GEI Consultants

Consulting
Engineers and
Scientists

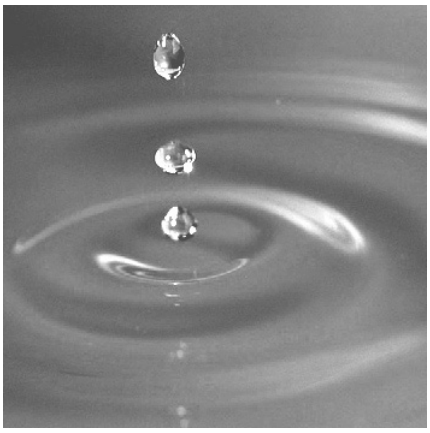
Georgia Power Company

2019 Annual Groundwater Monitoring and Corrective Action Report

Plant McIntosh Coal Combustion Residuals
Existing Landfill No. 4
Permit No. 051-010D(LI)

Prepared by:
GEI Consultants, Inc.
1375 Peachtree Street, Suite A15
Atlanta, GA 30309

January 2020
Project 1901973



Prepared by: Lauren Coker
Staff Geologist

Reviewed by: Christie Battenhouse, P.G.
Senior Project Manager

Table of Contents

Table of Contents (continued)

Tables

Figures

Appendices

PROFESSIONAL ENGINEER CERTIFICATION

This *2019 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company - Plant McIntosh Landfill No. 4,* has been prepared in accordance with the United States Environmental Protection Agency coal combustion residual rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with GEI Consultants, Inc.

GEI Consultants, Inc. certifies that all state Appendix I parameters were below the applicable Georgia maximum contaminant levels (MCL).

John M. Trast, P.E.
License No. PE41928

1. Introduction

In accordance with the United States Environmental Protection Agency (USEPA) coal combustion residuals (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D, April 17, 2015) and the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management 391-3-4-.10, GEI Consultants, Inc. (GEI) has prepared this *2019 Annual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted at Georgia Power Company's (GPC's) Plant McIntosh (the Site), CCR Existing Landfill No. 4 (Landfill No. 4) during 2019.

Groundwater monitoring is currently conducted in accordance with the Solid Waste Permit No. 051-010D(LI) requirements specified in the Design and Operation (D&O) Plan (GPC, 2004). A minor modification to the permit, dated August 9, 2017, approved the addition of Appendix III and IV parameters contained in the 40 CFR § 257 Subpart D to the groundwater monitoring plan in Solid Waste Permit No. 051-010D(LI). An application for a new Georgia CCR permit was submitted to Georgia EPD in November 2018 for the facility to replace the existing Solid Waste Permit.

This report provides the results of sampling events conducted in January, March, and September 2019 and includes: (1) results for a state-modified list of Appendix I constituents listed in the D&O Plan in the Solid Waste Permit No. 051-010D(LI); and (2) CCR detection monitoring sampling event for USEPA's CCR Appendix III constituents.

1.1 Site Description and Background

The Site is located at 981 Old Augusta Central Road, in southeast Effingham County, Georgia, approximately 4 miles northeast of the city of Rincon, and 20 miles north-northwest of the city of Savannah. The Site is situated on the west bank of the Savannah River at Big Kiffer Point (Figure 1). Landfill No. 4 receives CCR generated from the plant and is on the western portion of the plant property, approximately 1.5 miles west of the Savannah River and approximately 800 feet south of Lockner Creek.

Landfill No. 4 is composed of Cells 1, 2A, and 2B (Figure 2). Closure construction for Cell 1 of Landfill No. 4 began in June 2015 and final cover construction was completed in August 2016. GPC began construction of Cell 2A in June 2015 and received approval to begin receiving solid waste for disposal on July 20, 2017. Cell 2A of Landfill No. 4 began receiving CCR waste in September 2017. Cells 2B, 3, and 4 are for future development.

1.2 Regional Geology and Hydrogeologic Setting

Rincon, Georgia is located within the Coastal Plain Province of Georgia. Coastal Plain sediments are composed of stratified clay, silt, sand, and limestone, resting on much older igneous and metamorphic basement rocks. These older, crystalline rocks dip to the south and east causing the overlying sediments to form a wedge-shaped deposit, which is thickest to the east and the south. The Coastal Plain deposits crop out at the land surface in bands, from the oldest to the most recent, from the Fall Line to the coast. Pleistocene-aged deposits are at the surface in this region. Recharge to the major aquifers in the area is to the northeast of Landfill No. 4, where these formations outcrop (Southern Company Services Earth Science & Environmental Engineering [SCS ES&EE], 2002).

The Site is situated on sediments that were deposited from the Cretaceous to Pleistocene period and consist of stratified marine deposits and materials eroded from crystalline rock of the Piedmont Region. Soils at Landfill No. 4 are described in boring logs as interbedded clays, silts, and sands typical of Coastal Plain sediments.

The uppermost aquifer at Landfill No. 4 is the surficial aquifer, characterized by silty to sandy clays, clayey silts, silty sands, and fine to medium-grained sands. Monitoring wells and piezometers are screened in the surficial aquifer between elevation 40 and 12 feet (ft) North American Vertical Datum 88 (NAVD 88).

1.3 Groundwater Monitoring Well Network

Pursuant to 40 CFR §257.91, a groundwater monitoring network was installed within the uppermost aquifer at Landfill No. 4. The monitoring network is designed to monitor groundwater passing the waste boundary of the unit within the uppermost aquifer. Wells were located to serve as upgradient and downgradient monitoring points based on groundwater flow direction relative to constructed waste boundaries (Table 1).

2. Groundwater Monitoring Activities

The following subsections describe monitoring-related activities performed during 2019. All groundwater monitoring was performed in accordance with the federal CCR requirements found in 40 CFR § 257.94, and the state of Georgia monitoring requirements specified in Georgia EPD Rules for Solid Waste Management 391-3-4-.14 and the approved Georgia EPD Solid Waste Permit No. 051-010D(LI). Samples were collected from each well in the monitoring network shown on Figure 2. Pursuant to 40 CFR § 257.90(e)(3), a summary and description of groundwater sampling events completed at Landfill No. 4 in 2019 is shown on Table 2.

2.1 Monitoring Well and Piezometer Installation and Maintenance

Piezometer and monitoring well locations are shown on Figure 2. No new monitoring wells or piezometers were installed in 2019. Well maintenance was performed in 2019 on the existing groundwater monitoring network, and included the following activities:

- Cleaned well pad
- Removed rust on latches and replaced expansion caps (as needed)
- Drilled weep holes
- Added universal reflective signs containing the well names

Georgia EPD inspected the monitoring wells and piezometers at Landfill No. 4 in April 2019. No deficiencies were noted at Landfill No. 4. Monitoring well/piezometer maintenance will continue during each monitoring event.

2.2 Alternate Source Demonstrations

Statistically significant increases (SSIs) of Appendix I and Appendix III groundwater monitoring parameters were reported in one or more wells for boron, sulfate, and barium in 2019. In accordance with 40 CFR § 257.94(e), within 90 days of determining an SSI, alternate source demonstrations (ASDs) were prepared for all verified SSIs and the ASDs were submitted in appendices to either semiannual or annual reports as follows:

- Boron: GWC-10, *Alternative Source Demonstration* (GEI, 2018),

- Sulfate: GWC-1, GWC-4A(*GWB-4A), GWC-10, GWA-13, and GWC-15(*GWB-15), *2019 Semiannual Groundwater Monitoring and Corrective Action Report* (GEI, 2019), and

- Barium: GWA-13 and GWA-16(*GWB-16), *Alternative Source Demonstration* (ERM, 2018).

Appendix I or Appendix III SSIs not listed above and identified in 2019 were either unverified through resampling or considered to be representative of background groundwater quality, with the exception of chromium in GWC-19. GPC will prepare an ASD that shows that Landfill No. 4 is not the source of the chromium SSI due to the natural variability in groundwater chemistry. The SSIs, as well as results of all of the statistical analyses completed in 2019 are summarized in Sections 4.3 and 4.4. The ASDs concluded that Landfill No. 4 was not the source of the elevated constituents. The ASD completed in 2019 is provided in Appendix A.

2.3 Detection Monitoring

Two detection monitoring events were conducted during the first semiannual sampling period in January and March to align future first semiannual sampling events with a March sampling schedule. The second semiannual sampling event was completed in September 2019. Groundwater samples were collected from each monitoring well and analyzed for:

- Appendix III constituents according to 40 CFR § 257.94(a); and

- A state-modified list of Appendix I detection parameters according to Georgia EPD Rules for Solid Waste Management 391-3-4-.14 and the approved Georgia EPD Solid Waste Permit No. 051-010D(LI). The state-modified Appendix I list includes antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium, and zinc.

Copies of the analytical data packages for semiannual detection monitoring events are included in Appendix B.

2.4 Other Sampling

No additional sampling was conducted at Landfill No. 4 in 2019.

3. Sampling Methodology and Analyses

GEI conducted the field work described herein. The field activities and results of the groundwater sampling events are summarized in the following sections. Copies of the laboratory analytical and field sampling reports are included in Appendix B.

3.1 Groundwater Level Measurement

Prior to conducting each groundwater sampling event, groundwater elevations were collected from each piezometer and groundwater monitoring well at Landfill No. 4. GEI used an electronic water level indicator to measure water levels to the nearest 0.01 foot. The water levels and corresponding groundwater elevations measured during the detection monitoring events are summarized in Table 3.

Potentiometric surface elevation contours and estimated groundwater flow direction were developed using the groundwater elevation data in January (Figure 3), March (Figure 4), and September 2019 (Figure 5). Interpretation of the potentiometric surface elevation contours indicates that groundwater flow across Landfill No. 4 is generally to the north but ranges from northeast near Cell 1 to north-northwest near Cell 2A (Figures 3, 4, and 5), which is consistent with previous events.

3.2 Groundwater Gradient and Flow Velocity

Horizontal flow velocity at the Landfill No. 4 was calculated using a derivation of Darcy's Law. Specifically,

$$v = linear\ velocity = \frac{Ki}{\eta_e}$$

where :

$K = hydraulic\ conductivity$

$$i = hydraulic\ gradient = \frac{(h_1 - h_2)}{L}$$

$\eta_e = effective\ porosity$

$h_1\ and\ h_2 = groundwater\ elevation\ at\ locations\ 1\ and\ 2$

$L = distance\ between\ locations\ 1\ and\ 2$

As presented in previous reports, and originally detailed in the July 2002 *Savannah Electric Plant McIntosh Proposed Ash Monofill Site Acceptability Report* (SCS ES&EE, 2002), the

sandy Unit 3 aquifer was identified as the shallowest, water-bearing unit at the Site and hydrogeologic properties are observed to be very similar throughout the Site. Most wells at the Site are primarily screened in this aquifer, including wells at Landfill No. 4. The average hydraulic conductivity of the Unit 3 aquifer was used in the calculations, which is 0.859 feet per day (ft/day; SCS ES&EE, 2002). Soils at the screened intervals of the wells are generally classified as silty sands (SM). The default value for effective porosity for this type soil is 0.20 (USEPA 530/SW-89-031, 1989). To calculate an average gradient across Landfill No. 4, the hydraulic gradient was calculated between three separate well pairs: GWA-3 and GWC-11; GWC-5(*GWB-5) and GWC-23; and GWA-14 and GWC-18 (Table 4). The calculated average groundwater flow velocity at Landfill No. 4 in March and September 2019 is 0.053 ft/day or 19.35 feet per year (ft/year).

3.3 Groundwater Sampling

Groundwater samples were collected in accordance with 40 CFR § 257.93(a) and the approved D&O Plan. Wells were purged using a peristaltic pump with disposable tubing. The disposable tubing was lowered into each well so that the intake was at the midpoint of the well screen (or as appropriate determined by the water level). All non-disposable equipment was decontaminated before use and between well locations. While the wells were purged, water level data and purge volumes were recorded electronically and by hand, and the following field parameters were collected:

pH (field)	Oxidation Reduction Potential (ORP)	Temperature
Specific Conductivity	Dissolved Oxygen (DO)	Turbidity

Monitoring wells were purged and sampled and using low-flow sampling procedures. A SmarTroll (In-Situ field instrument) was used to monitor and record field water quality parameters during well purging to verify stabilization prior to sampling. Turbidity was monitored using a LaMotte 1970-USEPA Compliant Model 2020we or HANNA Instruments Model HI93703 USEPA and International Organization for Standardization (ISO) compliant turbidity meter. Groundwater samples were collected when the following stabilization criteria were met:

- ± 0.1 standard units for pH.
- ± 5 percent for specific conductance.
- ± 0.2 milligrams per liter (mg/L) or ±10 percent for DO > 0.5 mg/L (whichever is greater). No criterion applies if DO < 0.5 mg/L.
- Turbidity measurements less than 10 nephelometric turbidity units (NTU).

Once stabilization was achieved, unfiltered samples were collected in laboratory supplied bottles, placed in ice-packed coolers, and shipped to Eurofins TestAmerica (Eurofins) in Pittsburgh, Pennsylvania following chain-of-custody protocol. Field sampling data sheets are included in Appendix B.

3.4 Laboratory Analyses

Groundwater samples were collected in January, March, and September 2019 from wells in the certified groundwater monitoring network. These samples were analyzed for Appendix III monitoring parameters as part of the detection monitoring program, as well as the state compliance program. Samples were analyzed using methods described in USEPA SW846, *Methods for Chemical Analysis of Water and Wastes* (USEPA, 1983), and *Standard Method for The Examination of Water and Wastewater* (American Water Works Association, 2017). Specific methods are identified on the laboratory analytical data reports included in Appendix B. A summary of detection groundwater monitoring data and state Appendix I parameters collected in 2019 for Landfill No. 4 is included in Table 5.

Laboratory analyses were performed by Eurofins, which is accredited by the National Environmental Laboratory Accreditation Program (NELAP) and maintains a NELAP certification for all parameters analyzed during the groundwater monitoring events in 2019 at Landfill No. 4. In addition, Eurofins is certified by the state of Georgia to perform laboratory analysis. Laboratory reports and chain-of-custody records for the monitoring events are presented in Appendix B.

3.5 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at a rate of one sample per every 10 samples. QA/QC samples included field equipment rinsate blanks (FERB), field blanks (FB), and duplicate (DUP) samples. QA/QC sample data were evaluated during data validation (as discussed below) and are included in Appendix B.

Groundwater quality data in this report was validated in accordance with USEPA guidance (USEPA, 2011) and the analytical methods. Data validation consisted of reviewing holding times, laboratory methods, field equipment blanks and control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences (RPDs), post digestions spikes, and reporting limits (RLs) to verify sample integrity. Where appropriate, validation qualifiers and flags are applied to the data using USEPA procedures as guidance (USEPA, 2017). The tables provided in the data validation reports included in Appendix B summarize the validation actions and applicable interpretation.

A value followed by a "J" flag in Table 5 and laboratory reports indicate that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory RL. The estimated value is positively identified but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions.

4. Statistical Analyses

The statistical approach used to evaluate groundwater monitoring data analyzed for Appendix III and state compliance parameters (Appendix I parameters) was performed pursuant to 40 CFR § 257.93 and according to the Professional Engineer (PE)-certified statistical method for Landfill No. 4 (Section 4.1). State Appendix I parameters were statistically evaluated using interwell comparison methods for the January 2019. Following the January event, Groundwater Stats Consulting, LLC, recommended revisions to the statistical analysis plan for state Appendix I data and intrawell comparison methods were used for the March and September 2019 data.

The Sanitas groundwater statistical software was used to perform the statistical analyses (Sanitas, 2007). Sanitas is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities according to USEPA regulations and guidance as recommended in the USEPA Unified Guidance (USEPA, 2009) document. A summary of groundwater statistical analysis is included with the Sanitas statistical outputs in Appendices C and D. Results from these analyses are summarized in the following sections.

4.1 Statistical Methods – Appendix III Parameters

The statistical tests used to evaluate the Appendix III groundwater monitoring data are both the interwell (boron, calcium, chloride, fluoride, pH, and total dissolved solids) and intrawell (sulfate) prediction limit (PL) method combined with the option of a 1-of-2 resample plan.

The interwell PLs pool background data from the network of upgradient wells to calculate a PL, while the intrawell PLs use historical data from within a given well to establish a statistical limit for comparison of compliance data at the same well. An “initial exceedance” occurs when any downgradient well data exceed the PL.

If data from a sampling event initially exceeds the PL, the resampling strategy may be used to verify the result. In 1-of-2 resampling, one independent resample may be collected and evaluated within 90 days to determine whether the initial exceedance is verified. If the resample exceeds the PL, the initial exceedance is verified, and an SSI is identified. When a resample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance. The following guidance is also applicable to the statistical method:

- Statistical analyses are not performed on analytes containing 100 percent non-detects (USEPA, 2009).

- When data contain less than 15 percent non-detects in background, simple substitution of one-half the RL is utilized in the statistical analysis. The RL utilized for non-detects is the Practical Quantitation Limit as reported by the laboratory.

- When data contain between 15 to 50 percent non-detects the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the RL.

- Nonparametric PL are used on data containing greater than 50 percent non-detects.

4.2 Statistical Methods – State Appendix I Parameters

In accordance with the facility D&O Plan, the statistical test used to evaluate the January 2019 state compliance (Appendix I parameters) groundwater monitoring data was the interwell prediction limit method combined with a 1-of-2 resample plan for all constituents. The interwell PLs pool background data from the network of upgradient wells to calculate a PL to establish a statistical limit for comparison of compliance data at the same well. An "initial exceedance" occurs when any downgradient well data exceed the PL.

If data from a sampling event initially exceeds the PL, the resampling strategy may be used to verify the result. In 1-of-2 resampling, one independent resample may be collected and evaluated within 90 days to determine whether the initial exceedance is verified. If a resample exceeds the PL, the initial exceedance is verified, and an SSI is identified. When a resample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance.

In August 2019, analytical data for Appendix I parameters were evaluated to determine an appropriate statistical method for the data set. Groundwater Stats Consulting, LLC evaluated the background Appendix I parameter data set and recommended that an intrawell upper prediction limit analysis method combined with a 1-of-3 resampling plan for all D&O constituents should be applied to the Landfill No. 4 data. Georgia EPD approved the minor modification for using intrawell statistical methods on August 20, 2019. The statistical evaluation of the March and September 2019 sampling results using intrawell statistical methods was completed in August and November 2019, respectively.

In an intrawell comparison, analytical results from an individual well are compared to historical analytical results in that same well. If data from a sampling event initially exceeds the PL, the resampling strategy may be used to verify the result. In 1-of-3 resampling, two independent resamples may be collected and evaluated within 90 days to determine whether

the initial exceedance is verified. If a resample exceeds the PL, the initial exceedance is verified, and an SSI is identified. When a resample result does not verify the initial result, and does not exceed the PL, there is no SSI. If resampling is not performed, the initial exceedance is a confirmed exceedance. The following guidance is also applicable to both the interwell and intrawell statistical methods:

- Statistical analyses are not performed on analytes containing 100 percent non-detects (USEPA, 2009).

- When data contain less than 15 percent non-detects in background, simple substitution of one-half the RL is utilized in the statistical analysis. The RL utilized for non-detects is the Practical Quantitation Limit as reported by the laboratory.

- When data contain between 15 to 50 percent non-detects the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the RL.

- Nonparametric PL are used on data containing greater than 50 percent non-detects.

4.3 Statistical Analyses Results – Appendix III Parameters

A summary of statistical analysis of 2019 Appendix III semiannual monitoring data is included with the Sanitas statistical analysis and outputs provided in Appendices C1, C2, and C3 for the January, March, and September sampling events, respectively.

Verified SSIs were not observed during the 2019 monitoring events, or the SSI was previously addressed by an ASD. Although not SSIs, the statistical results presented in Appendix C, identified the following PL exceedances:

<u>January Monitoring Event</u>:

- Boron in GWC-10

- Sulfate in GWC-1, GWC-4A(*GWB-4A), GWC-10, and GWA-13

- TDS in GWC-10

<u>March Monitoring Event:</u>

- Chloride in GWC-9

September Monitoring Event:

- Sulfate in GWC-15(*GWB-15)

The source for elevated boron concentrations observed in January 2019 was previously addressed with the April and June 2018 ASDs outlined in Section 2.2. As such, GWC-10 was not resampled and there is no SSI for boron.

Following receipt of the January sampling results, verification resampling was not conducted for sulfate in GWC-1, GWC-4A(*GWB-4A), GWC-10, or GWA-13. An ASD was prepared in February 2019 for the sulfate SSIs in accordance with 40 CFR § 257.94(e). The result of the ASD was that Landfill No. 4 was not the source of the elevated sulfate concentration. A copy of the sulfate ASD is included in Appendix A. As such, these wells were not resampled and there is no SSI for sulfate.

Verification resampling for the January TDS exceedance in GWC-10 was conducted in March 2019. The reported concentration of TDS in the resampling event was below the PL. Since the resample result did not verify the initial result, there was no SSI for TDS in GWC-10.

Verification resampling for the apparent chloride exceedance at well GWC-9 from the March monitoring event was conducted in June 2019. The reported concentration of chloride in the resampling event did not exceed the PL. Since the resample result did not verify the initial result, there was no SSI for chloride in GWC-9.

Following receipt of the September sampling results verification resampling was not conducted for sulfate in well GWC-15(*GWB-15). As discussed above, an ASD was prepared in February 2019 for the sulfate SSIs in accordance with 40 CFR § 257.94(e).

4.4 Statistical Analyses Results – State Appendix I Parameters

Analytical data from the January, March, and September 2019 detection monitoring events at Landfill No. 4 were statistically analyzed in accordance with the approved facility D&O Plan and the minor modification dated August 9, 2019 (GPC, 2019). Georgia EPD approved the minor modification on August 20, 2019 changing the method for statistical analysis to an intrawell approach for Appendix I data beginning with the March sampling event.

A summary of groundwater statistical analysis of January 2019 and March, and September 2019 monitoring data and comparison to PLs is included with the Sanitas statistical analysis reports provided in Appendices D1, D2, and D3, respectively. Based on the statistical results presented in Appendix D, the following PL exceedances were identified:

January Monitoring Event:

- None

March Monitoring Event:

- Arsenic in GWC-18

September Monitoring Event:

- Barium in GWA-13 and GWA-16(*GWB-16)
- Beryllium in GWC-17
- Chromium in GWA-3, GWC-18, GWC-19, and GWC-23
- Zinc in GWA-3, GWC-4A(*GWB-4A), and GWC-5(*GWB-5)

With Georgia EPD approval, verification resampling for exceedances observed in the March event was conducted in September 2019. The reported concentration of arsenic in the resampling event was below the PL. Since the resample result did not verify the initial result reported in March, there are no SSIs for arsenic in GWC-18.

No verification resampling was conducted for barium in GWA-13 or GWA-16(*GWB-16). An ASD was prepared in January 2018 (ERM, 2018) for the barium SSIs in accordance with 40 CFR § 257.94(e). The result of the ASD was that Landfill No. 4 was not the source of the elevated barium concentrations. Groundwater chemistry has not changed since the ASD was completed and it is still applicable at these wells. Therefore, there is no SSI for barium at these wells.

The beryllium, chromium, and zinc SSIs were not verified by resampling. GPC conducted verification resampling for chromium and zinc in December 2019 in wells GWC-5(*GWB-5), GWA-13, GWA-14, GWC-15(*GWB-15), GWC-18, GWC-20, and GWC-23 and the reported concentrations were below the PL. Since the resample results did not verify the initial result, there are no SSIs for chromium or zinc in these wells.

No verification resampling was conducted for beryllium in GWC-17, chromium in GWA-3 and GWC-19, or zinc in wells GWA-3 and GWC-4A(*GWB-4A). However, monitoring wells GWA-3, GWC-4A(*GWB-4A), and GWC-17 are upgradient monitoring wells. Statistical analysis of upgradient wells is performed to assess potential changes in background conditions. The concentrations of beryllium, chromium, and zinc at these upgradient wells during the September 2019 sampling event are reflective of background groundwater chemistry and are as much as one to two orders of magnitude below the

groundwater protection standard (GWPS) of 0.004 mg/L, 0.1 mg/L, and 5 mg/L, respectively. Therefore, there are no SSIs for beryllium, chromium, or zinc in these upgradient wells. In accordance with 40 CFR § 257.94(e), GPC will prepare an ASD for chromium and submit under separate cover to address the SSI of chromium at GWC-19.

5. Groundwater Monitoring Program Status

Landfill No. 4 is in detection monitoring. Statistical evaluations of the detection groundwater monitoring data for Landfill No. 4 identified SSIs of Appendix III and state Appendix I groundwater monitoring parameters in 2019. Where SSIs were observed, they were either not verified through resampling, hydraulically positioned within the well network (included in the upgradient/background statistical pool), or addressed by ASDs with the exception of the SSI for chromium in GWC-19. In accordance with 40 CFR § 257.94(e), GPC will prepare an ASD for chromium and submit under separate cover. Landfill No. 4 remains in detection monitoring.

6. Conclusions and Future Actions

Groundwater monitoring events were conducted in January, March, and September 2019 at Landfill No. 4, pursuant to the CCR Rule 40 CFR §257.94 and the approved D&O Plan. On August 20, 2019, Georgia EPD approved a minor modification of the Site permit that changed the statistical evaluation to an intrawell approach beginning with the March 2019 sampling results.

In accordance with 40 CFR §257.94(e), ASDs for barium, boron, and sulfate were completed to address observed SSIs for those constituents. The statistical analysis for September 2019 identified an SSI of chromium at GWC-19. In accordance with 40 CFR § 257.94(e), GPC will prepare an ASD for chromium that shows that Landfill No. 4 is not the source of the chromium SSI due to the natural variability in groundwater chemistry and submit under separate cover. The site remains in detection monitoring.

Planned future actions at the Site include:

- Prepare an ASD for chromium and submit under separate cover.
- Perform the first semiannual groundwater monitoring in spring of 2020.
- Submit a semiannual report for groundwater monitoring activities and statistical analyses conducted during the first semiannual period in the third quarter 2020.

7. References

American Water Works Association, 2017. *Standard Methods for The Examination of Water and Wastewater, 23rd Edition*. Prepared by American Public Health Association, American Water Works Association, Water Environment Federation. 23rd Edition, 2017.

ERM, 2018. *Alternative Source Demonstration*, prepared by ERM, January 2018.

GEI, 2018. *Alternate Source Demonstration*, prepared by GEI Consultants, Inc. June 2018.

GEI, 2019. *2019 Semiannual Groundwater Monitoring and Corrective Action Report*, prepared by GEI Consultants, Inc. August 2019.

GPC, 2004. *Georgia Power Company, Plant McIntosh Coal Combustion By-Product (CCB) Landfill No. 4, Design and Operation Plan, Groundwater Monitoring Plan*. Revised August 2019.

GPC, 2019. *Requests for Minor Modification to Solid Waste Handling Permits, Multiple Georgia Power Private Industry Solid Waste Disposal Facilities, Incorporation of Alternate Statistical Methods into Groundwater Monitoring Plans*, prepared by GPC. August 9, 2019.

Sanitas™: Groundwater Statistical Software, Sanitas™ Technologies, Shawnee, KS, 2007. www.sanitastech.com.

SCS ES&EE, 2002. *Savannah Electric Plant McIntosh Proposed Ash Monofill Site Acceptability Report*. July 2002.

USEPA, 1983. *Methods for Chemical Analysis of Water and Wastes.* EPA 600/4-79/020. Office of Research and Development, U.S. Environmental Protection Agency, Washington, D.C., March 1983.

USEPA, 1989. *RCRA Facility Investigation (RFI) Guidance, Volume II of IV: Soil, Groundwater, Subsurface Gas Releases.* EPA/530/SW-89-031. Office of Solid Waste Management Division, U.S. Environmental Protection Agency, Washington, D.C.

USEPA, 2009. *Unified Guidance, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities: Office of Solid Waste Management Division, U.S. Environmental Protection Agency, Washington, D.C.* March 2009.

USEPA, 2011. *Data Validation Standard Operating Procedures*. Science and Ecosystem Support Division. Region IV. Athens, GA. September 2011.

USEPA. 2015. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. *40 CFR Parts 257 and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule.* [EPA-HQ-RCRA–2009–0640; FRL–9919–44–OSWER]. RIN– 2050–AE81. April.

USEPA. 2017. *National Functional Guidelines for Inorganic Superfund Methods Data Review.* Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA- 540-R-2017-001]. Washington, DC. January.

Tables

Table 1. Monitoring Well and Piezometer Network Summary
2019 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

Well ID	Installation Date	Northing	Easting	Total Depth (ft bTOC)	Ground Surface Elevation (ft NAVD 88)	Top of Casing Elevation (ft NAVD 88)	Top of Screen Elevation (ft NAVD 88)	Bottom of Screen Elevation (ft NAVD 88)	Location and Purpose
Monitoring Wells									
GWC-1	08/17/2004	855431.30	958419.36	28.50	44.06	47.06	29.06	19.06	Downgradient Monitoring Well
GWA-2	08/17/2004	855308.90	958103.93	28.50	50.64	53.64	35.64	25.64	Upgradient Monitoring Well
GWA-3	08/17/2004	855163.12	957786.21	38.50	54.93	57.93	29.93	19.93	Upgradient Monitoring Well
GWC-4A(*GWB-4A)	08/4/2016	855352.55	957496.51	39.00	62.20	64.98	39.98	29.98	Upgradient Monitoring Well
GWC-5(*GWB-5)	08/18/2004	855671.33	957319.99	41.50	59.29	62.29	31.29	21.29	Upgradient Monitoring Well
GWC-9	08/16/2004	856732.82	957909.70	38.50	50.56	53.56	25.56	15.56	Downgradient Monitoring Well
GWC-10	08/19/2004	856429.88	958077.92	33.50	46.55	49.55	26.55	16.55	Downgradient Monitoring Well
GWC-11	08/18/2004	856116.10	958244.61	43.50	54.97	57.97	24.97	14.97	Downgradient Monitoring Well
GWC-12	08/18/2004	855803.80	958413.62	18.76	54.26	57.26	26.26	16.26	Downgradient Monitoring Well
GWA-13	10/23/2015	855669.87	957006.97	40.11	57.74	60.85	31.04	21.04	Upgradient Monitoring Well
GWA-14	10/27/2015	855474.41	956656.96	49.90	58.50	61.40	21.80	11.80	Upgradient Monitoring Well
GWC-15(*GWB-15)	10/27/2015	855322.23	956314.50	40.30	53.42	56.72	26.72	16.72	Upgradient Monitoring Well
GWA-16(*GWB-16)	10/27/2015	855640.15	956094.66	40.27	51.33	54.60	24.63	14.63	Upgradient Monitoring Well
GWC-17**	10/28/2015	856011.50	956102.41	40.05	51.14	54.19	24.44	14.44	Upgradient Monitoring Well
GWC-18**	10/29/2015	856205.99	956438.21	42.20	56.48	59.68	27.78	17.78	Upgradient Monitoring Well
GWC-19	10/29/2015	856400.89	956801.55	36.95	50.67	53.62	26.97	16.97	Downgradient Monitoring Well
GWC-20	10/30/2015	856562.11	957093.85	30.13	44.10	47.23	27.40	17.40	Downgradient Monitoring Well
GWC-21	11/4/2015	856734.08	957390.27	27.16	42.00	45.16	28.30	18.30	Downgradient Monitoring Well
GWC-23	05/26/2016	856905.66	957714.42	33.70	NA	52.16	28.76	18.76	Downgradient Monitoring Well
Piezometers									
GWC-22(*PZ-22)	11/4/2015	856950.77	957722.65	31.65	47.42	51.07	29.72	19.72	Downgradient Piezometer

Notes:

Created by: CJB
Checked by: LLG

bTOC - below top of casing
ft - feet
NA - not applicable or not available
All monitoring wells and piezometers are 2 inches in diameter and casing material is polyvinyl chloride (PVC).
Elevations are in feet relative to North American Vertical Datum 88 (NAVD 88)
Northing and easting are in feet North American Datum 83 (NAD 83), State Plane Georgia East Zone
During each groundwater monitoring event, monitoring wells are gauged for water levels and sampled for laboratory analysis and piezometers are gauged for water level only.
Monitoring wells GWC-6, 7, and 8 were abandoned in June 29, 2015 in preparation for Cell 2A construction.
Monitoring well GWC-22 was replaced with GWC-23 in May 2016; GWC-22(*PZ-22) is now used for water level measurement only.
*****Change requested in the November 2018 permit submittal. Well designations will be updated once application is approved. Well IDs in parentheses are the proposed Well IDs.
**Monitoring wells GWC-17 and GWC-18 are included in the background monitoring statistical pool as described in the April 2018 Alternative Source Demonstration.

Table 2. Groundwater Sampling Event Summary for 2019
2019 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

Well ID	Hydraulic Location and Purpose	Summary of Sampling Events					
		Detection			Verification		
	Sampling Dates	January 29-30, 2019	March 26-28, 2019	September 10-11, 2019	June 17, 2019	September 11, 2019	December 17-18, 2019
GWC-1	Downgradient Monitoring Well	✓	✓	✓			✓
GWA-2	Upgradient Monitoring Well	✓	✓	✓			
GWA-3	Upgradient Monitoring Well	✓	✓	✓			
GWC-4A(*GWB-4A)	Upgradient Monitoring Well	✓	✓	✓			
GWC-5(*GWB-5)	Upgradient Monitoring Well	✓	✓	✓			✓
GWC-9	Downgradient Monitoring Well	✓	✓	✓	✓		
GWC-10	Downgradient Monitoring Well	✓	✓	✓			
GWC-11	Downgradient Monitoring Well	✓	✓	✓			
GWC-12	Downgradient Monitoring Well	✓	✓	✓			
GWA-13	Upgradient Monitoring Well	✓	✓	✓			✓
GWA-14	Upgradient Monitoring Well	✓	✓	✓			✓
GWC-15(*GWB-15)	Upgradient Monitoring Well	✓	✓	✓			✓
GWA-16(*GWB-16)	Upgradient Monitoring Well	✓	✓	✓			
GWC-17**	Upgradient Monitoring Well	✓	✓	✓			
GWC-18**	Upgradient Monitoring Well	✓	✓	✓		✓	✓
GWC-19	Downgradient Monitoring Well	✓	✓	✓			
GWC-20	Downgradient Monitoring Well	✓	✓	✓			✓
GWC-21	Downgradient Monitoring Well	✓	✓	✓			
GWC-23	Downgradient Monitoring Well	✓	✓	✓			✓

Notes:

Created by: CJB
Checked by: LLG

*Change requested in the November 2018 permit submittal. Well designations will be updated once application is approved. Well IDs in parentheses are the proposed Well IDs.
**Monitoring wells GWC-17 and GWC-18 are included in the background monitoring statistical pool as described in the April 2018 Alternative Source Demonstration.

Table 3. Summary of Groundwater Elevations for 2019
2019 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

Well ID	Top of Casing Elevation (ft NAVD 88)	Groundwater Elevations (ft NAVD 88)		
		January 28, 2019	March 25, 2019	September 9, 2019
GWC-1	47.06	33.42	32.03	31.35
GWA-2	53.64	38.09	36.81	36.31
GWA-3	57.93	37.22	36.92	36.59
GWC-4A (*GWB-4A)	64.98	40.08	39.47	39.35
GWC-5 (*GWB-5)	62.29	38.47	37.99	37.83
GWC-9	53.56	24.61	24.78	24.49
GWC-10	49.55	24.96	25.04	24.70
GWC-11	57.97	24.90	24.91	24.57
GWC-12	57.26	30.88	30.40	29.97
GWA-13	60.85	35.85	35.80	35.73
GWA-14	61.40	35.38	35.81	35.52
GWC-15 (*GWB-15)	56.72	34.62	34.72	34.61
GWA-16 (*GWB-16)	54.60	30.90	30.60	30.18
GWC-17	54.19	27.38	27.34	26.74
GWC-18	59.68	24.09	24.19	23.98
GWC-19	53.62	24.01	24.10	23.93
GWC-20	47.23	24.37	24.48	24.19
GWC-21	45.16	24.16	24.34	24.08
GWC-22[(1)] (*PZ-22)	51.07	23.22	23.43	23.26
GWC-23	52.16	23.25	23.46	23.31

Notes:
Created by: LMC
ft - feet
Checked by: LLG
Elevations are in feet relative to North American Vertical Datum 88 (NAVD 88)
(1) Monitoring well GWC-22 was replaced with GWC-23 in May 2016; GWC-22(*PZ-22) is now used for water level measurement only.
*Change requested in the November 2018 permit submittal. Well designations will be updated once application is approved. Well IDs in parentheses are the proposed Well IDs.

Table 4. Groundwater Flow Velocity Calculations for 2019
2019 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

March 2019									
Monitoring Wells	**h_1**	**h_2**	**K (ft/day)**	**n_e**	**dh (ft)**	**L (ft)**	**i (ft/ft)**	**Velocity (ft/day)**	**Velocity (ft/year)**
GWA-3 and GWC-11	36.92	24.91	0.859	0.20	12.01	1,057	0.011	0.047	17.16
GWC-5(*GWB-5) and GWC-23	37.99	23.46			14.53	1,296	0.011	0.047	17.16
GWA-14 and GWC-18	35.81	24.19			11.62	764	0.015	0.064	23.36
								Avg. (ft/day)	Avg. (ft/year)
								0.053	19.35

Created by: LMC
Checked by: CJB

September 2019									
Monitoring Wells	**h_1**	**h_2**	**K (ft/day)**	**n_e**	**dh (ft)**	**L (ft)**	**i (ft/ft)**	**Velocity (ft/day)**	**Velocity (ft/year)**
GWA-3 and GWC-11	36.59	24.57	0.859	0.20	12.02	1,057	0.011	0.047	17.16
GWC-5(*GWB-5) and GWC-23	37.83	23.31			14.52	1,296	0.011	0.047	17.16
GWA-14 and GWC-18	35.52	23.98			11.54	764	0.015	0.064	23.36
								Avg. (ft/day)	Avg. (ft/year)
								0.053	19.35

Notes:

dh - difference between h_1 and h_2

L- distance between locations 1 and 2

ft - feet

h_1 and h_2 - groundwater elevation at location 1 and 2

i - hydraulic gradient (dh/L)

K - hydraulic conductivity

n_e - effective porosity

Velocity = linear velocity = Ki/n_e

All wells were gauged on March 25, 2019 and September 9, 2019.

All elevations listed in North American Vertical Datum 88 (NAVD 88).

Created by: LMC
Checked by: CJB

Table 5. Summary of Groundwater Analytical Data
2019 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

General Notes:

-- - not sampled

CAS No. - Chemical Abstracts Service Registry Number

Bolded - detected value

µS/cm - microsiemens per centimeter

mg/L - milligrams per liter

mV - millivolts

NTU - nephelometric turbidity units

SU - Standard Units

*Change requested in the November 2018 permit submittal. Well designations will be updated once application is approved. Well IDs in parentheses are the proposed Well IDs.

Temperature, specific conductance, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity were measured and recorded in the field.

Lab Qualifiers:

< - The analyte was not detected at a concentration above the specified laboratory reporting limit.

B - The analyte was detected in the associated method blank.

F1 - MS and/or MSD recovery is outside the acceptance limits.

J - The result is an estimated value.

Table 5. Summary of Groundwater Analytical Data
2019 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

		Location Name	GWC-1				GWA-2			GWA-3			GWC-4A (*GWB-4A)			GWC-5 (*GWB-5)				GWC-9				GWC-10				
		Sample Name	GWC-1				GWA-2			GWA-3			GWC-4A			GWC-5				GWC-9				GWC-10				
		Sample Date	1/30/2019	3/27/2019	9/11/2019	12/18/2019	1/29/2019	3/27/2019	9/11/2019	1/29/2019	3/27/2019	9/11/2019	1/29/2019	3/26/2019	9/10/2019	1/29/2019	3/26/2019	9/10/2019	12/18/2019	1/30/2019	3/27/2019	6/17/2019	9/11/2019	1/30/2019	Jan. 19 DUP	3/27/2019	Mar. 19 DUP	9/11/2019
Analyte	**Units**	**CAS No.**																									
Field Parameters																											
Specific Conductance	µS/cm	COND	**64.24**	**58.14**	**46.03**	**58.99**	**42.22**	**37.54**	**37.55**	**34.62**	**31.06**	**30.29**	**47.14**	**50.16**	**45.99**	**40.47**	**35.00**	**34.56**	**37.61**	**45.43**	**46.27**	**46.61**	**44.45**	**256.62**		**217.46**		**267.51**
Dissolved Oxygen	mg/L	DO	**2.42**	**2.15**	**2.17**	**2.53**	**3.67**	**3.47**	**3.90**	**6.19**	**6.00**	**4.41**	**2.81**	**1.29**	**2.28**	**5.99**	**5.37**	**5.96**	**5.74**	**6.93**	**7.65**	**6.32**	**6.47**	**4.31**		**2.88**		**1.28**
ORP	mV	ORP	**87.80**	**149.68**	**111.22**	**126.99**	**136.98**	**198.67**	**138.14**	**190.46**	**206.63**	**145.52**	**371.06**	**212.83**	**249.92**	**117.48**	**184.10**	**212.18**	**76.44**	**125.36**	**223.03**	**287.36**	**128.25**	**147.65**		**74.57**		**103.97**
pH	SU	pH	**5.21**	**5.15**	**4.80**	**5.06**	**4.91**	**4.69**	**4.77**	**4.98**	**4.80**	**5.03**	**4.66**	**4.72**	**4.72**	**5.39**	**5.45**	**5.71**	**5.46**	**4.88**	**4.75**	**5.24**	**4.80**	**6.20**		**6.54**		**6.63**
Temperature	deg c	TEMP	**16.47**	**19.50**	**25.05**	**18.97**	**18.16**	**17.47**	**25.60**	**19.17**	**16.73**	**27.43**	**18.55**	**20.85**	**27.27**	**17.50**	**21.50**	**25.88**	**20.12**	**14.95**	**20.65**	**23.31**	**25.00**	**14.57**		**20.93**		**24.58**
Turbidity	NTU	TURB	**1.12**	**0.96**	**0.27**	**1.45**	**1.84**	**1.84**	**1.76**	**0.47**	**1.25**	**1.19**	**1.20**	**1.19**	**1.31**	**1.17**	**0.45**	**0.53**	**1.07**	**0.83**	**1.22**	**0.95**	**0.08**	**0.77**		**0.47**		**0.49**
Appendix III Parameters																											
Boron	mg/L	7440-42-8	< 0.030	< 0.021 F1	< 0.039	--	< 0.030	< 0.021	< 0.039	< 0.030	< 0.021	< 0.039	< 0.030	< 0.021	**0.052 J**	< 0.030	< 0.021	< 0.039	--	< 0.030	< 0.021	--	< 0.039	**0.055**	**0.059**	**0.050**	**0.053**	**0.067 J**
Calcium	mg/L	7440-70-2	**2.5**	**2.4 F1**	**1.4**	--	**0.53**	**0.37**	**0.43 J**	**0.85**	**0.73**	**0.76**	**0.83**	**0.53**	**0.64**	**3.3**	**2.8**	**2.3**	--	**0.38**	**0.28**	--	**0.44 J**	**26**	**26**	**22**	**20**	**26**
Chloride	mg/L	16887-00-6	**6.8**	**6.8**	**6.0**	--	**5.0**	**4.5**	**4.8**	**4.0**	**3.5**	**3.5**	**3.4**	**3.7**	**3.6**	**3.6**	**3.6**	**3.5**	--	**9.1**	**10.0**	**9.4**	**9.3**	**5.6**	**5.3**	**5.3**	**5.3**	**5.4**
Fluoride	mg/L	16984-48-8	**0.040 J**	**0.029 J**	**0.036 J**	--	< 0.026	< 0.026	**0.037 J**	< 0.026	< 0.026	**0.033 J**	< 0.026	< 0.026	**0.044 J**	< 0.026	**0.028 J**	**0.037 J**	--	< 0.026	< 0.026	--	**0.034 J**	**0.23**	**0.21**	**0.12 J**	**0.12 J**	**0.1**
pH	SU	pH	**5.21**	**5.15**	**4.80**	**5.06**	**4.91**	**4.69**	**4.77**	**4.98**	**4.80**	**5.03**	**4.66**	**4.72**	**4.72**	**5.39**	**5.45**	**5.71**	**5.46**	**4.88**	**4.75**	**5.24**	**4.80**	**6.20**		**6.54**		**6.63**
Sulfate	mg/L	14808-79-8	**2.1**	**1.6**	**1.3**	--	**0.64 J**	< 0.38	**0.76 J**	< 0.38	**0.70 J**	**1.0**	**8.7**	**11**	**9.8**	< 0.38	**0.68 J**	**0.77 J**	--	**0.58 J**	**1.2**	--	**0.92 J**	**5.0**	**4.6**	**4.3**	**4.5**	**5.2**
Total Dissolved Solids	mg/L	TDS	**55**	**26**	**49**	--	**36**	**36**	**28**	**27**	**35**	**15**	**26**	**39**	**36**	**34**	**21**	**13**	--	**42**	**34**	--	**43**	**160**	**110**	**130**	**120**	**130**
State Appendix I Parameters																											
Antimony	mg/L	7440-36-0	< 0.0011	< 0.0010	< 0.00038	--	< 0.0011	< 0.0010	< 0.00038	< 0.0011	< 0.0010	**0.00081 J**	< 0.0011	< 0.0010	< 0.00038	< 0.0011	< 0.0010	< 0.00038	--	< 0.0011	< 0.0010	--	< 0.00038	< 0.0011	< 0.0011	< 0.0010	< 0.0010	< 0.00038
Arsenic	mg/L	7440-38-2	< 0.00032	< 0.00046	< 0.00032	--	< 0.00032	< 0.00046	< 0.00032	< 0.00032	**0.0011 J**	< 0.00032	< 0.00032	**0.00050 J**	**0.00051 J**	< 0.00032	< 0.00046	**0.00035 J**	--	< 0.00032	**0.00073 J**	--	**0.00044 J**	**0.00082 J**	**0.00099 J**	**0.0013**	< 0.00046	**0.00082 J**
Barium	mg/L	7440-39-3	**0.050**	**0.045 F1**	**0.038**	--	**0.034**	**0.030**	**0.034**	**0.017**	**0.014**	**0.015**	**0.025**	**0.023**	**0.026**	**0.050**	**0.046**	**0.044**	--	**0.032**	**0.023**	--	**0.029**	**0.023**	**0.023**	**0.019**	**0.017**	**0.021**
Beryllium	mg/L	7440-41-7	**0.00018 J**	< 0.00034	**0.00021 J**	--	**0.000063 J**	< 0.00034	< 0.00018	< 0.000057	< 0.00034	< 0.00018	**0.00011 J**	< 0.00034	**0.00060 J**	< 0.000057	< 0.00034	< 0.00018	--	**0.00016 J**	< 0.00034	--	**0.00021 J**	< 0.000057	**0.000077 J**	< 0.00034	< 0.00034	< 0.00018
Cadmium	mg/L	7440-43-9	< 0.00013	< 0.00034	< 0.00013	--	< 0.00013	< 0.00034	< 0.00013	< 0.00013	< 0.00034	< 0.00013	< 0.00013	< 0.00034	**0.00019 J**	< 0.00013	< 0.00034	< 0.00013	--	< 0.00013	< 0.00034	--	< 0.00013	< 0.00013	< 0.00013	< 0.00034	< 0.00034	< 0.00013
Chromium	mg/L	7440-47-3	**0.0021 JB**	< 0.0011	**0.0035**	--	**0.0019 JB**	**0.0016 J**	**0.0040**	**0.0016 JB**	**0.0014 J**	**0.0034**	**0.00099 JB**	< 0.0011	**0.0031**	**0.0014 JB**	< 0.0011	**0.0041**	--	**0.0012 JB**	< 0.0011	--	**0.0025**	**0.0071 B**	**0.0063 B**	**0.0035**	**0.0030**	**0.0040**
Cobalt	mg/L	7440-48-4	**0.0016 J**	**0.0017 J**	**0.0020**	--	**0.0010 J**	**0.0011 J**	**0.0015**	**0.00035 J**	< 0.00040	**0.00039 J**	**0.0033**	**0.0037**	**0.0031**	**0.00064 J**	**0.00064 J**	**0.00074**	--	**0.00066 J**	**0.00051 J**	--	**0.00083**	< 0.000075	**0.00013 J**	< 0.00040	< 0.00040	**0.00010 J**
Copper	mg/L	7440-50-8	< 0.0013	< 0.0021	**0.0010 J**	--	< 0.0013	< 0.0021	< 0.00063	< 0.0013	< 0.0021	**0.00092 J**	< 0.0013	**0.0021 J**	**0.0016 J**	< 0.0013	< 0.0021	< 0.00063	--	**0.0020 J**	< 0.0021	--	**0.00092 J**	< 0.0013	< 0.0013	< 0.0021	< 0.0021	< 0.00063
Lead	mg/L	7439-92-1	< 0.000094	< 0.00035	< 0.00013	--	**0.00024 JB**	< 0.00035	< 0.00013	**0.000098 JB**	< 0.00035	< 0.00013	**0.00026 JB**	< 0.00035	**0.00051 J**	**0.00011 JB**	< 0.00035	**0.00074 J**	--	< 0.000094	< 0.00035	--	< 0.00013	< 0.000094	< 0.000094	< 0.00035	< 0.00035	< 0.00013
Nickel	mg/L	7440-02-0	**0.0013 J**	< 0.0018	**0.0013**	--	**0.00063 J**	< 0.0018	**0.00091 J**	**0.00034 J**	< 0.0018	**0.00045 J**	**0.0021 J**	**0.0021 J**	**0.0020**	< 0.00031	< 0.0018	**0.00043 J**	--	**0.00063 J**	< 0.0018	--	**0.00065 J**	< 0.00031	< 0.00031	< 0.0018	< 0.0018	< 0.00034
Selenium	mg/L	7782-49-2	< 0.00081	< 0.00071	< 0.0015	--	< 0.00081	< 0.00071	< 0.0015	< 0.00081	< 0.00071	< 0.0015	< 0.00081	< 0.00071	< 0.0015	< 0.00081	< 0.00071	< 0.0015	--	< 0.00081	< 0.00071	--	< 0.0015	< 0.00081	< 0.00081	< 0.00071	< 0.00071	< 0.0015
Silver	mg/L	7440-22-4	**0.00021 JB**	< 0.00011	< 0.00018	--	< 0.00012	< 0.00011	< 0.00018	< 0.00012	< 0.00011	< 0.00018	< 0.00012	< 0.00011	< 0.00018	< 0.00012	< 0.00011	< 0.00018	--	**0.00018 JB**	< 0.00011	--	< 0.00018	**0.00018 JB**	< 0.00012	< 0.00011	< 0.00011	< 0.00018
Thallium	mg/L	7440-28-0	< 0.000063	< 0.000085	< 0.00015	--	< 0.000063	< 0.000085	< 0.00015	< 0.000063	< 0.000085	< 0.00015	< 0.000063	< 0.000085	**0.00033 J**	< 0.000063	< 0.000085	< 0.00015	--	< 0.000063	< 0.000085	--	**0.00023 J**	< 0.000063	< 0.000063	< 0.000085	< 0.000085	**0.00020 J**
Vanadium	mg/L	7440-62-2	**0.0012 JB**	< 0.0014	**0.0013**	--	< 0.00090	**0.0019 J**	**0.0014**	< 0.00090	**0.0047**	**0.0012**	< 0.00090	**0.0027**	**0.0018**	< 0.00090	**0.0015 J**	**0.0018**	--	< 0.00090	**0.0060**	--	**0.0015**	**0.0027 B**	**0.0021 JB**	**0.0065**	< 0.0014	**0.0022**
Zinc	mg/L	7440-66-6	**0.0031 J**	< 0.0065 F1	**0.0088**	--	**0.0064 J**	< 0.0065	**0.0089**	< 0.0024	< 0.0065	**0.012**	**0.0064 J**	**0.010 J**	**0.012**	**0.0027 J**	< 0.0065	**0.022**	**0.0051**	**0.051**	< 0.0065	--	**0.0058**	< 0.0024	< 0.0024	< 0.0065	< 0.0065	**0.0058**

		Location Name	GWC-11				GWC-12			GWA-13				GWA-14				GWC-15(*GWB-15)				GWA-16(*GWB-16)		
		Sample Name	GWC-11				GWC-12			GWA-13				GWA-14				GWC-15				GWA-16		
		Sample Date	1/30/2019	3/27/2019	9/11/2019	Sept. 19 DUP	1/30/2019	3/27/2019	9/11/2019	1/29/2019	3/26/2019	9/10/2019	12/17/2019	1/29/2019	3/26/2019	9/10/2019	12/17/2019	1/29/2019	3/26/2019	9/11/2019	12/17/2019	1/29/2019	3/26/2019	9/10/2019
Analyte	**Units**	**CAS No.**																						
Field Parameters																								
Specific Conductance	µS/cm	COND	**116.66**	**122.30**	**92.95**		**29.08**	**24.31**	**22.59**	**21.67**	**19.05**	**20.50**	**24.47**	**28.14**	**23.68**	**24.84**	**26.62**	**28.29**	**24.10**	**24.91**	**26.41**	**23.57**	**22.48**	**22.41**
Dissolved Oxygen	mg/L	DO	**2.82**	**2.21**	**3.23**		**6.10**	**5.96**	**5.25**	**6.49**	**7.13**	**5.76**	**5.61**	**6.92**	**7.03**	**6.10**	**6.48**	**7.32**	**6.77**	**6.70**	**6.10**	**7.52**	**6.86**	**7.35**
ORP	mV	ORP	**16.35**	**90.10**	**74.93**		**83.66**	**191.43**	**118.19**	**122.84**	**231.58**	**162.52**	**172.87**	**139.25**	**167.88**	**189.98**	**145.10**	**127.91**	**206.70**	**143.31**	**167.26**	**122.83**	**198.46**	**224.52**
pH	SU	pH	**6.09**	**6.32**	**6.37**		**5.01**	**4.93**	**5.04**	**4.82**	**5.07**	**5.00**	**4.90**	**5.25**	**5.29**	**5.18**	**4.97**	**5.18**	**5.04**	**5.28**	**4.87**	**4.83**	**4.95**	**5.12**
Temperature	deg c	TEMP	**15.88**	**21.41**	**22.73**		**15.77**	**21.27**	**24.49**	**15.76**	**21.37**	**26.59**	**22.61**	**17.84**	**19.28**	**25.81**	**21.57**	**17.32**	**18.97**	**23.83**	**22.34**	**16.58**	**19.50**	**25.14**
Turbidity	NTU	TURB	**1.47**	**1.07**	**1.25**		**0.82**	**0.87**	**0.82**	**4.93**	**2.25**	**4.32**	**2.05**	**0.72**	**0.86**	**2.08**	**0.87**	**1.28**	**1.91**	**1.77**	**2.06**	**3.19**	**1.61**	**0.54**
Appendix III Parameters																								
Boron	mg/L	7440-42-8	< 0.030	< 0.021	< 0.039	< 0.039	< 0.030	< 0.021	< 0.039	< 0.030	< 0.021	**0.061 J**	--	< 0.030	< 0.021	< 0.039	--	< 0.030	< 0.021	< 0.039	--	< 0.030	< 0.021	< 0.039
Calcium	mg/L	7440-70-2	**11**	**13**	**9.3**	**9.5**	**0.68**	**0.62**	**0.62**	**0.33**	**0.3**	**0.37 J**	--	**0.51**	**0.42**	**0.47 J**	--	**0.91**	**0.58**	**0.42 J**	--	**0.41**	**0.37**	**0.41 J**
Chloride	mg/L	16887-00-6	**4.6**	**4.0**	**4.4**	**4.4**	**3.7**	**3.3**	**3.5**	**3.6**	**3.5**	**3.3**	--	**4.0**	**4.1**	**4.0**	--	**3.7**	**3.8**	**3.7**	--	**3.8**	**3.6**	**3.7**
Fluoride	mg/L	16984-48-8	**0.35**	**0.24**	**0.26**	**0.26**	< 0.026	< 0.026	**0.036 J**	< 0.026	< 0.026	**0.034 J**	--	< 0.026	< 0.026	**0.032 J**	--	< 0.026	< 0.026	**0.032 J**	--	< 0.026	< 0.026	**0.035 J**
pH	SU	pH	**6.09**	**6.32**	**6.37**		**5.01**	**4.93**	**5.04**	**4.82**	**5.07**	**5.00**	**4.90**	**5.25**	**5.29**	**5.18**	**4.97**	**5.18**	**5.04**	**5.28**	**4.87**	**4.83**	**4.95**	**5.12**
Sulfate	mg/L	14808-79-8	**4.3**	**5.4**	**3.8**	**3.7**	**0.65 J**	**0.67 J**	**1.0**	**1.2**	**0.63 J**	**0.93 J**	--	**0.52 J**	**0.92 J**	**0.83 J**	--	**0.43 J**	**0.79 J**	**1.2**	--	< 0.38	**0.90 J**	**0.83 J**
Total Dissolved Solids	mg/L	TDS	**89**	**79**	**39**	**60**	**22**	**24**	**28**	**24**	< 10	**21**	--	**22**	**17**	**16**	--	**23**	**17**	**15**	--	**26**	**27**	**13**
State Appendix I Parameters																								
Antimony	mg/L	7440-36-0	< 0.0011	< 0.0010	< 0.00038	< 0.00038	< 0.0011	< 0.0010	< 0.00038	< 0.0011	< 0.0010	**0.00052 J**	--	< 0.0011	< 0.0010	< 0.00038	--	< 0.0011	< 0.0010	< 0.00038	--	< 0.0011	< 0.0010	< 0.00038
Arsenic	mg/L	7440-38-2	**0.0015**	**0.0013**	**0.0017**	**0.0016**	< 0.00032	**0.0011 J**	**0.00032 J**	< 0.00032	< 0.00046	**0.00076 J**	--	< 0.00032	< 0.00046	**0.00043 J**	--	< 0.00032	**0.00075 J**	**0.00033 J**	--	< 0.00032	< 0.00046	**0.00036 J**
Barium	mg/L	7440-39-3	**0.014**	**0.013**	**0.011**	**0.011**	**0.011**	**0.0099**	**0.010**	**0.019**	**0.016**	**0.030**	--	**0.013**	**0.012**	**0.016**	--	**0.027**	**0.028**	**0.023**	--	**0.026**	**0.023**	**0.039**
Beryllium	mg/L	7440-41-7	< 0.000057	< 0.00034	< 0.00018	< 0.00018	**0.00018 J**	< 0.00034	**0.00022 J**	< 0.000057	< 0.00034	**0.00080 J**	--	< 0.000057	< 0.00034	**0.00025 J**	--	< 0.000057	< 0.00034	< 0.00018	--	< 0.000057	< 0.00034	**0.00036 J**
Cadmium	mg/L	7440-43-9	< 0.00013	< 0.00034	< 0.00013	< 0.00013	< 0.00013	< 0.00034	< 0.00013	< 0.00013	< 0.00034	**0.00035 J**	--	< 0.00013	< 0.00034	< 0.00013	--	< 0.00013	< 0.00034	< 0.00013	--	< 0.00013	< 0.00034	**0.00015 J**
Chromium	mg/L	7440-47-3	**0.0060 B**	**0.0031**	**0.0071**	**0.0072**	**0.0039 B**	**0.0019 J**	**0.0036**	**0.0037 B**	**0.0014 J**	**0.0052**	--	**0.0014 JB**	< 0.0011	**0.0040**	**0.0035**	**0.0021 JB**	**0.0016 J**	**0.0038**	**0.0039**	**0.0024 JB**	**0.0015 J**	**0.0040**
Cobalt	mg/L	7440-48-4	< 0.000075	< 0.00040	< 0.000075	< 0.000075	**0.00060 J**	**0.00051 J**	**0.00067**	**0.00043 J**	< 0.00040	**0.00064**	--	**0.00029 J**	< 0.00040	**0.00042 J**	--	**0.00037 J**	< 0.00040	**0.00044 J**	--	**0.00044 J**	< 0.00040	**0.00050**
Copper	mg/L	7440-50-8	< 0.0013	< 0.0021	< 0.00063	< 0.00063	< 0.0013	< 0.0021	**0.00069 J**	< 0.0013	< 0.0021	**0.00066 J**	--	< 0.0013	< 0.0021	**0.00076 J**	--	< 0.0013	< 0.0021	< 0.00063	--	< 0.0013	< 0.0021	< 0.00063
Lead	mg/L	7439-92-1	< 0.000094	< 0.00035	< 0.00013	< 0.00013	< 0.000094	< 0.00035	< 0.00013	**0.00043 JB**	< 0.00035	**0.00058 J**	--	**0.00011 JB**	< 0.00035	**0.00013 J**	--	**0.00014 JB**	< 0.00035	< 0.00013	--	**0.00018 JB**	< 0.00035	**0.00013 J**
Nickel	mg/L	7440-02-0	**0.00033 J**	< 0.0018	**0.00042 J**	**0.00042 J**	**0.0011 J**	< 0.0018	**0.0010**	**0.00033 J**	< 0.0018	**0.00040 J**	--	**0.00040 J**	< 0.0018	**0.00056 J**	--	**0.00046 J**	< 0.0018	**0.00042 J**	--	**0.00040 J**	< 0.0018	**0.00036 J**
Selenium	mg/L	7782-49-2	< 0.00081	< 0.00071	< 0.0015	< 0.0015	< 0.00081	< 0.00071	< 0.0015	< 0.00081	< 0.00071	< 0.0015	--	< 0.00081	< 0.00071	< 0.0015	--	< 0.00081	< 0.00071	< 0.0015	--	< 0.00081	< 0.00071	< 0.0015
Silver	mg/L	7440-22-4	**0.00016 JB**	< 0.00011	< 0.00018	< 0.00018	< 0.00012	< 0.00011	< 0.00018	< 0.00012	< 0.00011	< 0.00018	--	< 0.00012	< 0.00011	< 0.00018	--	< 0.00012	< 0.00011	< 0.00018	--	< 0.00012	< 0.00011	< 0.00018
Thallium	mg/L	7440-28-0	< 0.000063	< 0.000085	< 0.00015	< 0.00015	< 0.000063	< 0.000085	**0.00017 J**	< 0.000063	< 0.000085	**0.00057 J**	--	< 0.000063	< 0.000085	**0.00021 J**	--	< 0.000063	< 0.000085	< 0.00015	--	< 0.000063	< 0.000085	**0.00020 J**
Vanadium	mg/L	7440-62-2	**0.0024 JB**	**0.0016 J**	**0.0025**	**0.0025**	**0.0016 JB**	**0.0078**	**0.0011**	**0.0018 J**	< 0.0014	**0.0027**	**0.0012**	< 0.00090	< 0.0014	**0.0020**	--	< 0.00090	**0.0041**	**0.0016**	--	< 0.00090	**0.0019 J**	**0.0019**
Zinc	mg/L	7440-66-6	< 0.0024	< 0.0065	**0.005**	**0.0047 J**	< 0.0024	< 0.0065	**0.0066**	< 0.0024	< 0.0065	**0.0061**	--	**0.0048 J**	< 0.0065	**0.0069**	--	**0.0059 J**	< 0.0065	**0.0062**	--	**0.0024 J**	< 0.0065	**0.0060**

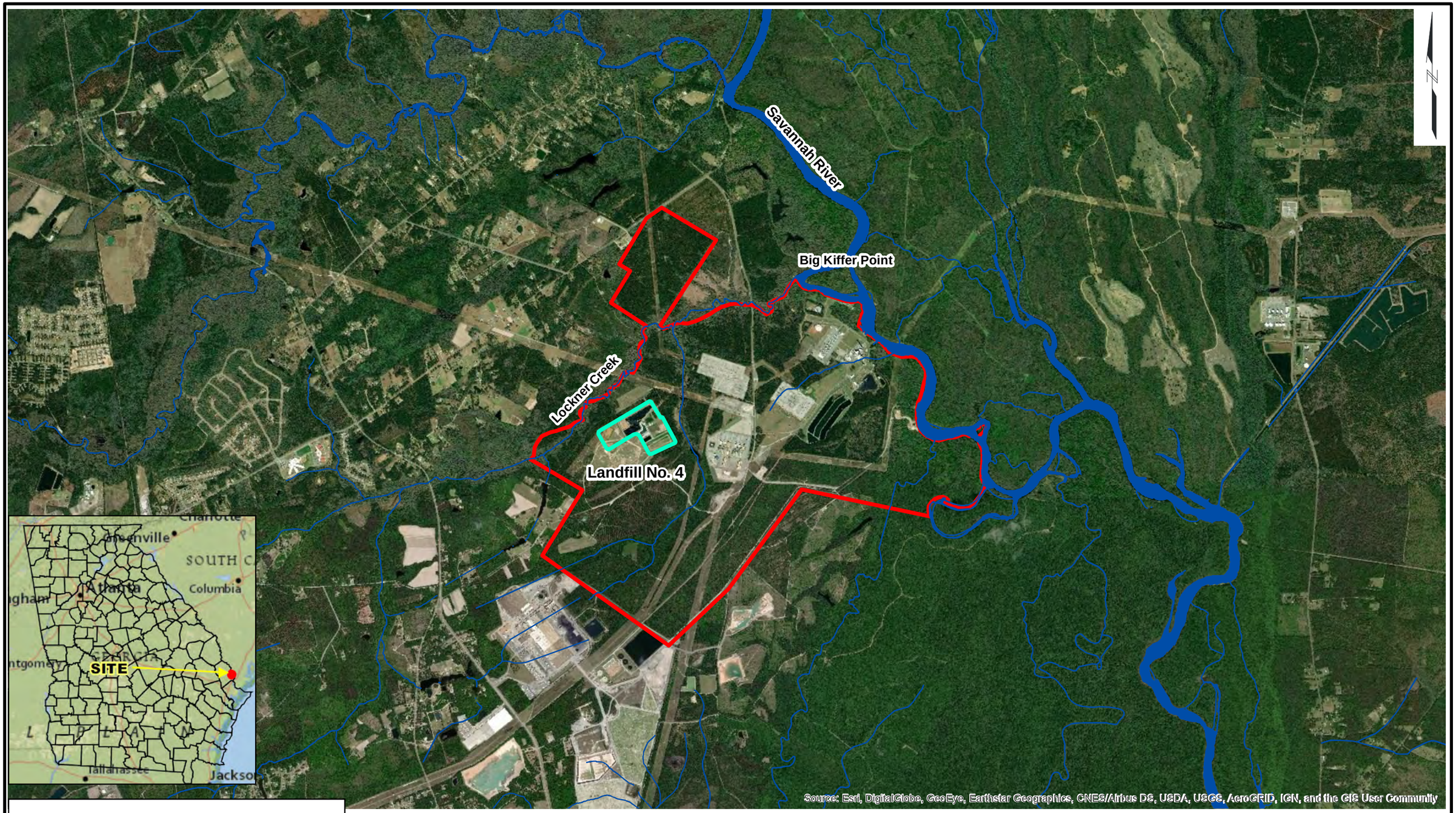
Created by: JW/LLG
Checked by: LMC

Table 5. Summary of Groundwater Analytical Data
2019 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

		Location Name	GWC-17			GWC-18				GWC-19			GWC-20				GWC-21						GWC-23			
		Sample Name	GWC-17			GWC-18				GWC-19			GWC-20				GWC-21						GWC-23			
		Sample Date	1/29/2019	3/27/2019	9/11/2019	1/30/2019	3/27/2019	9/11/2019	12/18/2019	1/29/2019	3/27/2019	9/11/2019	1/29/2019	3/27/2019	9/11/2019	12/18/2019	1/30/2019	Jan. 19 DUP	3/27/2019	Mar. 19 DUP	9/11/2019	Sept. 19 DUP	1/30/2019	3/27/2019	9/11/2019	12/18/2019
Analyte	**Units**	**CAS No.**																								
Field Parameters																										
Specific Conductance	µS/cm	COND	**37.88**	**31.58**	**30.72**	**113.03**	**94.80**	**103.64**	**114.52**	**91.32**	**85.67**	**82.06**	**46.52**	**50.20**	**44.58**	**47.87**	**39.54**		**38.05**		**40.77**		**43.43**	**41.90**	**37.89**	**38.85**
Dissolved Oxygen	mg/L	DO	**7.10**	**6.26**	**6.42**	**3.73**	**3.69**	**4.01**	**4.07**	**4.05**	**4.91**	**3.66**	**5.80**	**4.83**	**4.84**	**4.97**	**5.09**		**5.46**		**4.33**		**5.88**	**4.31**	**4.58**	**6.07**
ORP	mV	ORP	**110.48**	**154.57**	**110.21**	**56.24**	**98.50**	**165.63**	**84.79**	**100.63**	**116.94**	**140.96**	**404.56**	**175.30**	**117.10**	**144.31**	**284.75**		**183.15**		**142.84**		**84.88**	**137.90**	**150.02**	**77.85**
pH	SU	pH	**5.35**	**5.25**	**5.16**	**5.93**	**6.11**	**6.30**	**6.22**	**5.58**	**5.59**	**5.58**	**4.94**	**4.94**	**4.96**	**4.97**	**4.65**		**4.96**		**4.99**		**5.14**	**5.30**	**5.24**	**5.21**
Temperature	deg c	TEMP	**15.74**	**18.43**	**22.91**	**16.03**	**19.12**	**22.41**	**19.49**	**17.69**	**18.62**	**23.46**	**18.52**	**17.82**	**23.92**	**17.47**	**16.48**		**20.00**		**25.00**		**15.31**	**18.26**	**27.24**	**18.48**
Turbidity	NTU	TURB	**1.23**	**1.49**	**0.32**	**4.91**	**2.92**	**5.79**	**0.67**	**1.09**	**2.75**	**0.63**	**2.10**	**1.41**	**4.63**	**0.43**	**0.93**		**1.07**		**0.82**		**0.51**	**0.61**	**0.52**	**1.29**
Appendix III Parameters																										
Boron	mg/L	7440-42-8	< 0.030	< 0.021	< 0.039	< 0.030	< 0.021	< 0.039	--	< 0.030	< 0.021	< 0.039	< 0.030	< 0.021	0.042 J	--	< 0.030	< 0.030	< 0.021	< 0.021	**0.055 J**	< 0.039	< 0.030	< 0.021	0.040 J	--
Calcium	mg/L	7440-70-2	**2.2**	**2.0**	**2.0**	**14**	**11**	**13**	--	**9.2**	**9.2**	**8.2**	**1.8**	**1.5**	**1.5**	--	**1.0**	**1.1**	**1.1**	**1.6**	**1.0**	**1.1**	**1.1**	**1.4**	**1.4**	--
Chloride	mg/L	16887-00-6	**4.5**	**4.1**	**4.3**	**4.8**	**4.3**	**4.5**	--	**8.2**	**7.5**	**7.7**	**8.8**	**8.9**	**8.7**	--	**6.7**	**6.6**	**6.3**	**9.0**	**6.7**	**6.6**	**7.4**	**4.2**	**4.6**	--
Fluoride	mg/L	16984-48-8	**0.13 J**	**0.10 J**	**0.099 J**	**0.65**	**0.49**	**0.47**	--	**0.074 J**	**0.072 J**	**0.080 J**	**0.031 J**	**0.034 J**	**0.045 J**	--	< 0.026	< 0.026	< 0.026	**0.036 J**	**0.032 J**	**0.032 J**	< 0.026	**0.027 J**	**0.041 J**	--
pH	SU	pH	**5.35**	**5.25**	**5.16**	**5.93**	**6.11**	**6.30**	**6.22**	**5.58**	**5.59**	**5.58**	**4.94**	**4.94**	**4.96**	**4.97**	**4.65**		**4.96**		**4.99**		**5.14**	**5.30**	**5.24**	**5.21**
Sulfate	mg/L	14808-79-8	< 0.38	< 0.38	**0.85 J**	**5.8**	**4.8**	**4.5**	--	**1.4**	**1.6**	**1.8**	**1.3**	**1.7**	**0.97 J**	--	**0.72 J**	**0.69 J**	**0.92 J**	**2.1**	**0.94 J**	**1.1**	**2.4**	**2.8**	**2.5**	--
Total Dissolved Solids	mg/L	TDS	**37**	**38**	**31**	**100**	**79**	**45**	--	**62**	**61**	**49**	**27**	**57**	**45**	--	**43**	**29**	**33**	**18**	**23**	**26**	**38**	**42**	**24**	--
State Appendix I Parameters																										
Antimony	mg/L	7440-36-0	< 0.0011	< 0.0010	< 0.00038	< 0.0011	< 0.0010	< 0.00038	--	< 0.0011	< 0.0010	< 0.00038	< 0.0011	< 0.0010	< 0.00038	--	< 0.0011	< 0.0011	< 0.0010	< 0.0010	< 0.00038	< 0.00038	< 0.0011	< 0.0010	< 0.00038	--
Arsenic	mg/L	7440-38-2	< 0.00032	**0.00097 J**	**0.00038 J**	**0.0011 J**	**0.0019**	**0.0012**	--	< 0.00032	< 0.00046	**0.00057 J**	< 0.00032	< 0.00046	0.00066 J	--	< 0.00032	**0.00042 J**	**0.00074 J**	< 0.00046	**0.00064 J**	< 0.00032	**0.00034 J**	**0.00079 J**	**0.00051 J**	--
Barium	mg/L	7440-39-3	**0.020**	**0.017**	**0.021**	**0.020**	**0.014**	**0.018**	--	**0.016**	**0.013**	**0.015**	**0.017**	**0.018**	**0.021**	--	**0.017**	**0.018**	**0.016**	**0.020**	**0.019**	**0.018**	**0.034**	**0.027**	**0.023**	--
Beryllium	mg/L	7440-41-7	**0.00062 J**	**0.00062 J**	**0.0010**	**0.000083 J**	< 0.00034	0.00026 J	--	**0.00023 J**	< 0.00034	**0.00058 J**	**0.00016 J**	< 0.00034	0.00052 J	--	**0.00016 J**	**0.00018 J**	< 0.00034	< 0.00034	**0.00054 J**	< 0.00018	**0.00015 J**	< 0.00034	0.00026 J	--
Cadmium	mg/L	7440-43-9	**0.00062 J**	**0.00041 J**	**0.00064 J**	< 0.00013	< 0.00034	< 0.00013	--	**0.00020 J**	< 0.00034	**0.00031 J**	**0.00016 J**	< 0.00034	0.00029 J	--	**0.00014 J**	**0.00017 J**	< 0.00034	< 0.00034	**0.00029 J**	**0.00014 J**	**0.00015 J**	< 0.00034	0.00018 J	--
Chromium	mg/L	7440-47-3	**0.0041 B**	**0.0028**	**0.0059**	**0.0049 B**	**0.0025**	**0.0049**	**0.0021**	**0.0019 JB**	**0.0014 J**	**0.0043**	**0.0013 JB**	< 0.0011	0.0034	<0.0015	**0.0017 JB**	**0.0019 JB**	< 0.0011	< 0.0011	**0.0025**	**0.0023**	**0.0019 JB**	< 0.0011	0.004	**0.0018 J**
Cobalt	mg/L	7440-48-4	**0.00038 J**	< 0.00040	**0.00034 J**	**0.00040 J**	< 0.00040	0.000082 J	--	< 0.000075	< 0.00040	**0.000099 J**	**0.00084 J**	**0.0012 J**	**0.0014**	--	**0.00099 J**	**0.0011 J**	**0.0010 J**	**0.0014 J**	**0.0012**	**0.0012**	**0.0061**	**0.0060**	**0.0059**	--
Copper	mg/L	7440-50-8	< 0.0013	< 0.0021	**0.0012 J**	**0.0021 J**	< 0.0021	0.0011 J	--	< 0.0013	< 0.0021	**0.00085 J**	< 0.0013	< 0.0021	0.0012 J	--	< 0.0013	< 0.0013	< 0.0021	< 0.0021	**0.00066 J**	< 0.00063	< 0.0013	< 0.0021	0.00092 J	--
Lead	mg/L	7439-92-1	**0.00016 JB**	< 0.00035	< 0.00013	**0.00067 J**	< 0.00035	0.00017 J	--	**0.00011 JB**	< 0.00035	< 0.00013	**0.00012 JB**	< 0.00035	0.00024 J	--	< 0.000094	< 0.000094	< 0.00035	< 0.00035	**0.00021 J**	< 0.00013	**0.00013 J**	< 0.00035	0.00018 J	--
Nickel	mg/L	7440-02-0	**0.0016 J**	**0.0018 J**	**0.0018**	**0.0019 J**	< 0.0018	0.0012	--	**0.0017 J**	< 0.0018	**0.0018**	**0.00093 J**	< 0.0018	0.0014	--	**0.00071 J**	**0.00083 J**	< 0.0018	< 0.0018	**0.00097 J**	**0.00090 J**	**0.0019 J**	**0.0018 J**	**0.0023**	--
Selenium	mg/L	7782-49-2	< 0.00081	< 0.00071	< 0.0015	< 0.00081	< 0.00071	< 0.0015	--	< 0.00081	< 0.00071	< 0.0015	< 0.00081	< 0.00071	< 0.0015	--	< 0.00081	< 0.00081	< 0.00071	< 0.00071	< 0.0015	< 0.0015	< 0.00081	< 0.00071	< 0.0015	--
Silver	mg/L	7440-22-4	< 0.00012	< 0.00011	< 0.00018	**0.00029 JB**	< 0.00011	< 0.00018	--	< 0.00012	< 0.00011	< 0.00018	< 0.00012	< 0.00011	< 0.00018	--	**0.00018 JB**	**0.00019 JB**	< 0.00011	< 0.00011	< 0.00018	< 0.00018	**0.00012 JB**	< 0.00011	< 0.00018	--
Thallium	mg/L	7440-28-0	< 0.000063	< 0.000085	< 0.00015	**0.00012 J**	< 0.000085	0.00018 J	--	< 0.000063	< 0.000085	**0.00019 J**	< 0.000063	< 0.000085	0.00034 J	--	< 0.000063	**0.000083 J**	< 0.000085	< 0.000085	**0.00041 J**	< 0.00015	**0.00016 J**	**0.00011 J**	**0.00034 J**	--
Vanadium	mg/L	7440-62-2	< 0.00090	**0.0040**	**0.0018**	**0.0042 B**	**0.0074**	**0.0037**	--	< 0.00090	< 0.0014	**0.0023**	< 0.00090	**0.0031**	**0.0018**	--	**0.0014 JB**	**0.0011 JB**	**0.0049**	**0.0020 J**	**0.0015**	**0.0013**	< 0.00090	**0.0055**	**0.0015**	--
Zinc	mg/L	7440-66-6	**0.0059 J**	< 0.0065	**0.013**	**0.50**	< 0.0065	0.0058	--	**0.0051 J**	< 0.0065	**0.0046 J**	< 0.0024	< 0.0065	0.0073	--	**0.0025 J**	**0.0026 J**	< 0.0065	< 0.0065	**0.0063**	**0.0060**	**0.0049 J**	< 0.0065	0.0086	--

Created by: JW/LLG
Checked by: LMC

Figures



LEGEND

- Plant McIntosh Approximate Property Boundary
- Landfill No. 4
- Savannah River and Associated Tributaries

0 3,000 6,000

SCALE: 1 inch = 3000 feet

2019 Annual Groundwater Monitoring and Corrective Action Report - Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

Georgia Power Company
Atlanta, Georgia

GEI Consultants

SITE LOCATION MAP

Project No. 1901973 | Prepared November 2019 | Fig. 1

LEGEND

- Upgradient Monitoring Wells (GWA)
- Downgradient Monitoring Wells (GWC)
- Downgradient Piezometer
- Approximate Property Boundary
- Cell 1 Approximate Boundary
- Cell 2A Approximate Boundary
- Cell 2B Approximate Boundary (Not Yet Constructed)

NOTES:
*Change requested in the November 2018 permit submittal. Well designations will be updated once application is approved. Well IDs in parentheses are the proposed well IDs.
**Monitoring wells GWC-17 and GWC-18 are included in the background monitoring statistical pool as described in the April 2018 Alternative Source Demonstration.

0 250 500

SCALE: 1 inch = 250 feet

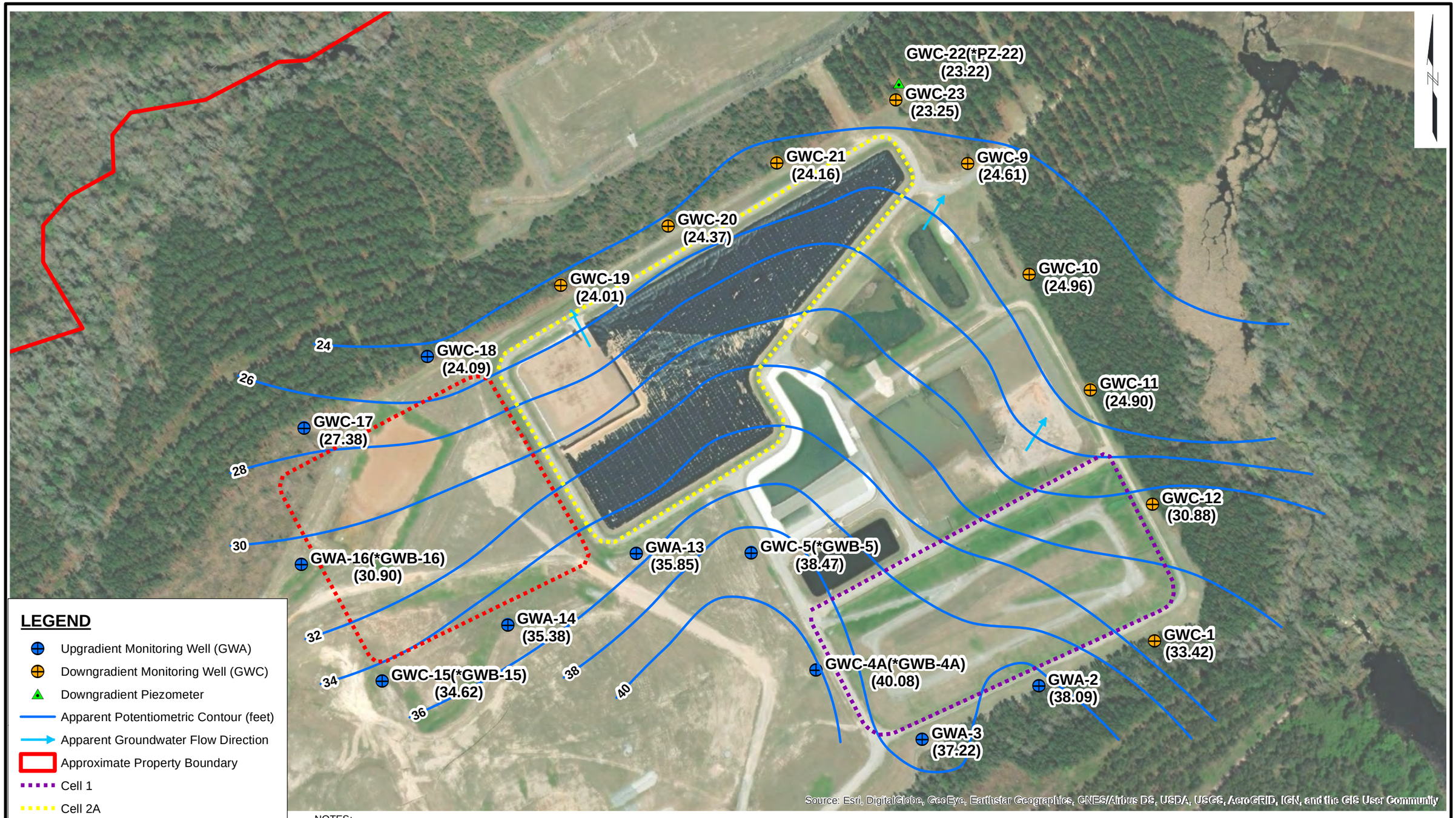
2019 Annual Groundwater Monitoring and Corrective Action Report - Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

Georgia Power Company
Atlanta, Georgia

GEI Consultants

WELL LOCATION MAP

Project No. 1901973 | Prepared January 2020 | Fig. 2



LEGEND

- Upgradient Monitoring Well (GWA)
- Downgradient Monitoring Well (GWC)
- Downgradient Piezometer
- Apparent Potentiometric Contour (feet)
- Apparent Groundwater Flow Direction
- Approximate Property Boundary
- Cell 1
- Cell 2A
- Cell 2B

(34.62) = Groundwater elevation measured 01/28/19

Elevations are in feet relative to North American Vertical Datum 1988 (NAVD 88)

NOTES:
* Change requested in the November 2018 permit submittal. Well designations will be updated once application is approved. Well IDs in parentheses are the proposed well IDs.
**Monitoring wells GWC-17 and GWC-18 are included in the background monitoring statistical pool as described in the April 2018 Alternative Source Demonstration.

0 250 500

SCALE: 1 inch = 250 feet

2019 Annual Groundwater Monitoring and Corrective Action Report - Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

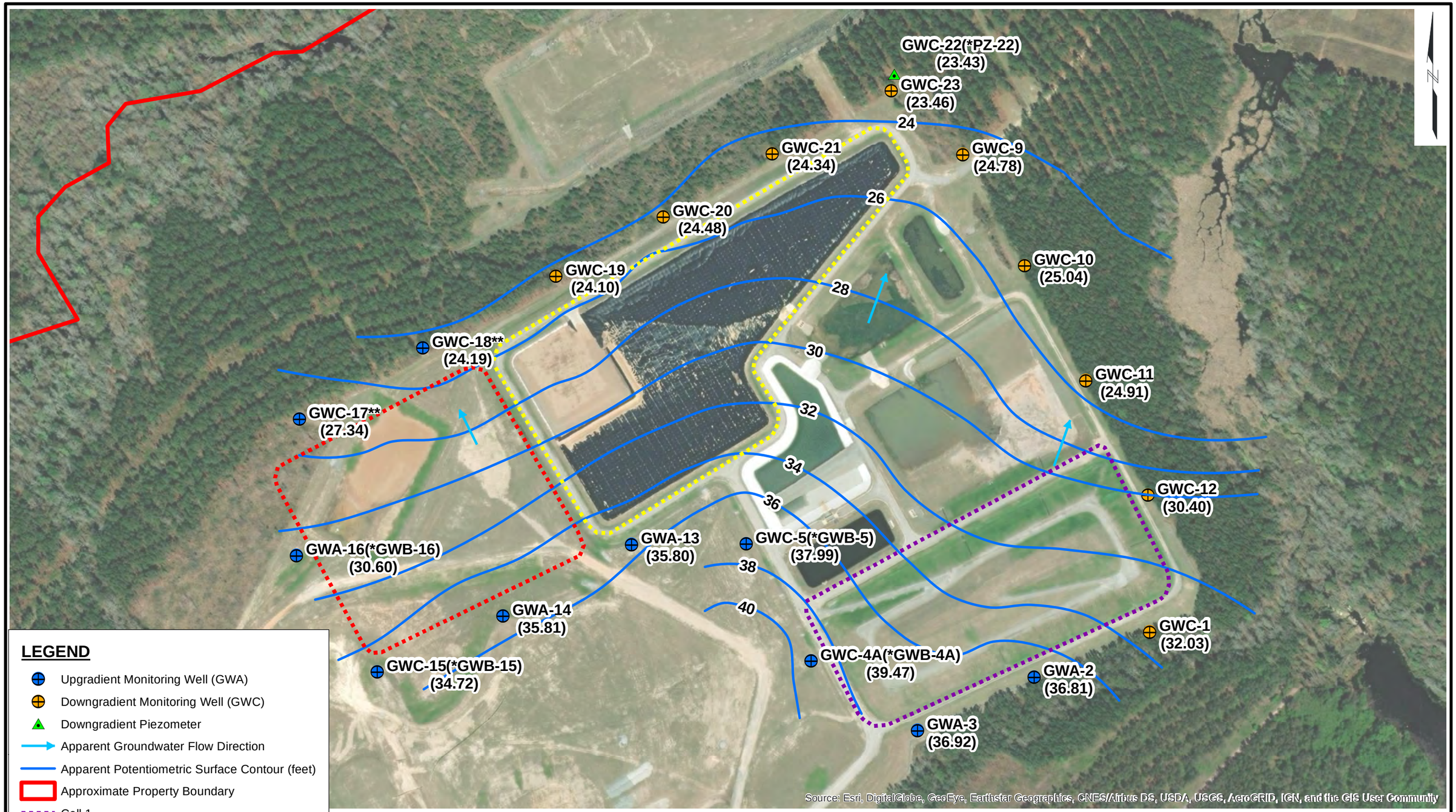
Georgia Power Company
Atlanta, Georgia

GEI Consultants

Project No. 1901973

POTENTIOMETRIC SURFACE CONTOUR MAP
JANUARY 2019

Prepared January 2020 Fig. 3



LEGEND

- Upgradient Monitoring Well (GWA)
- Downgradient Monitoring Well (GWC)
- Downgradient Piezometer
- Apparent Groundwater Flow Direction
- Apparent Potentiometric Surface Contour (feet)
- Approximate Property Boundary
- Cell 1
- Cell 2A
- Cell 2B

(34.72) = Groundwater elevation measured 03/25/19

Elevations are in feet relative to North American Vertical Datum 1988 (NAVD 88)

NOTES:
*Change requested in the November 2018 permit submittal. Well designations will be updated once application is approved. Well IDs in parentheses are the proposed well IDs.
**Monitoring wells GWC-17 and GWC-18 are included in the background monitoring statistical pool as described in the April 2018 Alternative Source Demonstration.

0 250 500

SCALE: 1 inch = 250 feet

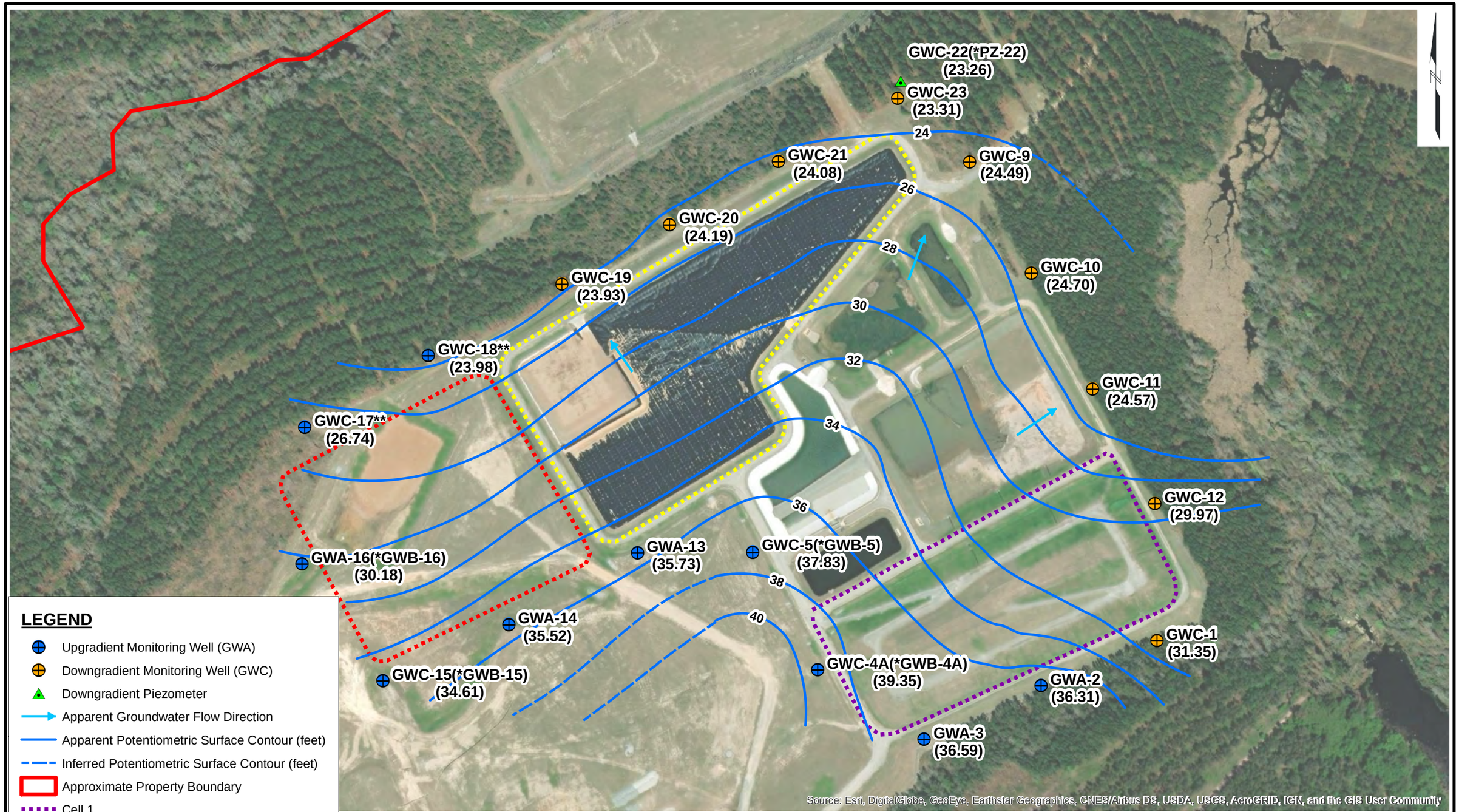
2019 Annual Groundwater Monitoring and Corrective Action Report - Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

Georgia Power Company
Atlanta, Georgia

GEI Consultants

POTENTIOMETRIC SURFACE CONTOUR MAP
MARCH 2019

Project No. 1901973 | Prepared January 2020 | Fig. 4



LEGEND

- Upgradient Monitoring Well (GWA)
- Downgradient Monitoring Well (GWC)
- Downgradient Piezometer
- Apparent Groundwater Flow Direction
- Apparent Potentiometric Surface Contour (feet)
- Inferred Potentiometric Surface Contour (feet)
- Approximate Property Boundary
- Cell 1
- Cell 2A
- Cell 2B

(34.61) = Groundwater elevation measured 09/09/19

Elevations are in feet relative to North American Vertical Datum 1988 (NAVD 88)

NOTES:
*Change requested in the November 2018 permit submittal. Well designations will be updated once application is approved. Well IDs in parentheses are the proposed well IDs.
**Monitoring wells GWC-17 and GWC-18 are included in the background monitoring statistical pool as described in the April 2018 Alternative Source Demonstration.

0 250 500

SCALE: 1 inch = 250 feet

2019 Annual Groundwater Monitoring and Corrective Action Report - Plant McIntosh Existing Landfill No. 4
Effingham County, Georgia

Georgia Power Company
Atlanta, Georgia

GEI Consultants

POTENTIOMETRIC SURFACE CONTOUR MAP
SEPTEMBER 2019

Project No. 1901973 | Prepared January 2020 | Fig. 5

Appendix A

Alternative Source Demonstration

GEI Consultants

Consulting
Engineers and
Scientists

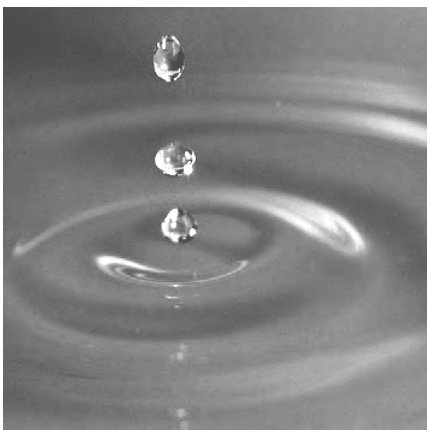
Georgia Power Company

Alternative Source Demonstration

Plant McIntosh Coal Combustion Residuals
Existing Landfill No. 4
Permit # 051-010D (LI)

Prepared by:
GEI Consultants, Inc.
1375 Peachtree Street, Suite A15
Atlanta, GA 30309

February 11, 2019
Project 1800205



Prepared by: Richard H. Frappa, P.G.
Senior Hydrogeologist

Reviewed By: Michael Cummings, P.G.
Project Hydrogeologist

Table of Contents

PROFESSIONAL ENGINEER CERTIFICATION

This Alternative Source Demonstration for Georgia Power Company – Plant McIntosh Landfill No. 4 has been prepared in accordance with the United States Environmental Protection Agency (US EPA) coal combustion residual rule (40 Code of Federal Regulations (CFR) 257 Subpart D) under the supervision of a licensed professional engineer with GEI Consultants, Inc.

John M. Trast, P.E.
License No. PE41928

1. Introduction

This document presents an alternative source demonstration (ASD) for the statistically significant increases (SSIs) of the Appendix III groundwater monitoring parameter sulfate detected in samples collected from monitoring wells GWC-10 and GWC-11 during the July 2018 semiannual detection monitoring event at Georgia Power Company's (GPC's) Plant McIntosh Coal Combustion By-Product Landfill No. 4 (Landfill No. 4). This ASD has been prepared pursuant to Title 40 Code of Federal Regulations (CFR) 257 Subpart D (the federal Coal Combustion Residuals [CCR] Rule or CCR Rule) 257.94(e)(2), which states that,

> "*the owner or operator may demonstrate that a source other than the CCR unit caused the statistically significant increase over background levels for a constituent or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality*."

The SSIs for sulfate are a result of natural variability in groundwater and are not caused by a release from Landfill No. 4. Groundwater monitoring data and statistical analysis reports discussed herein were included in the *2018 Annual Groundwater Monitoring and Corrective Action Report* (GEI, 2019).

1.1 Site Location and Background

Plant McIntosh is located in southeast Effingham County, Georgia, approximately 4 miles northeast of the city of Rincon, and 20 miles north-northwest of the city of Savannah. Landfill No. 4 is permitted for the disposal of CCR generated at the plant. Plant McIntosh and Landfill No. 4 are shown on **Figure 1**.

Landfill No. 4 is partially constructed with CCR placed in Cells 1 and 2A (**Figure 2**). Closure construction for Cell 1 began in June 2015 and final cover construction was completed in August 2016. GPC began construction of Cell 2A in June 2015 and received approval to begin receiving solid waste for disposal on July 20, 2017. Cell 2A began receiving CCR in September 2017. Cells 2B, 3, and 4 are reserved for future development (**Figure 2**).

Landfill No. 4 is currently in detection monitoring. The certified statistical methods for Landfill No. 4 specify the use of interwell prediction limits (PLs) for all Appendix III parameters except sulfate, which is analyzed using intrawell PLs. Unlike interwell analysis that compares parameter concentrations in downgradient wells to limits derived from upgradient wells, intrawell analysis compares concentrations detected in a well to a limit established using its own background data without using comparison data from surrounding upgradient wells.

Statistical analysis of data from the July 2018 detection monitoring event identified sulfate SSIs in downgradient monitoring wells GWC-10 and GWC-11.

It was also noted that sulfate concentrations exceeded background concentrations in upgradient well GWC-4A(*GWB-4A). The apparent increase over background event sampling results observed in GWC-4A(*GWB-4A) is due to the limited number of background samples (eight), which does not yet represent the true population. Exceedances in upgradient wells are an indication of naturally variable groundwater and are not indicative of an SSI. As more samples are collected during routine groundwater monitoring events (and background limits are updated), the data and statistics will account for the natural variability of sulfate upgradient of Landfill No. 4.

1.2 Hydrogeology and Geochemistry

As documented in the *2018 Annual Groundwater Monitoring and Corrective Action Report* (GEI, 2019), the general direction of groundwater flow across Landfill No. 4 is toward the northwest, north-northeast, and northeast (**Figure 2**). The groundwater flow pattern observed during the July 2018 detection monitoring event is consistent with historical observations. The calculated groundwater flow velocity at Landfill No. 4 is approximately 15 feet per year.

Monitoring wells GWC-10 and GWC-11 are situated downgradient along the eastern side of Landfill No. 4. As shown on **Figure 2,** monitoring well GWC-4A(*GWB-4A) is an upgradient monitoring well that monitors upgradient groundwater quality before it migrates under Landfill No. 4. GWC-10 and GWC-11 are in the direct flow path downgradient from GWC-4A(*GWB-4A) .

2. Alternative Source Demonstration

Based on the review of site information and data analysis, the sulfate SSIs are due to the limited number of background samples, which do not currently capture the natural variability in sulfate concentrations over time. The following lines of evidence discussed below support this conclusion:

- The highest sulfate concentration observed at Landfill No. 4 was in upgradient monitoring well GWC-4A(*GWB-4A). The apparent increase over background sampling results is due to the limited number of background samples (eight), which do not currently capture the natural variability of sulfate concentrations over time.

- The sulfate concentrations at Landfill No. 4 monitoring wells are very low, ranging from less than 0.70 milligrams per liter (mg/L) to 14 mg/L and there are no other SSIs at Landfill No. 4.

- The intrawell statistical method with a 1-of-3 resample plan did not adequately account for naturally variable sulfate concentrations in groundwater. Using an intrawell statistical method and appropriate 1-of-2 resampling plan, sulfate SSIs are not observed at GWC-10 and GWC-11.

2.1 Methods

The evaluation of natural groundwater variability in determining the validity of SSIs for sulfate was assessed through the collective review of upgradient and downgradient sulfate concentration data collected during the background (2016-2017) and detection (2018) monitoring events. The following sections present a summary of the data review and refined statistical analysis.

2.2 Sulfate in Upgradient Monitoring Wells

The natural variability of sulfate concentrations in groundwater at Landfill No. 4 is graphically demonstrated in the Time-Series Plots and Box and Whiskers Plots shown on **Figure 3** and **Figure 4**, respectively. As shown on these plots, sulfate concentrations detected in upgradient monitoring wells between 2016 and July 2018 ranged from less than 0.70 mg/L (non-detect) to 14 mg/L. **Figure 4** and data provided in **Table 1** illustrate that the sulfate concentrations detected at downgradient wells GWC-10 and GWC-11 in the July 2018 event are well below the historical average sulfate concentration of 6.84 mg/L in upgradient well GWC-4A(*GWB-4A). Higher sulfate concentrations detected upgradient of Landfill No. 4 indicate that background groundwater quality is naturally elevated in sulfate when compared to

downgradient groundwater. As shown in **Appendix A**, statistically significant increasing trends in sulfate concentration were not identified at Landfill No. 4, which you would expect to see if Landfill No. 4 was impacting groundwater. As shown by the range in sulfate concentrations on **Figure 3** and **Figure 4**, the sulfate data pool indicates naturally variable sulfate concentrations in upgradient and downgradient groundwater.

2.3 Single Parameter SSI

The sulfate concentrations at Landfill No. 4 are very low, ranging from less than 0.70 mg/L to 14 mg/L. There are no other SSIs at Landfill No. 4 and a release from Landfill No. 4 would cause SSIs of multiple Appendix III parameters. CCR impacts to groundwater result in an increase in concentrations of multiple Appendix III parameters, and a release from Landfill No. 4 would cause exceedances of the upper PLs, resulting in SSIs for multiple parameters. The absence of multiple SSIs and the absence of statistically significant increasing trends in sulfate supports the conclusion that the sulfate SSIs in GWC-10 and GWC-11 are not the result of a release from Landfill No. 4.

2.4 Intrawell Well Statistical Analysis

The certified statistical methods for Landfill No. 4 specify the use of interwell PLs for all Appendix III parameters except sulfate, which is analyzed using intrawell PLs. Intrawell analysis can cause false positive SSIs if the assumptions used to select the method of analysis are not periodically re-evaluated. In the case of sulfate at Landfill No. 4, the original assumptions made for the selection of intrawell analysis were that:

1. Sulfate concentrations were naturally variable between monitoring wells at Landfill No. 4;

2. The size of the background data pool was adequate, and;

3. A 1-of-3 resample plan was appropriate to minimize site-wide false positive rates (appropriate statistical power).

The Professional Engineer-certified statistical analysis method specifies intrawell PL methods combined with the option of a 1-of-3 resample plan. As described above, that recommendation was partially based on a downgradient monitoring well network consisting of 11 wells. Monitoring wells GWC-17 and GWC-18, which are downgradient of undeveloped Cell 2B, were previously included in the downgradient statistical pool; in 2017 these wells were included in the upgradient statistical pool. This change was appropriate and constituent concentrations observed in these wells could not have originated from Landfill No. 4 since Cell 2B has not been developed and does not contain waste. Since these wells are representative of background groundwater quality, GWC-17 and GWC-18 were moved into the upgradient (or background)

statistical pool for statistical evaluation, resulting in nine upgradient wells in the monitoring network.

The US EPA Unified Guidance requires that the statistical methodology selected for a facility demonstrate adequate power to detect a release at the facility and the statistical approach be periodically re-evaluated as additional data is collected semi-annually, and the statistical program adjusted as necessary.

Based on eight background samples, seven analytical parameters, and nine downgradient wells, a 1-of-2 resample plan is an appropriate statistical method to analyze sulfate at Landfill No. 4. The power curve provided in **Appendix B** demonstrates there is sufficient statistical power using a 1-of-2 resample plan, which provides approximately 55 percent power when compliance measurements are three standard deviations higher than the background average or approximately 80 percent power at four standard deviations. The intrawell sulfate analysis using a 1-of-2 resampling plan is included in **Appendix B**. When sulfate is evaluated using the 1-of-2 resample plan, the July 2018 sulfate data for GWC-10 and GWC-11 plot below the upper PL and there are no SSIs for sulfate (**Figure 5**). The range of sulfate concentrations in upgradient well GWC-4A further supports natural variability of sulfate in groundwater unrelated to the facility. The use of a 1-of-2 resample plan reduces the false positive rate while providing sufficient power to detect changes in sulfate concentrations in downgradient wells, as recommended by the US EPA Unified Guidance. When intrawell PLs are combined with a 1-of-2 resample plan, all sulfate results are within their respective limits for the July 2018 sample event.

3. Conclusion

Based on information presented in this ASD, the SSIs for sulfate at GWC-10 and GWC-11 are a result of natural variability in groundwater and are not caused by a release from Landfill No. 4. The ASD identified the following to support this conclusion:

- The highest sulfate concentration observed at Landfill No. 4 was in upgradient monitoring well GWC-4A(*GWB-4A). This apparent increase over background concentrations is due to the limited number of background sampling events, which do not currently capture the natural variability of sulfate concentrations over time. As more samples are collected during routine groundwater monitoring, and background limits are updated, the data will reflect the natural variability and the statistics will account for the variability in both upgradient and downgradient wells. In addition to GWC-4A(*GWB-4A), the sulfate concentrations detected in several upgradient monitoring wells–were higher than those in downgradient monitoring wells GWC-10 and GWC-11 **(Table 1)**.

- The sulfate concentrations are very low ranging from less than 0.70 mg/L to 14 mg/L. There are no other SSIs at Landfill No. 4. The absence of multiple SSIs supports the conclusion that the sulfate SSIs in GWC-10 and GWC-11 are not the result of a release from Landfill No. 4.

- The intrawell statistical method with a 1-of-3 resample plan did not adequately account for naturally variable sulfate concentrations in groundwater. The resample plan was originally chosen assuming 11 downgradient wells in the monitoring network. The US EPA requires that the statistical methodology selected for a facility demonstrate adequate power to detect a release at Landfill No. 4. However, based on eight background sampling events, seven analytical parameters, and nine downgradient wells in the monitoring network, a 1-of-2 resample plan is appropriate at this time, as demonstrated by the power curve provided in **Appendix A**. Using an intrawell statistical method and appropriate 1-of-2 resampling plan, sulfate SSIs are not observed at GWC-10 and GWC-11.

Landfill No. 4 will resume detection monitoring for the first 2019 semiannual monitoring event. GEI recommends a modification of the certified statistical method for sulfate from a 1-of-3 resample plan to a 1-of-2 resample plan at Landfill No. 4. The statistical approach will be periodically re-evaluated as additional data is collected, and adjustments to the program will be made as recommended by US EPA Unified Guidance.

4. References

GEI, 2019. *2018 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company, Plant McIntosh, CCB LF4*. January 31, 2019.

Table

Table 1. Summary of Groundwater Analytical Data
2018 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant McIntosh Landfill No. 4
Effingham County, Georgia

		Location Name	GWC-1			GWA-2		GWA-3		GWC-4A (*GWB-4A)		GWC-5 (*GWB-5)		GWC-9				GWC-10		GWC-11		GWC-12		
		Sample Name	GWC-1			GWA-2		GWA-3		GWA-4R		GWA-5		GWC-9				GWC-10		GWC-11		GWC-12		
		Sample Date	1/11/2018	Jan-DUP	7/12/2018	1/10/2018	7/11/2018	1/10/2018	7/11/2018	1/10/2018	7/11/2018	1/10/2018	7/11/2018	1/12/2018	7/12/2018	Jul-DUP	9/13/2018	1/11/2018	7/12/2018	1/11/2018	7/12/2018	1/11/2018	Jan-DUP	7/12/2018
Analyte	**Units**	**CAS No.**																						
Field Parameters																								
pH	SU	pH	**5.02**		**5.04**	**4.78**	**4.75**	**4.93**	**4.87**	**5.05**	**4.53**	**5.59**	**5.49**	**4.83**	**4.80**		**4.84**	**6.32**	**6.70**	**6.15**	**6.63**	**5.13**		**5.09**
ORP	µS/cm	ORP	**122.90**		**136.4**	**115.20**	**70.6**	**120.20**	**233.6**	**97.20**	**142.3**	**104.90**	**152.1**	**42.80**	**256.3**		**102.0**	**101.50**	**59.7**	**97.70**	**52.3**	**85.50**		**141.1**
Specific Conductivity	mV	COND	**57.10**		**58.5**	**40.60**	**39.0**	**31.66**	**31.4**	**48.40**	**67.4**	**41.20**	**38.2**	**46.80**	**46.2**		**47.0**	**162.40**	**276.8**	**92.30**	**142.7**	**27.30**		**25.2**
DO	mg/L	DO	**2.39**		**2.23**	**4.28**	**4.05**	**5.08**	**5.73**	**0.34**	**1.43**	**6.14**	**6.21**	**6.48**	**6.54**		**6.82**	**4.94**	**2.20**	**3.24**	**1.89**	**5.28**		**6.28**
Temperature	°Celsius	TEMP	**21.12**		**23.41**	**18.88**	**22.62**	**19.28**	**25.19**	**19.72**	**25.53**	**18.74**	**26.13**	**21.05**	**23.65**		**22.90**	**21.06**	**23.05**	**19.84**	**21.51**	**21.45**		**22.52**
Turbidity	NTU	TURB	**3.76**		**0.87**	**0.34**	**1.68**	**1.53**	**0.98**	**0.51**	**0.96**	**0.41**	**0.57**	**0.62**	**0.54**		**0.77**	**0.48**	**0.83**	**0.24**	**1.66**	**0.52**		**0.38**
Appendix III Parameters																								
Boron	mg/L	7440-42-8	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	--	**0.060**	**0.054**	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021
Calcium	mg/L	7440-70-2	**2.4**	**2.4**	**1.8**	**0.52**	**0.50**	**0.88**	**0.81**	**0.82**	**1.0**	**3.3**	**3.0**	**0.40**	**0.49**	**0.45**	--	**15**	**27**	**9.3**	**13**	**0.78**	**0.74**	**0.67**
Chloride	mg/L	16887-00-6	**7.5**	**7.5**	**7.0**	**4.6**	**5.0**	**4.2**	**4.3**	**3.3**	**3.2**	**3.2**	**3.5**	**9.0**	**9.4**	**9.5**	**9.1**	**5.9**	**5.1**	**4.3**	**4.3**	**3.4**	**3.4**	**3.7**
Fluoride	mg/L	16984-48-8	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	--	**0.15 J**	**0.13 J**	**0.31**	**0.25**	< 0.082	< 0.082	< 0.082
pH	SU	pH	**5.02**		**5.04**	**4.78**	**4.75**	4.93	**4.87**	**5.05**	**4.53**	**5.59**	**5.49**	**4.83**	**4.80**		**4.84**	6.32	**6.70**	**6.15**	**6.63**	**5.13**		**5.09**
Sulfate	mg/L	14808-79-8	**1.6**	**1.5**	**1.1**	< 0.70	< 0.70	**1.1**	< 0.70	**7.6**	**14**	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70	**--**	**2.6**	**5.0**	**3.5**	**5.9**	< 0.70	< 0.70	< 0.70
Total Dissolved Solids	mg/L	TDS	**100 J**	< 3.40 J	**24 J**	**6 J**	**16 J**	**28 J**	**12 J**	**42 J**	< 3.4 J	**48 J**	**22 J**	**48 J**	**42 J**	**48 J**	**--**	**150 J**	**140 J**	**10 J**	**94 J**	**34 J**	**80 J**	**26 J**

		Location Name	GWA-13		GWA-14		GWC-15 (*GWB-15)		GWA-16 (*GWB-16)		GWC-17		GWC-18			GWC-19		GWC-20			GWC-21		GWC-23	
		Sample Name	GWA-13		GWA-14		GWC-15		GWA-16		GWC-17		GWC-18			GWC-19		GWC-20			GWC-21		GWC-23	
		Sample Date	1/10/2018	7/11/2018	1/11/2018	7/11/2018	1/11/2018	7/11/2018	1/11/2018	7/11/2018	1/11/2018	7/11/2018	1/12/2018	7/11/2018	Jul-DUP	1/12/2018	7/11/2018	1/12/2018	7/11/2018	9/13/2018	1/11/2018	7/11/2018	1/12/2018	7/12/2018
Analyte	**Units**	**CAS No.**																						
Field Parameters																								
pH	SU	pH	**4.90**	**4.99**	**5.19**	**5.25**	**5.01**	**5.01**	**4.97**	**5.07**	**5.28**	**5.23**	**6.47**	**6.18**		**5.59**	**5.60**	**4.97**	**4.89**	**4.91**	**4.98**	**4.96**	**5.35**	**5.21**
ORP	µS/cm	ORP	**90.10**	**73.0**	**84.60**	**305.6**	**64.40**	**93.6**	**104.50**	**171.3**	**78.80**	**425.6**	**97.90**	**113.5**		**77.00**	**153.0**	**92.2**	**445.5**	**100.7**	**108.1**	**165.6**	**103.9**	**294.9**
Specific Conductivity	mV	COND	**25.10**	**22.0**	**25.40**	**26.8**	**26.70**	**25.7**	**21.80**	**23.1**	**34.90**	**33.7**	**130.40**	**101.4**		**93.00**	**95.1**	**52.20**	**51.2**	**48.9**	**40.10**	**40.3**	**41.8**	**40.5**
DO	mg/L	DO	**5.91**	**6.79**	**6.75**	**6.40**	**6.47**	**7.12**	**7.37**	**7.07**	**5.17**	**5.41**	**3.21**	**3.49**		**3.37**	**3.35**	**4.68**	**4.62**	**5.71**	**5.39**	**5.58**	**3.8**	**4.14**
Temperature	°Celsius	TEMP	**20.57**	**25.02**	**19.32**	**24.97**	**20.83**	**25.25**	**20.93**	**26.59**	**20.68**	**24.59**	**19.55**	**24.42**		**19.23**	**25.44**	**20.39**	**25.09**	**23.38**	**20.75**	**25.44**	**20.03**	**23.76**
Turbidity	NTU	TURB	**0.73**	**2.77**	**2.89**	**1.59**	**1.15**	**3.01**	**2.53**	**3.15**	**0.52**	**0.36**	**3.35**	**4.37**		**4.21**	**4.72**	**0.30**	**0.45**	**0.74**	**2.15**	**0.36**	**1.44**	**0.72**
Appendix III Parameters																								
Boron	mg/L	7440-42-8	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	< 0.021	--	< 0.021	< 0.021	< 0.021	< 0.021
Calcium	mg/L	7440-70-2	**0.27**	**0.32**	**0.51**	**0.47**	**0.41**	**0.53**	**0.43**	**0.45**	**2.1**	**2.1**	**15**	**12**	**12**	**9.5**	**10**	**1.7**	**1.7**	--	**1.0**	**1.1**	**1.4**	**1.2**
Chloride	mg/L	16887-00-6	**3.4**	**3.4**	**3.9**	**4.2**	**3.4**	**3.8**	**3.4**	**3.7**	**4.1**	**4.4**	**4.5**	**4.9**	**4.9**	**9.0**	**9.1**	**9.0**	**9.9**	**8.9**	**5.8**	**6.4**	**4.3**	**4.9**
Fluoride	mg/L	16984-48-8	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	< 0.082	**0.12 J**	**0.13 J**	**0.55**	**0.59**	**0.57**	**0.083 J**	**0.091 J**	< 0.082	< 0.082	--	< 0.082	< 0.082	< 0.082	< 0.082
pH	SU	pH	**4.90**	**4.99**	5.19	**5.25**	**5.01**	**5.01**	**4.97**	**5.07**	**5.28**	**5.23**	**6.47**	**6.18**		**5.59**	**5.60**	**4.97**	**4.89**	**4.91**	**4.98**	**4.96**	**5.35**	**5.21**
Sulfate	mg/L	14808-79-8	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70	< 0.70	**4.5**	**5.0**	**5.4**	**1.5**	**1.4**	**0.86 J**	**0.90 J**	**--**	< 0.70	< 0.70	**1.9**	**2.0**
Total Dissolved Solids	mg/L	TDS	**10 J**	**28 J**	**36 J**	**20 J**	**56 J**	< 3.4 J	**6 J**	**24 J**	**18 J**	**22 J**	**110 J**	**16 J**	**100 J**	**81 J**	**38 J**	**56 J**	**32 J**	**--**	**20 J**	**52 J**	**43 J**	**40**

General Notes:

CAS No. - Chemical Abstracts Service Registry Number

Bolded - detected value

- Shaded Location Name indicates well data are in the background statistical data pool.

