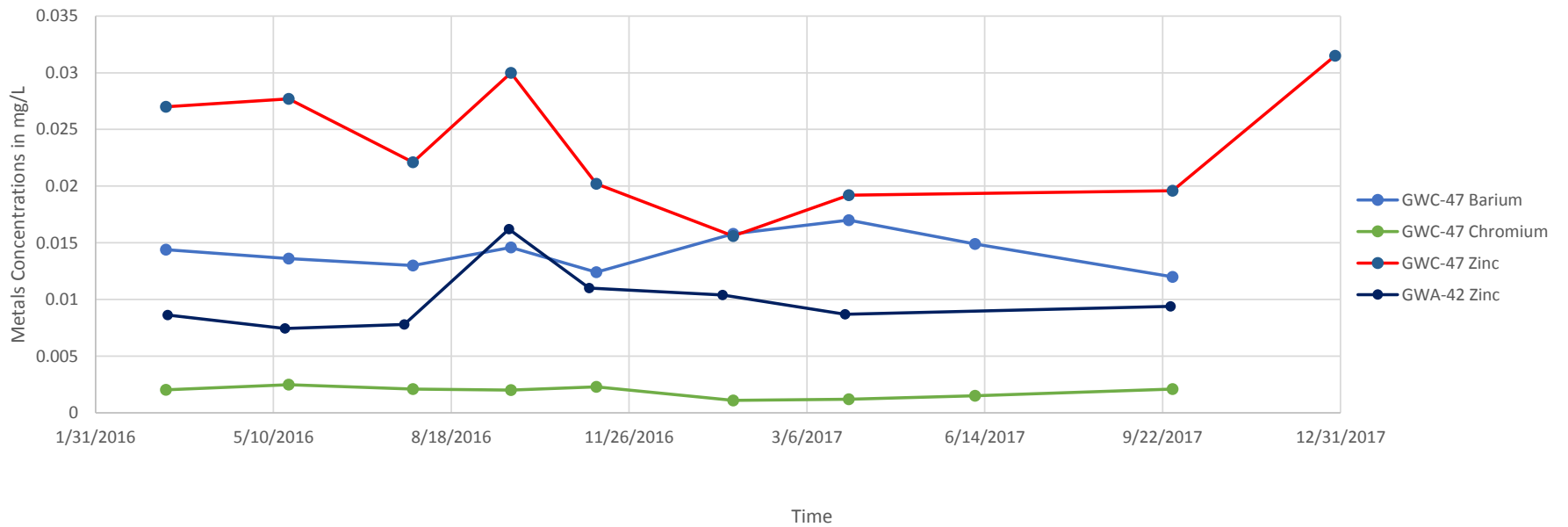
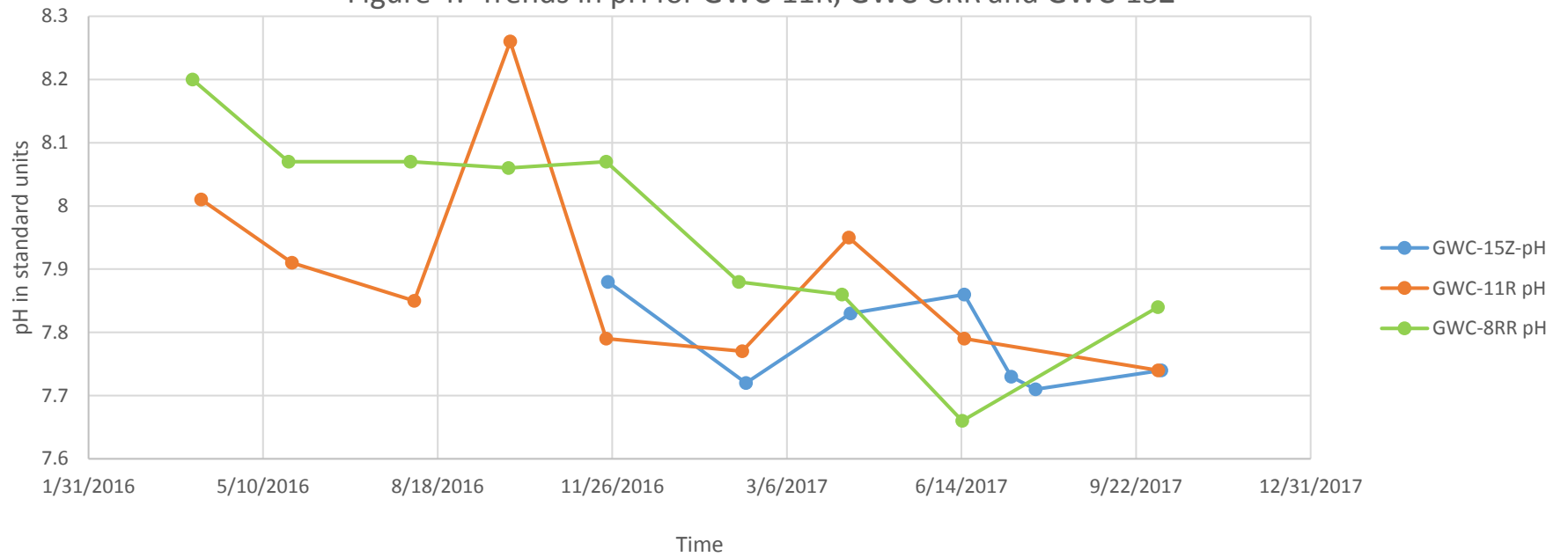


Figure 4: Trends in pH for GWC-11R, GWC-8RR and GWC-15Z



APPENDIX A
USGS REGIONAL DATA



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Land Protection Branch
2 Martin Luther King, Jr. Drive
Suite 1054, East Tower
Atlanta, Georgia 30334
404-656-7802

January 30, 2019

Ms. Alexandria Wild
Engineer – Environmental Affairs
Georgia Power Company
BIN 10221
241 Ralph McGill Blvd
Atlanta, Georgia 30308-3374

Subject: Groundwater Alternate Source Demonstration
Bartow County – Plant Bowen Industrial Landfill
Permit No. 008-018D(LI)

I have reviewed the groundwater Alternate Source Demonstration submittals that address the following Statistically Significant Increases (SSI's): antimony, barium, zinc, pH, calcium, chloride, sulfate, and total dissolved solids. Based on the information provided by Georgia Power the Alternate Source Demonstration is approved. If you have questions or require further information, please contact me at (404) 362-4511.

Sincerely,

Steve McManus, P.G.



Solid Waste Management Program

C: GW Monitoring Correspondence File
John Sayer, EPD
Chad Hall, EPD

S: Bartow-Plant Bowen Alt Source, 1-30-19