µS/cm - microsiemens per centimeter

mg/L - milligrams per liter

mV - millivolts

NTU - nephelometric turbidity units

SU - Standard Units

*Change requested in the November 2018 major modification request.

Temperature, specific conductance, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity were measured and recorded in the field.

Validator Qualifiers:

< - The analyte was not detected at a concentration above the specified laboratory reporting limit.

J - The result is an estimated value.

Figures

LEGEND

- Landfill No. 4 Approximate Boundary
- Plant McIntosh Approximate Property Boundary

0 3,000 6,000 9,000 12,000

SCALE: 1 inch = 3000 feet

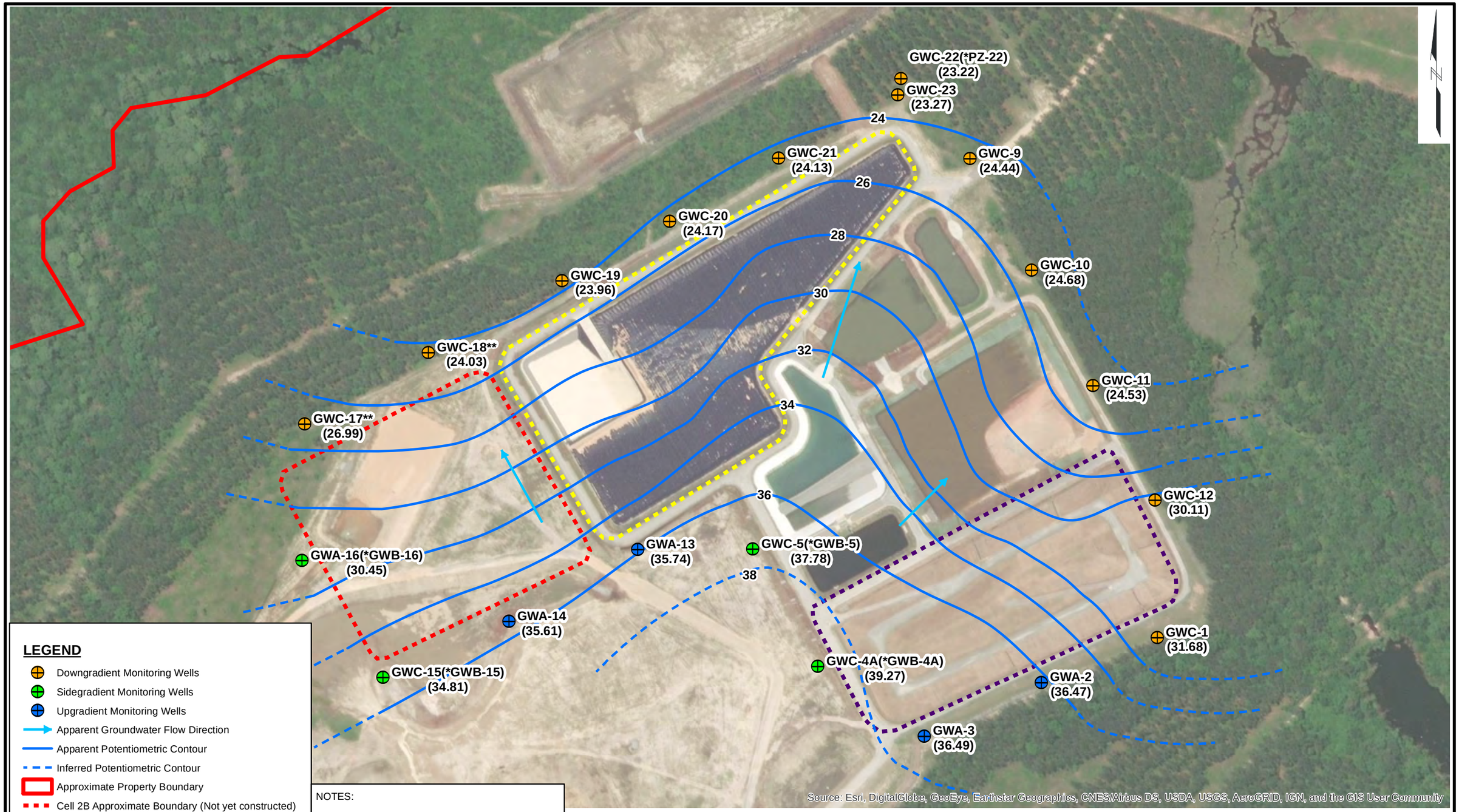
Alternative Source Demonstration
Plant McIntosh Landfill No. 4
Effingham County, Georgia

Georgia Power Company
Atlanta, Georgia

GEI Consultants

PLANT MCINTOSH
SITE LOCATION MAP

Project No. 1800205 | Prepared February 2019 | Fig. 1



LEGEND

- Downgradient Monitoring Wells
- Sidegradient Monitoring Wells
- Upgradient Monitoring Wells
- Apparent Groundwater Flow Direction
- Apparent Potentiometric Contour
- Inferred Potentiometric Contour
- Approximate Property Boundary
- Cell 2B Approximate Boundary (Not yet constructed)
- Cell 1 Approximate Boundary
- Cell 2A Approximate Boundary

(31.68) = Groundwater elevation measured 07/09/18

Elevations are in feet relative to North American Vertical Datum (NAVD)88

NOTES:

* Change requested as a part of the November 2018 D&O Modification. Well designations will be updated once modification is approved.

** Downgradient Wells GWC-17 and GWC-18 are included in the background monitoring statistical pool as described in the April 2018 Alternative Source Demonstration.

0 250 500

SCALE: 1 inch = 250 feet

Alternative Source Demonstration
Plant McIntosh Landfill No. 4
Effingham County, Georgia

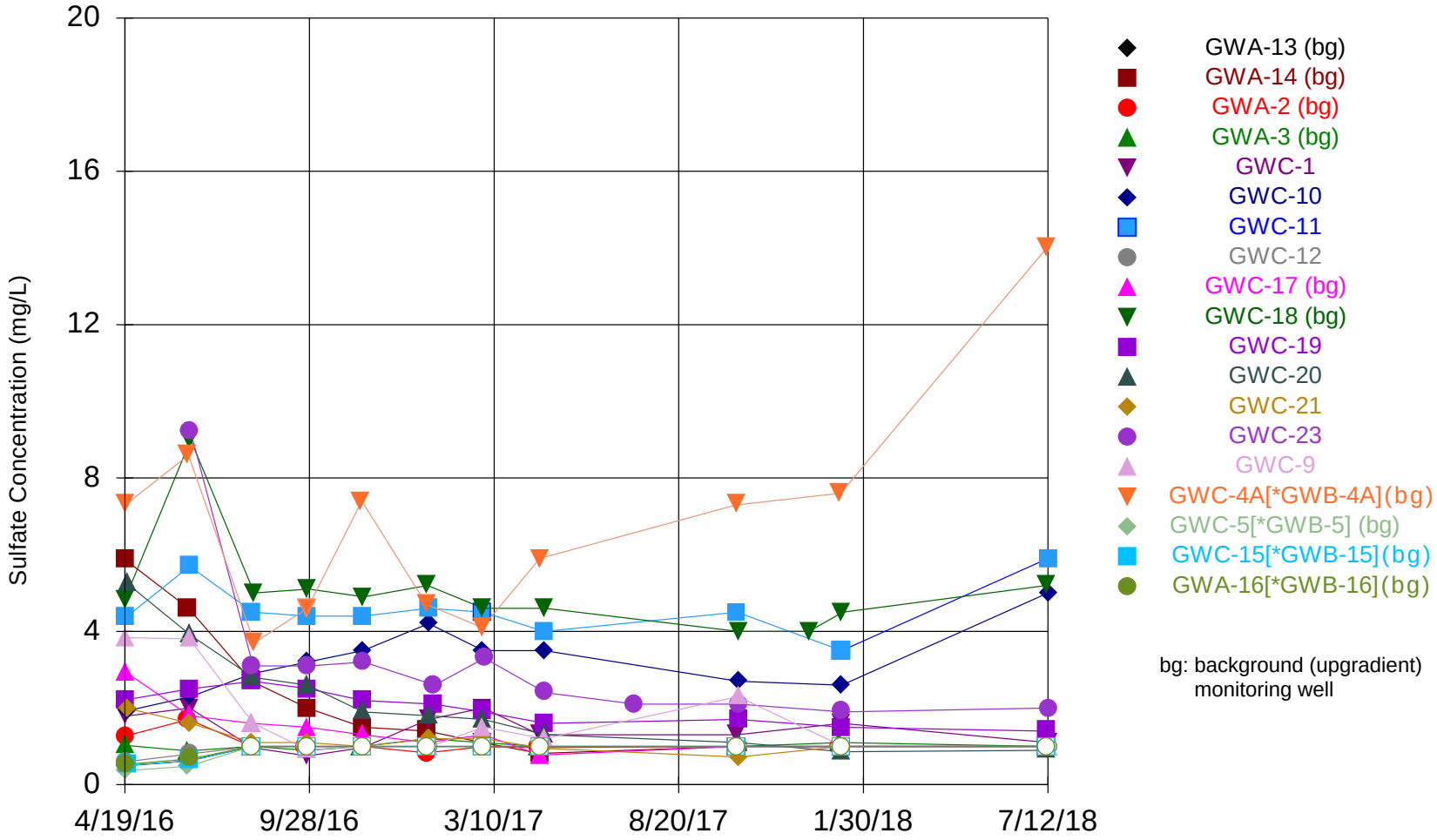
Georgia Power Company
Atlanta, Georgia

GEI Consultants

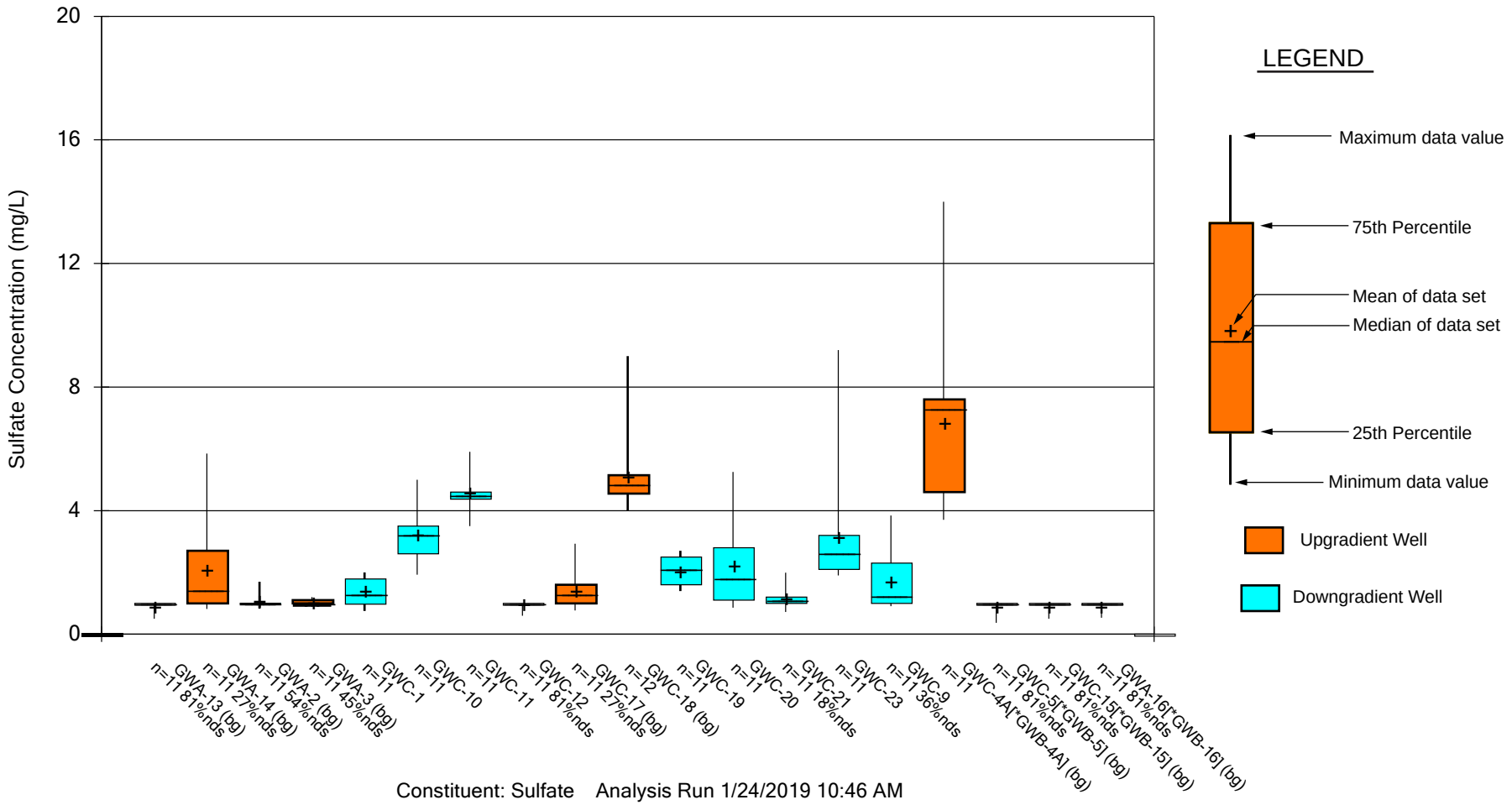
LANDFILL NO. 4
POTENTIOMETRIC SURFACE
CONTOUR MAP - July 2018

Project No. 1800205

Prepared February 2019 Fig. 2



Alternative Source Demonstration	GEI Consultants	TIME-SERIES PLOT-SULFATE
Georgia Power Company Atlanta, Georgia	Project 1800205	February 2019 Fig. 3



Constituent: Sulfate Analysis Run 1/24/2019 10:46 AM

Plant McIntosh Client: GEI Data: McIntosh No 4

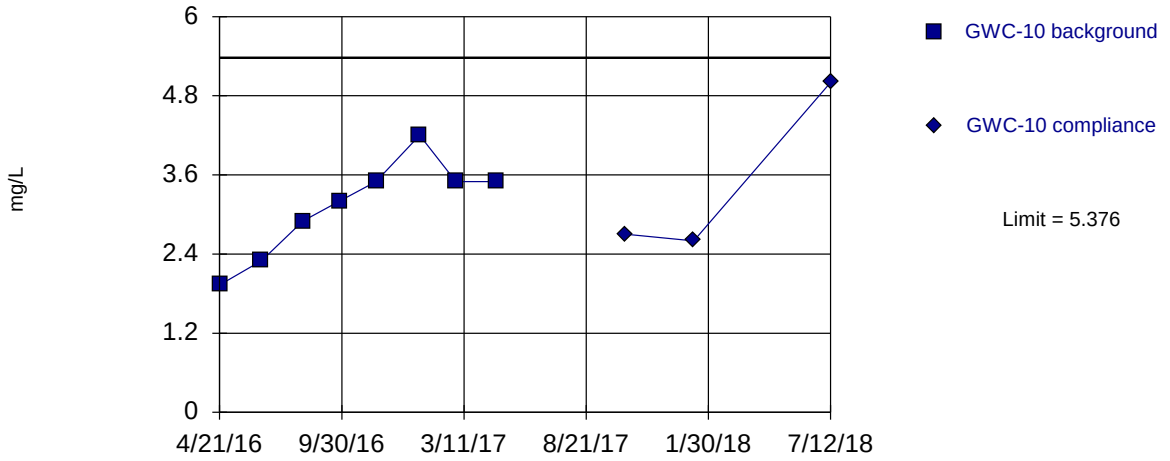
Alternative Source Demonstration	GEI Consultants	BOX AND WHISKER PLOT-SULFATE	
Georgia Power Company Atlanta, Georgia	Project 1800205	February 2019	Fig. 4

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3.129, Std. Dev.=0.7312, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9393, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

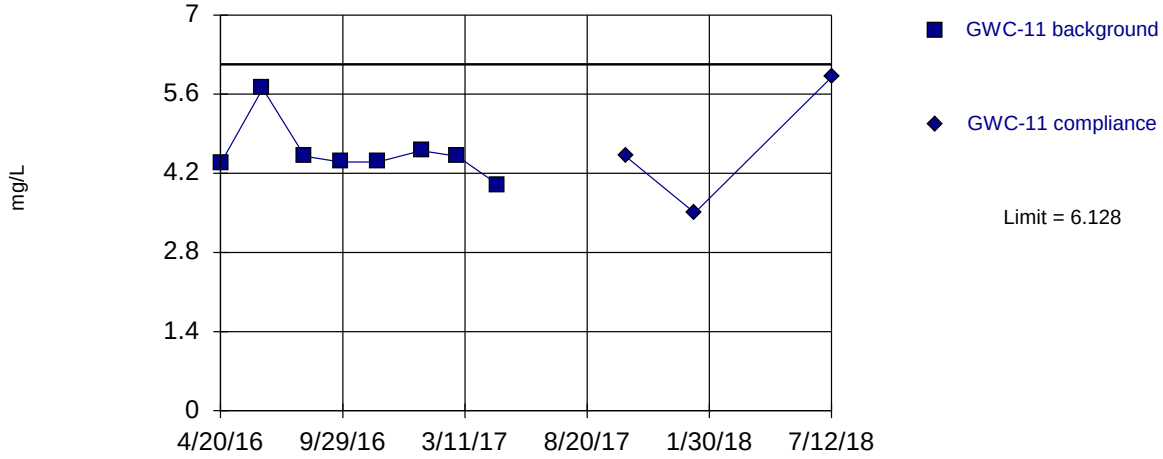
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=2.133, Std. Dev.=0.1116, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7586, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Alternative Source Demonstration	GEI Consultants	GWC-10 and GWC-11 INTRAWELL PREDICTION LIMITS- SULFATE (1-of-2 RESAMPLING)
Georgia Power Company Atlanta, Georgia	Project 1800205	February 2019 Fig. 5

Appendix A

Mann Kendall Sulfate Trend Plots

Trend Test

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28 Printed 1/31/2019, 9:31 AM

Constituent	Well	Slope*	Calculated M-K	Critical M-K	Significant*	N	%NDs	Normality	Xform	Alpha	Method
Sulfate (mg/L)	GWA-13 (bg)	0	1	27	No	11	81.82	n/a	n/a	0.05	NP
Sulfate (mg/L)	**GWA-14 (bg)**	**-2.101**	**-52**	**-27**	**Yes**	**11**	**27.27**	**n/a**	**n/a**	**0.05**	**NP**
Sulfate (mg/L)	GWA-2 (bg)	-0.146	-16	-27	No	11	54.55	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWA-3 (bg)	0	-6	-27	No	11	45.45	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWC-1	-0.1003	-3	-27	No	11	0	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWC-10	1.006	22	27	No	11	0	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWC-11	0	-1	-27	No	11	0	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWC-12	0	-17	-27	No	11	81.82	n/a	n/a	0.05	NP
Sulfate (mg/L)	**GWC-17 (bg)**	**-0.9631**	**-49**	**-27**	**Yes**	**11**	**27.27**	**n/a**	**n/a**	**0.05**	**NP**
Sulfate (mg/L)	GWC-18 (bg)	-0.3763	-17	-27	No	11	0	n/a	n/a	0.05	NP
Sulfate (mg/L)	**GWC-19**	**-0.6046**	**-44**	**-27**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Sulfate (mg/L)	**GWC-20**	**-1.789**	**-53**	**-27**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Sulfate (mg/L)	**GWC-21**	**-0.5318**	**-40**	**-27**	**Yes**	**11**	**18.18**	**n/a**	**n/a**	**0.05**	**NP**
Sulfate (mg/L)	**GWC-23**	**-0.9631**	**-39**	**-27**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Sulfate (mg/L)	GWC-9	-0.9715	-25	-27	No	11	36.36	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWC-4A[*GWB-4A] (bg)	2.33	15	27	No	11	0	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWC-5[*GWB-5] (bg)	0	19	27	No	11	81.82	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWC-15[*GWB-15] (bg)	0	-17	-27	No	11	81.82	n/a	n/a	0.05	NP
Sulfate (mg/L)	GWA-16[*GWB-16] (bg)	0	-17	-27	No	11	81.82	n/a	n/a	0.05	NP

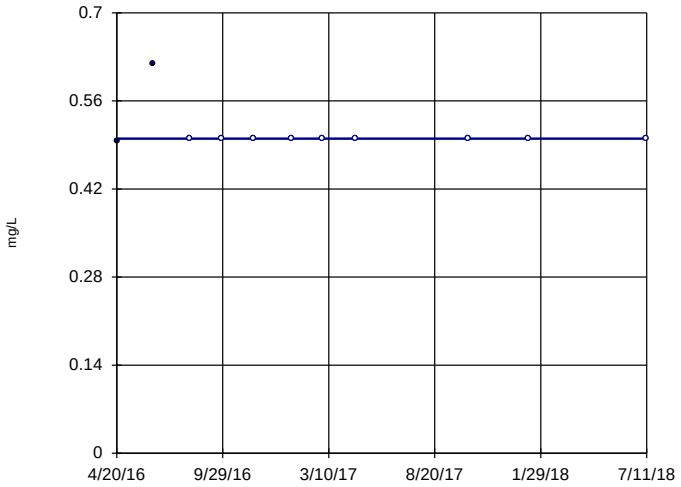
Notes:

*A statistically significant increasing concentration trend is signified by a positive slope where the calculated Mann-Kendall (M-K) Statistic is greater than the critical Mann-Kendall Statistic.

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-13 (bg)



n = 11

Slope = 0
units per year.

Mann-Kendall
statistic = 1
critical = 27

Trend not sig-
nificant at 95%
confidence level
(α = 0.025 per
tail).

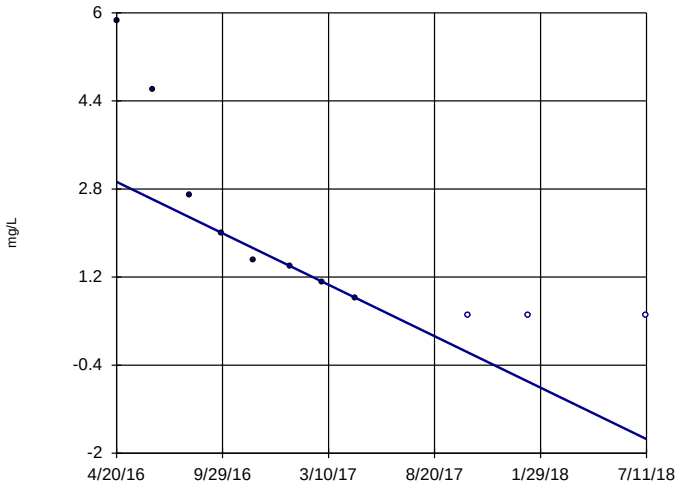
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-14 (bg)



n = 11

Slope = -2.101
units per year.

Mann-Kendall
statistic = -52
critical = -27

Decreasing trend
significant at 95%
confidence level
(α = 0.025 per
tail).

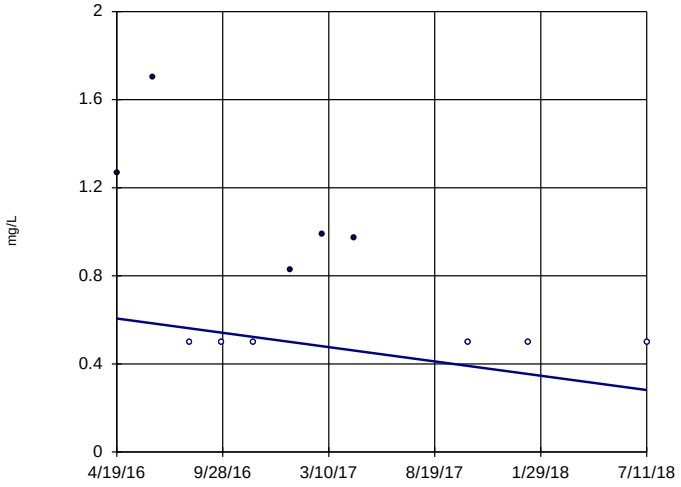
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 11

Slope = -0.146
units per year.

Mann-Kendall
statistic = -16
critical = -27

Trend not sig-
nificant at 95%
confidence level
(α = 0.025 per
tail).

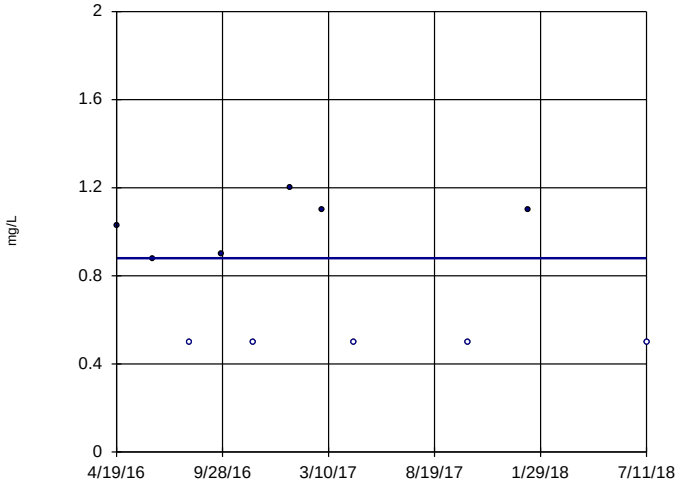
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-3 (bg)



n = 11

Slope = 0
units per year.

Mann-Kendall
statistic = -6
critical = -27

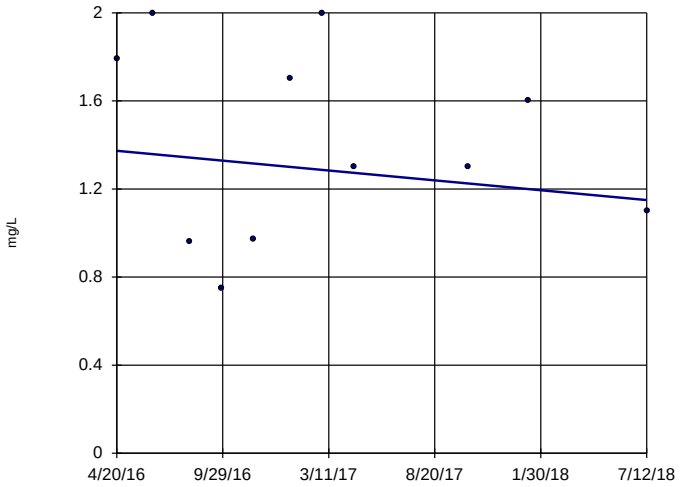
Trend not sig-
nificant at 95%
confidence level
(α = 0.025 per
tail).

Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sen's Slope Estimator

GWC-1



n = 11

Slope = -0.1003 units per year.

Mann-Kendall statistic = -3
critical = -27

Trend not significant at 95% confidence level (α = 0.025 per tail).

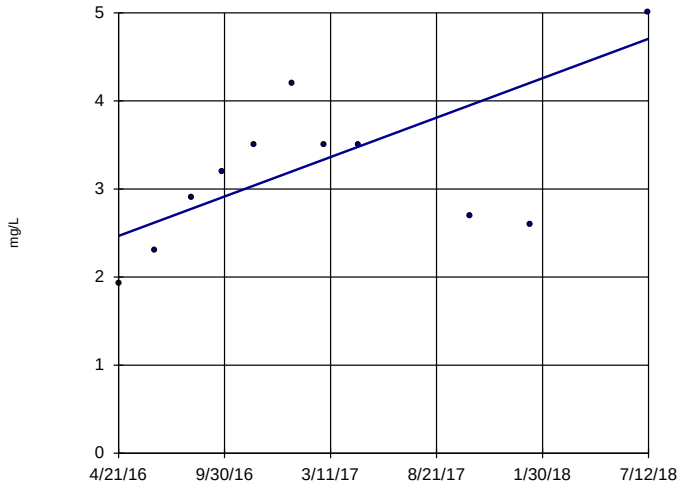
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Sen's Slope Estimator

GWC-10



n = 11

Slope = 1.006 units per year.

Mann-Kendall statistic = 22
critical = 27

Trend not significant at 95% confidence level (α = 0.025 per tail).

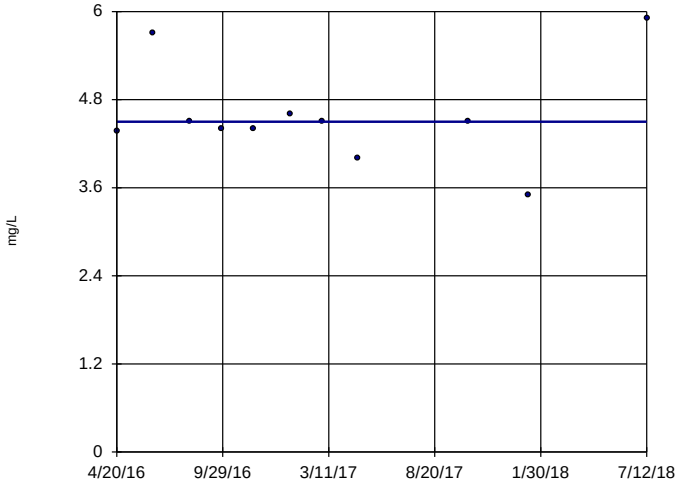
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Sen's Slope Estimator

GWC-11



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -27

Trend not significant at 95% confidence level (α = 0.025 per tail).

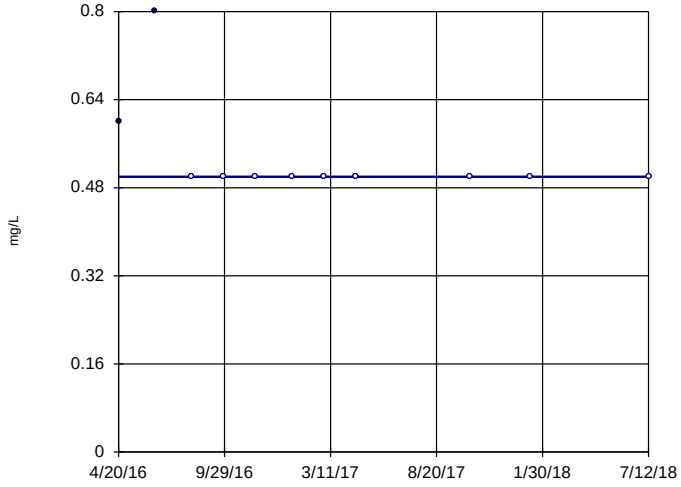
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-12



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = -17
critical = -27

Trend not significant at 95% confidence level (α = 0.025 per tail).

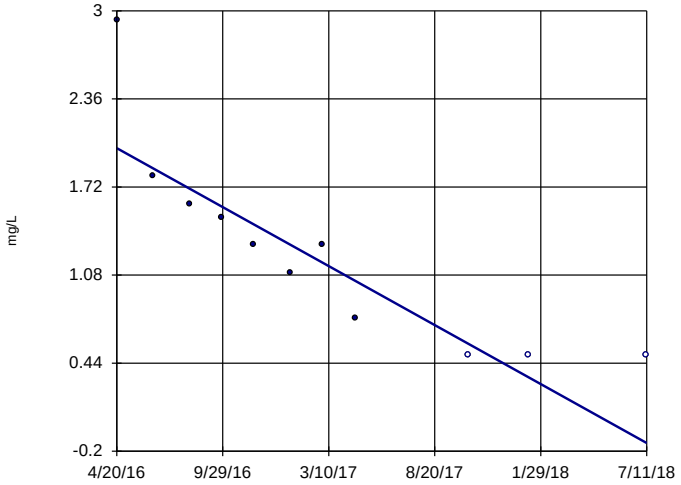
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-17 (bg)



n = 11

Slope = -0.9631 units per year.

Mann-Kendall statistic = -49
critical = -27

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

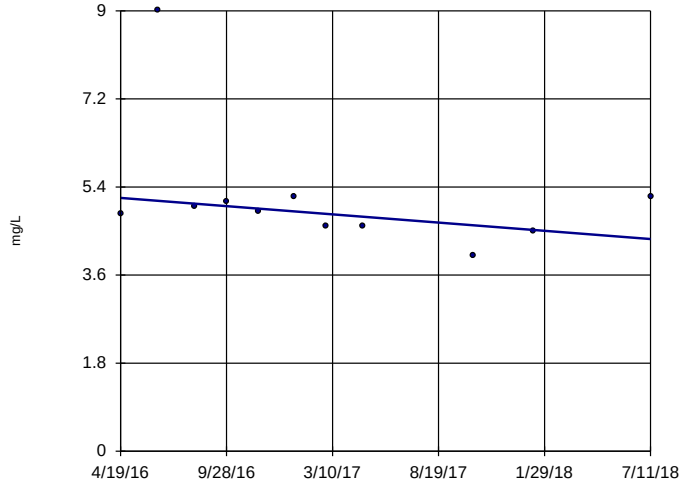
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Sen's Slope Estimator

GWC-18 (bg)



n = 11

Slope = -0.3763 units per year.

Mann-Kendall statistic = -17
critical = -27

Trend not significant at 95% confidence level (α = 0.025 per tail).

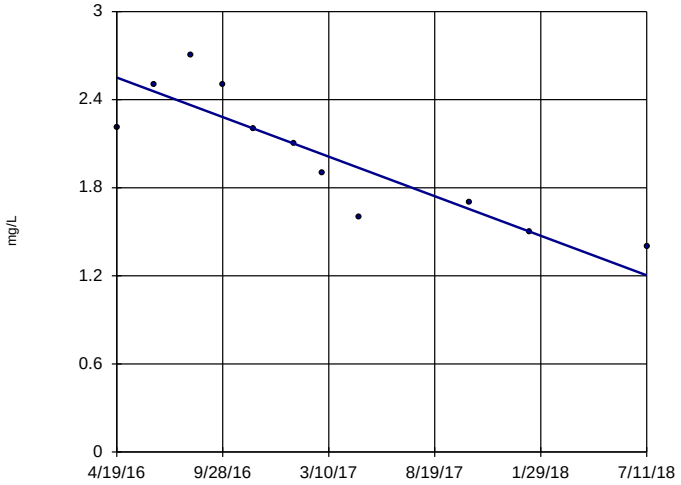
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Sen's Slope Estimator

GWC-19



n = 11

Slope = -0.6046 units per year.

Mann-Kendall statistic = -44
critical = -27

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

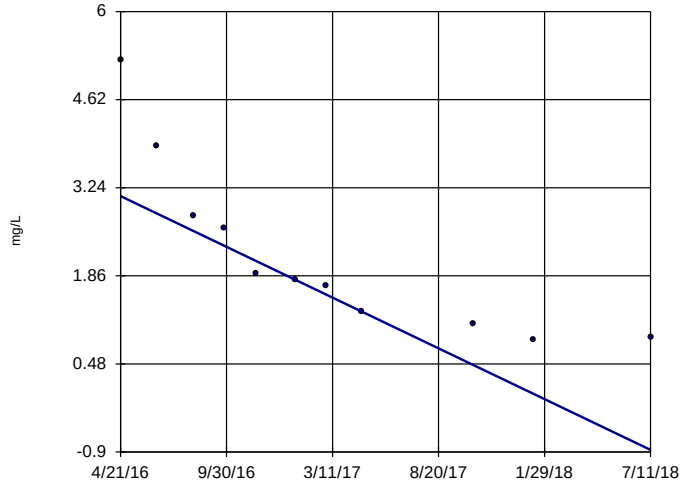
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Sen's Slope Estimator

GWC-20



n = 11

Slope = -1.789 units per year.

Mann-Kendall statistic = -53
critical = -27

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

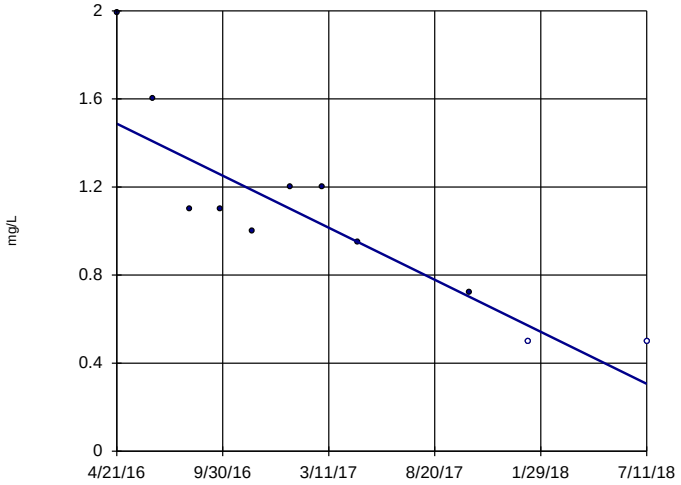
Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-21



n = 11

Slope = -0.5318 units per year.

Mann-Kendall statistic = -40
critical = -27

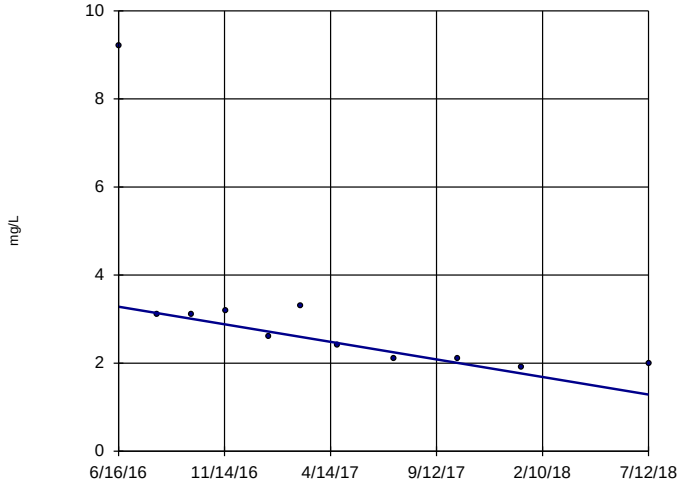
Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Sen's Slope Estimator

GWC-23



n = 11

Slope = -0.9631 units per year.

Mann-Kendall statistic = -39
critical = -27

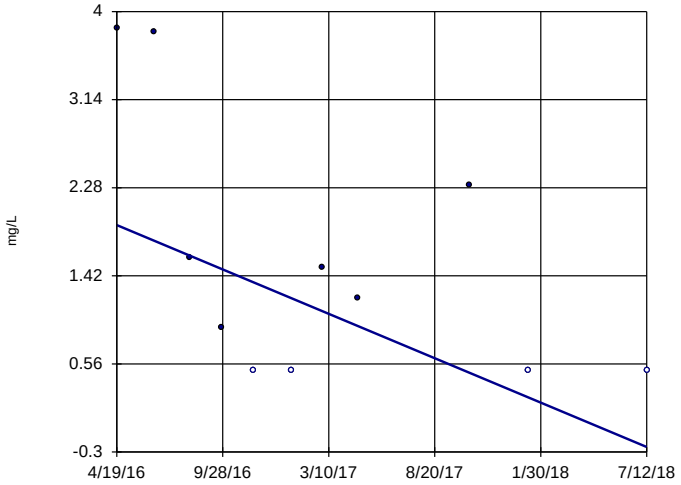
Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-9



n = 11

Slope = -0.9715 units per year.

Mann-Kendall statistic = -25
critical = -27

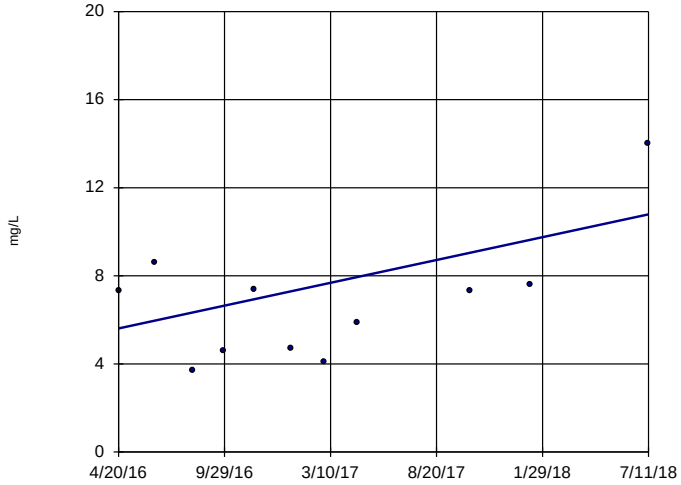
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Sen's Slope Estimator

GWC-4A[*GWB-4A] (bg)



n = 11

Slope = 2.33 units per year.

Mann-Kendall statistic = 15
critical = 27

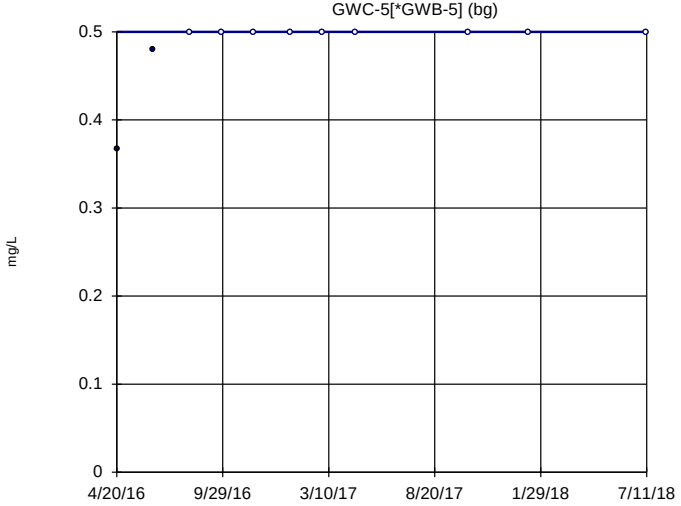
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-5[*GWB-5] (bg)



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = 19
critical = 27

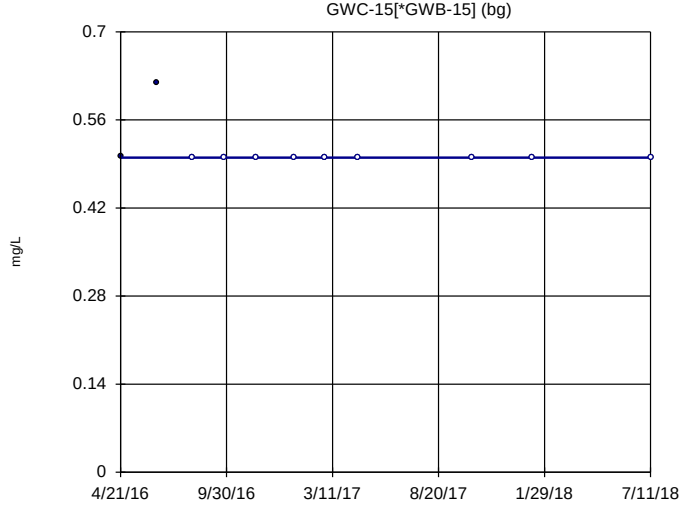
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-15[*GWB-15] (bg)



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = -17
critical = -27

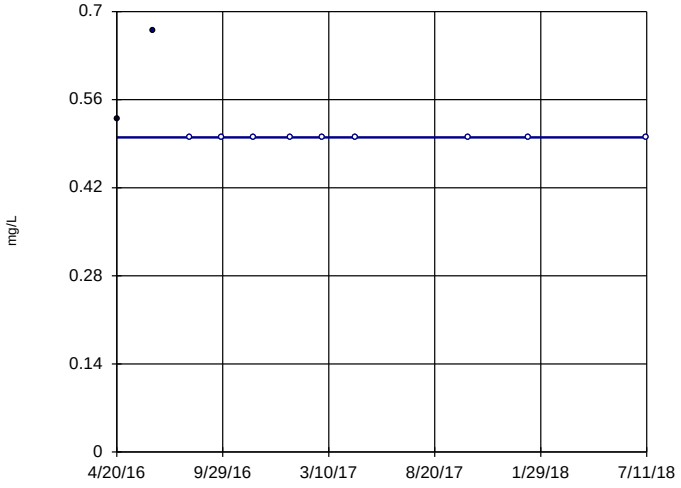
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-16[*GWB-16] (bg)



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = -17
critical = -27

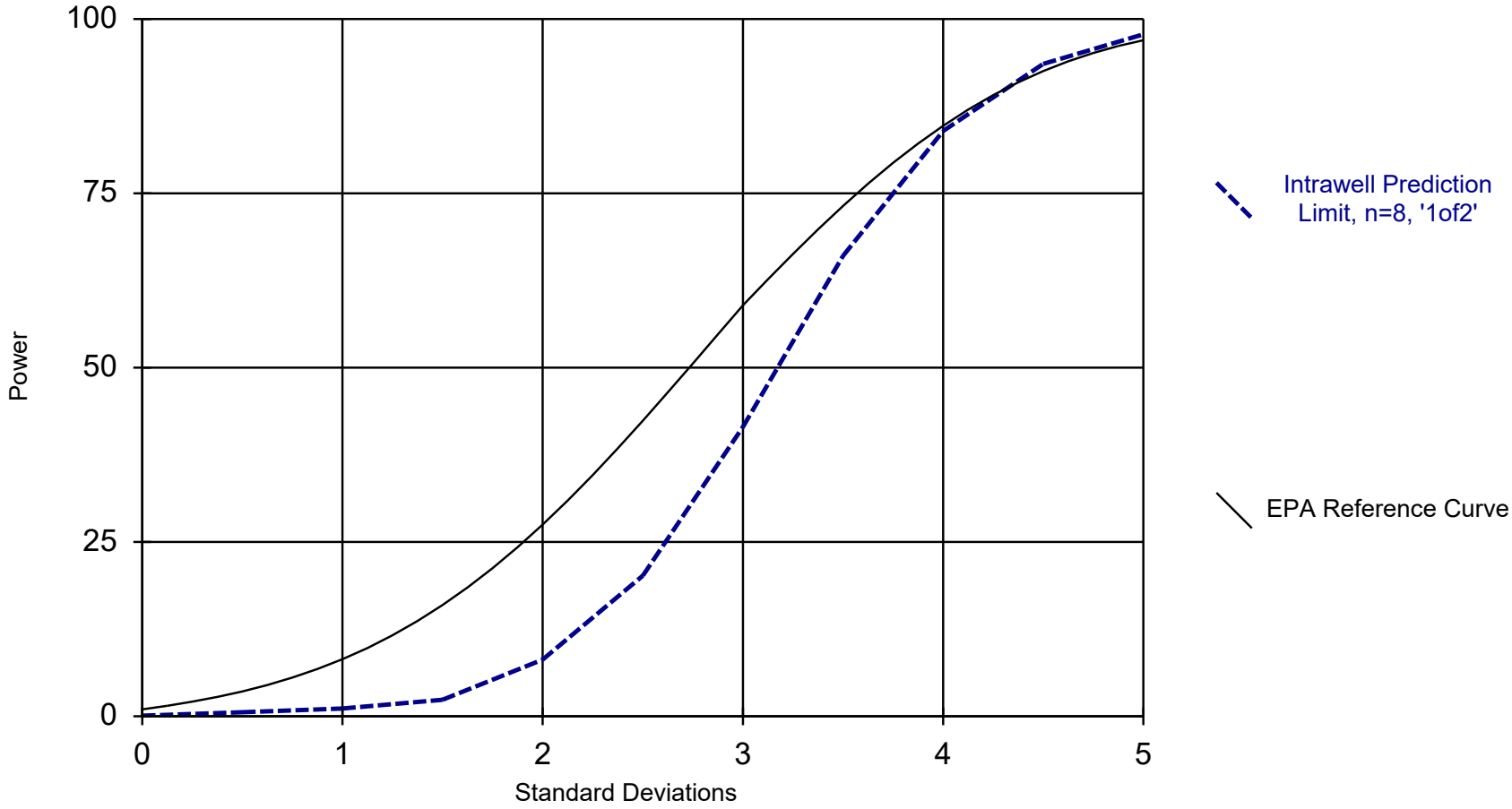
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Sulfate Analysis Run 1/31/2019 9:28 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Appendix B

Power Curve and Intrawell Prediction Limits with 1-of-2 Resampling

Power Curve



Kappa = 3.074, based on 9 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 1/28/2019 2:00 PM

Plant McIntosh Client: Southern Company Data: McIntosh No 4_CCR

Intrawell Prediction Limit

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28 Printed 1/28/2019, 3:24 PM

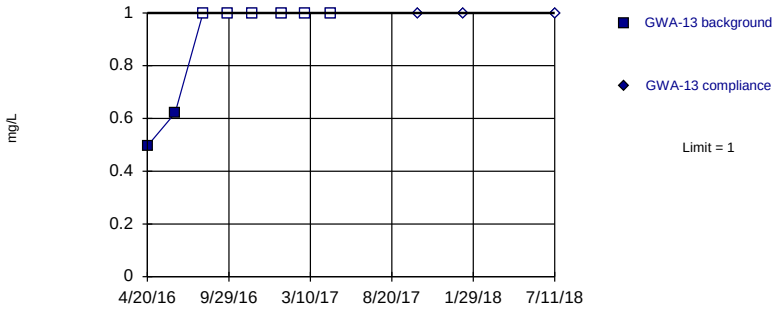
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	GWA-13	1	n/a	7/11/2018	1ND	No	8	n/a	n/a	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWA-14	8.057	n/a	7/11/2018	1ND	No	8	2.496	1.809	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWA-2	5.741	n/a	7/11/2018	1ND	No	8	0.6652	0.5631	37.5	sqrt(x)	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWA-3	2.294	n/a	7/11/2018	1ND	No	8	0.6388	0.5387	37.5	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-1	2.977	n/a	7/12/2018	1.1	No	8	1.434	0.502	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-10	5.376	n/a	7/12/2018	5	No	8	3.129	0.7312	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-11	6.128	n/a	7/12/2018	5.9	No	8	2.133	0.1116	0	sqrt(x)	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-12	1	n/a	7/12/2018	1ND	No	8	n/a	n/a	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWC-17	3.518	n/a	7/11/2018	1ND	No	8	1.538	0.6444	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-18	9	n/a	7/11/2018	5.2	No	8	n/a	n/a	0	n/a	0.02144	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-19	3.309	n/a	7/11/2018	1.4	No	8	2.214	0.3563	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-20	6.74	n/a	7/11/2018	0.9	No	8	2.656	1.329	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-21	2.351	n/a	7/11/2018	1ND	No	8	1.268	0.3526	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-23	9.2	n/a	7/12/2018	2	No	8	n/a	n/a	0	n/a	0.02144	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-9	11.28	n/a	7/12/2018	1ND	No	8	1.056	0.7492	25	sqrt(x)	0.0008358	Param 1 of 2
Sulfate (mg/L)	**GWC-4A[*GWB-4A]**	**11.32**	**n/a**	**7/11/2018**	**14**	**Yes**	**8**	**5.789**	**1.798**	**0**	**No**	**0.0008358**	Param 1 of 2
Sulfate (mg/L)	GWC-5[*GWB-5]	1	n/a	7/11/2018	1ND	No	8	n/a	n/a	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWC-15[*GWB-15]	1	n/a	7/11/2018	1ND	No	8	n/a	n/a	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWA-16[*GWB-16]	1	n/a	7/11/2018	1ND	No	8	n/a	n/a	75	n/a	0.02144	NP (NDs) 1 of 2

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

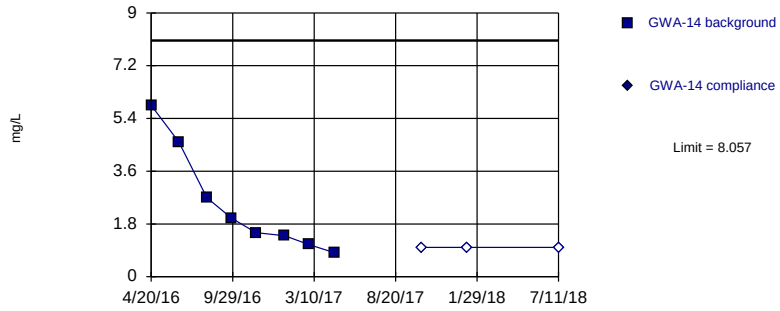
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.496, Std. Dev.=1.809, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8473, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

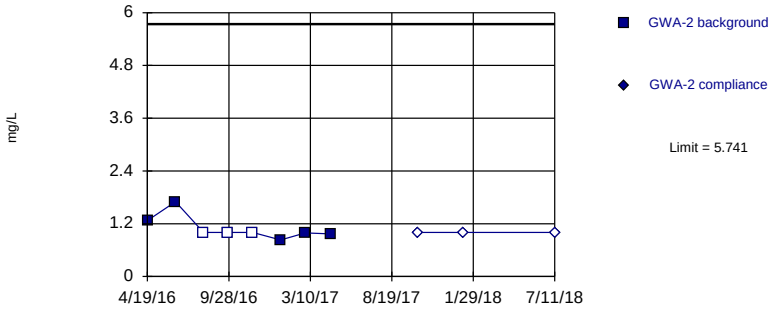
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison`s Adjustment): Mean=0.6652, Std. Dev.=0.5631, n=8, 37.5% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7755, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

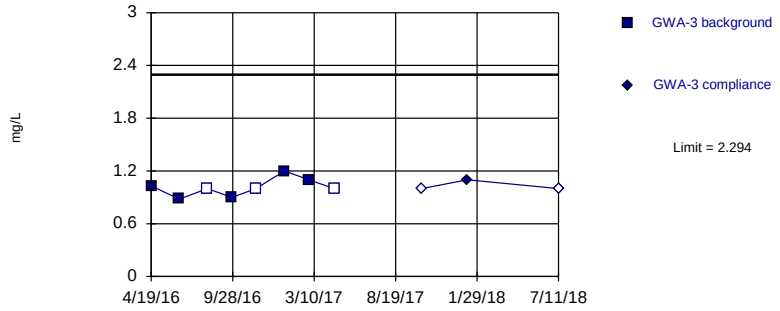
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Aitchison`s Adjustment): Mean=0.6388, Std. Dev.=0.5387, n=8, 37.5% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9315, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

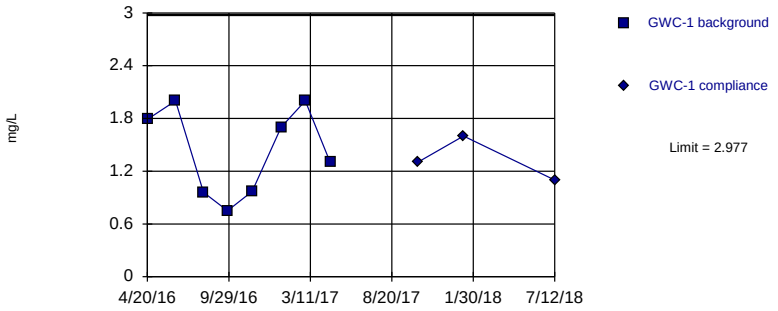
Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.434, Std. Dev.=0.502, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8871, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

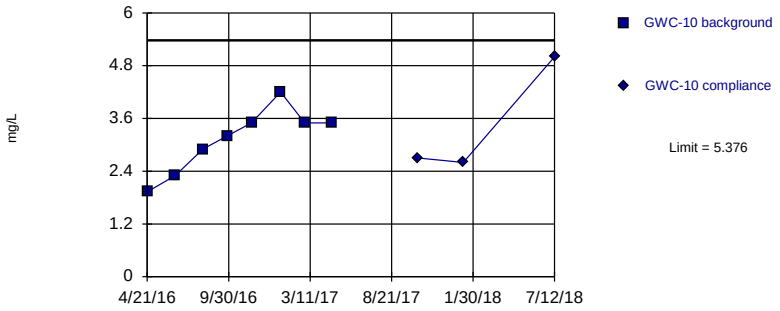
Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3.129, Std. Dev.=0.7312, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9393, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

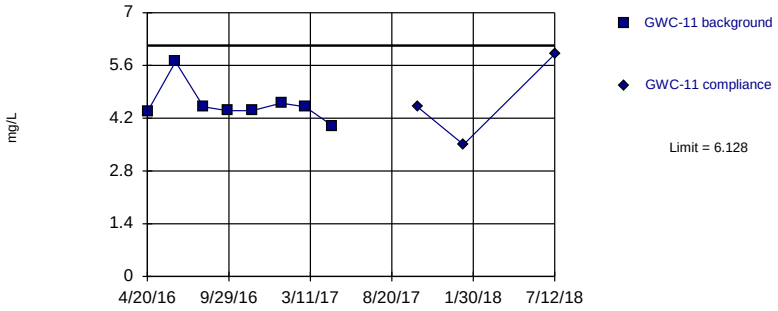
Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=2.133, Std. Dev.=0.1116, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7586, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

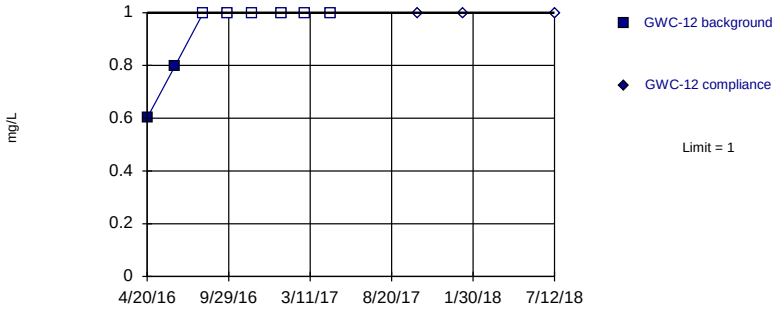
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

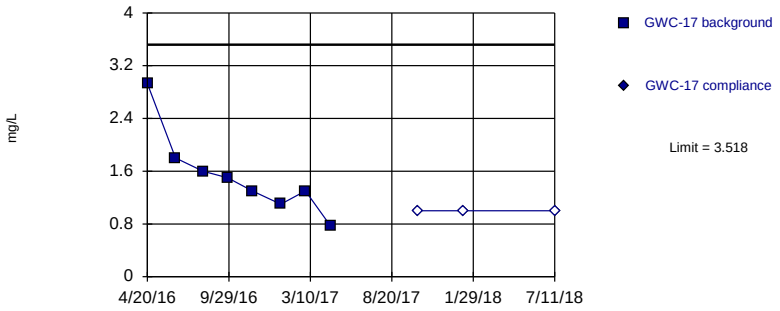
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.538, Std. Dev.=0.6444, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8722, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

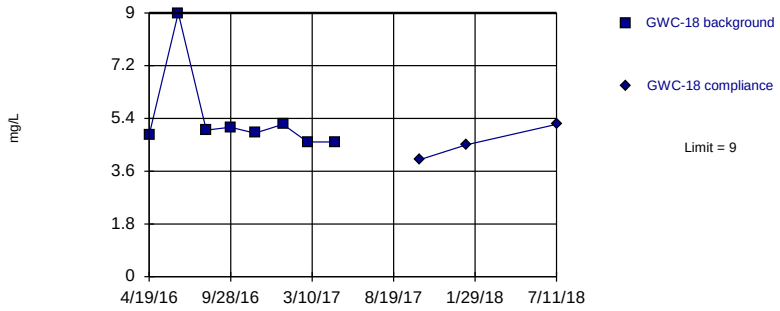
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

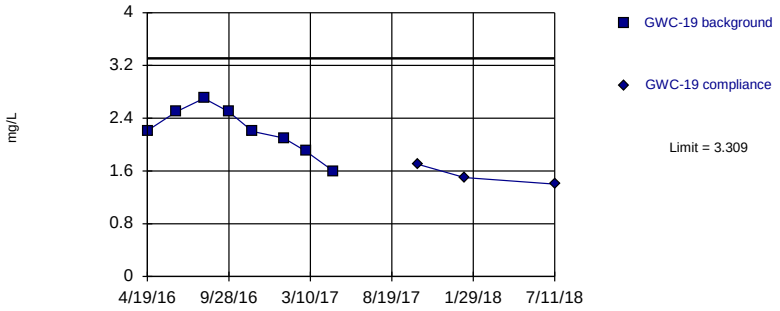
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.214, Std. Dev.=0.3563, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9647, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

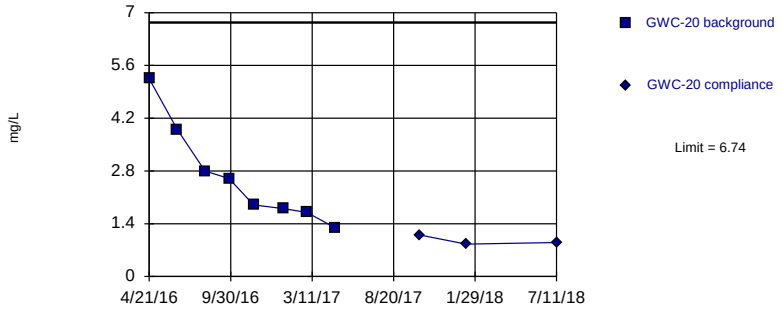
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.656, Std. Dev.=1.329, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8814, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

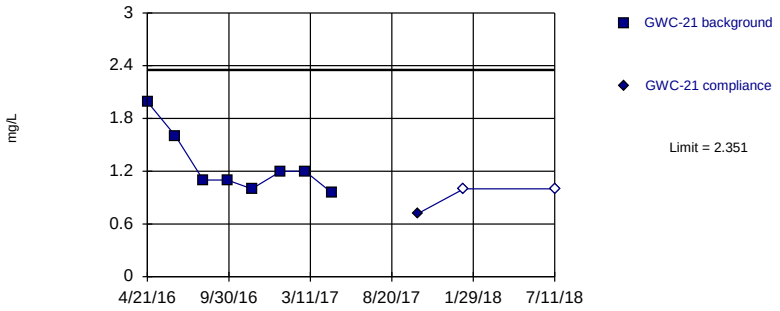
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.268, Std. Dev.=0.3526, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8153, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

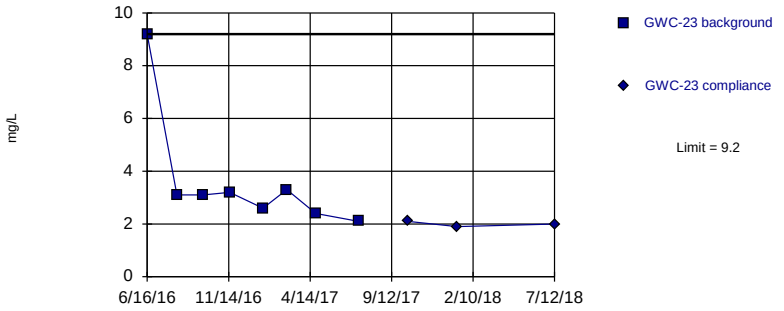
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

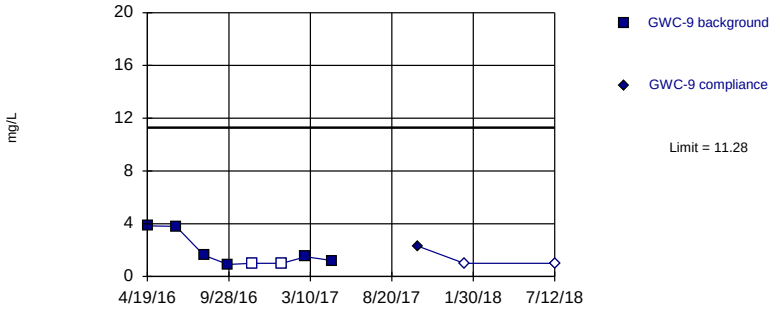
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Aitchison`s Adjustment): Mean=1.056, Std. Dev.=0.7492, n=8, 25% NDs. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7687, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

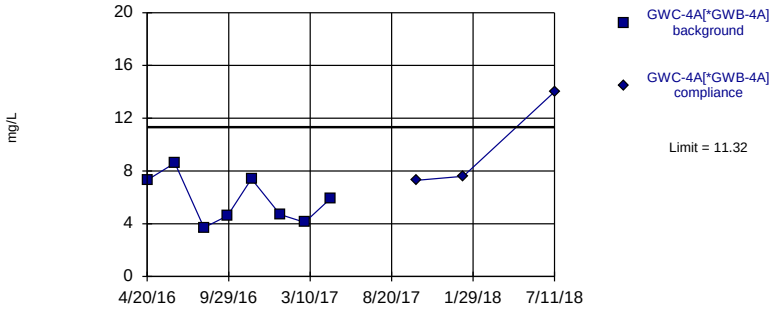
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.789, Std. Dev.=1.798, n=8. Insufficient data to test for seasonality: data were not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9142, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

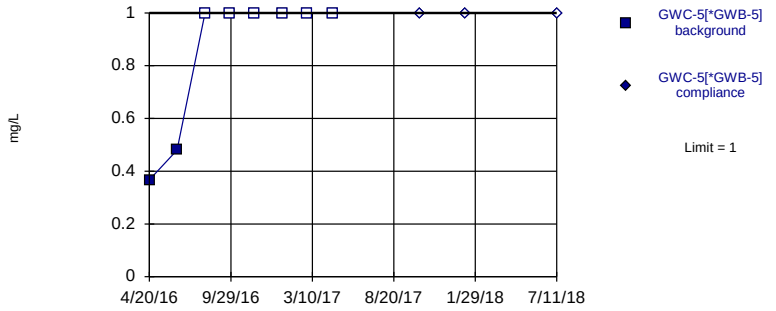
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

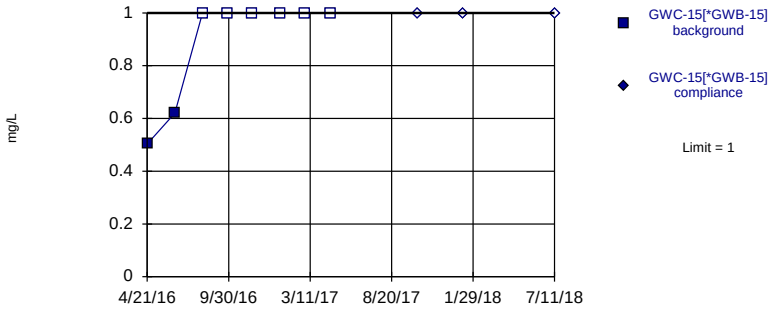
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

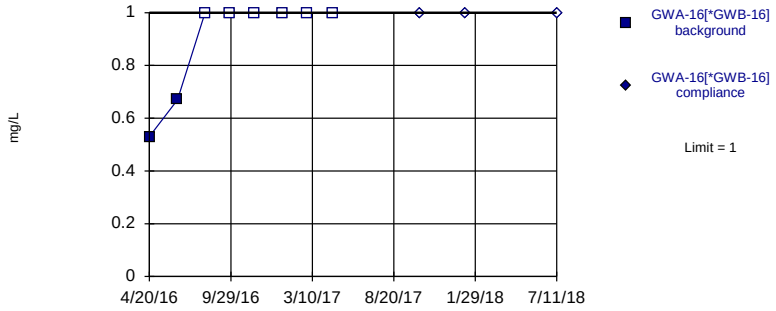
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Sanitas™ v.9.6.12 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2). Insufficient data to test for seasonality: data were not deseasonalized.

Constituent: Sulfate Analysis Run 1/28/2019 3:23 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28

Appendix B

Field Sampling, Laboratory Analytical Data, and Data Validation Reports

Water Level Measurement Data Sheet
Plant McIntosh
Georgia Power Company
Date: 1/28/2019
Gauged by: P. Adams, J. Noles, L. Coker

GEI Consultants

					Provided for reference			
Area	**Well ID**	**Installed Total Depth (ft btoc)**	**Measured Depth to Water (ft btoc)**	**Measured Depth to Bottom (ft btoc)**	**July 2018 Depth to Water (ft btoc)**	**July 2018 Depth to Bottom (ft btoc)**	**Installed Depth to Top of Screen (ft btoc)**	**Notes**
Landfill No. 4	GWC-1	28.50	13.64	27.39	15.38	27.69	18.00	
	GWA-2	28.50	15.55	28.00	17.17	27.99	18.00	
	GWA-3	38.50	20.71	37.59	21.44	37.51	28.00	
	GWC-4A (GWB-4A)	39.00	24.90	39.07	25.71	39.00	28.60	
	GWC-5 (GWB-5)	41.50	23.82	40.94	24.51	40.89	31.00	
	GWC-9	38.50	28.95	37.56	29.12	37.61	28.00	
	GWC-10	33.50	24.59	32.38	24.87	32.39	23.00	
	GWC-11	43.50	33.07	42.30	33.44	42.30	33.00	
	GWC-12	41.50	26.38	41.39	27.15	41.35	31.00	
	GWA-13	40.11	25.00	40.15	25.11	40.11	29.81	
	GWA-14	49.90	26.02	50.20	25.79	50.15	39.60	
	GWC-15 (GWB-15)	40.30	22.10	40.10	21.91	40.06	30.00	
	GWA-16 (GWB-16)	40.27	23.70	40.05	24.15	40.02	29.97	
	GWC-17	40.05	26.81	40.07	27.20	40.10	29.75	
	GWC-18	42.20	35.59	42.58	35.65	42.51	31.90	
	GWC-19	36.95	29.61	37.84	29.66	37.50	26.65	
	GWC-20	30.13	22.86	30.12	23.06	30.09	19.83	
	GWC-21	27.16	21.00	27.53	21.03	27.50	16.86	
	GWC-22 (PZ-22)	31.65	27.85	32.71	27.85	31.60	21.35	
	GWC-23	33.70	28.91	33.76	28.89	33.76	23.40	

Notes: ft = feet NM = Not Measured btoc = below top of casing

Product Name: Low-Flow System

Date: 2019-01-30 11:35:46

Project Information:		Pump Information:	
Operator Name	J. Noles	Pump Model/Type	Alexis
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	27 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	601533		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-1	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2105124 L
Well Total Depth	27.69 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.56 in
Depth to Water	14.01 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 10
Last 5	11:13:35	600.02	15.32	5.20	65.81	1.96	14.14	2.47	94.68
Last 5	11:18:35	900.02	15.64	5.21	65.58	0.00	14.14	2.42	90.89
Last 5	11:23:35	1200.02	16.22	5.21	65.26	1.71	14.14	2.40	89.84
Last 5	11:28:35	1500.02	16.40	5.20	64.87	2.16	14.14	2.43	88.95
Last 5	11:33:35	1800.02	16.47	5.21	64.24	1.12	14.14	2.42	87.80
Variance 0			0.58	-0.00	-0.31			-0.03	-1.06
Variance 1			0.18	-0.00	-0.39			0.03	-0.88
Variance 2			0.07	0.00	-0.63			-0.01	-1.15

Notes

Sampled at 1137 on 1-30-19.

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 13:37:14

Project Information:		Pump Information:	
Operator Name	J. Noles	Pump Model/Type	Alexis
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	27 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	601533		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWA-2	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2105124 L
Well Total Depth	27.99 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.48 in
Depth to Water	15.53 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 10
Last 5	13:15:23	600.02	18.17	4.97	42.90	2.15	15.56	3.78	140.54
Last 5	13:20:24	900.41	18.30	4.96	42.98	1.83	15.60	3.75	139.11
Last 5	13:25:24	1200.41	18.30	4.95	43.00	1.66	15.60	3.72	138.05
Last 5	13:30:24	1500.41	18.33	4.93	42.51	1.60	15.60	3.69	137.94
Last 5	13:35:24	1800.41	18.16	4.91	42.22	1.84	15.60	3.67	136.98
Variance 0			0.01	-0.01	0.03			-0.04	-1.05
Variance 1			0.02	-0.02	-0.49			-0.03	-0.11
Variance 2			-0.16	-0.02	-0.29			-0.02	-0.96

Notes

Sampled at 1342 on 1-29-19.

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 13:30:24

Project Information:		Pump Information:	
Operator Name	J Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	Plant McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369555		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWA-3	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	38.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	56.52 in
Depth to Water	20.70 ft	Total Volume Pumped	7.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 5%	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10%
Last 5	13:08:13	1500.92	19.53	5.18	34.86	0.66	24.87	6.19	198.23
Last 5	13:13:13	1800.92	18.85	5.01	28.30	0.57	24.90	7.03	197.12
Last 5	13:18:13	2100.92	19.04	5.04	34.85	0.54	25.02	6.44	194.38
Last 5	13:23:13	2400.92	19.26	4.99	34.60	0.39	25.25	6.26	194.62
Last 5	13:28:13	2700.92	19.17	4.98	34.62	0.47	25.41	6.19	190.46
Variance 0			0.19	0.03	6.54			-0.59	-2.74
Variance 1			0.22	-0.05	-0.25			-0.18	0.24
Variance 2			-0.09	-0.01	0.02			-0.07	-4.16

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 14:28:10

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	Lamotte2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-4A	Final Pumping Rate	180 mL/min
Well diameter	2 in	Total System Volume	0.09 L
Well Total Depth	39.07 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	24.90 ft	Total Volume Pumped	13.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:05:29	4200.02	18.60	4.67	50.09	1.05	25.27	4.30	414.65
Last 5	14:10:29	4500.02	18.60	4.67	49.09	1.10	25.25	1.97	402.85
Last 5	14:15:29	4800.02	18.78	4.67	47.68	1.01	25.25	4.36	390.92
Last 5	14:20:29	5100.02	18.69	4.68	47.10	0.97	25.26	4.47	380.74
Last 5	14:25:29	5400.02	18.55	4.66	47.14	1.20	25.27	2.81	371.06
Variance 0			0.18	0.00	-1.42			2.40	-11.94
Variance 1			-0.09	0.01	-0.58			0.10	-10.18
Variance 2			-0.14	-0.02	0.04			-1.66	-9.67

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 13:26:28

Project Information:		Pump Information:	
Operator Name	P Adams	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-5	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	23.7 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:04:44	600.86	18.08	5.73	42.77	1.33	24.01	6.01	134.27
Last 5	13:09:44	900.86	17.90	5.52	39.64	1.57	24.03	6.11	131.89
Last 5	13:14:44	1200.86	17.51	5.45	40.02	1.40	24.04	6.13	125.51
Last 5	13:19:44	1500.86	17.83	5.39	40.32	1.26	24.04	6.11	123.43
Last 5	13:24:44	1800.86	17.50	5.39	40.47	1.17	24.04	5.99	117.48
Variance 0			-0.38	-0.07	0.39			0.02	-6.38
Variance 1			0.31	-0.06	0.30			-0.02	-2.08
Variance 2			-0.32	-0.00	0.15			-0.12	-5.95

Notes

Sampled at 1330

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-30 10:08:48

Project Information:		Pump Information:	
Operator Name	J. Noles	Pump Model/Type	Alexis
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	37 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	601533		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-9	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2551467 L
Well Total Depth	37.61 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.24 in
Depth to Water	29.14 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 10
Last 5	09:46:51	600.03	14.40	4.91	45.97	1.10	29.16	6.76	132.65
Last 5	09:51:51	900.02	14.99	4.90	46.00	2.52	29.16	6.82	132.90
Last 5	09:56:51	1200.02	14.99	4.89	45.76	1.45	29.16	6.94	129.53
Last 5	10:01:51	1500.02	15.12	4.88	45.69	1.11	29.16	6.77	127.28
Last 5	10:06:51	1800.02	14.95	4.88	45.43	0.83	29.16	6.93	125.36
Variance 0			0.00	-0.01	-0.25			0.11	-3.36
Variance 1			0.13	-0.01	-0.06			-0.17	-2.25
Variance 2			-0.17	0.00	-0.26			0.16	-1.92

Notes

Sampled at 1010 on 1-30-19.

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-30 10:41:38

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	Lamotte2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-10	Final Pumping Rate	130 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	32.38 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	24.59 ft	Total Volume Pumped	3.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:19:27	600.02	13.50	5.93	261.71	0.60	24.87	4.67	354.60
Last 5	10:24:27	900.02	14.13	6.06	253.67	0.87	24.87	4.68	199.84
Last 5	10:29:27	1200.02	14.33	6.13	252.75	0.92	24.87	4.51	165.94
Last 5	10:34:27	1500.02	14.79	6.17	253.67	0.99	24.87	4.47	154.69
Last 5	10:39:27	1800.02	14.57	6.20	256.62	0.77	24.86	4.31	147.65
Variance 0			0.20	0.07	-0.92			-0.17	-33.89
Variance 1			0.46	0.04	0.92			-0.04	-11.25
Variance 2			-0.22	0.02	2.95			-0.16	-7.05

Notes

Sampled at 1045. DUP-LF4-02 taken here

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-30 11:41:08

Project Information:		Pump Information:	
Operator Name	P Adams	Pump Model/Type	qed bladder
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-11	Final Pumping Rate	250 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	42 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	33.2 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:16:02	900.02	16.16	6.19	133.38	2.28	33.45	2.73	12.16
Last 5	11:21:01	1200.02	16.31	6.17	134.77	1.97	33.45	2.43	8.42
Last 5	11:26:02	1500.02	16.29	6.16	131.95	1.66	33.45	2.36	4.49
Last 5	11:31:02	1800.02	16.31	6.14	125.39	1.98	33.45	2.54	8.23
Last 5	11:36:01	2100.02	15.88	6.09	116.66	1.47	33.45	2.82	16.35
Variance 0			-0.02	-0.01	-2.83			-0.08	-3.93
Variance 1			0.02	-0.02	-6.56			0.18	3.74
Variance 2			-0.42	-0.05	-8.73			0.28	8.12

Notes

Sampled at 1146

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-30 11:29:57

Project Information:		Pump Information:	
Operator Name	J Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	Plant McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369555		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-12	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	41.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.4 in
Depth to Water	26.55 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 5%	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10%
Last 5	11:07:13	600.03	15.20	5.15	29.37	1.02	26.75	6.34	113.27
Last 5	11:12:13	900.02	15.72	5.08	28.49	0.88	26.76	6.23	102.06
Last 5	11:17:13	1200.02	15.71	5.04	28.75	0.72	26.75	6.12	92.47
Last 5	11:22:13	1500.02	15.51	5.03	28.64	0.79	26.75	6.09	85.24
Last 5	11:27:13	1800.03	15.77	5.01	29.08	0.82	26.75	6.10	83.66
Variance 0			-0.01	-0.04	0.26			-0.11	-9.59
Variance 1			-0.19	-0.02	-0.12			-0.03	-7.22
Variance 2			0.26	-0.02	0.44			0.00	-1.59

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 14:46:30

Project Information:		Pump Information:	
Operator Name	P Adams	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWA-13	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	40.11 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	30 in
Depth to Water	29 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:22:14	1801.43	15.12	4.93	21.20	7.18	27.70	4.35	113.68
Last 5	14:27:14	2101.43	15.28	4.87	21.18	12.90	27.75	6.01	120.72
Last 5	14:32:14	2401.43	15.48	4.85	22.58	8.22	27.78	6.52	122.87
Last 5	14:37:14	2701.43	15.52	4.80	21.74	5.89	27.80	6.39	124.23
Last 5	14:42:14	3001.43	15.76	4.82	21.67	4.93	27.81	6.49	122.84
Variance 0			0.20	-0.02	1.40			0.51	2.16
Variance 1			0.04	-0.05	-0.84			-0.12	1.36
Variance 2			0.24	0.01	-0.07			0.10	-1.39

Notes

Sampled at 1450

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 14:56:29

Project Information:		Pump Information:	
Operator Name	J Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	Plant McIntosh	Tubing Length	50 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369555		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWA-14	Final Pumping Rate	0 mL/min
Well diameter	2 in	Total System Volume	0.3131711 L
Well Total Depth	49.90 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8.28 in
Depth to Water	26.00 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 5%	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10%
Last 5	14:34:25	600.03	17.57	5.37	28.79	1.97	26.65	7.01	152.75
Last 5	14:39:25	900.03	17.63	5.31	28.50	1.23	26.69	6.96	149.94
Last 5	14:44:25	1200.03	17.69	5.28	28.38	0.93	26.69	6.99	150.19
Last 5	14:49:25	1500.03	17.88	5.27	28.28	0.68	26.69	6.94	141.77
Last 5	14:54:25	1800.02	17.84	5.25	28.14	0.72	26.69	6.92	139.25
Variance 0			0.05	-0.03	-0.12			0.02	0.25
Variance 1			0.20	-0.01	-0.10			-0.05	-8.42
Variance 2			-0.05	-0.02	-0.14			-0.03	-2.52

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 14:56:07

Project Information:		Pump Information:	
Operator Name	J. Noles	Pump Model/Type	Alexis
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	601533		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-15	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	40.06 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.8 in
Depth to Water	22.06 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 10
Last 5	14:33:11	600.06	17.09	5.28	29.85	2.37	22.21	7.56	126.90
Last 5	14:38:11	900.02	17.18	5.25	29.61	2.55	22.21	7.37	125.70
Last 5	14:43:12	1200.86	17.18	5.19	28.34	1.14	22.21	7.38	128.15
Last 5	14:48:12	1500.86	17.32	5.18	28.33	1.33	22.21	7.35	127.97
Last 5	14:53:12	1800.86	17.32	5.18	28.29	1.28	22.21	7.32	127.91
Variance 0			-0.00	-0.06	-1.26			0.02	2.45
Variance 1			0.14	-0.01	-0.01			-0.04	-0.17
Variance 2			-0.00	0.00	-0.04			-0.03	-0.06

Notes

Sampled at 1500 on 1-29-19

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 16:01:30

Project Information:		Pump Information:	
Operator Name	P Adams	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWA-16	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	40 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7 in
Depth to Water	23.7 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:39:48	600.02	16.31	4.85	23.92	5.07	25.01	7.56	133.24
Last 5	15:44:48	900.02	16.53	4.83	23.73	4.34	25.17	7.55	128.80
Last 5	15:49:48	1200.02	16.68	4.85	23.74	3.56	25.28	7.56	125.20
Last 5	15:54:48	1500.02	16.65	4.84	23.70	3.41	25.35	7.59	123.80
Last 5	15:59:48	1800.10	16.58	4.83	23.57	3.19	25.41	7.52	122.83
Variance 0			0.15	0.02	0.00			0.01	-3.59
Variance 1			-0.03	-0.01	-0.04			0.03	-1.40
Variance 2			-0.07	-0.01	-0.13			-0.07	-0.98

Notes

Sampled at 1610

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 16:27:14

Project Information:		Pump Information:	
Operator Name	J Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	Plant McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369555		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-17	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	40.05 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.28 in
Depth to Water	26.64 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 5%	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10%
Last 5	16:02:22	1199.95	16.97	5.27	36.64	0.97	26.83	6.63	110.10
Last 5	16:07:22	1499.95	17.10	5.24	36.17	0.67	26.83	7.06	106.22
Last 5	16:12:22	1799.95	17.14	5.24	35.84	0.72	26.83	6.77	103.77
Last 5	16:17:22	2099.95	16.27	5.36	0.00	0.80	26.83	9.98	48.83
Last 5	16:22:22	2399.95	15.74	5.35	37.88	1.23	26.83	7.10	110.48
Variance 0			0.03	0.00	-0.33			-0.29	-2.45
Variance 1			-0.86	0.12	-35.84			3.21	-54.93
Variance 2			-0.53	-0.00	37.88			-2.88	61.64

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-30 10:21:37

Project Information:		Pump Information:	
Operator Name	P Adams	Pump Model/Type	qed bladder
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-18	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	42 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	35.7 ft	Total Volume Pumped	5.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:59:33	2100.02	15.75	5.87	101.99	15.80	36.20	3.81	65.15
Last 5	10:04:33	2400.02	16.00	5.86	103.19	9.21	36.20	3.73	62.47
Last 5	10:09:33	2699.95	16.09	5.87	106.10	6.89	36.20	3.51	59.80
Last 5	10:14:37	3003.95	16.11	5.90	108.20	5.22	36.20	3.62	57.96
Last 5	10:19:37	3303.95	16.03	5.93	113.03	4.91	36.20	3.73	56.24
Variance 0			0.10	0.01	2.91			-0.23	-2.67
Variance 1			0.02	0.03	2.10			0.12	-1.84
Variance 2			-0.08	0.03	4.83			0.11	-1.72

Notes

Sampled at 1030

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-29 16:54:51

Project Information:		Pump Information:	
Operator Name	J. Noles	Pump Model/Type	Alexis
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	601533		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-19	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	37.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.32 in
Depth to Water	29.63 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10%	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 10
Last 5	16:31:47	600.36	17.50	5.49	85.07	2.12	29.74	4.27	99.26
Last 5	16:36:47	900.36	17.63	5.52	87.51	1.31	29.74	4.21	100.38
Last 5	16:41:47	1200.36	17.63	5.56	90.24	1.44	29.74	4.12	99.34
Last 5	16:46:47	1500.36	17.67	5.57	90.68	1.65	29.74	4.03	101.20
Last 5	16:51:47	1800.36	17.69	5.58	91.32	1.09	29.74	4.05	100.63
Variance 0			-0.00	0.04	2.73			-0.10	-1.03
Variance 1			0.04	0.00	0.44			-0.08	1.85
Variance 2			0.01	0.01	0.65			0.01	-0.56

Notes

Sampled at 1700 on 1-29-19.

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-30 07:30:46

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	25 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	Lamotte2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-20	Final Pumping Rate	0 mL/min
Well diameter	2 in	Total System Volume	0.2015856 L
Well Total Depth	30.12 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	22.86 ft	Total Volume Pumped	0 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:59:11	600.02	17.98	4.98	47.80	1.60	22.95	5.54	292.19
Last 5	16:04:11	900.02	18.26	4.96	47.03	1.47	22.94	5.74	282.33
Last 5	16:09:10	1200.02	18.33	4.95	46.89	2.09	22.95	5.51	290.14
Last 5	16:14:10	1500.02	18.54	4.94	47.09	1.88	22.97	5.88	358.49
Last 5	16:19:10	1800.02	18.52	4.94	46.52	2.10	22.95	5.80	404.56
Variance 0			0.07	-0.02	-0.14			-0.23	7.82
Variance 1			0.21	-0.01	0.20			0.38	68.35
Variance 2			-0.03	0.00	-0.57			-0.09	46.07

Notes

Sampled at 16:20

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-30 09:27:21

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	24 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	Lamotte2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-21	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.1971222 L
Well Total Depth	27.53 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	21 ft	Total Volume Pumped	4.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:04:53	1200.02	15.87	4.72	39.30	0.75	21.44	5.14	270.35
Last 5	09:09:53	1500.02	16.01	4.68	39.43	0.43	21.45	6.36	276.31
Last 5	09:14:53	1800.02	16.47	4.68	39.64	0.10	21.47	4.89	279.85
Last 5	09:19:53	2100.02	16.14	4.64	39.74	0.22	21.47	5.13	280.46
Last 5	09:24:53	2400.02	16.48	4.65	39.54	0.93	21.47	5.09	284.75
Variance 0			0.46	-0.00	0.21			-1.48	3.54
Variance 1			-0.33	-0.03	0.10			0.25	0.61
Variance 2			0.34	0.01	-0.20			-0.05	4.30

Notes

Sampled at 0930

Grab Samples

Product Name: Low-Flow System

Date: 2019-01-30 09:37:43

Project Information:		Pump Information:	
Operator Name	J Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	Plant McIntosh	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369555		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-23	Final Pumping Rate	125 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	33.70 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	19.92 in
Depth to Water	29.50 ft	Total Volume Pumped	5.375 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 5%	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 10%
Last 5	09:15:11	1200.03	14.11	5.18	50.78	1.06	29.85	5.82	93.19
Last 5	09:20:11	1500.03	14.27	5.16	46.85	0.69	29.95	5.68	91.95
Last 5	09:25:11	1800.02	14.43	5.15	45.13	0.55	30.05	5.44	86.46
Last 5	09:30:11	2100.03	14.89	5.15	43.89	0.45	30.10	5.57	85.50
Last 5	09:35:11	2400.03	15.31	5.14	43.43	0.51	30.16	5.88	84.88
Variance 0			0.16	-0.00	-1.73			-0.24	-5.49
Variance 1			0.47	-0.00	-1.24			0.13	-0.96
Variance 2			0.42	-0.01	-0.46			0.32	-0.62

Notes

Grab Samples

Water Level Measurement Data Sheet
Plant McIntosh
Georgia Power Company
Date: 25-Mar-19
Gauged by: J. Adcock, L. Coker, J. Noles

					Provided for reference			
Area	**Well ID**	**Installed Total Depth (ft btoc)**	**Measured Depth to Water (ft btoc)**	**Measured Depth to Bottom (ft btoc)**	**January 2019 Depth to Water (ft btoc)**	**January 2019 Depth to Bottom (ft btoc)**	**Installed Depth to Top of Screen (ft btoc)**	**Notes**
Landfill No. 4	GWC-1	28.50	15.03	27.62	13.64	27.39	18.00	
	GWA-2	28.50	16.83	27.98	15.55	28.00	18.00	
	GWA-3	38.50	21.01	37.50	20.71	37.59	28.00	
	GWC-4A (GWB-4A)	39.00	25.51	39.02	24.90	39.07	28.60	
	GWC-5 (GWB-5)	41.50	24.30	40.87	23.82	40.94	31.00	
	GWC-9	38.50	28.78	37.50	28.95	37.56	28.00	
	GWC-10	33.50	24.51	32.34	24.59	32.38	23.00	
	GWC-11	43.50	33.06	42.23	33.07	42.30	33.00	
	GWC-12	41.50	26.86	42.32	26.38	41.39	31.00	
	GWA-13	40.11	25.05	40.13	25.00	40.15	29.81	
	GWA-14	49.90	25.59	50.09	26.02	50.20	39.60	
	GWC-15 (GWB-15)	40.30	22.00	40.04	22.10	40.10	30.00	
	GWA-16 (GWB-16)	40.27	24.00	40.01	23.70	40.05	29.97	
	GWC-17	40.05	26.85	40.10	26.81	40.07	29.75	
	GWC-18	42.20	35.49	42.51	35.59	42.58	31.90	
	GWC-19	36.95	29.52	37.77	29.61	37.84	26.65	
	GWC-20	30.13	22.75	30.11	22.86	30.12	19.83	
	GWC-21	27.16	20.82	27.52	21.00	27.53	16.86	
	GWC-22 (PZ-22)	31.65	27.64	31.61	27.85	32.71	21.35	
	GWC-23	33.70	28.70	33.71	28.91	33.76	23.40	

Notes: ft = feet NM = Not Measured btoc = below top of casing

Product Name: Low-Flow System

Date: 2019-03-27 14:42:05

Project Information:		Pump Information:	
Operator Name	J. Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	25 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	598939		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-1	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2015856 L
Well Total Depth	28.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.16 in
Depth to Water	15.16 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:20:22	600.02	19.77	5.18	58.99	1.92	15.32	2.13	173.43
Last 5	14:25:22	900.02	19.64	5.18	59.04	1.53	15.33	2.10	165.88
Last 5	14:30:22	1200.02	19.64	5.17	59.03	1.23	15.33	2.10	158.93
Last 5	14:35:22	1500.02	19.53	5.17	58.41	1.07	15.34	2.12	157.12
Last 5	14:40:22	1800.02	19.50	5.15	58.14	0.96	15.34	2.15	149.68
Variance 0			-0.01	-0.01	-0.01			-0.00	-6.95
Variance 1			-0.11	-0.00	-0.63			0.02	-1.81
Variance 2			-0.02	-0.01	-0.27			0.04	-7.44

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-06 16:04:32

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristalitic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWA-2	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	27.98 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.6 in
Depth to Water	17.20 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	15:42:55	600.02	17.33	4.71	37.35	3.12	17.25	3.60	211.40
Last 5	15:47:55	900.02	17.35	4.70	37.90	2.81	17.25	3.62	210.19
Last 5	15:52:55	1200.02	16.76	4.70	37.62	2.57	17.25	3.55	201.89
Last 5	15:57:55	1500.02	17.02	4.69	37.53	2.17	17.25	3.52	200.37
Last 5	16:02:55	1800.02	17.47	4.69	37.54	1.84	17.25	3.47	198.67
Variance 0			-0.58	0.00	-0.28			-0.07	-8.30
Variance 1			0.26	-0.01	-0.08			-0.03	-1.53
Variance 2			0.45	-0.00	0.00			-0.05	-1.69

Notes

Sampled at 1115

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-06 14:48:38

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristalitic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	36 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWA-3	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2506832 L
Well Total Depth	37.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	39.6 in
Depth to Water	21.05 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	14:25:28	1200.02	15.65	5.08	31.23	0.76	23.35	6.16	212.41
Last 5	14:30:28	1500.02	15.91	4.95	31.21	0.50	23.65	6.11	211.82
Last 5	14:35:28	1800.02	16.14	4.88	31.25	0.81	23.90	6.05	207.13
Last 5	14:40:28	2100.02	16.36	4.82	31.01	1.04	24.15	6.06	207.37
Last 5	14:45:28	2400.02	16.73	4.80	31.06	1.25	24.35	6.00	206.63
Variance 0			0.24	-0.07	0.04			-0.06	-4.69
Variance 1			0.22	-0.06	-0.24			0.00	0.24
Variance 2			0.37	-0.02	0.04			-0.06	-0.73

Notes

Sampled at 0955

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-05 19:58:57

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristalitic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	38 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-4A	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2596101 L
Well Total Depth	39.02 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.72 in
Depth to Water	25.62 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	19:37:03	1500.02	22.02	4.93	53.89	1.54	25.76	1.31	241.71
Last 5	19:42:03	1800.02	21.81	4.86	51.82	1.28	25.76	1.30	237.10
Last 5	19:47:03	2100.02	22.03	4.79	51.49	1.05	25.76	1.31	228.36
Last 5	19:52:03	2400.02	21.45	4.74	50.54	1.17	25.76	1.31	223.89
Last 5	19:57:03	2700.02	20.85	4.72	50.16	1.19	25.76	1.29	212.83
Variance 0			0.22	-0.07	-0.33			0.00	-8.74
Variance 1			-0.58	-0.04	-0.96			0.01	-4.47
Variance 2			-0.60	-0.03	-0.37			-0.03	-11.06

Notes

Sampled at 1505

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-26 14:10:32

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	36 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	408206		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-5	Final Pumping Rate	130 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	40.87 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.84 in
Depth to Water	24.30 ft	Total Volume Pumped	5.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	14:30:55	1200.02	20.83	5.58	36.20	0.52	24.60	5.45	188.50
Last 5	14:35:55	1500.02	21.25	5.54	37.80	0.59	24.61	5.38	186.10
Last 5	14:40:55	1800.02	21.45	5.48	35.30	0.60	24.61	5.34	188.10
Last 5	14:45:55	2100.02	21.54	5.47	34.50	1.62	24.61	5.35	186.80
Last 5	14:50:55	2400.02	21.50	5.45	35.00	0.45	24.62	5.37	184.10
Variance 0			-0.58	0.00	-0.28			-0.07	-8.30
Variance 1			0.26	-0.01	-0.08			-0.03	-1.53
Variance 2			0.45	-0.00	0.00			-0.05	-1.69

Notes

Sampled at 1500

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-06 17:56:27

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristalitic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-9	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	37.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	28.95 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	17:34:42	600.03	20.38	4.78	46.72	1.33	28.95	7.22	262.53
Last 5	17:39:42	900.02	20.64	4.78	46.66	1.43	28.95	7.49	254.30
Last 5	17:44:42	1200.03	20.29	4.78	46.61	0.98	28.95	7.24	239.79
Last 5	17:49:42	1500.02	20.35	4.78	46.42	1.01	28.95	7.60	228.91
Last 5	17:54:42	1800.02	20.65	4.75	46.27	1.22	28.95	7.65	223.03
Variance 0			-0.35	-0.01	-0.06			-0.24	-14.51
Variance 1			0.05	0.00	-0.18			0.35	-10.88
Variance 2			0.30	-0.02	-0.15			0.05	-5.88

Notes

Sampled at 1305

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-27 13:17:04

Project Information:		Pump Information:	
Operator Name	J. Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	31 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	598939		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-10	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2283661 L
Well Total Depth	33.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.84 in
Depth to Water	24.69 ft	Total Volume Pumped	5.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:50:11	600.03	20.97	6.62	223.69	0.79	24.76	3.21	114.82
Last 5	12:55:11	900.02	20.88	6.64	226.36	1.00	24.76	3.08	87.56
Last 5	13:00:11	1200.02	20.82	6.61	226.50	0.83	24.76	3.03	78.58
Last 5	13:10:11	1800.02	20.84	6.53	220.76	0.96	24.76	2.85	78.71
Last 5	13:15:11	2100.02	20.93	6.54	217.46	0.47	24.76	2.88	74.57
Variance 0			-0.06	-0.04	0.14			-0.06	-8.98
Variance 1			0.02	-0.08	-5.74			-0.18	0.13
Variance 2			0.09	0.01	-3.30			0.04	-4.15

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-26 14:05:16

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	QED Bladder
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	38 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-11	Final Pumping Rate	180 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	42.23 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.28 in
Depth to Water	33.06 ft	Total Volume Pumped	5.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	14:15:55	600.02	20.47	6.16	120.90	1.76	33.23	2.69	101.30
Last 5	14:20:55	900.02	21.40	6.21	123.00	1.39	33.25	2.49	96.40
Last 5	14:25:55	1200.02	21.33	6.24	124.20	1.18	33.25	2.37	95.20
Last 5	14:30:55	1500.02	21.34	6.26	123.80	1.03	33.25	2.24	96.20
Last 5	14:35:55	1800.02	21.41	6.32	122.30	1.07	33.25	2.21	90.10
Variance 0			-0.58	0.00	-0.28			-0.07	-8.30
Variance 1			0.26	-0.01	-0.08			-0.03	-1.53
Variance 2			0.45	-0.00	0.00			-0.05	-1.69

Notes

Sampled at 1440

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-06 19:13:16

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristalitic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-12	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	42.32 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	27.00 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	18:51:47	600.02	21.18	4.94	23.72	0.59	27.10	5.99	200.19
Last 5	18:56:47	900.02	21.22	4.94	24.07	0.63	27.10	6.05	196.54
Last 5	19:01:47	1200.02	21.32	4.93	24.14	0.55	27.10	6.16	194.11
Last 5	19:06:47	1500.02	21.23	4.93	24.17	0.55	27.10	5.84	192.76
Last 5	19:11:47	1800.02	21.27	4.93	24.31	0.87	27.10	5.96	191.43
Variance 0			0.11	-0.01	0.06			0.11	-2.43
Variance 1			-0.10	-0.00	0.04			-0.32	-1.34
Variance 2			0.05	0.00	0.14			0.13	-1.33

Notes

Sampled at 1430

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-26 14:47:10

Project Information:		Pump Information:	
Operator Name	J. Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	38 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	598939		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWA-13	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2596101 L
Well Total Depth	40.11 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.12 in
Depth to Water	25.12 ft	Total Volume Pumped	5.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:20:45	600.02	20.75	5.20	18.93	1.81	25.12	6.86	205.50
Last 5	14:25:45	900.02	20.52	5.14	18.87	5.31	25.12	6.90	200.81
Last 5	14:35:45	1500.01	20.95	5.11	18.71	8.25	25.13	6.93	195.51
Last 5	14:40:45	1800.01	21.20	5.10	18.76	5.28	25.13	6.97	198.74
Last 5	14:45:45	2100.01	21.37	5.07	19.05	2.25	25.13	7.13	231.58
Variance 0			0.42	-0.03	-0.15			0.04	-5.29
Variance 1			0.25	-0.02	0.04			0.03	3.22
Variance 2			0.18	-0.03	0.29			0.17	32.85

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-26 16:09:15

Project Information:		Pump Information:	
Operator Name	J. Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	47 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	598939		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWA-14	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2997809 L
Well Total Depth	49.90 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9 in
Depth to Water	25.94 ft	Total Volume Pumped	4.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:47:42	1800.02	19.42	5.50	25.64	2.13	26.64	7.40	160.24
Last 5	15:52:42	2100.02	19.42	5.43	24.99	1.66	26.68	7.44	163.04
Last 5	15:57:42	2400.01	19.41	5.35	24.29	1.57	26.68	7.63	164.34
Last 5	16:02:42	2700.02	19.32	5.33	23.86	1.05	26.68	7.59	166.48
Last 5	16:07:42	3000.02	19.28	5.29	23.68	0.86	26.69	7.03	167.88
Variance 0			-0.01	-0.08	-0.71			0.19	1.30
Variance 1			-0.09	-0.02	-0.42			-0.04	2.14
Variance 2			-0.05	-0.04	-0.18			-0.56	1.41

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-26 15:15:19

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	37 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	408206		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-15	Final Pumping Rate	113 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	40.04 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.28 in
Depth to Water	22.00 ft	Total Volume Pumped	3.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	15:25:55	600.02	19.14	5.12	24.50	2.45	22.30	6.84	215.70
Last 5	15:30:55	900.02	19.15	5.09	24.30	1.99	22.32	6.78	213.70
Last 5	15:35:55	1200.02	19.01	5.06	24.30	1.78	22.30	6.78	213.10
Last 5	15:40:55	1500.02	18.97	5.04	24.10	1.61	22.31	6.76	209.90
Last 5	15:45:55	1800.02	18.97	5.04	24.10	1.91	22.32	6.77	206.70
Variance 0			-0.58	0.00	-0.28			-0.07	-8.30
Variance 1			0.26	-0.01	-0.08			-0.03	-1.53
Variance 2			0.45	-0.00	0.00			-0.05	-1.69

Notes

Sampled at 1550

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-05 21:11:04

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristalitic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369370		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWA-16	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	40.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.68 in
Depth to Water	24.10 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	20:49:23	600.03	19.67	4.99	22.57	2.01	24.24	6.98	212.83
Last 5	20:54:23	900.02	19.54	4.99	22.46	1.89	24.24	6.93	209.11
Last 5	20:59:23	1200.02	19.55	4.98	22.45	2.27	24.24	6.95	205.32
Last 5	21:04:23	1500.02	19.57	4.97	22.34	2.21	24.24	6.89	199.98
Last 5	21:09:23	1800.02	19.50	4.95	22.48	1.61	24.24	6.86	198.46
Variance 0			0.01	-0.00	-0.01			0.02	-3.79
Variance 1			0.02	-0.01	-0.11			-0.05	-5.33
Variance 2			-0.07	-0.02	0.15			-0.03	-1.52

Notes

Sampled at 1620

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-27 09:40:46

Project Information:		Pump Information:	
Operator Name	J. Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	38 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	598939		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-17	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2596101 L
Well Total Depth	40.05 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	27.18 ft	Total Volume Pumped	0 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:18:57	1200.01	17.88	5.29	34.25	2.87	27.42	5.92	144.07
Last 5	09:23:57	1500.01	18.08	5.29	33.85	2.38	27.43	6.07	144.98
Last 5	09:28:57	1800.02	18.21	5.26	32.53	2.09	27.43	6.16	144.93
Last 5	09:33:57	2100.01	18.17	5.27	31.97	1.69	27.43	6.23	143.90
Last 5	09:38:57	2399.99	18.43	5.25	31.58	1.49	27.43	6.26	154.57
Variance 0			0.13	-0.03	-1.33			0.09	-0.04
Variance 1			-0.05	0.01	-0.56			0.07	-1.03
Variance 2			0.26	-0.02	-0.38			0.03	10.67

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-26 15:15:19

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	QED Bladder
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	37 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	408206		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-18	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	42.51 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9.12 in
Depth to Water	35.49 ft	Total Volume Pumped	4.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	09:35:06	600.01	18.98	6.42	91.00	4.20	36.10	3.82	114.60
Last 5	09:40:06	900.01	19.05	6.24	91.60	3.19	36.20	3.63	106.80
Last 5	09:45:06	1200.01	18.97	6.15	92.90	2.48	36.20	3.58	104.00
Last 5	09:50:06	1500.01	19.05	6.12	93.70	3.24	36.22	3.64	100.50
Last 5	09:55:06	1800.01	19.12	6.11	94.80	2.92	36.25	3.69	98.50
Variance 0			-0.31	0.00	-0.21			-0.07	-1.23
Variance 1			0.26	-0.01	-0.06			-0.03	-1.13
Variance 2			0.45	-0.00	0.00			-0.05	-2.11

Notes

Sampled at 1000

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-27 10:49:00

Project Information:		Pump Information:	
Operator Name	J. Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	35 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	598939		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-19	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	36.95 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.44 in
Depth to Water	29.59 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:20:49	300.04	18.15	5.82	111.02	19.80	29.68	3.89	81.63
Last 5	10:25:49	600.02	18.45	5.64	94.25	5.17	29.69	4.67	115.69
Last 5	10:35:49	1200.02	18.48	5.60	87.26	1.70	29.71	5.13	116.96
Last 5	10:40:49	1500.02	18.70	5.58	85.96	1.33	29.71	5.14	118.54
Last 5	10:45:49	1800.03	18.62	5.59	85.67	2.75	29.71	4.91	116.94
Variance 0			0.03	-0.04	-6.99			0.46	1.26
Variance 1			0.22	-0.02	-1.31			0.01	1.58
Variance 2			-0.08	0.02	-0.29			-0.23	-1.60

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-27 10:40:19

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	27 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	408206		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-20	Final Pumping Rate	140 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	30.11 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.8 in
Depth to Water	22.75 ft	Total Volume Pumped	4.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	10:50:06	600.03	17.40	5.10	48.90	2.36	22.90	5.09	190.90
Last 5	10:55:06	900.03	17.59	5.01	51.00	2.21	22.90	4.84	187.60
Last 5	11:00:06	1200.03	17.72	4.99	50.60	1.70	22.90	4.79	183.00
Last 5	11:05:06	1500.03	17.75	4.96	50.40	1.38	22.90	4.76	177.80
Last 5	11:10:06	1800.03	17.82	4.94	50.20	1.41	22.90	4.83	175.30
Variance 0			-0.31	0.00	-0.21			-0.07	-1.23
Variance 1			0.26	-0.01	-0.06			-0.03	-1.13
Variance 2			0.45	-0.00	0.00			-0.05	-2.11

Notes

Sampled at 1115, DUP-LF4-01 taken here

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-27 11:57:43

Project Information:		Pump Information:	
Operator Name	J. Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	26 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	598939		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-21	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.206049 L
Well Total Depth	27.16 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4.44 in
Depth to Water	20.89 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:30:40	300.03	20.22	5.03	38.27	1.23	21.10	5.39	187.45
Last 5	11:35:40	600.01	19.91	5.04	38.24	1.21	21.21	5.74	185.26
Last 5	11:45:40	1200.05	19.86	5.00	37.96	1.57	21.25	5.64	217.53
Last 5	11:50:40	1500.03	19.96	4.99	37.92	0.96	21.26	5.34	179.33
Last 5	11:55:40	1800.02	20.00	4.96	38.05	1.07	21.26	5.46	183.15
Variance 0			-0.05	-0.05	-0.27			-0.09	32.28
Variance 1			0.10	-0.01	-0.04			-0.30	-38.21
Variance 2			0.04	-0.03	0.13			0.12	3.82

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-03-27 12:05:29

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	30 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	408206		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-23	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	33.71 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8.04 in
Depth to Water	28.70 ft	Total Volume Pumped	4.0 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 0
Last 5	12:25:06	1200.03	18.09	5.35	45.80	0.51	29.25	4.82	143.20
Last 5	12:30:06	1500.03	17.94	5.34	43.90	0.50	29.29	4.43	140.10
Last 5	12:35:06	1800.03	18.09	5.31	42.90	0.72	29.30	4.56	140.60
Last 5	12:40:06	2100.03	18.18	5.31	41.80	0.58	29.34	4.36	138.60
Last 5	12:45:06	2400.03	18.26	5.30	41.90	0.61	29.37	4.31	137.90
Variance 0			-0.31	0.00	-0.21			-0.07	-1.23
Variance 1			0.26	-0.01	-0.06			-0.03	-1.13
Variance 2			0.45	-0.00	0.00			-0.05	-2.11

Notes

Sampled at 1250

Grab Samples

Product Name: Low-Flow System

Date: 2019-06-17 13:21:48

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	Plant McIntosh	Tubing Diameter	.170 in
Site Name	Default Site	Tubing Length	35 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	420625		
Turbidity Make/Model	LaMotte2020	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-9	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	37.56 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	29.15 ft	Total Volume Pumped	3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 10%
Last 5	12:58:38	900.01	23.80	5.59	55.43	0.97	29.17	6.39	278.90
Last 5	13:03:38	1200.01	24.51	5.40	50.60	0.95	29.17	6.33	282.58
Last 5	13:08:38	1500.01	23.96	5.28	48.65	1.12	29.17	6.31	284.47
Last 5	13:13:38	1800.01	23.72	5.26	48.38	0.95	29.17	6.46	285.72
Last 5	13:18:38	2100.01	23.31	5.24	46.61	0.95	29.17	6.32	287.36
Variance 0			-0.55	-0.12	-1.95			-0.02	1.88
Variance 1			-0.24	-0.03	-0.27			0.15	1.25
Variance 2			-0.41	-0.02	-1.77			-0.14	1.64

Notes

Sampled at 13:20

Grab Samples

Product Name: Low-Flow System

Date: 2019-06-17 13:21:48

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	Plant McIntosh	Tubing Diameter	.170 in
Site Name	Default Site	Tubing Length	35 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	420625		
Turbidity Make/Model	LaMotte2020	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-9	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	37.56 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	29.15 ft	Total Volume Pumped	3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 10	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 10%
Last 5	12:58:38	900.01	23.80	5.59	55.43	0.97	29.17	6.39	278.90
Last 5	13:03:38	1200.01	24.51	5.40	50.60	0.95	29.17	6.33	282.58
Last 5	13:08:38	1500.01	23.96	5.28	48.65	1.12	29.17	6.31	284.47
Last 5	13:13:38	1800.01	23.72	5.26	48.38	0.95	29.17	6.46	285.72
Last 5	13:18:38	2100.01	23.31	5.24	46.61	0.95	29.17	6.32	287.36
Variance 0			-0.55	-0.12	-1.95			-0.02	1.88
Variance 1			-0.24	-0.03	-0.27			0.15	1.25
Variance 2			-0.41	-0.02	-1.77			-0.14	1.64

Notes

Sampled at 13:20

Grab Samples

Water Level Measurement Data Sheet
Plant McIntosh
Georgia Power Company
Date: 9-Sep-19
Gauged by: J. Adcock, L. Coker, J. Noles

					Provided for reference			
Area	**Well ID**	**Installed Total Depth (ft btoc)**	**Measured Depth to Water (ft btoc)**	**Measured Depth to Bottom (ft btoc)**	**March 2019 Depth to Water (ft btoc)**	**March 2019 Depth to Bottom (ft btoc)**	**Installed Depth to Top of Screen (ft btoc)**	**Notes**
Landfill No. 4	GWC-1	28.50	15.71	27.62	15.03	27.62	18.00	
	GWA-2	28.50	17.33	28.00	16.83	27.98	18.00	
	GWA-3	38.50	21.34	37.52	21.01	37.50	28.00	
	GWC-4A (GWB-4A)	39.00	25.63	39.00	25.51	39.02	28.60	
	GWC-5 (GWB-5)	41.50	24.46	40.91	24.30	40.87	31.00	
	GWC-9	38.50	29.07	37.49	28.78	37.50	28.00	
	GWC-10	33.50	24.85	32.34	24.51	32.34	23.00	
	GWC-11	43.50	33.40	42.21	33.06	42.23	33.00	
	GWC-12	41.50	27.29	41.31	26.86	42.32	31.00	
	GWA-13	40.11	25.12	40.15	25.05	40.13	29.81	
	GWA-14	49.90	25.88	50.22	25.59	50.09	39.60	
	GWC-15 (GWB-15)	40.30	22.11	40.13	22.00	40.04	30.00	
	GWA-16 (GWB-16)	40.27	24.42	40.06	24.00	40.01	29.97	
	GWC-17	40.05	27.45	40.13	26.85	40.10	29.75	
	GWC-18	42.20	35.70	42.55	35.49	42.51	31.90	
	GWC-19	36.95	29.69	37.83	29.52	37.77	26.65	
	GWC-20	30.13	23.04	30.04	22.75	30.11	19.83	
	GWC-21	27.16	21.08	27.53	20.82	27.52	16.86	
	GWC-22 (PZ-22)	31.65	27.81	31.65	27.64	31.61	21.35	
	GWC-23	33.70	28.85	33.75	28.70	33.71	23.40	

Notes: ft = feet NM = Not Measured btoc = below top of casing

Product Name: Low-Flow System

Date: 2019-09-11 15:09:18

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369557		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-1	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	28 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.6 in
Depth to Water	15.70 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:47:20	600.02	25.05	4.88	48.61	1.76	15.85	1.83	109.15
Last 5	14:52:20	900.02	24.78	4.89	47.69	1.53	15.85	2.00	108.34
Last 5	14:57:20	1200.02	24.79	4.80	46.34	0.92	15.85	2.08	110.88
Last 5	15:02:20	1500.02	24.78	4.83	45.23	0.46	15.85	2.21	111.20
Last 5	15:07:20	1800.02	25.05	4.80	46.03	0.27	15.85	2.17	111.22
Variance 0			0.02	-0.09	-1.35			0.09	2.53
Variance 1			-0.01	0.03	-1.11			0.12	0.32
Variance 2			0.26	-0.03	0.80			-0.04	0.02

Notes

Sampled at 1525

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 15:49:58

Project Information:		Pump Information:	
Operator Name	J.Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	25 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	596190		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWA-2	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2015856 L
Well Total Depth	28.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.72 in
Depth to Water	17.28 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:27:22	599.99	26.24	4.90	37.26	2.80	17.33	3.78	140.57
Last 5	15:32:22	899.98	25.69	4.80	37.36	3.06	17.34	3.93	141.17
Last 5	15:37:22	1199.97	25.73	4.80	37.35	2.46	17.34	3.68	140.25
Last 5	15:42:22	1499.96	25.69	4.80	37.46	2.51	17.34	3.67	138.74
Last 5	15:47:22	1799.95	25.60	4.77	37.55	1.76	17.34	3.90	138.14
Variance 0			0.04	0.00	-0.01			-0.25	-0.93
Variance 1			-0.05	-0.00	0.11			-0.01	-1.50
Variance 2			-0.09	-0.03	0.09			0.24	-0.60

Notes Sampled at 1550

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 14:42:10

Project Information:		Pump Information:	
Operator Name	J.Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	596190		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWA-3	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	37.52 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	34.92 in
Depth to Water	21.35 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:20:22	600.00	27.68	5.23	31.27	0.48	23.14	4.42	146.53
Last 5	14:25:22	899.98	27.10	5.10	31.28	0.62	23.52	4.26	162.40
Last 5	14:30:22	1199.97	26.95	5.05	31.11	0.54	23.80	4.27	157.94
Last 5	14:35:22	1499.96	27.15	5.05	30.69	0.82	24.04	4.30	151.70
Last 5	14:40:22	1799.94	27.43	5.03	30.29	1.19	24.26	4.41	145.52
Variance 0			-0.15	-0.06	-0.17			0.01	-4.46
Variance 1			0.20	0.00	-0.42			0.03	-6.24
Variance 2			0.28	-0.02	-0.40			0.11	-6.18

Notes Sampled at 1445

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-10 15:20:26

Project Information:		Pump Information:	
Operator Name	L.Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-4A	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	39 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.28 in
Depth to Water	25.63 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 0.2	+/- 0
Last 5	14:58:21	1200.02	27.52	4.78	50.85	1.23	26.03	2.03	261.06
Last 5	15:03:21	1500.02	27.28	4.73	48.48	1.17	26.05	2.09	259.94
Last 5	15:08:21	1800.02	27.34	4.72	48.26	1.09	26.05	2.13	258.64
Last 5	15:13:21	2100.02	27.11	4.69	47.49	1.20	26.05	2.30	255.09
Last 5	15:18:21	2400.02	27.27	4.72	45.99	1.31	26.07	2.28	249.92
Variance 0			0.06	-0.01	-0.22			0.05	-1.30
Variance 1			-0.22	-0.03	-0.77			0.17	-3.55
Variance 2			0.15	0.03	-1.50			-0.02	-5.17

Notes

Samples at 1520

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-10 15:31:36

Project Information:		Pump Information:	
Operator Name	J.Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	38 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	596190		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-5	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2596101 L
Well Total Depth	40.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.04 in
Depth to Water	24.48 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:09:38	2400.02	25.87	5.67	35.02	0.69	24.64	6.05	249.07
Last 5	15:14:38	2700.02	26.46	5.63	34.77	0.72	24.65	6.04	245.65
Last 5	15:19:38	3000.37	26.26	5.79	34.85	0.82	24.65	6.10	233.65
Last 5	15:24:38	3300.37	25.73	5.69	35.35	1.12	24.65	6.18	221.98
Last 5	15:29:38	3600.37	25.88	5.71	34.56	0.53	24.65	5.96	212.18
Variance 0			-0.20	0.16	0.08			0.06	-12.01
Variance 1			-0.52	-0.10	0.50			0.09	-11.66
Variance 2			0.15	0.02	-0.80			-0.22	-9.81

Notes Sampled at 1535

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 12:31:17

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369557		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-9	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	38 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.6 in
Depth to Water	29.15 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:09:24	600.02	24.82	4.78	45.13	1.19	29.20	6.09	125.87
Last 5	12:14:24	900.02	24.96	4.74	44.80	0.22	29.20	6.09	128.08
Last 5	12:19:24	1200.02	24.82	4.78	45.01	0.34	29.20	6.22	127.16
Last 5	12:24:24	1500.02	24.59	4.81	44.43	0.02	29.20	6.28	126.44
Last 5	12:29:24	1800.02	25.00	4.80	44.45	0.08	29.20	6.47	128.25
Variance 0			-0.14	0.04	0.21			0.13	-0.92
Variance 1			-0.23	0.03	-0.59			0.06	-0.71
Variance 2			0.41	-0.01	0.02			0.19	1.80

Notes

Sampled at 1245

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 13:36:58

Project Information:		Pump Information:	
Operator Name	J.Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	31 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	596190		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-10	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2283661 L
Well Total Depth	32.34 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.48 in
Depth to Water	24.85 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:13:08	600.00	24.92	6.71	294.25	0.78	24.90	0.73	113.83
Last 5	13:18:08	899.99	24.95	6.68	288.89	0.80	24.89	0.86	112.05
Last 5	13:23:08	1199.98	24.87	6.65	280.59	0.74	24.89	1.02	109.53
Last 5	13:28:08	1499.96	24.60	6.65	270.13	0.65	24.89	1.18	106.03
Last 5	13:33:08	1799.95	24.58	6.63	267.51	0.49	24.89	1.28	103.97
Variance 0			-0.08	-0.03	-8.30			0.16	-2.52
Variance 1			-0.27	-0.01	-10.46			0.16	-3.49
Variance 2			-0.02	-0.02	-2.62			0.10	-2.06

Notes Sampled at 1335

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 14:35:44

Project Information:		Pump Information:	
Operator Name	L.Coker	Pump Model/Type	QED
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-11	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	42.21 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	33.40 ft	Total Volume Pumped	15 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 0.2%	+/- 0
Last 5	14:13:11	3306.00	22.89	6.43	104.34	2.67	33.75	2.90	65.13
Last 5	14:18:11	3606.00	22.75	6.44	101.63	2.10	33.75	2.91	63.92
Last 5	14:23:11	3906.00	22.50	6.42	96.97	2.00	33.75	3.03	67.41
Last 5	14:28:11	4206.00	22.09	6.40	93.20	1.89	33.75	3.20	69.60
Last 5	14:33:11	4506.00	22.73	6.37	92.95	1.25	33.75	3.23	74.93
Variance 0			-0.26	-0.02	-4.66			0.12	3.49
Variance 1			-0.41	-0.02	-8.58			0.92	2.19
Variance 2			0.64	-0.03	4.56			-0.71	5.34

Notes

Samples at 1440. DUp-lf4-02

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 13:47:11

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369557		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-12	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	42 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	27.40 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:26:01	600.02	24.75	5.00	22.26	1.63	27.55	5.50	119.50
Last 5	13:31:01	900.02	24.68	5.00	22.54	1.72	27.50	5.41	117.74
Last 5	13:36:01	1200.02	24.58	4.97	22.63	1.12	27.50	5.33	119.10
Last 5	13:41:01	1500.02	24.53	4.98	22.60	0.97	27.50	5.29	118.41
Last 5	13:46:01	1800.02	24.49	5.04	22.59	0.82	27.50	5.25	118.19
Variance 0			-0.11	-0.03	0.09			-0.08	1.36
Variance 1			-0.04	0.01	-0.03			-0.04	-0.69
Variance 2			-0.04	0.06	-0.01			-0.04	-0.23

Notes

Sampled at 1400

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-10 15:34:27

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369557		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWA-13	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	40 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	25.11 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:13:00	600.02	26.56	5.08	21.52	1.55	25.11	5.49	143.75
Last 5	15:18:00	900.02	26.43	5.07	21.37	1.27	25.11	5.59	139.75
Last 5	15:23:00	1200.02	26.31	5.05	20.88	2.42	25.11	5.68	141.62
Last 5	15:28:00	1500.02	26.64	4.99	20.59	1.78	25.11	5.73	156.21
Last 5	15:33:00	1800.02	26.59	5.00	20.50	4.32	25.11	5.76	162.52
Variance 0			-0.12	-0.02	-0.49			0.09	1.87
Variance 1			0.33	-0.06	-0.29			0.05	14.59
Variance 2			-0.04	0.02	-0.09			0.03	6.31

Notes

Sampled at 1535

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-10 16:37:13

Project Information:		Pump Information:	
Operator Name	L.Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	45 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWA-14	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	50.22 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8.03 in
Depth to Water	25.88 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 0.2	+/- 0
Last 5	16:15:04	1200.48	25.05	5.49	25.67	2.06	26.44	7.18	169.63
Last 5	16:20:04	1500.48	25.42	5.23	25.31	2.11	26.48	6.48	189.28
Last 5	16:25:04	1800.48	25.44	5.21	25.24	2.01	26.50	6.29	189.69
Last 5	16:30:04	2100.48	25.91	5.22	25.04	1.98	26.55	6.16	189.04
Last 5	16:35:04	2400.48	25.81	5.18	24.84	2.08	26.55	6.10	189.98
Variance 0			0.02	-0.02	-0.08			-0.18	0.42
Variance 1			0.47	0.01	-0.19			-0.14	-0.65
Variance 2			-0.10	-0.03	-0.20			-0.06	0.94

Notes

Samples at 1640

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 09:47:11

Project Information:		Pump Information:	
Operator Name	J.Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	37 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	596190		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-15	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2551467 L
Well Total Depth	40.13 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.32 in
Depth to Water	22.21 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:25:19	600.00	24.06	5.50	25.04	2.17	22.29	6.83	140.50
Last 5	09:30:19	899.99	23.92	5.36	25.01	1.15	22.30	6.75	143.40
Last 5	09:35:19	1199.98	23.83	5.30	25.09	1.87	22.31	6.73	143.87
Last 5	09:40:19	1499.96	23.79	5.31	24.91	2.36	22.31	6.68	144.10
Last 5	09:45:19	1799.95	23.83	5.28	24.91	1.77	22.32	6.70	143.31
Variance 0			-0.08	-0.05	0.08			-0.02	0.47
Variance 1			-0.05	0.01	-0.19			-0.04	0.23
Variance 2			0.05	-0.03	0.00			0.01	-0.79

Notes Sampled at 0950

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-10 16:28:56

Project Information:		Pump Information:	
Operator Name	J.Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	37 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	596190		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWA-16	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2551467 L
Well Total Depth	40.06 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4 in
Depth to Water	24.39 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	16:07:08	600.02	24.64	5.24	22.24	1.37	24.66	7.13	248.26
Last 5	16:12:08	900.02	24.50	5.16	22.53	1.11	24.66	7.43	254.35
Last 5	16:17:07	1199.87	24.61	5.15	22.51	1.32	24.67	7.24	246.89
Last 5	16:22:08	1500.87	24.87	5.13	22.68	1.58	24.67	7.16	234.89
Last 5	16:27:08	1800.87	25.14	5.12	22.41	0.54	24.69	7.35	224.52
Variance 0			0.10	-0.01	-0.02			-0.20	-7.46
Variance 1			0.27	-0.02	0.16			-0.07	-12.01
Variance 2			0.27	-0.01	-0.27			0.19	-10.37

Notes Sampled at 1630

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 10:06:23

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369557		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-17	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	40 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4.2 in
Depth to Water	27.52 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:48:10	300.03	23.30	5.22	30.65	0.64	27.75	5.74	118.24
Last 5	09:53:10	600.02	22.70	5.18	30.73	0.19	27.80	6.05	115.59
Last 5	09:58:10	900.09	22.71	5.17	30.70	0.26	27.83	6.45	114.23
Last 5	10:03:10	1200.04	22.99	5.19	30.57	0.18	27.87	6.40	113.73
Last 5	10:08:15	1500.06	22.91	5.16	30.72	0.32	27.88	6.42	110.21
Variance 0			-0.60	-0.04	0.08			0.31	-2.65
Variance 1			0.00	-0.01	-0.03			0.40	-1.36
Variance 2			0.29	0.02	-0.13			-0.05	-0.49

Notes

Sampled at 1015 Need to write in last reading.

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 11:22:58

Project Information:		Pump Information:	
Operator Name	L.Coker	Pump Model/Type	QED bladder
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-18	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	42.55 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	12.96 in
Depth to Water	35.70 ft	Total Volume Pumped	9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 0.2	+/- 0
Last 5	10:38:12	4493.55	22.09	6.27	97.36	7.71	36.74	4.26	130.60
Last 5	10:43:12	4793.55	22.40	6.08	100.09	7.00	36.77	4.15	136.36
Last 5	10:48:14	5095.55	22.37	6.32	102.49	6.71	36.77	4.09	137.31
Last 5	10:53:14	5395.55	22.41	6.30	103.64	5.79	36.78	4.01	165.63
~~Last 5~~	~~10:58:14~~	~~5695.55~~	~~22.44~~	~~6.28~~	~~105.04~~	~~4.11~~	~~36.78~~	~~3.87~~	~~217.07~~
Variance 0			-0.02	0.23	2.40			-0.07	0.95
Variance 1			0.04	-0.02	1.15			-0.07	28.33
Variance 2			0.03	-0.02	1.40			-0.15	51.44

Notes

Samples at 1100 see purge logfor notes Need to delete last line-use second to last

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 10:58:20

Project Information:		Pump Information:	
Operator Name	J.Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	33 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	596190		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-19	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.237293 L
Well Total Depth	37.83 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.44 in
Depth to Water	29.78 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:35:46	599.99	23.02	5.45	74.37	2.74	29.89	3.60	147.04
Last 5	10:40:46	899.98	23.43	5.50	75.45	1.78	29.89	3.67	145.95
Last 5	10:45:46	1199.97	23.74	5.55	78.44	1.11	29.90	3.71	144.38
Last 5	10:50:46	1499.95	23.29	5.57	81.09	0.71	29.90	3.65	143.58
Last 5	10:55:46	1799.95	23.46	5.58	82.06	0.63	29.90	3.66	140.96
Variance 0			0.32	0.04	2.99			0.04	-1.57
Variance 1			-0.45	0.03	2.65			-0.06	-0.80
Variance 2			0.16	0.00	0.96			0.01	-2.62

Notes Sampled at 11:00

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 11:18:07

Project Information:		Pump Information:	
Operator Name	J.Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369557		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-20	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	30 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.36 in
Depth to Water	23.10 ft	Total Volume Pumped	3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:56:27	900.02	23.69	4.83	46.02	13.80	23.13	4.70	121.81
Last 5	11:01:27	1200.02	24.19	4.84	45.85	11.90	23.13	4.77	121.68
Last 5	11:06:27	1500.02	24.18	4.89	45.55	6.29	23.13	4.72	119.55
Last 5	11:11:27	1800.02	24.09	4.87	44.98	5.60	23.13	4.68	121.12
Last 5	11:16:27	2100.02	23.92	4.96	44.58	4.63	23.13	4.84	117.10
Variance 0			-0.01	0.05	-0.31			-0.05	-2.13
Variance 1			-0.09	-0.02	-0.57			-0.04	1.57
Variance 2			-0.17	0.09	-0.40			0.16	-4.03

Notes

Sampled at 1130

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 12:18:00

Project Information:		Pump Information:	
Operator Name	J.Adcock	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	26 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	596190		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-21	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.206049 L
Well Total Depth	27.53 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.88 in
Depth to Water	21.12 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:55:02	600.00	24.87	5.15	40.79	0.54	21.36	4.23	172.48
Last 5	12:00:02	899.98	24.89	5.08	40.70	0.82	21.36	4.02	162.82
Last 5	12:05:02	1200.03	24.69	5.04	40.70	0.52	21.36	4.57	155.07
Last 5	12:10:02	1499.98	24.57	5.01	40.64	0.69	21.36	4.43	148.73
Last 5	12:15:02	1799.94	25.00	4.99	40.77	0.82	21.36	4.33	142.84
Variance 0			-0.20	-0.04	0.00			0.54	-7.75
Variance 1			-0.12	-0.03	-0.05			-0.13	-6.34
Variance 2			0.43	-0.01	0.12			-0.10	-5.89

Notes Sampled at 12:20

Grab Samples

Product Name: Low-Flow System

Date: 2019-09-11 12:27:48

Project Information:		Pump Information:	
Operator Name	L.Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	30 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	3 ft

Well Information:		Pumping Information:	
Well ID	GWC-23	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2239027 L
Well Total Depth	33.75 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8.4 in
Depth to Water	28.85 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 0.2	+/- 0
Last 5	12:05:31	300.03	27.75	5.34	41.48	0.83	29.35	1.76	138.32
Last 5	12:10:31	600.02	26.97	5.25	39.49	0.36	29.45	3.07	147.99
Last 5	12:15:31	900.02	27.43	5.28	39.24	0.22	29.50	4.21	144.87
Last 5	12:20:31	1200.02	27.57	5.25	38.30	0.44	29.51	4.43	149.13
Last 5	12:25:32	1500.50	27.24	5.24	37.89	0.52	29.55	4.58	150.02
Variance 0			0.46	0.03	-0.25			1.13	-3.11
Variance 1			0.14	-0.03	-0.93			0.22	4.26
Variance 2			-0.33	-0.01	-0.41			0.16	0.89

Notes

Samples at 12:25

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-18 12:26:30

Project Information:		Pump Information:	
Operator Name	J.Bash	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	23 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2 ft

Well Information:		Pumping Information:	
Well ID	GWC-1	Final Pumping Rate	133 mL/min
Well diameter	2 in	Total System Volume	0.1926587 L
Well Total Depth	ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	14.85 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:03:09	600.02	18.48	5.17	58.17	4.22	14.92	2.53	130.10
Last 5	12:08:09	900.02	18.53	5.10	58.66	2.90	14.96	2.52	130.35
Last 5	12:13:09	1200.02	18.55	5.07	59.56	2.51	14.94	2.55	129.56
Last 5	12:18:09	1500.02	19.01	5.08	58.85	1.78	14.94	2.51	127.55
Last 5	12:23:09	1800.02	18.97	5.06	58.99	1.45	14.95	2.53	126.99
Variance 0			0.02	-0.02	0.90			0.03	-0.79
Variance 1			0.46	0.00	-0.72			-0.05	-2.01
Variance 2			-0.05	-0.02	0.14			0.02	-0.55

Notes

No sample. Taking pH only

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-18 12:53:58

Project Information:		Pump Information:	
Operator Name	J. Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	Plant McIntosh	Tubing Length	42 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	601534		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-5	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2774638 L
Well Total Depth	41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	24.45 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:32:59	600.03	19.23	5.45	36.47	1.88	24.55	5.96	75.36
Last 5	12:37:59	900.03	19.67	5.47	38.26	1.28	24.55	5.89	74.62
Last 5	12:42:59	1200.02	19.72	5.49	37.99	1.21	24.55	5.89	74.24
Last 5	12:47:59	1500.02	19.86	5.44	37.52	1.19	24.55	5.87	76.14
Last 5	12:52:59	1800.02	20.12	5.46	37.61	1.07	24.55	5.74	76.44
Variance 0			0.05	0.02	-0.26			-0.00	-0.39
Variance 1			0.14	-0.05	-0.47			-0.02	1.90
Variance 2			0.26	0.02	0.08			-0.13	0.30

Notes

Sampled at 1235

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-17 12:57:50

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	3.5 ft

Well Information:		Pumping Information:	
Well ID	GWA-13	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	40.21 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.36 in
Depth to Water	25.07 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:32:28	1200.02	22.50	5.16	22.67	3.76	25.09	6.07	175.60
Last 5	12:37:28	1500.02	22.66	5.02	23.33	3.16	25.10	5.99	174.86
Last 5	12:42:28	1800.02	22.74	4.95	23.51	2.93	25.06	5.85	174.42
Last 5	12:47:28	2100.02	22.79	4.92	23.99	2.30	25.10	5.74	174.23
Last 5	12:52:28	2400.02	22.61	4.90	24.47	2.05	25.10	5.61	172.87
Variance 0			0.08	-0.07	0.17			-0.14	-0.44
Variance 1			0.05	-0.04	0.48			-0.11	-0.19
Variance 2			-0.19	-0.02	0.48			-0.13	-1.36

Notes

Sampled at 1255

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-17 14:04:40

Project Information:		Pump Information:	
Operator Name	J. Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	Plant McIntosh	Tubing Length	47 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	369557		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWA-14	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2997809 L
Well Total Depth	50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6.6 in
Depth to Water	26.00 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:42:20	600.02	21.90	4.95	26.87	1.19	26.45	6.09	149.19
Last 5	13:47:20	900.02	21.77	4.93	26.91	1.08	26.50	6.13	146.73
Last 5	13:52:20	1200.02	21.68	4.92	26.79	0.68	26.52	6.26	146.77
Last 5	13:57:20	1500.02	21.63	4.93	26.69	0.69	26.55	6.26	146.24
Last 5	14:02:20	1800.02	21.57	4.97	26.62	0.87	26.55	6.48	145.10
Variance 0			-0.09	-0.01	-0.11			0.13	0.04
Variance 1			-0.05	0.01	-0.11			-0.00	-0.53
Variance 2			-0.07	0.04	-0.07			0.22	-1.14

Notes

Sampled at 1340

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-17 13:59:33

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	35 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	3.0 ft

Well Information:		Pumping Information:	
Well ID	GWC-15	Final Pumping Rate	133 mL/min
Well diameter	2 in	Total System Volume	0.2462198 L
Well Total Depth	ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:30:35	600.02	22.55	4.89	27.20	1.42	22.39	5.84	174.31
Last 5	13:35:35	900.02	22.44	4.88	27.10	1.15	22.42	6.00	170.94
Last 5	13:40:35	1200.02	22.34	4.88	27.15	1.96	22.41	6.06	168.73
Last 5	13:45:35	1500.02	22.31	4.86	27.05	3.11	22.41	6.10	168.68
Last 5	13:50:35	1800.02	22.34	4.87	26.41	2.06	22.41	6.10	167.26
Variance 0			-0.10	0.00	0.05			0.06	-2.21
Variance 1			-0.04	-0.02	-0.10			0.04	-0.05
Variance 2			0.04	0.00	-0.64			0.00	-1.41

Notes

Sampled at 1350

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-18 11:09:54

Project Information:		Pump Information:	
Operator Name	L. Coker	Pump Model/Type	QED Bladder
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2.5 ft

Well Information:		Pumping Information:	
Well ID	GWC-18	Final Pumping Rate	240 mL/min
Well diameter	2 in	Total System Volume	0.2685369 L
Well Total Depth	ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	14.88 in
Depth to Water	35.82 ft	Total Volume Pumped	13.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:45:17	2101.02	19.26	6.10	103.43	1.08	36.88	4.29	89.13
Last 5	10:50:17	2401.02	19.34	6.14	106.77	1.13	36.94	4.26	87.43
Last 5	10:55:17	2701.02	19.23	6.18	110.16	0.96	36.95	4.17	86.39
Last 5	11:00:17	3001.02	19.33	6.19	112.76	0.86	37.00	4.11	85.60
Last 5	11:05:17	3301.02	19.49	6.22	114.52	0.67	37.06	4.07	84.79
Variance 0			-0.10	0.04	3.39			-0.09	-1.03
Variance 1			0.09	0.01	2.60			-0.06	-0.79
Variance 2			0.16	0.03	1.76			-0.03	-0.81

Notes

Sampled at 1110

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-18 09:38:55

Project Information:		Pump Information:	
Operator Name	J.Bash	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	McIntosh	Tubing Length	25 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	445707		
Turbidity Make/Model	LaMotte2020we	Pump placement from TOC	2.5 ft

Well Information:		Pumping Information:	
Well ID	GWC-20	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2015856 L
Well Total Depth	ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.44 in
Depth to Water	23.23 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	09:15:09	900.02	16.33	5.10	48.50	1.02	23.35	4.94	146.21
Last 5	09:20:09	1200.02	16.65	5.01	47.89	0.99	23.35	4.97	147.95
Last 5	09:25:09	1500.02	17.05	5.00	47.62	0.71	23.35	4.95	145.02
Last 5	09:30:09	1800.02	17.19	4.97	47.75	0.69	23.36	4.97	145.95
Last 5	09:35:09	2100.10	17.47	4.97	47.87	0.43	23.35	4.97	144.31
Variance 0			0.40	-0.01	-0.27			-0.01	-2.93
Variance 1			0.14	-0.03	0.13			0.02	0.93
Variance 2			0.28	0.00	0.12			0.00	-1.63

Notes

Sampled at 0945

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-18 11:46:39

Project Information:		Pump Information:	
Operator Name	J. Noles	Pump Model/Type	Alexis Peristaltic
Company Name	GEI	Tubing Type	LDPE
Project Name	LF4	Tubing Diameter	0.17 in
Site Name	Plant McIntosh	Tubing Length	36 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	601534		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	GWC-23	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.2506832 L
Well Total Depth	33 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9.6 in
Depth to Water	29.50 ft	Total Volume Pumped	3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:25:05	900.02	18.52	5.21	39.44	1.51	29.90	4.82	87.68
Last 5	11:30:05	1200.02	18.62	5.22	39.01	1.43	29.95	5.34	85.40
Last 5	11:35:05	1500.02	18.69	5.21	38.86	1.40	30.00	6.16	83.37
Last 5	11:40:05	1800.09	18.60	5.21	39.14	1.35	30.00	6.12	81.05
Last 5	11:45:05	2100.06	18.48	5.21	38.85	1.29	30.00	6.07	77.85
Variance 0			0.08	-0.01	-0.16			0.82	-2.03
Variance 1			-0.09	-0.00	0.28			-0.04	-2.32
Variance 2			-0.12	0.00	-0.28			-0.05	-3.20

Notes

Sampled at 1130

Grab Samples

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-86198-2
TestAmerica Sample Delivery Group: L4 State Compliance
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4
Revision: 2

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
3/8/2019 2:52:19 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-86198-2

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-86198-2

Revision(2) to set RL to those in SOW

Revised : to change RLs for B and Ca to routine

Comments
No additional comments.

Receipt
The samples were received on 1/30/2019 10:20 AM; the samples arrived in good condition. The temperatures of the 5 coolers at receipt time were 0.7º C, 2.4º C, 2.4º C, 10.9º C and 11.1º C.

As per Peter Adams, GEI, Boron and Calcium should be included in the state compliance list of metals; these elements are not listed on the COC.

Anions
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86198-2
SDG: L4 State Compliance

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-19
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-19 *
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	01-28-19 *
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-19
Texas	NELAP	6	T104704528-15-2	03-31-19 *
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86198-2
SDG: L4 State Compliance

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-86198-1	GWA-2	Water	01/29/19 13:42	01/30/19 10:20
180-86198-2	GWA-3	Water	01/29/19 13:35	01/30/19 10:20
180-86198-3	GWC-4A	Water	01/29/19 15:15	01/30/19 10:20
180-86198-4	GWC-5	Water	01/29/19 13:30	01/30/19 10:20
180-86198-5	GWA-13	Water	01/29/19 14:50	01/30/19 10:20
180-86198-6	GWA-14	Water	01/29/19 15:00	01/30/19 10:20
180-86198-7	GWA-16	Water	01/29/19 16:10	01/30/19 10:20
180-86198-8	GWC-17	Water	01/29/19 16:30	01/30/19 10:20
180-86198-9	GWC-15	Water	01/29/19 15:00	01/30/19 10:20
180-86198-10	GWC-19	Water	01/29/19 17:00	01/30/19 10:20
180-86198-11	GWC-20	Water	01/29/19 16:20	01/30/19 10:20
180-86198-12	FERB-LFY-01	Water	01/29/19 12:15	01/30/19 10:20
180-86198-13	FB-LFY-01	Water	01/29/19 12:20	01/30/19 10:20

Method Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86198-2
SDG: L4 State Compliance

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client Sample ID: GWA-2
Date Collected: 01/29/19 13:42
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 06:03	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 15:41	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269403	02/01/19 15:40	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-3
Date Collected: 01/29/19 13:35
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 06:19	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 15:54	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269403	02/01/19 15:40	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-4A
Date Collected: 01/29/19 15:15
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 06:34	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 15:57	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269403	02/01/19 15:40	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-5
Date Collected: 01/29/19 13:30
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 06:50	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86198-2
SDG: L4 State Compliance

Client Sample ID: GWC-5
Date Collected: 01/29/19 13:30
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:01	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269403	02/01/19 15:40	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-13
Date Collected: 01/29/19 14:50
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 09:13	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:04	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269403	02/01/19 15:40	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-14
Date Collected: 01/29/19 15:00
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			269428	02/02/19 15:37	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:07	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269403	02/01/19 15:40	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-16
Date Collected: 01/29/19 16:10
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269428	02/02/19 16:25	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:17	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269403	02/01/19 15:40	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86198-2
SDG: L4 State Compliance

Client Sample ID: GWC-17

Date Collected: 01/29/19 16:30
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269428	02/02/19 16:41	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:21	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269403	02/01/19 15:40	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-15

Date Collected: 01/29/19 15:00
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269428	02/02/19 16:57	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:24	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269406	02/01/19 17:19	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-19

Date Collected: 01/29/19 17:00
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269428	02/02/19 17:12	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:27	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269282	01/31/19 14:50	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-20

Date Collected: 01/29/19 16:20
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269428	02/02/19 17:28	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86198-2
SDG: L4 State Compliance

Client Sample ID: GWC-20

Date Collected: 01/29/19 16:20
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:31	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269282	01/31/19 14:50	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FERB-LFY-01

Date Collected: 01/29/19 12:15
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269428	02/02/19 17:44	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:34	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269406	02/01/19 17:19	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-LFY-01

Date Collected: 01/29/19 12:20
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269428	02/02/19 18:00	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269501	02/04/19 12:30	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269983	02/08/19 16:37	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269406	02/01/19 17:19	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

NAM = Nicole Marfisi

Batch Type: Analysis

CMR = Carl Reagle

MJH = Matthew Hartman

RSK = Robert Kurtz

TAM = Tessa Mastalski

Client Sample ID: GWA-2

Lab Sample ID: 180-86198-1

Date Collected: 01/29/19 13:42
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.0**		1.0	0.71	mg/L			02/05/19 06:03	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 06:03	1
Sulfate	**0.64**	**J**	1.0	0.38	mg/L			02/05/19 06:03	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 15:41	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 15:41	1
Barium	**0.034**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 15:41	1
Beryllium	**0.000063**	**J**	0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 15:41	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 15:41	1
Cobalt	**0.0010**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 15:41	1
Chromium	**0.0019**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 15:41	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 15:41	1
Nickel	**0.00063**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 15:41	1
Lead	**0.00024**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 15:41	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 15:41	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 15:41	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 15:41	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 15:41	1
Zinc	**0.0064**	**J**	0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 15:41	1
Calcium	**0.53**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 15:41	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 15:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**36**		10	10	mg/L			02/01/19 15:40	1

Client Sample ID: GWA-3

Lab Sample ID: 180-86198-2

Date Collected: 01/29/19 13:35
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.0**		1.0	0.71	mg/L			02/05/19 06:19	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 06:19	1
Sulfate	<0.38		1.0	0.38	mg/L			02/05/19 06:19	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 15:54	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 15:54	1
Barium	**0.017**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 15:54	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 15:54	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 15:54	1
Cobalt	**0.00035**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 15:54	1
Chromium	**0.0016**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 15:54	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 15:54	1
Nickel	**0.00034**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 15:54	1
Lead	**0.000098**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 15:54	1

Client Sample ID: GWA-3

Lab Sample ID: 180-86198-2
Date Collected: 01/29/19 13:35
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 15:54	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 15:54	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 15:54	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 15:54	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 15:54	1
Calcium	**0.85**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 15:54	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 15:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**27**		10	10	mg/L			02/01/19 15:40	1

Client Sample ID: GWC-4A

Lab Sample ID: 180-86198-3
Date Collected: 01/29/19 15:15
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.4**		1.0	0.71	mg/L			02/05/19 06:34	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 06:34	1
Sulfate	**8.7**		1.0	0.38	mg/L			02/05/19 06:34	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 15:57	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 15:57	1
Barium	**0.025**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 15:57	1
Beryllium	**0.00011**	**J**	0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 15:57	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 15:57	1
Cobalt	**0.0033**		0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 15:57	1
Chromium	**0.00099**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 15:57	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 15:57	1
Nickel	**0.0021**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 15:57	1
Lead	**0.00026**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 15:57	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 15:57	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 15:57	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 15:57	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 15:57	1
Zinc	**0.0064**	**J**	0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 15:57	1
Calcium	**0.83**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 15:57	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 15:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**26**		10	10	mg/L			02/01/19 15:40	1

Client Sample ID: GWC-5

Lab Sample ID: 180-86198-4

Date Collected: 01/29/19 13:30

Matrix: Water

Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.6**		1.0	0.71	mg/L			02/05/19 06:50	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 06:50	1
Sulfate	<0.38		1.0	0.38	mg/L			02/05/19 06:50	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:01	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:01	1
Barium	**0.050**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:01	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:01	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:01	1
Cobalt	**0.00064**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:01	1
Chromium	**0.0014**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:01	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:01	1
Nickel	<0.00031		0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:01	1
Lead	**0.00011**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:01	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:01	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:01	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:01	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:01	1
Zinc	**0.0027**	**J**	0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:01	1
Calcium	**3.3**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:01	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**34**		10	10	mg/L			02/01/19 15:40	1

Client Sample ID: GWA-13

Lab Sample ID: 180-86198-5

Date Collected: 01/29/19 14:50

Matrix: Water

Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.6**		1.0	0.71	mg/L			02/05/19 09:13	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 09:13	1
Sulfate	**1.2**		1.0	0.38	mg/L			02/05/19 09:13	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:04	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:04	1
Barium	**0.019**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:04	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:04	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:04	1
Cobalt	**0.00043**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:04	1
Chromium	**0.0037**	**B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:04	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:04	1
Nickel	**0.00033**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:04	1
Lead	**0.00043**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:04	1

Client Sample ID: GWA-13

Lab Sample ID: 180-86198-5

Date Collected: 01/29/19 14:50
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:04	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:04	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:04	1
Vanadium	**0.0018**	**J**	0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:04	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:04	1
Calcium	**0.33**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:04	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**24**		10	10	mg/L			02/01/19 15:40	1

Client Sample ID: GWA-14

Lab Sample ID: 180-86198-6

Date Collected: 01/29/19 15:00
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.0**		1.0	0.71	mg/L			02/02/19 15:37	1
Fluoride	<0.026		0.20	0.026	mg/L			02/02/19 15:37	1
Sulfate	**0.52**	**J**	1.0	0.38	mg/L			02/02/19 15:37	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:07	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:07	1
Barium	**0.013**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:07	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:07	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:07	1
Cobalt	**0.00029**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:07	1
Chromium	**0.0014**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:07	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:07	1
Nickel	**0.00040**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:07	1
Lead	**0.00011**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:07	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:07	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:07	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:07	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:07	1
Zinc	**0.0048**	**J**	0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:07	1
Calcium	**0.51**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:07	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**22**		10	10	mg/L			02/01/19 15:40	1

Client Sample ID: GWA-16

Lab Sample ID: 180-86198-7
Date Collected: 01/29/19 16:10
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.8**		1.0	0.71	mg/L			02/02/19 16:25	1
Fluoride	<0.026		0.20	0.026	mg/L			02/02/19 16:25	1
Sulfate	<0.38		1.0	0.38	mg/L			02/02/19 16:25	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:17	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:17	1
Barium	**0.026**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:17	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:17	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:17	1
Cobalt	**0.00044**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:17	1
Chromium	**0.0024**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:17	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:17	1
Nickel	**0.00040**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:17	1
Lead	**0.00018**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:17	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:17	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:17	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:17	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:17	1
Zinc	**0.0024**	**J**	0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:17	1
Calcium	**0.41**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:17	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**26**		10	10	mg/L			02/01/19 15:40	1

Client Sample ID: GWC-17

Lab Sample ID: 180-86198-8
Date Collected: 01/29/19 16:30
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.5**		1.0	0.71	mg/L			02/02/19 16:41	1
Fluoride	**0.13**	**J**	0.20	0.026	mg/L			02/02/19 16:41	1
Sulfate	<0.38		1.0	0.38	mg/L			02/02/19 16:41	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:21	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:21	1
Barium	**0.020**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:21	1
Beryllium	**0.00062**	**J**	0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:21	1
Cadmium	**0.00062**	**J**	0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:21	1
Cobalt	**0.00038**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:21	1
Chromium	**0.0041**	**B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:21	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:21	1
Nickel	**0.0016**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:21	1
Lead	**0.00016**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:21	1

Client Sample ID: GWC-17

Lab Sample ID: 180-86198-8
Date Collected: 01/29/19 16:30
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:21	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:21	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:21	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:21	1
Zinc	**0.0059**	**J**	0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:21	1
Calcium	**2.2**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:21	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**37**		10	10	mg/L			02/01/19 15:40	1

Client Sample ID: GWC-15

Lab Sample ID: 180-86198-9
Date Collected: 01/29/19 15:00
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.7**		1.0	0.71	mg/L			02/02/19 16:57	1
Fluoride	<0.026		0.20	0.026	mg/L			02/02/19 16:57	1
Sulfate	**0.43**	**J**	1.0	0.38	mg/L			02/02/19 16:57	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:24	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:24	1
Barium	**0.027**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:24	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:24	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:24	1
Cobalt	**0.00037**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:24	1
Chromium	**0.0021**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:24	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:24	1
Nickel	**0.00046**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:24	1
Lead	**0.00014**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:24	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:24	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:24	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:24	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:24	1
Zinc	**0.0059**	**J**	0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:24	1
Calcium	**0.91**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:24	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**23**		10	10	mg/L			02/01/19 17:19	1

Client Sample ID: GWC-19

Lab Sample ID: 180-86198-10

Date Collected: 01/29/19 17:00
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.2**		1.0	0.71	mg/L			02/02/19 17:12	1
Fluoride	**0.074**	**J**	0.20	0.026	mg/L			02/02/19 17:12	1
Sulfate	**1.4**		1.0	0.38	mg/L			02/02/19 17:12	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:27	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:27	1
Barium	**0.016**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:27	1
Beryllium	**0.00023**	**J**	0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:27	1
Cadmium	**0.00020**	**J**	0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:27	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:27	1
Chromium	**0.0019**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:27	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:27	1
Nickel	**0.0017**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:27	1
Lead	**0.00011**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:27	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:27	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:27	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:27	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:27	1
Zinc	**0.0051**	**J**	0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:27	1
Calcium	**9.2**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:27	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**62**		10	10	mg/L			01/31/19 14:50	1

Client Sample ID: GWC-20

Lab Sample ID: 180-86198-11

Date Collected: 01/29/19 16:20
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.8**		1.0	0.71	mg/L			02/02/19 17:28	1
Fluoride	**0.031**	**J**	0.20	0.026	mg/L			02/02/19 17:28	1
Sulfate	**1.3**		1.0	0.38	mg/L			02/02/19 17:28	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:31	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:31	1
Barium	**0.017**		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:31	1
Beryllium	**0.00016**	**J**	0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:31	1
Cadmium	**0.00016**	**J**	0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:31	1
Cobalt	**0.00084**	**J**	0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:31	1
Chromium	**0.0013**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:31	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:31	1
Nickel	**0.00093**	**J**	0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:31	1
Lead	**0.00012**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:31	1

Client Sample ID: GWC-20

Lab Sample ID: 180-86198-11
Date Collected: 01/29/19 16:20
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:31	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:31	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:31	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:31	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:31	1
Calcium	**1.8**		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:31	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**27**		10	10	mg/L			01/31/19 14:50	1

Client Sample ID: FERB-LFY-01

Lab Sample ID: 180-86198-12
Date Collected: 01/29/19 12:15
Matrix: Water
Date Received: 01/30/19 10:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/02/19 17:44	1
Fluoride	<0.026		0.20	0.026	mg/L			02/02/19 17:44	1
Sulfate	<0.38		1.0	0.38	mg/L			02/02/19 17:44	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:34	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:34	1
Barium	<0.00037		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:34	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:34	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:34	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:34	1
Chromium	<0.00063		0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:34	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:34	1
Nickel	<0.00031		0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:34	1
Lead	**0.00011**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:34	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:34	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:34	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:34	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:34	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:34	1
Calcium	<0.12		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:34	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/01/19 17:19	1

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86198-2
SDG: L4 State Compliance

Client Sample ID: FB-LFY-01
Date Collected: 01/29/19 12:20
Date Received: 01/30/19 10:20

Lab Sample ID: 180-86198-13
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/02/19 18:00	1
Fluoride	<0.026		0.20	0.026	mg/L			02/02/19 18:00	1
Sulfate	<0.38		1.0	0.38	mg/L			02/02/19 18:00	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 16:37	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 16:37	1
Barium	<0.00037		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 16:37	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 16:37	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 16:37	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 16:37	1
Chromium	**0.00068**	**J B**	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 16:37	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 16:37	1
Nickel	<0.00031		0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 16:37	1
Lead	**0.00011**	**J B**	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 16:37	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 16:37	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 16:37	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 16:37	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 16:37	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 16:37	1
Calcium	<0.12		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 16:37	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/01/19 17:19	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-269428/6
Matrix: Water
Analysis Batch: 269428

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/02/19 11:07	1
Fluoride	<0.026		0.20	0.026	mg/L			02/02/19 11:07	1
Sulfate	<0.38		1.0	0.38	mg/L			02/02/19 11:07	1

Lab Sample ID: LCS 180-269428/5
Matrix: Water
Analysis Batch: 269428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	24.1		mg/L		96	90 - 110
Fluoride	1.25	1.22		mg/L		98	90 - 110
Sulfate	25.0	23.9		mg/L		95	90 - 110

Lab Sample ID: 180-86198-6 MS
Matrix: Water
Analysis Batch: 269428

Client Sample ID: GWA-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.0		25.0	29.2		mg/L		101	80 - 120
Fluoride	<0.026		1.25	1.34		mg/L		107	80 - 120
Sulfate	0.52	J	25.0	25.4		mg/L		100	80 - 120

Lab Sample ID: 180-86198-6 MSD
Matrix: Water
Analysis Batch: 269428

Client Sample ID: GWA-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.0		25.0	29.0		mg/L		100	80 - 120	1	20
Fluoride	<0.026		1.25	1.33		mg/L		106	80 - 120	1	20
Sulfate	0.52	J	25.0	25.7		mg/L		101	80 - 120	1	20

Lab Sample ID: MB 180-269535/6
Matrix: Water
Analysis Batch: 269535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/05/19 05:31	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 05:31	1
Sulfate	<0.38		1.0	0.38	mg/L			02/05/19 05:31	1

Lab Sample ID: LCS 180-269535/5
Matrix: Water
Analysis Batch: 269535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.5		mg/L		102	90 - 110
Fluoride	1.25	1.29		mg/L		104	90 - 110
Sulfate	25.0	25.3		mg/L		101	90 - 110

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-269501/1-A
Matrix: Water
Analysis Batch: 269983

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 269501

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/04/19 12:30	02/08/19 15:17	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/04/19 12:30	02/08/19 15:17	1
Barium	<0.00037		0.0025	0.00037	mg/L		02/04/19 12:30	02/08/19 15:17	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/04/19 12:30	02/08/19 15:17	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/04/19 12:30	02/08/19 15:17	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		02/04/19 12:30	02/08/19 15:17	1
Chromium	0.000966	J	0.0025	0.00063	mg/L		02/04/19 12:30	02/08/19 15:17	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/04/19 12:30	02/08/19 15:17	1
Nickel	<0.00031		0.0025	0.00031	mg/L		02/04/19 12:30	02/08/19 15:17	1
Lead	0.000115	J	0.0010	0.000094	mg/L		02/04/19 12:30	02/08/19 15:17	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/04/19 12:30	02/08/19 15:17	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/04/19 12:30	02/08/19 15:17	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/04/19 12:30	02/08/19 15:17	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/04/19 12:30	02/08/19 15:17	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/04/19 12:30	02/08/19 15:17	1
Calcium	<0.12		0.25	0.12	mg/L		02/04/19 12:30	02/08/19 15:17	1
Boron	<0.030		0.050	0.030	mg/L		02/04/19 12:30	02/08/19 15:17	1

Lab Sample ID: LCS 180-269501/2-A
Matrix: Water
Analysis Batch: 269983

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 269501

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0517		mg/L		103	80 - 120
Arsenic	0.0400	0.0381		mg/L		95	80 - 120
Barium	2.00	2.13		mg/L		107	80 - 120
Beryllium	0.0500	0.0512		mg/L		102	80 - 120
Cadmium	0.0500	0.0514		mg/L		103	80 - 120
Cobalt	0.500	0.470		mg/L		94	80 - 120
Chromium	0.200	0.214		mg/L		107	80 - 120
Copper	0.250	0.242		mg/L		97	80 - 120
Nickel	0.500	0.465		mg/L		93	80 - 120
Lead	0.0200	0.0211		mg/L		106	80 - 120
Antimony	0.500	0.525		mg/L		105	80 - 120
Selenium	0.0100	0.0113		mg/L		113	80 - 120
Thallium	0.0500	0.0522		mg/L		104	80 - 120
Vanadium	0.500	0.526		mg/L		105	80 - 120
Zinc	0.500	0.473		mg/L		95	80 - 120
Calcium	50.0	56.4		mg/L		113	80 - 120
Boron	1.00	1.05		mg/L		105	80 - 120

Lab Sample ID: 180-86198-1 MS
Matrix: Water
Analysis Batch: 269983

Client Sample ID: GWA-2
Prep Type: Total Recoverable
Prep Batch: 269501

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<0.00012		0.0500	0.0520		mg/L		104	75 - 125
Arsenic	<0.00032		0.0400	0.0387		mg/L		97	75 - 125

Method: EPA 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-86198-1 MS
Matrix: Water
Analysis Batch: 269983

Client Sample ID: GWA-2
Prep Type: Total Recoverable
Prep Batch: 269501

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.034		2.00	2.18		mg/L		108	75 - 125
Beryllium	0.000063	J	0.0500	0.0519		mg/L		104	75 - 125
Cadmium	<0.00013		0.0500	0.0514		mg/L		103	75 - 125
Cobalt	0.0010	J	0.500	0.468		mg/L		93	75 - 125
Chromium	0.0019	J B	0.200	0.214		mg/L		106	75 - 125
Copper	<0.0013		0.250	0.242		mg/L		97	75 - 125
Nickel	0.00063	J	0.500	0.467		mg/L		93	75 - 125
Lead	0.00024	J B	0.0200	0.0211		mg/L		104	75 - 125
Antimony	<0.0011		0.500	0.527		mg/L		105	75 - 125
Selenium	<0.00081		0.0100	0.0104		mg/L		104	75 - 125
Thallium	<0.000063		0.0500	0.0526		mg/L		105	75 - 125
Vanadium	<0.00090		0.500	0.525		mg/L		105	75 - 125
Zinc	0.0064	J	0.500	0.479		mg/L		94	75 - 125
Calcium	0.53		50.0	57.5		mg/L		114	75 - 125
Boron	<0.030		1.00	1.08		mg/L		108	75 - 125

Lab Sample ID: 180-86198-1 MSD
Matrix: Water
Analysis Batch: 269983

Client Sample ID: GWA-2
Prep Type: Total Recoverable
Prep Batch: 269501

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<0.00012		0.0500	0.0515		mg/L		103	75 - 125	1	20
Arsenic	<0.00032		0.0400	0.0385		mg/L		96	75 - 125	1	20
Barium	0.034		2.00	2.16		mg/L		106	75 - 125	1	20
Beryllium	0.000063	J	0.0500	0.0521		mg/L		104	75 - 125	0	20
Cadmium	<0.00013		0.0500	0.0511		mg/L		102	75 - 125	1	20
Cobalt	0.0010	J	0.500	0.472		mg/L		94	75 - 125	1	20
Chromium	0.0019	J B	0.200	0.214		mg/L		106	75 - 125	0	20
Copper	<0.0013		0.250	0.242		mg/L		97	75 - 125	0	20
Nickel	0.00063	J	0.500	0.468		mg/L		93	75 - 125	0	20
Lead	0.00024	J B	0.0200	0.0212		mg/L		105	75 - 125	0	20
Antimony	<0.0011		0.500	0.521		mg/L		104	75 - 125	1	20
Selenium	<0.00081		0.0100	0.0113		mg/L		113	75 - 125	8	20
Thallium	<0.000063		0.0500	0.0527		mg/L		105	75 - 125	0	20
Vanadium	<0.00090		0.500	0.524		mg/L		105	75 - 125	0	20
Zinc	0.0064	J	0.500	0.479		mg/L		94	75 - 125	0	20
Calcium	0.53		50.0	57.4		mg/L		114	75 - 125	0	20
Boron	<0.030		1.00	1.08		mg/L		108	75 - 125	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-269282/2
Matrix: Water
Analysis Batch: 269282

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			01/31/19 14:50	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 180-269282/1
Matrix: Water
Analysis Batch: 269282

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	204	212		mg/L		104	80 - 120

Lab Sample ID: MB 180-269403/2
Matrix: Water
Analysis Batch: 269403

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/01/19 15:40	1

Lab Sample ID: LCS 180-269403/1
Matrix: Water
Analysis Batch: 269403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	204	218		mg/L		107	80 - 120

Lab Sample ID: MB 180-269406/2
Matrix: Water
Analysis Batch: 269406

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/01/19 17:19	1

Lab Sample ID: LCS 180-269406/1
Matrix: Water
Analysis Batch: 269406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	204	210		mg/L		103	80 - 120

HPLC/IC

Analysis Batch: 269428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86198-6	GWA-14	Total/NA	Water	EPA 300.0 R2.1	
180-86198-7	GWA-16	Total/NA	Water	EPA 300.0 R2.1	
180-86198-8	GWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-86198-9	GWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-86198-10	GWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-86198-11	GWC-20	Total/NA	Water	EPA 300.0 R2.1	
180-86198-12	FERB-LFY-01	Total/NA	Water	EPA 300.0 R2.1	
180-86198-13	FB-LFY-01	Total/NA	Water	EPA 300.0 R2.1	
MB 180-269428/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-269428/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-86198-6 MS	GWA-14	Total/NA	Water	EPA 300.0 R2.1	
180-86198-6 MSD	GWA-14	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 269535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86198-1	GWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-86198-2	GWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-86198-3	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	
180-86198-4	GWC-5	Total/NA	Water	EPA 300.0 R2.1	
180-86198-5	GWA-13	Total/NA	Water	EPA 300.0 R2.1	
MB 180-269535/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-269535/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 269501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86198-1	GWA-2	Total Recoverable	Water	3005A	
180-86198-2	GWA-3	Total Recoverable	Water	3005A	
180-86198-3	GWC-4A	Total Recoverable	Water	3005A	
180-86198-4	GWC-5	Total Recoverable	Water	3005A	
180-86198-5	GWA-13	Total Recoverable	Water	3005A	
180-86198-6	GWA-14	Total Recoverable	Water	3005A	
180-86198-7	GWA-16	Total Recoverable	Water	3005A	
180-86198-8	GWC-17	Total Recoverable	Water	3005A	
180-86198-9	GWC-15	Total Recoverable	Water	3005A	
180-86198-10	GWC-19	Total Recoverable	Water	3005A	
180-86198-11	GWC-20	Total Recoverable	Water	3005A	
180-86198-12	FERB-LFY-01	Total Recoverable	Water	3005A	
180-86198-13	FB-LFY-01	Total Recoverable	Water	3005A	
MB 180-269501/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-269501/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-86198-1 MS	GWA-2	Total Recoverable	Water	3005A	
180-86198-1 MSD	GWA-2	Total Recoverable	Water	3005A	

Analysis Batch: 269983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86198-1	GWA-2	Total Recoverable	Water	EPA 6020	269501
180-86198-2	GWA-3	Total Recoverable	Water	EPA 6020	269501
180-86198-3	GWC-4A	Total Recoverable	Water	EPA 6020	269501

Metals (Continued)

Analysis Batch: 269983 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86198-4	GWC-5	Total Recoverable	Water	EPA 6020	269501
180-86198-5	GWA-13	Total Recoverable	Water	EPA 6020	269501
180-86198-6	GWA-14	Total Recoverable	Water	EPA 6020	269501
180-86198-7	GWA-16	Total Recoverable	Water	EPA 6020	269501
180-86198-8	GWC-17	Total Recoverable	Water	EPA 6020	269501
180-86198-9	GWC-15	Total Recoverable	Water	EPA 6020	269501
180-86198-10	GWC-19	Total Recoverable	Water	EPA 6020	269501
180-86198-11	GWC-20	Total Recoverable	Water	EPA 6020	269501
180-86198-12	FERB-LFY-01	Total Recoverable	Water	EPA 6020	269501
180-86198-13	FB-LFY-01	Total Recoverable	Water	EPA 6020	269501
MB 180-269501/1-A	Method Blank	Total Recoverable	Water	EPA 6020	269501
LCS 180-269501/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	269501
180-86198-1 MS	GWA-2	Total Recoverable	Water	EPA 6020	269501
180-86198-1 MSD	GWA-2	Total Recoverable	Water	EPA 6020	269501

General Chemistry

Analysis Batch: 269282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86198-10	GWC-19	Total/NA	Water	SM 2540C	
180-86198-11	GWC-20	Total/NA	Water	SM 2540C	
MB 180-269282/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-269282/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 269403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86198-1	GWA-2	Total/NA	Water	SM 2540C	
180-86198-2	GWA-3	Total/NA	Water	SM 2540C	
180-86198-3	GWC-4A	Total/NA	Water	SM 2540C	
180-86198-4	GWC-5	Total/NA	Water	SM 2540C	
180-86198-5	GWA-13	Total/NA	Water	SM 2540C	
180-86198-6	GWA-14	Total/NA	Water	SM 2540C	
180-86198-7	GWA-16	Total/NA	Water	SM 2540C	
180-86198-8	GWC-17	Total/NA	Water	SM 2540C	
MB 180-269403/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-269403/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 269406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86198-9	GWC-15	Total/NA	Water	SM 2540C	
180-86198-12	FERB-LFY-01	Total/NA	Water	SM 2540C	
180-86198-13	FB-LFY-01	Total/NA	Water	SM 2540C	
MB 180-269406/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-269406/1	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: Southern Company				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308				
Phone:	PO #: SCS10347656			
Email: jabraham@southerco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWA-2	1/29/19	13:42	G	W	N	N	X	X	2	LF4 State Compliance
GWA-3	↓	13:35	↓	↓	↓	↓	↓	↓		
GWC-4A	↓	15:15	↓	↓	↓	↓	↓	↓		
GWC-5	↓	13:30	↓	↓	↓	↓	↓	↓		
GWA-13	↓	14:50	↓	↓	↓	↓	↓	↓		
GWA-14	↓	15:00	↓	↓	↓	↓	↓	↓		
GWA-16	↓	16:10	↓	↓	↓	↓	↓	↓		
GWC-17	↓	16:30	↓	↓	↓	↓	↓	↓		
GWC-15	↓	15:00	↓	↓	↓	↓	↓	↓		
GWC-19	↓	17:00	↓	↓	↓	↓	↓	↓		
GWC-20	↓	16:20	↓	↓	↓	↓	↓	↓		

180-86198 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment: FEDEX	
Relinquished by: Peter A	Date/Time: 1/29/19 19:00	Company: GEI	Received by: Dellilu Watson	Date/Time: 1-30-19 10:20	Company: TA Pitt
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: Southern Company				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308				
Phone:	PO #: SCS10347656			
Email: jabraham@southerco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash **Landfill #4**	Project #: 18019955			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	TDS; 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
FERB-LF4-01	1/29/19	12:15	G	W	N	N	X	X	2	LF4 State Compliance
FB-LF4-01	1/29/19	12:20	G	W	N	N	X	X	2	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Peter A	1/29/19 19:00	GEI	Pauline Watson	1-30-19	FAL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:20	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: Southern Company				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:	Analysis Requested		
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308				
Phone:	PO #: SCS10347656			
Email: jabraham@southerco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash **Landfill #4**	Project #: 18019955			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWA-2	1/29/19	13:42	G	W	N	N	X	X	2	LF4 State Compliance
GWA-3		13:35								
GWC-4A		15:15								
GWC-5		13:30								
GWA-13		14:50								
GWA-14		15:00								
GWA-16		16:10								
GWC-17		16:30								
GWC-15		15:00								
GWC-19		17:00								
GWC-20		16:20								

180-86198 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FEDEX

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Peter A	1/29/19 19:00	GEI	Debbie Watson	1-30-19 10:20	TAPITT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: Southern Company				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308				
Phone:	PO #: SCS10347656			
Email: jabraham@southerco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash **Landfill #4**	Project #: 18019955			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	TDS; 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
FERB-LF4-01	1/29/19	12:15	G	W	N	N	X	X	2	LF4 State Compliance
FB-LF4-01	1/29/19	12:20	G	W	N	N	X	X	2	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx	
Relinquished by: Peter A	Date/Time: 1/29/19 19:00	Company: GEI	Received by: Pauline Watson	Date/Time: 1-30-19 10:20 Company: FAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com	Page: Page 1 of 2
Company: Southern Company			Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:		
City: Atlanta	TAT Requested (days): Standard		
State, Zip: GA, 30308			
Phone:	PO #: SCS10347656		
Email: jabraham@southerco.com, lmpetty@southernco.com	WO #:		
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Ba, Ca	TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWA-2	1/29/19	13:42	G	W	N	X	X	X	2	LF4 Detection
GWA-3		13:35								
GWC-4A		15:15								
GWC-5		13:30								
GWA-13		14:50								
GWA-14		15:00								
GWA-16		16:10								
GWC-17		16:30								
GWC-15		15:00								
GWC-19		17:00								
GWC-20		16:20								

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: FedEx

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Peter A	1/29/19 19:00	GEI	Deidre Watson	1.30.19 10:20	TAPIT

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Page: Page 2 of 2
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com	
Company: Southern Company			Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:		
City: Atlanta	TAT Requested (days): Standard		
State, Zip: GA, 30308			
Phone:	PO #: SCS10347656		
Email: jabraham@southerco.com, lmpetty@southernco.com	WO #:		
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Bo, Ca	TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
FERB-LF4-01	1/29/19	12:15	G	W	N	N	X	X	2	LF4 Detection
FB-LF4-01	1/29/19	12:20	G	W	N	N	X	X	2	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FEDEX		
Relinquished by: Peter A	Date/Time: 1/29/19 19:00	Company: GEI	Received by: Deirdre Wortman	Date/Time: 1-30-19	Company: TAPIT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:20	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016


ORIGIN ID:SAVA (412) 963-7058
LAUREN COKER
TEST AMERICA
301 ALPHA DR
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US
SHIP DATE: 29JAN19
ACTWGT: 19.80 LB
CAD: 006994919/SSFE1922
DIMS: 14x11x11 IN
BILL THIRD PARTY
TO VERONICA BORTOT
TEST AMERICA
301 ALPHA DR
PITTSBURGH PA 15238
(555) 555-5555
INV:
PO:
REF:
DEPT:
FedEx
Express
Uncorrected temp 24 °C
Thermometer ID 10
CF 0 Initials TS
PT-WI-SR-001 effective 11/8/18
MPS# 0263 7852
Mstr# 7852
15238
PA-US PIT
1 of 5
TRK# 0201 7852 1226 6772
MASTER
XH AGCA
WED - 30 JAN
PRIORITY OVERN
PA-US
RUSH
180-86198 Waybill


SHIP DATE: 29
ACTWGT: 43.20
CAD: 006994919/
DIMS: 24x13x15
BILL THIRD PARTY
ORIGIN ID:SAVA (412) 963-7058
LAUREN COKER
TEST AMERICA
301 ALPHA DR
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US
SHIP DATE: 29JAN19
ACTWGT: 56.10 LB
CAD: 006994919/SSFE1922
DIMS: 24x13x15 IN
BILL THIRD PARTY
TO VERONICA BORTOT
TEST AMERICA
301 ALPHA DR
PITTSBURGH PA 15238
(555) 555-5555
REF:
INV:
PO:
DEPT:
FedEx Express
WED - 30 JAN 10:30A
PRIORITY OVERNIGHT
15238
0201
Uncorrected temp
Thermometer ID
Initials
CF
PT-WI-SR-001 effective 11/8/18
PA-US
PIT

1
2
3
4
5
6
7
8
9
10
11
12
13

FedEx

ORIGIN ID:SAVA (412) 963-7058
LAUREN COKER
TEST AMERICA
301 ALPHA DR
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 29JAN19
ACTWGT: 29.30 LB
CAD: 006994919/SSFE1922
DIMS: 24x13x15 IN

BILL THIRD PARTY

TO VERONICA BORTOT
TEST AMERICA
301 ALPHA DR

PITTSBURGH PA 15238
(666) 666-6666 REF:
INV:
PO: DEPT:

565J2/0E3B/23AD

FedEx
Express

E

J19101901070 1uv

5 of 5
MPS# 0263 7852 1226 6810
Mstr# 7852 1226 6772 0201

WED - 30 JAN 10:30A
PRIORITY OVERNIGHT

XH AGCA

15238
PA-US PIT

Uncorrected temp 10.9 C
Thermometer ID 10
CF 0 Initials TJ
PT-WI-SR-001 effective 11/8/18

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-86198-2
SDG Number: L4 State Compliance

Login Number: 86198
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	TWO COOLERS WITH RAD CONTAINERS HAD NO ICE
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-86241-2
TestAmerica Sample Delivery Group: L4 State Compliance
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4
Revision: 3

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
3/12/2019 1:33:11 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-86241-2

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-86241-2

Revised to set RL to those in SOW

Comments
No additional comments.

Receipt
The samples were received on 1/31/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.6º C and 2.8º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Two out of four COC's do not have a relinquished by time listed.

As per Peter Adams, GEI, Boron and Calcium should be included in the state compliance list of metals; these elements are not listed on the COC.

Anions
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86241-2
SDG: L4 State Compliance

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86241-2
SDG: L4 State Compliance

Laboratory: TestAmerica Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-19
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-19 *
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	01-28-19 *
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-19
Texas	NELAP	6	T104704528-15-2	03-31-19 *
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86241-2
SDG: L4 State Compliance

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-86241-1	GWC-18	Water	01/30/19 10:30	01/31/19 10:00
180-86241-2	GWC-9	Water	01/30/19 10:10	01/31/19 10:00
180-86241-3	GWC-1	Water	01/30/19 11:37	01/31/19 10:00
180-86241-4	GWC-11	Water	01/30/19 11:46	01/31/19 10:00
180-86241-5	GWC-21	Water	01/30/19 09:30	01/31/19 10:00
180-86241-6	GWC-10	Water	01/30/19 10:45	01/31/19 10:00
180-86241-7	GWC-12	Water	01/30/19 11:30	01/31/19 10:00
180-86241-8	GWC-23	Water	01/30/19 09:45	01/31/19 10:00
180-86241-9	DUP-LF4-01	Water	01/30/19 00:00	01/31/19 10:00
180-86241-10	DUP-LF4-02	Water	01/30/19 00:00	01/31/19 10:00
180-86241-11	FB-LF4-02	Water	01/30/19 17:01	01/31/19 10:00
180-86241-12	FERB-LF4-02	Water	01/30/19 17:02	01/31/19 10:00

Method Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86241-2
SDG: L4 State Compliance

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86241-2
SDG: L4 State Compliance

Client Sample ID: GWC-18
Date Collected: 01/30/19 10:30
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 09:28	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:19	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269416	02/02/19 08:18	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-9
Date Collected: 01/30/19 10:10
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 09:44	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:23	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269416	02/02/19 08:18	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-1
Date Collected: 01/30/19 11:37
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 10:00	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:26	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269416	02/02/19 08:18	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-11
Date Collected: 01/30/19 11:46
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 10:16	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86241-2
SDG: L4 State Compliance

Client Sample ID: GWC-11
Date Collected: 01/30/19 11:46
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:30	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269416	02/02/19 08:18	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-21
Date Collected: 01/30/19 09:30
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 10:32	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:33	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269417	02/02/19 08:25	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-10
Date Collected: 01/30/19 10:45
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 10:47	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:36	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269417	02/02/19 08:25	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-12
Date Collected: 01/30/19 11:30
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 12:06	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:40	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269416	02/02/19 08:18	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86241-2
SDG: L4 State Compliance

Client Sample ID: GWC-23
Date Collected: 01/30/19 09:45
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			269535	02/05/19 12:22	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:50	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269416	02/02/19 08:18	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-LF4-01
Date Collected: 01/30/19 00:00
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 13:10	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:53	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269417	02/02/19 08:25	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-LF4-02
Date Collected: 01/30/19 00:00
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 13:26	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 15:57	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269417	02/02/19 08:25	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-LF4-02
Date Collected: 01/30/19 17:01
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 11:03	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

TestAmerica Job ID: 180-86241-2
SDG: L4 State Compliance

Client Sample ID: FB-LF4-02

Date Collected: 01/30/19 17:01
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 16:00	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269416	02/02/19 08:18	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FERB-LF4-02

Date Collected: 01/30/19 17:02
Date Received: 01/31/19 10:00

Lab Sample ID: 180-86241-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1.0 mL	269535	02/05/19 11:51	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	269611	02/05/19 11:58	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			269787	02/06/19 16:03	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	269416	02/02/19 08:18	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

NAM = Nicole Marfisi

Batch Type: Analysis

AVS = Abbey Smith

MJH = Matthew Hartman

RSK = Robert Kurtz

Client Sample ID: GWC-18

Lab Sample ID: 180-86241-1

Date Collected: 01/30/19 10:30
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.8**		1.0	0.71	mg/L			02/05/19 09:28	1
Fluoride	**0.65**		0.20	0.026	mg/L			02/05/19 09:28	1
Sulfate	**5.8**		1.0	0.38	mg/L			02/05/19 09:28	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00029**	**J B**	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:19	1
Arsenic	**0.0011**	**J**	0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:19	1
Barium	**0.020**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:19	1
Beryllium	**0.000083**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:19	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:19	1
Cobalt	**0.00040**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:19	1
Chromium	**0.0049**	**B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:19	1
Copper	**0.0021**	**J**	0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:19	1
Nickel	**0.0019**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:19	1
Lead	**0.00067**	**J**	0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:19	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:19	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:19	1
Thallium	**0.00012**	**J**	0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:19	1
Vanadium	**0.0042**	**B**	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:19	1
Zinc	**0.50**		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:19	1
Calcium	**14**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:19	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**100**		10	10	mg/L			02/02/19 08:18	1

Client Sample ID: GWC-9

Lab Sample ID: 180-86241-2

Date Collected: 01/30/19 10:10
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.1**		1.0	0.71	mg/L			02/05/19 09:44	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 09:44	1
Sulfate	**0.58**	**J**	1.0	0.38	mg/L			02/05/19 09:44	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00018**	**J B**	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:23	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:23	1
Barium	**0.032**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:23	1
Beryllium	**0.00016**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:23	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:23	1
Cobalt	**0.00066**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:23	1
Chromium	**0.0012**	**J B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:23	1
Copper	**0.0020**	**J**	0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:23	1
Nickel	**0.00063**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:23	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:23	1

Client Sample ID: GWC-9

Lab Sample ID: 180-86241-2
Date Collected: 01/30/19 10:10
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:23	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:23	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:23	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:23	1
Zinc	**0.051**		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:23	1
Calcium	**0.38**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:23	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**42**		10	10	mg/L			02/02/19 08:18	1

Client Sample ID: GWC-1

Lab Sample ID: 180-86241-3
Date Collected: 01/30/19 11:37
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.8**		1.0	0.71	mg/L			02/05/19 10:00	1
Fluoride	**0.040**	**J**	0.20	0.026	mg/L			02/05/19 10:00	1
Sulfate	**2.1**		1.0	0.38	mg/L			02/05/19 10:00	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00021**	**J B**	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:26	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:26	1
Barium	**0.050**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:26	1
Beryllium	**0.00018**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:26	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:26	1
Cobalt	**0.0016**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:26	1
Chromium	**0.0021**	**J B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:26	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:26	1
Nickel	**0.0013**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:26	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:26	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:26	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:26	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:26	1
Vanadium	**0.0012**	**J B**	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:26	1
Zinc	**0.0031**	**J**	0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:26	1
Calcium	**2.5**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:26	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**55**		10	10	mg/L			02/02/19 08:18	1

Client Sample ID: GWC-11

Lab Sample ID: 180-86241-4

Date Collected: 01/30/19 11:46
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.6**		1.0	0.71	mg/L			02/05/19 10:16	1
Fluoride	**0.35**		0.20	0.026	mg/L			02/05/19 10:16	1
Sulfate	**4.3**		1.0	0.38	mg/L			02/05/19 10:16	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00016**	**J B**	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:30	1
Arsenic	**0.0015**		0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:30	1
Barium	**0.014**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:30	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:30	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:30	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:30	1
Chromium	**0.0060**	**B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:30	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:30	1
Nickel	**0.00033**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:30	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:30	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:30	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:30	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:30	1
Vanadium	**0.0024**	**J B**	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:30	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:30	1
Calcium	**11**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:30	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**89**		10	10	mg/L			02/02/19 08:18	1

Client Sample ID: GWC-21

Lab Sample ID: 180-86241-5

Date Collected: 01/30/19 09:30
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.7**		1.0	0.71	mg/L			02/05/19 10:32	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 10:32	1
Sulfate	**0.72**	**J**	1.0	0.38	mg/L			02/05/19 10:32	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00018**	**J B**	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:33	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:33	1
Barium	**0.017**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:33	1
Beryllium	**0.00016**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:33	1
Cadmium	**0.00014**	**J**	0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:33	1
Cobalt	**0.00099**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:33	1
Chromium	**0.0017**	**J B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:33	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:33	1
Nickel	**0.00071**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:33	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:33	1

Client Sample ID: GWC-21

Lab Sample ID: 180-86241-5
Date Collected: 01/30/19 09:30
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:33	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:33	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:33	1
Vanadium	**0.0014**	**J B**	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:33	1
Zinc	**0.0025**	**J**	0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:33	1
Calcium	**1.0**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:33	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**43**		10	10	mg/L			02/02/19 08:25	1

Client Sample ID: GWC-10

Lab Sample ID: 180-86241-6
Date Collected: 01/30/19 10:45
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.6**		1.0	0.71	mg/L			02/05/19 10:47	1
Fluoride	**0.23**		0.20	0.026	mg/L			02/05/19 10:47	1
Sulfate	**5.0**		1.0	0.38	mg/L			02/05/19 10:47	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00018**	**J B**	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:36	1
Arsenic	**0.00082**	**J**	0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:36	1
Barium	**0.023**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:36	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:36	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:36	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:36	1
Chromium	**0.0071**	**B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:36	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:36	1
Nickel	<0.00031		0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:36	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:36	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:36	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:36	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:36	1
Vanadium	**0.0027**	**B**	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:36	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:36	1
Calcium	**26**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:36	1
Boron	**0.055**		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**160**		10	10	mg/L			02/02/19 08:25	1

Client Sample ID: GWC-12

Lab Sample ID: 180-86241-7

Date Collected: 01/30/19 11:30

Matrix: Water

Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.7**		1.0	0.71	mg/L			02/05/19 12:06	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 12:06	1
Sulfate	**0.65**	**J**	1.0	0.38	mg/L			02/05/19 12:06	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:40	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:40	1
Barium	**0.011**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:40	1
Beryllium	**0.00018**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:40	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:40	1
Cobalt	**0.00060**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:40	1
Chromium	**0.0039**	**B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:40	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:40	1
Nickel	**0.0011**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:40	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:40	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:40	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:40	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:40	1
Vanadium	**0.0016**	**J B**	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:40	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:40	1
Calcium	**0.68**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:40	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**22**		10	10	mg/L			02/02/19 08:18	1

Client Sample ID: GWC-23

Lab Sample ID: 180-86241-8

Date Collected: 01/30/19 09:45

Matrix: Water

Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.4**		1.0	0.71	mg/L			02/05/19 12:22	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 12:22	1
Sulfate	**2.4**		1.0	0.38	mg/L			02/05/19 12:22	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00012**	**J B**	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:50	1
Arsenic	**0.00034**	**J**	0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:50	1
Barium	**0.034**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:50	1
Beryllium	**0.00015**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:50	1
Cadmium	**0.00015**	**J**	0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:50	1
Cobalt	**0.0061**		0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:50	1
Chromium	**0.0019**	**J B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:50	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:50	1
Nickel	**0.0019**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:50	1
Lead	**0.00013**	**J**	0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:50	1

Client Sample ID: GWC-23

Lab Sample ID: 180-86241-8
Date Collected: 01/30/19 09:45
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:50	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:50	1
Thallium	**0.00016**	**J**	0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:50	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:50	1
Zinc	**0.0049**	**J**	0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:50	1
Calcium	**1.1**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:50	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**38**		10	10	mg/L			02/02/19 08:18	1

Client Sample ID: DUP-LF4-01

Lab Sample ID: 180-86241-9
Date Collected: 01/30/19 00:00
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.6**		1.0	0.71	mg/L			02/05/19 13:10	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 13:10	1
Sulfate	**0.69**	**J**	1.0	0.38	mg/L			02/05/19 13:10	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.00019**	**J B**	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:53	1
Arsenic	**0.00042**	**J**	0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:53	1
Barium	**0.018**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:53	1
Beryllium	**0.00018**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:53	1
Cadmium	**0.00017**	**J**	0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:53	1
Cobalt	**0.0011**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:53	1
Chromium	**0.0019**	**J B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:53	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:53	1
Nickel	**0.00083**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:53	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:53	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:53	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:53	1
Thallium	**0.000083**	**J**	0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:53	1
Vanadium	**0.0011**	**J B**	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:53	1
Zinc	**0.0026**	**J**	0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:53	1
Calcium	**1.1**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:53	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**29**		10	10	mg/L			02/02/19 08:25	1

Client Sample ID: DUP-LF4-02

Lab Sample ID: 180-86241-10

Date Collected: 01/30/19 00:00
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.3**		1.0	0.71	mg/L			02/05/19 13:26	1
Fluoride	**0.21**		0.20	0.026	mg/L			02/05/19 13:26	1
Sulfate	**4.6**		1.0	0.38	mg/L			02/05/19 13:26	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 15:57	1
Arsenic	**0.00099**	**J**	0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 15:57	1
Barium	**0.023**		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 15:57	1
Beryllium	**0.000077**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 15:57	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 15:57	1
Cobalt	**0.00013**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 15:57	1
Chromium	**0.0063**	**B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 15:57	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 15:57	1
Nickel	<0.00031		0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 15:57	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 15:57	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 15:57	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 15:57	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 15:57	1
Vanadium	**0.0021**	**J B**	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 15:57	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 15:57	1
Calcium	**26**		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 15:57	1
Boron	**0.059**		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 15:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**110**		10	10	mg/L			02/02/19 08:25	1

Client Sample ID: FB-LF4-02

Lab Sample ID: 180-86241-11

Date Collected: 01/30/19 17:01
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/05/19 11:03	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 11:03	1
Sulfate	<0.38		1.0	0.38	mg/L			02/05/19 11:03	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 16:00	1
Arsenic	**0.00038**	**J**	0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 16:00	1
Barium	**0.0012**	**J**	0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 16:00	1
Beryllium	**0.000072**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 16:00	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 16:00	1
Cobalt	**0.00012**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 16:00	1
Chromium	**0.0011**	**J B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 16:00	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 16:00	1
Nickel	<0.00031		0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 16:00	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 16:00	1

Client Sample ID: FB-LF4-02

Lab Sample ID: 180-86241-11
Date Collected: 01/30/19 17:01
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 16:00	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 16:00	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 16:00	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 16:00	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 16:00	1
Calcium	**0.14**	**J**	0.25	0.12	mg/L		02/05/19 11:58	02/06/19 16:00	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 16:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/02/19 08:18	1

Client Sample ID: FERB-LF4-02

Lab Sample ID: 180-86241-12
Date Collected: 01/30/19 17:02
Matrix: Water
Date Received: 01/31/19 10:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/05/19 11:51	1
Fluoride	**0.026**	**J**	0.20	0.026	mg/L			02/05/19 11:51	1
Sulfate	<0.38		1.0	0.38	mg/L			02/05/19 11:51	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00012		0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 16:03	1
Arsenic	**0.00060**	**J**	0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 16:03	1
Barium	**0.0014**	**J**	0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 16:03	1
Beryllium	**0.000063**	**J**	0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 16:03	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 16:03	1
Cobalt	**0.00032**	**J**	0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 16:03	1
Chromium	**0.0019**	**J B**	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 16:03	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 16:03	1
Nickel	**0.0011**	**J**	0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 16:03	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 16:03	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 16:03	1
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 16:03	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 16:03	1
Vanadium	<0.00090		0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 16:03	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 16:03	1
Calcium	**0.12**	**J**	0.25	0.12	mg/L		02/05/19 11:58	02/06/19 16:03	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/02/19 08:18	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-269535/6
Matrix: Water
Analysis Batch: 269535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			02/05/19 05:31	1
Fluoride	<0.026		0.20	0.026	mg/L			02/05/19 05:31	1
Sulfate	<0.38		1.0	0.38	mg/L			02/05/19 05:31	1

Lab Sample ID: LCS 180-269535/5
Matrix: Water
Analysis Batch: 269535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.5		mg/L		102	90 - 110
Fluoride	1.25	1.29		mg/L		104	90 - 110
Sulfate	25.0	25.3		mg/L		101	90 - 110

Lab Sample ID: 180-86241-8 MS
Matrix: Water
Analysis Batch: 269535

Client Sample ID: GWC-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.4		25.0	31.2		mg/L		95	80 - 120
Fluoride	<0.026		1.25	1.40		mg/L		112	80 - 120
Sulfate	2.4		25.0	28.7		mg/L		105	80 - 120

Lab Sample ID: 180-86241-8 MSD
Matrix: Water
Analysis Batch: 269535

Client Sample ID: GWC-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.4		25.0	29.5		mg/L		88	80 - 120	6	20
Fluoride	<0.026		1.25	1.31		mg/L		105	80 - 120	6	20
Sulfate	2.4		25.0	26.9		mg/L		98	80 - 120	7	20

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-269611/1-A
Matrix: Water
Analysis Batch: 269787

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 269611

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.000157	J	0.0013	0.00012	mg/L		02/05/19 11:58	02/06/19 14:50	1
Arsenic	<0.00032		0.0013	0.00032	mg/L		02/05/19 11:58	02/06/19 14:50	1
Barium	<0.00037		0.0025	0.00037	mg/L		02/05/19 11:58	02/06/19 14:50	1
Beryllium	<0.000057		0.0025	0.000057	mg/L		02/05/19 11:58	02/06/19 14:50	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		02/05/19 11:58	02/06/19 14:50	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		02/05/19 11:58	02/06/19 14:50	1
Chromium	0.00117	J	0.0025	0.00063	mg/L		02/05/19 11:58	02/06/19 14:50	1
Copper	<0.0013		0.0025	0.0013	mg/L		02/05/19 11:58	02/06/19 14:50	1
Nickel	<0.00031		0.0025	0.00031	mg/L		02/05/19 11:58	02/06/19 14:50	1
Lead	<0.000094		0.0010	0.000094	mg/L		02/05/19 11:58	02/06/19 14:50	1
Antimony	<0.0011		0.0025	0.0011	mg/L		02/05/19 11:58	02/06/19 14:50	1

Method: EPA 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-269611/1-A
Matrix: Water
Analysis Batch: 269787

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 269611

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00081		0.0013	0.00081	mg/L		02/05/19 11:58	02/06/19 14:50	1
Thallium	<0.000063		0.00050	0.000063	mg/L		02/05/19 11:58	02/06/19 14:50	1
Vanadium	0.000971	J	0.0025	0.00090	mg/L		02/05/19 11:58	02/06/19 14:50	1
Zinc	<0.0024		0.020	0.0024	mg/L		02/05/19 11:58	02/06/19 14:50	1
Calcium	<0.12		0.25	0.12	mg/L		02/05/19 11:58	02/06/19 14:50	1
Boron	<0.030		0.050	0.030	mg/L		02/05/19 11:58	02/06/19 14:50	1

Lab Sample ID: LCS 180-269611/2-A
Matrix: Water
Analysis Batch: 269787

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 269611

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0533		mg/L		107	80 - 120
Arsenic	0.0400	0.0406		mg/L		101	80 - 120
Barium	2.00	2.17		mg/L		109	80 - 120
Beryllium	0.0500	0.0517		mg/L		103	80 - 120
Cadmium	0.0500	0.0543		mg/L		109	80 - 120
Cobalt	0.500	0.496		mg/L		99	80 - 120
Chromium	0.200	0.212		mg/L		106	80 - 120
Copper	0.250	0.254		mg/L		102	80 - 120
Nickel	0.500	0.491		mg/L		98	80 - 120
Lead	0.0200	0.0213		mg/L		107	80 - 120
Antimony	0.500	0.542		mg/L		108	80 - 120
Selenium	0.0100	0.00962		mg/L		96	80 - 120
Thallium	0.0500	0.0536		mg/L		107	80 - 120
Vanadium	0.500	0.526		mg/L		105	80 - 120
Zinc	0.500	0.498		mg/L		100	80 - 120
Calcium	50.0	53.8		mg/L		108	80 - 120
Boron	1.00	1.03		mg/L		103	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-269416/2
Matrix: Water
Analysis Batch: 269416

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/02/19 08:18	1

Lab Sample ID: LCS 180-269416/1
Matrix: Water
Analysis Batch: 269416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	204	218		mg/L		107	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 180-269417/2
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			02/02/19 08:25	1

Lab Sample ID: LCS 180-269417/1
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	204	238		mg/L		117	80 - 120

HPLC/IC

Analysis Batch: 269535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86241-1	GWC-18	Total/NA	Water	EPA 300.0 R2.1	
180-86241-2	GWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-86241-3	GWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-86241-4	GWC-11	Total/NA	Water	EPA 300.0 R2.1	
180-86241-5	GWC-21	Total/NA	Water	EPA 300.0 R2.1	
180-86241-6	GWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-86241-7	GWC-12	Total/NA	Water	EPA 300.0 R2.1	
180-86241-8	GWC-23	Total/NA	Water	EPA 300.0 R2.1	
180-86241-9	DUP-LF4-01	Total/NA	Water	EPA 300.0 R2.1	
180-86241-10	DUP-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
180-86241-11	FB-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
180-86241-12	FERB-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
MB 180-269535/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-269535/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-86241-8 MS	GWC-23	Total/NA	Water	EPA 300.0 R2.1	
180-86241-8 MSD	GWC-23	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 269611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86241-1	GWC-18	Total Recoverable	Water	3005A	
180-86241-2	GWC-9	Total Recoverable	Water	3005A	
180-86241-3	GWC-1	Total Recoverable	Water	3005A	
180-86241-4	GWC-11	Total Recoverable	Water	3005A	
180-86241-5	GWC-21	Total Recoverable	Water	3005A	
180-86241-6	GWC-10	Total Recoverable	Water	3005A	
180-86241-7	GWC-12	Total Recoverable	Water	3005A	
180-86241-8	GWC-23	Total Recoverable	Water	3005A	
180-86241-9	DUP-LF4-01	Total Recoverable	Water	3005A	
180-86241-10	DUP-LF4-02	Total Recoverable	Water	3005A	
180-86241-11	FB-LF4-02	Total Recoverable	Water	3005A	
180-86241-12	FERB-LF4-02	Total Recoverable	Water	3005A	
MB 180-269611/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-269611/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 269787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86241-1	GWC-18	Total Recoverable	Water	EPA 6020	269611
180-86241-2	GWC-9	Total Recoverable	Water	EPA 6020	269611
180-86241-3	GWC-1	Total Recoverable	Water	EPA 6020	269611
180-86241-4	GWC-11	Total Recoverable	Water	EPA 6020	269611
180-86241-5	GWC-21	Total Recoverable	Water	EPA 6020	269611
180-86241-6	GWC-10	Total Recoverable	Water	EPA 6020	269611
180-86241-7	GWC-12	Total Recoverable	Water	EPA 6020	269611
180-86241-8	GWC-23	Total Recoverable	Water	EPA 6020	269611
180-86241-9	DUP-LF4-01	Total Recoverable	Water	EPA 6020	269611
180-86241-10	DUP-LF4-02	Total Recoverable	Water	EPA 6020	269611
180-86241-11	FB-LF4-02	Total Recoverable	Water	EPA 6020	269611
180-86241-12	FERB-LF4-02	Total Recoverable	Water	EPA 6020	269611

Metals (Continued)

Analysis Batch: 269787 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-269611/1-A	Method Blank	Total Recoverable	Water	EPA 6020	269611
LCS 180-269611/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	269611

General Chemistry

Analysis Batch: 269416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86241-1	GWC-18	Total/NA	Water	SM 2540C	
180-86241-2	GWC-9	Total/NA	Water	SM 2540C	
180-86241-3	GWC-1	Total/NA	Water	SM 2540C	
180-86241-4	GWC-11	Total/NA	Water	SM 2540C	
180-86241-7	GWC-12	Total/NA	Water	SM 2540C	
180-86241-8	GWC-23	Total/NA	Water	SM 2540C	
180-86241-11	FB-LF4-02	Total/NA	Water	SM 2540C	
180-86241-12	FERB-LF4-02	Total/NA	Water	SM 2540C	
MB 180-269416/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-269416/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 269417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-86241-5	GWC-21	Total/NA	Water	SM 2540C	
180-86241-6	GWC-10	Total/NA	Water	SM 2540C	
180-86241-9	DUP-LF4-01	Total/NA	Water	SM 2540C	
180-86241-10	DUP-LF4-02	Total/NA	Water	SM 2540C	
MB 180-269417/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-269417/1	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: Southern Company				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308				
Phone:	PO #: SCS10347656			
Email: jabraham@southerco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash **Landfill #4**	Project #: 18019955			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWC-18	1/30/19	10:30	G	W	N	N	X	X	2	LF4 State Compliance
GWC-9		10:10								
GWC-1		11:37								
GWC-11		11:46								
GWC-21		09:30								
GWC-10		10:45								
GWC-12		11:30								
GWC-23		09:45								

180-86241 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: FeREX

	Date/Time	Company		Date/Time	Company
Relinquished by: Peter A	1/30/19 19:00	GEI	Received by: [illegible]	1-31-19	TAP, NT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:00	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: Southern Company				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308				
Phone:	PO #: SCS10347656			
Email: jabraham@southerco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash **Landfill #4**	Project #: 18019955			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
DUP-LF4-01	1/30/19		G	W	N	N	X	X	2	LF4 State Compliance
DUP-LF4-02	↓		↓	↓	↓	↓	↓	↓	↓	
FB-LF4-02		17:01								
FERB-LF4-02	↓	17:02	↓	↓	↓	↓	↓	↓	↓	

Possible Hazard Identification
☑ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☑ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx	
Relinquished by: Peter A	Date/Time: 1/30/19 19:00	Company: GET	Received by: Darlene Watson	Date/Time: 1-31-19 10:00 Company: TA PIT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: Southern Company				Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:	Analysis Requested		
City: Atlanta	TAT Requested (days): Standard			
State, Zip: GA, 30308				
Phone:	PO #: SCS10347656			
Email: jabraham@southerco.com, lmpetty@southernco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Ba, Ca	TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWC-18	1/30/19	10:30	G	W	N	N	X	X	2	LF4 Detection
GWC-9		10:10								
GWC-1		11:37								
GWC-11		11:46								
GWC-21		09:30								
GWC-10		10:45								
GWC-12		11:30								
GWC-23		9:45								

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Peter A	1/30/19	GEI	Bellie Watson	1-31-19 1000	TAPit
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: Southern Company			Analysis Requested	Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			Preservation Codes:
City: Atlanta	TAT Requested (days): Standard			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: GA, 30308				
Phone:	PO #: SCS10347656			Other:
Email: jabraham@southerco.com, lmpetty@southernco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Bo, Ca	TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
DUP-LF4-01	1/30/19		G	W	N	N	X	X	2	LF4 Detection
DUP-LF4-02	↓		↓	↓	↓	↓	↓	↓	↓	
FB-LF4-02		17:01								
FERB-LF4-02	↓	17:02	↓	↓	↓	↓	↓	↓		

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Peter A	1/30/19	GEI	Debbie Walker	1-31-19	TAP IT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:00	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-86241-2
SDG Number: L4 State Compliance

Login Number: 86241
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Site: Georgia Power Plant, Landfill 4 State Compliance
Laboratory: Test America, Pittsburgh, PA
Report No.: 180-86198-2
Reviewer: Lorie MacKinnon/GEI Consultants
Date: March 14, 2019

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
GWA-2	180-86198-01	Metals, Anions, TDS
GWA-3	180-86198-02	Metals, Anions, TDS
GWC-4A	180-86198-03	Metals, Anions, TDS
GWC-5	180-86198-04	Metals, Anions, TDS
GWA-13	180-86198-05	Metals, Anions, TDS
GWA-14	180-86198-06	Metals, Anions, TDS
GWA-16	180-86198-07	Metals, Anions, TDS
GWC-17	180-86198-08	Metals, Anions, TDS
GWC-15	180-86198-09	Metals, Anions, TDS
GWC-19	180-86198-10	Metals, Anions, TDS
GWC-20	180-86198-11	Metals, Anions, TDS
FERB-LFY-01	180-86198-12	Metals, Anions, TDS
FB-LFY-01	180-86198-13	Metals, Anions, TDS

QC Samples: Field/Equipment blanks: FERB-LFY-01, FB-LFY-01

The above-listed aqueous samples, equipment blank, and field blank sample were collected on January 29, 2019 and were analyzed for total recoverable metals (boron and calcium) by SW-846 method 6020, total dissolved solids (TDS) by Standard Methods SM 2540C, and anions (chloride, fluoride, and sulfate) by EPA method 300. The data were reviewed based on the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017 (USEPA-540-R-2017-001), as well as by the methods referenced and professional and technical judgment.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Laboratory and Field Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Quantitation Limits

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The level 2 (reduced deliverable) data package was complete as received by the laboratory and included sample results, method blank, MS/MSD, laboratory duplicate, and LCS results. A revision of this report was received for review which included the correction of reporting limits.

Holding Times and Sample Preservation

All criteria were met.

Blanks

Laboratory Blank Results

Low level laboratory contamination was detected in select laboratory method blank samples. The following table summarizes the contamination and validation actions taken.

Analyte	Blank ID/ Associated Samples	Contaminant Level (mg/L)	10x Action Level (mg/L)	Validation Actions
Chromium	Method MB180-269501: All samples	0.000966	0.00966	Qualify results for chromium in samples GWA-2, GWA-3, GWC-4A, GWC-5, GWA-14, GWA-16, GWC-15, GWC-19, GWC-20, and FB-LFY-01 as nondetect (U) at the RL. Estimate (J) the positive results for chromium in samples GWA-13 and GWC-17; High bias.
Lead		0.000115	0.00115	Qualify results for lead in samples GWA-2, GWA-3, GWC-4A, GWC-5, GWA-13, GWA-14, GWA-16, GWC-17, GWC-15, GWC-19, GWC-20, FERB-LFY-01, and FB-LFY-01 as nondetect (U) at the RL.

Blank Actions:
If the sample result is < reporting limit (RL); report the result as nondetect (U) at the RL.
If the sample result is ≥ RL and <2x blank contamination detected; professional judgment was taken to report the result as nondetect (U) at the reported value.
If the sample result is ≥ 2x blank and < 10x Action Level; report the sample result as estimated (J); biased high.
If the sample result is nondetect or > 10x Action Level; validation action is not required.

Field Blank Results

Contamination was not detected in the associated field blank samples after application of laboratory blank contamination qualifications.

MS/MSD Results

MS/MSD analyses were performed on sample GWA-14 for anions and sample GWA-2 for metals. All criteria were met.

Laboratory Duplicate Results

MSD analyses were performed for anions and metals in lieu of laboratory duplicate analyses.

LCS Results

All criteria were met.

Quantitation Limits

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

NJ - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

NJ - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Site: Georgia Power Plant, Landfill 4 State Compliance
Laboratory: Test America, Pittsburgh, PA
Report No.: 180-86241-2
Reviewer: Lorie MacKinnon/GEI Consultants
Date: May 13, 2019

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
GWC-18	180-86241-01	Metals, Anions, TDS
GWC-9	180-86241-02	Metals, Anions, TDS
GWC-1	180-86241-03	Metals, Anions, TDS
GWC-11	180-86241-04	Metals, Anions, TDS
GWC-21	180-86241-05	Metals, Anions, TDS
GWC-10	180-86241-06	Metals, Anions, TDS
GWC-12	180-86241-07	Metals, Anions, TDS
GWC-23	180-86241-08	Metals, Anions, TDS
DUP-LF4-01	180-86241-09	Metals, Anions, TDS
DUP-LF4-02	180-86241-10	Metals, Anions, TDS
FB-LF4-02	180-86241-11	Metals, Anions, TDS
FERB-LF4-02	180-86241-12	Metals, Anions, TDS

QC Samples: Field/Equipment blanks: FB-LF4-02, FERB-LF4-02
Field Duplicate pairs: GWC-21/DUP-LF4-01 and GWC-10/DUP-LF4-02

The above-listed aqueous samples, equipment blank, and field blank sample were collected on January 30, 2019 and were analyzed for total recoverable metals by SW-846 method 6020, total dissolved solids (TDS) by Standard Methods SM 2540C, and anions (chloride, fluoride, and sulfate) by EPA method 300. The data were reviewed based on the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017 (USEPA-540-R-2017-001), as well as by the methods referenced and professional and technical judgment.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Method and Field Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Field Duplicate Results
- Quantitation Limits

All results are usable as reported or usable with minor qualification due to sample matrix or

laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The level 2 (reduced deliverable) data package was complete as received by the laboratory and included sample results, method blank, MS/MSD, laboratory duplicate, and LCS results. A revision of this report was received for review which included the correction of reporting limits.

Holding Times and Sample Preservation

All criteria were met.

Blanks

Laboratory Blank Results

Low level laboratory contamination was detected in the method blanks. Laboratory blank contamination was evaluated prior to possible field blank contamination. The following table summarizes the contamination and validation actions taken.

Analyte	Blank ID/ Associated Samples	Concentration (mg/L)	10x Action Level (mg/L)	Validation Actions
Silver	Method blank MB180-269611: All samples	0.000157	0.00157	Qualify results for silver in samples GWC-18, GWC-9, GWC-1, GWC-11, GWC-21, GWC-10, GWC-23, and DUP-LF4-01 as nondetect (U) at the RL.
Chromium		0.00117	0.00117	Qualify results for chromium in samples GWC-9, GWC-1, GWC-21, GWC-23, DUP-LF4-01, FB-LF4-02, and FERB-LF4-02 as nondetect (U) at the RL. Estimate (J) the positive results for chromium in samples GWC-18, GWC-11, GWC-10, GWC-12, and DUP-LF4-02; High bias.
Vanadium		0.000971	0.00971	Qualify results for vanadium in samples GWC-1, GWC-21, GWC-12, GWC-11, DUP-LF4-02, and DUP-LF4-01 as nondetect (U) at the reported values. Estimate (J) the positive results for vanadium in samples GWC-18 and GWC-10; High bias.

Blank Actions:
If the sample result is < reporting limit (RL); report the result as nondetect (U) at the RL.
If the sample result is ≥ RL and <2x blank contamination detected; report the result as nondetect (U) at the reported value.
If the sample result is ≥ RL and < 10x Action Level; report the sample result as estimated (J); biased high.
If the sample result is nondetect or > 10x Action Level; validation action is not required.

Field Blank Results

Low level laboratory contamination was detected in the field blanks after evaluation of method blank contamination. The following table summarizes the highest level of contamination and validation actions taken.

Analyte	Blank ID/ Associated Samples	Maximum Contaminant Level (mg/L)	10x Action Level (mg/L)	Validation Actions
Beryllium	FB-LF4-02: All samples	0.000072	0.00072	Qualify results for beryllium in samples GWC-18, GWC-9, GWC-1, GWC-21, GWC-12, GWC-23, DUP-LF4-01, and DUP-LF4-02 as nondetect (U) at the RL.
Calcium		0.14	1.4	Estimate (J) the positive results for calcium in samples GWC-9, GWC-21, GWC-12, GWC-23, and DUP-LF4-01; High bias.
Arsenic	FERB-LF4-02: All samples	0.00060	0.0060	Qualify results for arsenic in samples GWC-18, GWC-10, GWC-23, DUP-LF4-01, and DUP-LF4-02 as nondetect (U) at the RL. Estimate (J) the positive result for arsenic in sample GWC-11; High bias.
Barium		0.0014	0.014	Estimate (J) the positive results for barium in samples GWC-11 and GWC-12; High bias.
Cobalt		0.00032	0.0032	Qualify results for cobalt in samples GWC-18, GWC-9, GWC-1, GWC-21, GWC-12, DUP-LF4-01, and DUP-LF4-02 as nondetect (U) at the RL.
Nickel		0.0011	0.011	Qualify results for nickel in samples GWC-18, GWC-9, GWC-1, GWC-11, GWC-21, GWC-12, GWC-23, and DUP-LF4-01 as nondetect (U) at the RL.
Fluoride		0.026	0.26	Qualify result for fluoride in sampleGWC-1 as nondetect (U) at the RL. Estimate (J) the positive results for fluoride in samples GWC-10 and DUP-LF4-02; High bias.

Blank Actions:
If the sample result is < reporting limit (RL); report the result as nondetect (U) at the RL.
If the sample result is ≥ RL and <2x blank contamination detected; report the result as nondetect (U) at the reported value.
If the sample result is ≥ RL and < 10x Action Level; report the sample result as estimated (J); biased high.
If the sample result is nondetect or > 10x Action Level; validation action is not required.

MS/MSD Results

MS/MSD analyses were performed on sample GWC-23 for anions. All criteria were met.

Laboratory Duplicate Results

MSD analyses were performed for anions in lieu of laboratory duplicate analyses.

LCS Results

All criteria were met.

Field Duplicate Results

Samples GWC-21 and DUP-LF4-01 were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria except for total dissolved solids. Professional judgment was taken to qualify results for total dissolved solids in field samples associated with this sample delivery group as both sets of field duplicate pair RPD criteria were not met. The results for TDS were qualified as estimated (J) in samples GWC-18, GWC-9, GWC-1, GWC-11, GWC-21, GWC-10, GWC-12, GWC-23, DUP-LF4-01, and DUP-LF4-02.

Analyte	GWC-21 (mg/L)	DUP-LF4-01 (mg/L)	RPD (%)
Chloride	6.7	6.6	1.5
Sulfate	0.72 J	0.69 J	4.3
Barium	0.017	0.018	5.7
Cadmium	0.00014 J	0.00017 J	19.4
Calcium	1.0	1.1	9.5
Zinc	0.0025 J	0.0026 J	NC, Within the RL
Thallium	0.00050 U	0.000083 J	NC, Within the RL
Total Dissolved Solids	43	29	**38.9**
NC – Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <30%. When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate >RL.			

Samples GWC-10 and DUP-LF4-02 were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, except for total dissolved solids.

Analyte	GWC-10 (mg/L)	DUP-LF4-02 (mg/L)	RPD (%)
Chloride	5.6	5.3	5.5
Fluoride	0.23	0.21	9.1
Sulfate	5.0	4.6	8.3
Barium	0.023	0.023	0
Chromium	0.0071	0.0063	11.9
Vanadium	0.0027	0.0025 U	NC, Within the RL
Boron	0.055	0.059	7.0
Calcium	26	26	0
Total Dissolved Solids	160	110	**37.0**
NC – Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <30%. When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate >RL.			

Quantitation Limits

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

NJ - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-88160-2
Laboratory Sample Delivery Group: L4 State Compliance
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
4/11/2019 5:54:40 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

Job ID: 180-88160-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-88160-2

Comments
No additional comments.

Receipt
The samples were received on 3/27/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.0º C, 2.2º C

Anions
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19 *
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-19 *
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	01-28-19 *
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-19 *
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	07-31-19

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-88160-1	GWA-13	Water	03/26/19 14:50	03/27/19 09:00
180-88160-2	GWC-5	Water	03/26/19 15:00	03/27/19 09:00
180-88160-3	GWC-4A	Water	03/26/19 15:05	03/27/19 09:00
180-88160-4	GWC-15	Water	03/26/19 15:50	03/27/19 09:00
180-88160-5	GWA-14	Water	03/26/19 16:10	03/27/19 09:00
180-88160-6	GWA-16	Water	03/26/19 16:20	03/27/19 09:00

Method Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

Client Sample ID: GWA-13
Date Collected: 03/26/19 14:50
Date Received: 03/27/19 09:00

Lab Sample ID: 180-88160-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			274661	04/03/19 08:05	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	435550	04/02/19 11:40	DRE	TAL PEN
Total Recoverable	Prep	3005A			50 mL	50 mL	435550	04/02/19 11:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			435657	04/02/19 17:52	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274449	03/30/19 13:52	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-5
Date Collected: 03/26/19 15:00
Date Received: 03/27/19 09:00

Lab Sample ID: 180-88160-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			274661	04/03/19 08:20	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	435550	04/02/19 11:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			435657	04/02/19 18:11	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274274	03/28/19 16:12	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-4A
Date Collected: 03/26/19 15:05
Date Received: 03/27/19 09:00

Lab Sample ID: 180-88160-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			274661	04/03/19 10:54	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	435550	04/02/19 11:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			435657	04/02/19 18:14	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274274	03/28/19 16:12	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-15
Date Collected: 03/26/19 15:50
Date Received: 03/27/19 09:00

Lab Sample ID: 180-88160-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			274661	04/03/19 11:56	MJH	TAL PIT
	Instrument ID: CHIC2100A									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

Client Sample ID: GWC-15
Date Collected: 03/26/19 15:50
Date Received: 03/27/19 09:00

Lab Sample ID: 180-88160-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	435550	04/02/19 11:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			435657	04/02/19 18:18	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274274	03/28/19 16:12	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-14
Date Collected: 03/26/19 16:10
Date Received: 03/27/19 09:00

Lab Sample ID: 180-88160-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			274661	04/03/19 13:10	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	435550	04/02/19 11:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			435657	04/02/19 18:41	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274274	03/28/19 16:12	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-16
Date Collected: 03/26/19 16:20
Date Received: 03/27/19 09:00

Lab Sample ID: 180-88160-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			274661	04/03/19 13:27	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	435550	04/02/19 11:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			435657	04/02/19 18:45	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274274	03/28/19 16:12	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PEN

Batch Type: Prep

DRE = Daniel Etscheid

Batch Type: Analysis

DRE = Daniel Etscheid

Lab: TAL PIT

Batch Type: Analysis

AVS = Abbey Smith

MJH = Matthew Hartman

TAM = Tessa Mastalski

Client Sample ID: GWA-13

Lab Sample ID: 180-88160-1

Date Collected: 03/26/19 14:50
Matrix: Water
Date Received: 03/27/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.5**		1.0	0.71	mg/L			04/03/19 08:05	1
Fluoride	<0.026		0.10	0.026	mg/L			04/03/19 08:05	1
Sulfate	**0.63**	**J**	1.0	0.38	mg/L			04/03/19 08:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/02/19 11:40	04/02/19 17:52	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/02/19 11:40	04/02/19 17:52	5
Barium	**0.016**		0.0025	0.00049	mg/L		04/02/19 11:40	04/02/19 17:52	5
Boron	<0.021		0.050	0.021	mg/L		04/02/19 11:40	04/02/19 17:52	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 17:52	5
Calcium	**0.30**		0.25	0.13	mg/L		04/02/19 11:40	04/02/19 17:52	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 17:52	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/02/19 11:40	04/02/19 17:52	5
Chromium	**0.0014**	**J**	0.0025	0.0011	mg/L		04/02/19 11:40	04/02/19 17:52	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/02/19 11:40	04/02/19 17:52	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/02/19 11:40	04/02/19 17:52	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/02/19 11:40	04/02/19 17:52	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/02/19 11:40	04/02/19 17:52	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/02/19 11:40	04/02/19 17:52	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/02/19 11:40	04/02/19 17:52	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/02/19 11:40	04/02/19 17:52	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/02/19 11:40	04/02/19 17:52	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/30/19 13:52	1

Client Sample ID: GWC-5

Lab Sample ID: 180-88160-2

Date Collected: 03/26/19 15:00
Matrix: Water
Date Received: 03/27/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.6**		1.0	0.71	mg/L			04/03/19 08:20	1
Fluoride	**0.028**	**J**	0.10	0.026	mg/L			04/03/19 08:20	1
Sulfate	**0.68**	**J**	1.0	0.38	mg/L			04/03/19 08:20	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/02/19 11:40	04/02/19 18:11	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/02/19 11:40	04/02/19 18:11	5
Barium	**0.046**		0.0025	0.00049	mg/L		04/02/19 11:40	04/02/19 18:11	5
Boron	<0.021		0.050	0.021	mg/L		04/02/19 11:40	04/02/19 18:11	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:11	5
Calcium	**2.8**		0.25	0.13	mg/L		04/02/19 11:40	04/02/19 18:11	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:11	5
Cobalt	**0.00064**	**J**	0.0025	0.00040	mg/L		04/02/19 11:40	04/02/19 18:11	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/02/19 11:40	04/02/19 18:11	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/02/19 11:40	04/02/19 18:11	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/02/19 11:40	04/02/19 18:11	5

Client Sample ID: GWC-5

Lab Sample ID: 180-88160-2

Date Collected: 03/26/19 15:00
Matrix: Water
Date Received: 03/27/19 09:00

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/02/19 11:40	04/02/19 18:11	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/02/19 11:40	04/02/19 18:11	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/02/19 11:40	04/02/19 18:11	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/02/19 11:40	04/02/19 18:11	5
Vanadium	**0.0015**	**J**	0.0025	0.0014	mg/L		04/02/19 11:40	04/02/19 18:11	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/02/19 11:40	04/02/19 18:11	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**21**		10	10	mg/L			03/28/19 16:12	1

Client Sample ID: GWC-4A

Lab Sample ID: 180-88160-3

Date Collected: 03/26/19 15:05
Matrix: Water
Date Received: 03/27/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.7**		1.0	0.71	mg/L			04/03/19 10:54	1
Fluoride	<0.026		0.10	0.026	mg/L			04/03/19 10:54	1
Sulfate	**11**		1.0	0.38	mg/L			04/03/19 10:54	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/02/19 11:40	04/02/19 18:14	5
Arsenic	**0.00050**	**J**	0.0013	0.00046	mg/L		04/02/19 11:40	04/02/19 18:14	5
Barium	**0.023**		0.0025	0.00049	mg/L		04/02/19 11:40	04/02/19 18:14	5
Boron	<0.021		0.050	0.021	mg/L		04/02/19 11:40	04/02/19 18:14	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:14	5
Calcium	**0.53**		0.25	0.13	mg/L		04/02/19 11:40	04/02/19 18:14	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:14	5
Cobalt	**0.0037**		0.0025	0.00040	mg/L		04/02/19 11:40	04/02/19 18:14	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/02/19 11:40	04/02/19 18:14	5
Copper	**0.0021**	**J**	0.0025	0.0021	mg/L		04/02/19 11:40	04/02/19 18:14	5
Nickel	**0.0021**	**J**	0.0025	0.0018	mg/L		04/02/19 11:40	04/02/19 18:14	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/02/19 11:40	04/02/19 18:14	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/02/19 11:40	04/02/19 18:14	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/02/19 11:40	04/02/19 18:14	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/02/19 11:40	04/02/19 18:14	5
Vanadium	**0.0027**		0.0025	0.0014	mg/L		04/02/19 11:40	04/02/19 18:14	5
Zinc	**0.010**	**J**	0.020	0.0065	mg/L		04/02/19 11:40	04/02/19 18:14	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**39**		10	10	mg/L			03/28/19 16:12	1

Client Sample ID: GWC-15

Lab Sample ID: 180-88160-4

Date Collected: 03/26/19 15:50
Matrix: Water
Date Received: 03/27/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.8**		1.0	0.71	mg/L			04/03/19 11:56	1
Fluoride	<0.026		0.10	0.026	mg/L			04/03/19 11:56	1
Sulfate	**0.79**	**J**	1.0	0.38	mg/L			04/03/19 11:56	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/02/19 11:40	04/02/19 18:18	5
Arsenic	**0.00075**	**J**	0.0013	0.00046	mg/L		04/02/19 11:40	04/02/19 18:18	5
Barium	**0.028**		0.0025	0.00049	mg/L		04/02/19 11:40	04/02/19 18:18	5
Boron	<0.021		0.050	0.021	mg/L		04/02/19 11:40	04/02/19 18:18	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:18	5
Calcium	**0.58**		0.25	0.13	mg/L		04/02/19 11:40	04/02/19 18:18	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:18	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/02/19 11:40	04/02/19 18:18	5
Chromium	**0.0016**	**J**	0.0025	0.0011	mg/L		04/02/19 11:40	04/02/19 18:18	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/02/19 11:40	04/02/19 18:18	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/02/19 11:40	04/02/19 18:18	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/02/19 11:40	04/02/19 18:18	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/02/19 11:40	04/02/19 18:18	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/02/19 11:40	04/02/19 18:18	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/02/19 11:40	04/02/19 18:18	5
Vanadium	**0.0041**		0.0025	0.0014	mg/L		04/02/19 11:40	04/02/19 18:18	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/02/19 11:40	04/02/19 18:18	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**17**		10	10	mg/L			03/28/19 16:12	1

Client Sample ID: GWA-14

Lab Sample ID: 180-88160-5

Date Collected: 03/26/19 16:10
Matrix: Water
Date Received: 03/27/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.1**		1.0	0.71	mg/L			04/03/19 13:10	1
Fluoride	<0.026		0.10	0.026	mg/L			04/03/19 13:10	1
Sulfate	**0.92**	**J**	1.0	0.38	mg/L			04/03/19 13:10	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/02/19 11:40	04/02/19 18:41	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/02/19 11:40	04/02/19 18:41	5
Barium	**0.012**		0.0025	0.00049	mg/L		04/02/19 11:40	04/02/19 18:41	5
Boron	<0.021		0.050	0.021	mg/L		04/02/19 11:40	04/02/19 18:41	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:41	5
Calcium	**0.42**		0.25	0.13	mg/L		04/02/19 11:40	04/02/19 18:41	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:41	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/02/19 11:40	04/02/19 18:41	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/02/19 11:40	04/02/19 18:41	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/02/19 11:40	04/02/19 18:41	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/02/19 11:40	04/02/19 18:41	5

Client Sample ID: GWA-14

Lab Sample ID: 180-88160-5

Date Collected: 03/26/19 16:10
Matrix: Water
Date Received: 03/27/19 09:00

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/02/19 11:40	04/02/19 18:41	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/02/19 11:40	04/02/19 18:41	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/02/19 11:40	04/02/19 18:41	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/02/19 11:40	04/02/19 18:41	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/02/19 11:40	04/02/19 18:41	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/02/19 11:40	04/02/19 18:41	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**17**		10	10	mg/L			03/28/19 16:12	1

Client Sample ID: GWA-16

Lab Sample ID: 180-88160-6

Date Collected: 03/26/19 16:20
Matrix: Water
Date Received: 03/27/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.6**		1.0	0.71	mg/L			04/03/19 13:27	1
Fluoride	<0.026		0.10	0.026	mg/L			04/03/19 13:27	1
Sulfate	**0.90**	**J**	1.0	0.38	mg/L			04/03/19 13:27	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/02/19 11:40	04/02/19 18:45	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/02/19 11:40	04/02/19 18:45	5
Barium	**0.023**		0.0025	0.00049	mg/L		04/02/19 11:40	04/02/19 18:45	5
Boron	<0.021		0.050	0.021	mg/L		04/02/19 11:40	04/02/19 18:45	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:45	5
Calcium	**0.37**		0.25	0.13	mg/L		04/02/19 11:40	04/02/19 18:45	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 18:45	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/02/19 11:40	04/02/19 18:45	5
Chromium	**0.0015**	**J**	0.0025	0.0011	mg/L		04/02/19 11:40	04/02/19 18:45	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/02/19 11:40	04/02/19 18:45	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/02/19 11:40	04/02/19 18:45	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/02/19 11:40	04/02/19 18:45	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/02/19 11:40	04/02/19 18:45	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/02/19 11:40	04/02/19 18:45	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/02/19 11:40	04/02/19 18:45	5
Vanadium	**0.0019**	**J**	0.0025	0.0014	mg/L		04/02/19 11:40	04/02/19 18:45	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/02/19 11:40	04/02/19 18:45	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**27**		10	10	mg/L			03/28/19 16:12	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-274661/6
Matrix: Water
Analysis Batch: 274661

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/03/19 06:33	1
Fluoride	<0.026		0.10	0.026	mg/L			04/03/19 06:33	1
Sulfate	<0.38		1.0	0.38	mg/L			04/03/19 06:33	1

Lab Sample ID: LCS 180-274661/5
Matrix: Water
Analysis Batch: 274661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	27.1		mg/L		108	90 - 110
Fluoride	1.25	1.28		mg/L		103	90 - 110
Sulfate	25.0	26.5		mg/L		106	90 - 110

Lab Sample ID: 180-88160-2 MS
Matrix: Water
Analysis Batch: 274661

Client Sample ID: GWC-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.6		25.0	30.0		mg/L		105	80 - 120
Fluoride	0.028	J	1.25	1.26		mg/L		98	80 - 120
Sulfate	0.68	J	25.0	25.6		mg/L		100	80 - 120

Lab Sample ID: 180-88160-2 MSD
Matrix: Water
Analysis Batch: 274661

Client Sample ID: GWC-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.6		25.0	30.0		mg/L		106	80 - 120	0	20
Fluoride	0.028	J	1.25	1.28		mg/L		100	80 - 120	2	20
Sulfate	0.68	J	25.0	26.0		mg/L		101	80 - 120	2	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-435550/1-A ^5
Matrix: Water
Analysis Batch: 435657

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 435550

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/02/19 11:40	04/02/19 17:40	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/02/19 11:40	04/02/19 17:40	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/02/19 11:40	04/02/19 17:40	5
Boron	<0.021		0.050	0.021	mg/L		04/02/19 11:40	04/02/19 17:40	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 17:40	5
Calcium	<0.13		0.25	0.13	mg/L		04/02/19 11:40	04/02/19 17:40	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/02/19 11:40	04/02/19 17:40	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/02/19 11:40	04/02/19 17:40	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/02/19 11:40	04/02/19 17:40	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/02/19 11:40	04/02/19 17:40	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/02/19 11:40	04/02/19 17:40	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/02/19 11:40	04/02/19 17:40	5

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 400-435550/1-A ^5
Matrix: Water
Analysis Batch: 435657

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 435550

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/02/19 11:40	04/02/19 17:40	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/02/19 11:40	04/02/19 17:40	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/02/19 11:40	04/02/19 17:40	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/02/19 11:40	04/02/19 17:40	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/02/19 11:40	04/02/19 17:40	5

Lab Sample ID: LCS 400-435550/2-A
Matrix: Water
Analysis Batch: 435657

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 435550

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0501		mg/L		100	80 - 120
Arsenic	0.0500	0.0539		mg/L		108	80 - 120
Barium	0.0500	0.0534		mg/L		107	80 - 120
Boron	0.100	0.0997		mg/L		100	80 - 120
Beryllium	0.0500	0.0507		mg/L		101	80 - 120
Calcium	5.00	5.15		mg/L		103	80 - 120
Cadmium	0.0500	0.0551		mg/L		110	80 - 120
Cobalt	0.0500	0.0539		mg/L		108	80 - 120
Chromium	0.0500	0.0530		mg/L		106	80 - 120
Copper	0.0500	0.0545		mg/L		109	80 - 120
Nickel	0.0500	0.0535		mg/L		107	80 - 120
Lead	0.0500	0.0484		mg/L		97	80 - 120
Antimony	0.0500	0.0507		mg/L		101	80 - 120
Selenium	0.0500	0.0503		mg/L		101	80 - 120
Thallium	0.0100	0.00957		mg/L		96	80 - 120
Vanadium	0.0500	0.0521		mg/L		104	80 - 120
Zinc	0.0500	0.0529		mg/L		106	80 - 120

Lab Sample ID: 180-88160-1 MS
Matrix: Water
Analysis Batch: 435657

Client Sample ID: GWA-13
Prep Type: Total Recoverable
Prep Batch: 435550

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<0.00011		0.0500	0.0486		mg/L		97	75 - 125
Arsenic	<0.00046		0.0500	0.0528		mg/L		106	75 - 125
Barium	0.016		0.0500	0.0663		mg/L		101	75 - 125
Boron	<0.021		0.100	0.116		mg/L		116	75 - 125
Beryllium	<0.00034		0.0500	0.0510		mg/L		102	75 - 125
Calcium	0.30		5.00	5.22		mg/L		99	75 - 125
Cadmium	<0.00034		0.0500	0.0537		mg/L		107	75 - 125
Cobalt	<0.00040		0.0500	0.0519		mg/L		104	75 - 125
Chromium	0.0014	J	0.0500	0.0507		mg/L		99	75 - 125
Copper	<0.0021		0.0500	0.0529		mg/L		106	75 - 125
Nickel	<0.0018		0.0500	0.0509		mg/L		102	75 - 125
Lead	<0.00035		0.0500	0.0488		mg/L		98	75 - 125
Antimony	<0.0010		0.0500	0.0488		mg/L		98	75 - 125
Selenium	<0.00071		0.0500	0.0522		mg/L		104	75 - 125
Thallium	<0.000085		0.0100	0.00961		mg/L		96	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-88160-1 MS
Matrix: Water
Analysis Batch: 435657

Client Sample ID: GWA-13
Prep Type: Total Recoverable
Prep Batch: 435550

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	<0.0014		0.0500	0.0504		mg/L		101	75 - 125
Zinc	<0.0065		0.0500	0.0521		mg/L		104	75 - 125

Lab Sample ID: 180-88160-1 MSD
Matrix: Water
Analysis Batch: 435657

Client Sample ID: GWA-13
Prep Type: Total Recoverable
Prep Batch: 435550

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<0.00011		0.0500	0.0490		mg/L		98	75 - 125	1	20
Arsenic	<0.00046		0.0500	0.0529		mg/L		106	75 - 125	0	20
Barium	0.016		0.0500	0.0667		mg/L		102	75 - 125	1	20
Boron	<0.021		0.100	0.118		mg/L		118	75 - 125	2	20
Beryllium	<0.00034		0.0500	0.0522		mg/L		104	75 - 125	2	20
Calcium	0.30		5.00	5.22		mg/L		98	75 - 125	0	20
Cadmium	<0.00034		0.0500	0.0528		mg/L		106	75 - 125	2	20
Cobalt	<0.00040		0.0500	0.0526		mg/L		105	75 - 125	1	20
Chromium	0.0014	J	0.0500	0.0524		mg/L		102	75 - 125	3	20
Copper	<0.0021		0.0500	0.0522		mg/L		104	75 - 125	1	20
Nickel	<0.0018		0.0500	0.0507		mg/L		101	75 - 125	0	20
Lead	<0.00035		0.0500	0.0496		mg/L		99	75 - 125	2	20
Antimony	<0.0010		0.0500	0.0483		mg/L		97	75 - 125	1	20
Selenium	<0.00071		0.0500	0.0532		mg/L		106	75 - 125	2	20
Thallium	<0.000085		0.0100	0.00978		mg/L		98	75 - 125	2	20
Vanadium	<0.0014		0.0500	0.0510		mg/L		102	75 - 125	1	20
Zinc	<0.0065		0.0500	0.0517		mg/L		103	75 - 125	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-274274/2
Matrix: Water
Analysis Batch: 274274

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/28/19 16:12	1

Lab Sample ID: LCS 180-274274/1
Matrix: Water
Analysis Batch: 274274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	304	304		mg/L		100	80 - 120

Lab Sample ID: MB 180-274449/2
Matrix: Water
Analysis Batch: 274449

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/30/19 13:52	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 180-274449/1
Matrix: Water
Analysis Batch: 274449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			304	260		mg/L		86	80 - 120		

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

HPLC/IC

Analysis Batch: 274661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88160-1	GWA-13	Total/NA	Water	EPA 300.0 R2.1	
180-88160-2	GWC-5	Total/NA	Water	EPA 300.0 R2.1	
180-88160-3	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	
180-88160-4	GWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-88160-5	GWA-14	Total/NA	Water	EPA 300.0 R2.1	
180-88160-6	GWA-16	Total/NA	Water	EPA 300.0 R2.1	
MB 180-274661/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-274661/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-88160-2 MS	GWC-5	Total/NA	Water	EPA 300.0 R2.1	
180-88160-2 MSD	GWC-5	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 435550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88160-1	GWA-13	Total Recoverable	Water	3005A	
180-88160-2	GWC-5	Total Recoverable	Water	3005A	
180-88160-3	GWC-4A	Total Recoverable	Water	3005A	
180-88160-4	GWC-15	Total Recoverable	Water	3005A	
180-88160-5	GWA-14	Total Recoverable	Water	3005A	
180-88160-6	GWA-16	Total Recoverable	Water	3005A	
MB 400-435550/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-435550/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-88160-1 MS	GWA-13	Total Recoverable	Water	3005A	
180-88160-1 MSD	GWA-13	Total Recoverable	Water	3005A	

Analysis Batch: 435657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88160-1	GWA-13	Total Recoverable	Water	6020	435550
180-88160-2	GWC-5	Total Recoverable	Water	6020	435550
180-88160-3	GWC-4A	Total Recoverable	Water	6020	435550
180-88160-4	GWC-15	Total Recoverable	Water	6020	435550
180-88160-5	GWA-14	Total Recoverable	Water	6020	435550
180-88160-6	GWA-16	Total Recoverable	Water	6020	435550
MB 400-435550/1-A ^5	Method Blank	Total Recoverable	Water	6020	435550
LCS 400-435550/2-A	Lab Control Sample	Total Recoverable	Water	6020	435550
180-88160-1 MS	GWA-13	Total Recoverable	Water	6020	435550
180-88160-1 MSD	GWA-13	Total Recoverable	Water	6020	435550

General Chemistry

Analysis Batch: 274274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88160-2	GWC-5	Total/NA	Water	SM 2540C	
180-88160-3	GWC-4A	Total/NA	Water	SM 2540C	
180-88160-4	GWC-15	Total/NA	Water	SM 2540C	
180-88160-5	GWA-14	Total/NA	Water	SM 2540C	
180-88160-6	GWA-16	Total/NA	Water	SM 2540C	
MB 180-274274/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-274274/1	Lab Control Sample	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88160-2
SDG: L4 State Compliance

General Chemistry

Analysis Batch: 274449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88160-1	GWA-13	Total/NA	Water	SM 2540C	
MB 180-274449/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-274449/1	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information

Client Contact: Ms. Lauren Petty
Company: Southern Company
Address: PO BOX 2641 GSC8
City: Birmingham
State, Zip: AL, 35291
Phone: 205-992-5417(Tel)
Email: lmpetty@southernco.com
Project Name: CCR - Plant McIntosh Ash Landfill #4
Site:

Sampler: L. Coker, J. Adcock, J. Noles
Phone: 404-592-0094
Due Date Requested:
TAT Requested (days): Standard
PO #: SCS10347656
WO #:
Project #: 18019955
SSOW#:

Lab PM: Bortot, Veronica
E-Mail: veronica.bortot@testamericainc.com
Carrier Tracking No(s):
COC No:
Page: Page 1 of 1
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, B, Ba, Be, Ca, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	2540C-TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWA-13	3/26/19	1450	G	W	N	N	X	X	2	LF4 State Compliance
GWC-5	3/26/19	1500	G	W	N	N	X	X	2	
GWC-4A	3/26/19	1505	G	W	N	N	X	X	2	
GWC-15	3/26/19	1550	G	W	N	N	X	X	2	
GWA-14	3/26/19	1610	G	W	N	N	X	X	2	
GWA-16	3/26/19	1620	G	W	N	N	X	X	2	

180-88160 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	3/26/19 1900	GEI	FedEx	3/26/19 1900	
			[signature]	3-27-19 900	TAPitt

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: P. Adams, L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Ms. Lauren Petty	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 1
Company: Southern Company				Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:			
City: Birmingham	TAT Requested (days): Standard			
State, Zip: AL, 35291				
Phone: 205-992-5417(Tel)	PO #: SCS10347656			
Email: lmpetty@southernco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - B, Ca	2540C-TDS, 300_ORGFM_28D Chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWA-13	3/26/19	1450	G	W	N	N	X	X	2	LF4 Detection
GWC-5	3/26/19	1500	G	W	N	N	X	X	2	
GWC-4A	3/26/19	1505	G	W	N	N	X	X	2	
GWC-1S	3/26/19	1550	G	W	N	N	X	X	2	
GWA-14	3/26/19	1610	G	W	N	N	X	X	2	
GWA-16	3/26/19	1620	G	W	N	N	X	X	2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Lauren Petty	3/26/19 1900	GEI	Fedex	3/26/19 1900	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

ORIGIN ID:SAVA (819) 724-7237
JAKE ADCOCK

RIDC PARK
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 26MAR19
ACTWGT: 43.60 LB
CAD: 006994919/SSFE2002
DIMS: 24x13x14 IN

BILL THIRD PARTY

TO VERONICA BORTOT
TEST AMERICA – PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058
INV:
PO:
REF:
DEPT:

FedEx Express

1 of 3
TRK# 0201 7862 7008 2007
MASTER
XH AGCA

WED – 27 MAR 10:30A
PRIORITY OVERNIGHT

15238
PA-US PIT

Uncorrected temp 15.7 °C
Thermometer ID Mtee
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

ORIGIN ID:SAVA (819) 724-7237
JAKE ADCOCK

RIDC PARK
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 26MAR19
ACTWGT: 55.00 LB
CAD: 006994919/SSFE2002
DIMS: 24x13x14 IN

BILL THIRD P

180-88160 Waybill

TO VERONICA BORTOT
TEST AMERICA – PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058
INV:
PO:
REF:
DEPT:

3 of 3
MPS# 0263 7862 7008 2029
Mstr# 7862 7008 2007
0201

WED – 27 MAR 10:30A
PRIORITY OVERNIGHT

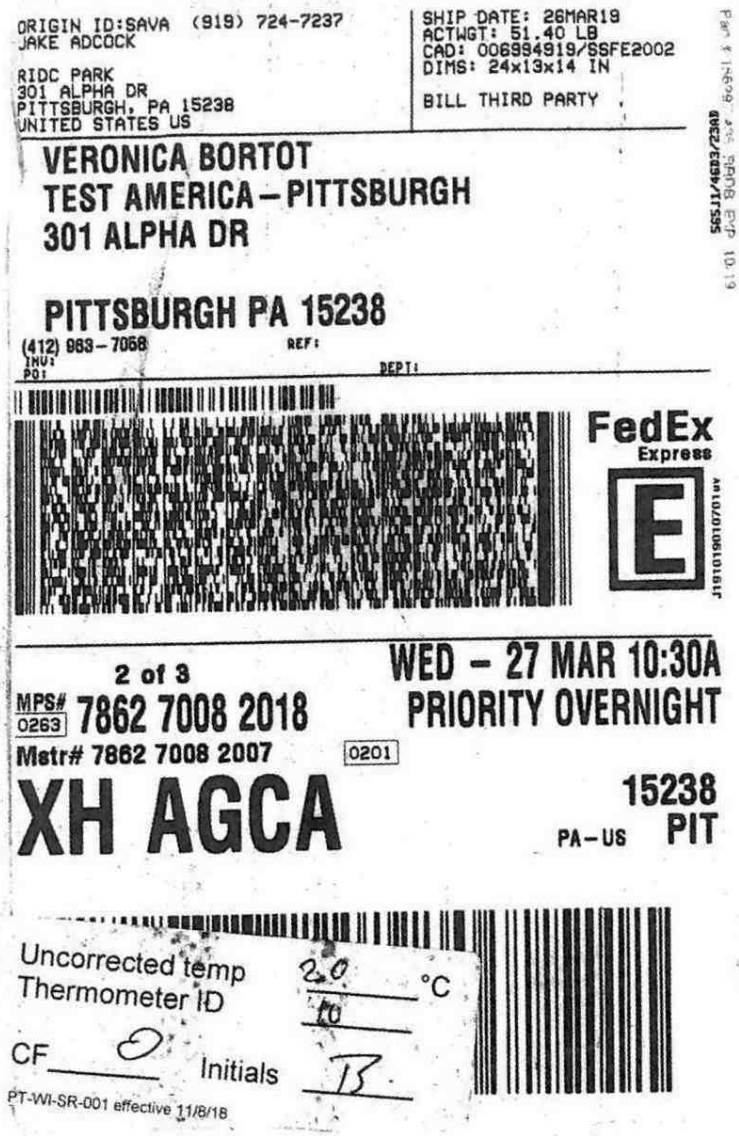
XH AGCA

15238
PA-US PIT

Uncorrected temp 22 °C
Thermometer ID 10
CF 0 Initials JB

PT-WI-SR-001 effective 11/8/18

RT 97



ORIGIN ID:SAVA (919) 724-7237
JAKE ADCOCK

RIDC PARK
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 26MAR19
ACTWGT: 51.40 LB
CAD: 006994919/SSFE2002
DIMS: 24x13x14 IN

BILL THIRD PARTY

VERONICA BORTOT
TEST AMERICA – PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238
(412) 963-7058 REF:
INV:
PO: DEPT:

FedEx Express

2 of 3
MPS# 0263 7862 7008 2018
Mstr# 7862 7008 2007 0201

WED – 27 MAR 10:30A
PRIORITY OVERNIGHT

XH AGCA

15238
PA-US PIT

Uncorrected temp 2.0 °C
Thermometer ID to
CF 0 Initials B.
PT-WI-SR-001 effective 11/8/18

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-358450.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-88160-1
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/8/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3005A (MOD) Edison Single Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GWA-13 (180-88160-1)	3/26/19	14:50 Eastern		Water			X	1	B and Ca logged twice; once in job1 and then job 2; upload results into both
GWC-5 (180-88160-2)	3/26/19	15:00 Eastern		Water			X	1	
GWC-4A (180-88160-3)	3/26/19	15:05 Eastern		Water			X	1	
GWC-15 (180-88160-4)	3/26/19	15:50 Eastern		Water			X	1	
GWA-14 (180-88160-5)	3/26/19	16:10 Eastern		Water			X	1	
GWA-16 (180-88160-6)	3/26/19	16:20 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/28/19 17:00	MSI			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	3-29-19 8:50	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		4.5° IR7

Ver: 01/16/2019

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-358450.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-88160-2
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/8/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3005A SbAsBaBeCdCrCoCuPbNiSeAgTlVZnBCa	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
GWA-13 (180-88160-1)	3/26/19	14:50 Eastern		Water			X	1	B and Ca logged twice; once in job1 and then job 2; upload results into both
GWC-5 (180-88160-2)	3/26/19	15:00 Eastern		Water			X	1	
GWC-4A (180-88160-3)	3/26/19	15:05 Eastern		Water			X	1	
GWC-15 (180-88160-4)	3/26/19	15:50 Eastern		Water			X	1	
GWA-14 (180-88160-5)	3/26/19	16:10 Eastern		Water			X	1	
GWA-16 (180-88160-6)	3/26/19	16:20 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

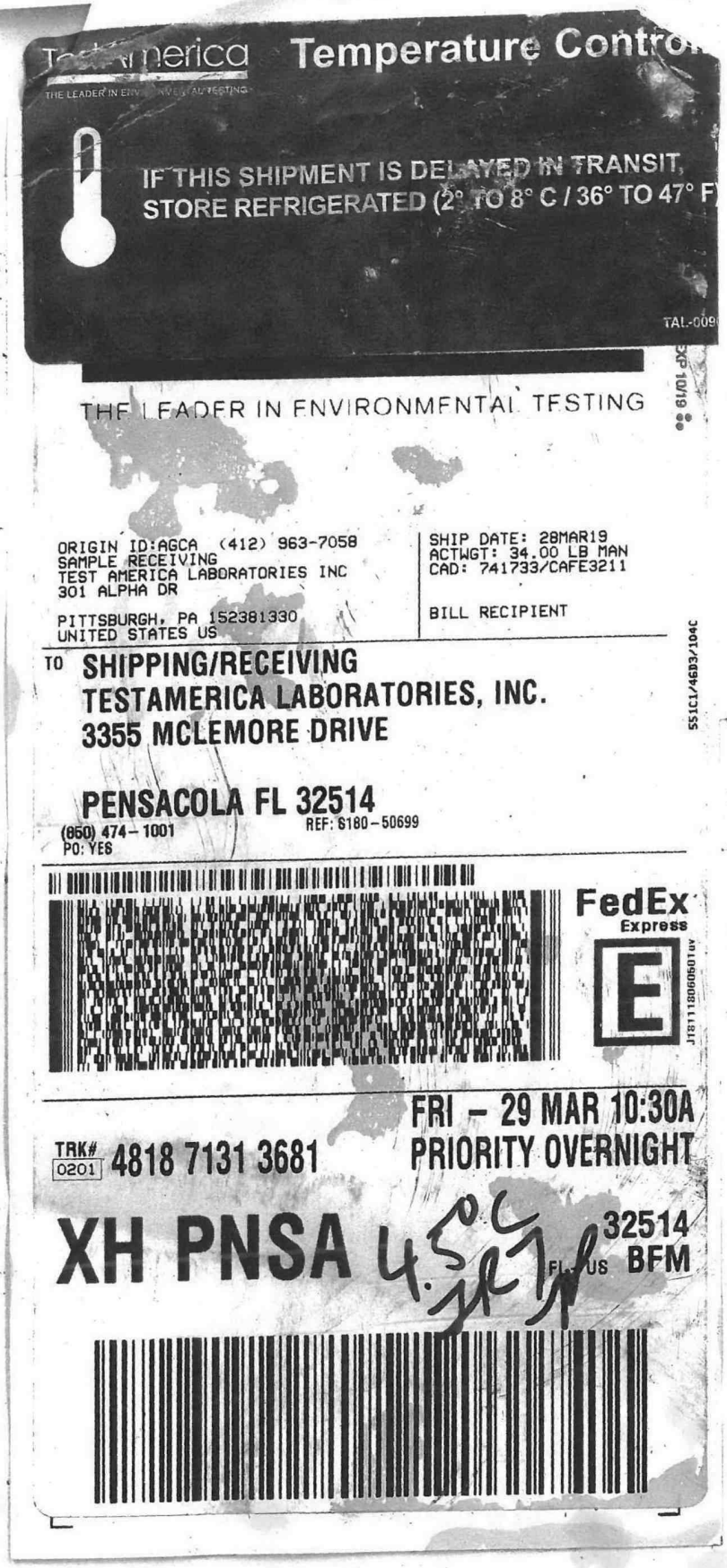
Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/28/19 1200	TAPitt			
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 3-29-19 8:50	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.5° IR

Ver: 01/16/2019


Temperature Control
IF THIS SHIPMENT IS DELAYED IN TRANSIT,
STORE REFRIGERATED (2° TO 8° C / 36° TO 47° F)
TAL-009
THE LEADER IN ENVIRONMENTAL TESTING
ORIGIN ID:AGCA (412) 963-7058
SAMPLE RECEIVING
TEST AMERICA LABORATORIES INC
301 ALPHA DR
PITTSBURGH, PA 152381330
UNITED STATES US
SHIP DATE: 28MAR19
ACTWGT: 34.00 LB MAN
CAD: 741733/CAFE3211
BILL RECIPIENT
TO SHIPPING/RECEIVING
TESTAMERICA LABORATORIES, INC.
3355 MCLEMORE DRIVE
PENSACOLA FL 32514
(850) 474-1001
REF: 6180-50699
PO: YES
FedEx
Express
TRK# 0201 4818 7131 3681
FRI - 29 MAR 10:30A
PRIORITY OVERNIGHT
XH PNSA
4.5°C
32514
FL US
BFM

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-88160-2
SDG Number: L4 State Compliance

Login Number: 88160
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-88160-2
SDG Number: L4 State Compliance

Login Number: 88160
List Number: 2
Creator: Conrady, Hank W

List Source: Eurofins TestAmerica, Pensacola
List Creation: 03/29/19 05:30 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-88225-2
Laboratory Sample Delivery Group: State Compliance
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
4/11/2019 5:16:56 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Job ID: 180-88225-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-88225-2

Comments
No additional comments.

Receipt
The samples were received on 3/28/2019 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.9º C and 3.4º C.

Receipt Exception

GWC-20 (180-88225-6) The following sample has no collection time listed on the containers.

Anions
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19 *
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-19 *
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	01-28-19 *
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-19 *
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	07-31-19

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-88225-1	GWC-17	Water	03/27/19 09:40	03/28/19 08:45
180-88225-2	GWA-3	Water	03/27/19 09:55	03/28/19 08:45
180-88225-3	GWC-18	Water	03/27/19 10:00	03/28/19 08:45
180-88225-4	GWC-19	Water	03/27/19 10:50	03/28/19 08:45
180-88225-5	GWA-2	Water	03/27/19 11:15	03/28/19 08:45
180-88225-6	GWC-20	Water	03/27/19 11:15	03/28/19 08:45
180-88225-7	GWC-21	Water	03/27/19 12:00	03/28/19 08:45
180-88225-8	GWC-23	Water	03/27/19 12:50	03/28/19 08:45
180-88225-9	GWC-9	Water	03/27/19 13:05	03/28/19 08:45
180-88225-10	GWC-10	Water	03/27/19 13:20	03/28/19 08:45
180-88225-11	GWC-12	Water	03/27/19 14:30	03/28/19 08:45

Method Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Client Sample ID: GWC-17
Date Collected: 03/27/19 09:40
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 15:40	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:02	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-3
Date Collected: 03/27/19 09:55
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 16:27	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:06	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-18
Date Collected: 03/27/19 10:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 16:43	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:10	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-19
Date Collected: 03/27/19 10:50
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 16:59	MJH	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Client Sample ID: GWC-19
Date Collected: 03/27/19 10:50
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:34	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-2
Date Collected: 03/27/19 11:15
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 17:15	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:38	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-20
Date Collected: 03/27/19 11:15
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 18:02	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:41	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-21
Date Collected: 03/27/19 12:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 18:18	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:45	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Client Sample ID: GWC-23
Date Collected: 03/27/19 12:50
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 18:34	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:49	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-9
Date Collected: 03/27/19 13:05
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 18:50	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:53	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274517	04/01/19 15:53	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-10
Date Collected: 03/27/19 13:20
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 19:05	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 22:57	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-12
Date Collected: 03/27/19 14:30
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 19:21	MJH	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Client Sample ID: GWC-12
Date Collected: 03/27/19 14:30
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	436360	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 23:01	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PEN
- Batch Type: Prep
  - DRE = Daniel Etscheid
- Batch Type: Analysis
  - DRE = Daniel Etscheid

Lab: TAL PIT
- Batch Type: Analysis
  - MJH = Matthew Hartman
  - TAM = Tessa Mastalski

Client Sample ID: GWC-17

Date Collected: 03/27/19 09:40
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.1**		1.0	0.71	mg/L			04/08/19 15:40	1
Fluoride	**0.10**	**J**	0.20	0.026	mg/L			04/08/19 15:40	1
Sulfate	<0.38		1.0	0.38	mg/L			04/08/19 15:40	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:02	5
Arsenic	**0.00097**	**J**	0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:02	5
Barium	**0.017**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:02	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:02	5
Beryllium	**0.00062**	**J**	0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:02	5
Calcium	**2.0**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:02	5
Cadmium	**0.00041**	**J**	0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:02	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:02	5
Chromium	**0.0028**		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:02	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:02	5
Nickel	**0.0018**	**J**	0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:02	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:02	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:02	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:02	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:02	5
Vanadium	**0.0040**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:02	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:02	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**38**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWA-3

Date Collected: 03/27/19 09:55
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.5**		1.0	0.71	mg/L			04/08/19 16:27	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 16:27	1
Sulfate	**0.70**	**J**	1.0	0.38	mg/L			04/08/19 16:27	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:06	5
Arsenic	**0.0011**	**J**	0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:06	5
Barium	**0.014**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:06	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:06	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:06	5
Calcium	**0.73**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:06	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:06	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:06	5
Chromium	**0.0014**	**J**	0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:06	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:06	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:06	5

Client Sample ID: GWA-3

Lab Sample ID: 180-88225-2
Date Collected: 03/27/19 09:55
Matrix: Water
Date Received: 03/28/19 08:45

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:06	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:06	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:06	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:06	5
Vanadium	**0.0047**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:06	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:06	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**35**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWC-18

Lab Sample ID: 180-88225-3
Date Collected: 03/27/19 10:00
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.3**		1.0	0.71	mg/L			04/08/19 16:43	1
Fluoride	**0.49**		0.20	0.026	mg/L			04/08/19 16:43	1
Sulfate	**4.8**		1.0	0.38	mg/L			04/08/19 16:43	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:10	5
Arsenic	**0.0019**		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:10	5
Barium	**0.014**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:10	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:10	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:10	5
Calcium	**11**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:10	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:10	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:10	5
Chromium	**0.0025**		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:10	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:10	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:10	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:10	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:10	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:10	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:10	5
Vanadium	**0.0074**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:10	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:10	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**79**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWC-19

Lab Sample ID: 180-88225-4

Date Collected: 03/27/19 10:50
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.5**		1.0	0.71	mg/L			04/08/19 16:59	1
Fluoride	**0.072**	**J**	0.20	0.026	mg/L			04/08/19 16:59	1
Sulfate	**1.6**		1.0	0.38	mg/L			04/08/19 16:59	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:34	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:34	5
Barium	**0.013**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:34	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:34	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:34	5
Calcium	**9.2**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:34	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:34	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:34	5
Chromium	**0.0014**	**J**	0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:34	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:34	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:34	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:34	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:34	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:34	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:34	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:34	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:34	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**61**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWA-2

Lab Sample ID: 180-88225-5

Date Collected: 03/27/19 11:15
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.5**		1.0	0.71	mg/L			04/08/19 17:15	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 17:15	1
Sulfate	<0.38		1.0	0.38	mg/L			04/08/19 17:15	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:38	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:38	5
Barium	**0.030**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:38	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:38	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:38	5
Calcium	**0.37**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:38	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:38	5
Cobalt	**0.0011**	**J**	0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:38	5
Chromium	**0.0016**	**J**	0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:38	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:38	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:38	5

Client Sample ID: GWA-2

Date Collected: 03/27/19 11:15
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-5

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:38	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:38	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:38	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:38	5
Vanadium	**0.0019**	**J**	0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:38	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:38	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**36**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWC-20

Date Collected: 03/27/19 11:15
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-6

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.9**		1.0	0.71	mg/L			04/08/19 18:02	1
Fluoride	**0.034**	**J**	0.20	0.026	mg/L			04/08/19 18:02	1
Sulfate	**1.7**		1.0	0.38	mg/L			04/08/19 18:02	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:41	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:41	5
Barium	**0.018**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:41	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:41	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:41	5
Calcium	**1.5**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:41	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:41	5
Cobalt	**0.0012**	**J**	0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:41	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:41	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:41	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:41	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:41	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:41	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:41	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:41	5
Vanadium	**0.0031**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:41	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:41	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**57**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWC-21

Lab Sample ID: 180-88225-7

Date Collected: 03/27/19 12:00

Matrix: Water

Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.3**		1.0	0.71	mg/L			04/08/19 18:18	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 18:18	1
Sulfate	**0.92**	**J**	1.0	0.38	mg/L			04/08/19 18:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:45	5
Arsenic	**0.00074**	**J**	0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:45	5
Barium	**0.016**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:45	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:45	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:45	5
Calcium	**1.1**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:45	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:45	5
Cobalt	**0.0010**	**J**	0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:45	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:45	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:45	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:45	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:45	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:45	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:45	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:45	5
Vanadium	**0.0049**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:45	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:45	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**33**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWC-23

Lab Sample ID: 180-88225-8

Date Collected: 03/27/19 12:50

Matrix: Water

Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.2**		1.0	0.71	mg/L			04/08/19 18:34	1
Fluoride	**0.027**	**J**	0.20	0.026	mg/L			04/08/19 18:34	1
Sulfate	**2.8**		1.0	0.38	mg/L			04/08/19 18:34	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:49	5
Arsenic	**0.00079**	**J**	0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:49	5
Barium	**0.027**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:49	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:49	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:49	5
Calcium	**1.4**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:49	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:49	5
Cobalt	**0.0060**		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:49	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:49	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:49	5
Nickel	**0.0018**	**J**	0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:49	5

Client Sample ID: GWC-23

Lab Sample ID: 180-88225-8

Date Collected: 03/27/19 12:50
Matrix: Water
Date Received: 03/28/19 08:45

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:49	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:49	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:49	5
Thallium	**0.00011**	**J**	0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:49	5
Vanadium	**0.0055**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:49	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:49	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**42**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWC-9

Lab Sample ID: 180-88225-9

Date Collected: 03/27/19 13:05
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10**		1.0	0.71	mg/L			04/08/19 18:50	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 18:50	1
Sulfate	**1.2**		1.0	0.38	mg/L			04/08/19 18:50	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:53	5
Arsenic	**0.00073**	**J**	0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:53	5
Barium	**0.023**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:53	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:53	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:53	5
Calcium	**0.28**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:53	5
Cobalt	**0.00051**	**J**	0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:53	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:53	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:53	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:53	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:53	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:53	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:53	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:53	5
Vanadium	**0.0060**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:53	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:53	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**34**		10	10	mg/L			04/01/19 15:53	1

Client Sample ID: GWC-10

Lab Sample ID: 180-88225-10

Date Collected: 03/27/19 13:20

Matrix: Water

Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.3**		1.0	0.71	mg/L			04/08/19 19:05	1
Fluoride	**0.12**	**J**	0.20	0.026	mg/L			04/08/19 19:05	1
Sulfate	**4.3**		1.0	0.38	mg/L			04/08/19 19:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 22:57	5
Arsenic	**0.0013**		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 22:57	5
Barium	**0.019**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 22:57	5
Boron	**0.050**		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 22:57	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:57	5
Calcium	**22**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 22:57	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 22:57	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 22:57	5
Chromium	**0.0035**		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 22:57	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 22:57	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 22:57	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 22:57	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 22:57	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 22:57	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 22:57	5
Vanadium	**0.0065**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 22:57	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 22:57	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**130**		10	10	mg/L			04/02/19 14:42	1

Client Sample ID: GWC-12

Lab Sample ID: 180-88225-11

Date Collected: 03/27/19 14:30

Matrix: Water

Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.3**		1.0	0.71	mg/L			04/08/19 19:21	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 19:21	1
Sulfate	**0.67**	**J**	1.0	0.38	mg/L			04/08/19 19:21	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 23:01	5
Arsenic	**0.0011**	**J**	0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 23:01	5
Barium	**0.0099**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 23:01	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 23:01	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 23:01	5
Calcium	**0.62**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 23:01	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 23:01	5
Cobalt	**0.00051**	**J**	0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 23:01	5
Chromium	**0.0019**	**J**	0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 23:01	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 23:01	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 23:01	5

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

Client Sample ID: GWC-12
Date Collected: 03/27/19 14:30
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88225-11
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 23:01	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 23:01	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 23:01	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 23:01	5
Vanadium	**0.0078**		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 23:01	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 23:01	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**24**		10	10	mg/L			04/02/19 14:42	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-275048/42
Matrix: Water
Analysis Batch: 275048

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/08/19 15:08	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 15:08	1
Sulfate	<0.38		1.0	0.38	mg/L			04/08/19 15:08	1

Lab Sample ID: LCS 180-275048/43
Matrix: Water
Analysis Batch: 275048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.9		mg/L		100	90 - 110
Fluoride	2.50	2.39		mg/L		96	90 - 110
Sulfate	50.0	49.5		mg/L		99	90 - 110

Lab Sample ID: 180-88225-1 MS
Matrix: Water
Analysis Batch: 275048

Client Sample ID: GWC-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.1		25.0	29.2		mg/L		100	80 - 120
Fluoride	0.10	J	1.25	1.34		mg/L		99	80 - 120
Sulfate	<0.38		25.0	25.2		mg/L		101	80 - 120

Lab Sample ID: 180-88225-1 MSD
Matrix: Water
Analysis Batch: 275048

Client Sample ID: GWC-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.1		25.0	29.2		mg/L		100	80 - 120	0	20
Fluoride	0.10	J	1.25	1.34		mg/L		99	80 - 120	0	20
Sulfate	<0.38		25.0	25.2		mg/L		101	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-436360/1-A ^5
Matrix: Water
Analysis Batch: 436562

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 436360

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 21:02	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 21:02	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 21:02	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 21:02	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 21:02	5
Calcium	<0.13		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 21:02	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 21:02	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 21:02	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 21:02	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 21:02	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 21:02	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 21:02	5

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 400-436360/1-A ^5
Matrix: Water
Analysis Batch: 436562

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 436360

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 21:02	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 21:02	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 21:02	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 21:02	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 21:02	5

Lab Sample ID: LCS 400-436360/2-A
Matrix: Water
Analysis Batch: 436562

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 436360

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0488		mg/L		98	80 - 120
Arsenic	0.0500	0.0489		mg/L		98	80 - 120
Barium	0.0500	0.0468		mg/L		94	80 - 120
Boron	0.100	0.104		mg/L		104	80 - 120
Beryllium	0.0500	0.0493		mg/L		99	80 - 120
Calcium	5.00	4.93		mg/L		99	80 - 120
Cadmium	0.0500	0.0478		mg/L		96	80 - 120
Cobalt	0.0500	0.0508		mg/L		102	80 - 120
Chromium	0.0500	0.0491		mg/L		98	80 - 120
Copper	0.0500	0.0503		mg/L		101	80 - 120
Nickel	0.0500	0.0503		mg/L		101	80 - 120
Lead	0.0500	0.0496		mg/L		99	80 - 120
Antimony	0.0500	0.0484		mg/L		97	80 - 120
Selenium	0.0500	0.0478		mg/L		96	80 - 120
Thallium	0.0100	0.00966		mg/L		97	80 - 120
Vanadium	0.0500	0.0478		mg/L		96	80 - 120
Zinc	0.0500	0.0486		mg/L		97	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-274517/2
Matrix: Water
Analysis Batch: 274517

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/01/19 15:53	1

Lab Sample ID: LCS 180-274517/1
Matrix: Water
Analysis Batch: 274517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	304	324		mg/L		107	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 180-274641/2
Matrix: Water
Analysis Batch: 274641

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/02/19 14:42	1

Lab Sample ID: LCS 180-274641/1
Matrix: Water
Analysis Batch: 274641

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	304	338		mg/L		111	80 - 120

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

HPLC/IC

Analysis Batch: 275048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88225-1	GWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-88225-2	GWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-88225-3	GWC-18	Total/NA	Water	EPA 300.0 R2.1	
180-88225-4	GWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-88225-5	GWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-88225-6	GWC-20	Total/NA	Water	EPA 300.0 R2.1	
180-88225-7	GWC-21	Total/NA	Water	EPA 300.0 R2.1	
180-88225-8	GWC-23	Total/NA	Water	EPA 300.0 R2.1	
180-88225-9	GWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-88225-10	GWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-88225-11	GWC-12	Total/NA	Water	EPA 300.0 R2.1	
MB 180-275048/42	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-275048/43	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-88225-1 MS	GWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-88225-1 MSD	GWC-17	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 436360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88225-1	GWC-17	Total Recoverable	Water	3005A	
180-88225-2	GWA-3	Total Recoverable	Water	3005A	
180-88225-3	GWC-18	Total Recoverable	Water	3005A	
180-88225-4	GWC-19	Total Recoverable	Water	3005A	
180-88225-5	GWA-2	Total Recoverable	Water	3005A	
180-88225-6	GWC-20	Total Recoverable	Water	3005A	
180-88225-7	GWC-21	Total Recoverable	Water	3005A	
180-88225-8	GWC-23	Total Recoverable	Water	3005A	
180-88225-9	GWC-9	Total Recoverable	Water	3005A	
180-88225-10	GWC-10	Total Recoverable	Water	3005A	
180-88225-11	GWC-12	Total Recoverable	Water	3005A	
MB 400-436360/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-436360/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 436562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88225-1	GWC-17	Total Recoverable	Water	6020	436360
180-88225-2	GWA-3	Total Recoverable	Water	6020	436360
180-88225-3	GWC-18	Total Recoverable	Water	6020	436360
180-88225-4	GWC-19	Total Recoverable	Water	6020	436360
180-88225-5	GWA-2	Total Recoverable	Water	6020	436360
180-88225-6	GWC-20	Total Recoverable	Water	6020	436360
180-88225-7	GWC-21	Total Recoverable	Water	6020	436360
180-88225-8	GWC-23	Total Recoverable	Water	6020	436360
180-88225-9	GWC-9	Total Recoverable	Water	6020	436360
180-88225-10	GWC-10	Total Recoverable	Water	6020	436360
180-88225-11	GWC-12	Total Recoverable	Water	6020	436360
MB 400-436360/1-A ^5	Method Blank	Total Recoverable	Water	6020	436360
LCS 400-436360/2-A	Lab Control Sample	Total Recoverable	Water	6020	436360

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88225-2
SDG: State Compliance

General Chemistry

Analysis Batch: 274517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88225-1	GWC-17	Total/NA	Water	SM 2540C	
180-88225-2	GWA-3	Total/NA	Water	SM 2540C	
180-88225-3	GWC-18	Total/NA	Water	SM 2540C	
180-88225-4	GWC-19	Total/NA	Water	SM 2540C	
180-88225-5	GWA-2	Total/NA	Water	SM 2540C	
180-88225-6	GWC-20	Total/NA	Water	SM 2540C	
180-88225-7	GWC-21	Total/NA	Water	SM 2540C	
180-88225-8	GWC-23	Total/NA	Water	SM 2540C	
180-88225-9	GWC-9	Total/NA	Water	SM 2540C	
MB 180-274517/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-274517/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 274641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88225-10	GWC-10	Total/NA	Water	SM 2540C	
180-88225-11	GWC-12	Total/NA	Water	SM 2540C	
MB 180-274641/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-274641/1	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica

Client Information	Sampler: L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Ms. Lauren Petty	Phone: 404-592-0094	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: Southern Company		Analysis Requested		Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:			Preservation Codes:
City: Birmingham	TAT Requested (days): Standard			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: AL, 35291	PO #: SCS10347656			Other:
Phone: 205-992-5417(Tel)	WO #:			
Email: lmpetty@southernco.com	Project #: 18019955			
Project Name: CCR - Plant McIntosh Ash Landfill #4	SSOW#:			
Site:				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, B, Ba, Be, Ca, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	2540C-TDS, 300_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWC-17	3/27/19	0940	G	W	N	N	X	X	2	LF4 State Compliance
GWA-3	3/27/19	0955	G	W	N	N	X	X	2	Send results to
GWC-18	3/27/19	1000	G	W	N	N	X	X	2	lcoker@geiconsultants.com
GWC-19	3/27/19	1050	G	W	N	N	X	X	2	
GWA-2	3/27/19	1115	G	W	N	N	X	X	2	
GWC-20	3/27/19	1115	G	W	N	N	X	X	2	
GWC-21	3/27/19	1200	G	W	N	N	X	X	2	
GWC-23	3/27/19	1250	G	W	N	N	X	X	2	
GWC-9	3/27/19	1305	G	W	N	N	X	X	2	
GWC-10	3/27/19	1320	G	W	N	N	X	X	2	
GWC-12	3/27/19	1430	G	W	N	N	X	X	2	

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	3/27/19 1800	GEI	FedEx	3/27/19 1800	
2				[signature]	3-28-19	ITAS
3					845	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

ORIGIN ID:SAVA (770) 912-0703
LAUREN COKER

RIDC PARK 301 ALPHA DR
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 27MAR19
ACTWGT: 49.00 LB
CAD: 006894920/SSFE2002
DIMS: 23x14x12 IN

BILL THIRD PARTY

TO VERONICA BOROT

RIDC PARK 301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7058

INV:
PO:

REF:

FedEx Express

TRK# 0201 7862 9550 8690

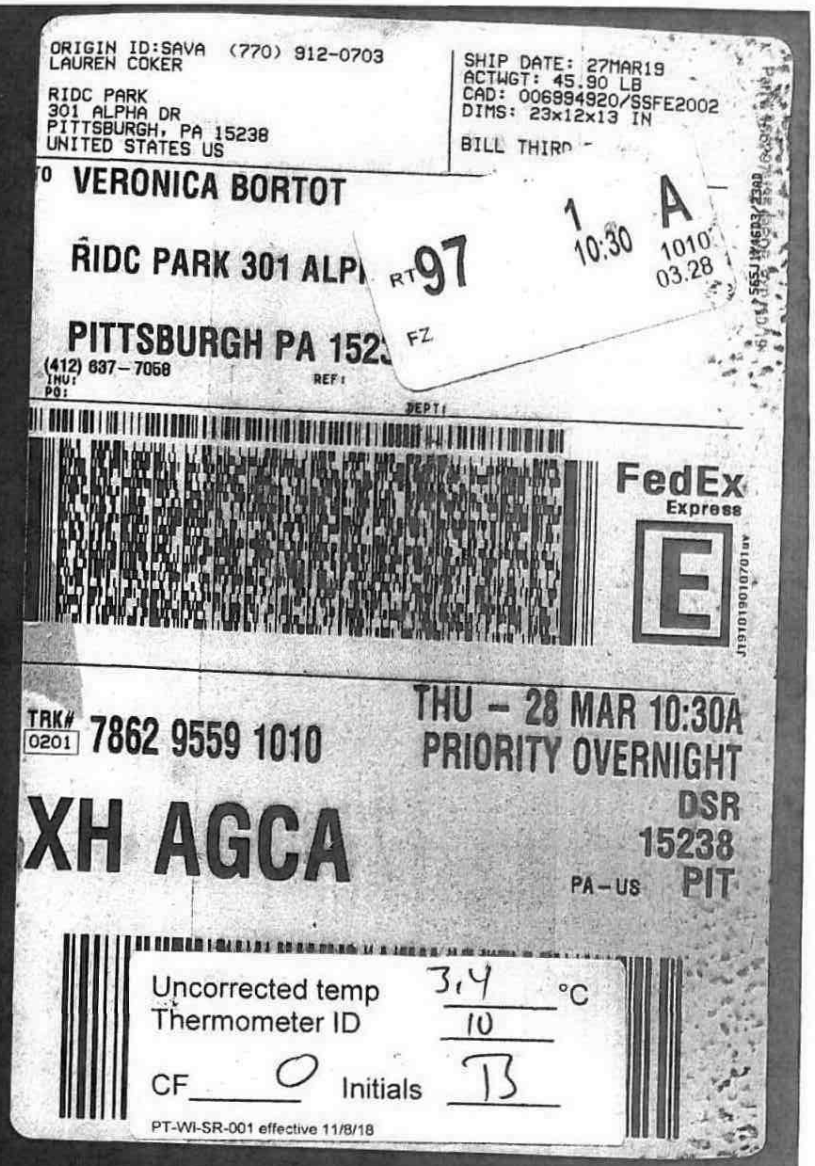
THU - 28 MAR 10:30A
PRIORITY OVERNIGHT
DSR
15238
PIT

XH AGCA

PA-US

Uncorrected temp 1.9 °C
Thermometer ID TO
CF 0 Initials TB

PT-WI-SR-001 effective 11/8/18


ORIGIN ID:SAVA (770) 912-0703
LAUREN COKER
RIDC PARK
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US
SHIP DATE: 27MAR19
ACTWGT: 45.90 LB
CAD: 006894920/SSFE2002
DIMS: 23x12x13 IN
BILL THIRD
TO VERONICA BORTOT
RIDC PARK 301 ALPI
PITTSBURGH PA 152
(412) 637-7058
INV:
PO:
REF:
DEPT:
RT 97
FZ
1
10:30
A
1010
03.28
FedEx
Express
TRK#
0201
7862 9559 1010
THU - 28 MAR 10:30A
PRIORITY OVERNIGHT
XH AGCA
DSR
15238
PA-US
PIT
Uncorrected temp 3.4 °C
Thermometer ID 10
CF 0 Initials TB
PT-WI-SR-001 effective 11/8/18

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-88225-2
SDG Number: State Compliance

Login Number: 88225
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-88227-2
Laboratory Sample Delivery Group: LF $State Compliance
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
4/11/2019 5:08:06 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Job ID: 180-88227-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-88227-2

Comments
No additional comments.

Receipt
The samples were received on 3/28/2019 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.9º C and 3.4º C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): DUP-LF4-02 (180-88227-4). The container labels list a sample collection time of 08:00, while the COC lists no time. The time on the labels was used.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): GWC-11 (180-88227-2). The container labels list a sample collection time of 14;40, while the COC lists 14:00. The time on the COC was used.

Anions
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 6020: The post digestion spike % recovery associated with batch 400-436562 was outside of control limits. The following sample is impacted: (180-88227-B-1-A PDS ^5).

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-436364 and analytical batch 400-436562 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19 *
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-19 *
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	01-28-19 *
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-19 *
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Laboratory: Eurofins TestAmerica, Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-20
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	07-31-19

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-88227-1	GWC-1	Water	03/27/19 14:40	03/28/19 08:45
180-88227-2	GWC-11	Water	03/27/19 14:00	03/28/19 08:45
180-88227-3	DUP-LF4-01	Water	03/27/19 00:00	03/28/19 08:45
180-88227-4	DUP-LF4-02	Water	03/27/19 00:00	03/28/19 08:45
180-88227-5	FB-LF4-01	Water	03/27/19 15:15	03/28/19 08:45
180-88227-6	FB-LF4-02	Water	03/27/19 15:20	03/28/19 08:45
180-88227-7	FERB-LF4-01	Water	03/27/19 15:25	03/28/19 08:45
180-88227-8	FERB-LF4-02	Water	03/27/19 15:30	03/28/19 08:45

Method Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Client Sample ID: GWC-1
Date Collected: 03/27/19 14:40
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 05:55	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 16:33	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-11
Date Collected: 03/27/19 14:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 06:42	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 16:53	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-LF4-01
Date Collected: 03/27/19 00:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 06:58	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 16:57	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-LF4-02
Date Collected: 03/27/19 00:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 07:14	MJH	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Client Sample ID: DUP-LF4-02

Date Collected: 03/27/19 00:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 17:21	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-LF4-01

Date Collected: 03/27/19 15:15
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 08:33	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 17:25	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-LF4-02

Date Collected: 03/27/19 15:20
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 08:49	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 17:29	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FERB-LF4-01

Date Collected: 03/27/19 15:25
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 09:05	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 17:33	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Client Sample ID: FERB-LF4-02

Date Collected: 03/27/19 15:30
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			275048	04/08/19 09:20	MJH	TAL PIT
	Instrument ID: CHICS2100B									

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Prep	3005A			50 mL	50 mL	436364	04/09/19 11:00	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			436562	04/09/19 17:37	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	274641	04/02/19 14:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PEN

Batch Type: Prep

DRE = Daniel Etscheid

Batch Type: Analysis

DRE = Daniel Etscheid

Lab: TAL PIT

Batch Type: Analysis

MJH = Matthew Hartman

TAM = Tessa Mastalski

Client Sample ID: GWC-1

Date Collected: 03/27/19 14:40
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-1

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.8**		1.0	0.71	mg/L			04/08/19 05:55	1
Fluoride	**0.029**	**J**	0.20	0.026	mg/L			04/08/19 05:55	1
Sulfate	**1.6**		1.0	0.38	mg/L			04/08/19 05:55	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 16:33	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 16:33	5
Barium	**0.045**	**F1**	0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 16:33	5
Boron	<0.021	F1	0.050	0.021	mg/L		04/09/19 11:00	04/09/19 16:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 16:33	5
Calcium	**2.4**	**F1**	0.25	0.13	mg/L		04/09/19 11:00	04/09/19 16:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 16:33	5
Cobalt	**0.0017**	**J**	0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 16:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 16:33	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 16:33	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 16:33	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 16:33	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 16:33	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 16:33	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 16:33	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 16:33	5
Zinc	<0.0065	F1	0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 16:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**26**		10	10	mg/L			04/02/19 14:42	1

Client Sample ID: GWC-11

Date Collected: 03/27/19 14:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-2

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.0**		1.0	0.71	mg/L			04/08/19 06:42	1
Fluoride	**0.24**		0.20	0.026	mg/L			04/08/19 06:42	1
Sulfate	**5.4**		1.0	0.38	mg/L			04/08/19 06:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 16:53	5
Arsenic	**0.0013**		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 16:53	5
Barium	**0.013**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 16:53	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 16:53	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 16:53	5
Calcium	**13**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 16:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 16:53	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 16:53	5
Chromium	**0.0031**		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 16:53	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 16:53	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 16:53	5

Client Sample ID: GWC-11

Date Collected: 03/27/19 14:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-2

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 16:53	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 16:53	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 16:53	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 16:53	5
Vanadium	**0.0016**	**J**	0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 16:53	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 16:53	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**79**		10	10	mg/L			04/02/19 14:42	1

Client Sample ID: DUP-LF4-01

Date Collected: 03/27/19 00:00
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.0**		1.0	0.71	mg/L			04/08/19 06:58	1
Fluoride	**0.036**	**J**	0.20	0.026	mg/L			04/08/19 06:58	1
Sulfate	**2.1**		1.0	0.38	mg/L			04/08/19 06:58	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 16:57	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 16:57	5
Barium	**0.020**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 16:57	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 16:57	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 16:57	5
Calcium	**1.6**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 16:57	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 16:57	5
Cobalt	**0.0014**	**J**	0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 16:57	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 16:57	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 16:57	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 16:57	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 16:57	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 16:57	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 16:57	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 16:57	5
Vanadium	**0.0020**	**J**	0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 16:57	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 16:57	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**18**		10	10	mg/L			04/02/19 14:42	1

Client Sample ID: DUP-LF4-02

Lab Sample ID: 180-88227-4

Date Collected: 03/27/19 00:00
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.3**		1.0	0.71	mg/L			04/08/19 07:14	1
Fluoride	**0.12**	**J**	0.20	0.026	mg/L			04/08/19 07:14	1
Sulfate	**4.5**		1.0	0.38	mg/L			04/08/19 07:14	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 17:21	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 17:21	5
Barium	**0.017**		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 17:21	5
Boron	**0.053**		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 17:21	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:21	5
Calcium	**20**		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 17:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:21	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 17:21	5
Chromium	**0.0030**		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 17:21	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 17:21	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 17:21	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 17:21	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 17:21	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 17:21	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 17:21	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 17:21	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 17:21	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**120**		10	10	mg/L			04/02/19 14:42	1

Client Sample ID: FB-LF4-01

Lab Sample ID: 180-88227-5

Date Collected: 03/27/19 15:15
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/08/19 08:33	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 08:33	1
Sulfate	<0.38		1.0	0.38	mg/L			04/08/19 08:33	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 17:25	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 17:25	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 17:25	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 17:25	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:25	5
Calcium	<0.13		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 17:25	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:25	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 17:25	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 17:25	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 17:25	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 17:25	5

Client Sample ID: FB-LF4-01

Lab Sample ID: 180-88227-5

Date Collected: 03/27/19 15:15
Matrix: Water
Date Received: 03/28/19 08:45

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 17:25	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 17:25	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 17:25	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 17:25	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 17:25	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 17:25	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/02/19 14:42	1

Client Sample ID: FB-LF4-02

Lab Sample ID: 180-88227-6

Date Collected: 03/27/19 15:20
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/08/19 08:49	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 08:49	1
Sulfate	<0.38		1.0	0.38	mg/L			04/08/19 08:49	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 17:29	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 17:29	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 17:29	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 17:29	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:29	5
Calcium	<0.13		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 17:29	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:29	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 17:29	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 17:29	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 17:29	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 17:29	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 17:29	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 17:29	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 17:29	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 17:29	5
Vanadium	**0.0014**	**J**	0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 17:29	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 17:29	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/02/19 14:42	1

Client Sample ID: FERB-LF4-01

Lab Sample ID: 180-88227-7

Date Collected: 03/27/19 15:25
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/08/19 09:05	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 09:05	1
Sulfate	<0.38		1.0	0.38	mg/L			04/08/19 09:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 17:33	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 17:33	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 17:33	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 17:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:33	5
Calcium	<0.13		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 17:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:33	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 17:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 17:33	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 17:33	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 17:33	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 17:33	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 17:33	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 17:33	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 17:33	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 17:33	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 17:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/02/19 14:42	1

Client Sample ID: FERB-LF4-02

Lab Sample ID: 180-88227-8

Date Collected: 03/27/19 15:30
Matrix: Water
Date Received: 03/28/19 08:45

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/08/19 09:20	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 09:20	1
Sulfate	<0.38		1.0	0.38	mg/L			04/08/19 09:20	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 17:37	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 17:37	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 17:37	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 17:37	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:37	5
Calcium	<0.13		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 17:37	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 17:37	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 17:37	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 17:37	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 17:37	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 17:37	5

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-88227-2
SDG: LF $State Compliance

Client Sample ID: FERB-LF4-02

Date Collected: 03/27/19 15:30
Date Received: 03/28/19 08:45

Lab Sample ID: 180-88227-8

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 17:37	5
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 17:37	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 17:37	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 17:37	5
Vanadium	**0.0014**	**J**	0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 17:37	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 17:37	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/02/19 14:42	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-275048/5
Matrix: Water
Analysis Batch: 275048

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/08/19 05:23	1
Fluoride	<0.026		0.20	0.026	mg/L			04/08/19 05:23	1
Sulfate	<0.38		1.0	0.38	mg/L			04/08/19 05:23	1

Lab Sample ID: LCS 180-275048/6
Matrix: Water
Analysis Batch: 275048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.0		mg/L		102	90 - 110
Fluoride	2.50	2.45		mg/L		98	90 - 110
Sulfate	50.0	50.6		mg/L		101	90 - 110

Lab Sample ID: 180-88227-1 MS
Matrix: Water
Analysis Batch: 275048

Client Sample ID: GWC-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.8		25.0	32.9		mg/L		104	80 - 120
Fluoride	0.029	J	1.25	1.28		mg/L		100	80 - 120
Sulfate	1.6		25.0	27.4		mg/L		103	80 - 120

Lab Sample ID: 180-88227-1 MSD
Matrix: Water
Analysis Batch: 275048

Client Sample ID: GWC-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.8		25.0	32.3		mg/L		102	80 - 120	2	20
Fluoride	0.029	J	1.25	1.24		mg/L		97	80 - 120	3	20
Sulfate	1.6		25.0	26.8		mg/L		101	80 - 120	2	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-436364/1-A ^5
Matrix: Water
Analysis Batch: 436562

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 436364

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.00011		0.0013	0.00011	mg/L		04/09/19 11:00	04/09/19 16:21	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/19 11:00	04/09/19 16:21	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/09/19 11:00	04/09/19 16:21	5
Boron	<0.021		0.050	0.021	mg/L		04/09/19 11:00	04/09/19 16:21	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 16:21	5
Calcium	<0.13		0.25	0.13	mg/L		04/09/19 11:00	04/09/19 16:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/19 11:00	04/09/19 16:21	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/19 11:00	04/09/19 16:21	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/19 11:00	04/09/19 16:21	5
Copper	<0.0021		0.0025	0.0021	mg/L		04/09/19 11:00	04/09/19 16:21	5
Nickel	<0.0018		0.0025	0.0018	mg/L		04/09/19 11:00	04/09/19 16:21	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/19 11:00	04/09/19 16:21	5

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 400-436364/1-A ^5
Matrix: Water
Analysis Batch: 436562

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 436364

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/19 11:00	04/09/19 16:21	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/09/19 11:00	04/09/19 16:21	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/19 11:00	04/09/19 16:21	5
Vanadium	<0.0014		0.0025	0.0014	mg/L		04/09/19 11:00	04/09/19 16:21	5
Zinc	<0.0065		0.020	0.0065	mg/L		04/09/19 11:00	04/09/19 16:21	5

Lab Sample ID: LCS 400-436364/2-A
Matrix: Water
Analysis Batch: 436562

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 436364

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0499		mg/L		100	80 - 120
Arsenic	0.0500	0.0497		mg/L		99	80 - 120
Barium	0.0500	0.0483		mg/L		97	80 - 120
Boron	0.100	0.104		mg/L		104	80 - 120
Beryllium	0.0500	0.0494		mg/L		99	80 - 120
Calcium	5.00	5.03		mg/L		101	80 - 120
Cadmium	0.0500	0.0495		mg/L		99	80 - 120
Cobalt	0.0500	0.0517		mg/L		103	80 - 120
Chromium	0.0500	0.0503		mg/L		101	80 - 120
Copper	0.0500	0.0507		mg/L		101	80 - 120
Nickel	0.0500	0.0503		mg/L		101	80 - 120
Lead	0.0500	0.0491		mg/L		98	80 - 120
Antimony	0.0500	0.0496		mg/L		99	80 - 120
Selenium	0.0500	0.0485		mg/L		97	80 - 120
Thallium	0.0100	0.00987		mg/L		99	80 - 120
Vanadium	0.0500	0.0499		mg/L		100	80 - 120
Zinc	0.0500	0.0501		mg/L		100	80 - 120

Lab Sample ID: 180-88227-1 MS
Matrix: Water
Analysis Batch: 436562

Client Sample ID: GWC-1
Prep Type: Total Recoverable
Prep Batch: 436364

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<0.00011		0.0500	0.0510		mg/L		102	75 - 125
Arsenic	<0.00046		0.0500	0.0504		mg/L		101	75 - 125
Barium	0.045	F1	0.0500	0.0941		mg/L		98	75 - 125
Boron	<0.021	F1	0.100	0.123		mg/L		123	75 - 125
Beryllium	<0.00034		0.0500	0.0491		mg/L		98	75 - 125
Calcium	2.4	F1	5.00	7.48		mg/L		102	75 - 125
Cadmium	<0.00034		0.0500	0.0497		mg/L		99	75 - 125
Cobalt	0.0017	J	0.0500	0.0538		mg/L		104	75 - 125
Chromium	<0.0011		0.0500	0.0510		mg/L		102	75 - 125
Copper	<0.0021		0.0500	0.0517		mg/L		103	75 - 125
Nickel	<0.0018		0.0500	0.0525		mg/L		105	75 - 125
Lead	<0.00035		0.0500	0.0494		mg/L		99	75 - 125
Antimony	<0.0010		0.0500	0.0515		mg/L		103	75 - 125
Selenium	<0.00071		0.0500	0.0516		mg/L		103	75 - 125
Thallium	<0.000085		0.0100	0.0101		mg/L		101	75 - 125

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-88227-1 MS
Matrix: Water
Analysis Batch: 436562

Client Sample ID: GWC-1
Prep Type: Total Recoverable
Prep Batch: 436364

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	<0.0014		0.0500	0.0499		mg/L		100	75 - 125
Zinc	<0.0065	F1	0.0500	0.0528		mg/L		106	75 - 125

Lab Sample ID: 180-88227-1 MSD
Matrix: Water
Analysis Batch: 436562

Client Sample ID: GWC-1
Prep Type: Total Recoverable
Prep Batch: 436364

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<0.00011		0.0500	0.0599		mg/L		120	75 - 125	16	20
Arsenic	<0.00046		0.0500	0.0583		mg/L		117	75 - 125	15	20
Barium	0.045	F1	0.0500	0.111	F1	mg/L		132	75 - 125	17	20
Boron	<0.021	F1	0.100	0.128	F1	mg/L		128	75 - 125	4	20
Beryllium	<0.00034		0.0500	0.0530		mg/L		106	75 - 125	8	20
Calcium	2.4	F1	5.00	8.82	F1	mg/L		129	75 - 125	16	20
Cadmium	<0.00034		0.0500	0.0603		mg/L		121	75 - 125	19	20
Cobalt	0.0017	J	0.0500	0.0631		mg/L		123	75 - 125	16	20
Chromium	<0.0011		0.0500	0.0599		mg/L		120	75 - 125	16	20
Copper	<0.0021		0.0500	0.0606		mg/L		121	75 - 125	16	20
Nickel	<0.0018		0.0500	0.0611		mg/L		122	75 - 125	15	20
Lead	<0.00035		0.0500	0.0529		mg/L		106	75 - 125	7	20
Antimony	<0.0010		0.0500	0.0584		mg/L		117	75 - 125	13	20
Selenium	<0.00071		0.0500	0.0517		mg/L		103	75 - 125	0	20
Thallium	<0.000085		0.0100	0.0105		mg/L		105	75 - 125	4	20
Vanadium	<0.0014		0.0500	0.0590		mg/L		118	75 - 125	17	20
Zinc	<0.0065	F1	0.0500	0.0633	F1	mg/L		127	75 - 125	18	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-274641/2
Matrix: Water
Analysis Batch: 274641

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/02/19 14:42	1

Lab Sample ID: LCS 180-274641/1
Matrix: Water
Analysis Batch: 274641

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	304	338		mg/L		111	80 - 120

HPLC/IC

Analysis Batch: 275048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88227-1	GWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-88227-2	GWC-11	Total/NA	Water	EPA 300.0 R2.1	
180-88227-3	DUP-LF4-01	Total/NA	Water	EPA 300.0 R2.1	
180-88227-4	DUP-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
180-88227-5	FB-LF4-01	Total/NA	Water	EPA 300.0 R2.1	
180-88227-6	FB-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
180-88227-7	FERB-LF4-01	Total/NA	Water	EPA 300.0 R2.1	
180-88227-8	FERB-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
MB 180-275048/5	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-275048/6	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-88227-1 MS	GWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-88227-1 MSD	GWC-1	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 436364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88227-1	GWC-1	Total Recoverable	Water	3005A	
180-88227-2	GWC-11	Total Recoverable	Water	3005A	
180-88227-3	DUP-LF4-01	Total Recoverable	Water	3005A	
180-88227-4	DUP-LF4-02	Total Recoverable	Water	3005A	
180-88227-5	FB-LF4-01	Total Recoverable	Water	3005A	
180-88227-6	FB-LF4-02	Total Recoverable	Water	3005A	
180-88227-7	FERB-LF4-01	Total Recoverable	Water	3005A	
180-88227-8	FERB-LF4-02	Total Recoverable	Water	3005A	
MB 400-436364/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-436364/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-88227-1 MS	GWC-1	Total Recoverable	Water	3005A	
180-88227-1 MSD	GWC-1	Total Recoverable	Water	3005A	

Analysis Batch: 436562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88227-1	GWC-1	Total Recoverable	Water	6020	436364
180-88227-2	GWC-11	Total Recoverable	Water	6020	436364
180-88227-3	DUP-LF4-01	Total Recoverable	Water	6020	436364
180-88227-4	DUP-LF4-02	Total Recoverable	Water	6020	436364
180-88227-5	FB-LF4-01	Total Recoverable	Water	6020	436364
180-88227-6	FB-LF4-02	Total Recoverable	Water	6020	436364
180-88227-7	FERB-LF4-01	Total Recoverable	Water	6020	436364
180-88227-8	FERB-LF4-02	Total Recoverable	Water	6020	436364
MB 400-436364/1-A ^5	Method Blank	Total Recoverable	Water	6020	436364
LCS 400-436364/2-A	Lab Control Sample	Total Recoverable	Water	6020	436364
180-88227-1 MS	GWC-1	Total Recoverable	Water	6020	436364
180-88227-1 MSD	GWC-1	Total Recoverable	Water	6020	436364

General Chemistry

Analysis Batch: 274641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88227-1	GWC-1	Total/NA	Water	SM 2540C	
180-88227-2	GWC-11	Total/NA	Water	SM 2540C	
180-88227-3	DUP-LF4-01	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 274641 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88227-4	DUP-LF4-02	Total/NA	Water	SM 2540C	
180-88227-5	FB-LF4-01	Total/NA	Water	SM 2540C	
180-88227-6	FB-LF4-02	Total/NA	Water	SM 2540C	
180-88227-7	FERB-LF4-01	Total/NA	Water	SM 2540C	
180-88227-8	FERB-LF4-02	Total/NA	Water	SM 2540C	
MB 180-274641/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-274641/1	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica

Client Information	Sampler: L. Coker, J. Adcock, J. Noles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Ms. Lauren Petty	Phone: 404-592-0094	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: Southern Company				Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:		Analysis Requested	Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, M - Hexane, N - None, O - AsNaO2
City: Birmingham	TAT Requested (days): Standard			
State, Zip: AL, 35291				
Phone: 205-992-5417(Tel)	PO #: SCS10347656			
Email: lmpetty@southernco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			
Site:	SSOW#:			

180-88227 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Sb, As, B, Ba, Be, Ca, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Va, Zn	2540C-TDS, 160_ORGFM_28D chloride, Fluoride, Sulfate	Total Number of	Special Instructions/Note:
			Preservation Code:				D	N		
GWC-1	3/27/19	1440	G	W	N	N	X	X	2	LF4 State Compliance
GWC-11	3/27/19	1400	G	W	N	N	X	X	2	Send results to
DUP-LF4-01	3/27/19	—	G	W	N	N	X	X	2	lcoker@geiconsultants.com
DUP-LF4-02	3/27/19	—	G	W	N	N	X	X	2	
FB-LF4-01	3/27/19	1515	G	W	N	N	X	X	2	
FB-LF4-02	3/27/19	1520	G	W	N	N	X	X	2	
FERB-LF4-01	3/27/19	1525	G	W	N	N	X	X	2	
FERB-LF4-02	3/27/19	1530	G	W	N	N	X	X	2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	3/27/19 1800	GEI	Fedex	3/27/19 1800	
2				[signature]	3-28-19	TAPIT
3					845	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

ORIGIN ID:SAVA (770) 912-0703
LAUREN COKER

RIDC PARK 301 ALPHA DR
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 27MAR19
ACTWGT: 43.00 LB
CAD: 0088594/SSF2002
DIMS: 23x14x12 IN

BILL THIRD PARTY

TO VERONICA BOROT

RIDC PARK 301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7068

INV:
PO:

FedEx

TRK# 0201 7862 9550 8690

XH AG

PRIORITY OVERNIGHT
DSR
15238
PIT

Uncorrected temp ____ °C
Thermometer ID 10
CF 0 Initials TS

P#7.WI-SR-001 effective 11/8/18

ORIGIN ID:SAVA (770) 912-0703
LAUREN COKER

RIDC PARK
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 27MAR19
ACTWGT: 45.90 LB
CAD: 006894920/SSFE2002
DIMS: 23x12x13 IN

BILL THIRD -

TO VERONICA BORTOT

RIDC PARK 301 ALPH RT 97

PITTSBURGH PA 152 FZ

(412) 637-7068
INV:
PO:

REF:

DEPT:

1 A
10:30
1010
03.28

FedEx Express

E

THU - 28 MAR 10:30A
PRIORITY OVERNIGHT

DSR
15238
PIT

PA-US

TRK# 0201 7862 9559 1010

XH AGCA

Uncorrected temp 3.4 °C
Thermometer ID 10
CF 0 Initials 13

PT-WI-SR-001 effective 11/8/18

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-88227-2
SDG Number: LF $State Compliance

Login Number: 88227
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Site: Georgia Power Plant, Landfill 4 State Compliance
Laboratory: Test America, Pittsburgh, PA
Report No.: 180-88160-2
Reviewer: Lorie MacKinnon/GEI Consultants
Date: May 30, 2019

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
GWA-13	180-88160-01	Metals, Anions, TDS
GWC-5	180-88160-02	Metals, Anions, TDS
GWC-4A	180-88160-03	Metals, Anions, TDS
GWC-15	180-88160-04	Metals, Anions, TDS
GWA-14	180-88160-05	Metals, Anions, TDS
GWA-16	180-88160-06	Metals, Anions, TDS

QC Samples:
Field/Equipment blanks: FB-LF4-01, FB-LF4-02, FERB-LF4-01, FERB-LF4-02 (reported in 180-88227)

The above-listed aqueous samples were collected on March 26, 2019 and were analyzed for total recoverable metals by SW-846 method 6020, total dissolved solids (TDS) by Standard Methods SM 2540C, and anions (chloride, fluoride, and sulfate) by EPA method 300. The data were reviewed based on the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017 (USEPA-540-R-2017-001), as well as by the methods referenced and professional and technical judgment.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Method and Field Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Quantitation Limits

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The level 2 (reduced deliverable) data package was complete as received by the laboratory and included sample results, method blank, MS/MSD, laboratory duplicate, and LCS results.

Holding Times and Sample Preservation

All criteria were met.

Blanks

Laboratory Blank Results

Contamination was not detected in the associated method blanks.

Field Blank Results

Low level contamination was detected in the field blanks. The following table summarizes the highest level of contamination and validation actions taken. The field blank samples were used in the evaluation of all Landfill 4 samples.

Analyte	Blank ID/ Associated Samples	Maximum Contaminant Level (mg/L)	2x Action Level (mg/L)	10x Action Level (mg/L)	Validation Actions
Vanadium	FB-LF4-02/ FERB-LF4-02: All Landfill 4 samples	0.0014	0.0028	0.014	Qualify results for vanadium in samples GWC-5, GWC-4A, and GWA-16 as nondetect (U) at the RL or reported values. Estimate (J) the positive result for vanadium in sample GWC-15; High bias.

Blank Actions:
If the sample result is < reporting limit (RL); report the result as nondetect (U) at the RL.
If the sample result is ≥ RL and <2x contamination detected; report the result as nondetect (U) at the reported value.
If the sample result is ≥ RL and <10x Action Level; report the sample result as estimated (J); biased high.
If the sample result is nondetect or > 10x Action Level; validation action is not required.

MS/MSD Results

MS/MSD analyses were performed on samples GWC-5 for anions and sample GWA-13 for metals. All recovery and precision criteria were met in these analyses.

Laboratory Duplicate Results

MSD analyses were performed for anions and metals in lieu of laboratory duplicate analyses.

LCS Results

All criteria were met.

Quantitation Limits

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

NJ - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Site: Georgia Power Plant, Landfill 4 State Compliance
Laboratory: Test America, Pittsburgh, PA
Report Nos.: 180-88225-2 and 180-88227-2
Reviewer: Lorie MacKinnon/GEI Consultants
Date: May 30, 2019

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
GWC-17	180-88225-01	Metals, Anions, TDS
GWA-3	180-88225-02	Metals, Anions, TDS
GWC-18	180-88225-03	Metals, Anions, TDS
GWC-19	180-88225-04	Metals, Anions, TDS
GWA-2	180-88225-05	Metals, Anions, TDS
GWC-20	180-88225-06	Metals, Anions, TDS
GWC-21	180-88225-07	Metals, Anions, TDS
GWC-23	180-88225-08	Metals, Anions, TDS
GWC-9	180-88225-09	Metals, Anions, TDS
GWC-10	180-88225-10	Metals, Anions, TDS
GWC-12	180-88225-11	Metals, Anions, TDS
GWC-1	180-88227-01	Metals, Anions, TDS
GWC-11	180-88227-02	Metals, Anions, TDS
DUP-LF4-01	180-88227-03	Metals, Anions, TDS
DUP-LF4-02	180-88227-04	Metals, Anions, TDS
FB-LF4-01	180-88227-05	Metals, Anions, TDS
FB-LF4-02	180-88227-06	Metals, Anions, TDS
FERB-LF4-01	180-88227-07	Metals, Anions, TDS
FERB-LF4-02	180-88227-08	Metals, Anions, TDS

QC Samples:
Field/Equipment blanks: FB-LF4-01, FB-LF4-02, FERB-LF4-01, FERB-LF4-02
Field Duplicate pairs: GWC-20/DUP-LF4-01 and GWC-10/DUP-LF4-02

The above-listed aqueous samples, equipment blanks, and field blank samples were collected on March 27, 2019 and were analyzed for total recoverable metals by SW-846 method 6020, total dissolved solids (TDS) by Standard Methods SM 2540C, and anions (chloride, fluoride, and sulfate) by EPA method 300. The data were reviewed based on the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017 (USEPA-540-R-2017-001), as well as by the methods referenced and professional and technical judgment.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation

- Method and Field Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Field Duplicate Results
- Quantitation Limits

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The level 2 (reduced deliverable) data package was complete as received by the laboratory and included sample results, method blank, MS/MSD, laboratory duplicate, and LCS results.

Holding Times and Sample Preservation

All criteria were met.

Blanks

Laboratory Blank Results

Contamination was not detected in the associated method blanks.

Field Blank Results

Low level contamination was detected in the field blanks. The following table summarizes the highest level of contamination and validation actions taken. The field blank samples were used in the evaluation of all Landfill 4 samples.

Analyte	Blank ID/ Associated Samples	Maximum Contaminant Level (mg/L)	2x Action Level (mg/L)	10x Action Level (mg/L)	Validation Actions
Vanadium	FB-LF4-02/ FERB-LF4-02: All Landfill 4 samples	0.0014	0.0028	0.014	Qualify results for vanadium in samples GWC-11, DUP-LF4-01, and GWA-2 as nondetect (U) at the RL. Estimate (J) the positive results for vanadium in samples GWC-17, GWA-3, GWC-18, GWC-20, GWC-21, GWC-23, GWC-9, GWC-10, and GWC-12; High bias.

Blank Actions:
If the sample result is < reporting limit (RL); report the result as nondetect (U) at the RL.
If the sample result is ≥ RL and <2x contamination detected; report the result as nondetect (U) at the reported value.
If the sample result is ≥ RL and <10x Action Level; report the sample result as estimated (J); biased high.
If the sample result is nondetect or > 10x Action Level; validation action is not required.

MS/MSD Results

MS/MSD analyses were performed on samples GWC-1 and GW-17 for anions. All recovery and precision criteria were met in these analyses.

MS/MSD analyses were performed on sample GWC-1 for metals. All precision criteria were met. The following table summarizes the recoveries outside of control limits and resulting actions.

Analyte	MS/MSD Recovery (%)	Control limits (%)	Validation Actions
Barium	MSD 132	75-125	Estimate (J) the positive results for barium in samples GWC-17, GWA-3, GWC-18, GWC-19, GWA-2, GWC-20, GWC-21, GWC-23, GWC-9, GWC-10, GWC-12, GWC-1, GWC-11, DUP-LF4-01, and DUP-LF4-02; High bias.
Boron	MSD 128		Estimate (J) the positive results for boron in samples GWC-10 and DUP-LF4-02; High bias.
Calcium	MSD 129		Estimate (J) the positive results for calcium in samples GWC-17, GWA-3, GWC-18, GWC-19, GWA-2, GWC-20, GWC-21, GWC-23, GWC-9, GWC-10, GWC-12, GWC-1, GWC-11, DUP-LF4-01 and DUP-LF4-02; High bias.
Zinc	MSD 127		Validation actions were not required as zinc was nondetect in the associated samples and therefore not affected by the potential high bias.
Associated field samples: GWC-17, GWA-3, GWC-18, GWC-19, GWA-2, GWC-20, GWC-21, GWC-23, GWC-9, GWC-10, GWC-12, GWC-1, GWC-11, DUP-LF4-01, DUP-LF4-02			

Laboratory Duplicate Results

MSD analyses were performed for anions in lieu of laboratory duplicate analyses.

LCS Results

All criteria were met.

Field Duplicate Results

Samples GWC-20 and DUP-LF4-01 were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria except for total dissolved solids. The positive results for total dissolved solids in samples GWC-20 and DUP-LF4-01 were qualified as estimated (J). The direction of the bias cannot be determined from this nonconformance.

Analyte	GWC-20 (mg/L)	DUP-LF4-01 (mg/L)	RPD (%)
Chloride	8.9	9.0	1.1
Fluoride	0.034 J	0.036 J	5.7
Sulfate	1.7	2.1	21.1
Barium	0.018	0.020	10.5
Calcium	1.5	1.6	6.5
Cobalt	0.0012 J	0.0014 J	15.4
Vanadium	0.0031	0.0025 U	NC, Within the RL
Total Dissolved Solids	57	18	**104**
NC – Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <30%. When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate >RL.			

Samples GWC-10 and DUP-LF4-02 were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria except for vanadium. The positive and nondetect results for vanadium in samples GWC-10 and DUP-LF4-02 were qualified as estimated (J/UJ). The direction of the bias cannot be determined from this nonconformance.

Analyte	GWC-10 (mg/L)	DUP-LF4-02 (mg/L)	RPD (%)
Chloride	5.3	5.3	0
Fluoride	0.12 J	0.12 J	0
Sulfate	4.3	4.5	4.5
Arsenic	0.0013	0.0013 U	NC, Within the RL
Barium	0.019	0.017	11.1
Boron	0.050	0.053	5.8
Calcium	22	20	9.5
Chromium	0.0035	0.0030	15.4

Analyte	GWC-10 (mg/L)	DUP-LF4-02 (mg/L)	RPD (%)
Vanadium	0.0065	0.0025 U	**NC, Not within the RL**
Total Dissolved Solids	130	120	8.0
NC – Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <30%. When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate >RL.			

Quantitation Limits

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

NJ - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-91469-1
Laboratory Sample Delivery Group: 1
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
6/20/2019 4:27:30 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

Job ID: 180-91469-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-91469-1

Comments
No additional comments.

Receipt
The sample was received on 6/19/2019 9:45 AM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 3.1° C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received as it was not relinquished.

Anions
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State		2891	04-30-20
California	State Program	9	2891	04-30-20
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Florida	NELAP		E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Illinois	NELAP		004375	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Kentucky (DW)	Kentucky UST	4	162013	04-30-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State		PA00164	07-31-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-20
New Jersey	NELAP	2	PA005	06-30-19
New Jersey	NELAP		PA005	06-30-19 *
New York	NELAP	2	11182	03-31-20
New York	NELAP		11182	04-01-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	02-06-20
Oregon	NELAP		PA-2151	02-06-20
Pennsylvania	NELAP	3	02-00416	04-30-20
Pennsylvania	NELAP		02-00416	04-30-20
South Carolina	State Program	4	89014	04-30-20
Texas	NELAP	6	T104704528-15-2	03-31-20
Texas	NELAP		T104704528	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
US Fish & Wildlife	US Federal Programs		058448	07-31-20
USDA	Federal		P330-16-00211	06-26-19
USDA	US Federal Programs		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
Virginia	NELAP		10043	09-14-19
West Virginia DEP	State		142	01-31-20
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State		998027800	08-31-19
Wisconsin	State Program	5	998027800	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-91469-1	GWC-9	Water	06/17/19 13:20	06/19/19 09:45	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

Client Sample ID: GWC-9
Date Collected: 06/17/19 13:20
Date Received: 06/19/19 09:45

Lab Sample ID: 180-91469-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			282301	06/20/19 06:33	MJH	TAL PIT
	Instrument ID: CHIC2100A									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis

MJH = Matthew Hartman

Client Sample Results

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

Client Sample ID: GWC-9
Date Collected: 06/17/19 13:20
Date Received: 06/19/19 09:45

Lab Sample ID: 180-91469-1
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.4		1.0	0.71	mg/L			06/20/19 06:33	1

QC Sample Results

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-282301/6
Matrix: Water
Analysis Batch: 282301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			06/20/19 05:16	1

Lab Sample ID: LCS 180-282301/5
Matrix: Water
Analysis Batch: 282301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	26.0		mg/L		104	90 - 110

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-91469-1
SDG: 1

HPLC/IC

Analysis Batch: 282301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-91469-1	GWC-9	Total/NA	Water	EPA 300.0 R2.1	
MB 180-282301/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-282301/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: L. Coker	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Ms. Lauren Petty	Phone: 404-592-0096	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 1

Company: Southern Company

Address: PO BOX 2641 GSC8
City: Birmingham
State, Zip: AL, 35291
Phone: 205-992-5417(Tel)
Email: lmpetty@southernco.com
Project Name: CCR - Plant McIntosh Ash Landfill #4
Site: Plant McIntosh Ash Landfill #4

Due Date Requested:
TAT Requested (days): Rush
PO #: SCS10347656
WO #:
Project #:
SSOW#:

Job #:

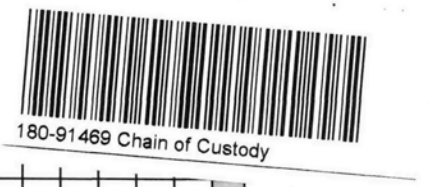
Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D-Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
~~GWC-9 Resample~~ GWC-9	6/17/19	1320	G	W	N	N	X	1	LF4 Detection
									Analyze for only Chloride, rush turnaround time



Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1					6/19/19 945	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

UPS CampusShip: View/Print Label

1. **Ensure there are no other shipping or tracking labels attached to your package.** Select the Print button on the print dialog box that appears. Note: If your browser does not support this function select Print from the File menu to print the label.

2. **Fold the printed label at the solid line below.** Place the label in a UPS Shipping Pouch. If you do not have a pouch, affix the folded label using clear plastic shipping tape over the entire label.

3. **GETTING YOUR SHIPMENT TO UPS**
   Customers with a Daily Pickup
   Your driver will pickup your shipment(s) as usual.

   Customers without a Daily Pickup
   Take your package to any location of The UPS Store®, UPS Access Point(TM) location, UPS Drop Box, UPS Customer Center, Staples® or Authorized Shipping Outlet near you. Items sent via UPS Return Services(S (including via Ground) are also accepted at Drop Boxes. To find the location nearest you, please visit the F area of CampusShip and select UPS Locations.
   Schedule a same day or future day Pickup to have a UPS driver pickup all your CampusShip packages. Hand the package to any UPS driver in your area.

UPS Access Point™
THE UPS STORE
925B PEACHTREE ST NE
ATLANTA ,GA 30309

UPS Access Point™
THE UPS STORE
1579 MONROE DR NE
ATLANTA ,GA 30324

UPS Access Point™
CVS STORE # 2943
842 PEACHTREE ST NE
ATLANTA ,GA 30308

FOLD HERE

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-91469-1
SDG Number: 1

Login Number: 91469
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-95524-1
Laboratory Sample Delivery Group: 1
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4
Revision: 1

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
10/9/2019 11:02:32 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

Job ID: 180-95524-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-95524-1

Revised: to correct flagging on Fluoride results

Comments
No additional comments.

Receipt
The samples were received on 9/11/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.1° C, 2.3° C, 25.8° C and 26.7° C.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	12-31-19
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

Sample Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-95524-1	GWC-4A	Water	09/10/19 15:20	09/11/19 09:00	
180-95524-2	GWC-5	Water	09/10/19 15:35	09/11/19 09:00	
180-95524-3	GWA-13	Water	09/10/19 15:35	09/11/19 09:00	
180-95524-4	GWA-16	Water	09/10/19 16:30	09/11/19 09:00	
180-95524-5	GWA-14	Water	09/10/19 16:40	09/11/19 09:00	
180-95524-6	FB-LF4-01	Water	09/10/19 16:45	09/11/19 09:00	
180-95524-7	FB-LF4-02	Water	09/10/19 16:45	09/11/19 09:00	
180-95524-8	FERB-LF4-01	Water	09/10/19 16:45	09/11/19 09:00	
180-95524-9	FERB-LF4-02	Water	09/10/19 16:45	09/11/19 09:00	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client Sample ID: GWC-4A
Date Collected: 09/10/19 15:20
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 11:34	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291664	09/17/19 16:09	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292211	09/21/19 15:31	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291259	09/13/19 12:26	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-5
Date Collected: 09/10/19 15:35
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 12:22	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291664	09/17/19 16:09	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292211	09/21/19 15:35	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291269	09/13/19 12:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-13
Date Collected: 09/10/19 15:35
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 13:09	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291664	09/17/19 16:09	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292211	09/21/19 15:52	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291269	09/13/19 12:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-16
Date Collected: 09/10/19 16:30
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 13:25	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291664	09/17/19 16:09	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292211	09/21/19 15:55	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291269	09/13/19 12:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

Client Sample ID: GWA-14
Date Collected: 09/10/19 16:40
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 13:41	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291664	09/17/19 16:09	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292211	09/21/19 15:58	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291269	09/13/19 12:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-LF4-01
Date Collected: 09/10/19 16:45
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 13:56	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291660	09/17/19 15:54	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292881	09/26/19 23:02	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	291660	09/17/19 15:54	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			293025	09/27/19 08:15	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291269	09/13/19 12:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-LF4-02
Date Collected: 09/10/19 16:45
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 14:12	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291664	09/17/19 16:09	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292211	09/21/19 16:09	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291269	09/13/19 12:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FERB-LF4-01
Date Collected: 09/10/19 16:45
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 14:28	CMR	TAL PIT
	Instrument ID: CHICS2100B									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

Client Sample ID: FERB-LF4-01

Date Collected: 09/10/19 16:45
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	291664	09/17/19 16:09	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292211	09/21/19 16:12	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291269	09/13/19 12:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FERB-LF4-02

Date Collected: 09/10/19 16:45
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 14:44	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291664	09/17/19 16:09	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			292211	09/21/19 16:16	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291269	09/13/19 12:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KAK = Kayla Kalamasz

Batch Type: Analysis

AVS = Abbey Smith
CMR = Carl Reagle
RSK = Robert Kurtz
WTR = Bill Reinheimer

Client Sample ID: GWC-4A

Lab Sample ID: 180-95524-1

Date Collected: 09/10/19 15:20
Matrix: Water
Date Received: 09/11/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.6		1.0	0.71	mg/L			09/15/19 11:34	1
Fluoride	0.044	J	0.10	0.026	mg/L			09/15/19 11:34	1
Sulfate	9.8		1.0	0.38	mg/L			09/15/19 11:34	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00051	J	0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 15:31	1
Barium	0.026		0.010	0.0016	mg/L		09/17/19 16:09	09/21/19 15:31	1
Beryllium	0.00060	J	0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:31	1
Boron	0.052	J	0.080	0.039	mg/L		09/17/19 16:09	09/21/19 15:31	1
Cadmium	0.00019	J	0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:31	1
Calcium	0.64		0.50	0.13	mg/L		09/17/19 16:09	09/21/19 15:31	1
Chromium	0.0031		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 15:31	1
Cobalt	0.0031		0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 15:31	1
Copper	0.0016	J	0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 15:31	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:31	1
Nickel	0.0020		0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 15:31	1
Lead	0.00051	J	0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:31	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 15:31	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 15:31	1
Thallium	0.00033	J	0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 15:31	1
Vanadium	0.0018		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 15:31	1
Zinc	0.012		0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 15:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	36		10	10	mg/L			09/13/19 12:26	1

Client Sample ID: GWC-5

Lab Sample ID: 180-95524-2

Date Collected: 09/10/19 15:35
Matrix: Water
Date Received: 09/11/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		1.0	0.71	mg/L			09/15/19 12:22	1
Fluoride	0.037	J	0.10	0.026	mg/L			09/15/19 12:22	1
Sulfate	0.77	J	1.0	0.38	mg/L			09/15/19 12:22	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00035	J	0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 15:35	1
Barium	0.044		0.010	0.0016	mg/L		09/17/19 16:09	09/21/19 15:35	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:35	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 16:09	09/21/19 15:35	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:35	1
Calcium	2.3		0.50	0.13	mg/L		09/17/19 16:09	09/21/19 15:35	1
Chromium	0.0041		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 15:35	1
Cobalt	0.00074		0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 15:35	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 15:35	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:35	1
Nickel	0.00043	J	0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 15:35	1

Client Sample ID: GWC-5

Date Collected: 09/10/19 15:35
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-2

Matrix: Water

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00074	J	0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:35	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 15:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 15:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 15:35	1
Vanadium	0.0018		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 15:35	1
Zinc	0.022		0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 15:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	13		10	10	mg/L			09/13/19 12:59	1

Client Sample ID: GWA-13

Date Collected: 09/10/19 15:35
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-3

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.3		1.0	0.71	mg/L			09/15/19 13:09	1
Fluoride	0.034	J	0.10	0.026	mg/L			09/15/19 13:09	1
Sulfate	0.93	J	1.0	0.38	mg/L			09/15/19 13:09	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00076	J	0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 15:52	1
Barium	0.030		0.010	0.0016	mg/L		09/17/19 16:09	09/21/19 15:52	1
Beryllium	0.00080	J	0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:52	1
Boron	0.061	J	0.080	0.039	mg/L		09/17/19 16:09	09/21/19 15:52	1
Cadmium	0.00035	J	0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:52	1
Calcium	0.37	J	0.50	0.13	mg/L		09/17/19 16:09	09/21/19 15:52	1
Chromium	0.0052		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 15:52	1
Cobalt	0.00064		0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 15:52	1
Copper	0.00066	J	0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 15:52	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:52	1
Nickel	0.00040	J	0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 15:52	1
Lead	0.00058	J	0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:52	1
Antimony	0.00052	J	0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 15:52	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 15:52	1
Thallium	0.00057	J	0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 15:52	1
Vanadium	0.0027		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 15:52	1
Zinc	0.0061		0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 15:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	21		10	10	mg/L			09/13/19 12:59	1

Client Sample ID: GWA-16

Date Collected: 09/10/19 16:30
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-4

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		1.0	0.71	mg/L			09/15/19 13:25	1
Fluoride	0.035	J	0.10	0.026	mg/L			09/15/19 13:25	1
Sulfate	0.83	J	1.0	0.38	mg/L			09/15/19 13:25	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00036	J	0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 15:55	1
Barium	0.039		0.010	0.0016	mg/L		09/17/19 16:09	09/21/19 15:55	1
Beryllium	0.00036	J	0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:55	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 16:09	09/21/19 15:55	1
Cadmium	0.00015	J	0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:55	1
Calcium	0.41	J	0.50	0.13	mg/L		09/17/19 16:09	09/21/19 15:55	1
Chromium	0.0040		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 15:55	1
Cobalt	0.00050		0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 15:55	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 15:55	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:55	1
Nickel	0.00036	J	0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 15:55	1
Lead	0.00013	J	0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:55	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 15:55	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 15:55	1
Thallium	0.00020	J	0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 15:55	1
Vanadium	0.0019		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 15:55	1
Zinc	0.0060		0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 15:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	13		10	10	mg/L			09/13/19 12:59	1

Client Sample ID: GWA-14

Date Collected: 09/10/19 16:40
Date Received: 09/11/19 09:00

Lab Sample ID: 180-95524-5

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.0		1.0	0.71	mg/L			09/15/19 13:41	1
Fluoride	0.032	J	0.10	0.026	mg/L			09/15/19 13:41	1
Sulfate	0.83	J	1.0	0.38	mg/L			09/15/19 13:41	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00043	J	0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 15:58	1
Barium	0.016		0.010	0.0016	mg/L		09/17/19 16:09	09/21/19 15:58	1
Beryllium	0.00025	J	0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:58	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 16:09	09/21/19 15:58	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:58	1
Calcium	0.47	J	0.50	0.13	mg/L		09/17/19 16:09	09/21/19 15:58	1
Chromium	0.0040		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 15:58	1
Cobalt	0.00042	J	0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 15:58	1
Copper	0.00076	J	0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 15:58	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:58	1
Nickel	0.00056	J	0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 15:58	1

Client Sample ID: GWA-14

Lab Sample ID: 180-95524-5

Date Collected: 09/10/19 16:40
Matrix: Water
Date Received: 09/11/19 09:00

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.00013**	**J**	0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:58	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 15:58	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 15:58	1
Thallium	**0.00021**	**J**	0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 15:58	1
Vanadium	**0.0020**		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 15:58	1
Zinc	**0.0069**		0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 15:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**16**		10	10	mg/L			09/13/19 12:59	1

Client Sample ID: FB-LF4-01

Lab Sample ID: 180-95524-6

Date Collected: 09/10/19 16:45
Matrix: Water
Date Received: 09/11/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/15/19 13:56	1
Fluoride	**0.028**	**J**	0.10	0.026	mg/L			09/15/19 13:56	1
Sulfate	**0.45**	**J**	1.0	0.38	mg/L			09/15/19 13:56	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00034**	**J**	0.0010	0.00032	mg/L		09/17/19 15:54	09/26/19 23:02	1
Barium	**0.0021**	**J**	0.010	0.0016	mg/L		09/17/19 15:54	09/26/19 23:02	1
Beryllium	**0.00026**	**J**	0.0010	0.00018	mg/L		09/17/19 15:54	09/26/19 23:02	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:54	09/27/19 08:15	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/26/19 23:02	1
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 15:54	09/26/19 23:02	1
Chromium	**0.0032**		0.0020	0.0015	mg/L		09/17/19 15:54	09/26/19 23:02	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 15:54	09/26/19 23:02	1
Copper	**0.00082**	**J**	0.0020	0.00063	mg/L		09/17/19 15:54	09/26/19 23:02	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:54	09/26/19 23:02	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 15:54	09/26/19 23:02	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/26/19 23:02	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:54	09/26/19 23:02	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:54	09/26/19 23:02	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:54	09/26/19 23:02	1
Vanadium	**0.0018**		0.0010	0.00099	mg/L		09/17/19 15:54	09/26/19 23:02	1
Zinc	**0.0032**	**J**	0.0050	0.0032	mg/L		09/17/19 15:54	09/26/19 23:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/13/19 12:59	1

Client Sample ID: FB-LF4-02

Lab Sample ID: 180-95524-7

Date Collected: 09/10/19 16:45
Matrix: Water
Date Received: 09/11/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/15/19 14:12	1
Fluoride	**0.026**	**J**	0.10	0.026	mg/L			09/15/19 14:12	1
Sulfate	**0.49**	**J**	1.0	0.38	mg/L			09/15/19 14:12	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00033**	**J**	0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 16:09	1
Barium	**0.0021**	**J**	0.010	0.0016	mg/L		09/17/19 16:09	09/21/19 16:09	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 16:09	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 16:09	09/21/19 16:09	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 16:09	1
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 16:09	09/21/19 16:09	1
Chromium	**0.0029**		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 16:09	1
Cobalt	**0.000085**	**J**	0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 16:09	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 16:09	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 16:09	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 16:09	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 16:09	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 16:09	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 16:09	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 16:09	1
Vanadium	**0.0019**		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 16:09	1
Zinc	**0.0035**	**J**	0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 16:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/13/19 12:59	1

Client Sample ID: FERB-LF4-01

Lab Sample ID: 180-95524-8

Date Collected: 09/10/19 16:45
Matrix: Water
Date Received: 09/11/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/15/19 14:28	1
Fluoride	**0.026**	**J**	0.10	0.026	mg/L			09/15/19 14:28	1
Sulfate	<0.38		1.0	0.38	mg/L			09/15/19 14:28	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 16:12	1
Barium	**0.0023**	**J**	0.010	0.0016	mg/L		09/17/19 16:09	09/21/19 16:12	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 16:12	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 16:09	09/21/19 16:12	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 16:12	1
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 16:09	09/21/19 16:12	1
Chromium	**0.0029**		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 16:12	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 16:12	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 16:12	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 16:12	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 16:12	1

Client Sample ID: FERB-LF4-01

Lab Sample ID: 180-95524-8

Date Collected: 09/10/19 16:45
Matrix: Water
Date Received: 09/11/19 09:00

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 16:12	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 16:12	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 16:12	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 16:12	1
Vanadium	**0.0016**		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 16:12	1
Zinc	**0.0040**	**J**	0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/13/19 12:59	1

Client Sample ID: FERB-LF4-02

Lab Sample ID: 180-95524-9

Date Collected: 09/10/19 16:45
Matrix: Water
Date Received: 09/11/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/15/19 14:44	1
Fluoride	**0.026**	**J**	0.10	0.026	mg/L			09/15/19 14:44	1
Sulfate	<0.38		1.0	0.38	mg/L			09/15/19 14:44	1

Method: EPA 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 16:16	1
Barium	**0.0038**	**J**	0.010	0.0016	mg/L		09/17/19 16:09	09/21/19 16:16	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 16:16	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 16:09	09/21/19 16:16	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 16:16	1
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 16:09	09/21/19 16:16	1
Chromium	**0.0028**		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 16:16	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 16:16	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 16:16	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 16:16	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 16:16	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 16:16	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 16:16	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 16:16	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 16:16	1
Vanadium	**0.0017**		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 16:16	1
Zinc	**0.0035**	**J**	0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/13/19 12:59	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-291383/6
Matrix: Water
Analysis Batch: 291383

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/15/19 06:12	1
Fluoride	<0.026		0.10	0.026	mg/L			09/15/19 06:12	1
Sulfate	<0.38		1.0	0.38	mg/L			09/15/19 06:12	1

Lab Sample ID: LCS 180-291383/5
Matrix: Water
Analysis Batch: 291383

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.4		mg/L		101	90 - 110
Fluoride	1.25	1.24		mg/L		100	90 - 110
Sulfate	25.0	25.1		mg/L		100	90 - 110

Lab Sample ID: 180-95524-1 MS
Matrix: Water
Analysis Batch: 291383

Client Sample ID: GWC-4A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.6		25.0	27.7		mg/L		97	80 - 120
Fluoride	0.044	J	1.25	1.28		mg/L		99	80 - 120
Sulfate	9.8		25.0	34.2		mg/L		97	80 - 120

Lab Sample ID: 180-95524-1 MSD
Matrix: Water
Analysis Batch: 291383

Client Sample ID: GWC-4A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.6		25.0	27.5		mg/L		96	80 - 120	1	20
Fluoride	0.044	J	1.25	1.27		mg/L		98	80 - 120	1	20
Sulfate	9.8		25.0	33.4		mg/L		95	80 - 120	2	20

Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-291660/1-A
Matrix: Water
Analysis Batch: 292881

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 15:54	09/26/19 22:48	1
Barium	<0.0016		0.010	0.0016	mg/L		09/17/19 15:54	09/26/19 22:48	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:54	09/26/19 22:48	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/26/19 22:48	1
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 15:54	09/26/19 22:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/17/19 15:54	09/26/19 22:48	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 15:54	09/26/19 22:48	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:54	09/26/19 22:48	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:54	09/26/19 22:48	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 15:54	09/26/19 22:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/26/19 22:48	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:54	09/26/19 22:48	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-291660/1-A
Matrix: Water
Analysis Batch: 292881

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:54	09/26/19 22:48	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:54	09/26/19 22:48	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		09/17/19 15:54	09/26/19 22:48	1
Zinc	<0.0032		0.0050	0.0032	mg/L		09/17/19 15:54	09/26/19 22:48	1

Lab Sample ID: MB 180-291660/1-A
Matrix: Water
Analysis Batch: 293025

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:54	09/27/19 08:02	1

Lab Sample ID: LCS 180-291660/2-A
Matrix: Water
Analysis Batch: 292881

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.967		mg/L		97	80 - 120
Barium	1.00	1.05		mg/L		105	80 - 120
Beryllium	0.500	0.543		mg/L		109	80 - 120
Cadmium	0.500	0.511		mg/L		102	80 - 120
Calcium	25.0	25.3		mg/L		101	80 - 120
Chromium	0.500	0.523		mg/L		105	80 - 120
Cobalt	0.500	0.480		mg/L		96	80 - 120
Copper	0.500	0.478		mg/L		96	80 - 120
Silver	0.250	0.255		mg/L		102	80 - 120
Nickel	0.500	0.482		mg/L		96	80 - 120
Lead	0.500	0.516		mg/L		103	80 - 120
Antimony	0.250	0.267		mg/L		107	80 - 120
Selenium	1.00	1.01		mg/L		101	80 - 120
Thallium	1.00	1.06		mg/L		106	80 - 120
Vanadium	0.500	0.518		mg/L		104	80 - 120
Zinc	0.250	0.240		mg/L		96	80 - 120

Lab Sample ID: LCS 180-291660/2-A
Matrix: Water
Analysis Batch: 293025

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.30		mg/L		104	80 - 120

Lab Sample ID: MB 180-291664/1-A
Matrix: Water
Analysis Batch: 292211

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291664

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 16:09	09/21/19 15:14	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:14	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 16:09	09/21/19 15:14	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:14	1

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-291664/1-A
Matrix: Water
Analysis Batch: 292211

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291664

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 16:09	09/21/19 15:14	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/17/19 16:09	09/21/19 15:14	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 16:09	09/21/19 15:14	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 16:09	09/21/19 15:14	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 16:09	09/21/19 15:14	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 16:09	09/21/19 15:14	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 16:09	09/21/19 15:14	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 16:09	09/21/19 15:14	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 16:09	09/21/19 15:14	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 16:09	09/21/19 15:14	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		09/17/19 16:09	09/21/19 15:14	1
Zinc	<0.0032		0.0050	0.0032	mg/L		09/17/19 16:09	09/21/19 15:14	1

Lab Sample ID: MB 180-291664/1-A
Matrix: Water
Analysis Batch: 292384

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291664

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		09/17/19 16:09	09/24/19 08:21	1

Lab Sample ID: LCS 180-291664/2-A
Matrix: Water
Analysis Batch: 292211

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 291664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.951		mg/L		95	80 - 120
Barium	1.00	1.08		mg/L		108	80 - 120
Beryllium	0.500	0.526		mg/L		105	80 - 120
Boron	1.25	1.33		mg/L		106	80 - 120
Cadmium	0.500	0.539		mg/L		108	80 - 120
Calcium	25.0	25.8		mg/L		103	80 - 120
Chromium	0.500	0.550		mg/L		110	80 - 120
Cobalt	0.500	0.482		mg/L		96	80 - 120
Copper	0.500	0.480		mg/L		96	80 - 120
Silver	0.250	0.251		mg/L		100	80 - 120
Nickel	0.500	0.482		mg/L		96	80 - 120
Lead	0.500	0.520		mg/L		104	80 - 120
Antimony	0.250	0.288		mg/L		115	80 - 120
Selenium	1.00	1.06		mg/L		106	80 - 120
Thallium	1.00	1.00		mg/L		100	80 - 120
Vanadium	0.500	0.541		mg/L		108	80 - 120
Zinc	0.250	0.279		mg/L		112	80 - 120

Lab Sample ID: 180-95524-2 MS
Matrix: Water
Analysis Batch: 292211

Client Sample ID: GWC-5
Prep Type: Total Recoverable
Prep Batch: 291664

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00035	J	1.00	0.930		mg/L		93	75 - 125

Method: EPA 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-95524-2 MS
Matrix: Water
Analysis Batch: 292211

Client Sample ID: GWC-5
Prep Type: Total Recoverable
Prep Batch: 291664

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.044		1.00	1.10		mg/L		106	75 - 125
Beryllium	<0.00018		0.500	0.527		mg/L		105	75 - 125
Boron	<0.039		1.25	1.35		mg/L		108	75 - 125
Cadmium	<0.00013		0.500	0.531		mg/L		106	75 - 125
Calcium	2.3		25.0	27.6		mg/L		101	75 - 125
Chromium	0.0041		0.500	0.548		mg/L		109	75 - 125
Cobalt	0.00074		0.500	0.474		mg/L		95	75 - 125
Copper	<0.00063		0.500	0.477		mg/L		95	75 - 125
Silver	<0.00018		0.250	0.249		mg/L		100	75 - 125
Nickel	0.00043	J	0.500	0.476		mg/L		95	75 - 125
Lead	0.00074	J	0.500	0.517		mg/L		103	75 - 125
Antimony	<0.00038		0.250	0.282		mg/L		113	75 - 125
Selenium	<0.0015		1.00	1.05		mg/L		105	75 - 125
Thallium	<0.00015		1.00	1.00		mg/L		100	75 - 125
Vanadium	0.0018		0.500	0.539		mg/L		107	75 - 125
Zinc	0.022		0.250	0.279		mg/L		103	75 - 125

Lab Sample ID: 180-95524-2 MSD
Matrix: Water
Analysis Batch: 292211

Client Sample ID: GWC-5
Prep Type: Total Recoverable
Prep Batch: 291664

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00035	J	1.00	0.977		mg/L		98	75 - 125	5	20
Barium	0.044		1.00	1.12		mg/L		108	75 - 125	2	20
Beryllium	<0.00018		0.500	0.535		mg/L		107	75 - 125	1	20
Boron	<0.039		1.25	1.37		mg/L		110	75 - 125	2	20
Cadmium	<0.00013		0.500	0.543		mg/L		109	75 - 125	2	20
Calcium	2.3		25.0	27.9		mg/L		103	75 - 125	1	20
Chromium	0.0041		0.500	0.553		mg/L		110	75 - 125	1	20
Cobalt	0.00074		0.500	0.494		mg/L		99	75 - 125	4	20
Copper	<0.00063		0.500	0.501		mg/L		100	75 - 125	5	20
Silver	<0.00018		0.250	0.257		mg/L		103	75 - 125	3	20
Nickel	0.00043	J	0.500	0.496		mg/L		99	75 - 125	4	20
Lead	0.00074	J	0.500	0.528		mg/L		105	75 - 125	2	20
Antimony	<0.00038		0.250	0.289		mg/L		116	75 - 125	2	20
Selenium	<0.0015		1.00	1.09		mg/L		109	75 - 125	4	20
Thallium	<0.00015		1.00	1.01		mg/L		101	75 - 125	1	20
Vanadium	0.0018		0.500	0.542		mg/L		108	75 - 125	1	20
Zinc	0.022		0.250	0.284		mg/L		105	75 - 125	2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-291259/2
Matrix: Water
Analysis Batch: 291259

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/13/19 12:26	1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 180-291259/1
Matrix: Water
Analysis Batch: 291259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	633	592		mg/L		94	80 - 120

Lab Sample ID: MB 180-291269/2
Matrix: Water
Analysis Batch: 291269

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/13/19 12:59	1

Lab Sample ID: LCS 180-291269/1
Matrix: Water
Analysis Batch: 291269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	633	598		mg/L		94	80 - 120

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

HPLC/IC

Analysis Batch: 291383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95524-1	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	
180-95524-2	GWC-5	Total/NA	Water	EPA 300.0 R2.1	
180-95524-3	GWA-13	Total/NA	Water	EPA 300.0 R2.1	
180-95524-4	GWA-16	Total/NA	Water	EPA 300.0 R2.1	
180-95524-5	GWA-14	Total/NA	Water	EPA 300.0 R2.1	
180-95524-6	FB-LF4-01	Total/NA	Water	EPA 300.0 R2.1	
180-95524-7	FB-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
180-95524-8	FERB-LF4-01	Total/NA	Water	EPA 300.0 R2.1	
180-95524-9	FERB-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
MB 180-291383/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-291383/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-95524-1 MS	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	
180-95524-1 MSD	GWC-4A	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 291660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95524-6	FB-LF4-01	Total Recoverable	Water	3005A	
MB 180-291660/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-291660/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 291664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95524-1	GWC-4A	Total Recoverable	Water	3005A	
180-95524-2	GWC-5	Total Recoverable	Water	3005A	
180-95524-3	GWA-13	Total Recoverable	Water	3005A	
180-95524-4	GWA-16	Total Recoverable	Water	3005A	
180-95524-5	GWA-14	Total Recoverable	Water	3005A	
180-95524-7	FB-LF4-02	Total Recoverable	Water	3005A	
180-95524-8	FERB-LF4-01	Total Recoverable	Water	3005A	
180-95524-9	FERB-LF4-02	Total Recoverable	Water	3005A	
MB 180-291664/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-291664/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-95524-2 MS	GWC-5	Total Recoverable	Water	3005A	
180-95524-2 MSD	GWC-5	Total Recoverable	Water	3005A	

Analysis Batch: 292211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95524-1	GWC-4A	Total Recoverable	Water	EPA 6020B	291664
180-95524-2	GWC-5	Total Recoverable	Water	EPA 6020B	291664
180-95524-3	GWA-13	Total Recoverable	Water	EPA 6020B	291664
180-95524-4	GWA-16	Total Recoverable	Water	EPA 6020B	291664
180-95524-5	GWA-14	Total Recoverable	Water	EPA 6020B	291664
180-95524-7	FB-LF4-02	Total Recoverable	Water	EPA 6020B	291664
180-95524-8	FERB-LF4-01	Total Recoverable	Water	EPA 6020B	291664
180-95524-9	FERB-LF4-02	Total Recoverable	Water	EPA 6020B	291664
MB 180-291664/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	291664
LCS 180-291664/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	291664
180-95524-2 MS	GWC-5	Total Recoverable	Water	EPA 6020B	291664
180-95524-2 MSD	GWC-5	Total Recoverable	Water	EPA 6020B	291664

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95524-1
SDG: 1

Metals

Analysis Batch: 292384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-291664/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	291664

Analysis Batch: 292881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95524-6	FB-LF4-01	Total Recoverable	Water	EPA 6020B	291660
MB 180-291660/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	291660
LCS 180-291660/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	291660

Analysis Batch: 293025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95524-6	FB-LF4-01	Total Recoverable	Water	EPA 6020B	291660
MB 180-291660/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	291660
LCS 180-291660/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	291660

General Chemistry

Analysis Batch: 291259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95524-1	GWC-4A	Total/NA	Water	SM 2540C	
MB 180-291259/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-291259/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 291269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95524-2	GWC-5	Total/NA	Water	SM 2540C	
180-95524-3	GWA-13	Total/NA	Water	SM 2540C	
180-95524-4	GWA-16	Total/NA	Water	SM 2540C	
180-95524-5	GWA-14	Total/NA	Water	SM 2540C	
180-95524-6	FB-LF4-01	Total/NA	Water	SM 2540C	
180-95524-7	FB-LF4-02	Total/NA	Water	SM 2540C	
180-95524-8	FERB-LF4-01	Total/NA	Water	SM 2540C	
180-95524-9	FERB-LF4-02	Total/NA	Water	SM 2540C	
MB 180-291269/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-291269/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: J. Adcock, J. Noles, L. Coker	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-54272-10411.2
Client Contact: Peter Adams	Phone: 404-592-0094	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 1
Company: Southern Company Services, Inc.		Analysis Requested		Job #:
Address: 3535 Colonnade Parkway	Due Date Requested:			Preservation Codes:
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35243				
Phone: 205-992-5417(Tel)	PO #: SCS10382606			
Email: : Impetty@southernco.com	WO #:			J - DI Water; K - EDTA; L - EDA; W - pH 4-5; Z - other (specify)
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			Other:
Site: Georgia	SSOW#:			

180-95524 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - B, Ca state : SbAsBaBeCdCrCoCuPbNiSeAgTlVZ	2540C_Calcd, TDS 300_Chloride, Fluoride Sulfate Hd	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N		
GWC-4A	9/10/19	1520	G	Water	N	N	X	X	2	
GWC-5	9/10/19	1535	G	Water	N	N	X	X	2	
GWA-13	9/10/19	1535	G	Water	N	N	X	X	2	
GWA-16	9/10/19	1630	G	Water	N	N	X	X	2	
GWA-14	9/10/19	1640	G	Water	N	N	X	X	2	
FB-LF4-01	9/10/19	1645	G	Water	N	N	X	X	2	
FB-LF4-02	9/10/19	1645	G	Water	N	N	X	X	2	
FERB-LF4-01	9/10/19	1645	G	Water	N	N	X	X	2	
FERB-LF4-02	9/10/19	1645	G	Water	N	N	X	X	2	
				Water						
				Water						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 9/10/19 1900	Company: GEI	Received by: Fedex	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 9/11/19 9w	Company: [signature]
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-95524-1
SDG Number: 1

Login Number: 95524
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-95558-1
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Authorized for release by:
10/9/2019 11:05:21 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

Job ID: 180-95558-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-95558-1

Comments
No additional comments.

Receipt
The samples were received on 9/12/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.9º C and 3.2º C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): GWC-15 (180-95558-16). The container labels list a sample id of GWA-15, while the COC lists GWC-15. The id on the COC was used.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Job ID: 180-95558-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-95558-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	12-31-19
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

Sample Summary

Client: Southern Company
Job ID: 180-95558-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-95558-1	GWC-17	Water	09/11/19 10:15	09/12/19 09:00	
180-95558-2	GWC-18	Water	09/11/19 11:00	09/12/19 09:00	
180-95558-3	GWC-19	Water	09/11/19 11:00	09/12/19 09:00	
180-95558-4	GWC-20	Water	09/11/19 11:30	09/12/19 09:00	
180-95558-5	GWC-21	Water	09/11/19 12:20	09/12/19 09:00	
180-95558-6	GWC-23	Water	09/11/19 12:25	09/12/19 09:00	
180-95558-7	GWC-9	Water	09/11/19 12:45	09/12/19 09:00	
180-95558-8	GWC-10	Water	09/11/19 13:35	09/12/19 09:00	
180-95558-9	GWC-11	Water	09/11/19 14:40	09/12/19 09:00	
180-95558-10	GWC-12	Water	09/11/19 14:00	09/12/19 09:00	
180-95558-11	GWA-3	Water	09/11/19 14:45	09/12/19 09:00	
180-95558-12	GWA-2	Water	09/11/19 15:50	09/12/19 09:00	
180-95558-13	GWC-1	Water	09/11/19 15:25	09/12/19 09:00	
180-95558-14	DUP-LF4-01	Water	09/11/19 00:00	09/12/19 09:00	
180-95558-15	DUP-LF4-02	Water	09/11/19 00:00	09/12/19 09:00	
180-95558-16	GWC-15	Water	09/11/19 09:50	09/12/19 09:00	

Method Summary

Client: Southern Company
Job ID: 180-95558-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

Client Sample ID: GWC-17

Lab Sample ID: 180-95558-1
Matrix: Water
Date Collected: 09/11/19 10:15
Date Received: 09/12/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 15:31	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291660	09/17/19 15:54	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			292881	09/27/19 00:36	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	291660	09/17/19 15:54	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293025	09/27/19 09:53	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-18

Lab Sample ID: 180-95558-2
Matrix: Water
Date Collected: 09/11/19 11:00
Date Received: 09/12/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 16:50	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291660	09/17/19 15:54	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			292881	09/27/19 00:40	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	291660	09/17/19 15:54	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293025	09/27/19 10:04	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-19

Lab Sample ID: 180-95558-3
Matrix: Water
Date Collected: 09/11/19 11:00
Date Received: 09/12/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 17:06	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291660	09/17/19 15:54	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			292881	09/26/19 22:58	RSK	TAL PIT
	Instrument ID: A									
Total Recoverable	Prep	3005A			50 mL	50 mL	291660	09/17/19 15:54	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293025	09/27/19 08:12	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

Client Sample ID: GWC-20
Date Collected: 09/11/19 11:30
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 17:22	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 20:51	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-21
Date Collected: 09/11/19 12:20
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 17:38	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:04	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-23
Date Collected: 09/11/19 12:25
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 17:53	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:07	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-9
Date Collected: 09/11/19 12:45
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 18:09	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:11	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

Client Sample ID: GWC-10

Date Collected: 09/11/19 13:35
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 18:25	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:14	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-11

Date Collected: 09/11/19 14:40
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 18:41	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:18	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-12

Date Collected: 09/11/19 14:00
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 19:28	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:28	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWA-3

Date Collected: 09/11/19 14:45
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 19:44	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:31	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

Client Sample ID: GWA-2

Date Collected: 09/11/19 15:50
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 20:32	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:35	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: GWC-1

Date Collected: 09/11/19 15:25
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 20:47	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:38	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-LF4-01

Date Collected: 09/11/19 00:00
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 21:03	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:41	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-LF4-02

Date Collected: 09/11/19 00:00
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 21:19	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:45	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

Client Sample ID: GWC-15

Date Collected: 09/11/19 09:50
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			291383	09/15/19 21:35	CMR	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	291656	09/17/19 15:26	KAK	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			293231	09/29/19 21:48	WTR	TAL PIT
	Instrument ID: A									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	291588	09/17/19 10:16	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

KAK = Kayla Kalamasz

Batch Type: Analysis

AVS = Abbey Smith
CMR = Carl Reagle
RSK = Robert Kurtz
WTR = Bill Reinheimer

Client Sample ID: GWC-17

Lab Sample ID: 180-95558-1

Date Collected: 09/11/19 10:15

Matrix: Water

Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.3		1.0	0.71	mg/L			09/15/19 15:31	1
Fluoride	0.099	J	0.10	0.026	mg/L			09/15/19 15:31	1
Sulfate	0.85	J	1.0	0.38	mg/L			09/15/19 15:31	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00038	J	0.0010	0.00032	mg/L		09/17/19 15:54	09/27/19 00:36	1
Barium	0.021		0.010	0.0016	mg/L		09/17/19 15:54	09/27/19 00:36	1
Beryllium	0.0010		0.0010	0.00018	mg/L		09/17/19 15:54	09/27/19 00:36	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:54	09/27/19 09:53	1
Cadmium	0.00064	J	0.0010	0.00013	mg/L		09/17/19 15:54	09/27/19 00:36	1
Calcium	2.0		0.50	0.13	mg/L		09/17/19 15:54	09/27/19 00:36	1
Chromium	0.0059		0.0020	0.0015	mg/L		09/17/19 15:54	09/27/19 00:36	1
Cobalt	0.00034	J	0.00050	0.000075	mg/L		09/17/19 15:54	09/27/19 00:36	1
Copper	0.0012	J	0.0020	0.00063	mg/L		09/17/19 15:54	09/27/19 00:36	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:54	09/27/19 00:36	1
Nickel	0.0018		0.0010	0.00034	mg/L		09/17/19 15:54	09/27/19 00:36	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/27/19 00:36	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:54	09/27/19 00:36	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:54	09/27/19 00:36	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:54	09/27/19 00:36	1
Vanadium	0.0018		0.0010	0.00099	mg/L		09/17/19 15:54	09/27/19 00:36	1
Zinc	0.013		0.0050	0.0032	mg/L		09/17/19 15:54	09/27/19 00:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	31		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-18

Lab Sample ID: 180-95558-2

Date Collected: 09/11/19 11:00

Matrix: Water

Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.5		1.0	0.71	mg/L			09/15/19 16:50	1
Fluoride	0.47		0.10	0.026	mg/L			09/15/19 16:50	1
Sulfate	4.5		1.0	0.38	mg/L			09/15/19 16:50	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0012		0.0010	0.00032	mg/L		09/17/19 15:54	09/27/19 00:40	1
Barium	0.018		0.010	0.0016	mg/L		09/17/19 15:54	09/27/19 00:40	1
Beryllium	0.00026	J	0.0010	0.00018	mg/L		09/17/19 15:54	09/27/19 00:40	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:54	09/27/19 10:04	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/27/19 00:40	1
Calcium	13		0.50	0.13	mg/L		09/17/19 15:54	09/27/19 00:40	1
Chromium	0.0049		0.0020	0.0015	mg/L		09/17/19 15:54	09/27/19 00:40	1
Cobalt	0.000082	J	0.00050	0.000075	mg/L		09/17/19 15:54	09/27/19 00:40	1
Copper	0.0011	J	0.0020	0.00063	mg/L		09/17/19 15:54	09/27/19 00:40	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:54	09/27/19 00:40	1
Nickel	0.0012		0.0010	0.00034	mg/L		09/17/19 15:54	09/27/19 00:40	1

Client Sample ID: GWC-18
Lab Sample ID: 180-95558-2
Date Collected: 09/11/19 11:00
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00017	J	0.0010	0.00013	mg/L		09/17/19 15:54	09/27/19 00:40	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:54	09/27/19 00:40	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:54	09/27/19 00:40	1
Thallium	0.00018	J	0.0010	0.00015	mg/L		09/17/19 15:54	09/27/19 00:40	1
Vanadium	0.0037		0.0010	0.00099	mg/L		09/17/19 15:54	09/27/19 00:40	1
Zinc	0.0058		0.0050	0.0032	mg/L		09/17/19 15:54	09/27/19 00:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	45		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-19
Lab Sample ID: 180-95558-3
Date Collected: 09/11/19 11:00
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.7		1.0	0.71	mg/L			09/15/19 17:06	1
Fluoride	0.080	J	0.10	0.026	mg/L			09/15/19 17:06	1
Sulfate	1.8		1.0	0.38	mg/L			09/15/19 17:06	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00057	J	0.0010	0.00032	mg/L		09/17/19 15:54	09/26/19 22:58	1
Barium	0.015		0.010	0.0016	mg/L		09/17/19 15:54	09/26/19 22:58	1
Beryllium	0.00058	J	0.0010	0.00018	mg/L		09/17/19 15:54	09/26/19 22:58	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:54	09/27/19 08:12	1
Cadmium	0.00031	J	0.0010	0.00013	mg/L		09/17/19 15:54	09/26/19 22:58	1
Calcium	8.2		0.50	0.13	mg/L		09/17/19 15:54	09/26/19 22:58	1
Chromium	0.0043		0.0020	0.0015	mg/L		09/17/19 15:54	09/26/19 22:58	1
Cobalt	0.000099	J	0.00050	0.000075	mg/L		09/17/19 15:54	09/26/19 22:58	1
Copper	0.00085	J	0.0020	0.00063	mg/L		09/17/19 15:54	09/26/19 22:58	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:54	09/26/19 22:58	1
Nickel	0.0018		0.0010	0.00034	mg/L		09/17/19 15:54	09/26/19 22:58	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/26/19 22:58	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:54	09/26/19 22:58	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:54	09/26/19 22:58	1
Thallium	0.00019	J	0.0010	0.00015	mg/L		09/17/19 15:54	09/26/19 22:58	1
Vanadium	0.0023		0.0010	0.00099	mg/L		09/17/19 15:54	09/26/19 22:58	1
Zinc	0.0046	J	0.0050	0.0032	mg/L		09/17/19 15:54	09/26/19 22:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	49		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-20

Date Collected: 09/11/19 11:30
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-4
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.7		1.0	0.71	mg/L			09/15/19 17:22	1
Fluoride	0.045	J	0.10	0.026	mg/L			09/15/19 17:22	1
Sulfate	0.97	J	1.0	0.38	mg/L			09/15/19 17:22	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00066	J	0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 20:51	1
Barium	0.021		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 20:51	1
Beryllium	0.00052	J	0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 20:51	1
Boron	0.042	J	0.080	0.039	mg/L		09/17/19 15:26	09/29/19 20:51	1
Cadmium	0.00029	J	0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 20:51	1
Calcium	1.5		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 20:51	1
Chromium	0.0034		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 20:51	1
Cobalt	0.0014		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 20:51	1
Copper	0.0012	J	0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 20:51	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 20:51	1
Nickel	0.0014		0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 20:51	1
Lead	0.00024	J	0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 20:51	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 20:51	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 20:51	1
Thallium	0.00034	J	0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 20:51	1
Vanadium	0.0018		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 20:51	1
Zinc	0.0073		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 20:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	45		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-21

Date Collected: 09/11/19 12:20
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-5
Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.7		1.0	0.71	mg/L			09/15/19 17:38	1
Fluoride	0.032	J	0.10	0.026	mg/L			09/15/19 17:38	1
Sulfate	0.94	J	1.0	0.38	mg/L			09/15/19 17:38	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00064	J	0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:04	1
Barium	0.019		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:04	1
Beryllium	0.00054	J	0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:04	1
Boron	0.055	J	0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:04	1
Cadmium	0.00029	J	0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:04	1
Calcium	1.0		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:04	1
Chromium	0.0025		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:04	1
Cobalt	0.0012		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:04	1
Copper	0.00066	J	0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:04	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:04	1
Nickel	0.00097	J	0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:04	1

Client Sample ID: GWC-21
Lab Sample ID: 180-95558-5
Date Collected: 09/11/19 12:20
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00021	J	0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:04	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:04	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:04	1
Thallium	0.00041	J	0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:04	1
Vanadium	0.0015		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:04	1
Zinc	0.0063		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	23		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-23
Lab Sample ID: 180-95558-6
Date Collected: 09/11/19 12:25
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.6		1.0	0.71	mg/L			09/15/19 17:53	1
Fluoride	0.041	J	0.10	0.026	mg/L			09/15/19 17:53	1
Sulfate	2.5		1.0	0.38	mg/L			09/15/19 17:53	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00051	J	0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:07	1
Barium	0.023		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:07	1
Beryllium	0.00026	J	0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:07	1
Boron	0.040	J	0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:07	1
Cadmium	0.00018	J	0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:07	1
Calcium	1.4		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:07	1
Chromium	0.0040		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:07	1
Cobalt	0.0059		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:07	1
Copper	0.00092	J	0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:07	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:07	1
Nickel	0.0023		0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:07	1
Lead	0.00018	J	0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:07	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:07	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:07	1
Thallium	0.00034	J	0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:07	1
Vanadium	0.0015		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:07	1
Zinc	0.0086		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-9
Lab Sample ID: 180-95558-7
Date Collected: 09/11/19 12:45
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.3		1.0	0.71	mg/L			09/15/19 18:09	1
Fluoride	0.034	J	0.10	0.026	mg/L			09/15/19 18:09	1
Sulfate	0.92	J	1.0	0.38	mg/L			09/15/19 18:09	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00044	J	0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:11	1
Barium	0.029		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:11	1
Beryllium	0.00021	J	0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:11	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:11	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:11	1
Calcium	0.44	J	0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:11	1
Chromium	0.0025		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:11	1
Cobalt	0.00083		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:11	1
Copper	0.00092	J	0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:11	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:11	1
Nickel	0.00065	J	0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:11	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:11	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:11	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:11	1
Thallium	0.00023	J	0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:11	1
Vanadium	0.0015		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:11	1
Zinc	0.0058		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	43		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-10
Lab Sample ID: 180-95558-8
Date Collected: 09/11/19 13:35
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.4		1.0	0.71	mg/L			09/15/19 18:25	1
Fluoride	0.10		0.10	0.026	mg/L			09/15/19 18:25	1
Sulfate	5.2		1.0	0.38	mg/L			09/15/19 18:25	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00082	J	0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:14	1
Barium	0.021		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:14	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:14	1
Boron	0.067	J	0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:14	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:14	1
Calcium	26		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:14	1
Chromium	0.0040		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:14	1
Cobalt	0.00010	J	0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:14	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:14	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:14	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:14	1

Client Sample ID: GWC-10
Lab Sample ID: 180-95558-8
Date Collected: 09/11/19 13:35
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:14	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:14	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:14	1
Thallium	**0.00020**	**J**	0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:14	1
Vanadium	**0.0022**		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:14	1
Zinc	**0.0058**		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**130**		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-11
Lab Sample ID: 180-95558-9
Date Collected: 09/11/19 14:40
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.4**		1.0	0.71	mg/L			09/15/19 18:41	1
Fluoride	**0.26**		0.10	0.026	mg/L			09/15/19 18:41	1
Sulfate	**3.8**		1.0	0.38	mg/L			09/15/19 18:41	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0017**		0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:18	1
Barium	**0.011**		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:18	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:18	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:18	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:18	1
Calcium	**9.3**		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:18	1
Chromium	**0.0071**		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:18	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:18	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:18	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:18	1
Nickel	**0.00042**	**J**	0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:18	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:18	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:18	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:18	1
Vanadium	**0.0025**		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:18	1
Zinc	**0.0050**		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**39**		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-12

Lab Sample ID: 180-95558-10

Date Collected: 09/11/19 14:00

Matrix: Water

Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		1.0	0.71	mg/L			09/15/19 19:28	1
Fluoride	0.036	J	0.10	0.026	mg/L			09/15/19 19:28	1
Sulfate	1.0		1.0	0.38	mg/L			09/15/19 19:28	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00032	J	0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:28	1
Barium	0.010		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:28	1
Beryllium	0.00022	J	0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:28	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:28	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:28	1
Calcium	0.62		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:28	1
Chromium	0.0036		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:28	1
Cobalt	0.00067		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:28	1
Copper	0.00069	J	0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:28	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:28	1
Nickel	0.0010		0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:28	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:28	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:28	1
Thallium	0.00017	J	0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:28	1
Vanadium	0.0011		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:28	1
Zinc	0.0066		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWA-3

Lab Sample ID: 180-95558-11

Date Collected: 09/11/19 14:45

Matrix: Water

Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		1.0	0.71	mg/L			09/15/19 19:44	1
Fluoride	0.033	J	0.10	0.026	mg/L			09/15/19 19:44	1
Sulfate	1.0		1.0	0.38	mg/L			09/15/19 19:44	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:31	1
Barium	0.015		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:31	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:31	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:31	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:31	1
Calcium	0.76		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:31	1
Chromium	0.0034		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:31	1
Cobalt	0.00039	J	0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:31	1
Copper	0.00092	J	0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:31	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:31	1
Nickel	0.00045	J	0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:31	1

Client Sample ID: GWA-3
Lab Sample ID: 180-95558-11
Date Collected: 09/11/19 14:45
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:31	1
Antimony	**0.00081**	**J**	0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:31	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:31	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:31	1
Vanadium	**0.0012**		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:31	1
Zinc	**0.012**		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**15**		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWA-2
Lab Sample ID: 180-95558-12
Date Collected: 09/11/19 15:50
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.8**		1.0	0.71	mg/L			09/15/19 20:32	1
Fluoride	**0.037**	**J**	0.10	0.026	mg/L			09/15/19 20:32	1
Sulfate	**0.76**	**J**	1.0	0.38	mg/L			09/15/19 20:32	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:35	1
Barium	**0.034**		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:35	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:35	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:35	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:35	1
Calcium	**0.43**	**J**	0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:35	1
Chromium	**0.0040**		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:35	1
Cobalt	**0.0015**		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:35	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:35	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:35	1
Nickel	**0.00091**	**J**	0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:35	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:35	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:35	1
Vanadium	**0.0014**		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:35	1
Zinc	**0.0089**		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**28**		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: GWC-1

Lab Sample ID: 180-95558-13

Date Collected: 09/11/19 15:25

Matrix: Water

Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.0		1.0	0.71	mg/L			09/15/19 20:47	1
Fluoride	0.036	J	0.10	0.026	mg/L			09/15/19 20:47	1
Sulfate	1.3		1.0	0.38	mg/L			09/15/19 20:47	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:38	1
Barium	0.038		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:38	1
Beryllium	0.00021	J	0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:38	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:38	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:38	1
Calcium	1.4		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:38	1
Chromium	0.0035		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:38	1
Cobalt	0.0020		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:38	1
Copper	0.0010	J	0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:38	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:38	1
Nickel	0.0013		0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:38	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:38	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:38	1
Vanadium	0.0013		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:38	1
Zinc	0.0088		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	49		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: DUP-LF4-01

Lab Sample ID: 180-95558-14

Date Collected: 09/11/19 00:00

Matrix: Water

Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.6		1.0	0.71	mg/L			09/15/19 21:03	1
Fluoride	0.032	J	0.10	0.026	mg/L			09/15/19 21:03	1
Sulfate	1.1		1.0	0.38	mg/L			09/15/19 21:03	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:41	1
Barium	0.018		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:41	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:41	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:41	1
Cadmium	0.00014	J	0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:41	1
Calcium	1.1		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:41	1
Chromium	0.0023		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:41	1
Cobalt	0.0012		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:41	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:41	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:41	1
Nickel	0.00090	J	0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:41	1

Client Sample ID: DUP-LF4-01
Lab Sample ID: 180-95558-14
Date Collected: 09/11/19 00:00
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:41	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:41	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:41	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:41	1
Vanadium	**0.0013**		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:41	1
Zinc	**0.0060**		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**26**		10	10	mg/L			09/17/19 10:16	1

Client Sample ID: DUP-LF4-02
Lab Sample ID: 180-95558-15
Date Collected: 09/11/19 00:00
Matrix: Water
Date Received: 09/12/19 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.4**		1.0	0.71	mg/L			09/15/19 21:19	1
Fluoride	**0.26**		0.10	0.026	mg/L			09/15/19 21:19	1
Sulfate	**3.7**		1.0	0.38	mg/L			09/15/19 21:19	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0016**		0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:45	1
Barium	**0.011**		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:45	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:45	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:45	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:45	1
Calcium	**9.5**		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:45	1
Chromium	**0.0072**		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:45	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:45	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:45	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:45	1
Nickel	**0.00042**	**J**	0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:45	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:45	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:45	1
Vanadium	**0.0025**		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:45	1
Zinc	**0.0047**	**J**	0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**60**		10	10	mg/L			09/17/19 10:16	1

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

Client Sample ID: GWC-15

Date Collected: 09/11/19 09:50
Date Received: 09/12/19 09:00

Lab Sample ID: 180-95558-16

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.7**		1.0	0.71	mg/L			09/15/19 21:35	1
Fluoride	**0.032**	**J**	0.10	0.026	mg/L			09/15/19 21:35	1
Sulfate	**1.2**		1.0	0.38	mg/L			09/15/19 21:35	1

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00033**	**J**	0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 21:48	1
Barium	**0.023**		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 21:48	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:48	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 21:48	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:48	1
Calcium	**0.42**	**J**	0.50	0.13	mg/L		09/17/19 15:26	09/29/19 21:48	1
Chromium	**0.0038**		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 21:48	1
Cobalt	**0.00044**	**J**	0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 21:48	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 21:48	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 21:48	1
Nickel	**0.00042**	**J**	0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 21:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 21:48	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 21:48	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 21:48	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 21:48	1
Vanadium	**0.0016**		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 21:48	1
Zinc	**0.0062**		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 21:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**15**		10	10	mg/L			09/17/19 10:16	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-291383/38
Matrix: Water
Analysis Batch: 291383

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/15/19 15:15	1
Fluoride	<0.026		0.10	0.026	mg/L			09/15/19 15:15	1
Sulfate	<0.38		1.0	0.38	mg/L			09/15/19 15:15	1

Lab Sample ID: LCS 180-291383/37
Matrix: Water
Analysis Batch: 291383

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	25.3		mg/L		101	90 - 110
Fluoride	1.25	1.24		mg/L		99	90 - 110
Sulfate	25.0	25.0		mg/L		100	90 - 110

Lab Sample ID: 180-95558-1 MS
Matrix: Water
Analysis Batch: 291383

Client Sample ID: GWC-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.3		25.0	28.2		mg/L		95	80 - 120
Fluoride	0.099	J	1.25	1.38		mg/L		103	80 - 120
Sulfate	0.85	J	25.0	25.0		mg/L		97	80 - 120

Lab Sample ID: 180-95558-1 MSD
Matrix: Water
Analysis Batch: 291383

Client Sample ID: GWC-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.3		25.0	27.9		mg/L		95	80 - 120	1	20
Fluoride	0.099	J	1.25	1.35		mg/L		100	80 - 120	2	20
Sulfate	0.85	J	25.0	24.7		mg/L		95	80 - 120	1	20

Lab Sample ID: 180-95558-11 MS
Matrix: Water
Analysis Batch: 291383

Client Sample ID: GWA-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.5		25.0	27.3		mg/L		95	80 - 120
Fluoride	0.033	J	1.25	1.26		mg/L		98	80 - 120
Sulfate	1.0		25.0	25.2		mg/L		96	80 - 120

Lab Sample ID: 180-95558-11 MSD
Matrix: Water
Analysis Batch: 291383

Client Sample ID: GWA-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.5		25.0	27.7		mg/L		97	80 - 120	1	20
Fluoride	0.033	J	1.25	1.26		mg/L		98	80 - 120	0	20
Sulfate	1.0		25.0	25.1		mg/L		96	80 - 120	0	20

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-291656/1-A
Matrix: Water
Analysis Batch: 293231

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291656

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 15:26	09/29/19 20:30	1
Barium	<0.0016		0.010	0.0016	mg/L		09/17/19 15:26	09/29/19 20:30	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 20:30	1
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:26	09/29/19 20:30	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 20:30	1
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 15:26	09/29/19 20:30	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/17/19 15:26	09/29/19 20:30	1
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 15:26	09/29/19 20:30	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:26	09/29/19 20:30	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:26	09/29/19 20:30	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 15:26	09/29/19 20:30	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:26	09/29/19 20:30	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:26	09/29/19 20:30	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:26	09/29/19 20:30	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:26	09/29/19 20:30	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		09/17/19 15:26	09/29/19 20:30	1
Zinc	<0.0032		0.0050	0.0032	mg/L		09/17/19 15:26	09/29/19 20:30	1

Lab Sample ID: LCS 180-291656/2-A
Matrix: Water
Analysis Batch: 293231

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 291656

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.09		mg/L		109	80 - 120
Barium	1.00	1.02		mg/L		102	80 - 120
Beryllium	0.500	0.518		mg/L		104	80 - 120
Boron	1.25	1.17		mg/L		94	80 - 120
Cadmium	0.500	0.544		mg/L		109	80 - 120
Calcium	25.0	26.7		mg/L		107	80 - 120
Chromium	0.500	0.562		mg/L		112	80 - 120
Cobalt	0.500	0.570		mg/L		114	80 - 120
Copper	0.500	0.573		mg/L		115	80 - 120
Silver	0.250	0.267		mg/L		107	80 - 120
Nickel	0.500	0.565		mg/L		113	80 - 120
Lead	0.500	0.541		mg/L		108	80 - 120
Antimony	0.250	0.277		mg/L		111	80 - 120
Selenium	1.00	1.10		mg/L		110	80 - 120
Thallium	1.00	1.20		mg/L		120	80 - 120
Vanadium	0.500	0.551		mg/L		110	80 - 120
Zinc	0.250	0.298		mg/L		119	80 - 120

Lab Sample ID: 180-95558-4 MS
Matrix: Water
Analysis Batch: 293231

Client Sample ID: GWC-20
Prep Type: Total Recoverable
Prep Batch: 291656

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00066	J	1.00	1.03		mg/L		103	75 - 125
Barium	0.021		1.00	1.01		mg/L		99	75 - 125
Beryllium	0.00052	J	0.500	0.489		mg/L		98	75 - 125

Method: EPA 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-95558-4 MS
Matrix: Water
Analysis Batch: 293231

Client Sample ID: GWC-20
Prep Type: Total Recoverable
Prep Batch: 291656

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.042	J	1.25	1.24		mg/L		95	75 - 125
Cadmium	0.00029	J	0.500	0.520		mg/L		104	75 - 125
Calcium	1.5		25.0	26.8		mg/L		101	75 - 125
Chromium	0.0034		0.500	0.527		mg/L		105	75 - 125
Cobalt	0.0014		0.500	0.541		mg/L		108	75 - 125
Copper	0.0012	J	0.500	0.542		mg/L		108	75 - 125
Silver	<0.00018		0.250	0.255		mg/L		102	75 - 125
Nickel	0.0014		0.500	0.539		mg/L		108	75 - 125
Lead	0.00024	J	0.500	0.514		mg/L		103	75 - 125
Antimony	<0.00038		0.250	0.265		mg/L		106	75 - 125
Selenium	<0.0015		1.00	1.02		mg/L		102	75 - 125
Thallium	0.00034	J	1.00	1.13		mg/L		113	75 - 125
Vanadium	0.0018		0.500	0.518		mg/L		103	75 - 125
Zinc	0.0073		0.250	0.285		mg/L		111	75 - 125

Lab Sample ID: 180-95558-4 MSD
Matrix: Water
Analysis Batch: 293231

Client Sample ID: GWC-20
Prep Type: Total Recoverable
Prep Batch: 291656

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00066	J	1.00	1.03		mg/L		103	75 - 125	0	20
Barium	0.021		1.00	0.994		mg/L		97	75 - 125	2	20
Beryllium	0.00052	J	0.500	0.483		mg/L		97	75 - 125	1	20
Boron	0.042	J	1.25	1.23		mg/L		95	75 - 125	1	20
Cadmium	0.00029	J	0.500	0.519		mg/L		104	75 - 125	0	20
Calcium	1.5		25.0	26.7		mg/L		101	75 - 125	0	20
Chromium	0.0034		0.500	0.520		mg/L		103	75 - 125	1	20
Cobalt	0.0014		0.500	0.529		mg/L		105	75 - 125	2	20
Copper	0.0012	J	0.500	0.539		mg/L		107	75 - 125	1	20
Silver	<0.00018		0.250	0.257		mg/L		103	75 - 125	1	20
Nickel	0.0014		0.500	0.534		mg/L		107	75 - 125	1	20
Lead	0.00024	J	0.500	0.512		mg/L		102	75 - 125	0	20
Antimony	<0.00038		0.250	0.266		mg/L		107	75 - 125	1	20
Selenium	<0.0015		1.00	1.05		mg/L		105	75 - 125	2	20
Thallium	0.00034	J	1.00	1.08		mg/L		108	75 - 125	4	20
Vanadium	0.0018		0.500	0.515		mg/L		103	75 - 125	1	20
Zinc	0.0073		0.250	0.286		mg/L		111	75 - 125	0	20

Lab Sample ID: MB 180-291660/1-A
Matrix: Water
Analysis Batch: 292881

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0010	0.00032	mg/L		09/17/19 15:54	09/26/19 22:48	1
Barium	<0.0016		0.010	0.0016	mg/L		09/17/19 15:54	09/26/19 22:48	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:54	09/26/19 22:48	1
Cadmium	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/26/19 22:48	1
Calcium	<0.13		0.50	0.13	mg/L		09/17/19 15:54	09/26/19 22:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/17/19 15:54	09/26/19 22:48	1

Method: EPA 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 180-291660/1-A
Matrix: Water
Analysis Batch: 292881

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.000075		0.00050	0.000075	mg/L		09/17/19 15:54	09/26/19 22:48	1
Copper	<0.00063		0.0020	0.00063	mg/L		09/17/19 15:54	09/26/19 22:48	1
Silver	<0.00018		0.0010	0.00018	mg/L		09/17/19 15:54	09/26/19 22:48	1
Nickel	<0.00034		0.0010	0.00034	mg/L		09/17/19 15:54	09/26/19 22:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/17/19 15:54	09/26/19 22:48	1
Antimony	<0.00038		0.0020	0.00038	mg/L		09/17/19 15:54	09/26/19 22:48	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/17/19 15:54	09/26/19 22:48	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/17/19 15:54	09/26/19 22:48	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		09/17/19 15:54	09/26/19 22:48	1
Zinc	<0.0032		0.0050	0.0032	mg/L		09/17/19 15:54	09/26/19 22:48	1

Lab Sample ID: MB 180-291660/1-A
Matrix: Water
Analysis Batch: 293025

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		09/17/19 15:54	09/27/19 08:02	1

Lab Sample ID: LCS 180-291660/2-A
Matrix: Water
Analysis Batch: 292881

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	0.967		mg/L		97	80 - 120
Barium	1.00	1.05		mg/L		105	80 - 120
Beryllium	0.500	0.543		mg/L		109	80 - 120
Cadmium	0.500	0.511		mg/L		102	80 - 120
Calcium	25.0	25.3		mg/L		101	80 - 120
Chromium	0.500	0.523		mg/L		105	80 - 120
Cobalt	0.500	0.480		mg/L		96	80 - 120
Copper	0.500	0.478		mg/L		96	80 - 120
Silver	0.250	0.255		mg/L		102	80 - 120
Nickel	0.500	0.482		mg/L		96	80 - 120
Lead	0.500	0.516		mg/L		103	80 - 120
Antimony	0.250	0.267		mg/L		107	80 - 120
Selenium	1.00	1.01		mg/L		101	80 - 120
Thallium	1.00	1.06		mg/L		106	80 - 120
Vanadium	0.500	0.518		mg/L		104	80 - 120
Zinc	0.250	0.240		mg/L		96	80 - 120

Lab Sample ID: LCS 180-291660/2-A
Matrix: Water
Analysis Batch: 293025

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 291660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1.25	1.30		mg/L		104	80 - 120

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-291588/2
Matrix: Water
Analysis Batch: 291588

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/17/19 10:16	1

Lab Sample ID: LCS 180-291588/1
Matrix: Water
Analysis Batch: 291588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	633	558		mg/L		88	80 - 120

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-95558-1

HPLC/IC

Analysis Batch: 291383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95558-1	GWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-95558-2	GWC-18	Total/NA	Water	EPA 300.0 R2.1	
180-95558-3	GWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-95558-4	GWC-20	Total/NA	Water	EPA 300.0 R2.1	
180-95558-5	GWC-21	Total/NA	Water	EPA 300.0 R2.1	
180-95558-6	GWC-23	Total/NA	Water	EPA 300.0 R2.1	
180-95558-7	GWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-95558-8	GWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-95558-9	GWC-11	Total/NA	Water	EPA 300.0 R2.1	
180-95558-10	GWC-12	Total/NA	Water	EPA 300.0 R2.1	
180-95558-11	GWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-95558-12	GWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-95558-13	GWC-1	Total/NA	Water	EPA 300.0 R2.1	
180-95558-14	DUP-LF4-01	Total/NA	Water	EPA 300.0 R2.1	
180-95558-15	DUP-LF4-02	Total/NA	Water	EPA 300.0 R2.1	
180-95558-16	GWC-15	Total/NA	Water	EPA 300.0 R2.1	
MB 180-291383/38	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-291383/37	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-95558-1 MS	GWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-95558-1 MSD	GWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-95558-11 MS	GWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-95558-11 MSD	GWA-3	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 291656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95558-4	GWC-20	Total Recoverable	Water	3005A	
180-95558-5	GWC-21	Total Recoverable	Water	3005A	
180-95558-6	GWC-23	Total Recoverable	Water	3005A	
180-95558-7	GWC-9	Total Recoverable	Water	3005A	
180-95558-8	GWC-10	Total Recoverable	Water	3005A	
180-95558-9	GWC-11	Total Recoverable	Water	3005A	
180-95558-10	GWC-12	Total Recoverable	Water	3005A	
180-95558-11	GWA-3	Total Recoverable	Water	3005A	
180-95558-12	GWA-2	Total Recoverable	Water	3005A	
180-95558-13	GWC-1	Total Recoverable	Water	3005A	
180-95558-14	DUP-LF4-01	Total Recoverable	Water	3005A	
180-95558-15	DUP-LF4-02	Total Recoverable	Water	3005A	
180-95558-16	GWC-15	Total Recoverable	Water	3005A	
MB 180-291656/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-291656/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-95558-4 MS	GWC-20	Total Recoverable	Water	3005A	
180-95558-4 MSD	GWC-20	Total Recoverable	Water	3005A	

Prep Batch: 291660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95558-1	GWC-17	Total Recoverable	Water	3005A	
180-95558-2	GWC-18	Total Recoverable	Water	3005A	
180-95558-3	GWC-19	Total Recoverable	Water	3005A	
MB 180-291660/1-A	Method Blank	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 291660 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-291660/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 292881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95558-1	GWC-17	Total Recoverable	Water	EPA 6020	291660
180-95558-2	GWC-18	Total Recoverable	Water	EPA 6020	291660
180-95558-3	GWC-19	Total Recoverable	Water	EPA 6020	291660
MB 180-291660/1-A	Method Blank	Total Recoverable	Water	EPA 6020	291660
LCS 180-291660/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	291660

Analysis Batch: 293025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95558-1	GWC-17	Total Recoverable	Water	EPA 6020	291660
180-95558-2	GWC-18	Total Recoverable	Water	EPA 6020	291660
180-95558-3	GWC-19	Total Recoverable	Water	EPA 6020	291660
MB 180-291660/1-A	Method Blank	Total Recoverable	Water	EPA 6020	291660
LCS 180-291660/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	291660

Analysis Batch: 293231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95558-4	GWC-20	Total Recoverable	Water	EPA 6020	291656
180-95558-5	GWC-21	Total Recoverable	Water	EPA 6020	291656
180-95558-6	GWC-23	Total Recoverable	Water	EPA 6020	291656
180-95558-7	GWC-9	Total Recoverable	Water	EPA 6020	291656
180-95558-8	GWC-10	Total Recoverable	Water	EPA 6020	291656
180-95558-9	GWC-11	Total Recoverable	Water	EPA 6020	291656
180-95558-10	GWC-12	Total Recoverable	Water	EPA 6020	291656
180-95558-11	GWA-3	Total Recoverable	Water	EPA 6020	291656
180-95558-12	GWA-2	Total Recoverable	Water	EPA 6020	291656
180-95558-13	GWC-1	Total Recoverable	Water	EPA 6020	291656
180-95558-14	DUP-LF4-01	Total Recoverable	Water	EPA 6020	291656
180-95558-15	DUP-LF4-02	Total Recoverable	Water	EPA 6020	291656
180-95558-16	GWC-15	Total Recoverable	Water	EPA 6020	291656
MB 180-291656/1-A	Method Blank	Total Recoverable	Water	EPA 6020	291656
LCS 180-291656/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	291656
180-95558-4 MS	GWC-20	Total Recoverable	Water	EPA 6020	291656
180-95558-4 MSD	GWC-20	Total Recoverable	Water	EPA 6020	291656

General Chemistry

Analysis Batch: 291588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95558-1	GWC-17	Total/NA	Water	SM 2540C	
180-95558-2	GWC-18	Total/NA	Water	SM 2540C	
180-95558-3	GWC-19	Total/NA	Water	SM 2540C	
180-95558-4	GWC-20	Total/NA	Water	SM 2540C	
180-95558-5	GWC-21	Total/NA	Water	SM 2540C	
180-95558-6	GWC-23	Total/NA	Water	SM 2540C	
180-95558-7	GWC-9	Total/NA	Water	SM 2540C	
180-95558-8	GWC-10	Total/NA	Water	SM 2540C	
180-95558-9	GWC-11	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 291588 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-95558-10	GWC-12	Total/NA	Water	SM 2540C	
180-95558-11	GWA-3	Total/NA	Water	SM 2540C	
180-95558-12	GWA-2	Total/NA	Water	SM 2540C	
180-95558-13	GWC-1	Total/NA	Water	SM 2540C	
180-95558-14	DUP-LF4-01	Total/NA	Water	SM 2540C	
180-95558-15	DUP-LF4-02	Total/NA	Water	SM 2540C	
180-95558-16	GWC-15	Total/NA	Water	SM 2540C	
MB 180-291588/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-291588/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: J. Adcock, J. Noles, L. Coker	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-54272-10411.2
Client Contact: ~~Peter Adams~~ Lauren Petty	Phone: 404-592-0094	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 2
Company: Southern Company Services, Inc.				Job #:
Address: 3535 Colonnade Parkway	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35243				
Phone: 205-992-5417(Tel)	PO #: SCS10382606			
Email: : lmpetty@southernco.com	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - B, Ca state : SbAsBaBeCdCrCoCuPbNiSeAgTlVZ	2540C_Calcd, TDS 300_Chloride, Fluoride Sulfate	Total Number of containers	Special Instructions
			Preservation Code:				D	N		
GWC-17	9/11/19	1015	G	Water	N	N	X	X		
GWC-18	9/11/19	1100	G	Water	N	N	X	X		
GWC-19	9/11/19	1100	G	Water	N	N	X	X		
GWC-20	9/11/19	1130	G	Water	N	N	X	X		
GWC-21	9/11/19	1220	G	Water	N	N	X	X		
GWC-23	9/11/19	1225	G	Water	N	N	X	X		
GWC-9	9/11/19	1245	G	Water	N	N	X	X		
GWC-10	9/11/19	1335	G	Water	N	N	X	X		
GWC-11	9/11/19	1440	G	Water	N	N	X	X		
GWC-12	9/11/19	1400	G	Water	N	N	X	X		
GWA-3	9/11/19	1445	G	Water	N	N	X	X		

180-95558 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		9/11/19 1900	GEI	Fedex		
2	Relinquished by:	Date/Time:	Company	Received by: Debbie Watson	Date/Time: 9-12-19 9:00	Company TAP, TT
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: J. Adcock, J. Noles, L. Coker	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-54272-10411.2
Client Contact: ~~Peter Adams~~ Lauren Petty	Phone: 404-592-0094	E-Mail: veronica.bortot@testamericainc.com		Page: Page 2 of 2
Company: Southern Company Services, Inc.				Job #:

Address: 3535 Colonnade Parkway	Due Date Requested:
City: Birmingham	TAT Requested (days):
State, Zip: AL, 35243	
Phone: 205-992-5417(Tel)	PO #: SCS10382606
Email: : lmpetty@southernco.com	WO #:
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019955
Site: Georgia	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - B, Ca state : SbAsBaBeCdCrCoCuPbNiSeAgTlVZ	2540C_Calcd, TDS 300_Chloride, Fluoride Sulfate	pH	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N			
GWA-2	9/11/19	1550	G	Water	N	N	X	X			
GWC-1	9/11/19	1525	G	Water	N	N	X	X			
DUP-LF4-01	9/11/19	—	G	Water	N	N	X	X			
DUP-LF4-02	9/11/19	—	G	Water	N	N	X	X			
GWC-15	9/11/19	0950	G	Water	N	N	X	X			
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 9/11/19 1900	Company GEI	Received by: Fedex	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Debbie Watson	Date/Time: 9-12-19	Company TAP-TL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 9:30	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

10/9/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-95558-1

Login Number: 95558
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Site: Georgia Power Plant, Landfill 4
Laboratory: Test America, Pittsburgh, PA
Report Nos.: 180-95524-1 and 180-95558-1
Reviewer: Lorie MacKinnon/GEI Consultants
Date: October 16, 2019

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
GWC-4A	180-95524-01	Metals, Anions, TDS
GWC-5	180-95524-02	Metals, Anions, TDS
GWA-13	180-95524-03	Metals, Anions, TDS
GWA-16	180-95524-04	Metals, Anions, TDS
GWA-14	180-95524-05	Metals, Anions, TDS
FB-LF4-01	180-95524-06	Metals, Anions, TDS
FB-LF4-02	180-95524-07	Metals, Anions, TDS
FERB-LF4-01	180-95524-08	Metals, Anions, TDS
FERB-LF4-02	180-95524-09	Metals, Anions, TDS
GWC-17	180-95558-01	Metals, Anions, TDS
GWC-18	180-95558-02	Metals, Anions, TDS
GWC-19	180-95558-03	Metals, Anions, TDS
GWC-20	180-95558-04	Metals, Anions, TDS
GWC-21	180-95558-05	Metals, Anions, TDS
GWC-23	180-95558-06	Metals, Anions, TDS
GWC-9	180-95558-07	Metals, Anions, TDS
GWC-10	180-95558-08	Metals, Anions, TDS
GWC-11	180-95558-09	Metals, Anions, TDS
GWC-12	180-95558-10	Metals, Anions, TDS
GWA-3	180-95558-11	Metals, Anions, TDS
GWA-2	180-95558-12	Metals, Anions, TDS
GWC-1	180-95558-13	Metals, Anions, TDS
DUP-LF4-01	180-95558-14	Metals, Anions, TDS
DUP-LF4-02	180-95558-15	Metals, Anions, TDS
GWC-15	180-95558-16	Metals, Anions, TDS

QC Samples:
Field/Equipment blanks: FB-LF4-01, FB-LF4-02, FERB-LF4-01, FERB-LF4-02
Field Duplicate pairs: GWC-11/DUP-LF4-02 and GWC-21/DUP-LF4-01

The above-listed aqueous samples, equipment blanks, and field blank samples were collected on September 10 and 11, 2019 and were analyzed for total recoverable metals by SW-846 method 6020, total dissolved solids (TDS) by Standard Methods SM2540C, and anions (chloride, fluoride, and sulfate) by EPA method 300. The data were reviewed based on the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review, January 2017 (USEPA-540-R-2017-001), as well as by the methods referenced and professional and technical judgment.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Method and Field Blank Results
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Field Duplicate Results
- Laboratory Control Sample (LCS) Results
- Quantitation Limits

All results are usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers. All results were considered valid; even though some were qualified as discussed below.

The validation findings were based on the following information.

Data Completeness

The level 2 (reduced deliverable) data package was complete as received by the laboratory and included sample results, method blank, MS/MSD, laboratory duplicate, and LCS results. Sample 180-95558-16 was identified as GWC-15 on the chain of custody (COC) and GWA-15 on the sample container. The ID on the COC, GWC-15, was used for identification.

Holding Times and Sample Preservation

All criteria were met.

Method and Field Blank Results

Contaminants were not detected in the associated laboratory method blanks. Contamination was detected in the associated field and equipment blank samples and is listed below. The following table summarizes the maximum level of contamination detected in bold, blank action levels, and the field blank qualification actions taken.

Analyte	Concentration Detected (mg/L)	Field Blank ID	2X Blank Level (mg/L)	10X Blank Level (mg/L)	Validation Actions
Fluoride	**0.028 J**	FB-LF4-01	0.056	0.28	Qualify results for fluoride in samples GWC-4A, GWC-5, GWA-13, GWA-16, GWA-14, GWC-17, GWC-19, GWC-20, GWC-21, GWC-23, GWC-9, GWC-12, GWA-3, GWA-2, GWC-1, DUP-LF4-01,
	0.026 J	FB-LF4-02			
	0.026 J	FERB-LF4-01			

Analyte	Concentration Detected (mg/L)	Field Blank ID	2X Blank Level (mg/L)	10X Blank Level (mg/L)	Validation Actions
	0.026 J	FERB-LF4-02			and GWC-15 as nondetect (U) at the reporting limit (RL). Estimate (J) the positive results for fluoride in samples GWC-10, GWC-11, and DUP-LF4-02; High bias.
Sulfate	**0.49 J**	FB-LF4-02	0.98	4.9	Qualify results for sulfate in samples GWC-5, GWA-13, GWA-16, GWA-14, GWC-17, GWC-20, GWC-21, GWC-9, and GWA-2 as nondetect (U) at the RL. Estimate (J) the positive results for sulfate in samples GWC-18, GWC-19, GWC-23, GWC-11, GWC-12, GWA-3, GWC-1, DUP-LF4-01, DUP-LF4-02, and GWC-15; High bias.
	0.45 J	FB-LF4-01			
Arsenic	**0.00034 J**	FB-LF4-01	0.00068	0.0034	Qualify results for arsenic in samples GWC-4A, GWC-5, GWA-13, GWA-16, GWA-14, GWC-17, GWC-19, GWC-20, GWC-21, GWC-23, GWC-9, GWC-10, GWC-12, and GWC-15 as nondetect (U) at the RL. Estimate (J) the positive results for arsenic in samples GWC-18, GWC-11, and DUP-LF4-02; High bias.
	0.00033 J	FB-LF4-02			
Barium	**0.0038 J**	FERB-LF4-02	0.0076	0.038	Estimate (J) the positive results for barium in samples GWC-4A, GWA-13, GWA-14, GWC-17, GWC-18, GWC-19, GWC-20, GWC-21, GWC-23, GWC-9, GWC-10, GWC-11, GWC-12, GWA-3, GWA-2, DUP-LF4-01, DUP-LF4-02, and GWC-15; High bias.
	0.0021 J	FB-LF4-01			
	0.0021 J	FB-LF4-02			
	0.0023 J	FERB-LF4-01			
Beryllium	**0.00026 J**	FB-LF4-01	0.00052	0.0026	Qualify results for beryllium in samples GWC-4A, GWA-13, GWA-16, GWA-14, GWC-18, GWC-19, GWC-20, GWC-21, GWC-23, GWC-9, GWC-12, and GWC-1 as nondetect (U) at the RL. Estimate (J) the positive result for beryllium in sample GWC-17; High bias.
Chromium	**0.0032**	FB-LF4-01	0.0064	0.032	Qualify results for chromium in samples GWC-4A, GWC-5, GWA-13, GWA-16, GWA-14, GWC-17, GWC-18, GWC-19, GWC-20, GWC-21, GWC-23, GWC-9, GWC-10, GWC-12, GWA-3, GWA-2, GWC-1, DUP-LF4-01, and GWC-15 as nondetect (U) at the reported values. Estimate (J) the positive results for chromium in samples GWC-11 and DUP-LF4-02; High bias.
	0.0029	FB-LF4-02			
	0.0029	FERB-LF4-01			
	0.0028	FERB-LF4-02			
Cobalt	0.000085 J	FB-LF4-02	0.00017	0.00085	Qualify results for cobalt in samples GWA-14, GWC-17, GWC-18, GWC-19, GWC-10, GWA-3, and GWC-15 as nondetect (U) at the RL. Estimate (J) the positive results for cobalt in samples GWC-5, GWA-13, GWA-16, GWC-9, and GWC-12; High bias.

Analyte	Concentration Detected (mg/L)	Field Blank ID	2X Blank Level (mg/L)	10X Blank Level (mg/L)	Validation Actions
Copper	**0.00082 J**	FB-LF4-01	0.00164	0.0082	Qualify results for copper in samples GWC-4A, GWA-13, GWA-14, GWC-17, GWC-18, GWC-19, GWC-20, GWC-21, GWC-23, GWC-9, GWC-12, GWA-3, and GWC-1 as nondetect (U) at the RL.
Vanadium	**0.0019**	FB-LF4-02	0.0038	0.019	Qualify results for vanadium in samples GWC-4A, GWC-5, GWA-13, GWA-16, GWA-14, GWC-17, GWC-18, GWC-19, GWC-20, GWC-21, GWC-23, GWC-9, GWC-10, GWC-11, GWC-12, GWA-3, GWA-2, GWC-1, DUP-LF4-01, DUP-LF4-02, and GWC-15 as nondetect (U) at the reported values.
	0.0018	FB-LF4-01			
	0.0016	FERB-LF4-01			
	0.0017	FERB-LF4-02			
Zinc	**0.0040 J**	FERB-LF4-01	0.0080	0.040	Qualify results for zinc in samples GWA-13, GWA-16, GWA-14, GWC-18, GWC-19, GWC-20, GWC-21, GWC-9, GWC-10, GWC-11, GWC-12, DUP-LF4-01, DUP-LF4-02, and GWC-15 as nondetect (U) at the reported values or RL. Estimate (J) the positive results for zinc in samples GWC-4A, GWC-5, GWC-17, GWC-23, GWA-3, GWA-2, and GWC-1; High bias.
	0.0032 J	FB-LF4-01			
	0.0035 J	FB-LF4-02			
	0.0035 J	FERB-LF4-02			

Blank Actions:
If the sample result is < reporting limit (RL); report the result as nondetect (U) at the RL.
If the sample result is ≥ RL and <2x blank contamination detected; professional judgment was taken to report the result as nondetect (U) at the reported sample level.
If the sample result is ≥ 2x Blank Level (or RL) and < 10x Blank Level; report the sample result as estimated (J); biased high.
If the sample result is nondetect or > 10x Blank Level; validation action was not required.

MS/MSD Results

MS/MSD analyses were performed on samples GWC-4A, GWC-17, and GWA-3 for anions and samples GWC-5 and GWC-20 for metals. All criteria were met.

Laboratory Duplicate Results

MSD analyses were performed for anions and metals in lieu of laboratory duplicate analyses.

Field Duplicate Results

Samples GWC-11 and DUP-LF4-02 were submitted as a field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria except for total dissolved solids. The positive results for total dissolved solids in samples GWC-11 and DUP-LF4-02 were qualified as estimated (J). The direction of the bias cannot be determined from this nonconformance.

Analyte	GWC-11 (mg/L)	DUP-LF4-02 (mg/L)	RPD (%)
Chloride	4.4	4.4	0
Fluoride	0.26	0.26	0
Sulfate	3.8	3.7	2.7
Arsenic	0.0017	0.0016	6.1
Barium	0.011	0.011	0
Calcium	9.3	9.5	2.1
Chromium	0.0071	0.0072	1.4
Nickel	0.00042 J	0.00042 J	0
Total dissolved solids	39	60	**42.4**
NC – Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <30%. When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate >RL.			

Samples GWC-21 and DUP-LF4-01 were submitted as a field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria.

Analyte	GWC-21 (mg/L)	DUP-LF4-01 (mg/L)	RPD (%)
Chloride	6.7	6.6	1.5
Sulfate	1.0 U	1.1	NC, Within the RL
Barium	0.019	0.018	5.4
Boron	0.055 J	0.080 U	NC, Within the RL
Cadmium	0.00029 J	0.00014 J	69.8, Within the RL
Calcium	1.0	1.1	9.5
I Cobalt	0.0012	0.0012	0
Nickel	0.00097 J	0.00090 J	7.5
Lead	0.00021 J	0.0010 U	NC, Within the RL
Thallium	0.00041 J	0.010 U	NC, Within the RL
Total dissolved solids	23	26	12.2
NC – Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <30%. When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate >RL.			

LCS Results

All criteria were met.

Quantitation Limits

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-100136-1
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4
Revision: 2

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
1/8/2020 9:36:59 AM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-100136-1

Job ID: 180-100136-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-100136-1

revision 2 : to correct RL for Cr

Revised : to correct sample ID

Comments
No additional comments.

Receipt
The samples were received on 12/18/2019 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

Metals
Methods 6020, : The ICSAB for batch 180-302411 was outside the acceptance limits for element: strontium. An elevated concentration in the stock solution is suspected. All other QC for the target analyte passes; so the results have been reported.

Methods , 6020: The continuing calibration verification (CCV) associated with batch 180-302411 recovered above the upper control limit for beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Job ID: 180-100136-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-100136-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Louisiana	NELAP	04041	06-30-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

Sample Summary

Client: Southern Company
Job ID: 180-100136-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-100136-1	GWA-13	Water	12/17/19 12:55	12/18/19 10:30	
180-100136-2	GWA-14	Water	12/17/19 13:40	12/18/19 10:30	
180-100136-3	GWC-15	Water	12/17/19 13:50	12/18/19 10:30	

Method Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-100136-1

Method	Method Description	Protocol	Laboratory
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-100136-1

Client Sample ID: GWA-13
Date Collected: 12/17/19 12:55
Date Received: 12/18/19 10:30

Lab Sample ID: 180-100136-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302056	12/19/19 20:36	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302411	12/21/19 18:44	RSK	TAL PIT
	Instrument ID: A									

Client Sample ID: GWA-14
Date Collected: 12/17/19 13:40
Date Received: 12/18/19 10:30

Lab Sample ID: 180-100136-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302056	12/19/19 20:36	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302411	12/21/19 18:58	RSK	TAL PIT
	Instrument ID: A									

Client Sample ID: GWC-15
Date Collected: 12/17/19 13:50
Date Received: 12/18/19 10:30

Lab Sample ID: 180-100136-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302056	12/19/19 20:36	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302411	12/21/19 19:01	RSK	TAL PIT
	Instrument ID: A									

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

MWW = Margaret Wanyoike

Batch Type: Analysis

RSK = Robert Kurtz

Client Sample Results

Client: Southern Company
Job ID: 180-100136-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Client Sample ID: GWA-13
Lab Sample ID: 180-100136-1
Date Collected: 12/17/19 12:55
Matrix: Water
Date Received: 12/18/19 10:30

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	0.0012		0.0010	0.00099	mg/L		12/19/19 20:36	12/21/19 18:44	1

Client Sample ID: GWA-14
Lab Sample ID: 180-100136-2
Date Collected: 12/17/19 13:40
Matrix: Water
Date Received: 12/18/19 10:30

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0035		0.0020	0.0015	mg/L		12/19/19 20:36	12/21/19 18:58	1

Client Sample ID: GWC-15
Lab Sample ID: 180-100136-3
Date Collected: 12/17/19 13:50
Matrix: Water
Date Received: 12/18/19 10:30

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0039		0.0020	0.0015	mg/L		12/19/19 20:36	12/21/19 19:01	1

QC Sample Results

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-100136-1

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-302056/1-A
Matrix: Water
Analysis Batch: 302411

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 302056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0015		0.0020	0.0015	mg/L		12/19/19 20:36	12/21/19 18:31	1
Vanadium	<0.00099		0.0010	0.00099	mg/L		12/19/19 20:36	12/21/19 18:31	1

Lab Sample ID: LCS 180-302056/2-A
Matrix: Water
Analysis Batch: 302411

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 302056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.500	0.555		mg/L		111	80 - 120
Vanadium	0.500	0.544		mg/L		109	80 - 120

Lab Sample ID: 180-100136-1 MS
Matrix: Water
Analysis Batch: 302411

Client Sample ID: GWA-13
Prep Type: Total Recoverable
Prep Batch: 302056

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.0042		0.500	0.547		mg/L		108	75 - 125
Vanadium	0.0012		0.500	0.542		mg/L		108	75 - 125

Lab Sample ID: 180-100136-1 MSD
Matrix: Water
Analysis Batch: 302411

Client Sample ID: GWA-13
Prep Type: Total Recoverable
Prep Batch: 302056

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	0.0042		0.500	0.554		mg/L		110	75 - 125	1	20
Vanadium	0.0012		0.500	0.548		mg/L		109	75 - 125	1	20

QC Association Summary

Client: Southern Company
Job ID: 180-100136-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Metals

Prep Batch: 302056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-100136-1	GWA-13	Total Recoverable	Water	3005A	
180-100136-2	GWA-14	Total Recoverable	Water	3005A	
180-100136-3	GWC-15	Total Recoverable	Water	3005A	
MB 180-302056/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-302056/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-100136-1 MS	GWA-13	Total Recoverable	Water	3005A	
180-100136-1 MSD	GWA-13	Total Recoverable	Water	3005A	

Analysis Batch: 302411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-100136-1	GWA-13	Total Recoverable	Water	EPA 6020	302056
180-100136-2	GWA-14	Total Recoverable	Water	EPA 6020	302056
180-100136-3	GWC-15	Total Recoverable	Water	EPA 6020	302056
MB 180-302056/1-A	Method Blank	Total Recoverable	Water	EPA 6020	302056
LCS 180-302056/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	302056
180-100136-1 MS	GWA-13	Total Recoverable	Water	EPA 6020	302056
180-100136-1 MSD	GWA-13	Total Recoverable	Water	EPA 6020	302056

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

681-Atlanta

eurofins | Environment Testing TestAmerica

Client Information	Sampler: L. Coker, J. Nobles	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-56817-11627.1
Client Contact: Lauren ~~Coker~~ Petty	Phone: 404-592-0094	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 1
Company: ~~GEI Consultants, Inc.~~ Southern Company				Job #:
Address: ~~1375 Peachtree Street NE Suite A15~~ PO Box 2641 GSC8	Due Date Requested:			
City: ~~Atlanta~~ Birmingham	TAT Requested (days): Rush			
State, Zip: ~~GA, 30309~~ AL 35291				
Phone: 205-992-5417(Tel)	PO #: SCS10382606			
Email: lpetty@southernco.com ~~lcoker@geiconsultants.com~~	WO #:			
Project Name: CCR - Plant McIntosh Ash Landfill #4	Project #: 18019950			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)		6020 - 6020 Copper	6020 - 6020 chromium	6020 - 6020 Chromium & Cobalt	6020 -	6020 - vanadium	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	D	D	D			
GWA-13	12/17/19	1255	G	Water	N	N					X		
GWA-14	12/17/19	1340	G	Water	N	N		X					
GWC-15	12/17/19	1350	G	Water	N	N		X					
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

180-100136 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

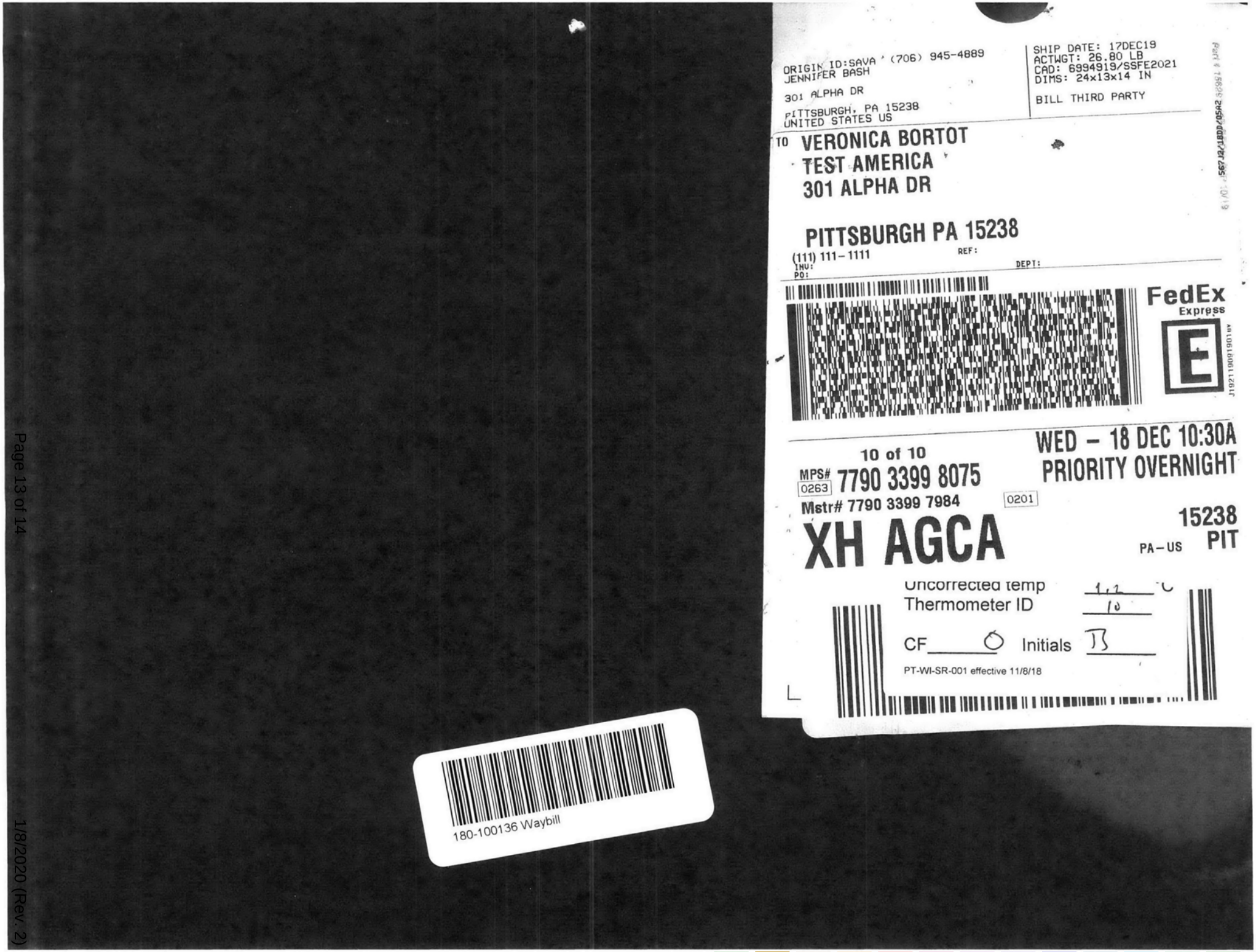
Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		12/17/19 1630	GEI		12/18/19 1030	DAPIT
2						
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019


ORIGIN ID:SAVA (706) 945-4889
JENNIFER BASH
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US
SHIP DATE: 17DEC19
ACTWGT: 26.80 LB
CAD: 6994919/SSFE2021
DIMS: 24x13x14 IN
BILL THIRD PARTY
TO VERONICA BORTOT
TEST AMERICA
301 ALPHA DR
PITTSBURGH PA 15238
(111) 111-1111
REF:
INV:
PO:
DEPT:
FedEx
Express
10 of 10
MPS# 7790 3399 8075
0263
Mstr# 7790 3399 7984
0201
WED - 18 DEC 10:30A
PRIORITY OVERNIGHT
XH AGCA
15238
PIT
PA-US
Uncorrected temp
Thermometer ID
CF
Initials
PT-WI-SR-001 effective 11/8/18
180-100136 Waybill

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-100136-1

Login Number: 100136
List Number: 1
Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-100237-1
Client Project/Site: CCR - Plant McIntosh Ash Landfill #4

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Ms. Lauren Petty

Veronica Bortot

Authorized for release by:
12/26/2019 5:17:48 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Case Narrative

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-100237-1

Job ID: 180-100237-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-100237-1

Comments
No additional comments.

Receipt
The samples were received on 12/19/2019 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Southern Company
Job ID: 180-100237-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Accreditation/Certification Summary

Client: Southern Company
Job ID: 180-100237-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-19
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-19
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	12-31-19
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-30-19
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	01-31-20
Wisconsin	State	998027800	08-31-20

Sample Summary

Client: Southern Company
Job ID: 180-100237-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-100237-1	GWC-20	Water	12/18/19 09:45	12/19/19 10:00	
180-100237-2	GWC-18	Water	12/18/19 11:10	12/19/19 10:00	
180-100237-3	GWC-23	Water	12/18/19 11:30	12/19/19 10:00	
180-100237-4	GWC-5	Water	12/18/19 12:35	12/19/19 10:00	

Method Summary

Client: Southern Company
Job ID: 180-100237-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Method	Method Description	Protocol	Laboratory
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-100237-1

Client Sample ID: GWC-20
Date Collected: 12/18/19 09:45
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100237-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302191	12/20/19 19:17	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302478	12/23/19 22:35	WTR	TAL PIT
	Instrument ID: M									

Client Sample ID: GWC-18
Date Collected: 12/18/19 11:10
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100237-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302191	12/20/19 19:17	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302478	12/23/19 22:40	WTR	TAL PIT
	Instrument ID: M									

Client Sample ID: GWC-23
Date Collected: 12/18/19 11:30
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100237-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302191	12/20/19 19:17	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302478	12/23/19 22:45	WTR	TAL PIT
	Instrument ID: M									

Client Sample ID: GWC-5
Date Collected: 12/18/19 12:35
Date Received: 12/19/19 10:00

Lab Sample ID: 180-100237-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	302191	12/20/19 19:17	MWW	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			302478	12/23/19 23:05	WTR	TAL PIT
	Instrument ID: M									

Laboratory References:
TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:
Lab: TAL PIT
Batch Type: Prep
MWW = Margaret Wanyoike
Batch Type: Analysis
WTR = Bill Reinheimer

Client Sample Results

Client: Southern Company
Job ID: 180-100237-1
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Client Sample ID: GWC-20
Lab Sample ID: 180-100237-1
Date Collected: 12/18/19 09:45
Matrix: Water
Date Received: 12/19/19 10:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0015		0.0020	0.0015	mg/L		12/20/19 19:17	12/23/19 22:35	1

Client Sample ID: GWC-18
Lab Sample ID: 180-100237-2
Date Collected: 12/18/19 11:10
Matrix: Water
Date Received: 12/19/19 10:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0021		0.0020	0.0015	mg/L		12/20/19 19:17	12/23/19 22:40	1

Client Sample ID: GWC-23
Lab Sample ID: 180-100237-3
Date Collected: 12/18/19 11:30
Matrix: Water
Date Received: 12/19/19 10:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.0018	J	0.0020	0.0015	mg/L		12/20/19 19:17	12/23/19 22:45	1

Client Sample ID: GWC-5
Lab Sample ID: 180-100237-4
Date Collected: 12/18/19 12:35
Matrix: Water
Date Received: 12/19/19 10:00

Method: EPA 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.0051		0.0050	0.0032	mg/L		12/20/19 19:17	12/23/19 23:05	1

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-100237-1

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-302191/1-A
Matrix: Water
Analysis Batch: 302478

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 302191

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<0.0032		0.0050	0.0032	mg/L		12/20/19 19:17	12/23/19 22:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		12/20/19 19:17	12/23/19 22:25	1

Lab Sample ID: LCS 180-302191/2-A
Matrix: Water
Analysis Batch: 302478

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 302191

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Zinc			0.250	0.261		mg/L		105	80 - 120		
Chromium			0.500	0.489		mg/L		98	80 - 120		

Lab Sample ID: 180-100237-4 MS
Matrix: Water
Analysis Batch: 302478

Client Sample ID: GWC-5
Prep Type: Total Recoverable
Prep Batch: 302191

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Zinc	0.0051		0.250	0.268		mg/L		105	75 - 125		
Chromium	<0.0015		0.500	0.491		mg/L		98	75 - 125		

Lab Sample ID: 180-100237-4 MSD
Matrix: Water
Analysis Batch: 302478

Client Sample ID: GWC-5
Prep Type: Total Recoverable
Prep Batch: 302191

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	0.0051		0.250	0.268		mg/L		105	75 - 125	0	20
Chromium	<0.0015		0.500	0.490		mg/L		98	75 - 125	0	20

QC Association Summary

Client: Southern Company
Project/Site: CCR - Plant McIntosh Ash Landfill #4

Job ID: 180-100237-1

Metals

Prep Batch: 302191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-100237-1	GWC-20	Total Recoverable	Water	3005A	
180-100237-2	GWC-18	Total Recoverable	Water	3005A	
180-100237-3	GWC-23	Total Recoverable	Water	3005A	
180-100237-4	GWC-5	Total Recoverable	Water	3005A	
MB 180-302191/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-302191/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-100237-4 MS	GWC-5	Total Recoverable	Water	3005A	
180-100237-4 MSD	GWC-5	Total Recoverable	Water	3005A	

Analysis Batch: 302478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-100237-1	GWC-20	Total Recoverable	Water	EPA 6020	302191
180-100237-2	GWC-18	Total Recoverable	Water	EPA 6020	302191
180-100237-3	GWC-23	Total Recoverable	Water	EPA 6020	302191
180-100237-4	GWC-5	Total Recoverable	Water	EPA 6020	302191
MB 180-302191/1-A	Method Blank	Total Recoverable	Water	EPA 6020	302191
LCS 180-302191/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	302191
180-100237-4 MS	GWC-5	Total Recoverable	Water	EPA 6020	302191
180-100237-4 MSD	GWC-5	Total Recoverable	Water	EPA 6020	302191

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: J. Nokes, L. Coker, J. Bash	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No:
Client Contact: Lauren Petty	Phone: 4045920094	E-Mail: veronica.bortot@testamericainc.com		Page: Page (of (
Company: Southern Company				Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:			
City: Birmingham	TAT Requested (days): Rush			
State, Zip: AL, 35291				
Phone: 205-992-5417(Tel)	PO #: SCS10347656			
Email: lmpetty@southernco.com	WO #:			
Project Name: CCR - Plant McIntosh	Project #: 18019950			
Site: ~~Plant McIntosh~~ Landfill 4	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Chromium	6020 - Zinc	Total Number of containers	Special
			Preservation Code:							
GWC-20	12/18/19	0545	G	W	N	N	X		1	
GWC-18	12/18/19	1110	G	W	N	N	X		1	
GWC-23	12/18/19	1130	G	W	N	N	X		1	
GWC-5	12/18/19	1235	G	W	N	N		X	1	

180-100237 Chain of Custody

Possible Hazard Identification
X Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client X Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	[signature]	12/18/19 1600	GEI	[signature] Watson	12-19-19	TAPIT
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10:00	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

FedEx

ORIGIN ID:PIMA (770) 912-0703
LAUREN COKER

SEE CHEERS 5 BEFORE BILL
301 ALPHA DR
PITTSBURGH, PA 15238
UNITED STATES US

SHIP DATE: 18DEC19
ACTWGT: 37.20 LB
CAD: 6994785/SSFE2021
DIMS: 22x14x16 IN

BILL THIRD PARTY

TO VERONICA BORTOT

301 ALPHA DRIVE

PITTSBURGH PA 15238

(412) 963-2435 REF:

INV:
PO: DEPT:

RT 193 1 A
10:30 6156
12.19

FZ

FedEx Express

REL# 3765346

THU - 19 DEC 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7790 7105 6156

XH AGCA

15238
PA-US PIT

Uncorrected temp 44.9 C
Thermometer ID 10

CF 0 Initials TB

PT-WI-SR-001 effective 11/8/18

180-100237 Waybill

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-100237-1

Login Number: 100237
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix C1

Sanitas Outputs for Appendix III Parameters – January 2019

Prediction Limit - Significant Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 7/17/2019, 10:15 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	**GWC-10**	**0.05**	**n/a**	**1/30/2019**	**0.057**	**Yes**	**120**	**90.83**	**n/a**	**0.000...**	**NP Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GWC-10**	**150**	**n/a**	**1/30/2019**	**160**	**Yes**	**120**	**14.17**	**n/a**	**0.000...**	**NP Inter 1 of 2**

Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 7/17/2019, 10:15 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	GWC-1	0.05	n/a	1/30/2019	0.05ND	No	120	90.83	n/a	0.000...	NP Inter 1 of 2
Boron (mg/L)	**GWC-10**	**0.05**	**n/a**	**1/30/2019**	**0.057**	**Yes**	**120**	**90.83**	**n/a**	**0.000...**	**NP Inter 1 of 2**
Boron (mg/L)	GWC-11	0.05	n/a	1/30/2019	0.05ND	No	120	90.83	n/a	0.000...	NP Inter 1 of 2
Boron (mg/L)	GWC-12	0.05	n/a	1/30/2019	0.05ND	No	120	90.83	n/a	0.000...	NP Inter 1 of 2
Boron (mg/L)	GWC-19	0.05	n/a	1/29/2019	0.05ND	No	120	90.83	n/a	0.000...	NP Inter 1 of 2
Boron (mg/L)	GWC-20	0.05	n/a	1/29/2019	0.05ND	No	120	90.83	n/a	0.000...	NP Inter 1 of 2
Boron (mg/L)	GWC-21	0.05	n/a	1/30/2019	0.05ND	No	120	90.83	n/a	0.000...	NP Inter 1 of 2
Boron (mg/L)	GWC-23	0.05	n/a	1/30/2019	0.05ND	No	120	90.83	n/a	0.000...	NP Inter 1 of 2
Boron (mg/L)	GWC-9	0.05	n/a	1/30/2019	0.05ND	No	120	90.83	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-1	33.2	n/a	1/30/2019	2.5	No	120	0	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-10	33.2	n/a	1/30/2019	26	No	120	0	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-11	33.2	n/a	1/30/2019	11	No	120	0	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-12	33.2	n/a	1/30/2019	0.68	No	120	0	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-19	33.2	n/a	1/29/2019	9.2	No	120	0	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-20	33.2	n/a	1/29/2019	1.8	No	120	0	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-21	33.2	n/a	1/30/2019	1.05	No	120	0	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-23	33.2	n/a	1/30/2019	1.1	No	120	0	n/a	0.000...	NP Inter 1 of 2
Calcium (mg/L)	GWC-9	33.2	n/a	1/30/2019	0.38	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-1	9.4	n/a	1/30/2019	6.8	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-10	9.4	n/a	1/30/2019	5.45	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-11	9.4	n/a	1/30/2019	4.6	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-12	9.4	n/a	1/30/2019	3.7	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-19	9.4	n/a	1/29/2019	8.2	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-20	9.4	n/a	1/29/2019	8.8	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-21	9.4	n/a	1/30/2019	6.65	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-23	9.4	n/a	1/30/2019	7.4	No	120	0	n/a	0.000...	NP Inter 1 of 2
Chloride (mg/L)	GWC-9	9.4	n/a	1/30/2019	9.1	No	120	0	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-1	0.74	n/a	1/30/2019	0.2ND	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-10	0.74	n/a	1/30/2019	0.22	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-11	0.74	n/a	1/30/2019	0.35	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-12	0.74	n/a	1/30/2019	0.2ND	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-19	0.74	n/a	1/29/2019	0.074	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-20	0.74	n/a	1/29/2019	0.031	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-21	0.74	n/a	1/30/2019	0.2ND	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-23	0.74	n/a	1/30/2019	0.2ND	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
Fluoride (mg/L)	GWC-9	0.74	n/a	1/30/2019	0.2ND	No	120	73.33	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-1	7.1	4.21	1/30/2019	5.21	No	130	0	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-10	7.1	4.21	1/30/2019	6.2	No	130	0	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-11	7.1	4.21	1/30/2019	6.09	No	130	0	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-12	7.1	4.21	1/30/2019	5.01	No	130	0	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-19	7.1	4.21	1/29/2019	5.58	No	130	0	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-20	7.1	4.21	1/29/2019	4.94	No	130	0	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-21	7.1	4.21	1/30/2019	4.65	No	130	0	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-23	7.1	4.21	1/30/2019	5.14	No	130	0	n/a	0.000...	NP Inter 1 of 2
pH (S.U.)	GWC-9	7.1	4.21	1/30/2019	4.88	No	130	0	n/a	0.000...	NP Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-1	150	n/a	1/30/2019	55	No	120	14.17	n/a	0.000...	NP Inter 1 of 2
Total Dissolved Solids (mg/L)	**GWC-10**	**150**	**n/a**	**1/30/2019**	**160**	**Yes**	**120**	**14.17**	**n/a**	**0.000...**	**NP Inter 1 of 2**
Total Dissolved Solids (mg/L)	GWC-11	150	n/a	1/30/2019	89	No	120	14.17	n/a	0.000...	NP Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-12	150	n/a	1/30/2019	22	No	120	14.17	n/a	0.000...	NP Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-19	150	n/a	1/29/2019	62	No	120	14.17	n/a	0.000...	NP Inter 1 of 2

Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 7/17/2019, 10:16 AM

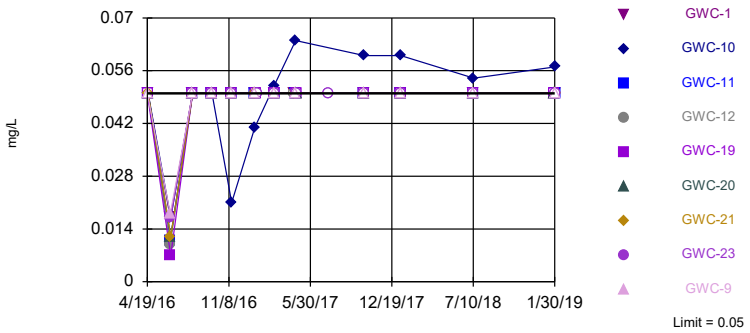
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	GWC-20	150	n/a	1/29/2019	27	No	120	14.17	n/a	0.000...	NP Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-21	150	n/a	1/30/2019	36	No	120	14.17	n/a	0.000...	NP Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-23	150	n/a	1/30/2019	38	No	120	14.17	n/a	0.000...	NP Inter 1 of 2
Total Dissolved Solids (mg/L)	GWC-9	150	n/a	1/30/2019	42	No	120	14.17	n/a	0.000...	NP Inter 1 of 2

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit: GWC-10

Prediction Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 120 background values. 90.83% NDs. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Boron Analysis Run 7/12/2019 6:07 AM

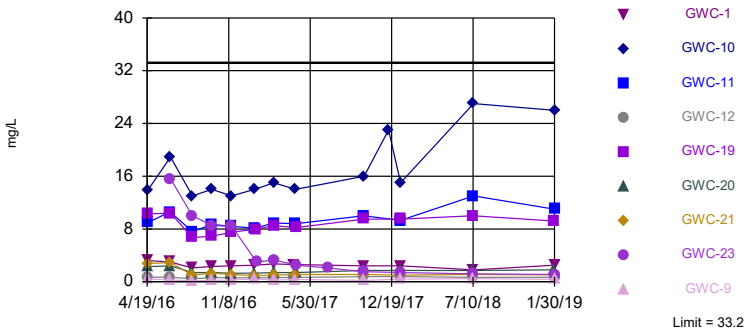
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 120 background values. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Calcium Analysis Run 7/12/2019 6:07 AM

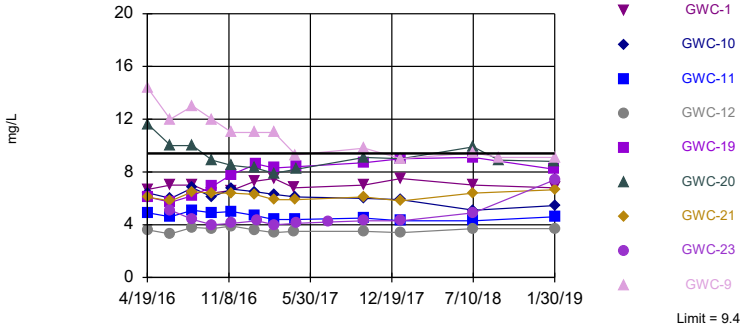
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 120 background values. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Chloride Analysis Run 7/12/2019 6:07 AM

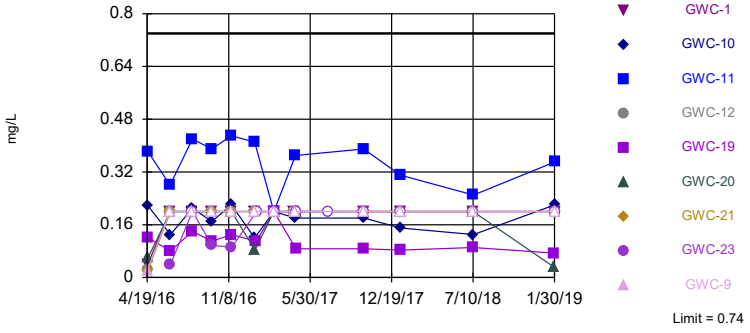
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 120 background values. 73.33% NDs. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

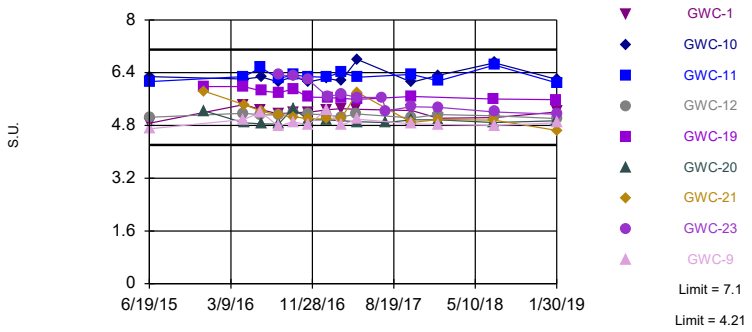
Constituent: Fluoride Analysis Run 7/12/2019 6:07 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limits

Prediction Limit

Interwell Non-parametric



NP test selected by user. Limits are highest and lowest of 130 background values. Annual per-constituent alpha = 0.004211. Individual comparison alpha = 0.0002342 (1 of 2). Comparing 9 points to limit.

Constituent: pH Analysis Run 7/12/2019 6:07 AM

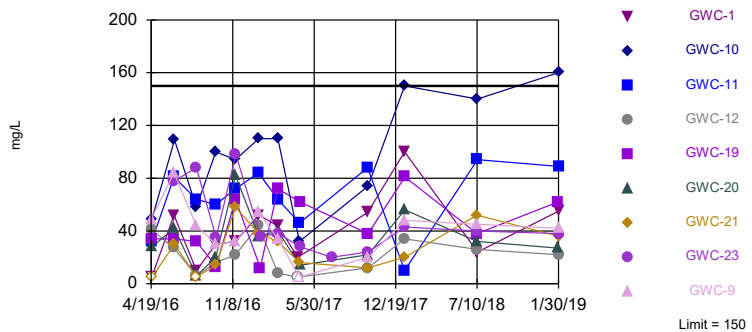
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



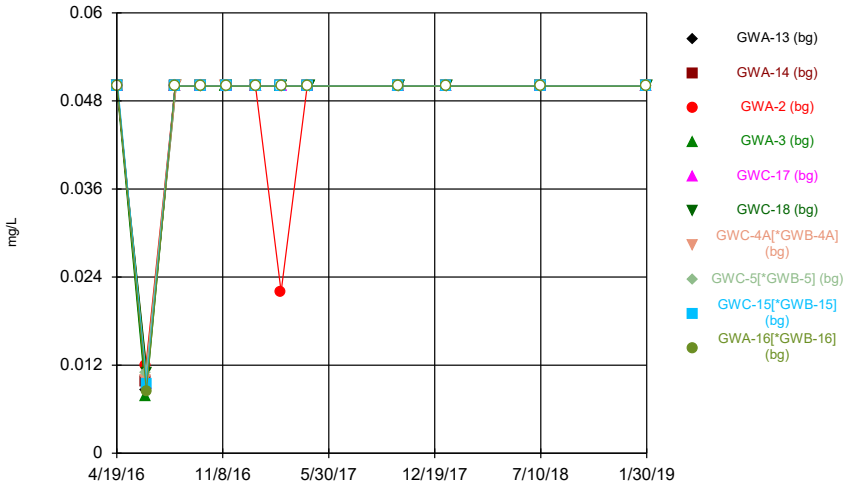
NP test selected by user. Limit is highest of 120 background values. 14.17% NDs. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Total Dissolved Solids Analysis Run 7/12/2019 6:07 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

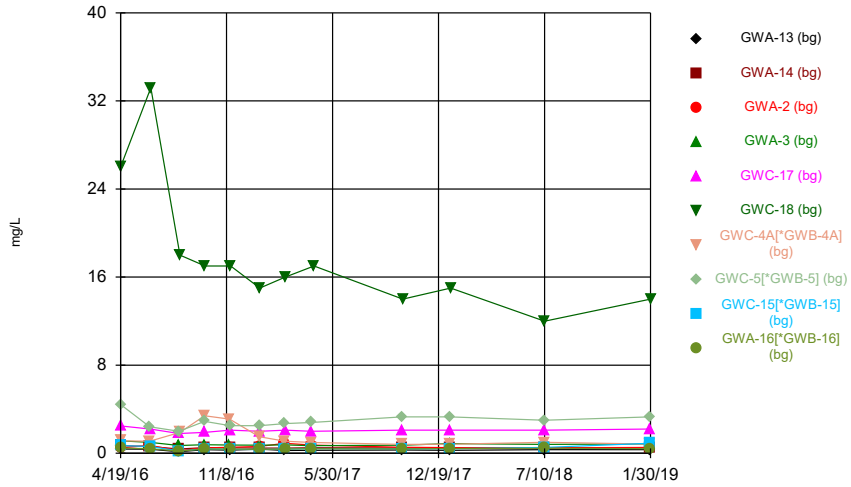
Time Series



Constituent: Boron Analysis Run 7/12/2019 6:03 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

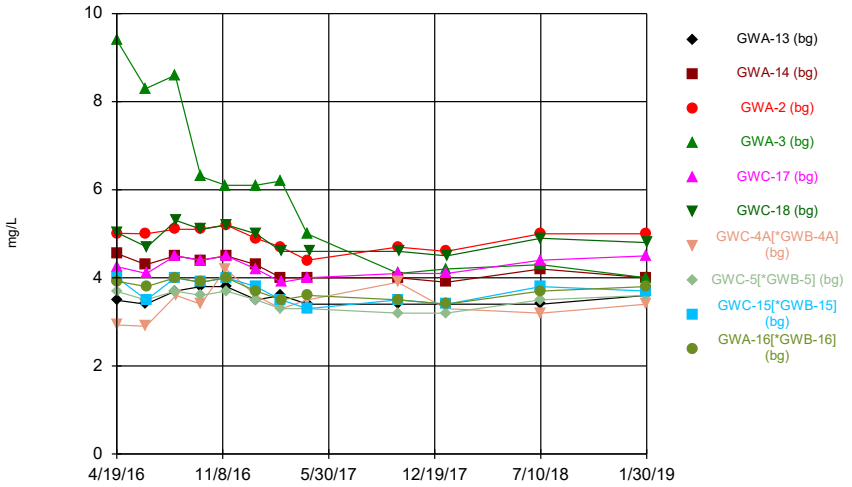
Time Series



Constituent: Calcium Analysis Run 7/12/2019 6:03 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

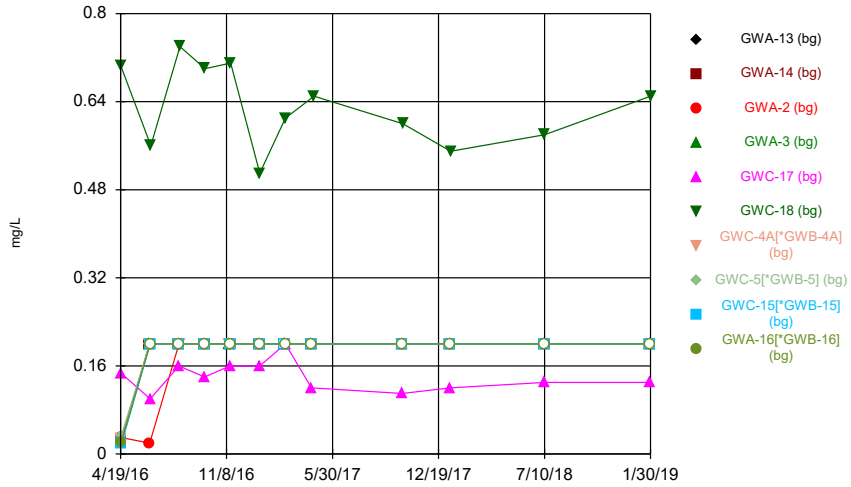
Time Series



Constituent: Chloride Analysis Run 7/12/2019 6:03 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

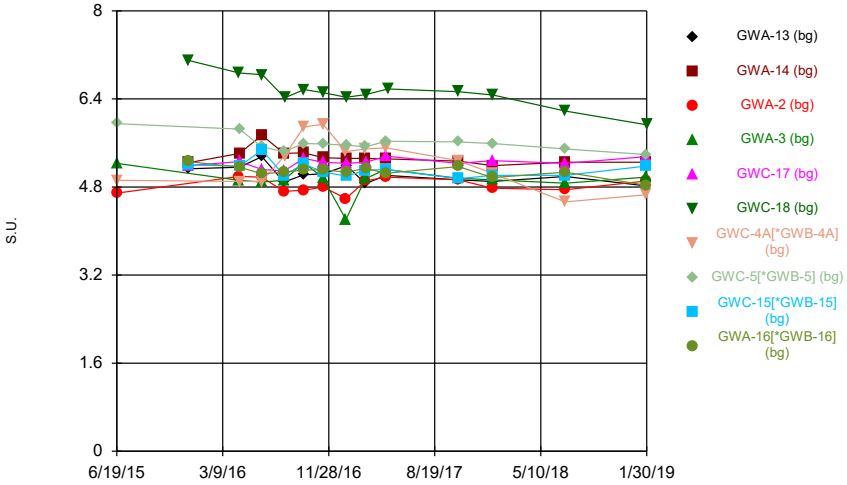
Time Series



Constituent: Fluoride Analysis Run 7/12/2019 6:03 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Time Series

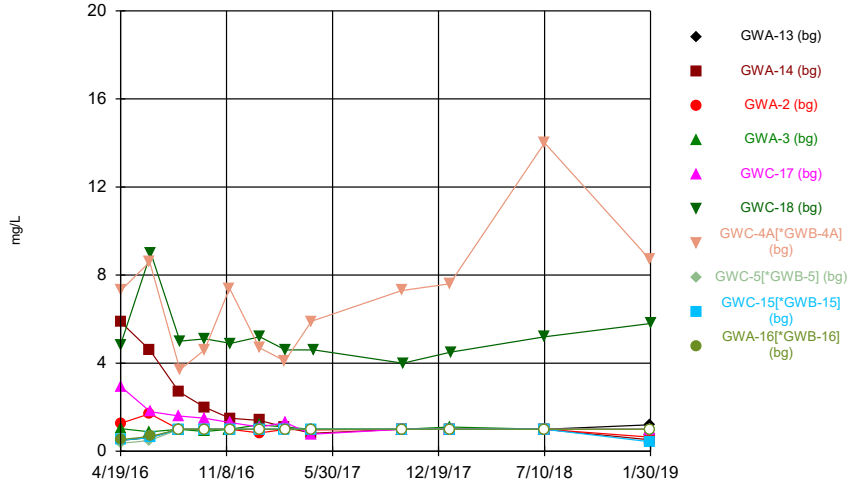


Constituent: pH Analysis Run 7/12/2019 6:03 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Time Series

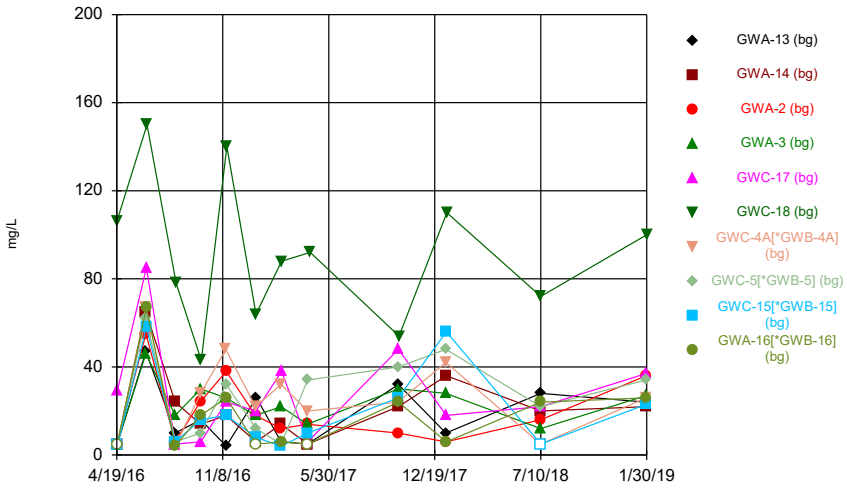


Constituent: Sulfate Analysis Run 7/12/2019 6:03 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids Analysis Run 7/12/2019 6:03 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Intrawell Prediction Limit - Significant Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 7/12/2019, 6:12 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	**GWA-13**	**1**	**n/a**	**1/29/2019**	**1.2**	**Yes**	**8**	**75**	**n/a**	**0.02144**	NP 1 of 2
Sulfate (mg/L)	**GWC-1**	**2**	**n/a**	**1/30/2019**	**2.1**	**Yes**	**8**	**0**	**n/a**	**0.02144**	NP 1 of 2
Sulfate (mg/L)	**GWC-10**	**4.2**	**n/a**	**1/30/2019**	**4.8**	**Yes**	**8**	**0**	**n/a**	**0.02144**	NP 1 of 2
Sulfate (mg/L)	**GWC-4A[*GWB-4A]**	**8.6**	**n/a**	**1/29/2019**	**8.7**	**Yes**	**8**	**0**	**n/a**	**0.02144**	NP 1 of 2

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 7/12/2019, 6:12 AM

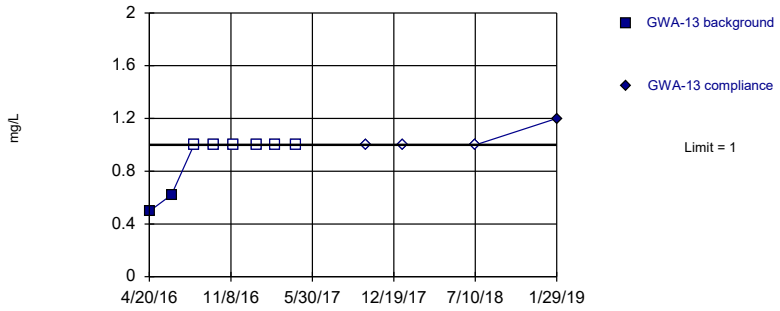
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	**GWA-13**	**1**	**n/a**	**1/29/2019**	**1.2**	**Yes**	**8**	**75**	**n/a**	**0.02144**	NP 1 of 2
Sulfate (mg/L)	GWA-14	5.85	n/a	1/29/2019	0.52	No	8	0	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWA-2	1.7	n/a	1/29/2019	0.64	No	8	37.5	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWA-3	1.2	n/a	1/29/2019	1ND	No	8	37.5	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	**GWC-1**	**2**	**n/a**	**1/30/2019**	**2.1**	**Yes**	**8**	**0**	**n/a**	**0.02144**	NP 1 of 2
Sulfate (mg/L)	**GWC-10**	**4.2**	**n/a**	**1/30/2019**	**4.8**	**Yes**	**8**	**0**	**n/a**	**0.02144**	NP 1 of 2
Sulfate (mg/L)	GWC-11	5.7	n/a	1/30/2019	4.3	No	8	0	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-12	1	n/a	1/30/2019	0.65	No	8	75	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-17	2.93	n/a	1/29/2019	1ND	No	8	0	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-18	9	n/a	1/30/2019	5.8	No	8	0	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-19	2.7	n/a	1/29/2019	1.4	No	8	0	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-20	5.25	n/a	1/29/2019	1.3	No	8	0	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-21	1.99	n/a	1/30/2019	0.705	No	8	0	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-23	9.2	n/a	1/30/2019	2.4	No	8	0	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-9	3.84	n/a	1/30/2019	0.58	No	8	25	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	**GWC-4A[*GWB-4A]**	**8.6**	**n/a**	**1/29/2019**	**8.7**	**Yes**	**8**	**0**	**n/a**	**0.02144**	NP 1 of 2
Sulfate (mg/L)	GWC-5[*GWB-5]	1	n/a	1/29/2019	1ND	No	8	75	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWC-15[*GWB-15]	1	n/a	1/29/2019	0.43	No	8	75	n/a	0.02144	NP 1 of 2
Sulfate (mg/L)	GWA-16[*GWB-16]	1	n/a	1/29/2019	1ND	No	8	75	n/a	0.02144	NP 1 of 2

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

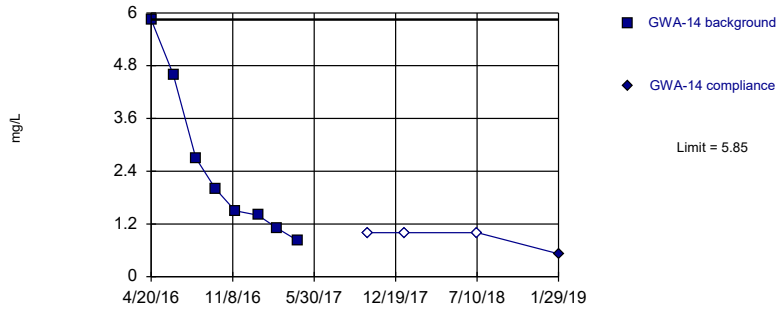
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

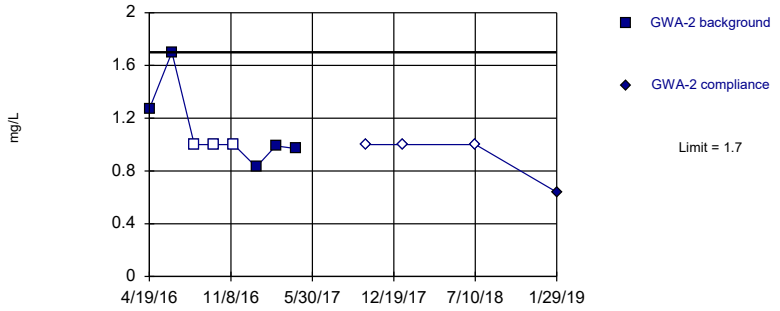
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. 37.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

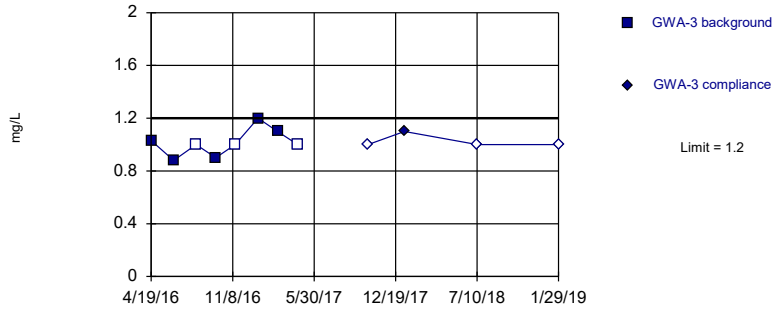
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. 37.5% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

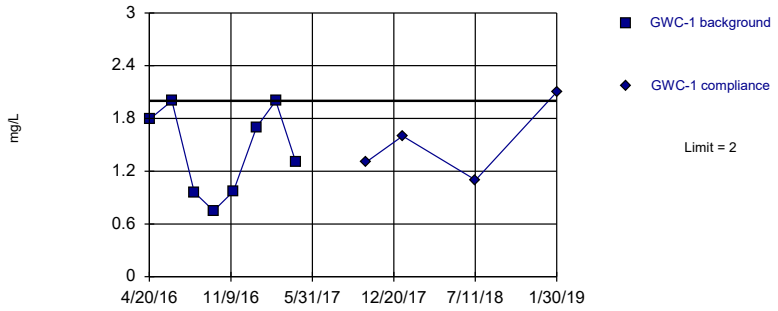
Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

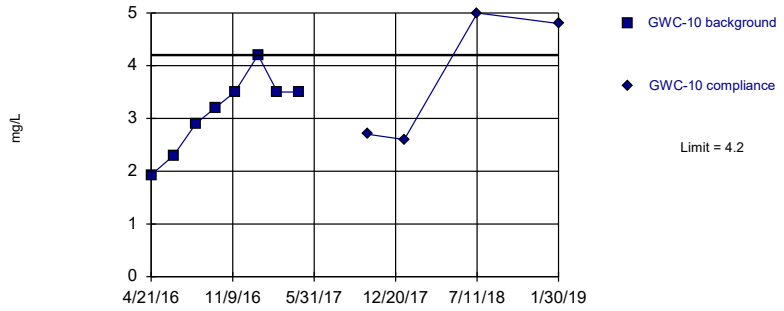
Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

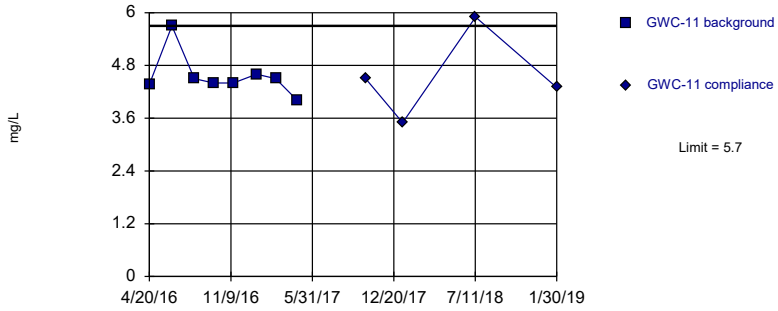
Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

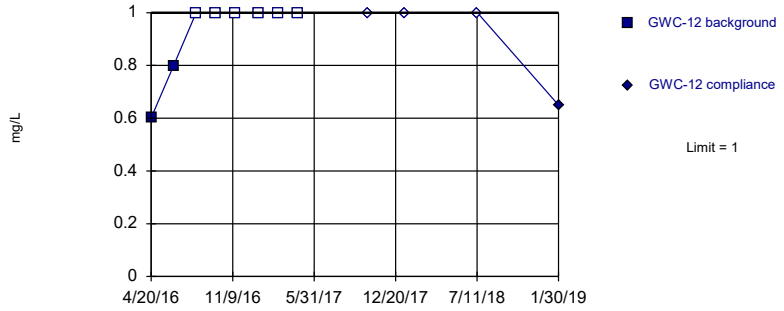
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

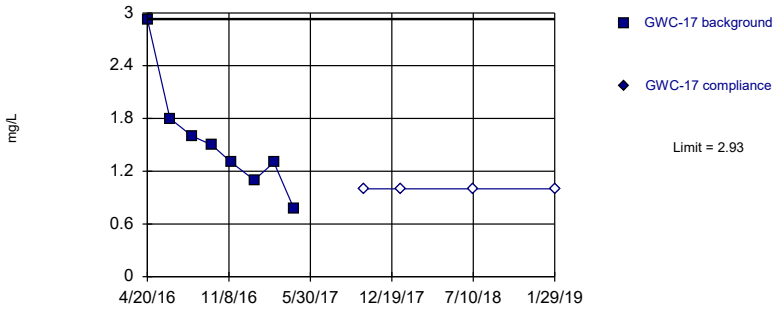
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

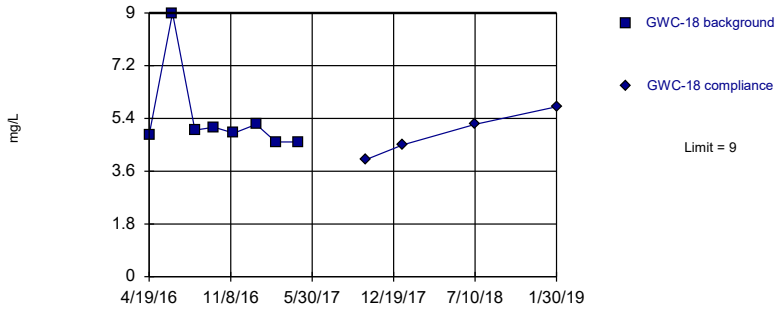
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

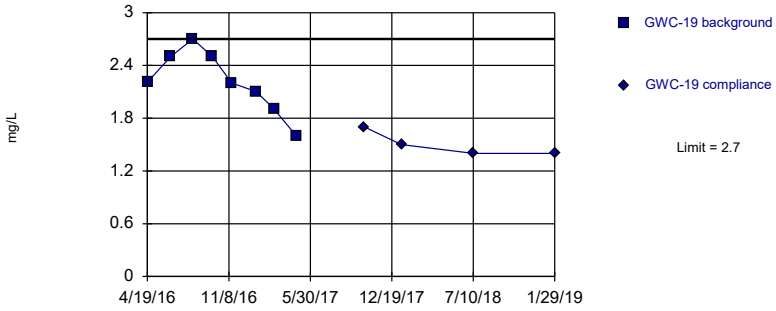
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

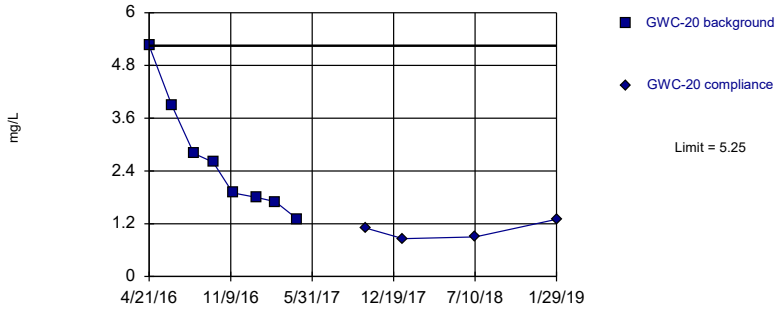
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

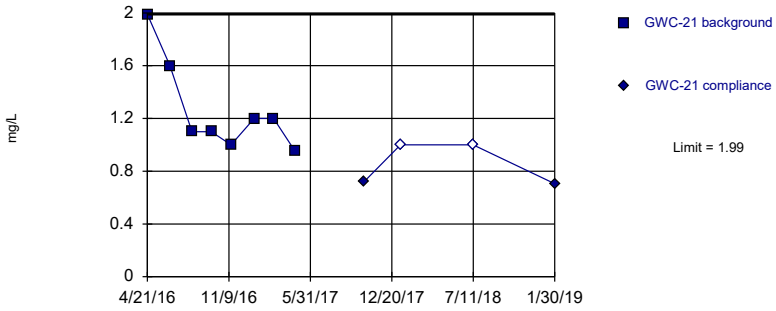
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

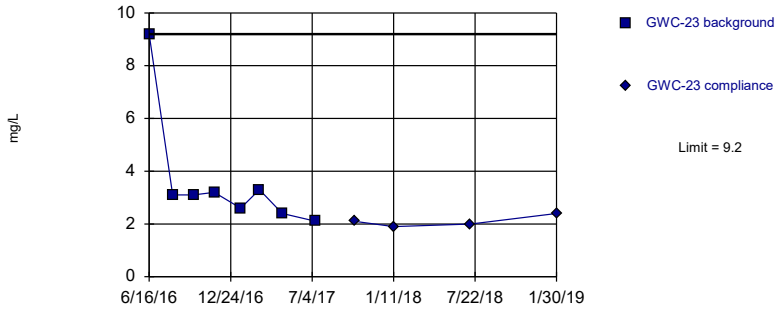
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

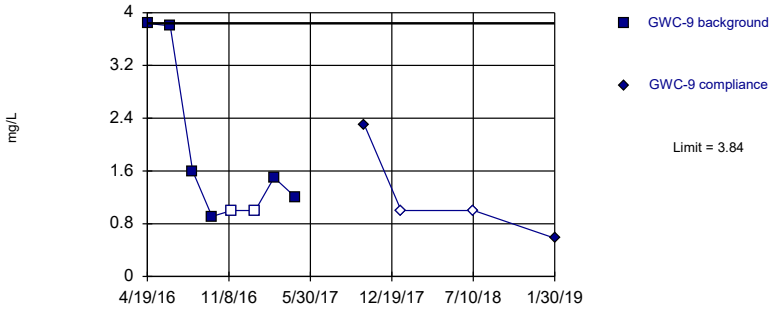
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. 25% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

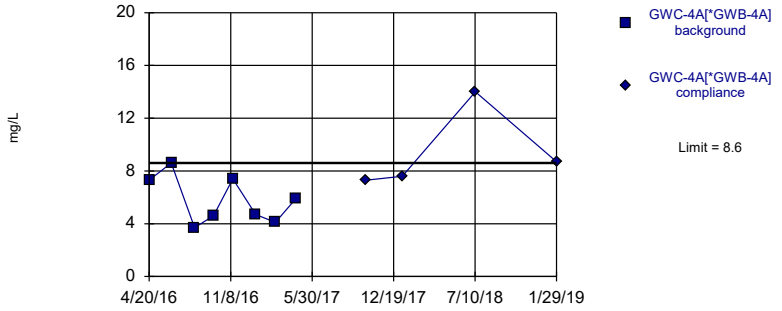
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

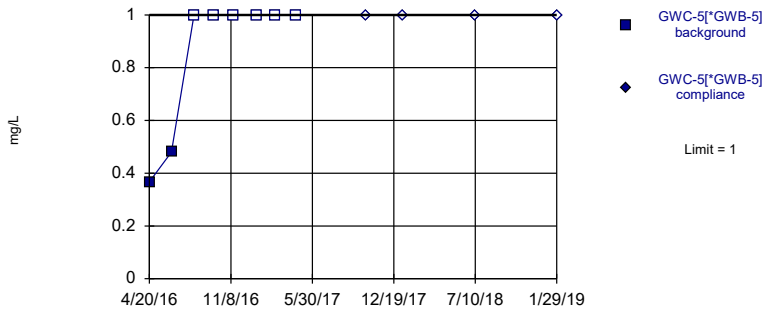
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

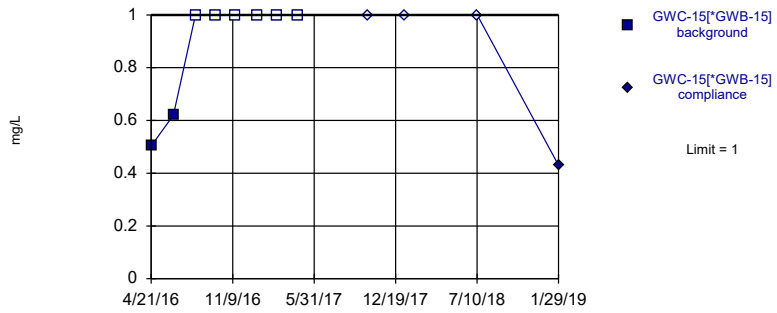
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

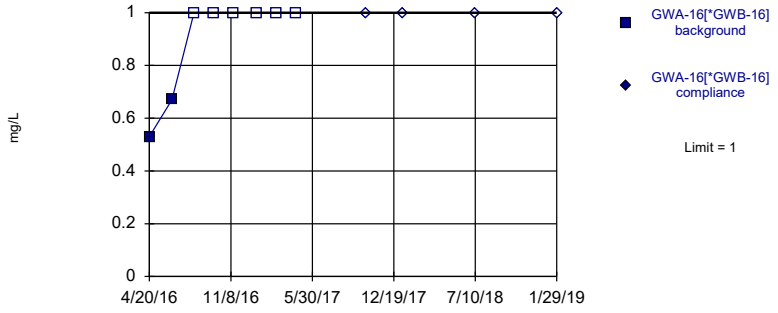
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



NP test selected by user. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/12/2019 6:10 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:06 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Boron (mg/L)	GWA-13 (bg)	12	0.04655	0.01195	0.00345	0.05	0.0086	0.05	91.67
Boron (mg/L)	GWA-14 (bg)	12	0.04665	0.0116	0.00335	0.05	0.0098	0.05	91.67
Boron (mg/L)	GWA-2 (bg)	12	0.0445	0.01302	0.003759	0.05	0.012	0.05	83.33
Boron (mg/L)	GWA-3 (bg)	12	0.04648	0.01221	0.003525	0.05	0.0077	0.05	91.67
Boron (mg/L)	GWC-1	12	0.04725	0.009526	0.00275	0.05	0.017	0.05	91.67
Boron (mg/L)	GWC-10	12	0.04783	0.01476	0.00426	0.051	0.017	0.064	25
Boron (mg/L)	GWC-11	12	0.04675	0.01126	0.00325	0.05	0.011	0.05	91.67
Boron (mg/L)	GWC-12	12	0.04667	0.01155	0.003333	0.05	0.01	0.05	91.67
Boron (mg/L)	GWC-17 (bg)	12	0.04663	0.01169	0.003375	0.05	0.0095	0.05	91.67
Boron (mg/L)	GWC-18 (bg)	12	0.04675	0.01126	0.00325	0.05	0.011	0.05	91.67
Boron (mg/L)	GWC-19	12	0.04641	0.01244	0.003592	0.05	0.0069	0.05	91.67
Boron (mg/L)	GWC-20	12	0.04683	0.01097	0.003167	0.05	0.012	0.05	91.67
Boron (mg/L)	GWC-21	12	0.04683	0.01097	0.003167	0.05	0.012	0.05	91.67
Boron (mg/L)	GWC-23	12	0.04725	0.009526	0.00275	0.05	0.017	0.05	91.67
Boron (mg/L)	GWC-9	12	0.04733	0.009238	0.002667	0.05	0.018	0.05	91.67
Boron (mg/L)	GWC-4A[*G...	12	0.04667	0.01155	0.003333	0.05	0.01	0.05	91.67
Boron (mg/L)	GWC-5[*GW...	12	0.04675	0.01126	0.00325	0.05	0.011	0.05	91.67
Boron (mg/L)	GWC-15[*G...	12	0.04663	0.01169	0.003375	0.05	0.0095	0.05	91.67
Boron (mg/L)	GWA-16[*G...	12	0.04654	0.01198	0.003458	0.05	0.0085	0.05	91.67
Calcium (mg/L)	GWA-13 (bg)	12	0.3024	0.06691	0.01932	0.31	0.14	0.389	0
Calcium (mg/L)	GWA-14 (bg)	12	0.5113	0.07565	0.02184	0.5	0.39	0.686	0
Calcium (mg/L)	GWA-2 (bg)	12	0.5696	0.1673	0.04831	0.535	0.24	0.91	0
Calcium (mg/L)	GWA-3 (bg)	12	0.8175	0.1312	0.03786	0.765	0.69	1.13	0
Calcium (mg/L)	GWC-1	12	2.493	0.3739	0.1079	2.45	1.8	3.22	0
Calcium (mg/L)	GWC-10	13	17.14	4.983	1.382	15	13	27	0
Calcium (mg/L)	GWC-11	12	9.445	1.494	0.4312	8.92	7.6	13	0
Calcium (mg/L)	GWC-12	12	0.65	0.08571	0.02474	0.66	0.45	0.78	0
Calcium (mg/L)	GWC-17 (bg)	12	2.09	0.1687	0.04871	2.1	1.8	2.48	0
Calcium (mg/L)	GWC-18 (bg)	12	17.85	5.937	1.714	16.5	12	33.2	0
Calcium (mg/L)	GWC-19	12	8.725	1.284	0.3705	8.85	6.7	10.4	0
Calcium (mg/L)	GWC-20	12	1.649	0.3689	0.1065	1.55	1.3	2.4	0
Calcium (mg/L)	GWC-21	12	1.358	0.6989	0.2017	1.1	0.93	2.9	0
Calcium (mg/L)	GWC-23	12	4.883	4.646	1.341	2.75	1.1	15.6	0
Calcium (mg/L)	GWC-9	12	0.3159	0.1086	0.03135	0.305	0.13	0.49	0
Calcium (mg/L)	GWC-4A[*G...	12	1.471	0.8896	0.2568	1.1	0.8	3.4	0
Calcium (mg/L)	GWC-5[*GW...	12	2.924	0.613	0.1769	2.85	2	4.39	0
Calcium (mg/L)	GWC-15[*G...	12	0.4713	0.1873	0.05408	0.41	0.21	0.91	0
Calcium (mg/L)	GWA-16[*G...	12	0.3918	0.07051	0.02035	0.405	0.19	0.472	0
Chloride (mg/L)	GWA-13 (bg)	12	3.541	0.1567	0.04523	3.495	3.4	3.8	0
Chloride (mg/L)	GWA-14 (bg)	12	4.221	0.235	0.06783	4.25	3.9	4.55	0
Chloride (mg/L)	GWA-2 (bg)	12	4.893	0.2396	0.06916	5	4.4	5.2	0
Chloride (mg/L)	GWA-3 (bg)	12	6.05	1.87	0.5399	6.1	4	9.4	0
Chloride (mg/L)	GWC-1	12	6.965	0.3408	0.09838	7	6.4	7.5	0
Chloride (mg/L)	GWC-10	12	6.126	0.4718	0.1362	6.1	5.1	6.8	0
Chloride (mg/L)	GWC-11	12	4.642	0.2778	0.08021	4.6	4.3	5.1	0
Chloride (mg/L)	GWC-12	12	3.593	0.1782	0.05145	3.605	3.3	3.9	0
Chloride (mg/L)	GWC-17 (bg)	12	4.246	0.2105	0.06076	4.225	3.9	4.5	0
Chloride (mg/L)	GWC-18 (bg)	12	4.861	0.266	0.0768	4.85	4.5	5.3	0
Chloride (mg/L)	GWC-19	12	7.75	1.206	0.348	8.25	5.7	9.1	0
Chloride (mg/L)	GWC-20	13	9.162	0.9954	0.2761	8.9	7.9	11.6	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:06 AM

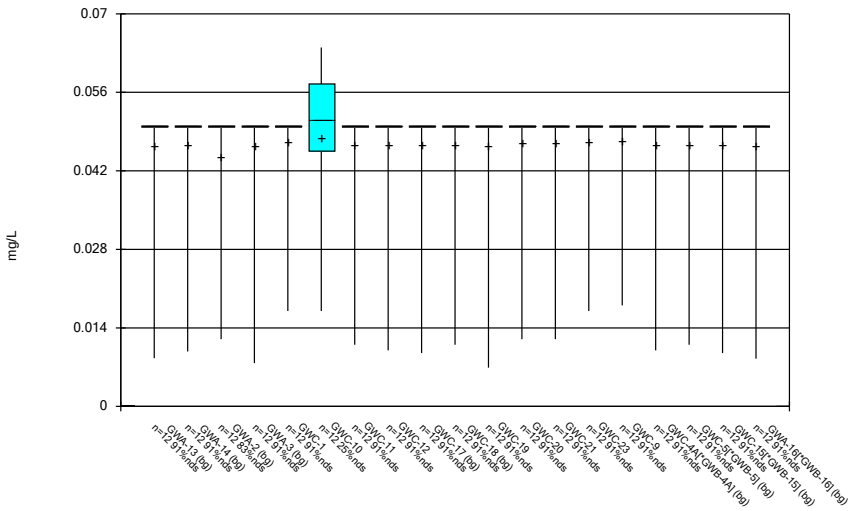
Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Chloride (mg/L)	GWC-21	12	6.19	0.3005	0.08674	6.2	5.8	6.7	0
Chloride (mg/L)	GWC-23	12	4.592	0.9472	0.2734	4.3	4	7.4	0
Chloride (mg/L)	GWC-9	13	10.78	1.708	0.4738	11	9	14.4	0
Chloride (mg/L)	GWC-4A[*G...	12	3.436	0.3687	0.1064	3.4	2.9	4.2	0
Chloride (mg/L)	GWC-5[*GW...	12	3.483	0.1889	0.05452	3.5	3.2	3.7	0
Chloride (mg/L)	GWC-15[*G...	12	3.699	0.2512	0.07251	3.75	3.3	4	0
Chloride (mg/L)	GWA-16[*G...	12	3.735	0.2031	0.05863	3.75	3.4	4	0
Fluoride (mg/L)	GWA-13 (bg)	12	0.1848	0.05254	0.01517	0.2	0.018	0.2	91.67
Fluoride (mg/L)	GWA-14 (bg)	12	0.1851	0.05167	0.01492	0.2	0.021	0.2	91.67
Fluoride (mg/L)	GWA-2 (bg)	12	0.1708	0.06815	0.01967	0.2	0.02	0.2	83.33
Fluoride (mg/L)	GWA-3 (bg)	12	0.1852	0.05138	0.01483	0.2	0.022	0.2	91.67
Fluoride (mg/L)	GWC-1	12	0.1867	0.04619	0.01333	0.2	0.04	0.2	91.67
Fluoride (mg/L)	GWC-10	12	0.1781	0.03852	0.01112	0.18	0.12	0.23	8.333
Fluoride (mg/L)	GWC-11	12	0.3486	0.07297	0.02106	0.3765	0.2	0.43	8.333
Fluoride (mg/L)	GWC-12	12	0.1855	0.05023	0.0145	0.2	0.026	0.2	91.67
Fluoride (mg/L)	GWC-17 (bg)	12	0.1398	0.02755	0.007953	0.135	0.1	0.2	8.333
Fluoride (mg/L)	GWC-18 (bg)	12	0.6313	0.07296	0.02106	0.63	0.51	0.74	0
Fluoride (mg/L)	GWC-19	12	0.1095	0.03553	0.01026	0.1005	0.074	0.2	8.333
Fluoride (mg/L)	GWC-20	12	0.1645	0.06518	0.01881	0.2	0.031	0.2	75
Fluoride (mg/L)	GWC-21	12	0.1852	0.05138	0.01483	0.2	0.022	0.2	91.67
Fluoride (mg/L)	GWC-23	12	0.1691	0.05753	0.01661	0.2	0.04	0.2	75
Fluoride (mg/L)	GWC-9	12	0.185	0.05196	0.015	0.2	0.02	0.2	91.67
Fluoride (mg/L)	GWC-4A[*G...	12	0.1857	0.04965	0.01433	0.2	0.028	0.2	91.67
Fluoride (mg/L)	GWC-5[*GW...	12	0.186	0.0485	0.014	0.2	0.032	0.2	91.67
Fluoride (mg/L)	GWC-15[*G...	12	0.1849	0.05225	0.01508	0.2	0.019	0.2	91.67
Fluoride (mg/L)	GWA-16[*G...	12	0.1852	0.05138	0.01483	0.2	0.022	0.2	91.67
pH (S.U.)	GWA-13 (bg)	13	5.022	0.1516	0.04205	5.01	4.82	5.35	0
pH (S.U.)	GWA-14 (bg)	13	5.343	0.1389	0.03852	5.32	5.19	5.74	0
pH (S.U.)	GWA-2 (bg)	13	4.828	0.1293	0.03586	4.8	4.59	4.99	0
pH (S.U.)	GWA-3 (bg)	13	4.938	0.251	0.06962	4.95	4.21	5.25	0
pH (S.U.)	GWC-1	13	5.193	0.146	0.0405	5.21	4.87	5.43	0
pH (S.U.)	GWC-10	13	6.292	0.2155	0.05978	6.23	6.11	6.8	0
pH (S.U.)	GWC-11	13	6.303	0.1562	0.04331	6.28	6.09	6.63	0
pH (S.U.)	GWC-12	13	5.106	0.05576	0.01546	5.12	5.01	5.19	0
pH (S.U.)	GWC-17 (bg)	13	5.243	0.07889	0.02188	5.25	5.09	5.36	0
pH (S.U.)	GWC-18 (bg)	13	6.532	0.2961	0.08211	6.51	5.93	7.1	0
pH (S.U.)	GWC-19	12	5.74	0.1524	0.044	5.67	5.58	5.98	0
pH (S.U.)	GWC-20	13	4.972	0.1449	0.04019	4.94	4.84	5.32	0
pH (S.U.)	GWC-21	13	5.15	0.3468	0.09619	5.01	4.65	5.84	0
pH (S.U.)	GWC-23	12	5.654	0.4229	0.1221	5.65	5.14	6.34	0
pH (S.U.)	GWC-9	13	4.909	0.1674	0.04643	4.85	4.7	5.28	0
pH (S.U.)	GWC-4A[*G...	13	5.222	0.439	0.1217	5.28	4.53	5.94	0
pH (S.U.)	GWC-5[*GW...	13	5.596	0.1527	0.04236	5.58	5.39	5.95	0
pH (S.U.)	GWC-15[*G...	13	5.117	0.138	0.03827	5.1	4.95	5.47	0
pH (S.U.)	GWA-16[*G...	13	5.081	0.104	0.02883	5.07	4.83	5.26	0
Sulfate (mg/L)	GWA-13 (bg)	12	0.943	0.1906	0.05501	1	0.496	1.2	75
Sulfate (mg/L)	GWA-14 (bg)	12	1.958	1.653	0.4772	1.25	0.52	5.85	25
Sulfate (mg/L)	GWA-2 (bg)	12	1.033	0.2539	0.07329	1	0.64	1.7	50
Sulfate (mg/L)	GWA-3 (bg)	12	1.018	0.08614	0.02487	1	0.88	1.2	50
Sulfate (mg/L)	GWC-1	12	1.464	0.4626	0.1335	1.45	0.75	2.1	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:06 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Sulfate (mg/L)	GWC-10	12	3.361	0.9799	0.2829	3.35	1.93	5	0
Sulfate (mg/L)	GWC-11	12	4.556	0.6536	0.1887	4.45	3.5	5.9	0
Sulfate (mg/L)	GWC-12	12	0.9209	0.1497	0.04323	1	0.601	1	75
Sulfate (mg/L)	GWC-17 (bg)	12	1.358	0.5782	0.1669	1.2	0.77	2.93	33.33
Sulfate (mg/L)	GWC-18 (bg)	12	5.212	1.271	0.3668	4.95	4	9	0
Sulfate (mg/L)	GWC-19	12	1.976	0.458	0.1322	2	1.4	2.7	0
Sulfate (mg/L)	GWC-20	12	2.118	1.33	0.3838	1.75	0.86	5.25	0
Sulfate (mg/L)	GWC-21	12	1.132	0.3557	0.1027	1.05	0.72	1.99	16.67
Sulfate (mg/L)	GWC-23	12	3.117	1.98	0.5717	2.5	1.9	9.2	0
Sulfate (mg/L)	GWC-9	12	1.644	1.106	0.3192	1.1	0.58	3.84	33.33
Sulfate (mg/L)	GWC-4A[*G...	12	6.993	2.808	0.8105	7.305	3.7	14	0
Sulfate (mg/L)	GWC-5[*GW...	12	0.9039	0.2257	0.06515	1	0.367	1	83.33
Sulfate (mg/L)	GWC-15[*G...	12	0.8794	0.2219	0.06407	1	0.43	1	75
Sulfate (mg/L)	GWA-16[*G...	12	0.9333	0.1585	0.04577	1	0.53	1	83.33
Total Dissolved Solids (mg/L)	GWA-13 (bg)	12	17.75	13.64	3.937	13	4	47	16.67
Total Dissolved Solids (mg/L)	GWA-14 (bg)	12	20.92	16.56	4.781	19	5	65	16.67
Total Dissolved Solids (mg/L)	GWA-2 (bg)	12	20	15.54	4.487	15	5	55	8.333
Total Dissolved Solids (mg/L)	GWA-3 (bg)	12	23	10.68	3.082	24	5	46	8.333
Total Dissolved Solids (mg/L)	GWC-1	12	39.83	25.71	7.421	38	5	100	8.333
Total Dissolved Solids (mg/L)	GWC-10	12	98.83	40.07	11.57	104.5	32	160	0
Total Dissolved Solids (mg/L)	GWC-11	12	65.33	25.43	7.341	68	10	94	0
Total Dissolved Solids (mg/L)	GWC-12	12	21.92	13.17	3.801	22	5	44	8.333
Total Dissolved Solids (mg/L)	GWC-17 (bg)	12	28.17	22.45	6.481	23	5	85	8.333
Total Dissolved Solids (mg/L)	GWC-18 (bg)	12	86.75	38.77	11.19	90	16	150	0
Total Dissolved Solids (mg/L)	GWC-19	12	45.17	22.53	6.505	38	12	81	0
Total Dissolved Solids (mg/L)	GWC-20	12	33.75	20.24	5.841	30	6	82	0
Total Dissolved Solids (mg/L)	GWC-21	12	27.08	17.91	5.171	25	5	58	16.67
Total Dissolved Solids (mg/L)	GWC-23	12	47.17	25.86	7.464	38	20	98	0
Total Dissolved Solids (mg/L)	GWC-9	12	40.33	19.36	5.59	42	5	84	8.333
Total Dissolved Solids (mg/L)	GWC-4A[*G...	12	27	18.65	5.385	25	5	67	25
Total Dissolved Solids (mg/L)	GWC-5[*GW...	12	25.83	18.8	5.428	27	5	62	16.67
Total Dissolved Solids (mg/L)	GWC-15[*G...	12	19.58	18.95	5.47	13	4	58	16.67
Total Dissolved Solids (mg/L)	GWA-16[*G...	12	18	18.07	5.217	12	4	67	25

Box & Whiskers Plot

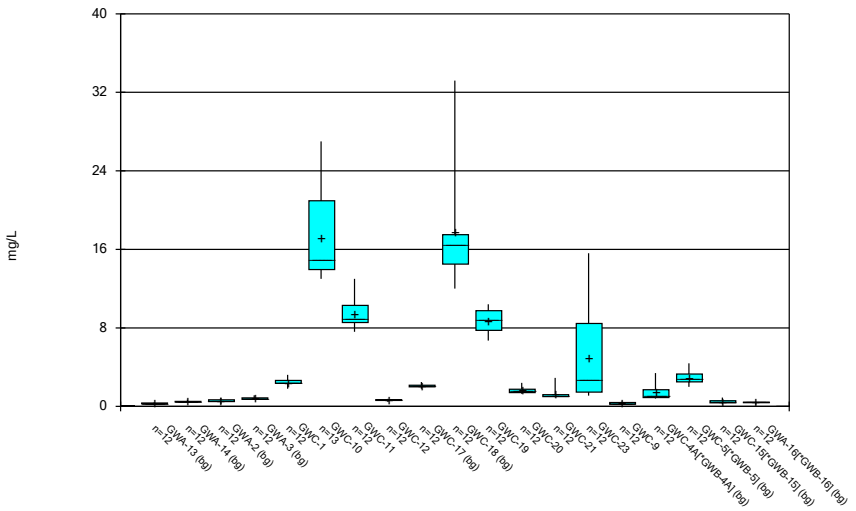


Constituent: Boron Analysis Run 1/13/2020 10:05 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

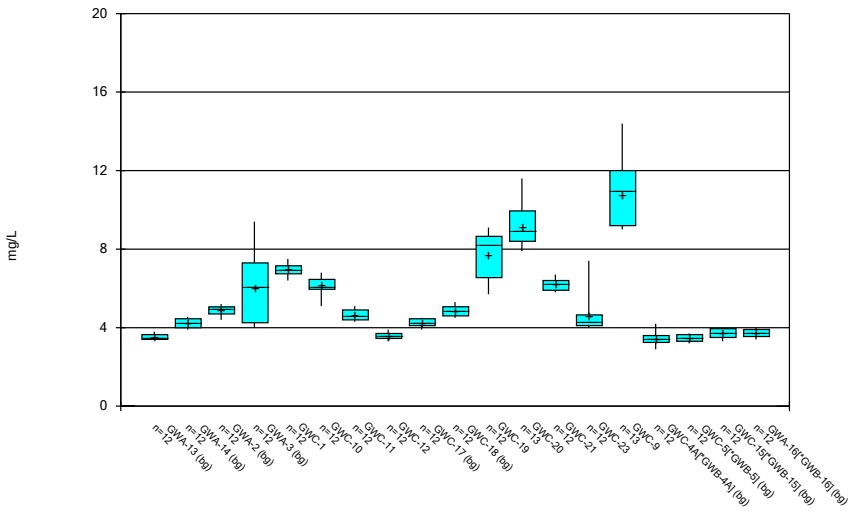


Constituent: Calcium Analysis Run 1/13/2020 10:05 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

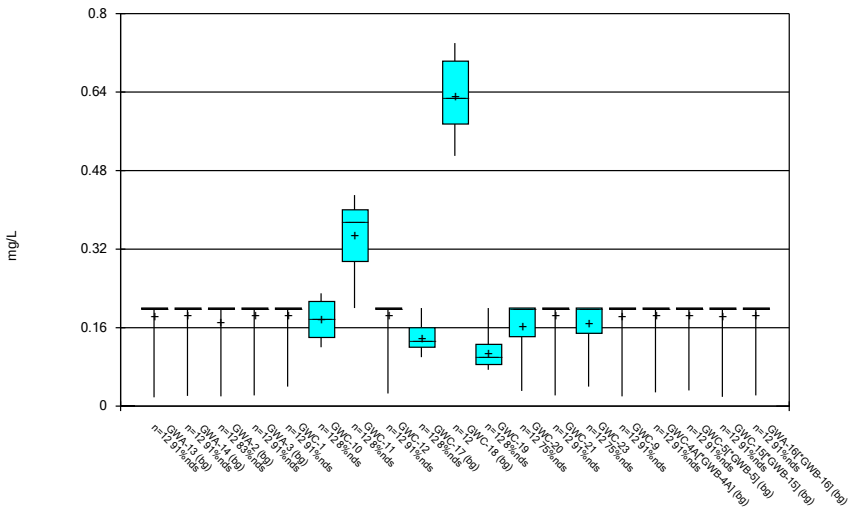


Constituent: Chloride Analysis Run 1/13/2020 10:05 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

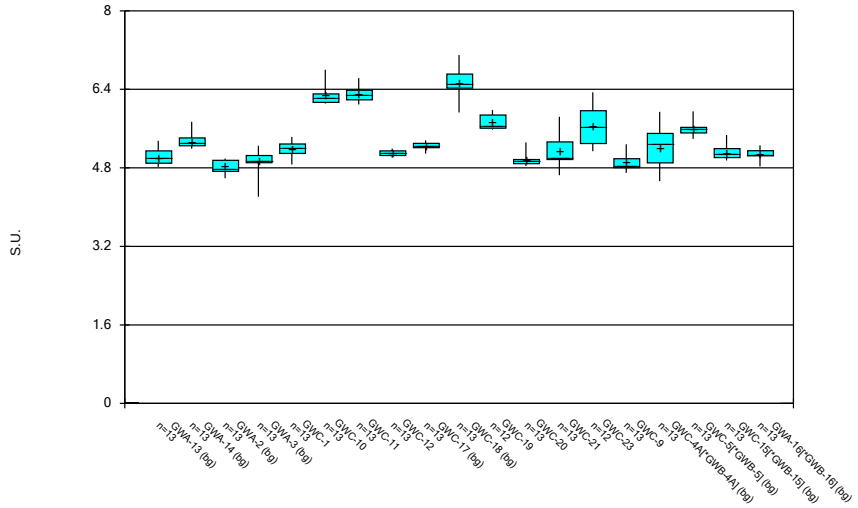
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 1/13/2020 10:05 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

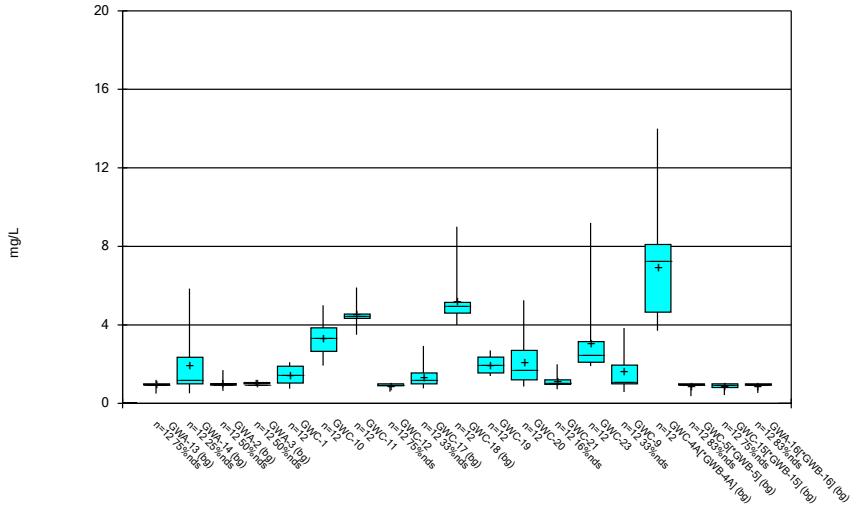


Constituent: pH Analysis Run 1/13/2020 10:05 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

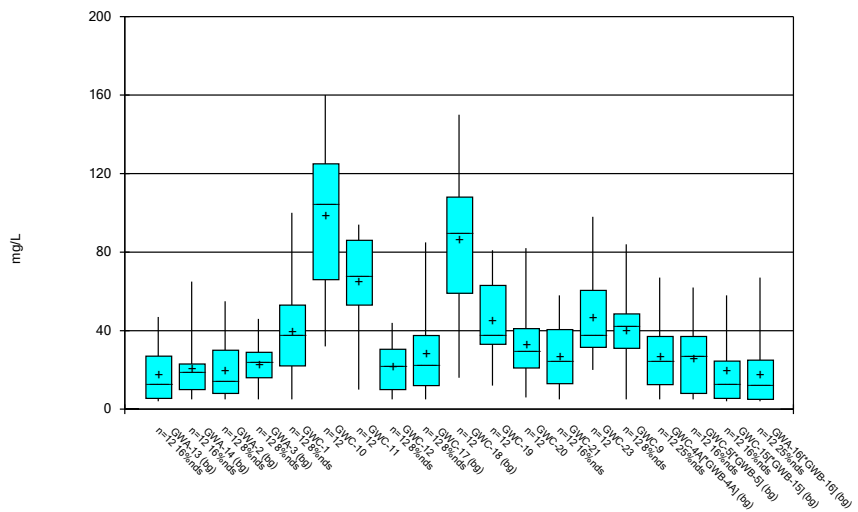


Constituent: Sulfate Analysis Run 1/13/2020 10:05 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2020 10:06 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Appendix C2

Sanitas Outputs for Appendix III Parameters – March 2019

Interwell Prediction Limit

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/17/2020, 1:36 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	GWC-1	0.1	n/a	3/27/2019	0.05ND	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Boron (mg/L)	GWC-10	0.1	n/a	3/27/2019	0.05	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Boron (mg/L)	GWC-11	0.1	n/a	3/27/2019	0.05ND	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Boron (mg/L)	GWC-12	0.1	n/a	3/27/2019	0.05ND	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Boron (mg/L)	GWC-19	0.1	n/a	3/27/2019	0.05ND	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Boron (mg/L)	GWC-20	0.1	n/a	3/27/2019	0.05ND	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Boron (mg/L)	GWC-21	0.1	n/a	3/27/2019	0.05ND	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Boron (mg/L)	GWC-23	0.1	n/a	3/27/2019	0.05ND	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Boron (mg/L)	GWC-9	0.1	n/a	3/27/2019	0.05ND	No	130	91.54	n/a	0.0001171	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-1	26	n/a	3/27/2019	2.4	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Calcium (mg/L)	GWC-10	26	n/a	3/27/2019	22	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Calcium (mg/L)	GWC-11	26	n/a	3/27/2019	13	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Calcium (mg/L)	GWC-12	26	n/a	3/27/2019	0.62	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Calcium (mg/L)	GWC-19	26	n/a	3/27/2019	9.2	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Calcium (mg/L)	GWC-20	26	n/a	3/27/2019	1.5	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Calcium (mg/L)	GWC-21	26	n/a	3/27/2019	1.1	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Calcium (mg/L)	GWC-23	26	n/a	3/27/2019	1.4	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Calcium (mg/L)	GWC-9	26	n/a	3/27/2019	0.28	No	127	0	n/a	0.0001224	NP (normality) 1 of 2
Chloride (mg/L)	GWC-1	9.4	n/a	3/27/2019	6.8	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Chloride (mg/L)	GWC-10	9.4	n/a	3/27/2019	5.3	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Chloride (mg/L)	GWC-11	9.4	n/a	3/27/2019	4	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Chloride (mg/L)	GWC-12	9.4	n/a	3/27/2019	3.3	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Chloride (mg/L)	GWC-19	9.4	n/a	3/27/2019	7.5	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Chloride (mg/L)	GWC-20	9.4	n/a	3/27/2019	8.9	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Chloride (mg/L)	GWC-21	9.4	n/a	3/27/2019	6.3	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Chloride (mg/L)	GWC-23	9.4	n/a	3/27/2019	4.2	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Chloride (mg/L)	GWC-9	9.4	n/a	6/17/2019	9.4	No	130	0	n/a	0.0001171	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.74	n/a	3/27/2019	0.029	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-10	0.74	n/a	3/27/2019	0.12	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-11	0.74	n/a	3/27/2019	0.24	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-12	0.74	n/a	3/27/2019	0.2ND	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-19	0.74	n/a	3/27/2019	0.072	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-20	0.74	n/a	3/27/2019	0.034	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-21	0.74	n/a	3/27/2019	0.2ND	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-23	0.74	n/a	3/27/2019	0.027	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-9	0.74	n/a	3/27/2019	0.2ND	No	131	72.52	n/a	0.0001153	NP (NDs) 1 of 2
pH (S.U.)	GWC-1	7.1	4.21	3/27/2019	5.15	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
pH (S.U.)	GWC-10	7.1	4.21	3/27/2019	6.54	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
pH (S.U.)	GWC-11	7.1	4.21	3/27/2019	6.32	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
pH (S.U.)	GWC-12	7.1	4.21	3/27/2019	4.93	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
pH (S.U.)	GWC-19	7.1	4.21	3/27/2019	5.59	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
pH (S.U.)	GWC-20	7.1	4.21	3/27/2019	4.94	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
pH (S.U.)	GWC-21	7.1	4.21	3/27/2019	4.96	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
pH (S.U.)	GWC-23	7.1	4.21	3/27/2019	5.3	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
pH (S.U.)	GWC-9	7.1	4.21	3/27/2019	4.75	No	140	0	n/a	0.0001989	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-1	150	n/a	3/27/2019	26	No	130	13.85	sqrt(x)	0.0008358	Param 1 of 2
Total Dissolved Solids (mg/L)	GWC-10	150	n/a	3/27/2019	130	No	130	13.85	**sqrt(x)**	0.0008358	Param 1 of 2
Total Dissolved Solids (mg/L)	GWC-11	150	n/a	3/27/2019	79	No	130	13.85	sqrt(x)	0.0008358	Param 1 of 2
Total Dissolved Solids (mg/L)	GWC-12	150	n/a	3/27/2019	24	No	130	13.85	sqrt(x)	0.0008358	Param 1 of 2
Total Dissolved Solids (mg/L)	GWC-19	150	n/a	3/27/2019	61	No	130	13.85	sqrt(x)	0.0008358	Param 1 of 2

Interwell Prediction Limit

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/17/2020, 1:25 PM

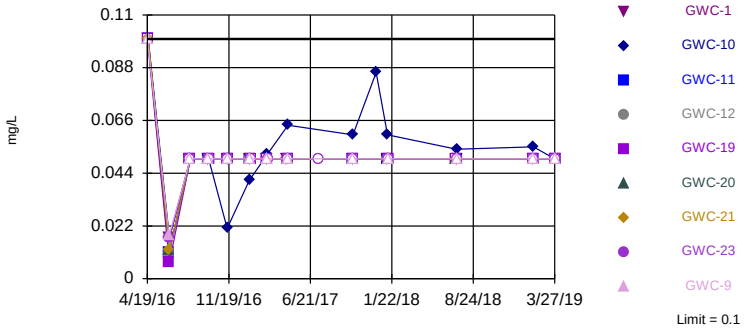
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	GWC-20	150	n/a	3/27/2019	57	No	130	13.85	sqrt(x)	0.0008358	Param 1 of 2
Total Dissolved Solids (mg/L)	GWC-21	150	n/a	3/27/2019	33	No	130	13.85	sqrt(x)	0.0008358	Param 1 of 2
Total Dissolved Solids (mg/L)	GWC-23	150	n/a	3/27/2019	42	No	130	13.85	sqrt(x)	0.0008358	Param 1 of 2
Total Dissolved Solids (mg/L)	GWC-9	150	n/a	3/27/2019	34	No	130	13.85	sqrt(x)	0.0008358	Param 1 of 2

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 130 background values. 91.54% NDs. Annual per-constituent alpha = 0.002106. Individual comparison alpha = 0.0001171 (1 of 2). Comparing 9 points to limit.

Constituent: Boron Analysis Run 1/17/2020 1:35 PM View: LF4 EPD

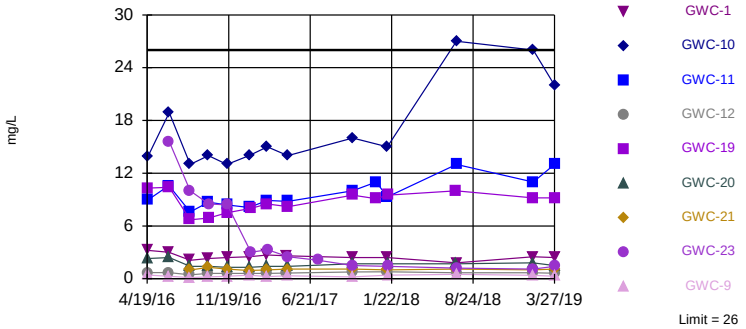
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 127 background values. Annual per-constituent alpha = 0.002201. Individual comparison alpha = 0.0001224 (1 of 2). Comparing 9 points to limit.

Constituent: Calcium Analysis Run 1/17/2020 1:35 PM View: LF4 EPD

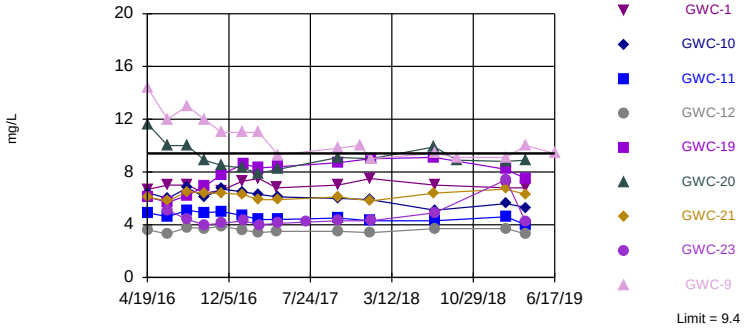
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 130 background values. Annual per-constituent alpha = 0.002106. Individual comparison alpha = 0.0001171 (1 of 2). Comparing 9 points to limit.

Constituent: Chloride Analysis Run 1/17/2020 1:35 PM View: LF4 EPD

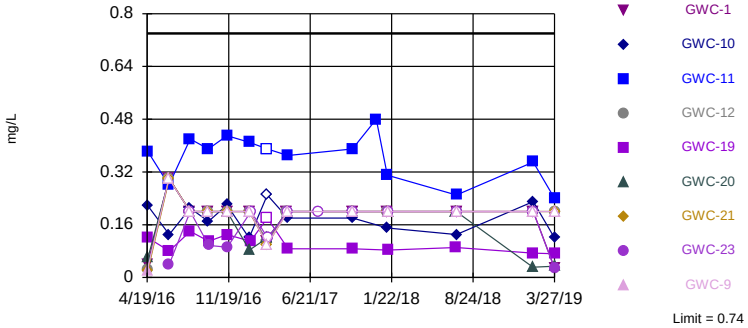
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 131 background values. 72.52% NDs. Annual per-constituent alpha = 0.002074. Individual comparison alpha = 0.0001153 (1 of 2). Comparing 9 points to limit.

Constituent: Fluoride Analysis Run 1/17/2020 1:35 PM View: LF4 EPD

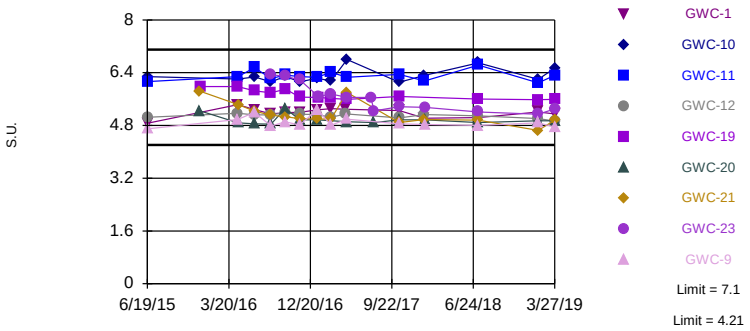
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 140 background values. Annual per-constituent alpha = 0.003578. Individual comparison alpha = 0.0001989 (1 of 2). Comparing 9 points to limit.

Constituent: pH Analysis Run 1/17/2020 1:35 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

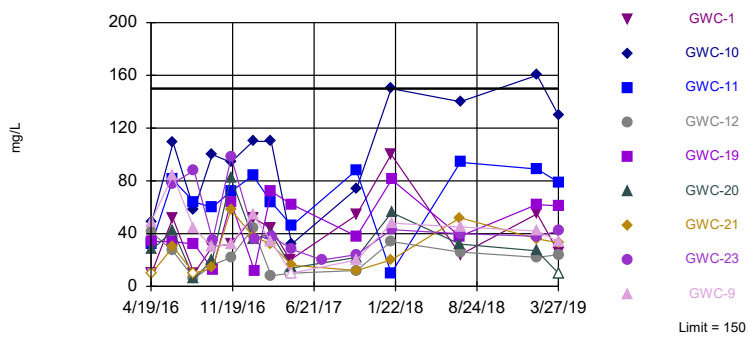
Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 130 background values. 13.85% NDs. Annual per-constituent alpha = 0.002106. Individual comparison alpha = 0.0001171 (1 of 2). Comparing 9 points to limit.

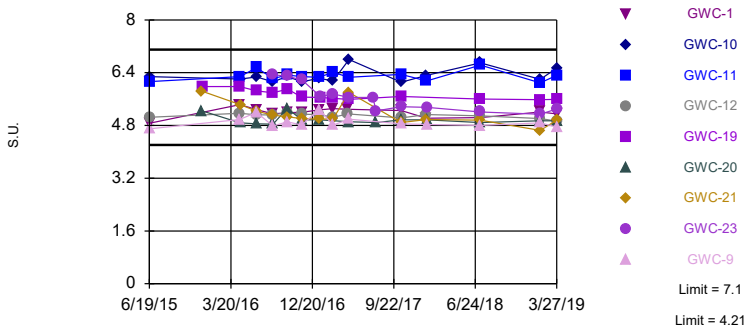
Constituent: Total Dissolved Solids Analysis Run 7/1/2019 1:26 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 140 background values. Annual per-constituent alpha = 0.003578. Individual comparison alpha = 0.0001989 (1 of 2). Comparing 9 points to limit.

Constituent: pH Analysis Run 7/1/2019 1:26 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 7/1/2019, 12:22 PM

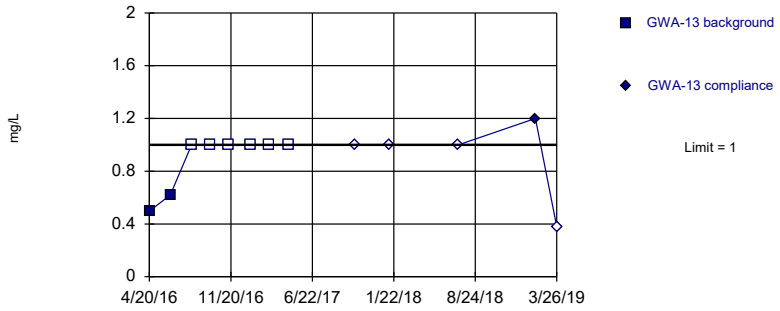
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	GWA-13	1	n/a	3/26/2019	0.38ND	No	8	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWA-14	9.401	n/a	3/26/2019	0.38ND	No	8	0	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWA-2	2.227	n/a	3/27/2019	1ND	No	8	37.5	sqrt(x)	0.000266	Param 1 of 2
Sulfate (mg/L)	GWA-3	1.411	n/a	3/27/2019	0.38ND	No	8	37.5	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-1	3.349	n/a	3/27/2019	1.6	No	8	0	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-10	5.919	n/a	3/27/2019	4.3	No	8	0	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-11	6.545	n/a	3/27/2019	5.4	No	8	0	sqrt(x)	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-12	1	n/a	3/27/2019	0.38ND	No	8	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWC-17	3.996	n/a	3/27/2019	1ND	No	8	0	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-18	9	n/a	3/27/2019	4.8	No	8	0	n/a	0.02144	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-19	3.573	n/a	3/27/2019	1.6	No	8	0	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-20	7.726	n/a	3/27/2019	1.7	No	8	0	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-21	2.613	n/a	3/27/2019	0.38ND	No	8	0	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-23	9.2	n/a	3/27/2019	2.8	No	8	0	n/a	0.02144	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-9	7.905	n/a	3/27/2019	1.2	No	8	25	sqrt(x)	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-4A[*GWB-4A]	12.65	n/a	3/26/2019	11	No	8	0	No	0.000266	Param 1 of 2
Sulfate (mg/L)	GWC-5[*GWB-5]	1	n/a	3/26/2019	0.38ND	No	8	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWC-15[*GWB-15]	1	n/a	3/26/2019	0.38ND	No	8	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWA-16[*GWB-16]	1	n/a	3/26/2019	0.38ND	No	8	75	n/a	0.02144	NP (NDs) 1 of 2

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

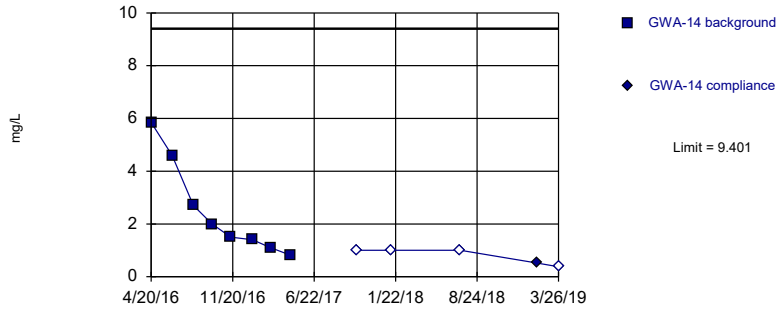
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.496, Std. Dev.=1.809, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8473, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

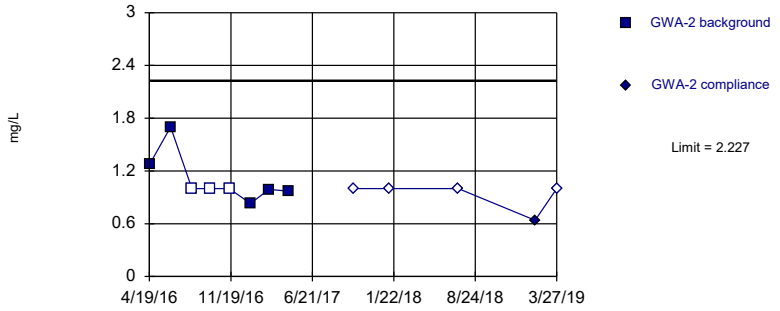
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=1.027, Std. Dev.=0.122, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7755, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

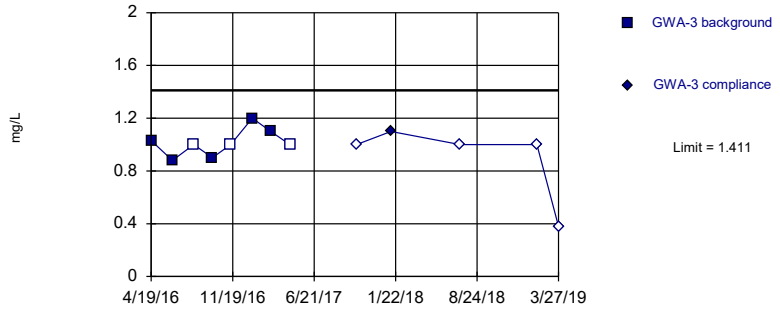
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.9725, Std. Dev.=0.115, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9315, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

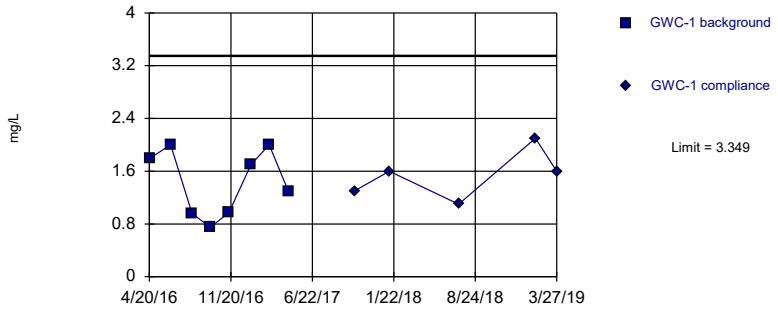
Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.434, Std. Dev.=0.502, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8871, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

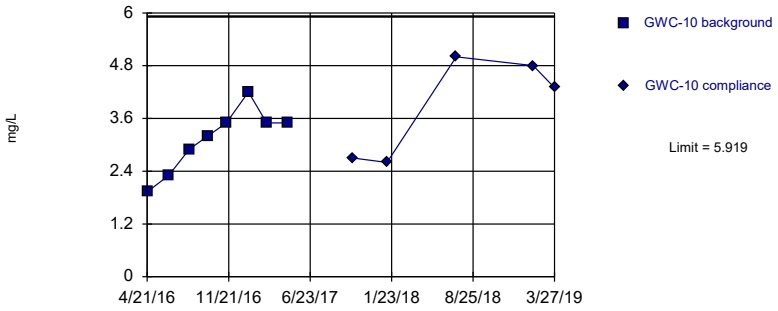
Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3.129, Std. Dev.=0.7312, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9393, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

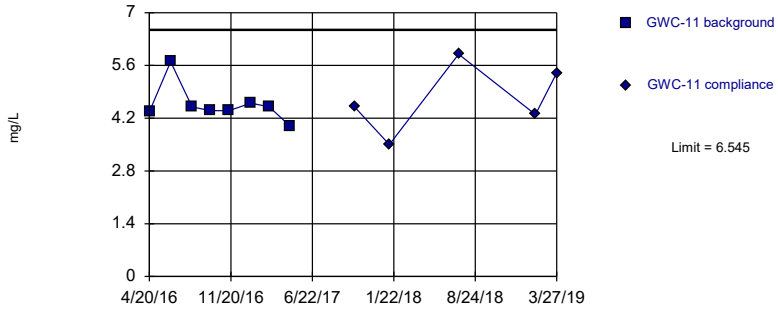
Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=2.133, Std. Dev.=0.1116, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7586, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

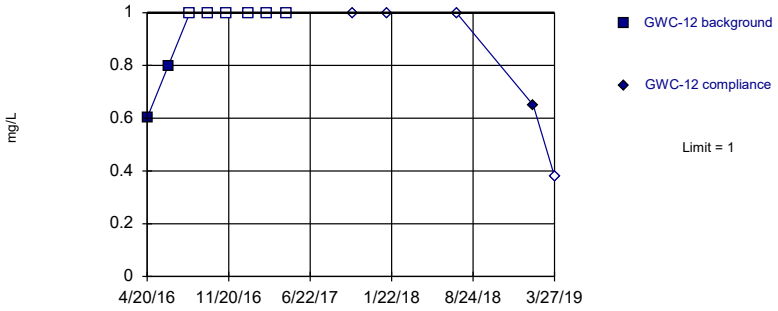
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

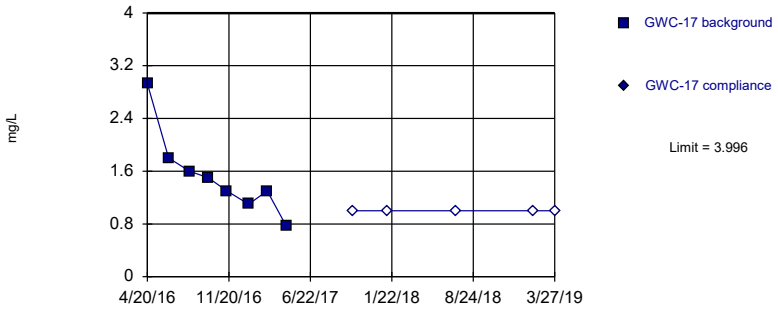
Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.538, Std. Dev.=0.6444, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8722, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

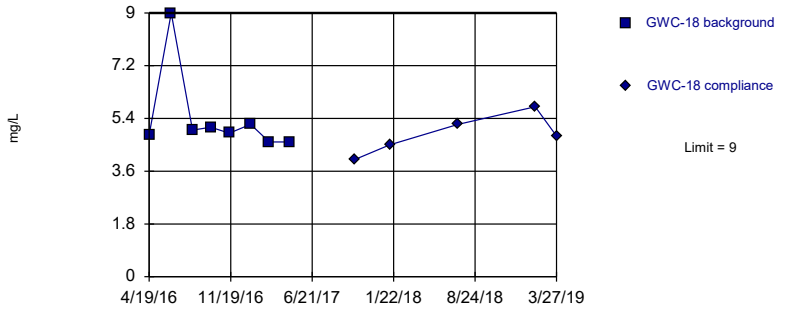
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

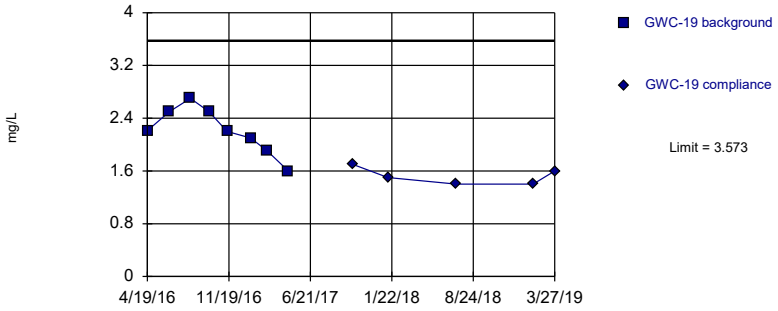
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.214, Std. Dev.=0.3563, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9647, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

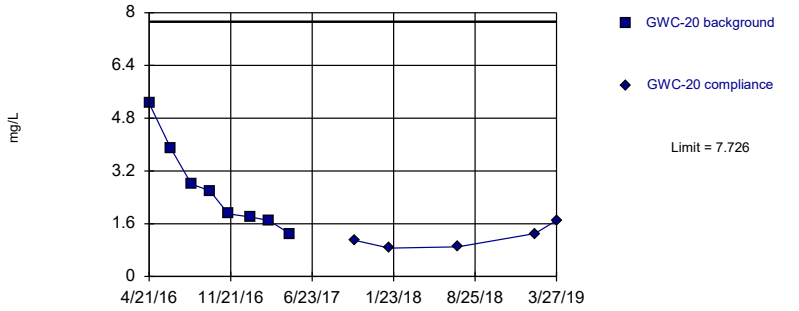
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.656, Std. Dev.=1.329, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8814, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

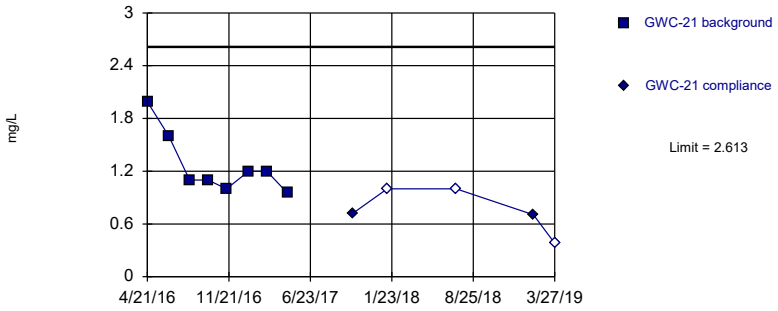
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.268, Std. Dev.=0.3526, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8153, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

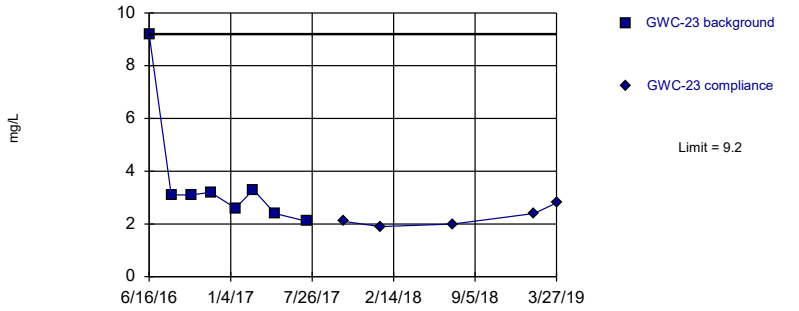
Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

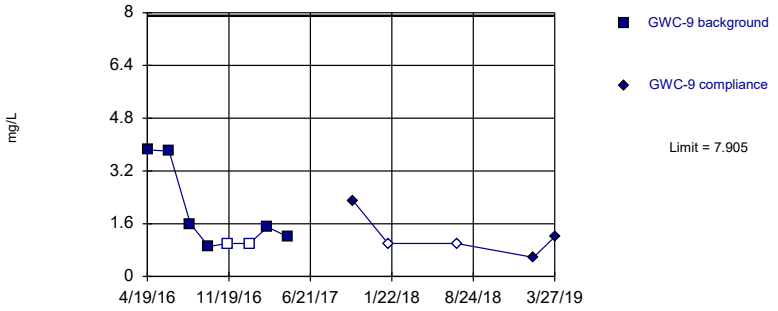
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=1.294, Std. Dev.=0.3976, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7687, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

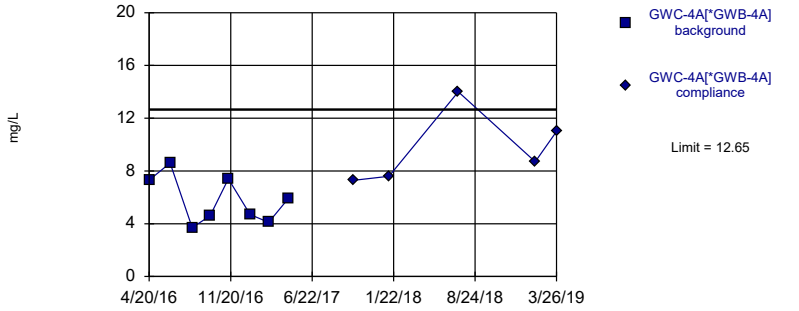
Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.789, Std. Dev.=1.798, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9142, critical = 0.749. Kappa = 3.816 (c=22, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.000266.

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

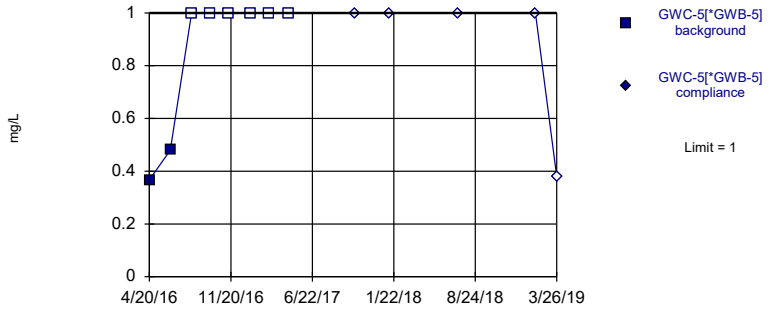
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

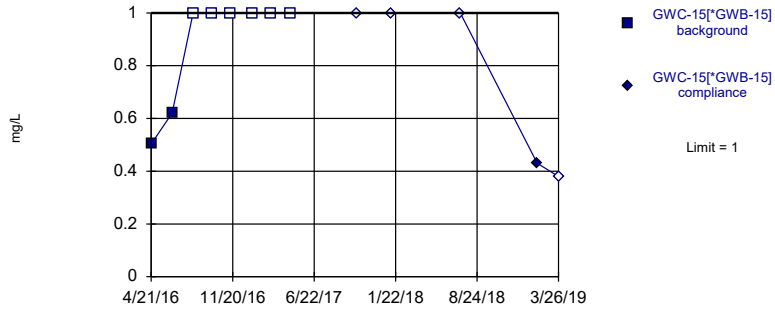
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

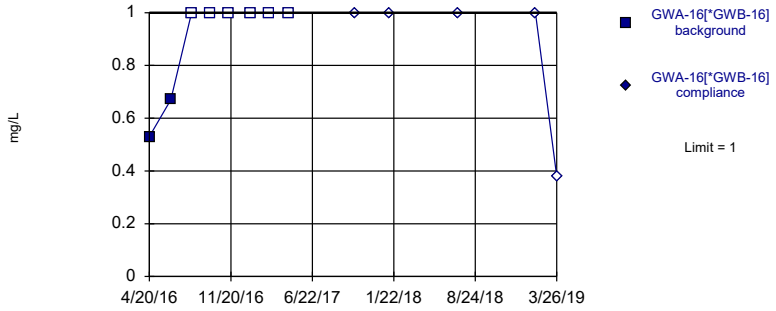
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



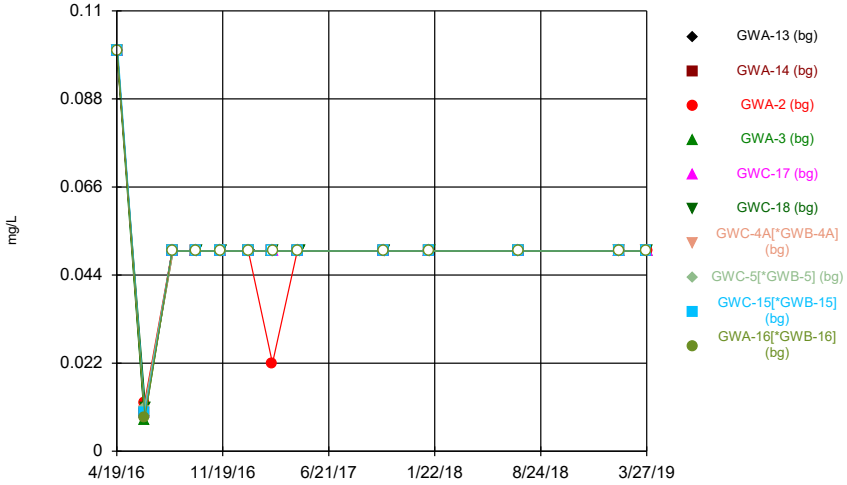
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 7/1/2019 12:21 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

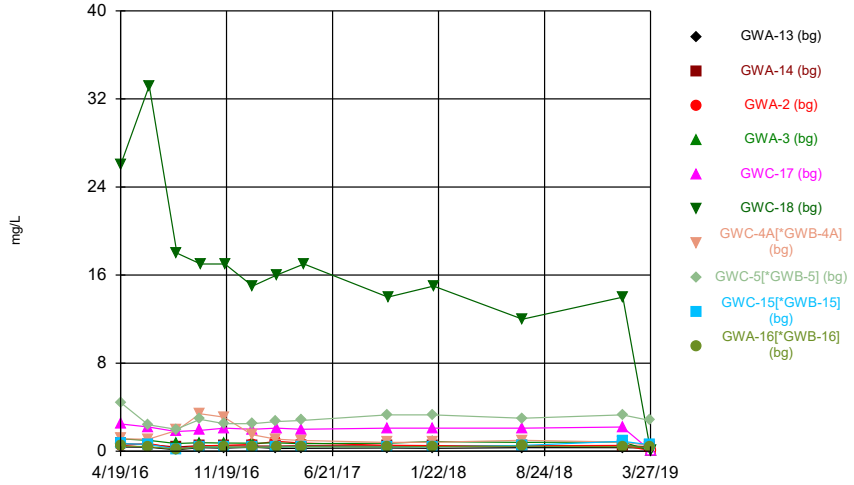
Time Series



Constituent: Boron Analysis Run 7/1/2019 12:42 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

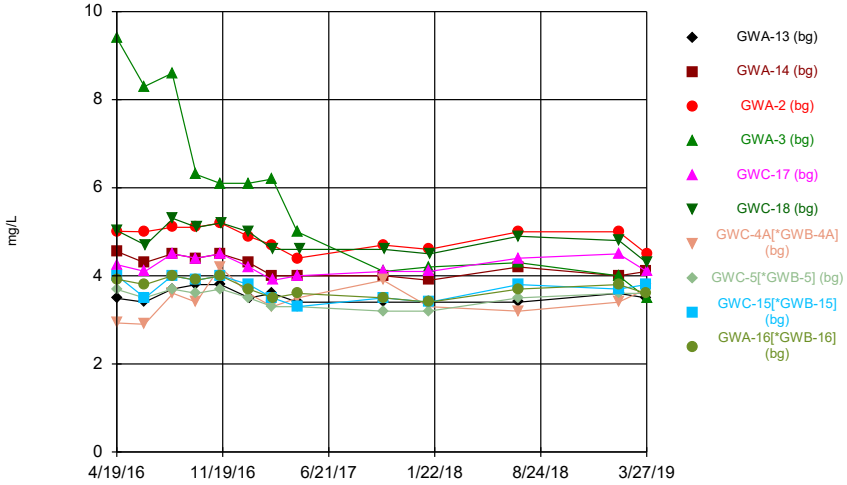
Time Series



Constituent: Calcium Analysis Run 7/1/2019 12:42 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

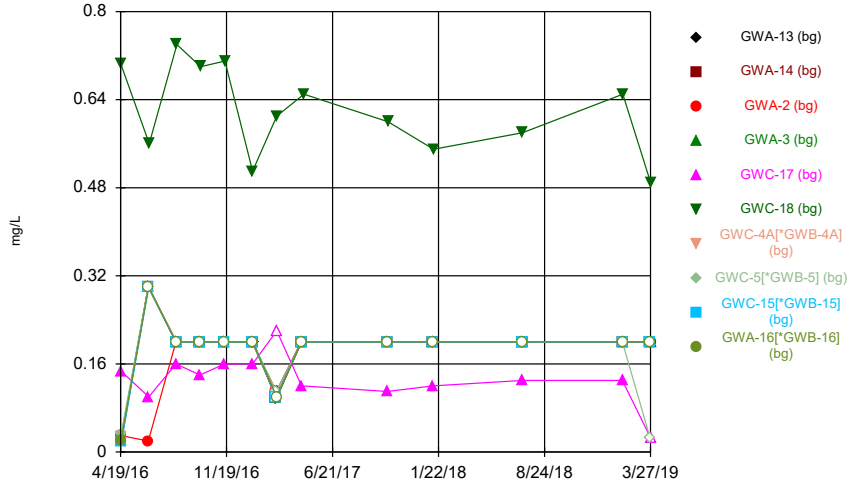
Time Series



Constituent: Chloride Analysis Run 7/1/2019 12:42 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

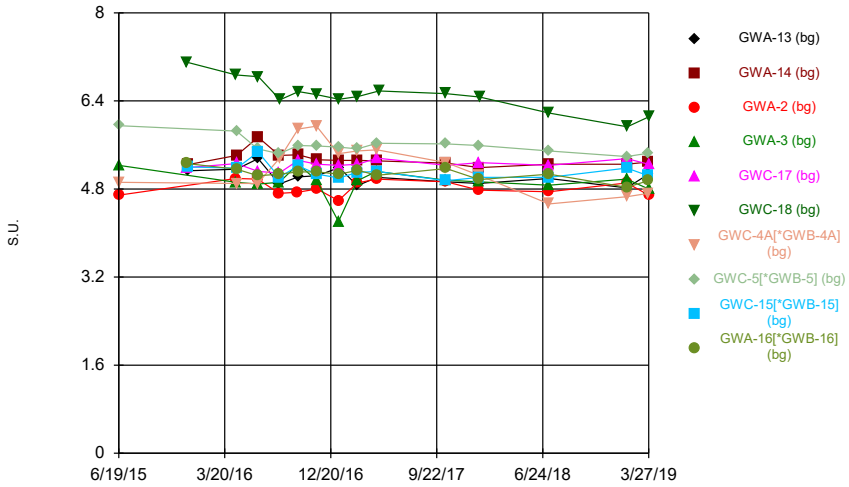
Time Series



Constituent: Fluoride Analysis Run 7/1/2019 12:42 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Time Series



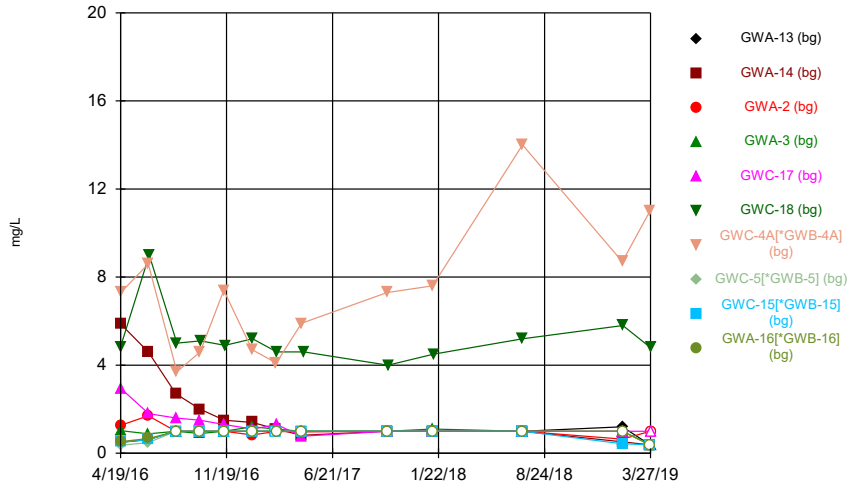
Constituent: pH Analysis Run 7/1/2019 12:42 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Time Series



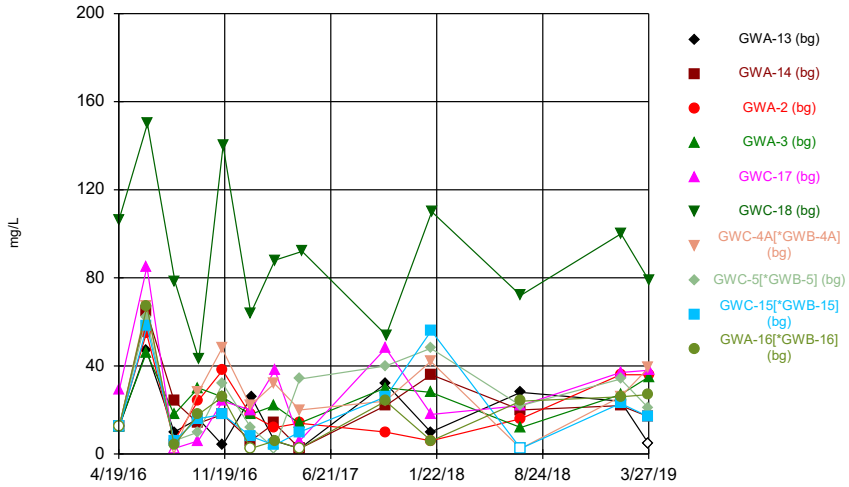
Constituent: Sulfate Analysis Run 7/1/2019 12:42 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Time Series

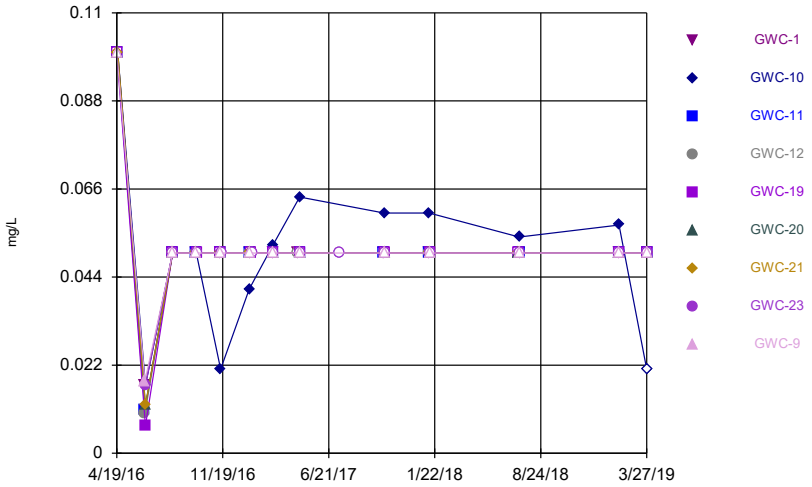


Constituent: Total Dissolved Solids Analysis Run 7/1/2019 12:42 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

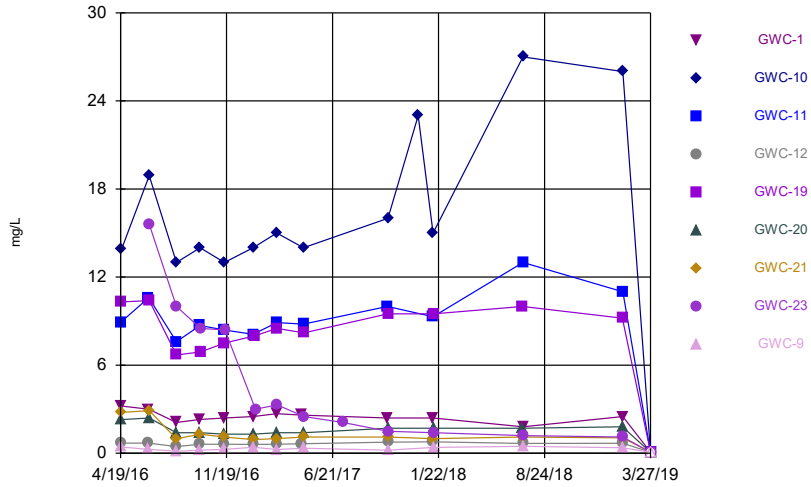
Time Series



Constituent: Boron Analysis Run 7/1/2019 12:38 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

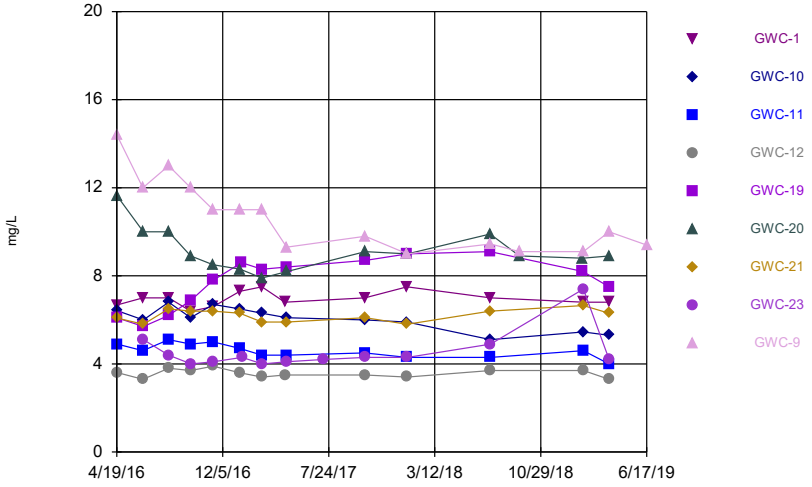
Time Series



Constituent: Calcium Analysis Run 7/1/2019 12:38 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

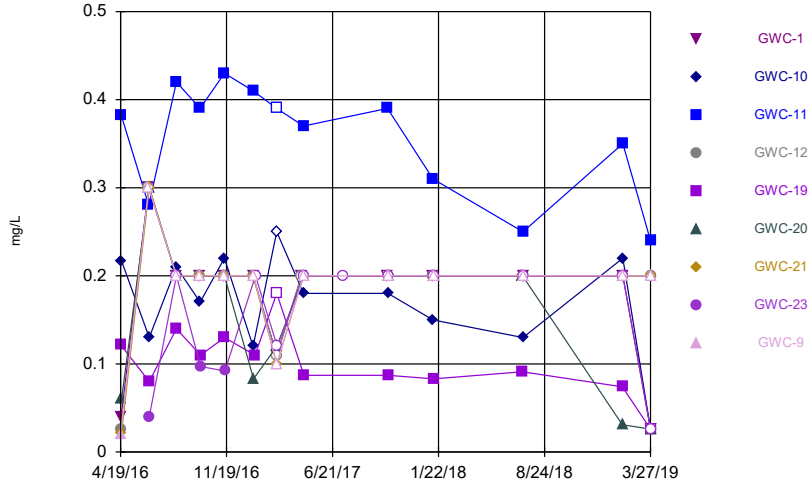
Time Series



Constituent: Chloride Analysis Run 7/1/2019 12:38 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

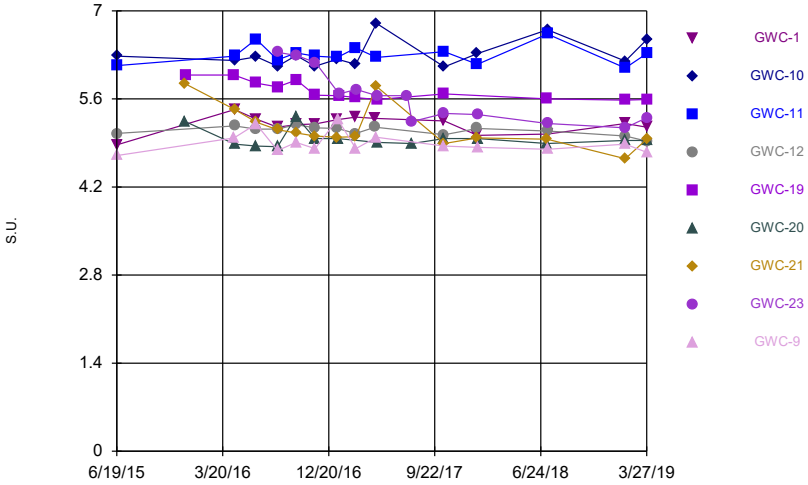
Time Series



Constituent: Fluoride Analysis Run 7/1/2019 12:38 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Time Series



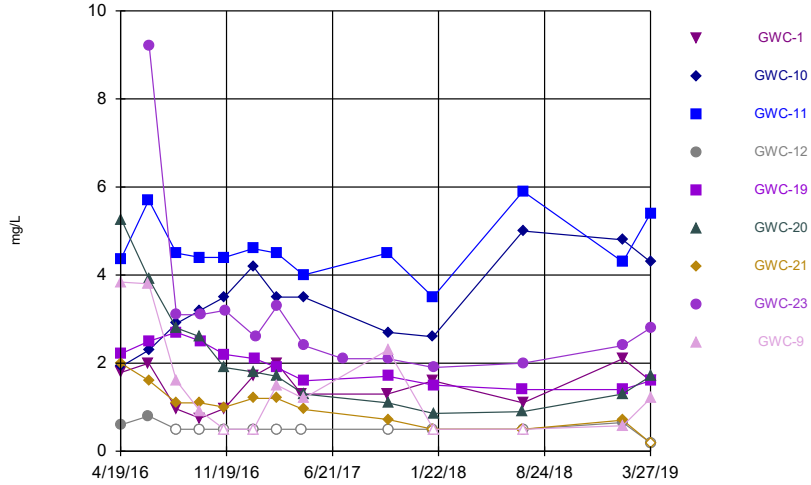
Constituent: pH Analysis Run 7/1/2019 12:38 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Time Series



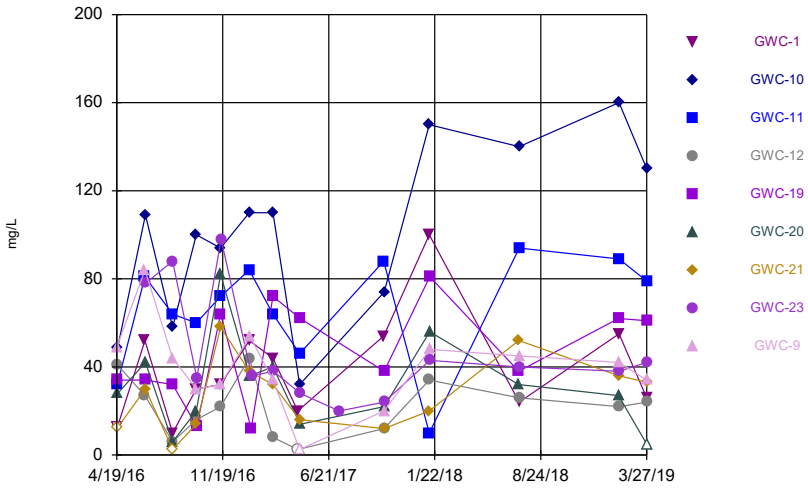
Constituent: Sulfate Analysis Run 7/1/2019 12:38 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.18 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids Analysis Run 7/1/2019 12:38 PM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 9:58 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Boron (mg/L)	GWA-13 (bg)	13	0.04682	0.01148	0.003185	0.05	0.0086	0.05	92.31
Boron (mg/L)	GWA-14 (bg)	13	0.04691	0.01115	0.003092	0.05	0.0098	0.05	92.31
Boron (mg/L)	GWA-2 (bg)	13	0.04492	0.01256	0.003483	0.05	0.012	0.05	84.62
Boron (mg/L)	GWA-3 (bg)	13	0.04675	0.01173	0.003254	0.05	0.0077	0.05	92.31
Boron (mg/L)	GWC-1	13	0.04746	0.009153	0.002538	0.05	0.017	0.05	92.31
Boron (mg/L)	GWC-10	13	0.04577	0.01597	0.004429	0.05	0.017	0.064	30.77
Boron (mg/L)	GWC-11	13	0.047	0.01082	0.003	0.05	0.011	0.05	92.31
Boron (mg/L)	GWC-12	13	0.04692	0.01109	0.003077	0.05	0.01	0.05	92.31
Boron (mg/L)	GWC-17 (bg)	13	0.04688	0.01123	0.003115	0.05	0.0095	0.05	92.31
Boron (mg/L)	GWC-18 (bg)	13	0.047	0.01082	0.003	0.05	0.011	0.05	92.31
Boron (mg/L)	GWC-19	13	0.04668	0.01195	0.003315	0.05	0.0069	0.05	92.31
Boron (mg/L)	GWC-20	13	0.04708	0.01054	0.002923	0.05	0.012	0.05	92.31
Boron (mg/L)	GWC-21	13	0.04708	0.01054	0.002923	0.05	0.012	0.05	92.31
Boron (mg/L)	GWC-23	13	0.04746	0.009153	0.002538	0.05	0.017	0.05	92.31
Boron (mg/L)	GWC-9	13	0.04754	0.008875	0.002462	0.05	0.018	0.05	92.31
Boron (mg/L)	GWC-4A[*G...	13	0.04692	0.01109	0.003077	0.05	0.01	0.05	92.31
Boron (mg/L)	GWC-5[*GW...	13	0.047	0.01082	0.003	0.05	0.011	0.05	92.31
Boron (mg/L)	GWC-15[*G...	13	0.04688	0.01123	0.003115	0.05	0.0095	0.05	92.31
Boron (mg/L)	GWA-16[*G...	13	0.04681	0.01151	0.003192	0.05	0.0085	0.05	92.31
Calcium (mg/L)	GWA-13 (bg)	13	0.3022	0.06407	0.01777	0.3	0.14	0.389	0
Calcium (mg/L)	GWA-14 (bg)	13	0.5043	0.07673	0.02128	0.5	0.39	0.686	0
Calcium (mg/L)	GWA-2 (bg)	13	0.5358	0.2013	0.05584	0.53	0.13	0.91	7.692
Calcium (mg/L)	GWA-3 (bg)	13	0.7646	0.2283	0.06332	0.76	0.13	1.13	7.692
Calcium (mg/L)	GWC-1	13	2.312	0.7469	0.2071	2.4	0.13	3.22	7.692
Calcium (mg/L)	GWC-10	14	15.92	6.602	1.764	14.5	0.13	27	7.143
Calcium (mg/L)	GWC-11	13	8.728	2.953	0.819	8.9	0.13	13	7.692
Calcium (mg/L)	GWC-12	13	0.61	0.1659	0.04602	0.65	0.13	0.78	7.692
Calcium (mg/L)	GWC-17 (bg)	13	1.939	0.5671	0.1573	2.1	0.13	2.48	7.692
Calcium (mg/L)	GWC-18 (bg)	13	16.49	7.515	2.084	16	0.13	33.2	7.692
Calcium (mg/L)	GWC-19	13	8.064	2.682	0.7438	8.5	0.13	10.4	7.692
Calcium (mg/L)	GWC-20	13	1.532	0.5498	0.1525	1.4	0.13	2.4	7.692
Calcium (mg/L)	GWC-21	13	1.264	0.7508	0.2082	1.1	0.13	2.9	7.692
Calcium (mg/L)	GWC-23	13	4.518	4.639	1.287	2.5	0.13	15.6	7.692
Calcium (mg/L)	GWC-9	13	0.3016	0.1161	0.03219	0.27	0.13	0.49	7.692
Calcium (mg/L)	GWC-4A[*G...	13	1.398	0.8908	0.2471	1.1	0.53	3.4	0
Calcium (mg/L)	GWC-5[*GW...	13	2.915	0.5879	0.1631	2.8	2	4.39	0
Calcium (mg/L)	GWC-15[*G...	13	0.4797	0.1819	0.05044	0.41	0.21	0.91	0
Calcium (mg/L)	GWA-16[*G...	13	0.3902	0.06778	0.0188	0.4	0.19	0.472	0
Chloride (mg/L)	GWA-13 (bg)	13	3.538	0.1505	0.04173	3.5	3.4	3.8	0
Chloride (mg/L)	GWA-14 (bg)	13	4.212	0.2274	0.06308	4.2	3.9	4.55	0
Chloride (mg/L)	GWA-2 (bg)	13	4.862	0.2539	0.07042	5	4.4	5.2	0
Chloride (mg/L)	GWA-3 (bg)	13	5.854	1.925	0.5339	6.1	3.5	9.4	0
Chloride (mg/L)	GWC-1	13	6.952	0.3295	0.09139	7	6.4	7.5	0
Chloride (mg/L)	GWC-10	13	6.062	0.5064	0.1405	6.1	5.1	6.8	0
Chloride (mg/L)	GWC-11	13	4.592	0.3201	0.08877	4.6	4	5.1	0
Chloride (mg/L)	GWC-12	13	3.57	0.1889	0.0524	3.6	3.3	3.9	0
Chloride (mg/L)	GWC-17 (bg)	13	4.235	0.2055	0.057	4.2	3.9	4.5	0
Chloride (mg/L)	GWC-18 (bg)	13	4.818	0.2984	0.08277	4.8	4.3	5.3	0
Chloride (mg/L)	GWC-19	13	7.731	1.156	0.3207	8.2	5.7	9.1	0
Chloride (mg/L)	GWC-20	14	9.143	0.9589	0.2563	8.9	7.9	11.6	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 9:58 AM

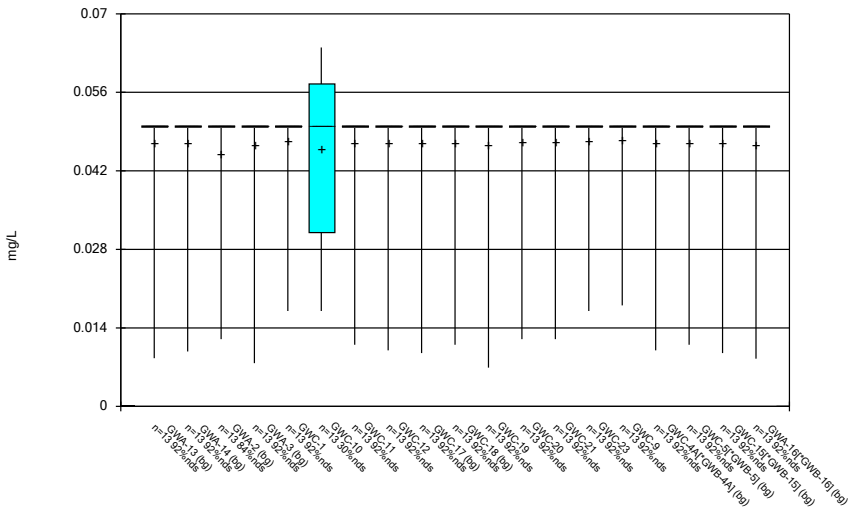
Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Chloride (mg/L)	GWC-21	13	6.198	0.2893	0.08024	6.3	5.8	6.7	0
Chloride (mg/L)	GWC-23	13	4.562	0.9134	0.2533	4.3	4	7.4	0
Chloride (mg/L)	GWC-9	14	10.72	1.654	0.4422	10.5	9	14.4	0
Chloride (mg/L)	GWC-4A[*G...	13	3.456	0.3605	0.1	3.4	2.9	4.2	0
Chloride (mg/L)	GWC-5[*GW...	13	3.492	0.1838	0.05096	3.5	3.2	3.7	0
Chloride (mg/L)	GWC-15[*G...	13	3.707	0.2421	0.06715	3.8	3.3	4	0
Chloride (mg/L)	GWA-16[*G...	13	3.725	0.198	0.05492	3.7	3.4	4	0
Fluoride (mg/L)	GWA-13 (bg)	13	0.186	0.05048	0.014	0.2	0.018	0.2	92.31
Fluoride (mg/L)	GWA-14 (bg)	13	0.1862	0.04965	0.01377	0.2	0.021	0.2	92.31
Fluoride (mg/L)	GWA-2 (bg)	13	0.1731	0.06575	0.01824	0.2	0.02	0.2	84.62
Fluoride (mg/L)	GWA-3 (bg)	13	0.1863	0.04937	0.01369	0.2	0.022	0.2	92.31
Fluoride (mg/L)	GWC-1	13	0.1743	0.06278	0.01741	0.2	0.026	0.2	92.31
Fluoride (mg/L)	GWC-10	13	0.1664	0.05603	0.01554	0.18	0.026	0.23	15.38
Fluoride (mg/L)	GWC-11	13	0.3402	0.07607	0.0211	0.37	0.2	0.43	7.692
Fluoride (mg/L)	GWC-12	13	0.1866	0.04826	0.01338	0.2	0.026	0.2	92.31
Fluoride (mg/L)	GWC-17 (bg)	13	0.131	0.04112	0.01141	0.13	0.026	0.2	15.38
Fluoride (mg/L)	GWC-18 (bg)	13	0.6205	0.0801	0.02222	0.61	0.49	0.74	0
Fluoride (mg/L)	GWC-19	13	0.1031	0.04115	0.01141	0.091	0.026	0.2	15.38
Fluoride (mg/L)	GWC-20	13	0.1538	0.07328	0.02032	0.2	0.026	0.2	76.92
Fluoride (mg/L)	GWC-21	13	0.1863	0.04937	0.01369	0.2	0.022	0.2	92.31
Fluoride (mg/L)	GWC-23	13	0.1581	0.06789	0.01883	0.2	0.026	0.2	76.92
Fluoride (mg/L)	GWC-9	13	0.1862	0.04992	0.01385	0.2	0.02	0.2	92.31
Fluoride (mg/L)	GWC-4A[*G...	13	0.1868	0.0477	0.01323	0.2	0.028	0.2	92.31
Fluoride (mg/L)	GWC-5[*GW...	13	0.1737	0.06423	0.01781	0.2	0.026	0.2	92.31
Fluoride (mg/L)	GWC-15[*G...	13	0.1861	0.0502	0.01392	0.2	0.019	0.2	92.31
Fluoride (mg/L)	GWA-16[*G...	13	0.1863	0.04937	0.01369	0.2	0.022	0.2	92.31
pH (S.U.)	GWA-13 (bg)	14	5.026	0.1462	0.03908	5.015	4.82	5.35	0
pH (S.U.)	GWA-14 (bg)	14	5.339	0.1342	0.03586	5.315	5.19	5.74	0
pH (S.U.)	GWA-2 (bg)	14	4.819	0.1296	0.03464	4.79	4.59	4.99	0
pH (S.U.)	GWA-3 (bg)	14	4.928	0.244	0.06521	4.94	4.21	5.25	0
pH (S.U.)	GWC-1	14	5.19	0.1408	0.03762	5.205	4.87	5.43	0
pH (S.U.)	GWC-10	14	6.31	0.2174	0.0581	6.25	6.11	6.8	0
pH (S.U.)	GWC-11	14	6.304	0.1501	0.04012	6.28	6.09	6.63	0
pH (S.U.)	GWC-12	14	5.094	0.07132	0.01906	5.12	4.93	5.19	0
pH (S.U.)	GWC-17 (bg)	14	5.244	0.07581	0.02026	5.25	5.09	5.36	0
pH (S.U.)	GWC-18 (bg)	14	6.501	0.3059	0.08177	6.495	5.93	7.1	0
pH (S.U.)	GWC-19	13	5.728	0.1518	0.04209	5.66	5.58	5.98	0
pH (S.U.)	GWC-20	14	4.97	0.1395	0.03728	4.94	4.84	5.32	0
pH (S.U.)	GWC-21	14	5.136	0.3371	0.09008	5.005	4.65	5.84	0
pH (S.U.)	GWC-23	13	5.627	0.4167	0.1156	5.65	5.14	6.34	0
pH (S.U.)	GWC-9	14	4.898	0.1664	0.04446	4.84	4.7	5.28	0
pH (S.U.)	GWC-4A[*G...	14	5.186	0.4425	0.1183	5.165	4.53	5.94	0
pH (S.U.)	GWC-5[*GW...	14	5.586	0.1518	0.04058	5.57	5.39	5.95	0
pH (S.U.)	GWC-15[*G...	14	5.111	0.1342	0.03585	5.085	4.95	5.47	0
pH (S.U.)	GWA-16[*G...	14	5.071	0.1058	0.02828	5.07	4.83	5.26	0
Sulfate (mg/L)	GWA-13 (bg)	13	0.8997	0.2401	0.0666	1	0.38	1.2	76.92
Sulfate (mg/L)	GWA-14 (bg)	13	1.836	1.642	0.4554	1.1	0.38	5.85	30.77
Sulfate (mg/L)	GWA-2 (bg)	13	1.031	0.2433	0.06747	1	0.64	1.7	53.85
Sulfate (mg/L)	GWA-3 (bg)	13	0.9685	0.1951	0.05411	1	0.38	1.2	53.85
Sulfate (mg/L)	GWC-1	13	1.475	0.4445	0.1233	1.6	0.75	2.1	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 9:58 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Sulfate (mg/L)	GWC-10	13	3.433	0.9737	0.2701	3.5	1.93	5	0
Sulfate (mg/L)	GWC-11	13	4.621	0.6682	0.1853	4.5	3.5	5.9	0
Sulfate (mg/L)	GWC-12	13	0.8793	0.2075	0.05755	1	0.38	1	76.92
Sulfate (mg/L)	GWC-17 (bg)	13	1.331	0.5624	0.156	1.1	0.77	2.93	38.46
Sulfate (mg/L)	GWC-18 (bg)	13	5.18	1.222	0.3389	4.9	4	9	0
Sulfate (mg/L)	GWC-19	13	1.947	0.4507	0.125	1.9	1.4	2.7	0
Sulfate (mg/L)	GWC-20	13	2.085	1.278	0.3545	1.7	0.86	5.25	0
Sulfate (mg/L)	GWC-21	13	1.074	0.3993	0.1107	1	0.38	1.99	23.08
Sulfate (mg/L)	GWC-23	13	3.092	1.898	0.5264	2.6	1.9	9.2	0
Sulfate (mg/L)	GWC-9	13	1.61	1.066	0.2956	1.2	0.58	3.84	30.77
Sulfate (mg/L)	GWC-4A[*G...	13	7.301	2.909	0.8068	7.31	3.7	14	0
Sulfate (mg/L)	GWC-5[*GW...	13	0.8636	0.2604	0.07222	1	0.367	1	84.62
Sulfate (mg/L)	GWC-15[*G...	13	0.841	0.2536	0.07035	1	0.38	1	76.92
Sulfate (mg/L)	GWA-16[*G...	13	0.8908	0.2158	0.05987	1	0.38	1	84.62
Total Dissolved Solids (mg/L)	GWA-13 (bg)	13	17.92	12.59	3.491	10	4	47	23.08
Total Dissolved Solids (mg/L)	GWA-14 (bg)	13	21.38	15.17	4.207	18	6	65	15.38
Total Dissolved Solids (mg/L)	GWA-2 (bg)	13	21.62	15.15	4.202	16	6	55	7.692
Total Dissolved Solids (mg/L)	GWA-3 (bg)	13	24.31	10.09	2.797	26	10	46	7.692
Total Dissolved Solids (mg/L)	GWC-1	13	39.15	24.38	6.761	32	10	100	7.692
Total Dissolved Solids (mg/L)	GWC-10	13	101.2	39.33	10.91	109	32	160	0
Total Dissolved Solids (mg/L)	GWC-11	13	66.38	24.64	6.834	72	10	94	0
Total Dissolved Solids (mg/L)	GWC-12	13	22.46	12.12	3.362	22	6	44	7.692
Total Dissolved Solids (mg/L)	GWC-17 (bg)	13	29.31	21.25	5.893	24	6	85	7.692
Total Dissolved Solids (mg/L)	GWC-18 (bg)	13	86.15	37.19	10.31	88	16	150	0
Total Dissolved Solids (mg/L)	GWC-19	13	46.38	22.02	6.106	38	12	81	0
Total Dissolved Solids (mg/L)	GWC-20	13	31.92	20.46	5.675	28	6	82	7.692
Total Dissolved Solids (mg/L)	GWC-21	13	28.31	16.21	4.496	30	10	58	15.38
Total Dissolved Solids (mg/L)	GWC-23	13	46.77	24.8	6.877	38	20	98	0
Total Dissolved Solids (mg/L)	GWC-9	13	40.23	17.88	4.959	42	10	84	7.692
Total Dissolved Solids (mg/L)	GWC-4A[*G...	13	28.69	17.19	4.767	26	5	67	23.08
Total Dissolved Solids (mg/L)	GWC-5[*GW...	13	26.23	17.19	4.767	22	6	62	15.38
Total Dissolved Solids (mg/L)	GWC-15[*G...	13	19.77	17.88	4.958	16	4	58	15.38
Total Dissolved Solids (mg/L)	GWA-16[*G...	13	19.85	16.62	4.609	18	4	67	23.08

Box & Whiskers Plot

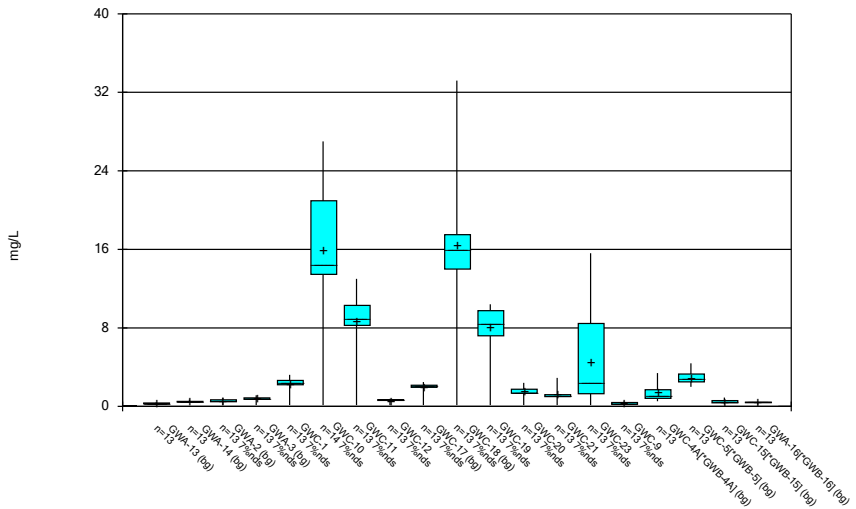


Constituent: Boron Analysis Run 1/13/2020 9:57 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

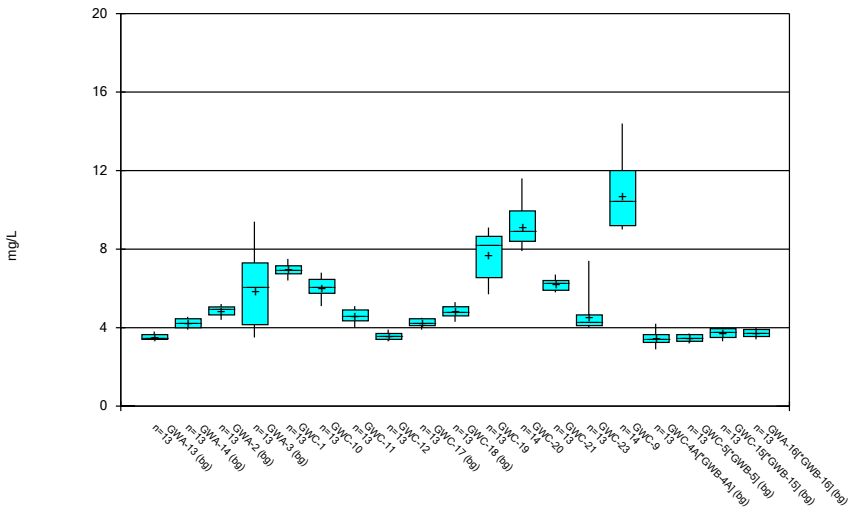


Constituent: Calcium Analysis Run 1/13/2020 9:57 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

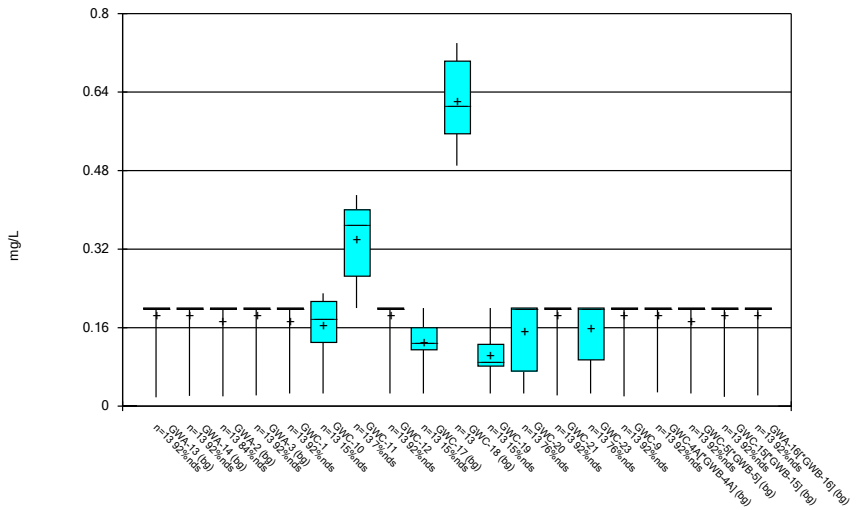


Constituent: Chloride Analysis Run 1/13/2020 9:57 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

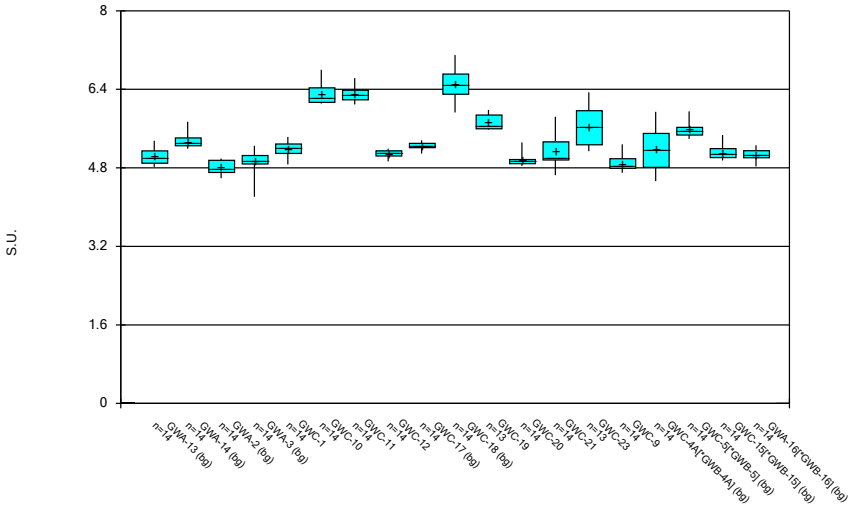
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 1/13/2020 9:57 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

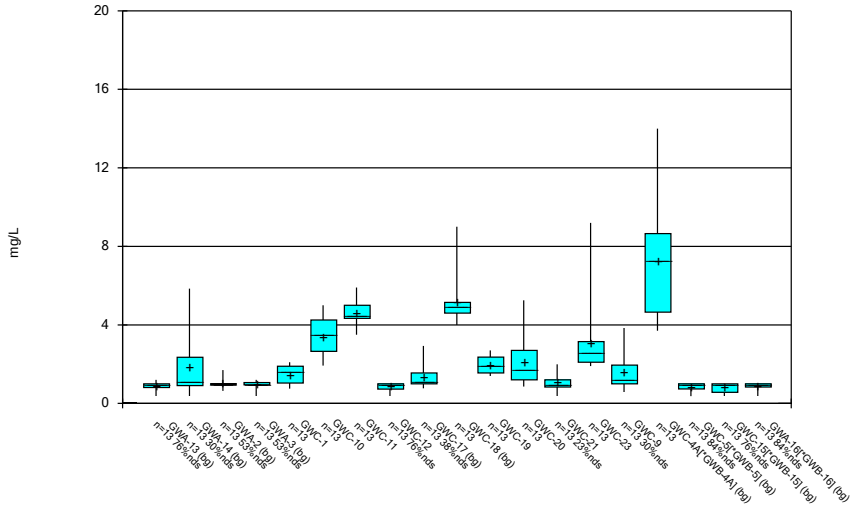


Constituent: pH Analysis Run 1/13/2020 9:57 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

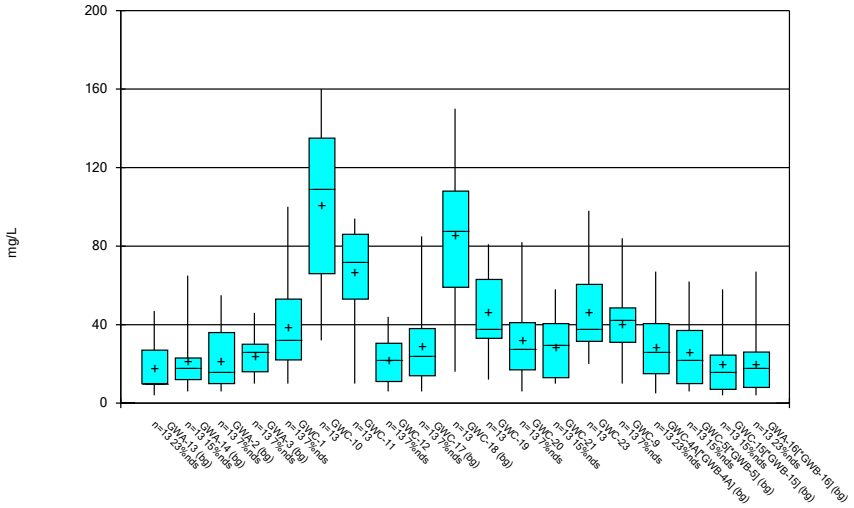


Constituent: Sulfate Analysis Run 1/13/2020 9:57 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2020 9:57 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Appendix C3

Sanitas Outputs for Appendix III Parameters – September 2019

CCR Rule Interwell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:50 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	GWC-1	0.08	n/a	9/11/2019	0.08ND	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Boron (mg/L)	GWC-10	0.08	n/a	9/11/2019	0.067	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Boron (mg/L)	GWC-11	0.08	n/a	9/11/2019	0.08ND	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Boron (mg/L)	GWC-12	0.08	n/a	9/11/2019	0.08ND	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Boron (mg/L)	GWC-19	0.08	n/a	9/11/2019	0.08ND	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Boron (mg/L)	GWC-20	0.08	n/a	9/11/2019	0.042	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Boron (mg/L)	GWC-21	0.08	n/a	9/11/2019	0.055	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Boron (mg/L)	GWC-23	0.08	n/a	9/11/2019	0.04	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Boron (mg/L)	GWC-9	0.08	n/a	9/11/2019	0.08ND	No	140	90.71	n/a	0.00009947	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-1	33.2	n/a	9/11/2019	1.4	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Calcium (mg/L)	GWC-10	33.2	n/a	9/11/2019	26	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Calcium (mg/L)	GWC-11	33.2	n/a	9/11/2019	9.3	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Calcium (mg/L)	GWC-12	33.2	n/a	9/11/2019	0.62	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Calcium (mg/L)	GWC-19	33.2	n/a	9/11/2019	8.2	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Calcium (mg/L)	GWC-20	33.2	n/a	9/11/2019	1.5	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Calcium (mg/L)	GWC-21	33.2	n/a	9/11/2019	1	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Calcium (mg/L)	GWC-23	33.2	n/a	9/11/2019	1.4	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Calcium (mg/L)	GWC-9	33.2	n/a	9/11/2019	0.44	No	141	2.837	n/a	0.00009832	NP (normality) 1 of 2
Chloride (mg/L)	GWC-1	9.4	n/a	9/11/2019	6	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Chloride (mg/L)	GWC-10	9.4	n/a	9/11/2019	5.4	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Chloride (mg/L)	GWC-11	9.4	n/a	9/11/2019	4.4	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Chloride (mg/L)	GWC-12	9.4	n/a	9/11/2019	3.5	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Chloride (mg/L)	GWC-19	9.4	n/a	9/11/2019	7.7	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Chloride (mg/L)	GWC-20	9.4	n/a	9/11/2019	8.7	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Chloride (mg/L)	GWC-21	9.4	n/a	9/11/2019	6.7	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Chloride (mg/L)	GWC-23	9.4	n/a	9/11/2019	4.6	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Chloride (mg/L)	GWC-9	9.4	n/a	9/11/2019	9.3	No	140	0	n/a	0.00009947	NP (normality) 1 of 2
Fluoride (mg/L)	GWC-1	0.74	n/a	9/11/2019	0.036	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-10	0.74	n/a	9/11/2019	0.1	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-11	0.74	n/a	9/11/2019	0.26	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-12	0.74	n/a	9/11/2019	0.036	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-19	0.74	n/a	9/11/2019	0.08	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-20	0.74	n/a	9/11/2019	0.045	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-21	0.74	n/a	9/11/2019	0.032	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-23	0.74	n/a	9/11/2019	0.041	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-9	0.74	n/a	9/11/2019	0.034	No	141	68.79	n/a	0.00009832	NP (NDs) 1 of 2
pH (S.U.)	GWC-1	7.1	4.21	9/11/2019	4.8	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
pH (S.U.)	GWC-10	7.1	4.21	9/11/2019	6.63	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
pH (S.U.)	GWC-11	7.1	4.21	9/11/2019	6.37	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
pH (S.U.)	GWC-12	7.1	4.21	9/11/2019	5.04	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
pH (S.U.)	GWC-19	7.1	4.21	9/11/2019	5.58	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
pH (S.U.)	GWC-20	7.1	4.21	9/11/2019	5.58	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
pH (S.U.)	GWC-21	7.1	4.21	9/11/2019	4.99	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
pH (S.U.)	GWC-23	7.1	4.21	9/11/2019	5.24	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
pH (S.U.)	GWC-9	7.1	4.21	9/11/2019	4.8	No	150	0	n/a	0.0001759	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-1	150	n/a	9/11/2019	49	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-10	150	n/a	9/11/2019	130	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-11	150	n/a	9/11/2019	39	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-12	150	n/a	9/11/2019	28	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-19	150	n/a	9/11/2019	49	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2

Interwell Prediction Limit

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:50 AM

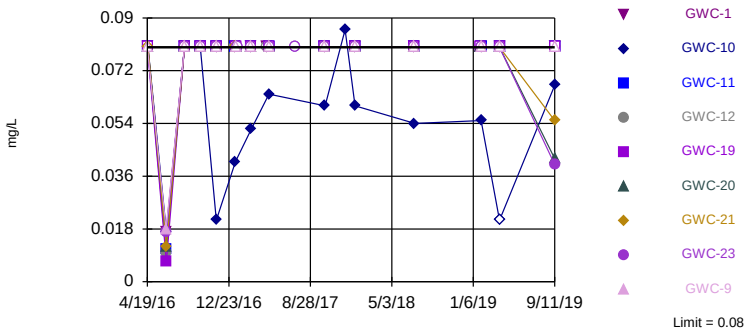
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	GWC-20	150	n/a	9/11/2019	45	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-21	150	n/a	9/11/2019	23	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-23	150	n/a	9/11/2019	24	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-9	150	n/a	9/11/2019	43	No	132	13.64	n/a	0.0001136	NP (normality) 1 of 2

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 140 background values. 90.71% NDs. Annual per-constituent alpha = 0.001789. Individual comparison alpha = 0.00009947 (1 of 2). Comparing 9 points to limit.

Constituent: Boron Analysis Run 1/13/2020 10:49 AM

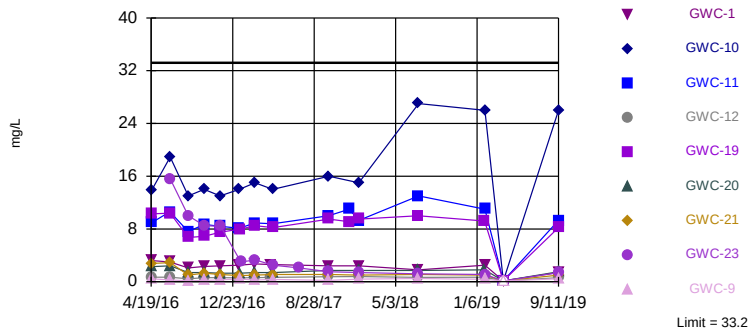
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 141 background values. 2.837% NDs. Annual per-constituent alpha = 0.001768. Individual comparison alpha = 0.00009832 (1 of 2). Comparing 9 points to limit.

Constituent: Calcium Analysis Run 1/13/2020 10:49 AM

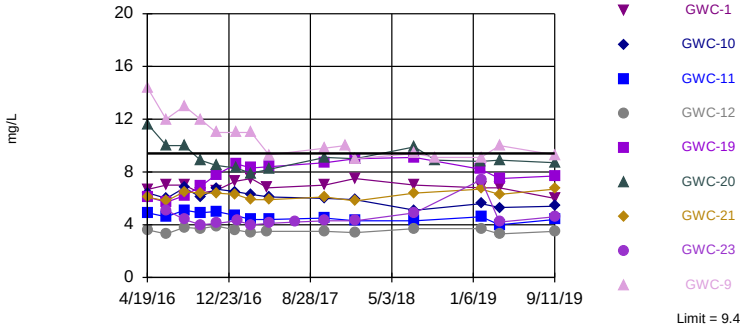
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 140 background values. Annual per-constituent alpha = 0.001789. Individual comparison alpha = 0.00009947 (1 of 2). Comparing 9 points to limit.

Constituent: Chloride Analysis Run 1/13/2020 10:49 AM

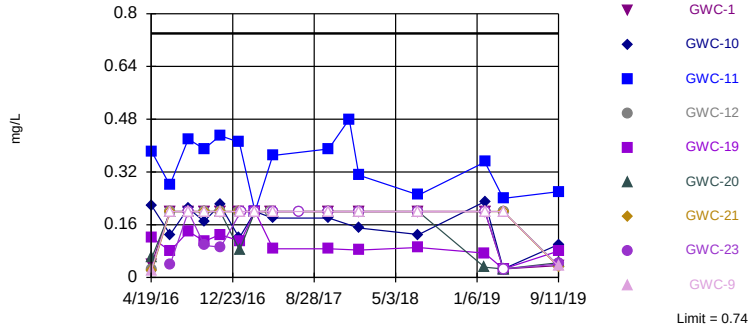
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 141 background values. 68.79% NDs. Annual per-constituent alpha = 0.001768. Individual comparison alpha = 0.00009832 (1 of 2). Comparing 9 points to limit.

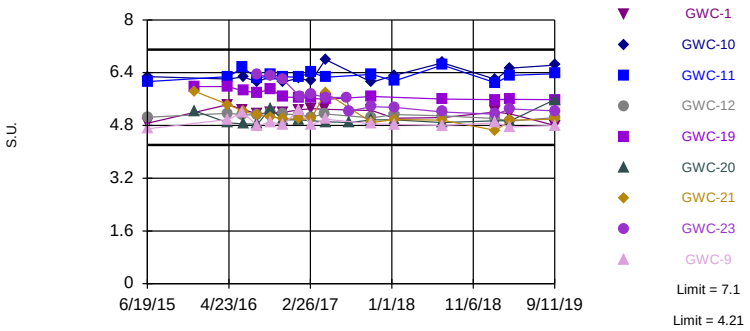
Constituent: Fluoride Analysis Run 1/13/2020 10:49 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 150 background values. Annual per-constituent alpha = 0.003164. Individual comparison alpha = 0.0001759 (1 of 2). Comparing 9 points to limit.

Constituent: pH Analysis Run 1/13/2020 10:49 AM

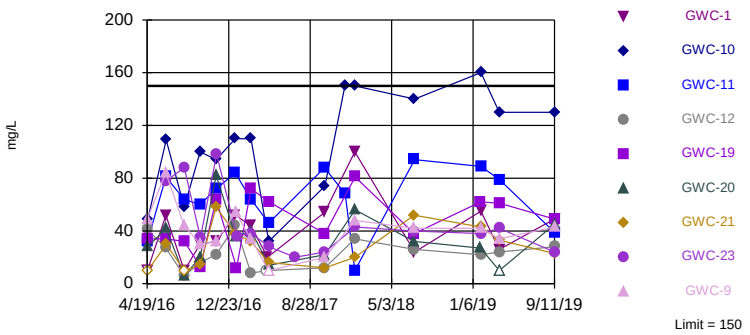
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 132 background values. 13.64% NDs. Annual per-constituent alpha = 0.002042. Individual comparison alpha = 0.0001136 (1 of 2). Comparing 9 points to limit.

Constituent: Total Dissolved Solids Analysis Run 1/13/2020 10:49 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

CCR Rule Intrawell Prediction Limit - Significant Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 11/5/2019, 10:09 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	**GWC-15[*GWB-15]**	**1**	**n/a**	**9/11/2019**	**1.2**	**Yes**	**8**	**75**	**n/a**	**0.02144**	NP (NDs) 1 of 2

CCR Rule Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 11/5/2019, 10:09 AM

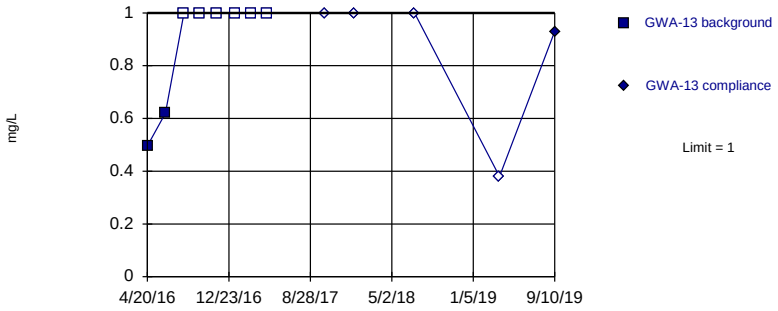
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	GWA-13	1	n/a	9/10/2019	0.93	No	8	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWA-14	8.057	n/a	9/10/2019	0.83	No	8	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWA-2	1.965	n/a	9/11/2019	0.76	No	8	37.5	sqrt(x)	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWA-3	1.326	n/a	9/11/2019	1	No	8	37.5	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-1	2.977	n/a	9/11/2019	1.3	No	8	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-10	5.376	n/a	9/11/2019	5.2	No	8	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-11	6.128	n/a	9/11/2019	3.8	No	8	0	sqrt(x)	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-12	1	n/a	9/11/2019	1	No	8	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	GWC-17	3.518	n/a	9/11/2019	0.85	No	8	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-18	9	n/a	9/11/2019	4.5	No	8	0	n/a	0.02144	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-19	3.309	n/a	9/11/2019	1.8	No	8	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-20	6.74	n/a	9/11/2019	0.97	No	8	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-21	2.351	n/a	9/11/2019	0.94	No	8	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-23	9.2	n/a	9/11/2019	2.5	No	8	0	n/a	0.02144	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-9	6.332	n/a	9/11/2019	0.92	No	8	25	sqrt(x)	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-4A[*GWB-4A]	11.32	n/a	9/10/2019	9.8	No	8	0	No	0.0008358	Param 1 of 2
Sulfate (mg/L)	GWC-5[*GWB-5]	1	n/a	9/10/2019	0.77	No	8	75	n/a	0.02144	NP (NDs) 1 of 2
Sulfate (mg/L)	**GWC-15[*GWB-15]**	**1**	**n/a**	**9/11/2019**	**1.2**	**Yes**	**8**	**75**	**n/a**	**0.02144**	NP (NDs) 1 of 2
Sulfate (mg/L)	GWA-16[*GWB-16]	1	n/a	9/10/2019	0.83	No	8	75	n/a	0.02144	NP (NDs) 1 of 2

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

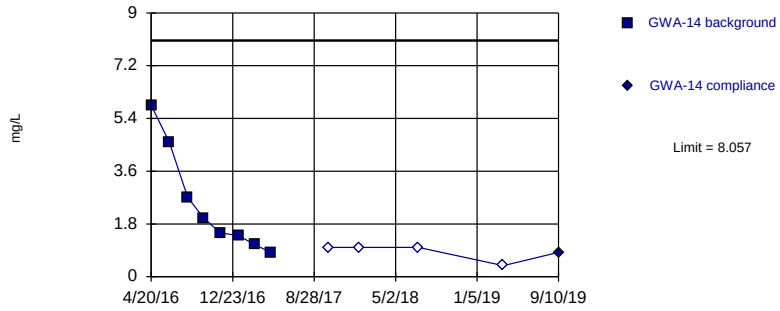
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.496, Std. Dev.=1.809, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8473, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

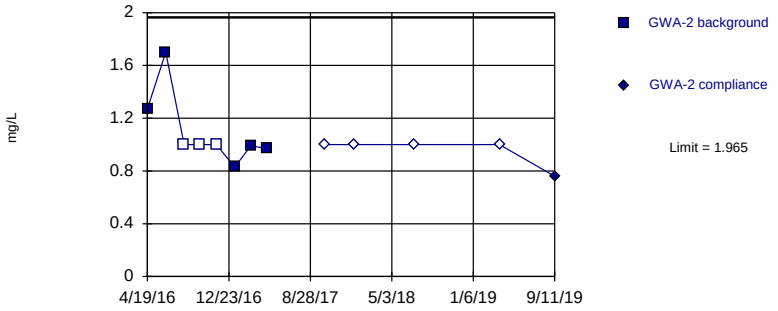
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=1.027, Std. Dev.=0.122, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7755, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

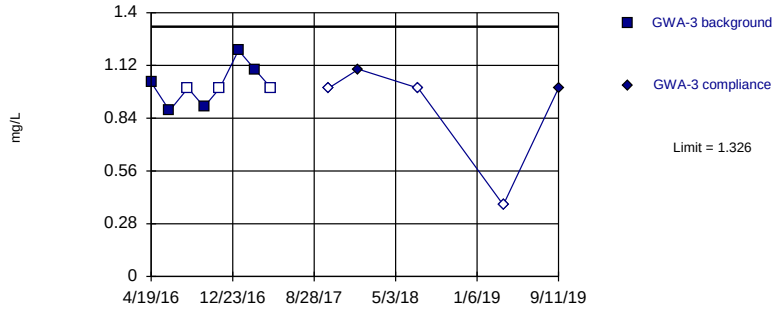
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.9725, Std. Dev.=0.115, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9315, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

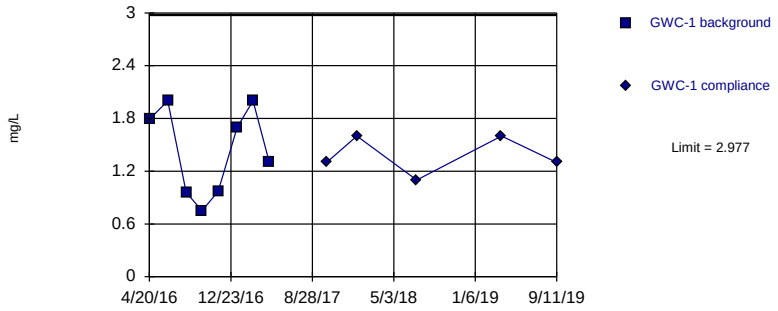
Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.434, Std. Dev.=0.502, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8871, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

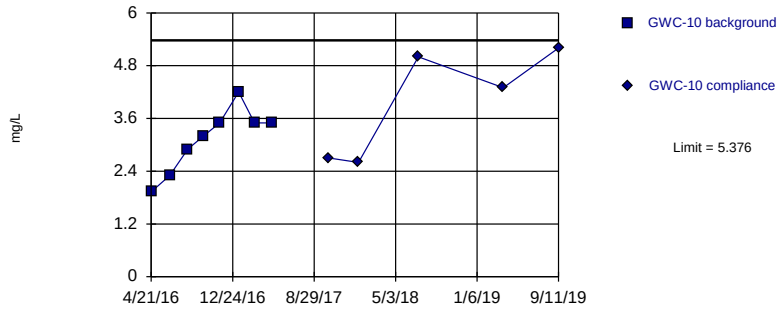
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3.129, Std. Dev.=0.7312, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9393, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

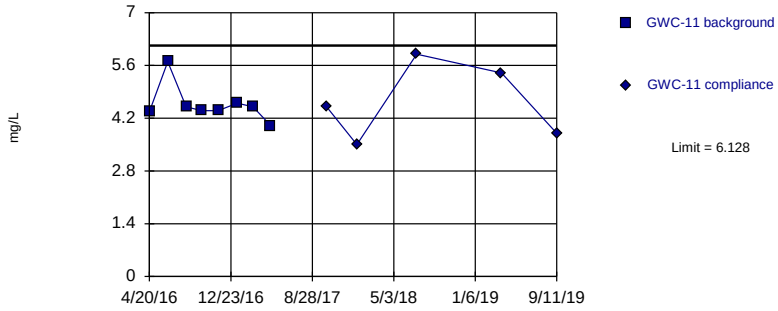
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=2.133, Std. Dev.=0.1116, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7586, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

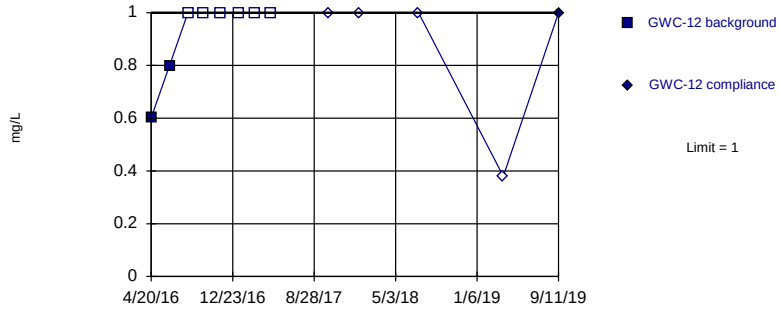
Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

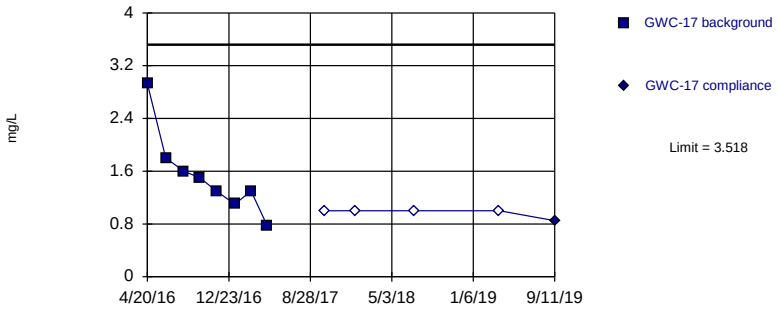
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.538, Std. Dev.=0.6444, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8722, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

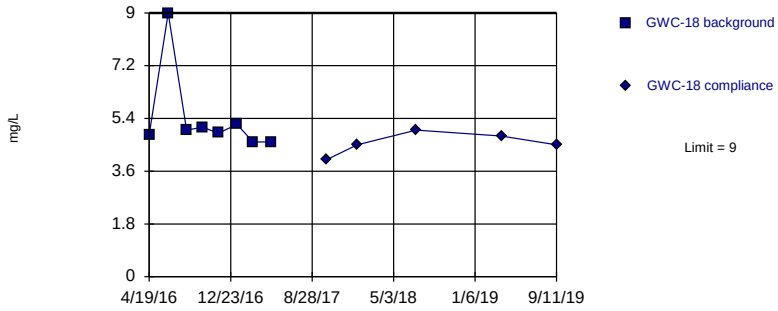
Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

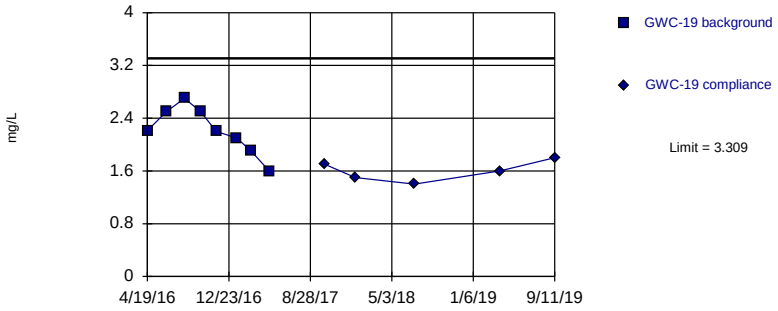
Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.214, Std. Dev.=0.3563, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9647, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

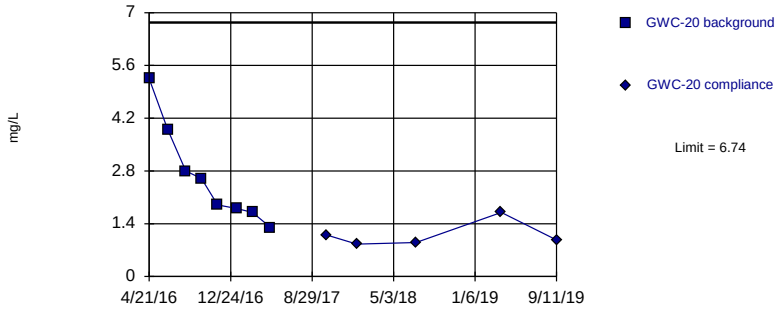
Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.656, Std. Dev.=1.329, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8814, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 11/5/2019 10:08 AM

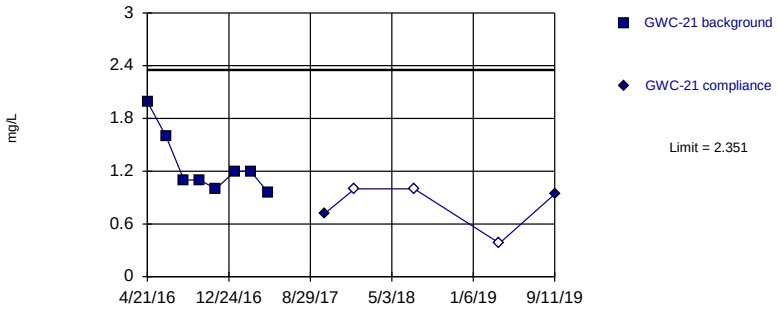
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.268, Std. Dev.=0.3526, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8153, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

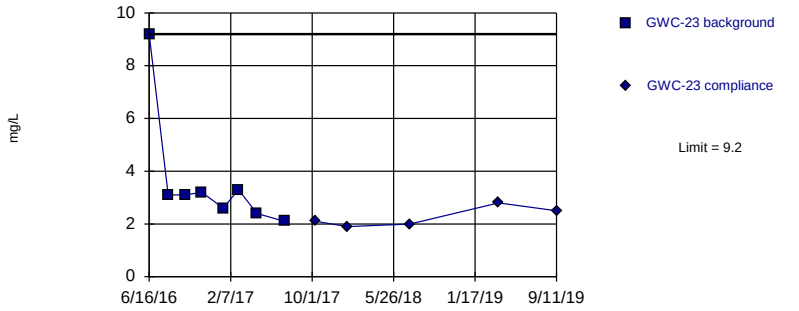
Constituent: Sulfate Analysis Run 11/5/2019 10:09 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 11/5/2019 10:09 AM

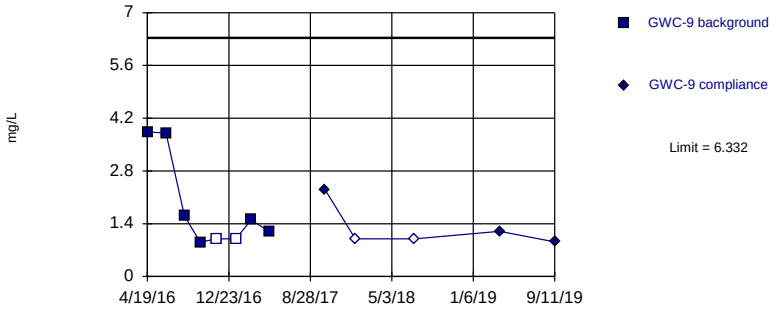
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=1.294, Std. Dev.=0.3976, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7687, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

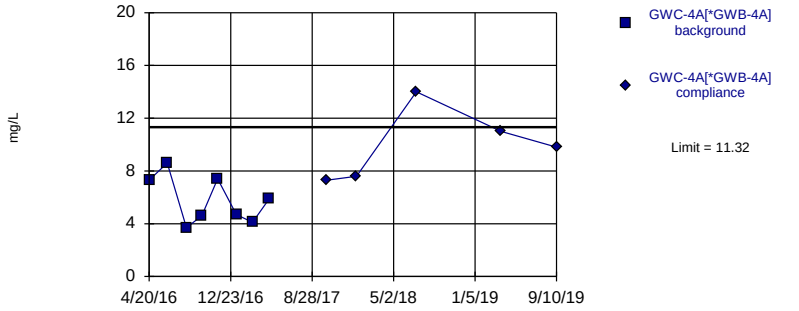
Constituent: Sulfate Analysis Run 11/5/2019 10:09 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.789, Std. Dev.=1.798, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9142, critical = 0.749. Kappa = 3.074 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.0008358.

Constituent: Sulfate Analysis Run 11/5/2019 10:09 AM

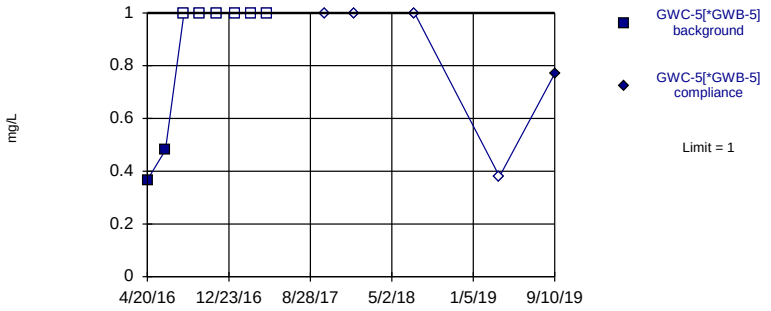
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 11/5/2019 10:09 AM

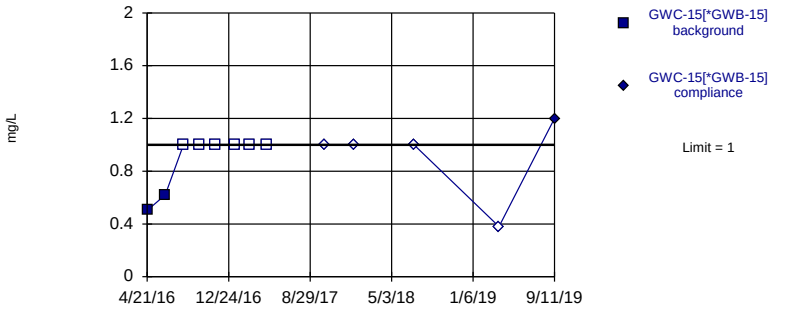
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 11/5/2019 10:09 AM

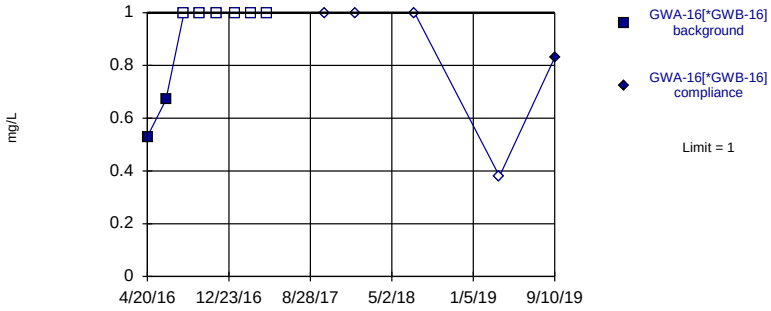
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



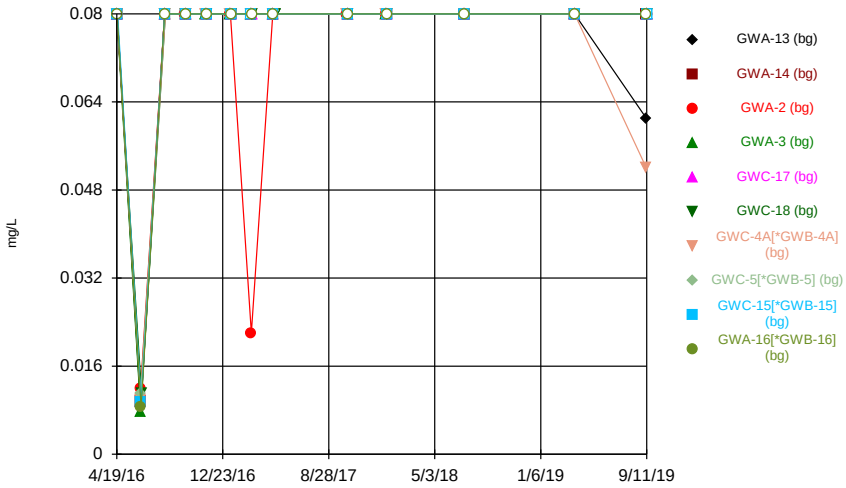
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.04242. Individual comparison alpha = 0.02144 (1 of 2).

Constituent: Sulfate Analysis Run 11/5/2019 10:09 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

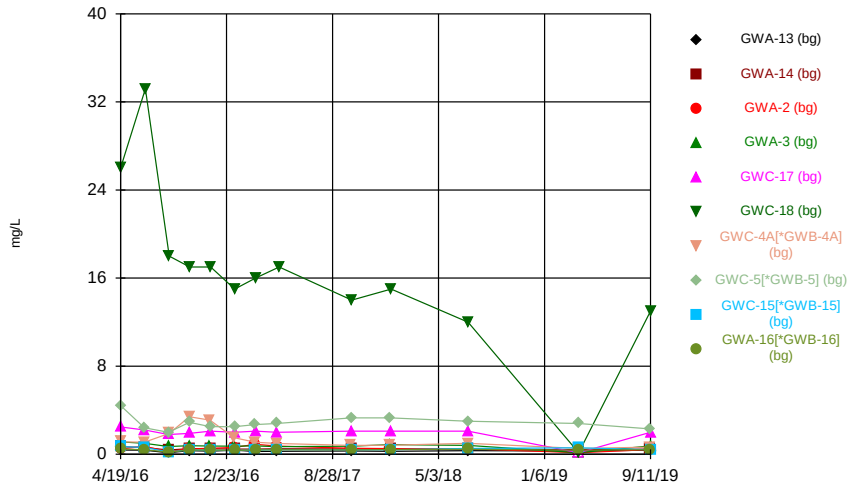
Time Series



Constituent: Boron Analysis Run 11/5/2019 9:58 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

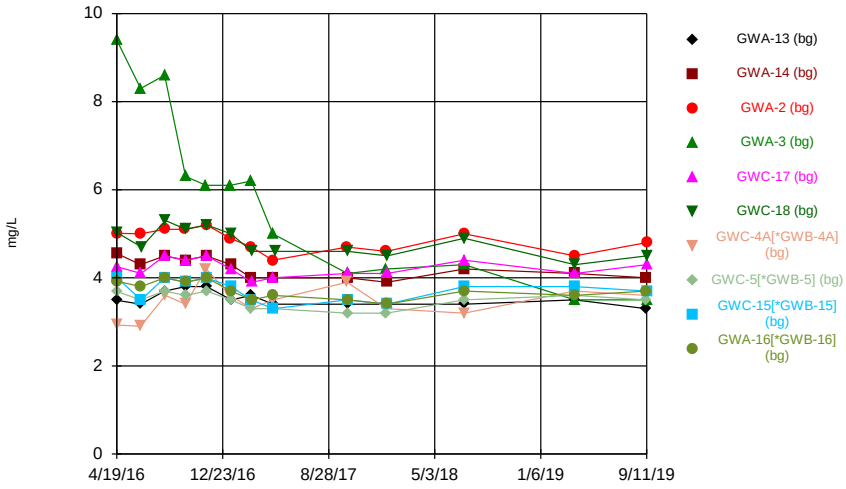
Time Series



Constituent: Calcium Analysis Run 11/5/2019 9:58 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

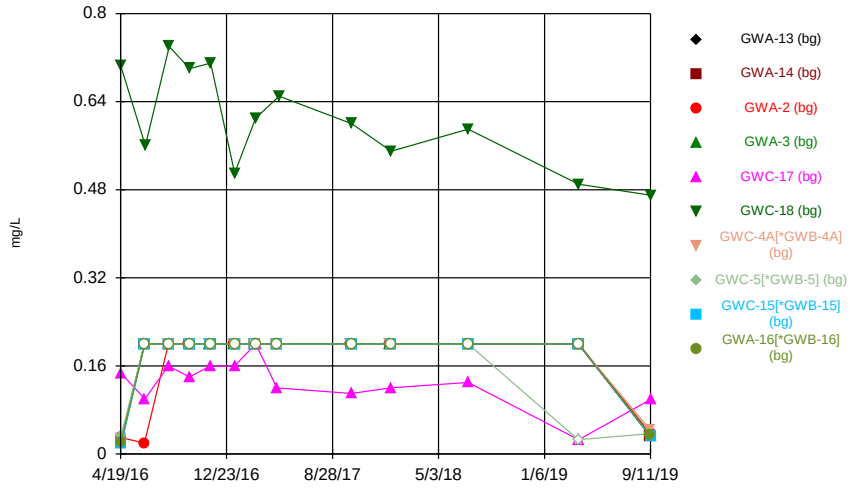
Time Series



Constituent: Chloride Analysis Run 11/5/2019 9:58 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

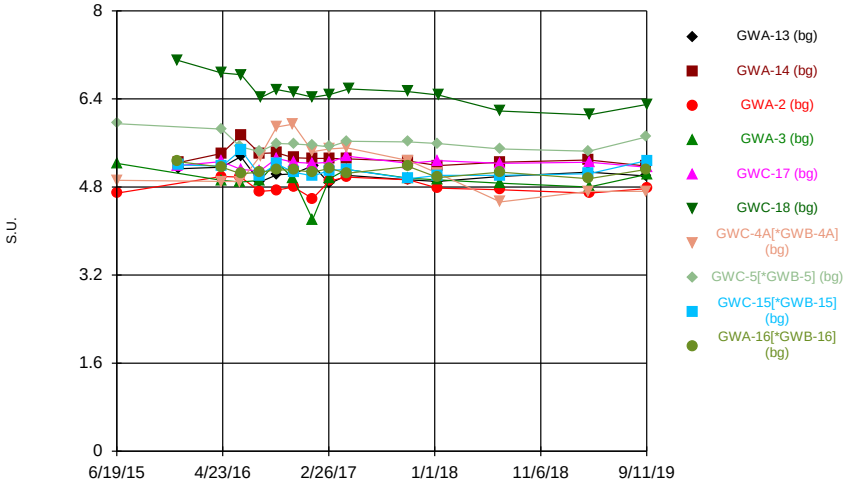
Time Series



Constituent: Fluoride Analysis Run 11/5/2019 9:58 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Time Series



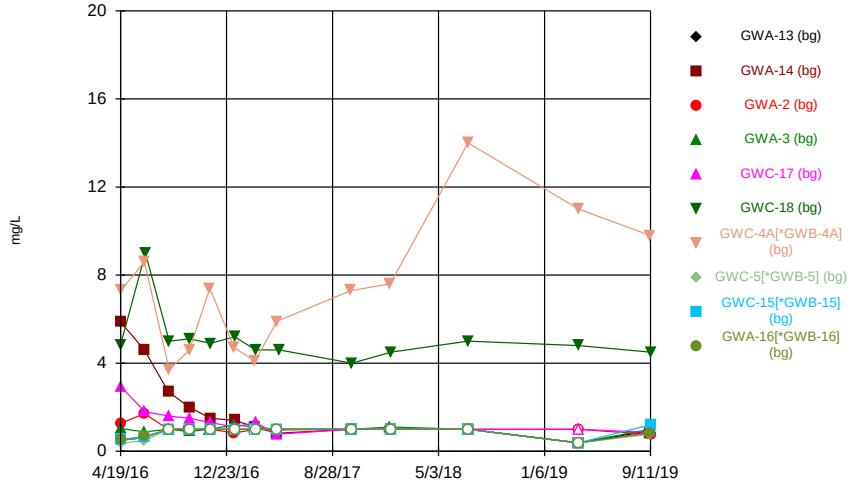
Constituent: pH Analysis Run 11/5/2019 9:58 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Time Series



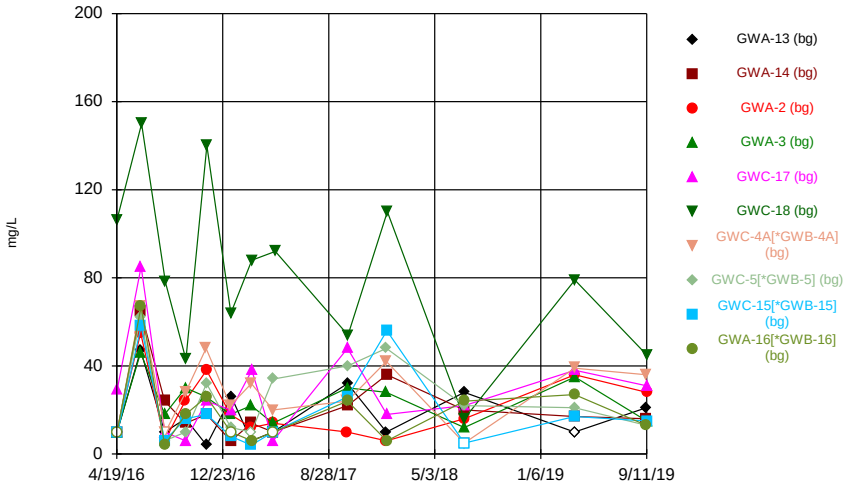
Constituent: Sulfate Analysis Run 11/5/2019 9:58 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Time Series

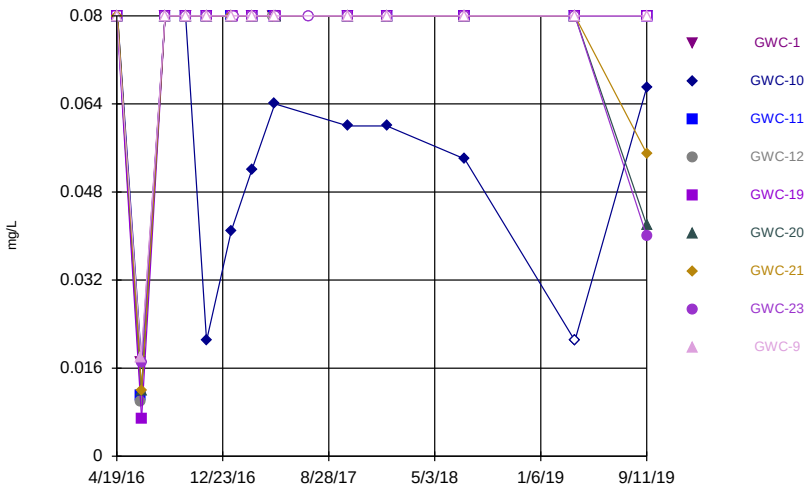


Constituent: Total Dissolved Solids Analysis Run 11/5/2019 9:58 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

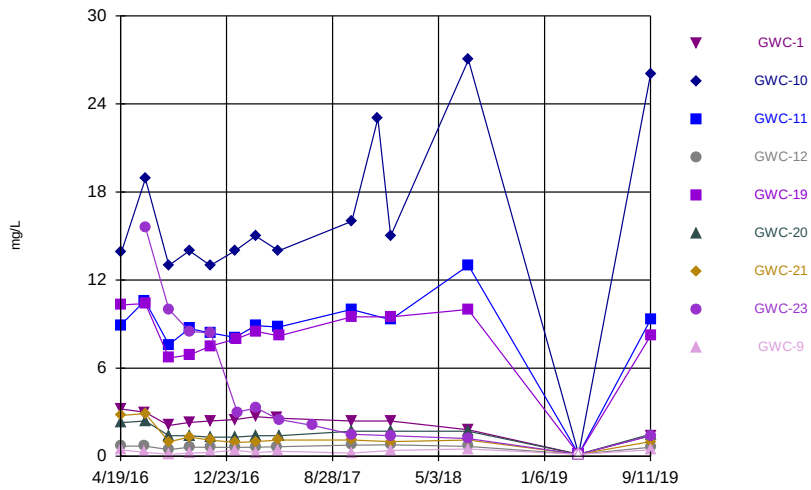
Time Series



Constituent: Boron Analysis Run 11/5/2019 10:01 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

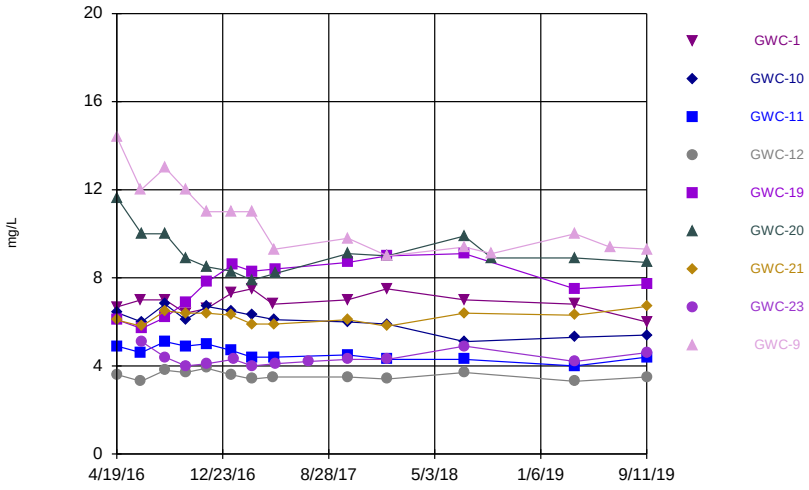
Time Series



Constituent: Calcium Analysis Run 11/5/2019 10:01 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

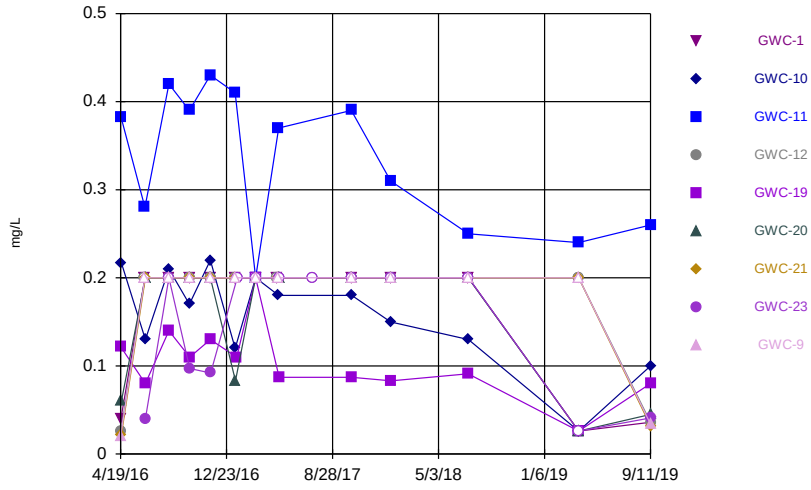
Time Series



Constituent: Chloride Analysis Run 11/5/2019 10:01 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

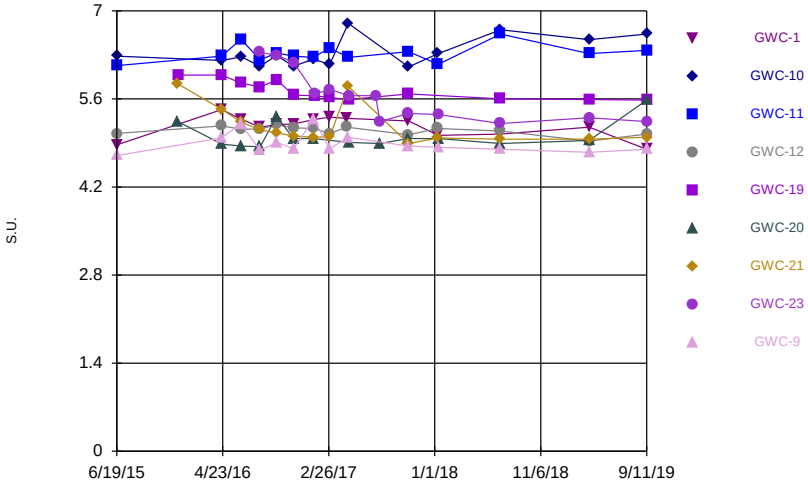
Time Series



Constituent: Fluoride Analysis Run 11/5/2019 10:01 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Time Series



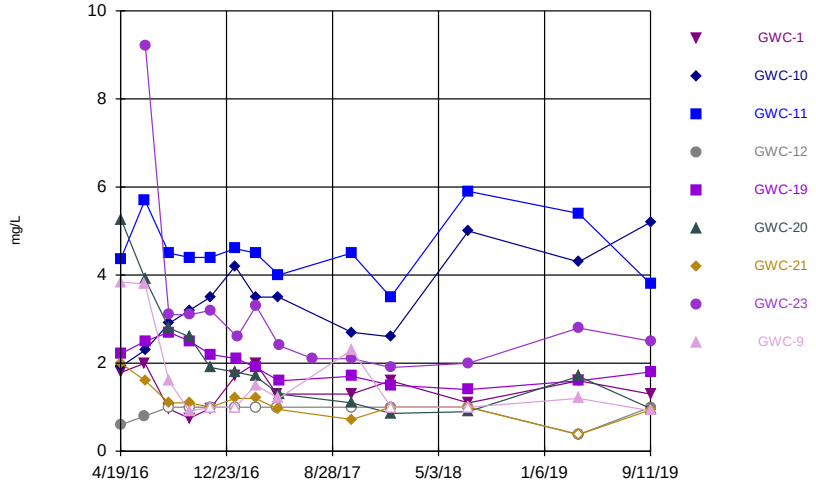
Constituent: pH Analysis Run 11/5/2019 10:01 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Time Series



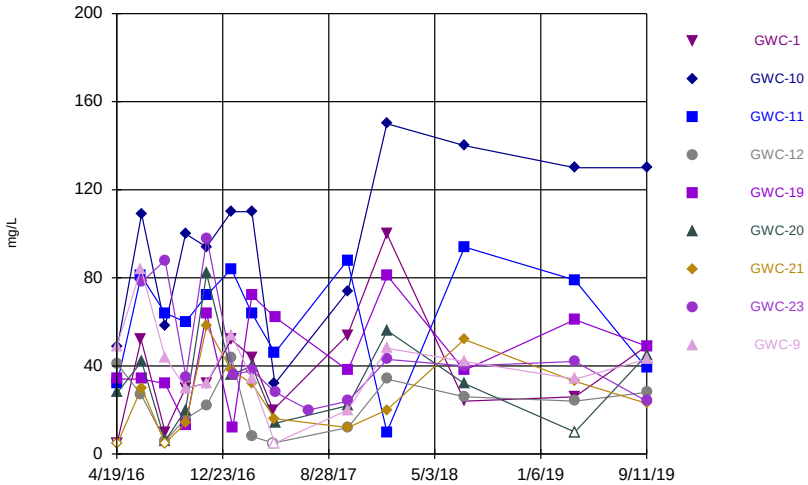
Constituent: Sulfate Analysis Run 11/5/2019 10:01 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.23 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids Analysis Run 11/5/2019 10:01 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 9:56 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Boron (mg/L)	GWA-13 (bg)	14	0.07354	0.01937	0.005176	0.08	0.0086	0.08	85.71
Boron (mg/L)	GWA-14 (bg)	14	0.07499	0.01876	0.005014	0.08	0.0098	0.08	92.86
Boron (mg/L)	GWA-2 (bg)	14	0.071	0.02296	0.006137	0.08	0.012	0.08	85.71
Boron (mg/L)	GWA-3 (bg)	14	0.07484	0.01932	0.005164	0.08	0.0077	0.08	92.86
Boron (mg/L)	GWC-1	14	0.0755	0.01684	0.0045	0.08	0.017	0.08	92.86
Boron (mg/L)	GWC-10	14	0.05371	0.02164	0.005784	0.0575	0.017	0.08	28.57
Boron (mg/L)	GWC-11	14	0.07507	0.01844	0.004929	0.08	0.011	0.08	92.86
Boron (mg/L)	GWC-12	14	0.075	0.01871	0.005	0.08	0.01	0.08	92.86
Boron (mg/L)	GWC-17 (bg)	14	0.07496	0.01884	0.005036	0.08	0.0095	0.08	92.86
Boron (mg/L)	GWC-18 (bg)	14	0.07507	0.01844	0.004929	0.08	0.011	0.08	92.86
Boron (mg/L)	GWC-19	14	0.07478	0.01954	0.005221	0.08	0.0069	0.08	92.86
Boron (mg/L)	GWC-20	14	0.07243	0.02013	0.005379	0.08	0.012	0.08	85.71
Boron (mg/L)	GWC-21	14	0.07336	0.01887	0.005044	0.08	0.012	0.08	85.71
Boron (mg/L)	GWC-23	14	0.07264	0.01924	0.005142	0.08	0.017	0.08	85.71
Boron (mg/L)	GWC-9	14	0.07557	0.01657	0.004429	0.08	0.018	0.08	92.86
Boron (mg/L)	GWC-4A[*G...	14	0.073	0.01961	0.00524	0.08	0.01	0.08	85.71
Boron (mg/L)	GWC-5[*GW...	14	0.07507	0.01844	0.004929	0.08	0.011	0.08	92.86
Boron (mg/L)	GWC-15[*G...	14	0.07496	0.01884	0.005036	0.08	0.0095	0.08	92.86
Boron (mg/L)	GWA-16[*G...	14	0.07489	0.01911	0.005107	0.08	0.0085	0.08	92.86
Calcium (mg/L)	GWA-13 (bg)	14	0.3071	0.06416	0.01715	0.31	0.14	0.389	0
Calcium (mg/L)	GWA-14 (bg)	14	0.5019	0.07429	0.01985	0.495	0.39	0.686	0
Calcium (mg/L)	GWA-2 (bg)	14	0.5282	0.1955	0.05225	0.525	0.13	0.91	7.143
Calcium (mg/L)	GWA-3 (bg)	14	0.7643	0.2194	0.05863	0.76	0.13	1.13	7.143
Calcium (mg/L)	GWC-1	14	2.246	0.7578	0.2025	2.4	0.13	3.22	7.143
Calcium (mg/L)	GWC-10	15	16.6	6.873	1.775	15	0.13	27	6.667
Calcium (mg/L)	GWC-11	14	8.769	2.841	0.7594	8.92	0.13	13	7.143
Calcium (mg/L)	GWC-12	14	0.6107	0.1594	0.04261	0.635	0.13	0.78	7.143
Calcium (mg/L)	GWC-17 (bg)	14	1.944	0.5451	0.1457	2.1	0.13	2.48	7.143
Calcium (mg/L)	GWC-18 (bg)	14	16.24	7.28	1.946	15.5	0.13	33.2	7.143
Calcium (mg/L)	GWC-19	14	8.074	2.577	0.6887	8.35	0.13	10.4	7.143
Calcium (mg/L)	GWC-20	14	1.53	0.5283	0.1412	1.45	0.13	2.4	7.143
Calcium (mg/L)	GWC-21	14	1.245	0.7248	0.1937	1.05	0.13	2.9	7.143
Calcium (mg/L)	GWC-23	14	4.295	4.534	1.212	2.3	0.13	15.6	7.143
Calcium (mg/L)	GWC-9	14	0.3115	0.1175	0.0314	0.305	0.13	0.49	7.143
Calcium (mg/L)	GWC-4A[*G...	14	1.344	0.8796	0.2351	1.05	0.53	3.4	0
Calcium (mg/L)	GWC-5[*GW...	14	2.871	0.5882	0.1572	2.8	2	4.39	0
Calcium (mg/L)	GWC-15[*G...	14	0.4754	0.1755	0.04689	0.415	0.21	0.91	0
Calcium (mg/L)	GWA-16[*G...	14	0.3916	0.06533	0.01746	0.405	0.19	0.472	0
Chloride (mg/L)	GWA-13 (bg)	14	3.521	0.1579	0.0422	3.495	3.3	3.8	0
Chloride (mg/L)	GWA-14 (bg)	14	4.196	0.2257	0.06033	4.15	3.9	4.55	0
Chloride (mg/L)	GWA-2 (bg)	14	4.858	0.2445	0.06535	4.95	4.4	5.2	0
Chloride (mg/L)	GWA-3 (bg)	14	5.686	1.954	0.5221	5.55	3.5	9.4	0
Chloride (mg/L)	GWC-1	14	6.884	0.4062	0.1086	6.9	6	7.5	0
Chloride (mg/L)	GWC-10	14	6.015	0.5178	0.1384	6.05	5.1	6.8	0
Chloride (mg/L)	GWC-11	14	4.579	0.3118	0.08332	4.55	4	5.1	0
Chloride (mg/L)	GWC-12	14	3.565	0.1825	0.04877	3.55	3.3	3.9	0
Chloride (mg/L)	GWC-17 (bg)	14	4.239	0.1982	0.05298	4.225	3.9	4.5	0
Chloride (mg/L)	GWC-18 (bg)	14	4.795	0.299	0.07992	4.75	4.3	5.3	0
Chloride (mg/L)	GWC-19	14	7.729	1.111	0.2969	8	5.7	9.1	0
Chloride (mg/L)	GWC-20	15	9.113	0.9311	0.2404	8.9	7.9	11.6	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 9:56 AM

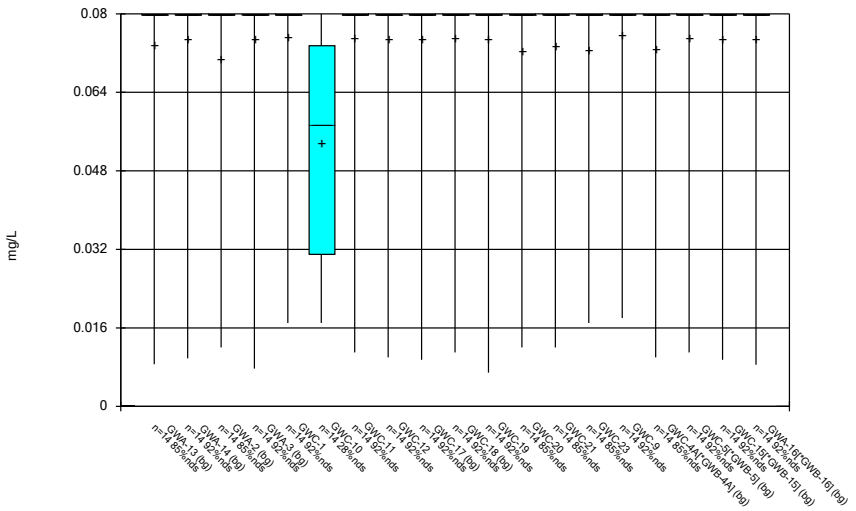
Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Chloride (mg/L)	GWC-21	14	6.234	0.3086	0.08247	6.3	5.8	6.7	0
Chloride (mg/L)	GWC-23	14	4.564	0.8776	0.2345	4.3	4	7.4	0
Chloride (mg/L)	GWC-9	15	10.63	1.636	0.4224	10	9	14.4	0
Chloride (mg/L)	GWC-4A[*G...	14	3.466	0.3485	0.09315	3.45	2.9	4.2	0
Chloride (mg/L)	GWC-5[*GW...	14	3.492	0.1766	0.04719	3.5	3.2	3.7	0
Chloride (mg/L)	GWC-15[*G...	14	3.706	0.2326	0.06217	3.75	3.3	4	0
Chloride (mg/L)	GWA-16[*G...	14	3.723	0.1904	0.05088	3.7	3.4	4	0
Fluoride (mg/L)	GWA-13 (bg)	14	0.1751	0.06326	0.01691	0.2	0.018	0.2	85.71
Fluoride (mg/L)	GWA-14 (bg)	14	0.1752	0.06304	0.01685	0.2	0.021	0.2	85.71
Fluoride (mg/L)	GWA-2 (bg)	14	0.1634	0.07289	0.01948	0.2	0.02	0.2	78.57
Fluoride (mg/L)	GWA-3 (bg)	14	0.1754	0.06268	0.01675	0.2	0.022	0.2	85.71
Fluoride (mg/L)	GWC-1	14	0.1644	0.07074	0.01891	0.2	0.026	0.2	85.71
Fluoride (mg/L)	GWC-10	14	0.1616	0.05668	0.01515	0.175	0.026	0.23	14.29
Fluoride (mg/L)	GWC-11	14	0.3345	0.07617	0.02036	0.36	0.2	0.43	7.143
Fluoride (mg/L)	GWC-12	14	0.1759	0.0614	0.01641	0.2	0.026	0.2	85.71
Fluoride (mg/L)	GWC-17 (bg)	14	0.1287	0.04042	0.0108	0.13	0.026	0.2	14.29
Fluoride (mg/L)	GWC-18 (bg)	14	0.6097	0.08683	0.02321	0.605	0.47	0.74	0
Fluoride (mg/L)	GWC-19	14	0.1014	0.04001	0.01069	0.089	0.026	0.2	14.29
Fluoride (mg/L)	GWC-20	14	0.1461	0.07618	0.02036	0.2	0.026	0.2	71.43
Fluoride (mg/L)	GWC-21	14	0.1753	0.06285	0.0168	0.2	0.022	0.2	85.71
Fluoride (mg/L)	GWC-23	14	0.1497	0.07234	0.01933	0.2	0.026	0.2	71.43
Fluoride (mg/L)	GWC-9	14	0.1753	0.06288	0.01681	0.2	0.02	0.2	85.71
Fluoride (mg/L)	GWC-4A[*G...	14	0.1766	0.05964	0.01594	0.2	0.028	0.2	85.71
Fluoride (mg/L)	GWC-5[*GW...	14	0.1639	0.07171	0.01917	0.2	0.026	0.2	85.71
Fluoride (mg/L)	GWC-15[*G...	14	0.1751	0.06342	0.01695	0.2	0.019	0.2	85.71
Fluoride (mg/L)	GWA-16[*G...	14	0.1755	0.06233	0.01666	0.2	0.022	0.2	85.71
pH (S.U.)	GWA-13 (bg)	15	5.024	0.1411	0.03642	5.01	4.82	5.35	0
pH (S.U.)	GWA-14 (bg)	15	5.329	0.1357	0.03504	5.31	5.18	5.74	0
pH (S.U.)	GWA-2 (bg)	15	4.815	0.1255	0.03241	4.78	4.59	4.99	0
pH (S.U.)	GWA-3 (bg)	15	4.935	0.2366	0.06108	4.95	4.21	5.25	0
pH (S.U.)	GWC-1	15	5.164	0.1689	0.04362	5.2	4.8	5.43	0
pH (S.U.)	GWC-10	15	6.331	0.2252	0.05814	6.27	6.11	6.8	0
pH (S.U.)	GWC-11	15	6.309	0.1456	0.03761	6.28	6.09	6.63	0
pH (S.U.)	GWC-12	15	5.09	0.0701	0.0181	5.12	4.93	5.19	0
pH (S.U.)	GWC-17 (bg)	15	5.238	0.07618	0.01967	5.25	5.09	5.36	0
pH (S.U.)	GWC-18 (bg)	15	6.488	0.2994	0.07729	6.48	5.93	7.1	0
pH (S.U.)	GWC-19	14	5.718	0.1511	0.04039	5.655	5.58	5.98	0
pH (S.U.)	GWC-20	15	5.011	0.2071	0.05347	4.94	4.84	5.58	0
pH (S.U.)	GWC-21	15	5.127	0.327	0.08443	5	4.65	5.84	0
pH (S.U.)	GWC-23	14	5.599	0.4135	0.1105	5.51	5.14	6.34	0
pH (S.U.)	GWC-9	15	4.891	0.1623	0.04191	4.83	4.7	5.28	0
pH (S.U.)	GWC-4A[*G...	15	5.155	0.4431	0.1144	5.05	4.53	5.94	0
pH (S.U.)	GWC-5[*GW...	15	5.594	0.1498	0.03868	5.58	5.39	5.95	0
pH (S.U.)	GWC-15[*G...	15	5.123	0.1364	0.03522	5.1	4.95	5.47	0
pH (S.U.)	GWA-16[*G...	15	5.075	0.1027	0.02653	5.07	4.83	5.26	0
Sulfate (mg/L)	GWA-13 (bg)	14	0.9019	0.2309	0.0617	1	0.38	1.2	71.43
Sulfate (mg/L)	GWA-14 (bg)	14	1.764	1.6	0.4277	1.05	0.38	5.85	28.57
Sulfate (mg/L)	GWA-2 (bg)	14	1.011	0.2447	0.06539	1	0.64	1.7	50
Sulfate (mg/L)	GWA-3 (bg)	14	0.9707	0.1876	0.05015	1	0.38	1.2	50
Sulfate (mg/L)	GWC-1	14	1.462	0.4296	0.1148	1.45	0.75	2.1	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 9:56 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Sulfate (mg/L)	GWC-10	14	3.559	1.048	0.2801	3.5	1.93	5.2	0
Sulfate (mg/L)	GWC-11	14	4.562	0.6784	0.1813	4.45	3.5	5.9	0
Sulfate (mg/L)	GWC-12	14	0.8879	0.202	0.05398	1	0.38	1	71.43
Sulfate (mg/L)	GWC-17 (bg)	14	1.296	0.5554	0.1484	1.05	0.77	2.93	35.71
Sulfate (mg/L)	GWC-18 (bg)	14	5.131	1.188	0.3175	4.87	4	9	0
Sulfate (mg/L)	GWC-19	14	1.936	0.4348	0.1162	1.85	1.4	2.7	0
Sulfate (mg/L)	GWC-20	14	2.006	1.264	0.3378	1.7	0.86	5.25	0
Sulfate (mg/L)	GWC-21	14	1.064	0.3853	0.103	1	0.38	1.99	21.43
Sulfate (mg/L)	GWC-23	14	3.05	1.83	0.4892	2.55	1.9	9.2	0
Sulfate (mg/L)	GWC-9	14	1.561	1.041	0.2781	1.1	0.58	3.84	28.57
Sulfate (mg/L)	GWC-4A[*G...	14	7.479	2.873	0.768	7.355	3.7	14	0
Sulfate (mg/L)	GWC-5[*GW...	14	0.8569	0.2514	0.0672	1	0.367	1	78.57
Sulfate (mg/L)	GWC-15[*G...	14	0.8666	0.2619	0.07	1	0.38	1.2	71.43
Sulfate (mg/L)	GWA-16[*G...	14	0.8864	0.208	0.05559	1	0.38	1	78.57
Total Dissolved Solids (mg/L)	GWA-13 (bg)	13	17.92	12.59	3.491	10	4	47	23.08
Total Dissolved Solids (mg/L)	GWA-14 (bg)	13	21.38	15.17	4.207	18	6	65	15.38
Total Dissolved Solids (mg/L)	GWA-2 (bg)	13	21.62	15.15	4.202	16	6	55	7.692
Total Dissolved Solids (mg/L)	GWA-3 (bg)	13	24.31	10.09	2.797	26	10	46	7.692
Total Dissolved Solids (mg/L)	GWC-1	14	39.86	23.57	6.299	38	10	100	7.143
Total Dissolved Solids (mg/L)	GWC-10	14	103.3	38.56	10.31	109.5	32	160	0
Total Dissolved Solids (mg/L)	GWC-11	14	64.43	24.78	6.622	68	10	94	0
Total Dissolved Solids (mg/L)	GWC-12	14	22.86	11.74	3.138	23	6	44	7.143
Total Dissolved Solids (mg/L)	GWC-17 (bg)	14	29.43	20.42	5.457	26.5	6	85	7.143
Total Dissolved Solids (mg/L)	GWC-18 (bg)	14	83.21	37.38	9.991	83.5	16	150	0
Total Dissolved Solids (mg/L)	GWC-19	14	46.57	21.16	5.657	43.5	12	81	0
Total Dissolved Solids (mg/L)	GWC-20	14	32.86	19.97	5.337	30	6	82	7.143
Total Dissolved Solids (mg/L)	GWC-21	14	27.93	15.64	4.179	26.5	10	58	14.29
Total Dissolved Solids (mg/L)	GWC-23	14	45.14	24.59	6.572	38	20	98	0
Total Dissolved Solids (mg/L)	GWC-9	14	40.43	17.19	4.595	42	10	84	7.143
Total Dissolved Solids (mg/L)	GWC-4A[*G...	13	28.69	17.19	4.767	26	5	67	23.08
Total Dissolved Solids (mg/L)	GWC-5[*GW...	13	26.23	17.19	4.767	22	6	62	15.38
Total Dissolved Solids (mg/L)	GWC-15[*G...	13	19.77	17.88	4.958	16	4	58	15.38
Total Dissolved Solids (mg/L)	GWA-16[*G...	13	19.85	16.62	4.609	18	4	67	23.08

Box & Whiskers Plot

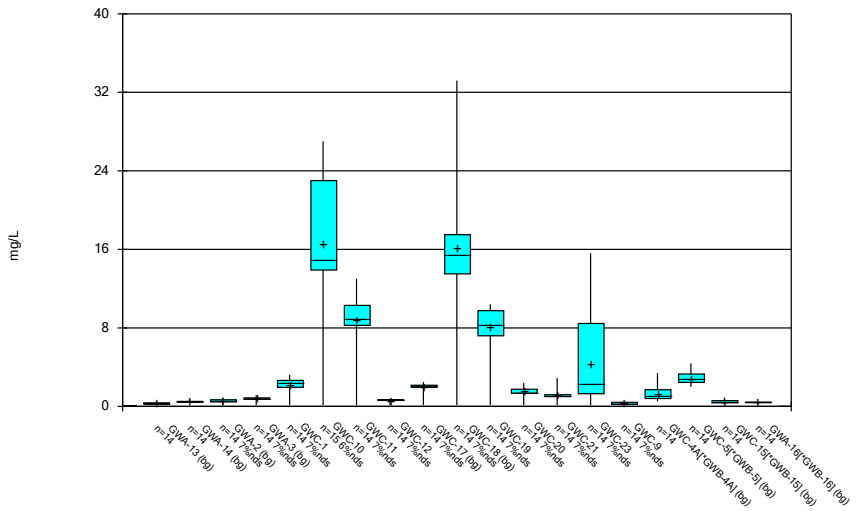


Constituent: Boron Analysis Run 1/13/2020 9:53 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

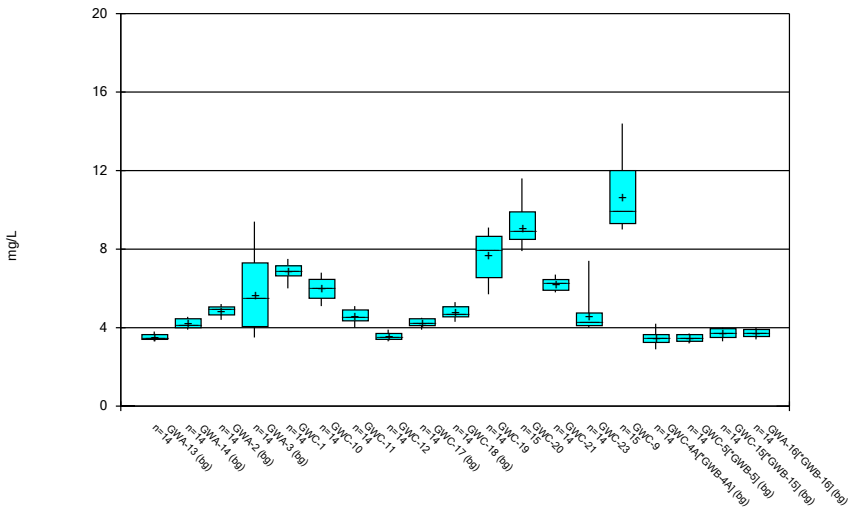


Constituent: Calcium Analysis Run 1/13/2020 9:53 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

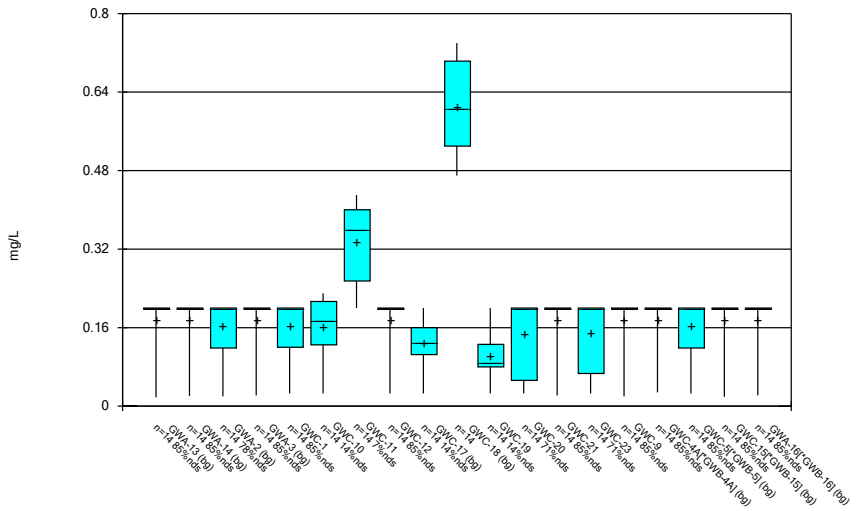


Constituent: Chloride Analysis Run 1/13/2020 9:53 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

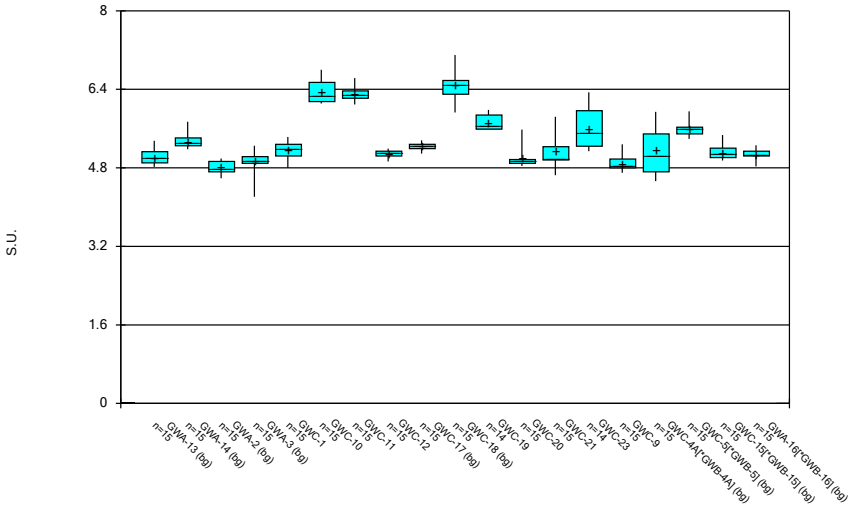
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 1/13/2020 9:53 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

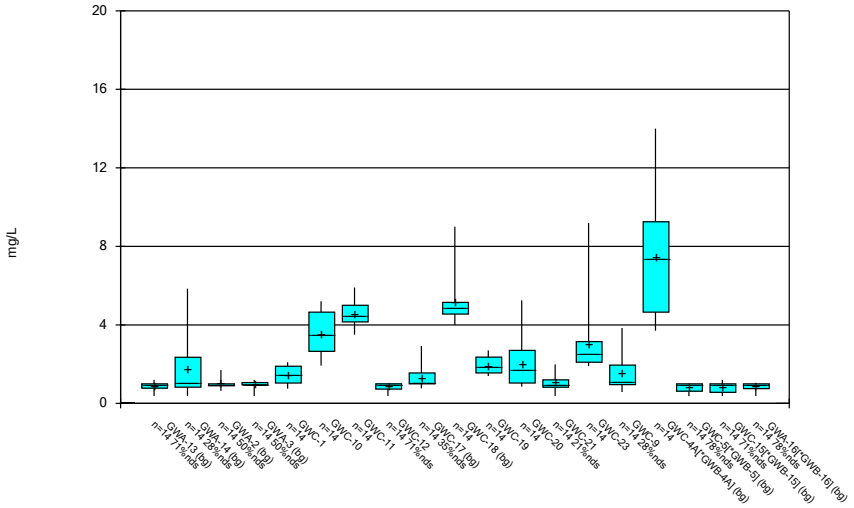


Constituent: pH Analysis Run 1/13/2020 9:53 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

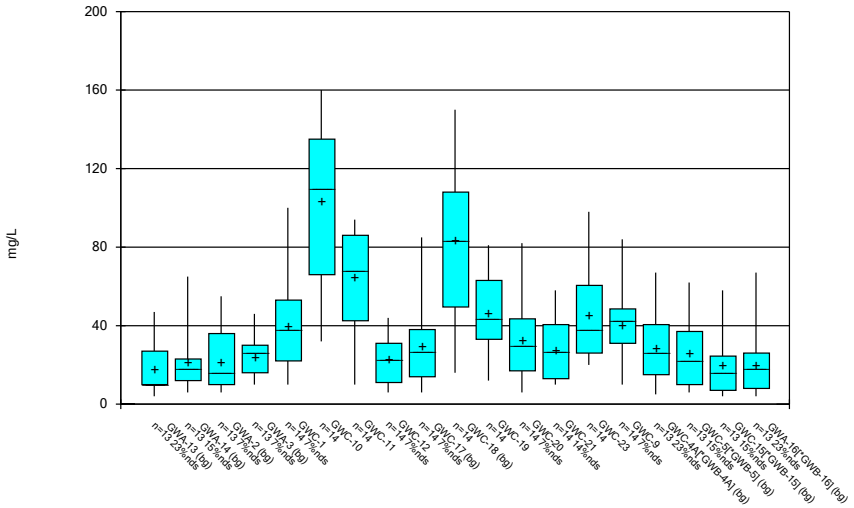


Constituent: Sulfate Analysis Run 1/13/2020 9:53 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2020 9:53 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Appendix D1

Sanitas Outputs for State Appendix I Parameters – January 2019

Interwell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 5/15/2019, 11:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GWC-1	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-10	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-11	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-12	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-19	0.0025	n/a	1/29/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-20	0.0025	n/a	1/29/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-21	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-23	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Antimony (mg/L)	GWC-9	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	99.02	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-1	0.0089	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-10	0.0089	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-11	0.0089	n/a	1/30/2019	0.0015	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-12	0.0089	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-19	0.0089	n/a	1/29/2019	0.0013ND	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-20	0.0089	n/a	1/29/2019	0.0013ND	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-21	0.0089	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-23	0.0089	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Arsenic, Total (mg/L)	GWC-9	0.0089	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	92.16	n/a	0.00004916	NP (NDs) 1 of 2
Barium, Total (mg/L)	GWC-1	0.21	n/a	1/30/2019	0.05	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Barium, Total (mg/L)	GWC-10	0.21	n/a	1/30/2019	0.023	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Barium, Total (mg/L)	GWC-11	0.21	n/a	1/30/2019	0.014	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Barium, Total (mg/L)	GWC-12	0.21	n/a	1/30/2019	0.011	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Barium, Total (mg/L)	GWC-19	0.21	n/a	1/29/2019	0.016	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Barium, Total (mg/L)	GWC-20	0.21	n/a	1/29/2019	0.017	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Barium, Total (mg/L)	GWC-21	0.21	n/a	1/30/2019	0.0175	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Barium, Total (mg/L)	GWC-23	0.21	n/a	1/30/2019	0.034	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Barium, Total (mg/L)	GWC-9	0.21	n/a	1/30/2019	0.032	No	204	n/a	n/a	0	n/a	0.00004916	NP (normality) 1 of 2
Beryllium, Total (mg/L)	GWC-1	0.0025	n/a	1/30/2019	0.0025ND	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Beryllium, Total (mg/L)	GWC-10	0.0025	n/a	1/30/2019	0.0025ND	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Beryllium, Total (mg/L)	GWC-11	0.0025	n/a	1/30/2019	0.0025ND	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Beryllium, Total (mg/L)	GWC-12	0.0025	n/a	1/30/2019	0.0025ND	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Beryllium, Total (mg/L)	GWC-19	0.0025	n/a	1/29/2019	0.00023	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Beryllium, Total (mg/L)	GWC-20	0.0025	n/a	1/29/2019	0.00016	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Beryllium, Total (mg/L)	GWC-21	0.0025	n/a	1/30/2019	0.0025ND	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Beryllium, Total (mg/L)	GWC-23	0.0025	n/a	1/30/2019	0.0025ND	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Beryllium, Total (mg/L)	GWC-9	0.0025	n/a	1/30/2019	0.0025ND	No	203	n/a	n/a	86.7	n/a	0.00004916	NP (NDs) 1 of 2
Boron (mg/L)	GWC-1	0.05	n/a	1/30/2019	0.05ND	No	120	n/a	n/a	90.83	n/a	0.0001347	NP (NDs) 1 of 2
Boron (mg/L)	**GWC-10**	**0.05**	**n/a**	**1/30/2019**	**0.057**	**Yes**	**120**	**n/a**	**n/a**	**90.83**	**n/a**	**0.0001347**	NP (NDs) 1 of 2
Boron (mg/L)	GWC-11	0.05	n/a	1/30/2019	0.05ND	No	120	n/a	n/a	90.83	n/a	0.0001347	NP (NDs) 1 of 2
Boron (mg/L)	GWC-12	0.05	n/a	1/30/2019	0.05ND	No	120	n/a	n/a	90.83	n/a	0.0001347	NP (NDs) 1 of 2
Boron (mg/L)	GWC-19	0.05	n/a	1/29/2019	0.05ND	No	120	n/a	n/a	90.83	n/a	0.0001347	NP (NDs) 1 of 2
Boron (mg/L)	GWC-20	0.05	n/a	1/29/2019	0.05ND	No	120	n/a	n/a	90.83	n/a	0.0001347	NP (NDs) 1 of 2
Boron (mg/L)	GWC-21	0.05	n/a	1/30/2019	0.05ND	No	120	n/a	n/a	90.83	n/a	0.0001347	NP (NDs) 1 of 2
Boron (mg/L)	GWC-23	0.05	n/a	1/30/2019	0.05ND	No	120	n/a	n/a	90.83	n/a	0.0001347	NP (NDs) 1 of 2
Boron (mg/L)	GWC-9	0.05	n/a	1/30/2019	0.05ND	No	120	n/a	n/a	90.83	n/a	0.0001347	NP (NDs) 1 of 2
Cadmium, Total (mg/L)	GWC-1	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2
Cadmium, Total (mg/L)	GWC-10	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2
Cadmium, Total (mg/L)	GWC-11	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2
Cadmium, Total (mg/L)	GWC-12	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2
Cadmium, Total (mg/L)	GWC-19	0.0025	n/a	1/29/2019	0.0002	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2

Interwell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 5/15/2019, 11:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Cadmium, Total (mg/L)	GWC-20	0.0025	n/a	1/29/2019	0.00016	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2
Cadmium, Total (mg/L)	GWC-21	0.0025	n/a	1/30/2019	0.000155	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2
Cadmium, Total (mg/L)	GWC-23	0.0025	n/a	1/30/2019	0.00015	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2
Cadmium, Total (mg/L)	GWC-9	0.0025	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	91.67	n/a	0.00004916	NP (NDs) 1 of 2
Calcium (mg/L)	GWC-1	33.2	n/a	1/30/2019	2.5	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Calcium (mg/L)	GWC-10	33.2	n/a	1/30/2019	26	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Calcium (mg/L)	GWC-11	33.2	n/a	1/30/2019	11	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Calcium (mg/L)	GWC-12	33.2	n/a	1/30/2019	0.68	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Calcium (mg/L)	GWC-19	33.2	n/a	1/29/2019	9.2	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Calcium (mg/L)	GWC-20	33.2	n/a	1/29/2019	1.8	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Calcium (mg/L)	GWC-21	33.2	n/a	1/30/2019	1.05	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Calcium (mg/L)	GWC-23	33.2	n/a	1/30/2019	1.1	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Calcium (mg/L)	GWC-9	33.2	n/a	1/30/2019	0.38	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-1	9.4	n/a	1/30/2019	6.8	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-10	9.4	n/a	1/30/2019	5.45	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-11	9.4	n/a	1/30/2019	4.6	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-12	9.4	n/a	1/30/2019	3.7	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-19	9.4	n/a	1/29/2019	8.2	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-20	9.4	n/a	1/29/2019	8.8	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-21	9.4	n/a	1/30/2019	6.65	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-23	9.4	n/a	1/30/2019	7.4	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chloride (mg/L)	GWC-9	9.4	n/a	1/30/2019	9.1	No	120	n/a	n/a	0	n/a	0.0001347	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-1	0.22	n/a	1/30/2019	0.0025ND	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-10	0.22	n/a	1/30/2019	0.0067	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-11	0.22	n/a	1/30/2019	0.006	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-12	0.22	n/a	1/30/2019	0.0039	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-19	0.22	n/a	1/29/2019	0.0025ND	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-20	0.22	n/a	1/29/2019	0.0025ND	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-21	0.22	n/a	1/30/2019	0.0025ND	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-23	0.22	n/a	1/30/2019	0.0025ND	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Chromium, Total (mg/L)	GWC-9	0.22	n/a	1/30/2019	0.0025ND	No	198	n/a	n/a	50	n/a	0.0000503	NP (normality) 1 of 2
Cobalt, Total (mg/L)	GWC-1	0.013	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Cobalt, Total (mg/L)	GWC-10	0.013	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Cobalt, Total (mg/L)	GWC-11	0.013	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Cobalt, Total (mg/L)	GWC-12	0.013	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Cobalt, Total (mg/L)	GWC-19	0.013	n/a	1/29/2019	0.0025ND	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Cobalt, Total (mg/L)	GWC-20	0.013	n/a	1/29/2019	0.00084	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Cobalt, Total (mg/L)	GWC-21	0.013	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Cobalt, Total (mg/L)	GWC-23	0.013	n/a	1/30/2019	0.0061	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Cobalt, Total (mg/L)	GWC-9	0.013	n/a	1/30/2019	0.0025ND	No	204	n/a	n/a	55.88	n/a	0.00004916	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-1	0.014	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-10	0.014	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-11	0.014	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-12	0.014	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-19	0.014	n/a	1/29/2019	0.0025ND	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-20	0.014	n/a	1/29/2019	0.0025ND	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-21	0.014	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-23	0.014	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Copper, Total (mg/L)	GWC-9	0.014	n/a	1/30/2019	0.002	No	184	n/a	n/a	90.76	n/a	0.00005827	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-1	0.74	n/a	1/30/2019	0.2ND	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2

Interwell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 5/15/2019, 11:31 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Fluoride (mg/L)	GWC-10	0.74	n/a	1/30/2019	0.22	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-11	0.74	n/a	1/30/2019	0.35	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-12	0.74	n/a	1/30/2019	0.2ND	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-19	0.74	n/a	1/29/2019	0.074	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-20	0.74	n/a	1/29/2019	0.031	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-21	0.74	n/a	1/30/2019	0.2ND	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-23	0.74	n/a	1/30/2019	0.2ND	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2
Fluoride (mg/L)	GWC-9	0.74	n/a	1/30/2019	0.2ND	No	120	n/a	n/a	73.33	n/a	0.0001347	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-1	0.014	n/a	1/30/2019	0.001ND	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-10	0.014	n/a	1/30/2019	0.001ND	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-11	0.014	n/a	1/30/2019	0.001ND	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-12	0.014	n/a	1/30/2019	0.001ND	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-19	0.014	n/a	1/29/2019	0.001ND	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-20	0.014	n/a	1/29/2019	0.001ND	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-21	0.014	n/a	1/30/2019	0.001ND	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-23	0.014	n/a	1/30/2019	0.00013	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Lead, Total (mg/L)	GWC-9	0.014	n/a	1/30/2019	0.001ND	No	204	n/a	n/a	97.55	n/a	0.00004916	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-1	0.03	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-10	0.03	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-11	0.03	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-12	0.03	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-19	0.03	n/a	1/29/2019	0.0017	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-20	0.03	n/a	1/29/2019	0.00093	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-21	0.03	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-23	0.03	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
Nickel, Total (mg/L)	GWC-9	0.03	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	79.35	n/a	0.00005827	NP (NDs) 1 of 2
pH (S.U.)	GWC-1	7.1	4.21	1/30/2019	5.21	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
pH (S.U.)	GWC-10	7.1	4.21	1/30/2019	6.2	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
pH (S.U.)	GWC-11	7.1	4.21	1/30/2019	6.09	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
pH (S.U.)	GWC-12	7.1	4.21	1/30/2019	5.01	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
pH (S.U.)	GWC-19	7.1	4.21	1/29/2019	5.58	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
pH (S.U.)	GWC-20	7.1	4.21	1/29/2019	4.94	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
pH (S.U.)	GWC-21	7.1	4.21	1/30/2019	4.65	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
pH (S.U.)	GWC-23	7.1	4.21	1/30/2019	5.14	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
pH (S.U.)	GWC-9	7.1	4.21	1/30/2019	4.88	No	130	n/a	n/a	0	n/a	0.0002342	NP (normality) 1 of 2
Selenium (mg/L)	GWC-1	0.002	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-10	0.002	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-11	0.002	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-12	0.002	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-19	0.002	n/a	1/29/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-20	0.002	n/a	1/29/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-21	0.002	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-23	0.002	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Selenium (mg/L)	GWC-9	0.002	n/a	1/30/2019	0.0013ND	No	204	n/a	n/a	94.12	n/a	0.00004916	NP (NDs) 1 of 2
Silver, Total (mg/L)	GWC-1	0.0013	n/a	1/30/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2
Silver, Total (mg/L)	GWC-10	0.0013	n/a	1/30/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2
Silver, Total (mg/L)	GWC-11	0.0013	n/a	1/30/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2
Silver, Total (mg/L)	GWC-12	0.0013	n/a	1/30/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2
Silver, Total (mg/L)	GWC-19	0.0013	n/a	1/29/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2
Silver, Total (mg/L)	GWC-20	0.0013	n/a	1/29/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2

Interwell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 5/15/2019, 11:31 AM

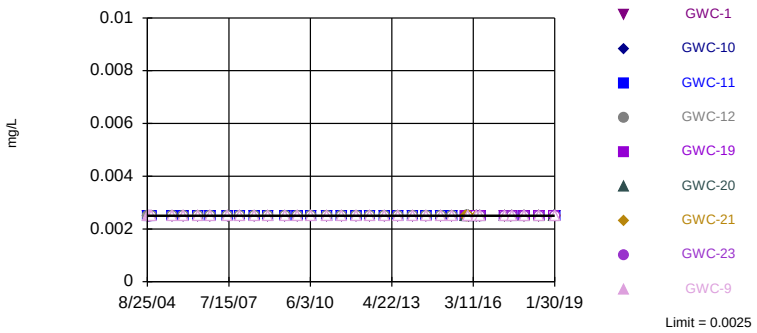
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Silver, Total (mg/L)	GWC-21	0.0013	n/a	1/30/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2
Silver, Total (mg/L)	GWC-23	0.0013	n/a	1/30/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2
Silver, Total (mg/L)	GWC-9	0.0013	n/a	1/30/2019	0.0013ND	No	184	n/a	n/a	100	n/a	0.00005827	NP (NDs) 1 of 2
Sulfate (mg/L)	GWC-1	14	n/a	1/30/2019	2.1	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-10	14	n/a	1/30/2019	4.8	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-11	14	n/a	1/30/2019	4.3	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-12	14	n/a	1/30/2019	0.65	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-19	14	n/a	1/29/2019	1.4	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-20	14	n/a	1/29/2019	1.3	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-21	14	n/a	1/30/2019	0.705	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-23	14	n/a	1/30/2019	2.4	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Sulfate (mg/L)	GWC-9	14	n/a	1/30/2019	0.58	No	120	n/a	n/a	47.5	n/a	0.0001347	NP (normality) 1 of 2
Thallium (mg/L)	GWC-1	0.0005	n/a	1/30/2019	0.0005ND	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-10	0.0005	n/a	1/30/2019	0.0005ND	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-11	0.0005	n/a	1/30/2019	0.0005ND	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-12	0.0005	n/a	1/30/2019	0.0005ND	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-19	0.0005	n/a	1/29/2019	0.0005ND	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-20	0.0005	n/a	1/29/2019	0.0005ND	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-21	0.0005	n/a	1/30/2019	0.0002915	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-23	0.0005	n/a	1/30/2019	0.00016	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Thallium (mg/L)	GWC-9	0.0005	n/a	1/30/2019	0.0005ND	No	196	n/a	n/a	89.29	n/a	0.00005144	NP (NDs) 1 of 2
Total Dissolved Solids (mg/L)	GWC-1	150	n/a	1/30/2019	55	No	120	n/a	n/a	14.17	n/a	0.0001347	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**GWC-10**	**150**	**n/a**	**1/30/2019**	**160**	**Yes**	**120**	**n/a**	**n/a**	**14.17**	**n/a**	**0.0001347**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-11	150	n/a	1/30/2019	89	No	120	n/a	n/a	14.17	n/a	0.0001347	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-12	150	n/a	1/30/2019	22	No	120	n/a	n/a	14.17	n/a	0.0001347	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-19	150	n/a	1/29/2019	62	No	120	n/a	n/a	14.17	n/a	0.0001347	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-20	150	n/a	1/29/2019	27	No	120	n/a	n/a	14.17	n/a	0.0001347	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-21	150	n/a	1/30/2019	36	No	120	n/a	n/a	14.17	n/a	0.0001347	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-23	150	n/a	1/30/2019	38	No	120	n/a	n/a	14.17	n/a	0.0001347	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	GWC-9	150	n/a	1/30/2019	42	No	120	n/a	n/a	14.17	n/a	0.0001347	NP (normality) 1 of 2
Vanadium, Total (mg/L)	GWC-1	0.056	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Vanadium, Total (mg/L)	GWC-10	0.056	n/a	1/30/2019	0.0026	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Vanadium, Total (mg/L)	GWC-11	0.056	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Vanadium, Total (mg/L)	GWC-12	0.056	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Vanadium, Total (mg/L)	GWC-19	0.056	n/a	1/29/2019	0.0025ND	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Vanadium, Total (mg/L)	GWC-20	0.056	n/a	1/29/2019	0.0025ND	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Vanadium, Total (mg/L)	GWC-21	0.056	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Vanadium, Total (mg/L)	GWC-23	0.056	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Vanadium, Total (mg/L)	GWC-9	0.056	n/a	1/30/2019	0.0025ND	No	184	n/a	n/a	85.33	n/a	0.00005827	NP (NDs) 1 of 2
Zinc, Total (mg/L)	GWC-1	0.5	n/a	1/30/2019	0.0031	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2
Zinc, Total (mg/L)	GWC-10	0.5	n/a	1/30/2019	0.02ND	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2
Zinc, Total (mg/L)	GWC-11	0.5	n/a	1/30/2019	0.02ND	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2
Zinc, Total (mg/L)	GWC-12	0.5	n/a	1/30/2019	0.02ND	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2
Zinc, Total (mg/L)	GWC-19	0.5	n/a	1/29/2019	0.0051	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2
Zinc, Total (mg/L)	GWC-20	0.5	n/a	1/29/2019	0.02ND	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2
Zinc, Total (mg/L)	GWC-21	0.5	n/a	1/30/2019	0.00255	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2
Zinc, Total (mg/L)	GWC-23	0.5	n/a	1/30/2019	0.0049	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2
Zinc, Total (mg/L)	GWC-9	0.5	n/a	1/30/2019	0.051	No	184	n/a	n/a	33.15	n/a	0.00005827	NP (normality) 1 of 2

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 204 background values. 99.02% NDs. Annual per-constituent alpha = 0.0008845. Individual comparison alpha = 0.00004916 (1 of 2). Comparing 9 points to limit.

Constituent: Antimony Analysis Run 5/15/2019 11:28 AM

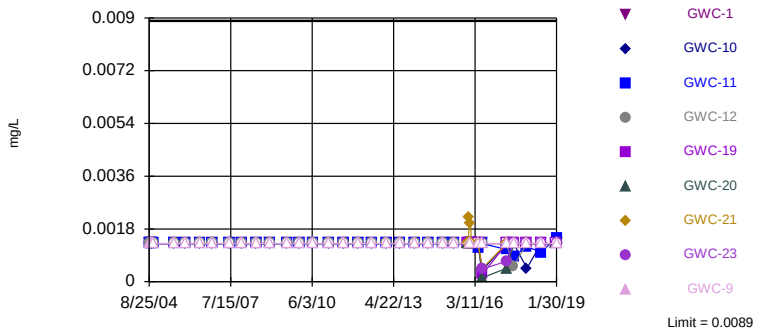
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 204 background values. 92.16% NDs. Annual per-constituent alpha = 0.0008845. Individual comparison alpha = 0.00004916 (1 of 2). Comparing 9 points to limit.

Constituent: Arsenic, Total Analysis Run 5/15/2019 11:28 AM

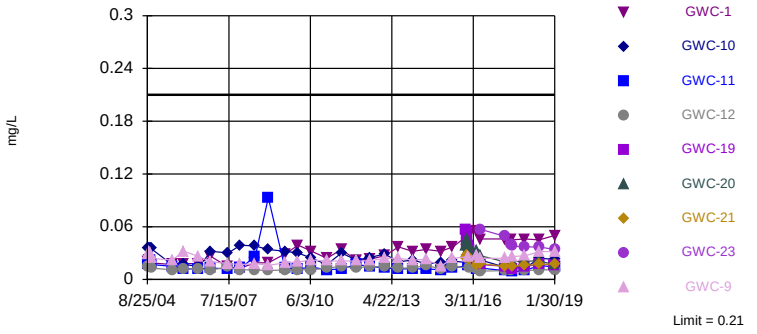
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 204 background values. Annual per-constituent alpha = 0.0008845. Individual comparison alpha = 0.00004916 (1 of 2). Comparing 9 points to limit.

Constituent: Barium, Total Analysis Run 5/15/2019 11:28 AM

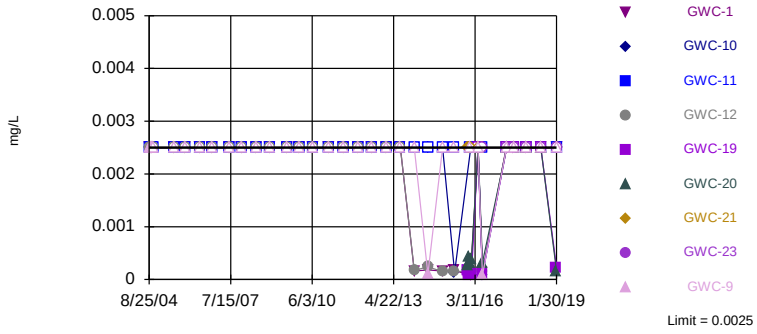
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 203 background values. 86.7% NDs. Annual per-constituent alpha = 0.0008845. Individual comparison alpha = 0.00004916 (1 of 2). Comparing 9 points to limit.

Constituent: Beryllium, Total Analysis Run 5/15/2019 11:28 AM

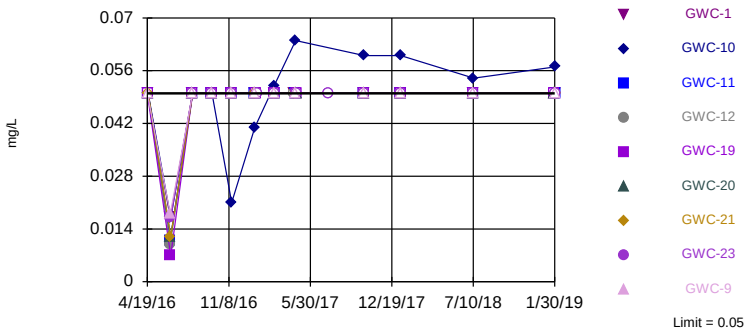
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit: GWC-10

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 120 background values. 90.83% NDs. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Boron Analysis Run 5/15/2019 11:28 AM

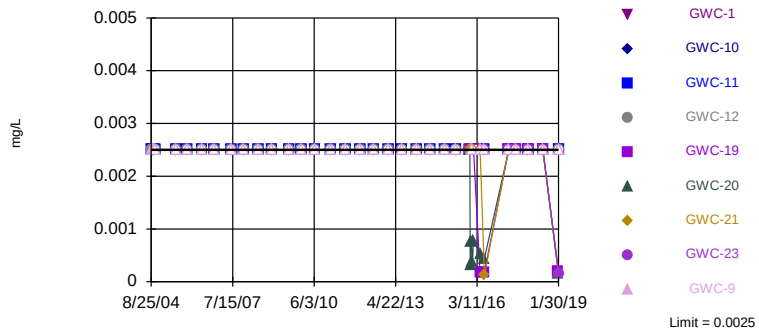
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 204 background values. 91.67% NDs. Annual per-constituent alpha = 0.0008845. Individual comparison alpha = 0.00004916 (1 of 2). Comparing 9 points to limit.

Constituent: Cadmium, Total Analysis Run 5/15/2019 11:28 AM

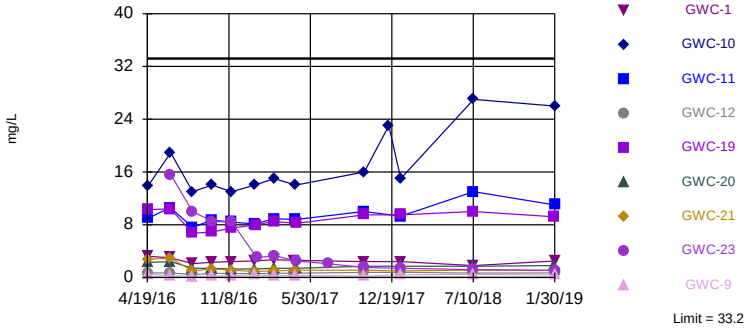
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 120 background values. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Calcium Analysis Run 5/15/2019 11:28 AM

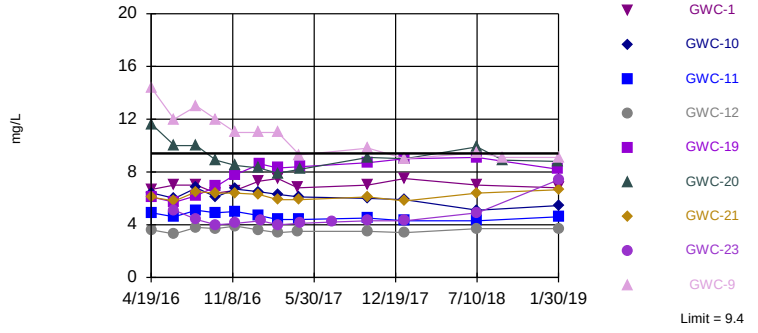
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 120 background values. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Chloride Analysis Run 5/15/2019 11:28 AM

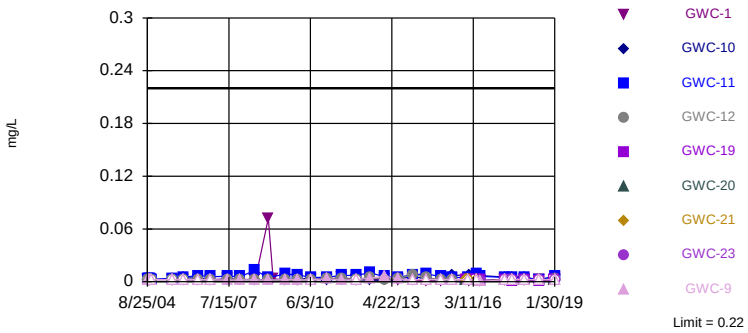
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 198 background values. 50% NDs. Annual per-constituent alpha = 0.000905. Individual comparison alpha = 0.0000503 (1 of 2). Comparing 9 points to limit.

Constituent: Chromium, Total Analysis Run 5/15/2019 11:28 AM

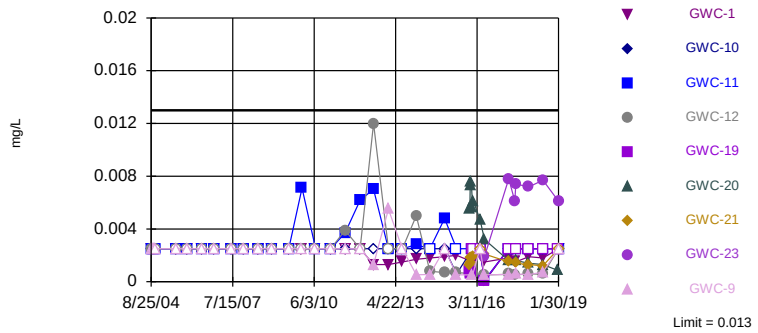
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 204 background values. 55.88% NDs. Annual per-constituent alpha = 0.0008845. Individual comparison alpha = 0.00004916 (1 of 2). Comparing 9 points to limit.

Constituent: Cobalt, Total Analysis Run 5/15/2019 11:28 AM

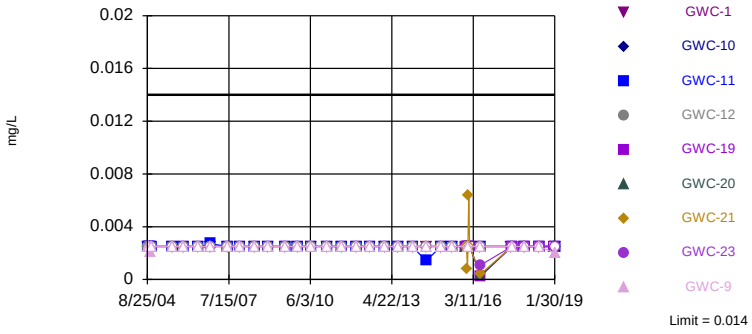
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 184 background values. 90.76% NDs. Annual per-constituent alpha = 0.001048. Individual comparison alpha = 0.00005827 (1 of 2). Comparing 9 points to limit.

Constituent: Copper, Total Analysis Run 5/15/2019 11:28 AM

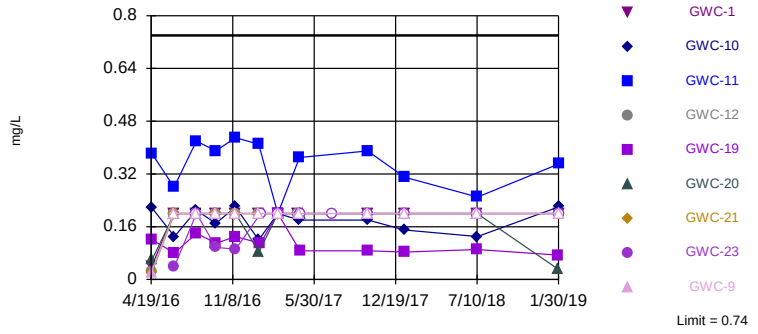
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 120 background values. 73.33% NDs. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Fluoride Analysis Run 5/15/2019 11:28 AM

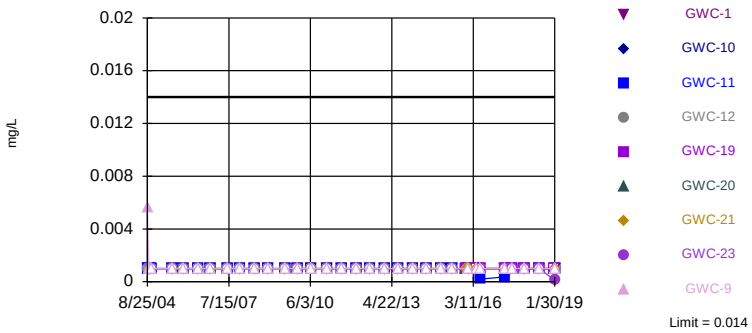
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 204 background values. 97.55% NDs. Annual per-constituent alpha = 0.0008845. Individual comparison alpha = 0.00004916 (1 of 2). Comparing 9 points to limit.

Constituent: Lead, Total Analysis Run 5/15/2019 11:28 AM

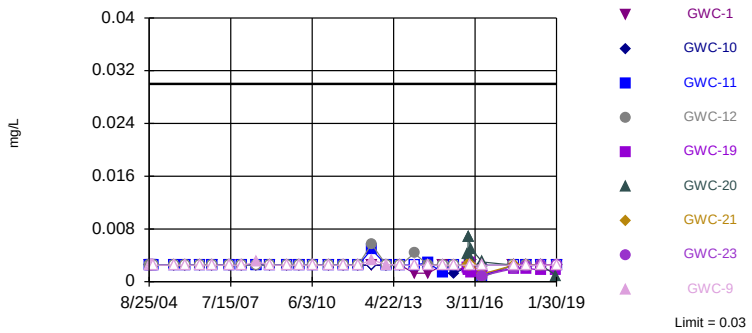
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 184 background values. 79.35% NDs. Annual per-constituent alpha = 0.001048. Individual comparison alpha = 0.00005827 (1 of 2). Comparing 9 points to limit.

Constituent: Nickel, Total Analysis Run 5/15/2019 11:28 AM

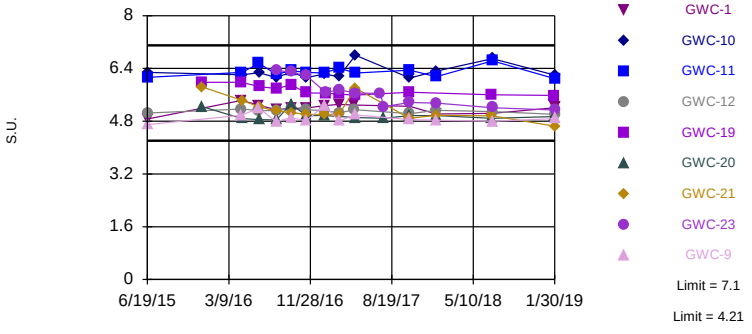
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 130 background values. Annual per-constituent alpha = 0.004211. Individual comparison alpha = 0.0002342 (1 of 2). Comparing 9 points to limit.

Constituent: pH Analysis Run 5/15/2019 11:28 AM

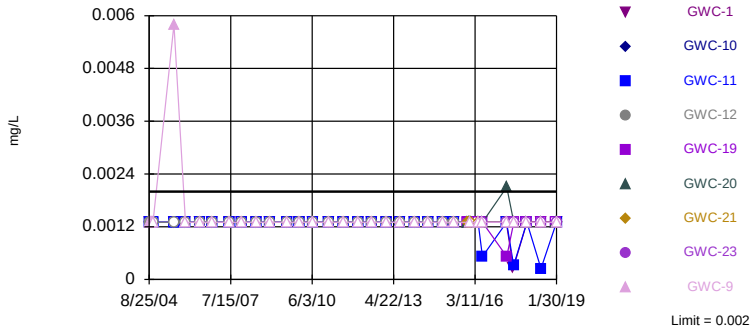
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 204 background values. 94.12% NDs. Annual per-constituent alpha = 0.0008845. Individual comparison alpha = 0.00004916 (1 of 2). Comparing 9 points to limit.

Constituent: Selenium Analysis Run 5/15/2019 11:28 AM

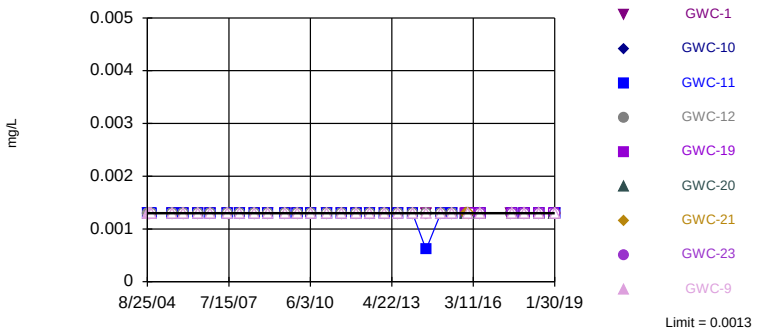
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 184) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.001048. Individual comparison alpha = 0.00005827 (1 of 2). Comparing 9 points to limit.

Constituent: Silver, Total Analysis Run 5/16/2019 1:50 PM

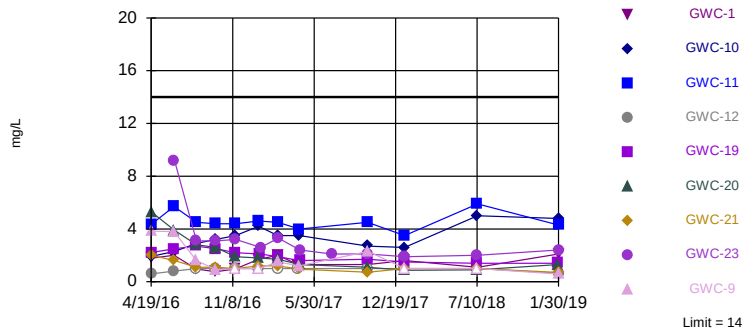
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 120 background values. 47.5% NDs. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Sulfate Analysis Run 5/16/2019 1:50 PM

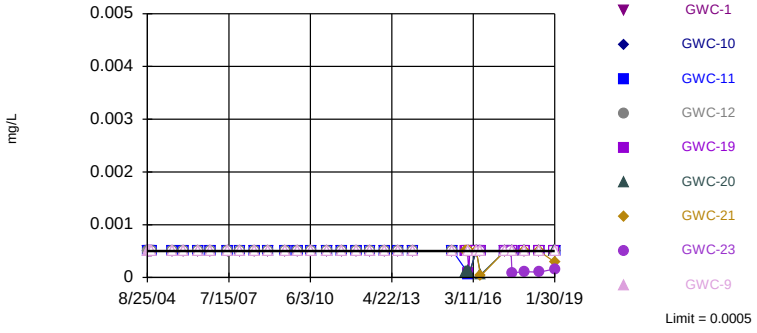
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 196 background values. 89.29% NDs. Annual per-constituent alpha = 0.0009254. Individual comparison alpha = 0.00005144 (1 of 2). Comparing 9 points to limit.

Constituent: Thallium Analysis Run 5/16/2019 1:50 PM

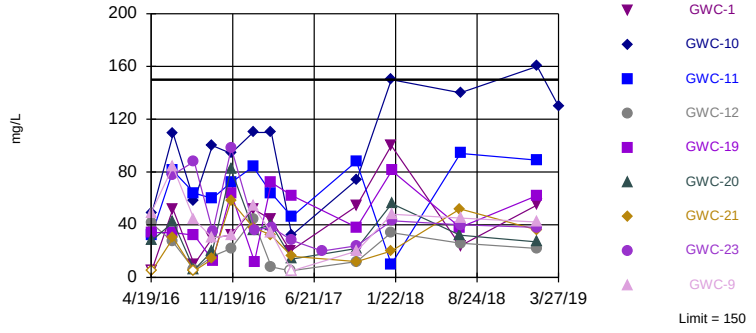
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 120 background values. 14.17% NDs. Annual per-constituent alpha = 0.002422. Individual comparison alpha = 0.0001347 (1 of 2). Comparing 9 points to limit.

Constituent: Total Dissolved Solids Analysis Run 5/16/2019 1:50 PM

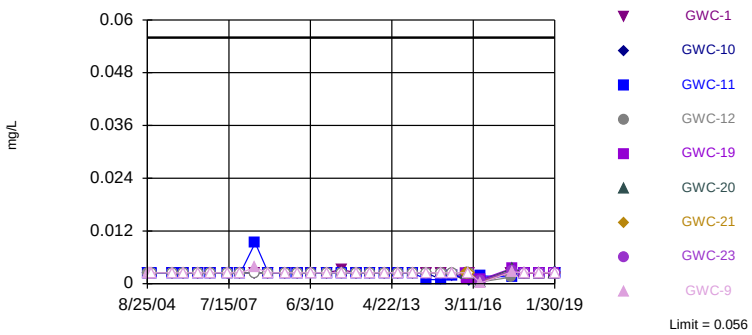
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 184 background values. 85.33% NDs. Annual per-constituent alpha = 0.001048. Individual comparison alpha = 0.00005827 (1 of 2). Comparing 9 points to limit.

Constituent: Vanadium, Total Analysis Run 5/15/2019 11:28 AM

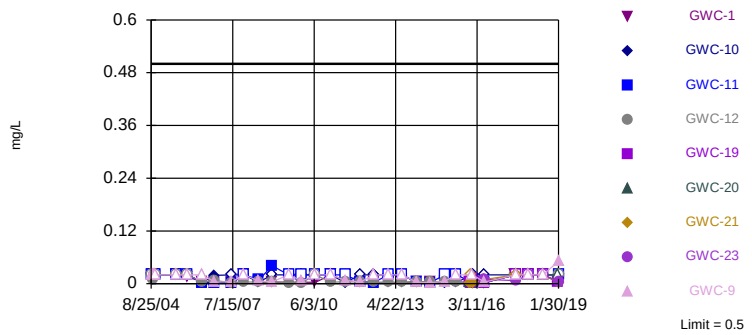
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



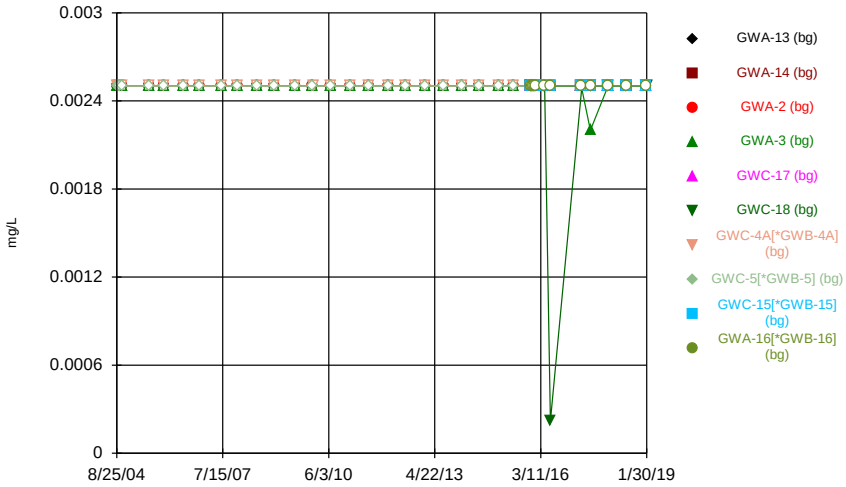
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 184 background values. 33.15% NDs. Annual per-constituent alpha = 0.001048. Individual comparison alpha = 0.00005827 (1 of 2). Comparing 9 points to limit.

Constituent: Zinc, Total Analysis Run 5/15/2019 11:28 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

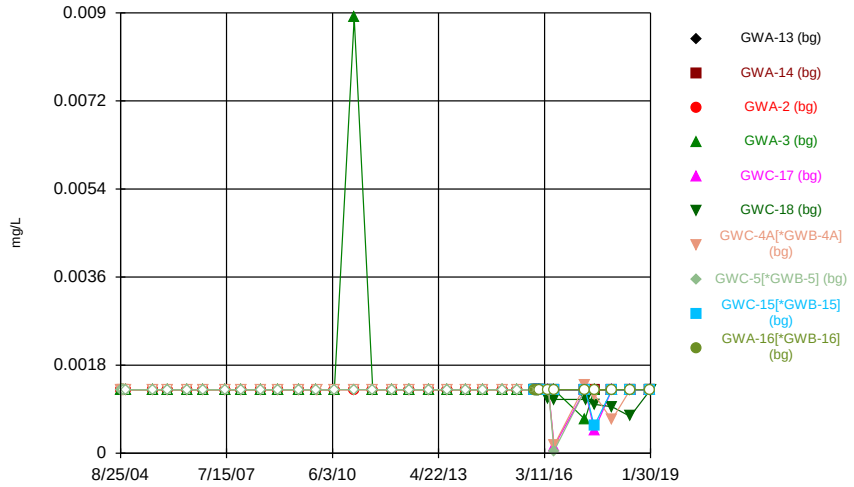
Time Series



Constituent: Antimony Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

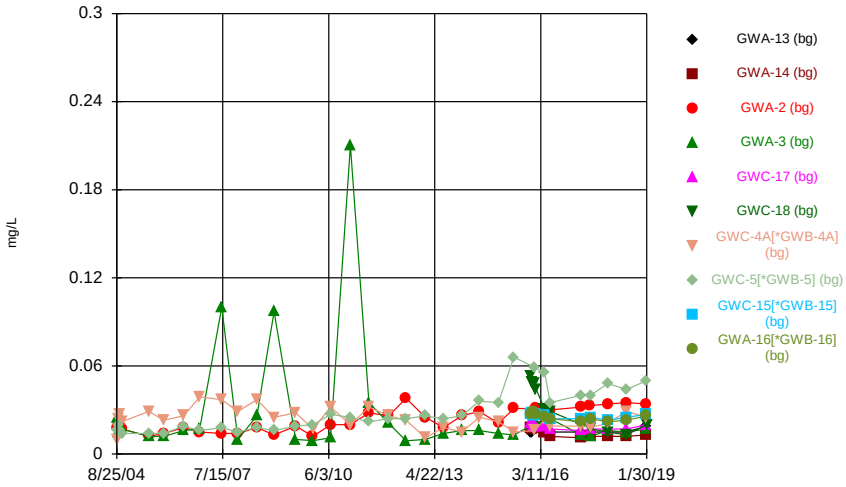
Time Series



Constituent: Arsenic, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

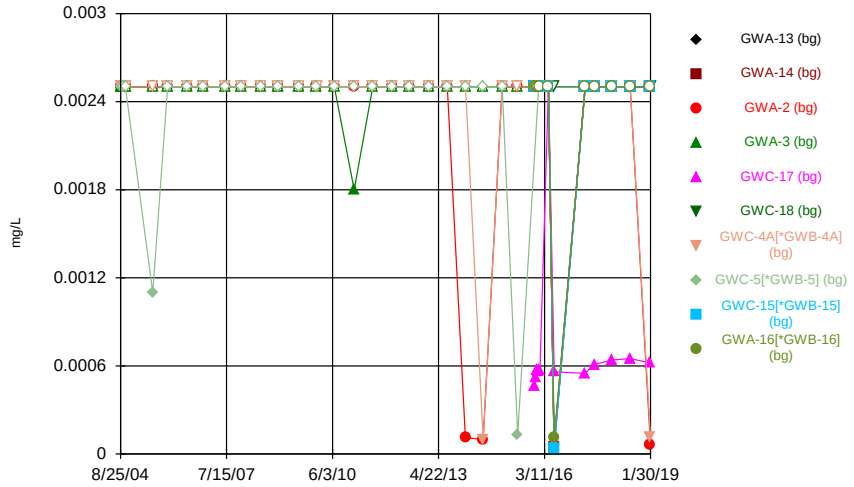
Time Series



Constituent: Barium, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

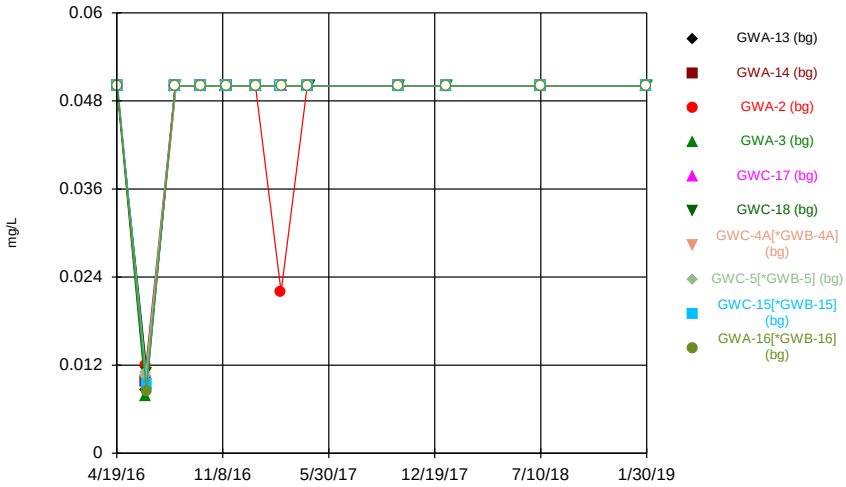
Time Series



Constituent: Beryllium, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

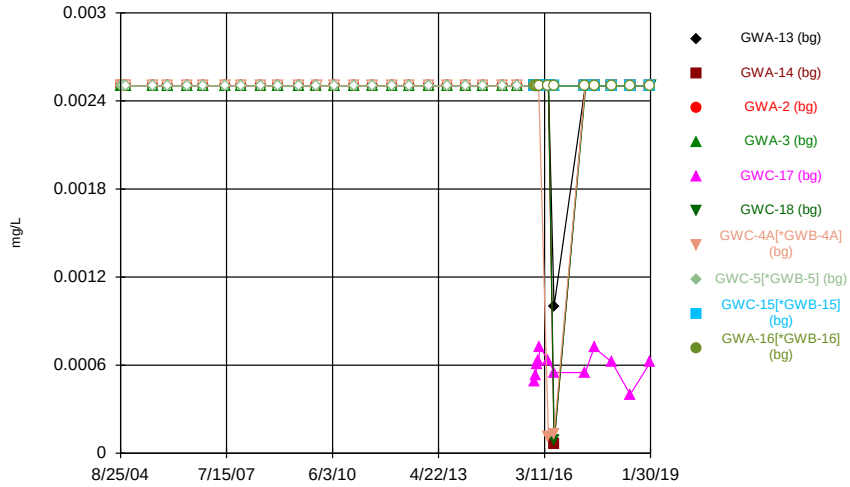
Time Series



Constituent: Boron Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

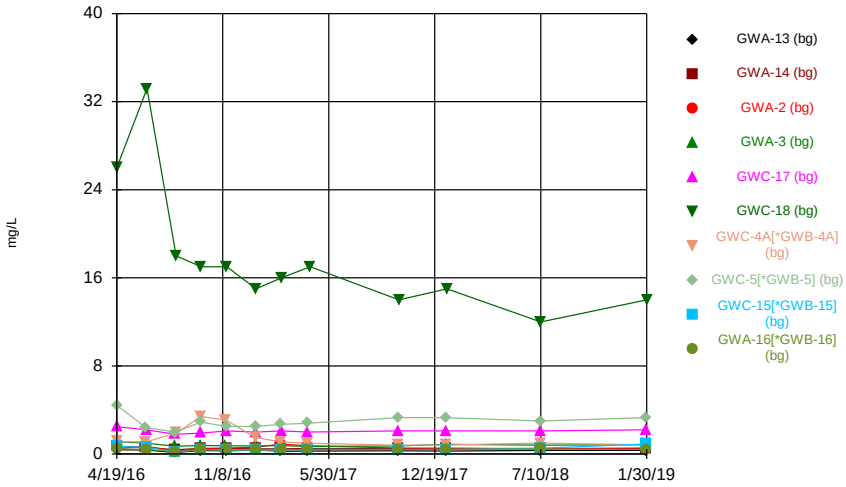
Time Series



Constituent: Cadmium, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

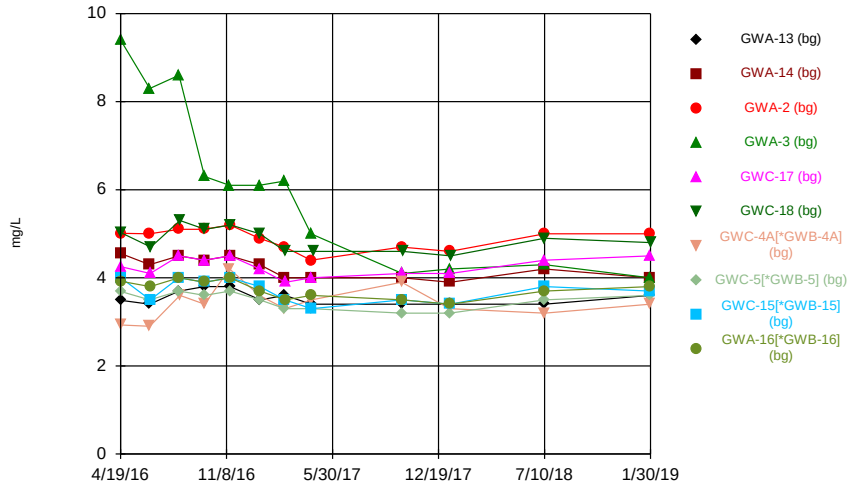
Time Series



Constituent: Calcium Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

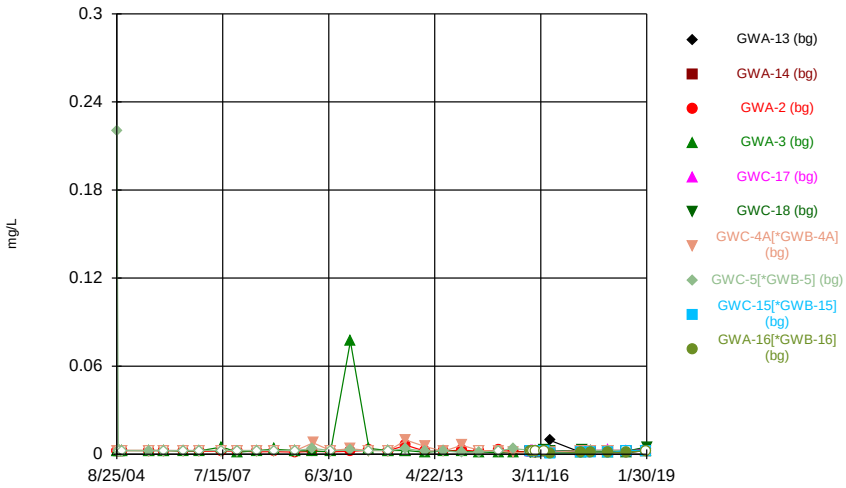
Time Series



Constituent: Chloride Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

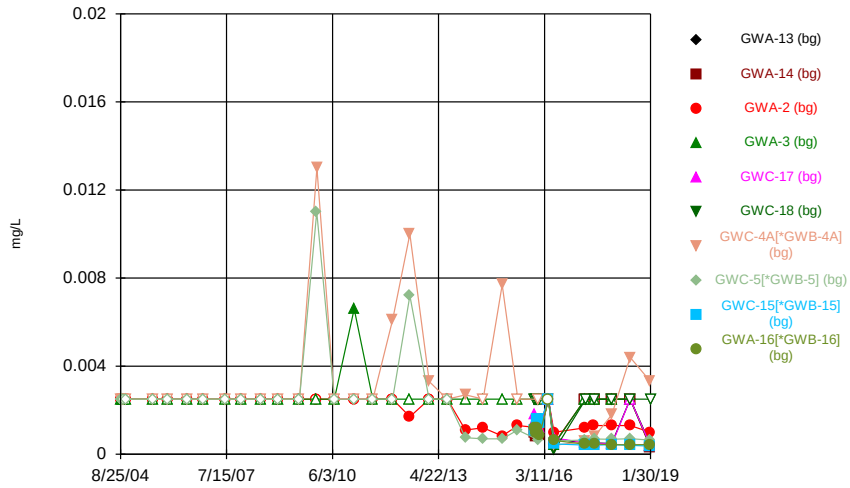
Time Series



Constituent: Chromium, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

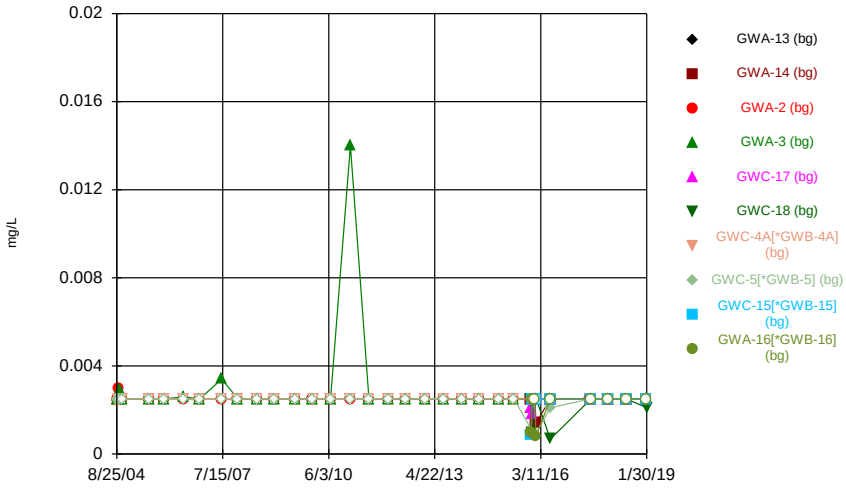
Time Series



Constituent: Cobalt, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

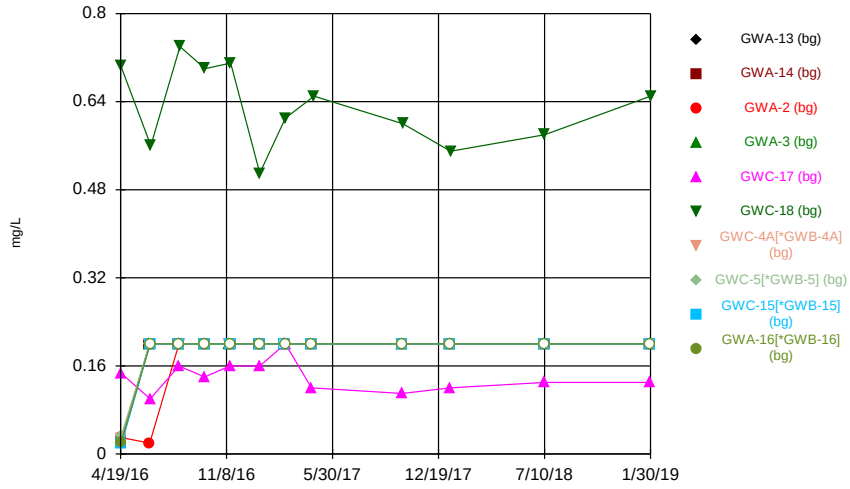
Time Series



Constituent: Copper, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

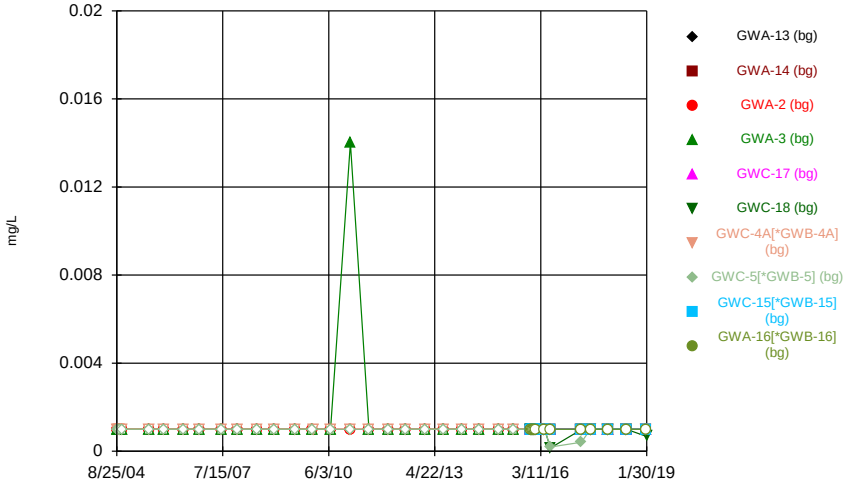
Time Series



Constituent: Fluoride Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

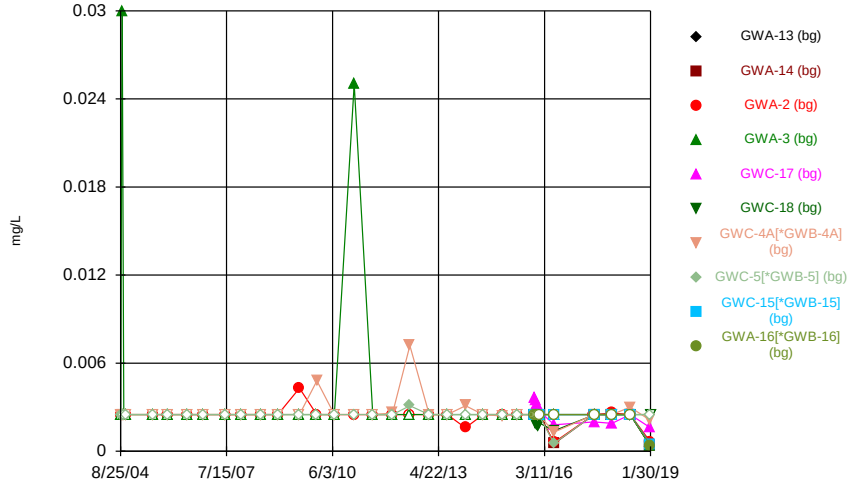
Time Series



Constituent: Lead, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

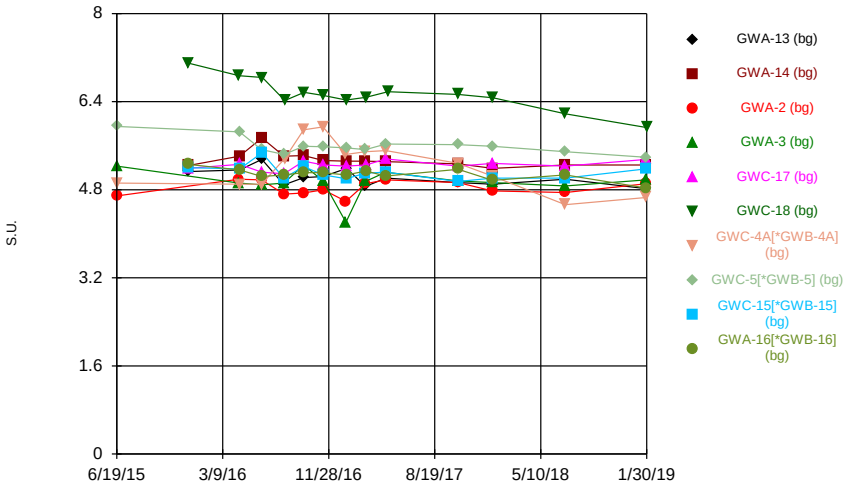
Time Series



Constituent: Nickel, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

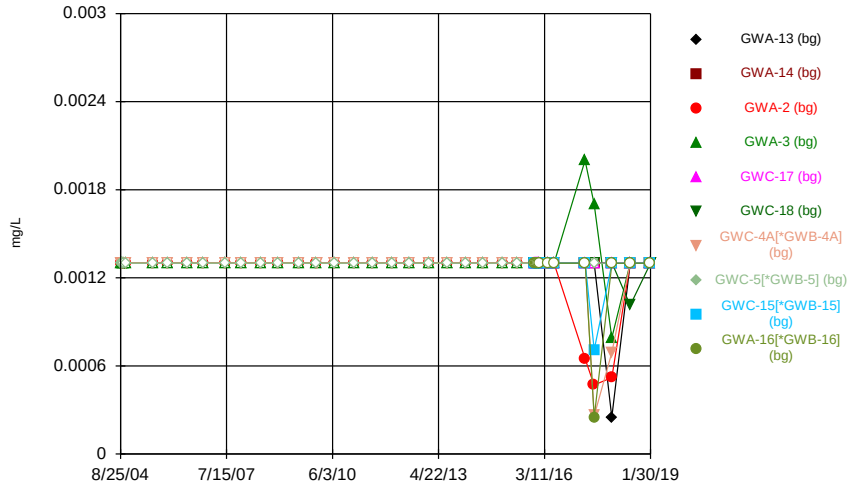
Time Series



Constituent: pH Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

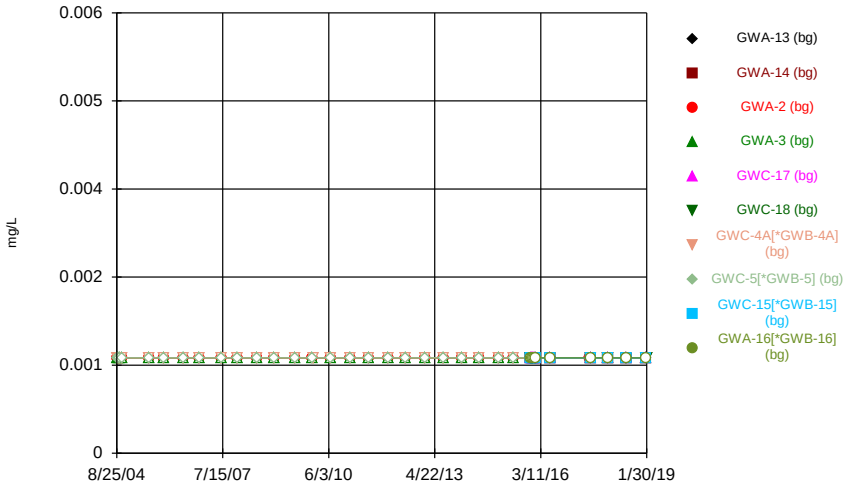
Time Series



Constituent: Selenium Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

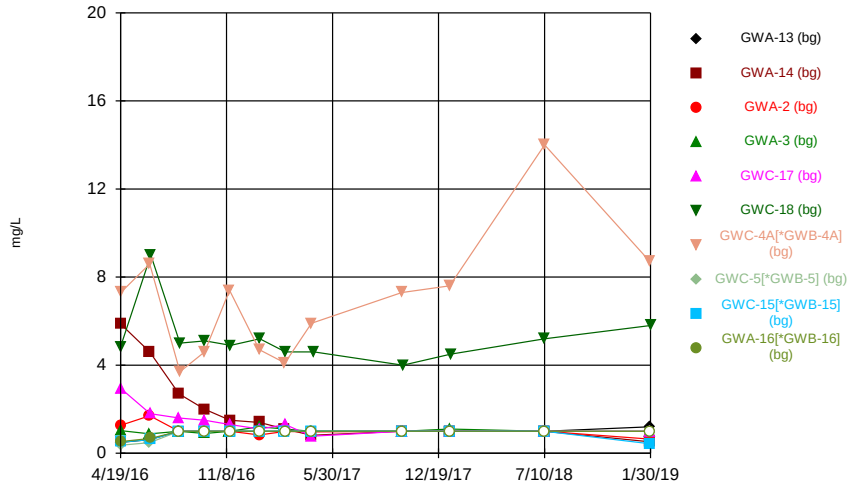
Time Series



Constituent: Silver, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

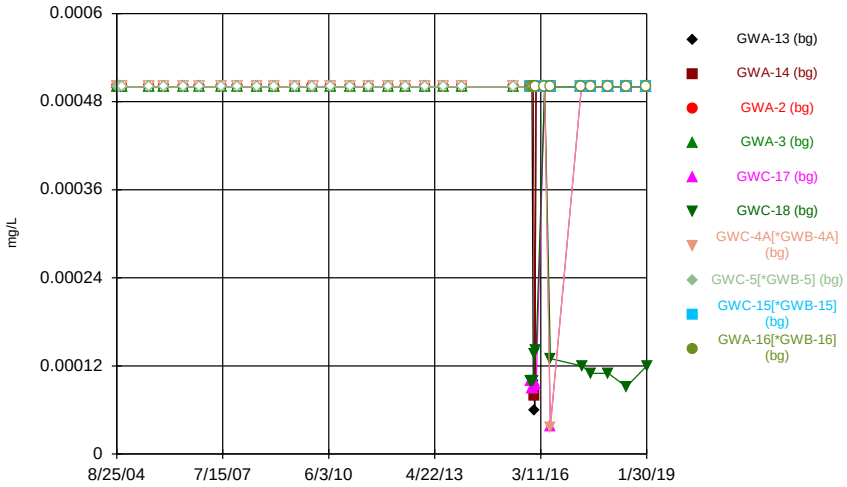
Time Series



Constituent: Sulfate Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

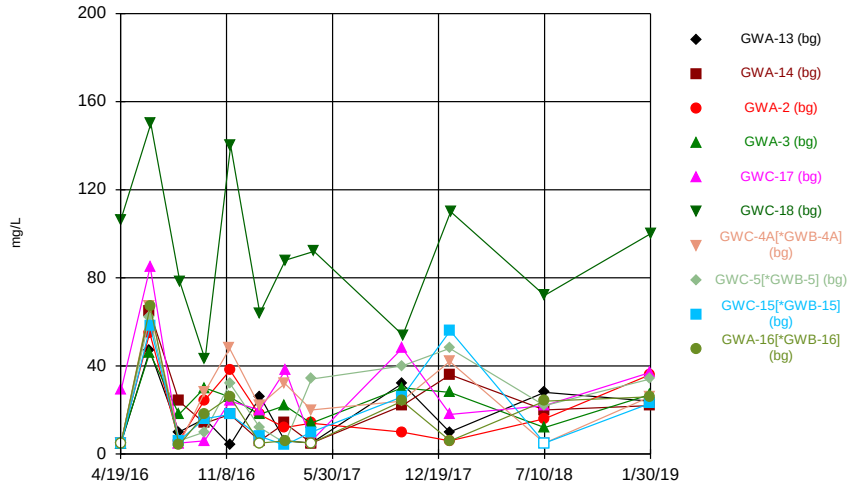
Time Series



Constituent: Thallium Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

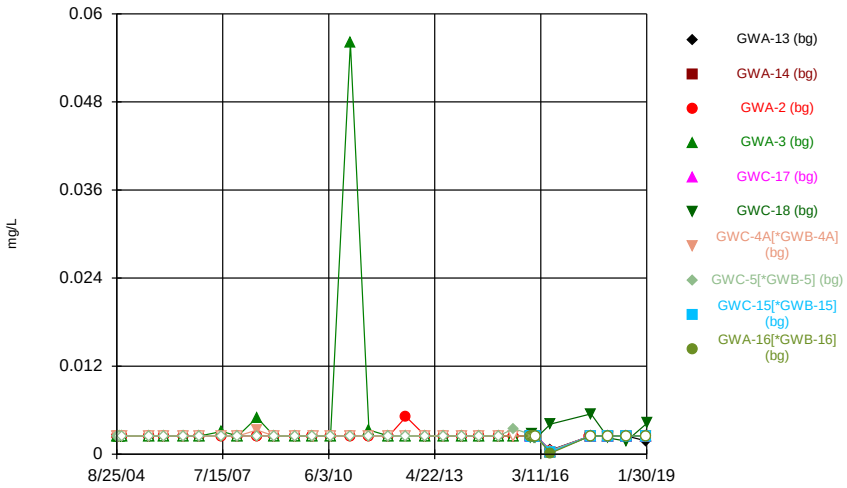
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

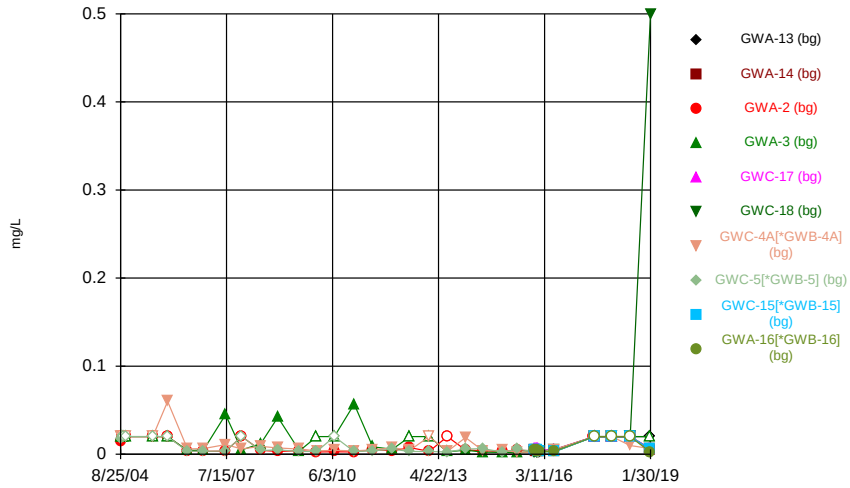
Time Series



Constituent: Vanadium, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

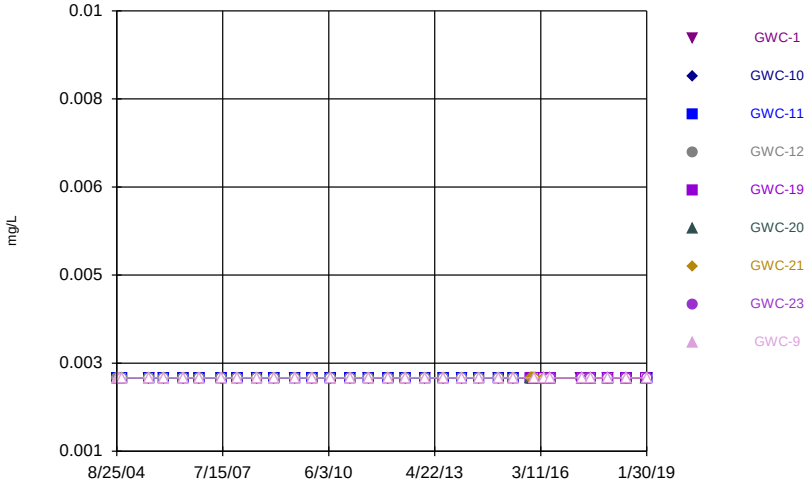
Time Series



Constituent: Zinc, Total Analysis Run 5/15/2019 11:31 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

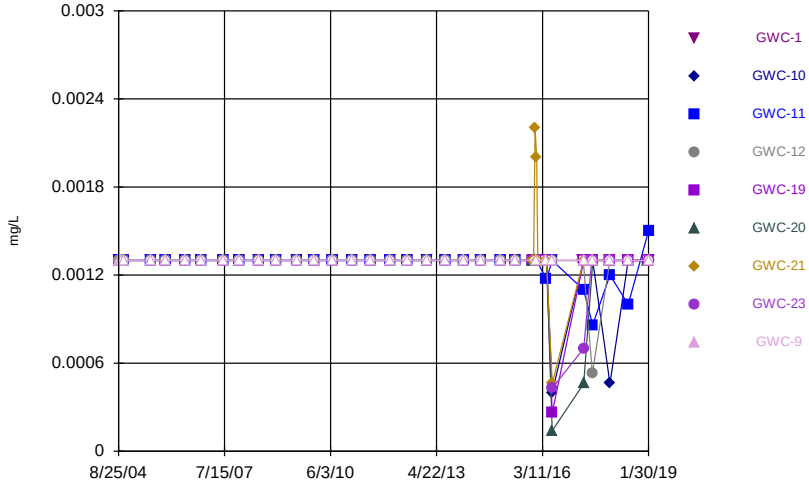
Time Series



Constituent: Antimony Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

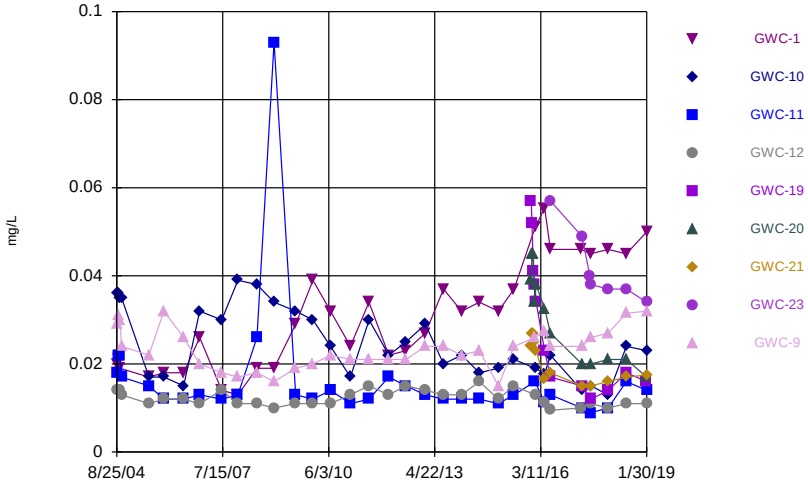
Time Series



Constituent: Arsenic, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

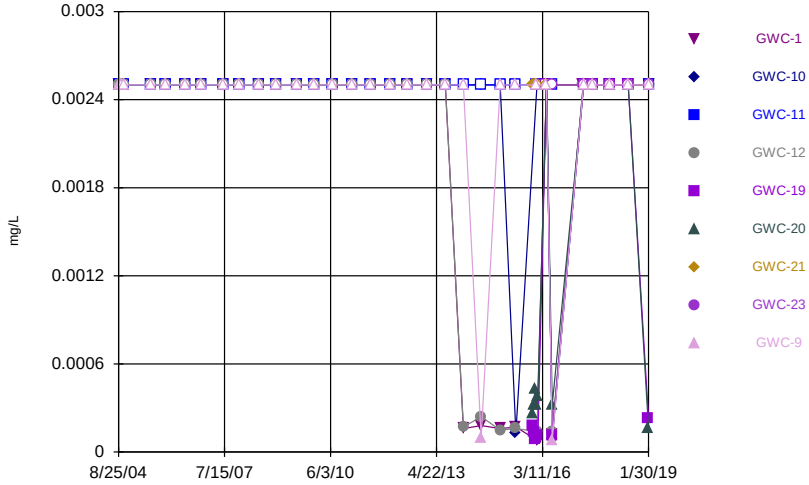
Time Series



Constituent: Barium, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

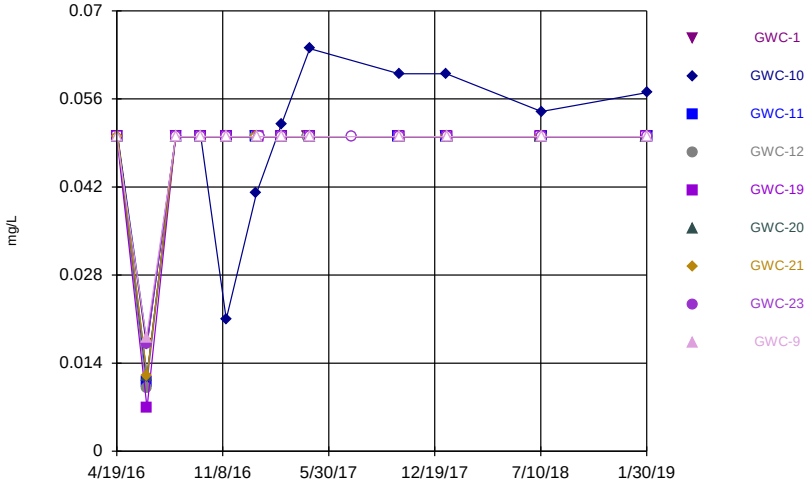
Time Series



Constituent: Beryllium, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

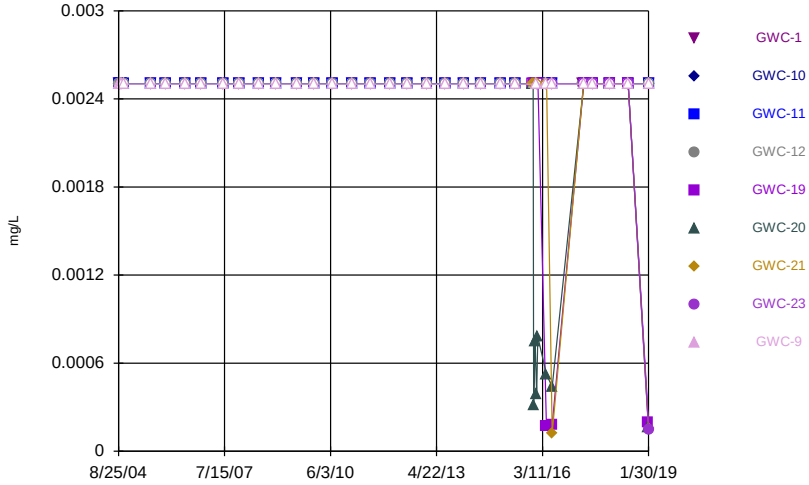
Time Series



Constituent: Boron Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

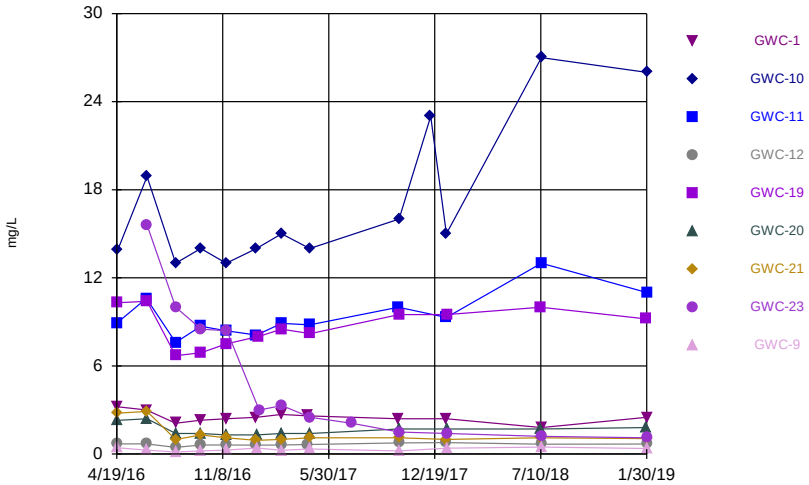
Time Series



Constituent: Cadmium, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

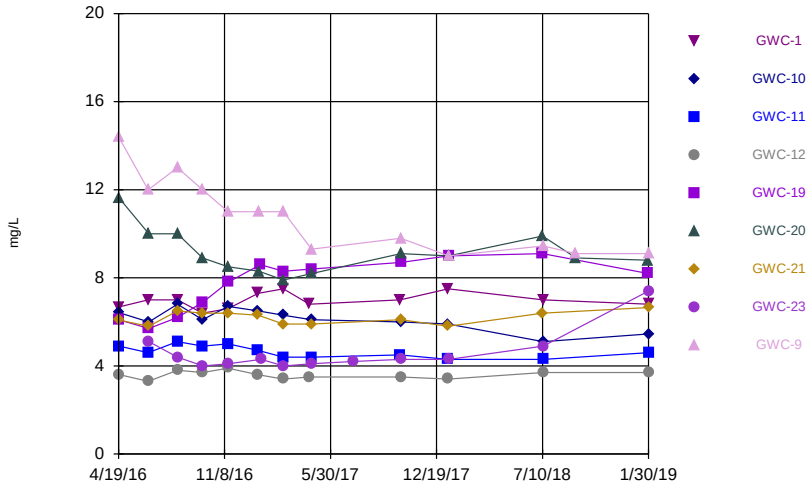
Time Series



Constituent: Calcium Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

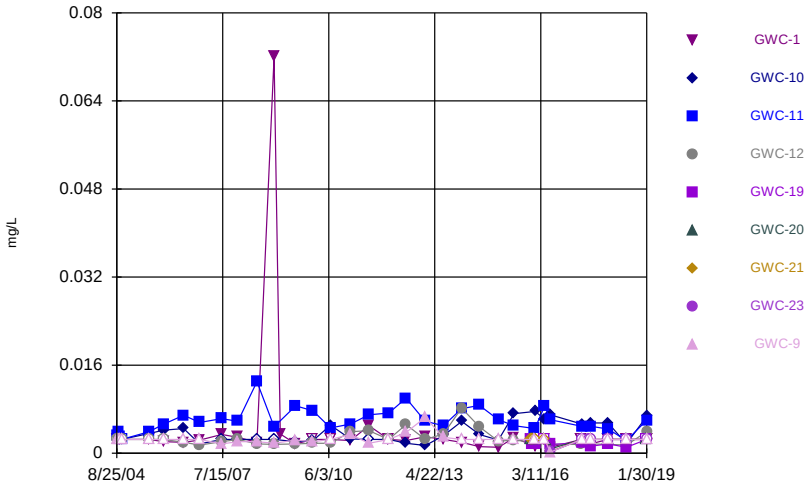
Time Series



Constituent: Chloride Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

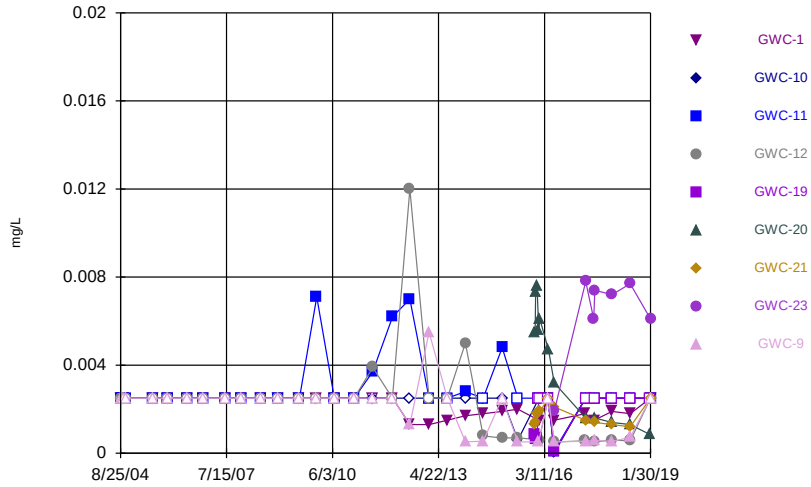
Time Series



Constituent: Chromium, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

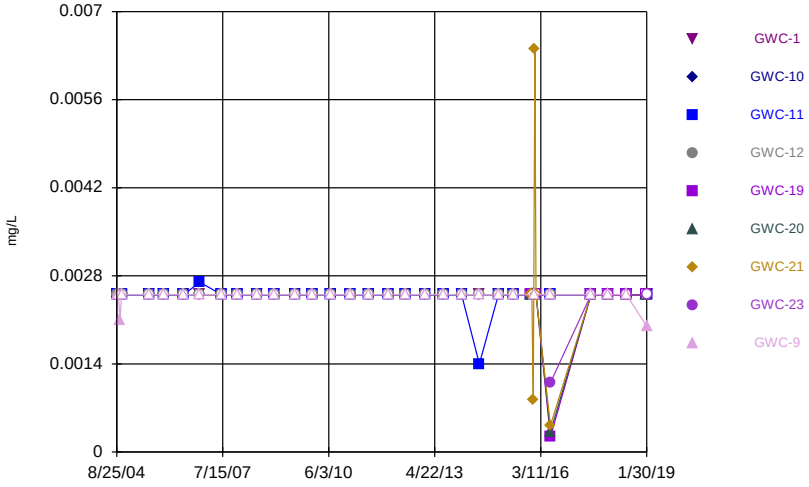
Time Series



Constituent: Cobalt, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

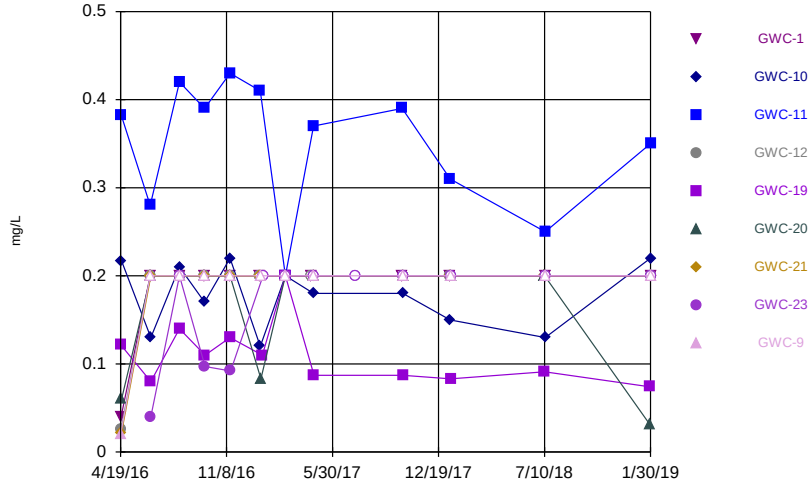
Time Series



Constituent: Copper, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

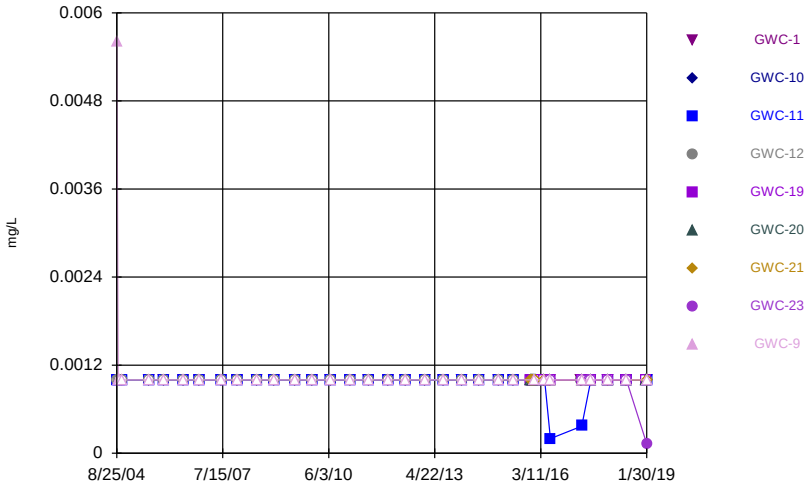
Time Series



Constituent: Fluoride Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

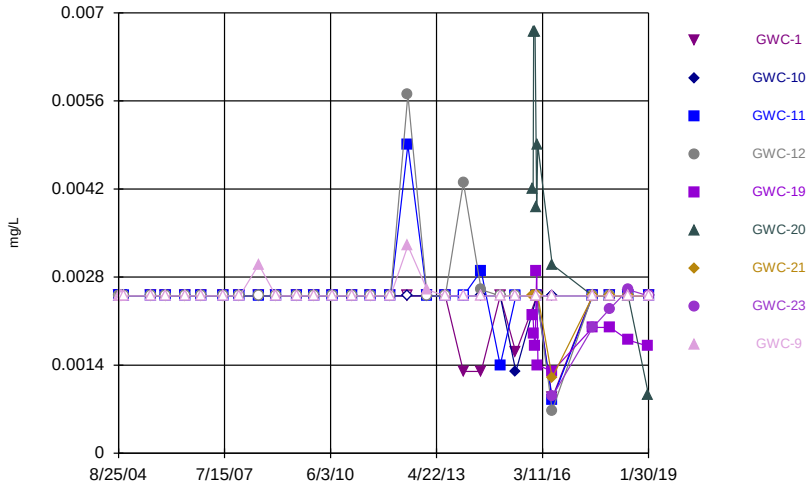
Time Series



Constituent: Lead, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

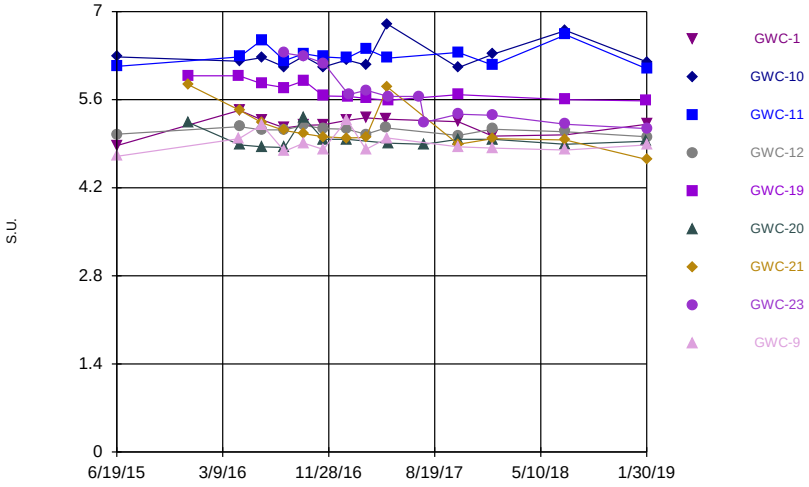
Time Series



Constituent: Nickel, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG

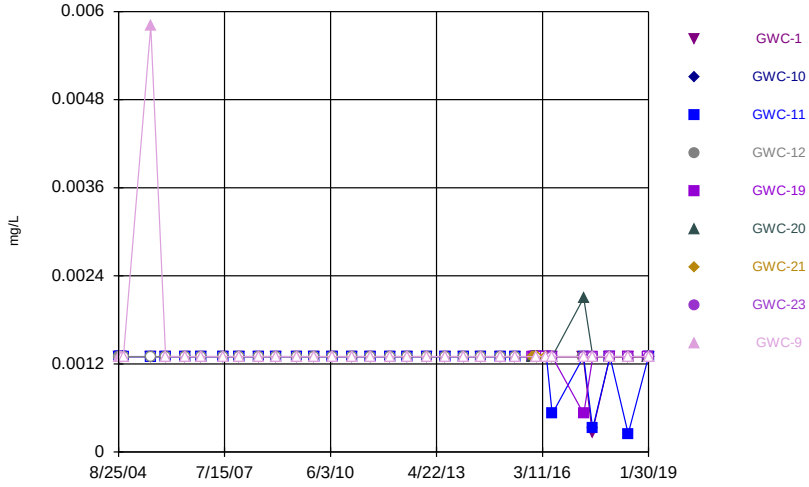
Time Series



Constituent: pH Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

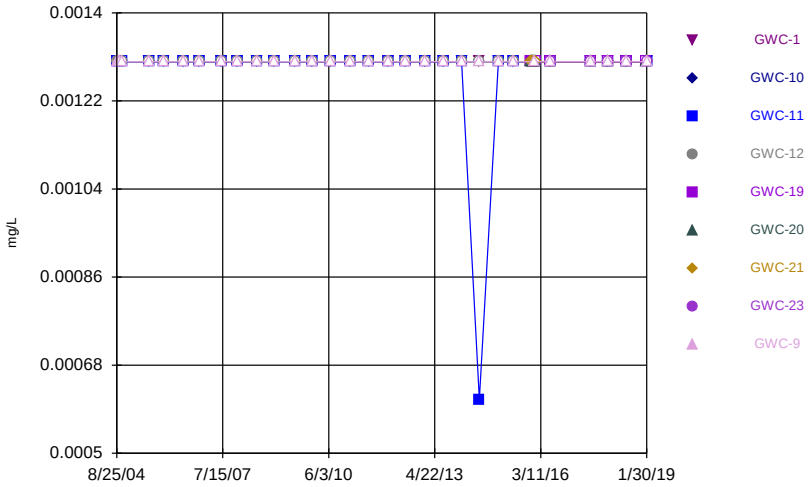
Time Series



Constituent: Selenium Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

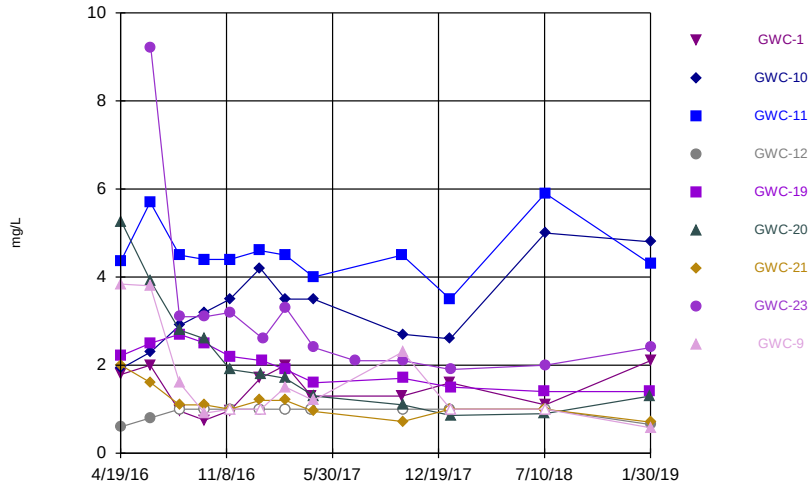
Time Series



Constituent: Silver, Total Analysis Run 5/16/2019 1:53 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

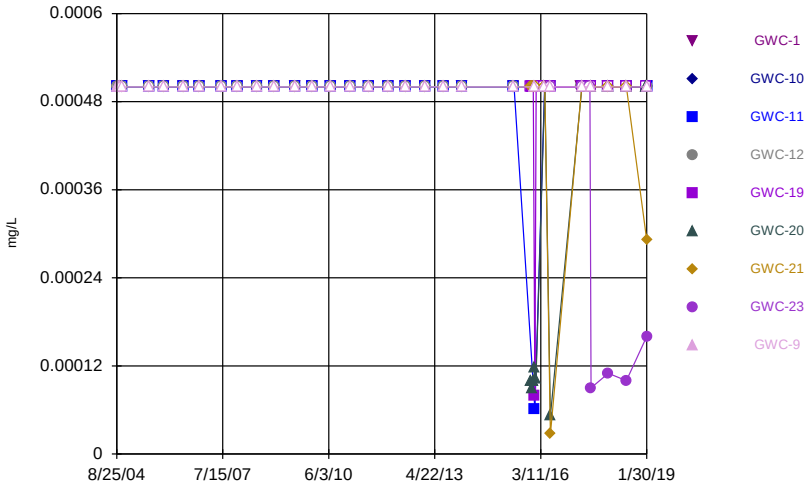
Time Series



Constituent: Sulfate Analysis Run 5/16/2019 1:53 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

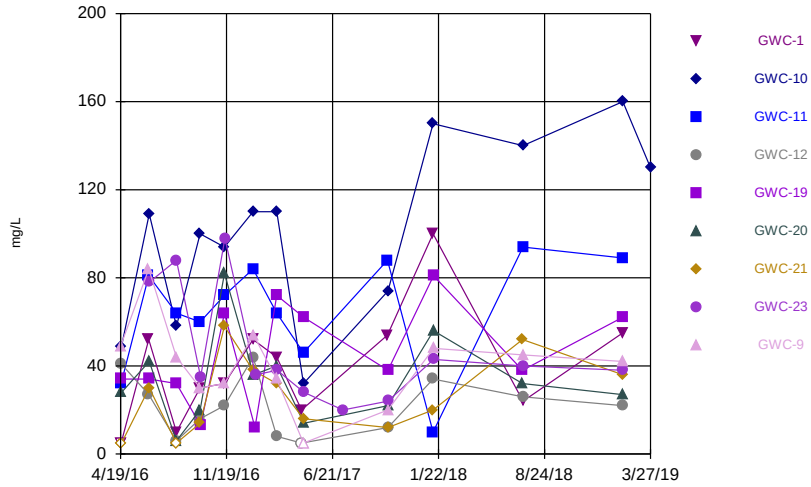
Time Series



Constituent: Thallium Analysis Run 5/16/2019 1:53 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

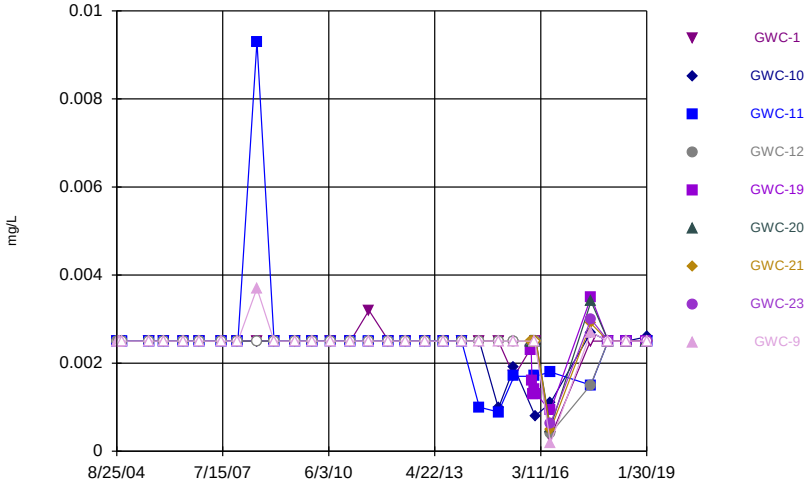
Time Series



Constituent: Total Dissolved Solids Analysis Run 5/16/2019 1:53 PM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

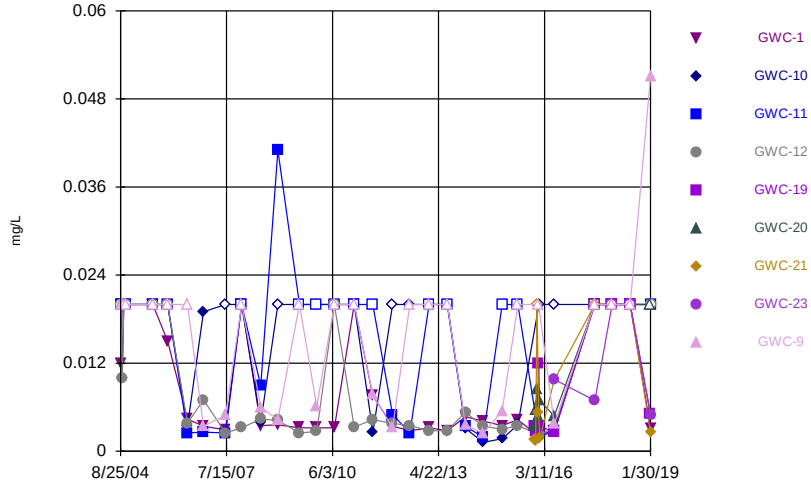
Time Series



Constituent: Vanadium, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.13 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc, Total Analysis Run 5/15/2019 11:34 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:41 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Antimony (mg/L)	GWA-13 (bg)	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWA-14 (bg)	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWA-2 (bg)	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWA-3 (bg)	33	0.002491	0.0000...	0.0000...	0.0025	0.0022	0.0025	96.97
Antimony (mg/L)	GWC-1	32	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-10	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-11	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-12	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-17 (bg)	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-18 (bg)	12	0.00231	0.0006582	0.00019	0.0025	0.00022	0.0025	91.67
Antimony (mg/L)	GWC-19	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-20	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-21	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-23	7	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-9	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-4A[*G...	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-5[*GW...	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-15[*G...	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWA-16[*G...	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Arsenic, Total (mg/L)	GWA-13 (bg)	12	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWA-14 (bg)	12	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWA-2 (bg)	33	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWA-3 (bg)	33	0.001512	0.001331	0.0002316	0.0013	0.00069	0.0089	93.94
Arsenic, Total (mg/L)	GWC-1	32	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWC-10	33	0.001247	0.0002109	0.0000...	0.0013	0.0004	0.0013	93.94
Arsenic, Total (mg/L)	GWC-11	33	0.001271	0.0001064	0.0000...	0.0013	0.00086	0.0015	78.79
Arsenic, Total (mg/L)	GWC-12	33	0.001277	0.000134	0.0000...	0.0013	0.00053	0.0013	96.97
Arsenic, Total (mg/L)	GWC-17 (bg)	12	0.001135	0.0003913	0.000113	0.0013	0.00015	0.0013	83.33
Arsenic, Total (mg/L)	GWC-18 (bg)	12	0.001148	0.0001921	0.0000...	0.00121	0.0007	0.0013	50
Arsenic, Total (mg/L)	GWC-19	12	0.001213	0.0003002	0.0000...	0.0013	0.00026	0.0013	91.67
Arsenic, Total (mg/L)	GWC-20	12	0.001133	0.0003952	0.0001141	0.0013	0.00014	0.0013	83.33
Arsenic, Total (mg/L)	GWC-21	12	0.001363	0.0004218	0.0001218	0.0013	0.00046	0.0022	75
Arsenic, Total (mg/L)	GWC-23	7	0.00109	0.000367	0.0001387	0.0013	0.00043	0.0013	71.43
Arsenic, Total (mg/L)	GWC-9	33	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWC-4A[*G...	33	0.001247	0.0002243	0.0000...	0.0013	0.00016	0.0014	87.88
Arsenic, Total (mg/L)	GWC-5[*GW...	33	0.001262	0.0002176	0.0000...	0.0013	0.00005	0.0013	96.97
Arsenic, Total (mg/L)	GWC-15[*G...	12	0.001238	0.0002136	0.0000...	0.0013	0.00056	0.0013	91.67
Arsenic, Total (mg/L)	GWA-16[*G...	12	0.0013	0	0	0.0013	0.0013	0.0013	100
Barium, Total (mg/L)	GWA-13 (bg)	12	0.0157	0.001331	0.0003842	0.015	0.0144	0.019	0
Barium, Total (mg/L)	GWA-14 (bg)	12	0.01461	0.002933	0.0008468	0.01365	0.011	0.018	0
Barium, Total (mg/L)	GWA-2 (bg)	33	0.02317	0.007817	0.001361	0.02	0.012	0.038	0
Barium, Total (mg/L)	GWA-3 (bg)	30	0.01616	0.005864	0.001071	0.0155	0.009	0.035	0
Barium, Total (mg/L)	GWC-1	32	0.03095	0.01221	0.002158	0.0305	0.013	0.0554	0
Barium, Total (mg/L)	GWC-10	33	0.02487	0.007867	0.001369	0.023	0.013	0.039	0
Barium, Total (mg/L)	GWC-11	32	0.01401	0.003756	0.0006639	0.013	0.0089	0.026	0
Barium, Total (mg/L)	GWC-12	33	0.0123	0.00172	0.0002994	0.012	0.0095	0.016	0
Barium, Total (mg/L)	GWC-17 (bg)	12	0.01857	0.001726	0.0004984	0.0189	0.016	0.021	0
Barium, Total (mg/L)	GWC-18 (bg)	12	0.03223	0.01525	0.004403	0.0299	0.013	0.053	0
Barium, Total (mg/L)	GWC-19	12	0.02808	0.01576	0.00455	0.0205	0.012	0.057	0
Barium, Total (mg/L)	GWC-20	12	0.02996	0.01026	0.002961	0.02975	0.017	0.045	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:41 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Barium, Total (mg/L)	GWC-21	12	0.02004	0.00475	0.001371	0.0175	0.015	0.027	0
Barium, Total (mg/L)	GWC-23	7	0.04171	0.00824	0.003115	0.038	0.034	0.057	0
Barium, Total (mg/L)	GWC-9	33	0.02356	0.004627	0.0008055	0.024	0.015	0.032	0
Barium, Total (mg/L)	GWC-4A[*G...	33	0.0237	0.007088	0.001234	0.0234	0.0096	0.039	0
Barium, Total (mg/L)	GWC-5[*GW...	33	0.02852	0.01442	0.002511	0.024	0.014	0.066	0
Barium, Total (mg/L)	GWC-15[*G...	12	0.02568	0.001503	0.0004338	0.026	0.023	0.028	0
Barium, Total (mg/L)	GWA-16[*G...	12	0.02549	0.002429	0.0007012	0.02595	0.022	0.029	0
Beryllium, Total (mg/L)	GWA-13 (bg)	11	0.002279	0.0007324	0.0002208	0.0025	0.000071	0.0025	90.91
Beryllium, Total (mg/L)	GWA-14 (bg)	12	0.002295	0.000709	0.0002047	0.0025	0.000044	0.0025	91.67
Beryllium, Total (mg/L)	GWA-2 (bg)	33	0.002207	0.0008006	0.0001394	0.0025	0.000063	0.0025	87.88
Beryllium, Total (mg/L)	GWA-3 (bg)	33	0.002404	0.0004429	0.0000771	0.0025	0.000032	0.0025	93.94
Beryllium, Total (mg/L)	GWC-1	32	0.002058	0.000934	0.0001651	0.0025	0.00008	0.0025	81.25
Beryllium, Total (mg/L)	GWC-10	33	0.002355	0.0005797	0.0001009	0.0025	0.000085	0.0025	93.94
Beryllium, Total (mg/L)	GWC-11	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Beryllium, Total (mg/L)	GWC-12	33	0.002076	0.000914	0.0001591	0.0025	0.00014	0.0025	81.82
Beryllium, Total (mg/L)	GWC-17 (bg)	12	0.000...	0.0005586	0.0001612	0.00057	0.00046	0.0025	8.333
Beryllium, Total (mg/L)	GWC-18 (bg)	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Beryllium, Total (mg/L)	GWC-19	12	0.001122	0.001217	0.0003514	0.000205	0.00009	0.0025	41.67
Beryllium, Total (mg/L)	GWC-20	12	0.001224	0.001128	0.0003256	0.000405	0.00016	0.0025	41.67
Beryllium, Total (mg/L)	GWC-21	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Beryllium, Total (mg/L)	GWC-23	7	0.0025	0	0	0.0025	0.0025	0.0025	100
Beryllium, Total (mg/L)	GWC-9	33	0.002354	0.0005843	0.0001017	0.0025	0.000077	0.0025	93.94
Beryllium, Total (mg/L)	GWC-4A[*G...	33	0.002282	0.0007009	0.000122	0.0025	0.000087	0.0025	90.91
Beryllium, Total (mg/L)	GWC-5[*GW...	33	0.002312	0.0006222	0.0001083	0.0025	0.000054	0.0025	90.91
Beryllium, Total (mg/L)	GWC-15[*G...	12	0.002295	0.0007107	0.0002052	0.0025	0.000038	0.0025	91.67
Beryllium, Total (mg/L)	GWA-16[*G...	12	0.002301	0.0006899	0.0001992	0.0025	0.00011	0.0025	91.67
Cadmium, Total (mg/L)	GWA-13 (bg)	12	0.002375	0.000433	0.000125	0.0025	0.001	0.0025	91.67
Cadmium, Total (mg/L)	GWA-14 (bg)	12	0.002297	0.0007038	0.0002032	0.0025	0.000062	0.0025	91.67
Cadmium, Total (mg/L)	GWA-2 (bg)	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWA-3 (bg)	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-1	32	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-10	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-11	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-12	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-17 (bg)	12	0.000...	0.0000...	0.0000...	0.000615	0.0004	0.00072	0
Cadmium, Total (mg/L)	GWC-18 (bg)	12	0.002299	0.0006972	0.0002012	0.0025	0.000085	0.0025	91.67
Cadmium, Total (mg/L)	GWC-19	12	0.001921	0.001048	0.0003025	0.0025	0.00017	0.0025	75
Cadmium, Total (mg/L)	GWC-20	12	0.001321	0.001054	0.0003043	0.000765	0.00016	0.0025	41.67
Cadmium, Total (mg/L)	GWC-21	12	0.002105	0.0009225	0.0002663	0.0025	0.00012	0.0025	83.33
Cadmium, Total (mg/L)	GWC-23	7	0.002164	0.0008882	0.0003357	0.0025	0.00015	0.0025	85.71
Cadmium, Total (mg/L)	GWC-9	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-4A[*G...	33	0.002356	0.0005766	0.0001004	0.0025	0.000111	0.0025	93.94
Cadmium, Total (mg/L)	GWC-5[*GW...	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-15[*G...	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWA-16[*G...	12	0.0025	0	0	0.0025	0.0025	0.0025	100
Calcium (mg/L)	GWA-13 (bg)	12	0.3024	0.06691	0.01932	0.31	0.14	0.389	0
Calcium (mg/L)	GWA-14 (bg)	12	0.5113	0.07565	0.02184	0.5	0.39	0.686	0
Calcium (mg/L)	GWA-2 (bg)	12	0.5696	0.1673	0.04831	0.535	0.24	0.91	0
Calcium (mg/L)	GWA-3 (bg)	12	0.8175	0.1312	0.03786	0.765	0.69	1.13	0
Calcium (mg/L)	GWC-1	12	2.493	0.3739	0.1079	2.45	1.8	3.22	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:41 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Calcium (mg/L)	GWC-10	12	16.65	4.869	1.405	14.5	13	27	0
Calcium (mg/L)	GWC-11	13	9.565	1.494	0.4143	8.94	7.6	13	0
Calcium (mg/L)	GWC-12	12	0.65	0.08571	0.02474	0.66	0.45	0.78	0
Calcium (mg/L)	GWC-17 (bg)	12	2.09	0.1687	0.04871	2.1	1.8	2.48	0
Calcium (mg/L)	GWC-18 (bg)	13	17.4	5.912	1.64	16	12	33.2	0
Calcium (mg/L)	GWC-19	13	8.754	1.233	0.3421	9.1	6.7	10.4	0
Calcium (mg/L)	GWC-20	12	1.649	0.3689	0.1065	1.55	1.3	2.4	0
Calcium (mg/L)	GWC-21	12	1.358	0.6989	0.2017	1.1	0.93	2.9	0
Calcium (mg/L)	GWC-23	12	4.883	4.646	1.341	2.75	1.1	15.6	0
Calcium (mg/L)	GWC-9	12	0.3159	0.1086	0.03135	0.305	0.13	0.49	0
Calcium (mg/L)	GWC-4A[*G...	12	1.471	0.8896	0.2568	1.1	0.8	3.4	0
Calcium (mg/L)	GWC-5[*GW...	12	2.924	0.613	0.1769	2.85	2	4.39	0
Calcium (mg/L)	GWC-15[*G...	12	0.4713	0.1873	0.05408	0.41	0.21	0.91	0
Calcium (mg/L)	GWA-16[*G...	12	0.3918	0.07051	0.02035	0.405	0.19	0.472	0
Chromium, Total (mg/L)	GWA-13 (bg)	11	0.003109	0.002166	0.0006532	0.0025	0.0011	0.0094	72.73
Chromium, Total (mg/L)	GWA-14 (bg)	11	0.002351	0.0004945	0.0001491	0.0025	0.00086	0.0025	90.91
Chromium, Total (mg/L)	GWA-2 (bg)	32	0.002059	0.000495	0.0000...	0.00205	0.0011	0.0029	28.13
Chromium, Total (mg/L)	GWA-3 (bg)	32	0.002158	0.0008737	0.0001545	0.00235	0.00085	0.0049	34.38
Chromium, Total (mg/L)	GWC-1	32	0.002384	0.0007505	0.0001327	0.0025	0.0011	0.005	40.63
Chromium, Total (mg/L)	GWC-10	33	0.003708	0.001862	0.0003241	0.0026	0.0014	0.0076	27.27
Chromium, Total (mg/L)	GWC-11	33	0.005914	0.002243	0.0003905	0.0056	0.0023	0.013	3.03
Chromium, Total (mg/L)	GWC-12	33	0.002648	0.001378	0.0002398	0.0025	0.0015	0.0082	24.24
Chromium, Total (mg/L)	GWC-17 (bg)	11	0.002582	0.0005474	0.000165	0.0025	0.0018	0.0041	45.45
Chromium, Total (mg/L)	GWC-18 (bg)	11	0.002261	0.001001	0.0003017	0.0021	0.0012	0.0049	0
Chromium, Total (mg/L)	GWC-19	11	0.001827	0.0005002	0.0001508	0.0017	0.0011	0.0026	18.18
Chromium, Total (mg/L)	GWC-20	11	0.002345	0.0005126	0.0001545	0.0025	0.0008	0.0025	90.91
Chromium, Total (mg/L)	GWC-21	11	0.002301	0.0006603	0.0001991	0.0025	0.00031	0.0025	90.91
Chromium, Total (mg/L)	GWC-23	7	0.002176	0.000858	0.0003243	0.0025	0.00023	0.0025	85.71
Chromium, Total (mg/L)	GWC-9	33	0.002525	0.0009013	0.0001569	0.0025	0.00021	0.0065	63.64
Chromium, Total (mg/L)	GWC-4A[*G...	33	0.002942	0.001765	0.0003072	0.0025	0.0011	0.0096	66.67
Chromium, Total (mg/L)	GWC-5[*GW...	32	0.002441	0.0006329	0.0001119	0.0025	0.0011	0.004	65.63
Chromium, Total (mg/L)	GWC-15[*G...	11	0.001991	0.0007162	0.0002159	0.0025	0.0008	0.0025	63.64
Chromium, Total (mg/L)	GWA-16[*G...	11	0.001911	0.0007015	0.0002115	0.0025	0.00072	0.0025	54.55
Cobalt, Total (mg/L)	GWA-13 (bg)	12	0.001099	0.0007172	0.000207	0.00097	0.00043	0.0025	16.67
Cobalt, Total (mg/L)	GWA-14 (bg)	12	0.001487	0.0009174	0.0002648	0.001	0.00029	0.0025	41.67
Cobalt, Total (mg/L)	GWA-2 (bg)	33	0.002028	0.0006464	0.0001125	0.0025	0.00083	0.0025	63.64
Cobalt, Total (mg/L)	GWA-3 (bg)	33	0.002497	0.0008957	0.0001559	0.0025	0.00035	0.0066	90.91
Cobalt, Total (mg/L)	GWC-1	32	0.002156	0.0004464	0.0000...	0.0025	0.0013	0.0025	59.38
Cobalt, Total (mg/L)	GWC-10	33	0.002367	0.000537	0.0000...	0.0025	0.00001	0.0025	93.94
Cobalt, Total (mg/L)	GWC-11	33	0.002931	0.001386	0.0002414	0.0025	0.00011	0.0071	78.79
Cobalt, Total (mg/L)	GWC-12	33	0.002392	0.002017	0.0003511	0.0025	0.00051	0.012	63.64
Cobalt, Total (mg/L)	GWC-17 (bg)	12	0.001251	0.0007589	0.0002191	0.00125	0.00038	0.0025	16.67
Cobalt, Total (mg/L)	GWC-18 (bg)	12	0.002306	0.0006726	0.0001942	0.0025	0.00017	0.0025	91.67
Cobalt, Total (mg/L)	GWC-19	12	0.001854	0.0009708	0.0002802	0.0025	0.000067	0.0025	66.67
Cobalt, Total (mg/L)	GWC-20	12	0.003893	0.002515	0.0007261	0.00394	0.00084	0.0076	0
Cobalt, Total (mg/L)	GWC-21	12	0.001725	0.0004555	0.0001315	0.00165	0.0012	0.0025	16.67
Cobalt, Total (mg/L)	GWC-23	7	0.006314	0.002068	0.0007818	0.0072	0.0019	0.0078	0
Cobalt, Total (mg/L)	GWC-9	33	0.002025	0.001075	0.0001872	0.0025	0.00051	0.0055	66.67
Cobalt, Total (mg/L)	GWC-4A[*G...	33	0.00323	0.002533	0.000441	0.0025	0.0004	0.013	63.64
Cobalt, Total (mg/L)	GWC-5[*GW...	33	0.002305	0.002003	0.0003486	0.0025	0.0006	0.011	60.61

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:41 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Cobalt, Total (mg/L)	GWC-15[*G...	12	0.000...	0.0006864	0.0001982	0.000785	0.00037	0.0025	8.333
Cobalt, Total (mg/L)	GWA-16[*G...	12	0.000...	0.0005933	0.0001713	0.00076	0.00043	0.0025	8.333
Copper, Total (mg/L)	GWA-13 (bg)	10	0.0025	0	0	0.0025	0.0025	0.0025	100
Copper, Total (mg/L)	GWA-14 (bg)	10	0.00239	0.0003479	0.00011	0.0025	0.0014	0.0025	90
Copper, Total (mg/L)	GWA-2 (bg)	31	0.002516	0.0000898	0.0000...	0.0025	0.0025	0.003	96.77
Copper, Total (mg/L)	GWA-3 (bg)	31	0.002916	0.002064	0.0003708	0.0025	0.0025	0.014	87.1
Copper, Total (mg/L)	GWC-1	30	0.0025	0	0	0.0025	0.0025	0.0025	100
Copper, Total (mg/L)	GWC-10	31	0.0025	0	0	0.0025	0.0025	0.0025	100
Copper, Total (mg/L)	GWC-11	31	0.002471	0.000202	0.0000...	0.0025	0.0014	0.0027	93.55
Copper, Total (mg/L)	GWC-12	31	0.0025	0	0	0.0025	0.0025	0.0025	100
Copper, Total (mg/L)	GWC-17 (bg)	10	0.00239	0.0002424	0.0000...	0.0025	0.0018	0.0025	80
Copper, Total (mg/L)	GWC-18 (bg)	10	0.002124	0.0007016	0.0002219	0.0025	0.00068	0.0025	70
Copper, Total (mg/L)	GWC-19	10	0.002274	0.0007147	0.000226	0.0025	0.00024	0.0025	90
Copper, Total (mg/L)	GWC-20	10	0.002282	0.0006894	0.000218	0.0025	0.00032	0.0025	90
Copper, Total (mg/L)	GWC-21	10	0.002514	0.001576	0.0004984	0.0025	0.00042	0.0064	70
Copper, Total (mg/L)	GWC-23	5	0.00222	0.0006261	0.00028	0.0025	0.0011	0.0025	80
Copper, Total (mg/L)	GWC-9	31	0.002471	0.0001131	0.0000...	0.0025	0.002	0.0025	93.55
Copper, Total (mg/L)	GWC-4A[*G...	31	0.002494	0.0000...	0.0000...	0.0025	0.0023	0.0025	96.77
Copper, Total (mg/L)	GWC-5[*GW...	31	0.002434	0.0003043	0.0000...	0.0025	0.00084	0.0025	93.55
Copper, Total (mg/L)	GWC-15[*G...	10	0.002334	0.0005249	0.000166	0.0025	0.00084	0.0025	90
Copper, Total (mg/L)	GWA-16[*G...	10	0.002181	0.000674	0.0002131	0.0025	0.00081	0.0025	80
Lead, Total (mg/L)	GWA-13 (bg)	12	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWA-14 (bg)	12	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWA-2 (bg)	33	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWA-3 (bg)	33	0.001394	0.002263	0.0003939	0.001	0.001	0.014	96.97
Lead, Total (mg/L)	GWC-1	32	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWC-10	33	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWC-11	33	0.000...	0.0001745	0.0000...	0.001	0.0002	0.001	93.94
Lead, Total (mg/L)	GWC-12	33	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWC-17 (bg)	12	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWC-18 (bg)	12	0.000...	0.000255	0.0000...	0.001	0.00015	0.001	83.33
Lead, Total (mg/L)	GWC-19	12	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWC-20	12	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWC-21	12	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWC-23	7	0.000...	0.0003288	0.0001243	0.001	0.00013	0.001	85.71
Lead, Total (mg/L)	GWC-9	33	0.001139	0.0008008	0.0001394	0.001	0.001	0.0056	96.97
Lead, Total (mg/L)	GWC-4A[*G...	33	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWC-5[*GW...	33	0.000...	0.0001718	0.0000...	0.001	0.00019	0.001	93.94
Lead, Total (mg/L)	GWC-15[*G...	12	0.001	0	0	0.001	0.001	0.001	100
Lead, Total (mg/L)	GWA-16[*G...	12	0.001	0	0	0.001	0.001	0.001	100
Nickel, Total (mg/L)	GWA-13 (bg)	10	0.002283	0.0006862	0.000217	0.0025	0.00033	0.0025	90
Nickel, Total (mg/L)	GWA-14 (bg)	10	0.002092	0.0008606	0.0002721	0.0025	0.0004	0.0025	80
Nickel, Total (mg/L)	GWA-2 (bg)	31	0.002411	0.0006033	0.0001084	0.0025	0.0006	0.0043	83.87
Nickel, Total (mg/L)	GWA-3 (bg)	29	0.002426	0.0004011	0.0000...	0.0025	0.00034	0.0025	96.55
Nickel, Total (mg/L)	GWC-1	30	0.002336	0.0004358	0.0000...	0.0025	0.00088	0.0025	86.67
Nickel, Total (mg/L)	GWC-10	31	0.002461	0.0002155	0.0000...	0.0025	0.0013	0.0025	96.77
Nickel, Total (mg/L)	GWC-11	31	0.002502	0.0005731	0.0001029	0.0025	0.00085	0.0049	87.1
Nickel, Total (mg/L)	GWC-12	31	0.002606	0.0007406	0.000133	0.0025	0.00068	0.0057	87.1
Nickel, Total (mg/L)	GWC-17 (bg)	10	0.00257	0.0007273	0.00023	0.0026	0.0016	0.0036	10
Nickel, Total (mg/L)	GWC-18 (bg)	10	0.00212	0.0004237	0.000134	0.0022	0.0014	0.0025	50

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:41 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Nickel, Total (mg/L)	GWC-19	10	0.00189	0.0004483	0.0001418	0.00185	0.0013	0.0029	0
Nickel, Total (mg/L)	GWC-20	10	0.003783	0.00189	0.0005976	0.00345	0.00093	0.0067	30
Nickel, Total (mg/L)	GWC-21	10	0.00237	0.0004111	0.00013	0.0025	0.0012	0.0025	90
Nickel, Total (mg/L)	GWC-23	5	0.00206	0.0006877	0.0003076	0.0023	0.0009	0.0026	20
Nickel, Total (mg/L)	GWC-9	31	0.002545	0.000167	0.00003	0.0025	0.0025	0.0033	90.32
Nickel, Total (mg/L)	GWC-4A[*G...	31	0.00271	0.0009703	0.0001743	0.0025	0.0013	0.0072	70.97
Nickel, Total (mg/L)	GWC-5[*GW...	31	0.002456	0.0003716	0.0000...	0.0025	0.00054	0.0031	93.55
Nickel, Total (mg/L)	GWC-15[*G...	10	0.002296	0.0006451	0.000204	0.0025	0.00046	0.0025	90
Nickel, Total (mg/L)	GWA-16[*G...	10	0.00229	0.0006641	0.00021	0.0025	0.0004	0.0025	90
Selenium (mg/L)	GWA-13 (bg)	12	0.001213	0.0003031	0.0000875	0.0013	0.00025	0.0013	91.67
Selenium (mg/L)	GWA-14 (bg)	12	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWA-2 (bg)	33	0.001232	0.0002211	0.0000385	0.0013	0.00047	0.0013	90.91
Selenium (mg/L)	GWA-3 (bg)	33	0.001318	0.0001677	0.0000...	0.0013	0.00079	0.002	90.91
Selenium (mg/L)	GWC-1	32	0.001268	0.0001838	0.0000325	0.0013	0.00026	0.0013	96.88
Selenium (mg/L)	GWC-10	33	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-11	33	0.001215	0.0002757	0.0000...	0.0013	0.00025	0.0013	90.91
Selenium (mg/L)	GWC-12	33	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-17 (bg)	12	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-18 (bg)	12	0.001228	0.0002483	0.0000...	0.0013	0.00044	0.0013	91.67
Selenium (mg/L)	GWC-19	12	0.001235	0.0002252	0.000065	0.0013	0.00052	0.0013	91.67
Selenium (mg/L)	GWC-20	12	0.001367	0.0002309	0.0000...	0.0013	0.0013	0.0021	91.67
Selenium (mg/L)	GWC-21	12	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-23	7	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-9	33	0.001436	0.0007833	0.0001364	0.0013	0.0013	0.0058	96.97
Selenium (mg/L)	GWC-4A[*G...	33	0.00125	0.000207	0.0000...	0.0013	0.00026	0.0013	93.94
Selenium (mg/L)	GWC-5[*GW...	33	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-15[*G...	12	0.001251	0.0001703	0.0000...	0.0013	0.00071	0.0013	91.67
Selenium (mg/L)	GWA-16[*G...	12	0.001213	0.0003031	0.0000875	0.0013	0.00025	0.0013	91.67
Silver, Total (mg/L)	GWA-13 (bg)	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWA-14 (bg)	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWA-2 (bg)	31	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWA-3 (bg)	31	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-1	30	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-10	31	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-11	31	0.001278	0.0001239	0.0000...	0.0013	0.00061	0.0013	96.77
Silver, Total (mg/L)	GWC-12	31	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-17 (bg)	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-18 (bg)	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-19	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-20	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-21	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-23	5	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-9	31	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-4A[*G...	31	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-5[*GW...	31	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-15[*G...	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWA-16[*G...	10	0.0013	0	0	0.0013	0.0013	0.0013	100
Thallium (mg/L)	GWA-13 (bg)	12	0.00043	0.0001637	0.0000...	0.0005	0.00006	0.0005	83.33
Thallium (mg/L)	GWA-14 (bg)	12	0.000...	0.0001215	0.0000...	0.0005	0.000079	0.0005	91.67
Thallium (mg/L)	GWA-2 (bg)	31	0.0005	0	0	0.0005	0.0005	0.0005	100

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:41 AM

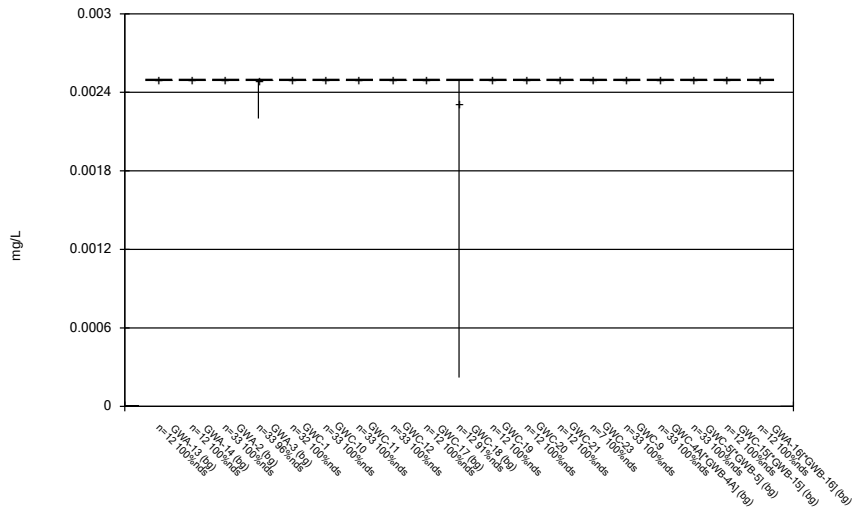
Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Thallium (mg/L)	GWA-3 (bg)	31	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-1	31	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-10	31	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-11	31	0.000...	0.0000...	0.0000...	0.0005	0.000061	0.0005	96.77
Thallium (mg/L)	GWC-12	31	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-17 (bg)	12	0.000...	0.0002171	0.0000...	0.0003	0.000038	0.0005	50
Thallium (mg/L)	GWC-18 (bg)	12	0.000147	0.0001122	0.0000324	0.000115	0.000095	0.0005	8.333
Thallium (mg/L)	GWC-19	12	0.000...	0.0001215	0.0000...	0.0005	0.000079	0.0005	91.67
Thallium (mg/L)	GWC-20	12	0.000...	0.0002127	0.0000...	0.000309	0.000052	0.0005	50
Thallium (mg/L)	GWC-21	12	0.000...	0.0001365	0.0000...	0.0005	0.000027	0.0005	91.67
Thallium (mg/L)	GWC-23	7	0.00028	0.000207	0.0000...	0.00016	0.00009	0.0005	42.86
Thallium (mg/L)	GWC-9	31	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-4A[*G...	31	0.000485	0.0000...	0.0000...	0.0005	0.000036	0.0005	96.77
Thallium (mg/L)	GWC-5[*GW...	31	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-15[*G...	12	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWA-16[*G...	12	0.0005	0	0	0.0005	0.0005	0.0005	100
Vanadium, Total (mg/L)	GWA-13 (bg)	10	0.002235	0.0006316	0.0001997	0.0025	0.00055	0.0025	80
Vanadium, Total (mg/L)	GWA-14 (bg)	10	0.002283	0.0006862	0.000217	0.0025	0.00033	0.0025	90
Vanadium, Total (mg/L)	GWA-2 (bg)	31	0.002517	0.0006054	0.0001087	0.0025	0.00044	0.0051	93.55
Vanadium, Total (mg/L)	GWA-3 (bg)	30	0.002556	0.0006467	0.0001181	0.0025	0.00027	0.005	86.67
Vanadium, Total (mg/L)	GWC-1	30	0.002424	0.0004453	0.0000...	0.0025	0.00031	0.0032	90
Vanadium, Total (mg/L)	GWC-10	31	0.002345	0.0004779	0.0000...	0.0025	0.0008	0.0027	80.65
Vanadium, Total (mg/L)	GWC-11	31	0.002513	0.00134	0.0002406	0.0025	0.00089	0.0093	74.19
Vanadium, Total (mg/L)	GWC-12	31	0.0024	0.0004123	0.0000...	0.0025	0.0004	0.0025	93.55
Vanadium, Total (mg/L)	GWC-17 (bg)	10	0.002297	0.0006419	0.000203	0.0025	0.00047	0.0025	90
Vanadium, Total (mg/L)	GWC-18 (bg)	10	0.00295	0.001231	0.0003894	0.00235	0.0016	0.0055	0
Vanadium, Total (mg/L)	GWC-19	10	0.001982	0.0007995	0.0002528	0.00195	0.00092	0.0035	30
Vanadium, Total (mg/L)	GWC-20	10	0.002394	0.0007102	0.0002246	0.0025	0.00054	0.0034	80
Vanadium, Total (mg/L)	GWC-21	10	0.002338	0.0006648	0.0002102	0.0025	0.00048	0.0029	80
Vanadium, Total (mg/L)	GWC-23	5	0.002226	0.0009181	0.0004106	0.0025	0.00063	0.003	60
Vanadium, Total (mg/L)	GWC-9	31	0.002471	0.0004757	0.0000...	0.0025	0.00019	0.0037	90.32
Vanadium, Total (mg/L)	GWC-4A[*G...	31	0.002454	0.0004283	0.0000...	0.0025	0.00028	0.0033	93.55
Vanadium, Total (mg/L)	GWC-5[*GW...	31	0.002467	0.0004118	0.0000...	0.0025	0.00047	0.0035	93.55
Vanadium, Total (mg/L)	GWC-15[*G...	10	0.00228	0.0006957	0.00022	0.0025	0.0003	0.0025	90
Vanadium, Total (mg/L)	GWA-16[*G...	10	0.002265	0.0007431	0.000235	0.0025	0.00015	0.0025	90
Zinc, Total (mg/L)	GWA-13 (bg)	10	0.00981	0.008786	0.002778	0.0038	0.0022	0.02	40
Zinc, Total (mg/L)	GWA-14 (bg)	10	0.00849	0.007968	0.00252	0.004	0.0028	0.02	30
Zinc, Total (mg/L)	GWA-2 (bg)	31	0.009542	0.007606	0.001366	0.0045	0.0027	0.02	32.26
Zinc, Total (mg/L)	GWA-3 (bg)	28	0.01229	0.008085	0.001528	0.016	0.0019	0.02	50
Zinc, Total (mg/L)	GWC-1	30	0.00862	0.007476	0.001365	0.00385	0.002	0.02	26.67
Zinc, Total (mg/L)	GWC-10	31	0.01576	0.007357	0.001321	0.02	0.0012	0.02	70.97
Zinc, Total (mg/L)	GWC-11	30	0.01448	0.008031	0.001466	0.02	0.0019	0.02	66.67
Zinc, Total (mg/L)	GWC-12	31	0.009077	0.007797	0.0014	0.0042	0.0023	0.02	32.26
Zinc, Total (mg/L)	GWC-17 (bg)	10	0.0099	0.006981	0.002208	0.00585	0.0046	0.02	30
Zinc, Total (mg/L)	GWC-18 (bg)	9	0.008811	0.008446	0.002815	0.0036	0.0017	0.02	33.33
Zinc, Total (mg/L)	GWC-19	10	0.00917	0.007978	0.002523	0.0043	0.0023	0.02	30
Zinc, Total (mg/L)	GWC-20	10	0.0114	0.007515	0.002376	0.00765	0.0035	0.02	40
Zinc, Total (mg/L)	GWC-21	10	0.01022	0.00876	0.00277	0.00745	0.0015	0.02	40
Zinc, Total (mg/L)	GWC-23	5	0.01232	0.007224	0.003231	0.0098	0.0049	0.02	40
Zinc, Total (mg/L)	GWC-9	31	0.01554	0.009954	0.001788	0.02	0.0024	0.051	61.29

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:41 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Zinc, Total (mg/L)	GWC-4A[*G...	30	0.009913	0.006915	0.001262	0.0064	0.0023	0.02	26.67
Zinc, Total (mg/L)	GWC-5[*GW...	31	0.009432	0.007844	0.001409	0.0049	0.0022	0.02	32.26
Zinc, Total (mg/L)	GWC-15[*G...	10	0.00901	0.007631	0.002413	0.0049	0.0028	0.02	30
Zinc, Total (mg/L)	GWA-16[*G...	10	0.00853	0.00794	0.002511	0.004	0.0024	0.02	30

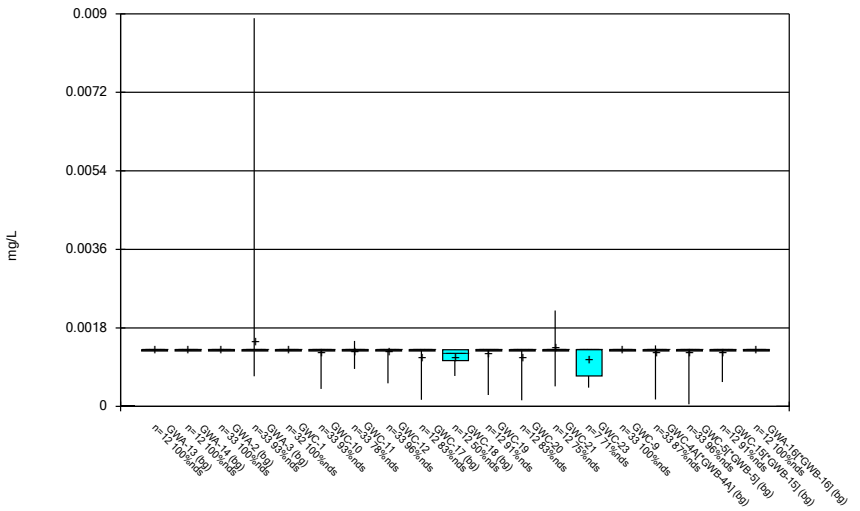
Box & Whiskers Plot



Constituent: Antimony Analysis Run 1/13/2020 10:39 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

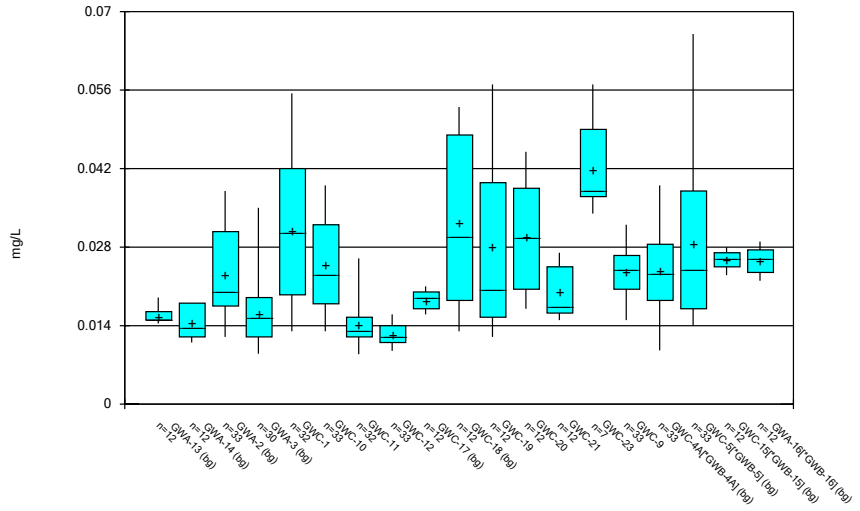
Box & Whiskers Plot



Constituent: Arsenic, Total Analysis Run 1/13/2020 10:39 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

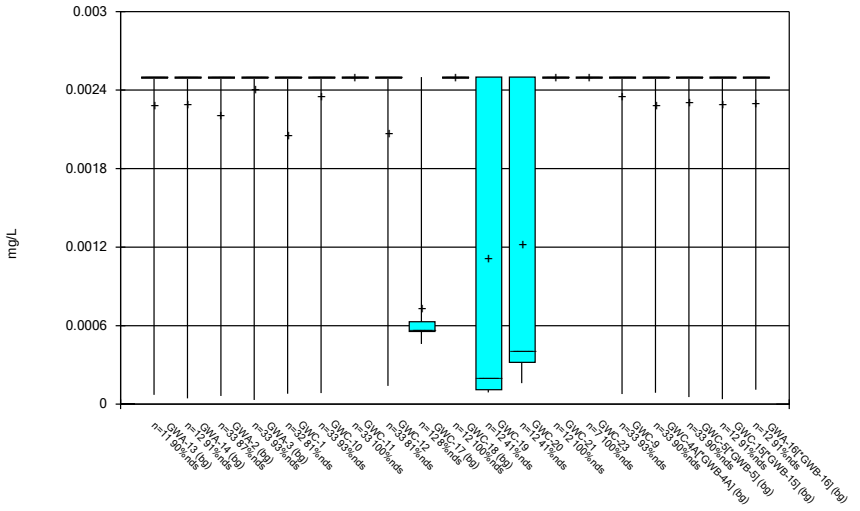
Box & Whiskers Plot



Constituent: Barium, Total Analysis Run 1/13/2020 10:39 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

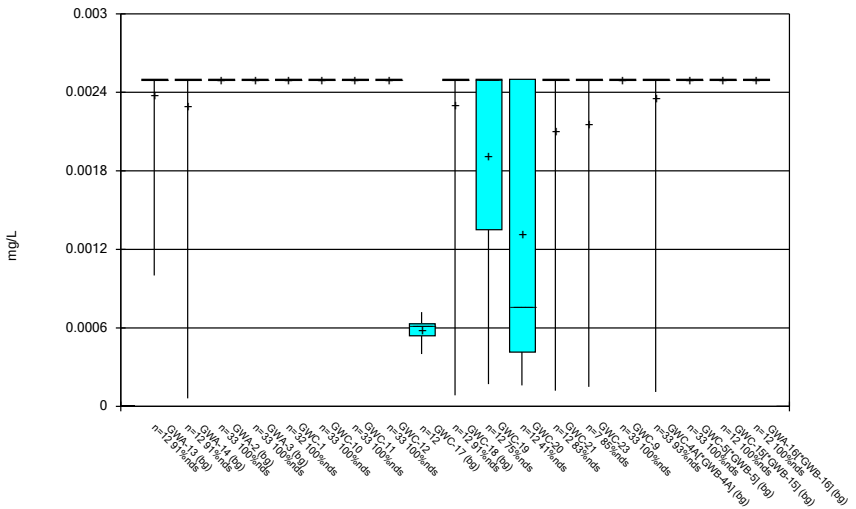
Box & Whiskers Plot



Constituent: Beryllium, Total Analysis Run 1/13/2020 10:39 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

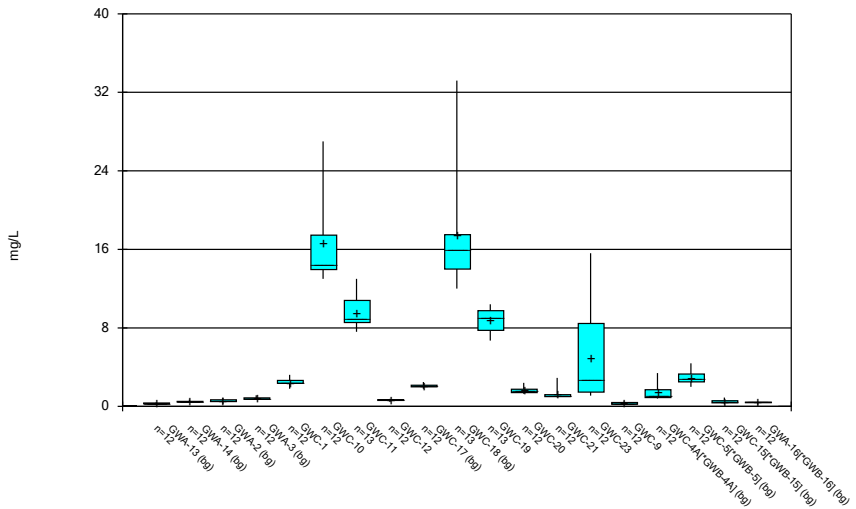
Box & Whiskers Plot



Constituent: Cadmium, Total Analysis Run 1/13/2020 10:39 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

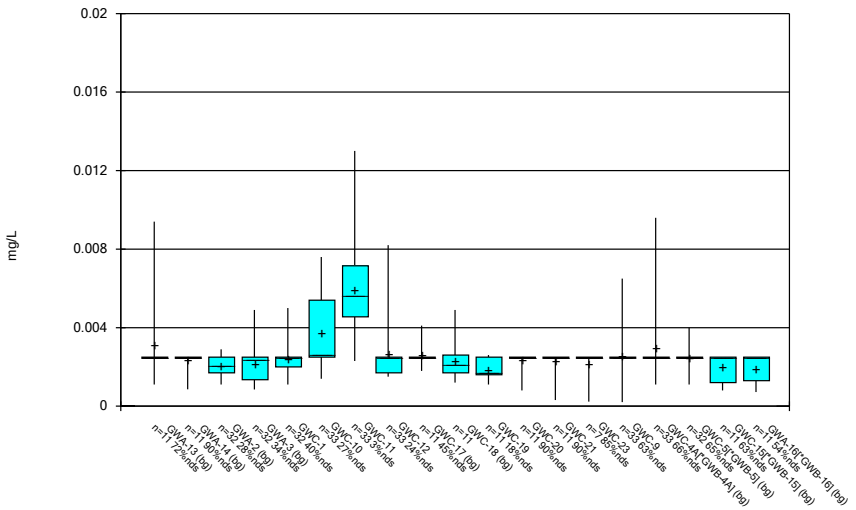
Box & Whiskers Plot



Constituent: Calcium Analysis Run 1/13/2020 10:39 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

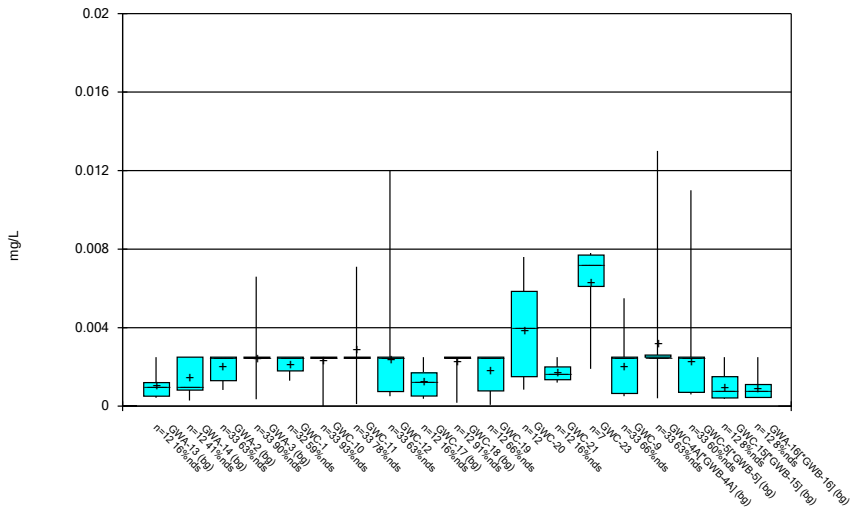
Box & Whiskers Plot



Constituent: Chromium, Total Analysis Run 1/13/2020 10:39 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

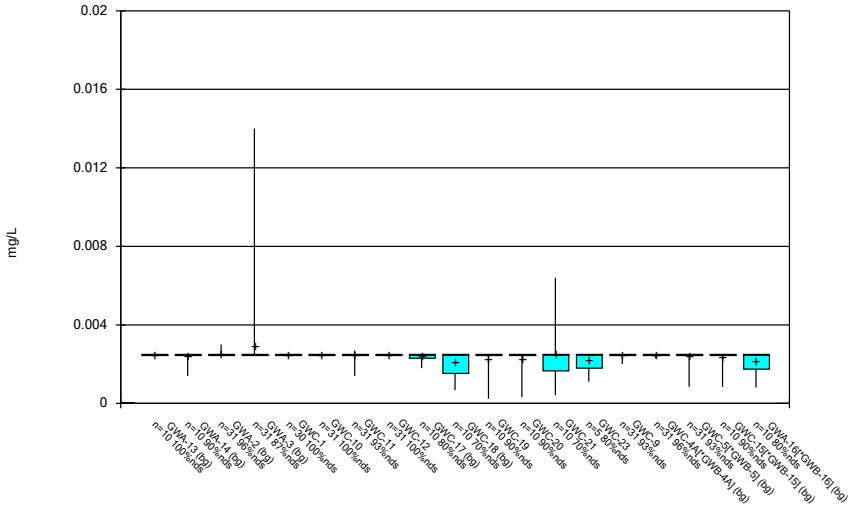
Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Cobalt, Total Analysis Run 1/13/2020 10:39 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

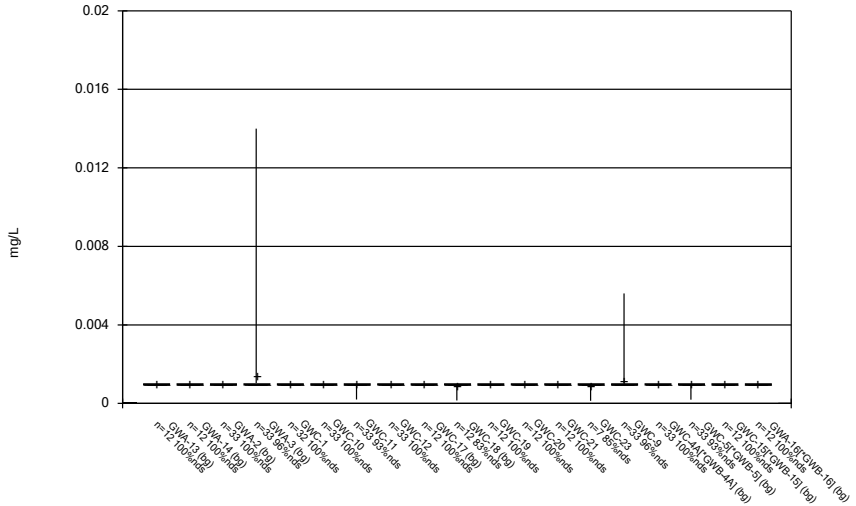


Constituent: Copper, Total Analysis Run 1/13/2020 10:40 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

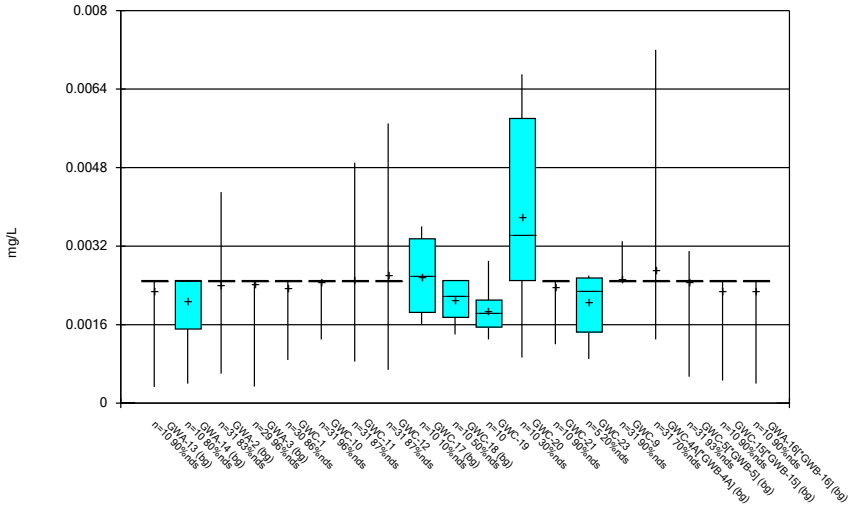


Constituent: Lead, Total Analysis Run 1/13/2020 10:40 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

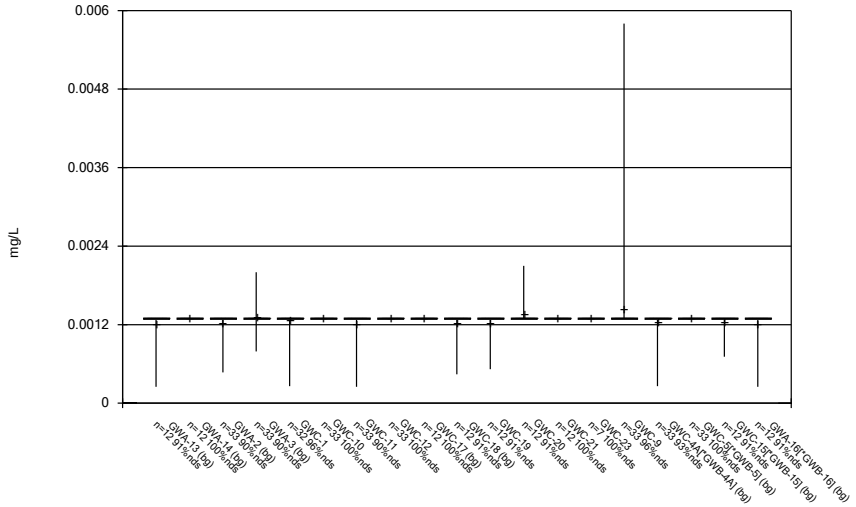


Constituent: Nickel, Total Analysis Run 1/13/2020 10:40 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

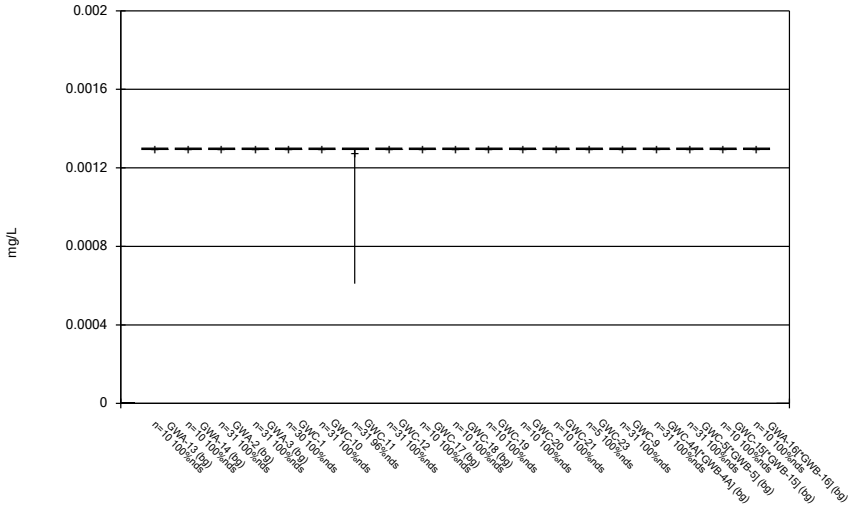
Box & Whiskers Plot



Constituent: Selenium Analysis Run 1/13/2020 10:40 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

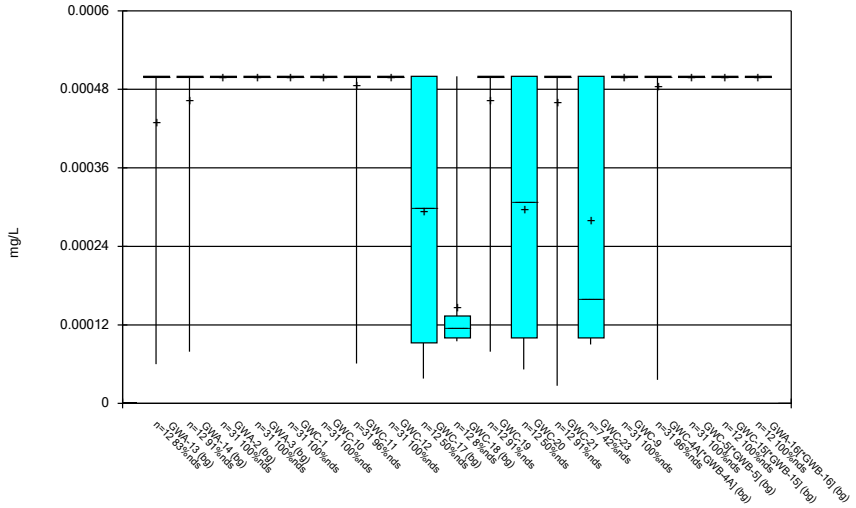


Constituent: Silver, Total Analysis Run 1/13/2020 10:40 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

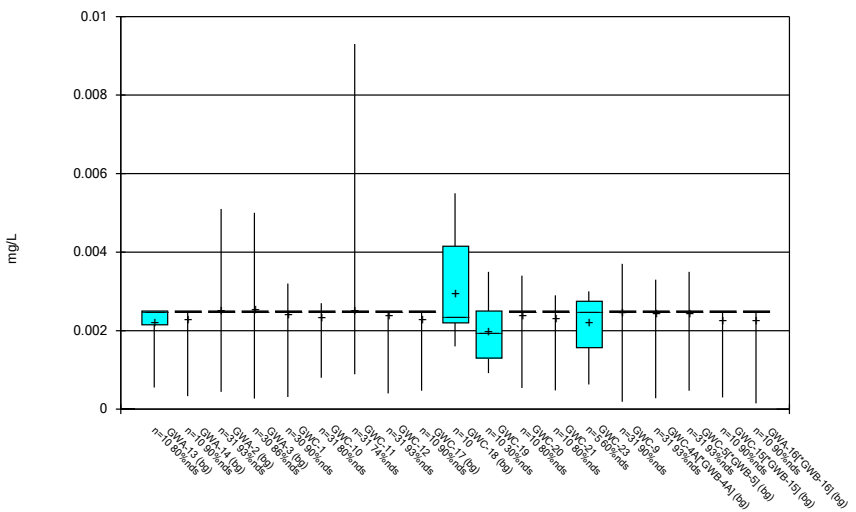


Constituent: Thallium Analysis Run 1/13/2020 10:40 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

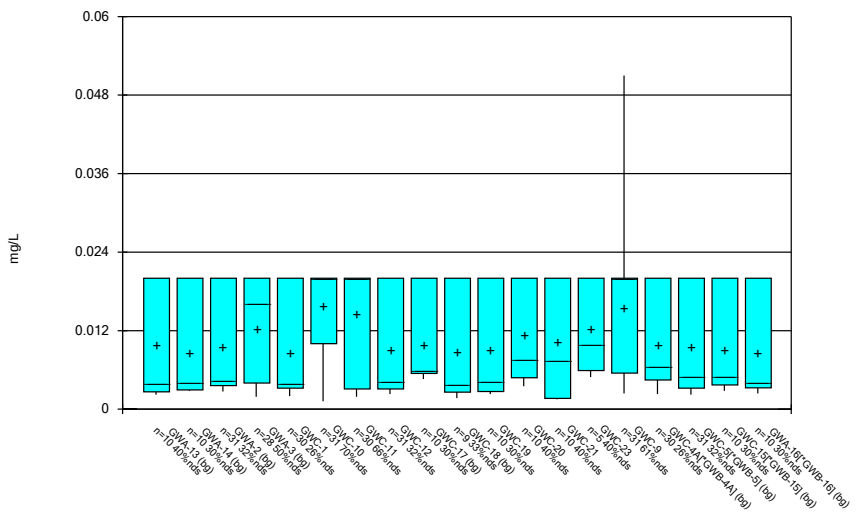


Constituent: Vanadium, Total Analysis Run 1/13/2020 10:40 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Zinc, Total Analysis Run 1/13/2020 10:40 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Appendix D2

Sanitas Outputs for State Appendix I Parameters – March 2019

EPD Intrawell Prediction Limit - Significant Results

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR Printed 8/8/2019, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Arsenic, Total (mg/L)	**GWC-18**	**0.001255**	**n/a**	**3/27/2019**	**0.0019**	**Yes**	**11**	**45.45**	**No**	**0.000...**	**Param Intra 1 of 3**

EPD Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR Printed 8/8/2019, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GWA-13	0.0025	n/a	3/26/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-14	0.0025	n/a	3/26/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-16[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-2	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWA-3	0.0025	n/a	3/27/2019	0.0025ND	No	32	96.88	n/a	0.000...	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-1	0.0025	n/a	3/27/2019	0.0025ND	No	31	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-10	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-11	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-12	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-15[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-17	0.0025	n/a	3/27/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-18	0.0025	n/a	3/27/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-19	0.0025	n/a	3/27/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-20	0.0025	n/a	3/27/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-21	0.0025	n/a	3/27/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-23	0.0025	n/a	3/27/2019	0.0025ND	No	6	100	n/a	0.01143	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-4A[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-5[*GW...	0.0025	n/a	3/26/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Antimony (mg/L)	GWC-9	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-13	0.0013	n/a	3/26/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-14	0.0013	n/a	3/26/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-16[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-2	0.0013	n/a	3/27/2019	0.0013ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-3	0.0013	n/a	3/27/2019	0.00046ND	No	31	96.77	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-1	0.0013	n/a	3/27/2019	0.0013ND	No	31	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-10	0.0013	n/a	3/27/2019	0.0013	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-11	0.005	n/a	3/27/2019	0.0013	No	32	81.25	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-12	0.0013	n/a	3/27/2019	0.00046ND	No	32	96.88	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-15[*G...	0.0013	n/a	3/26/2019	0.00046ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-17	0.0013	n/a	3/27/2019	0.00046ND	No	11	81.82	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	**GWC-18**	**0.001255**	**n/a**	**3/27/2019**	**0.0019**	**Yes**	**11**	**45.45**	**No**	**0.000...**	**Param Intra 1 of 3**
Arsenic, Total (mg/L)	GWC-19	0.0013	n/a	3/27/2019	0.0013ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-20	0.0013	n/a	3/27/2019	0.0013ND	No	11	81.82	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-21	0.0022	n/a	3/27/2019	0.00046ND	No	11	72.73	n/a	0.002806	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-23	0.0013	n/a	3/27/2019	0.00046ND	No	6	66.67	n/a	0.01143	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-4A[*G...	0.0014	n/a	3/26/2019	0.00046ND	No	32	87.5	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-5[*GW...	0.0013	n/a	3/26/2019	0.0013ND	No	32	96.88	n/a	0.000...	NP Intra (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-9	0.0013	n/a	3/27/2019	0.00046ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Barium, Total (mg/L)	GWA-13	0.017	n/a	3/26/2019	0.016	No	11	0	n/a	0.002806	NP Intra (normality) 1 of 3
Barium, Total (mg/L)	GWA-14	0.018	n/a	3/26/2019	0.012	No	11	0	n/a	0.002806	NP Intra (normality) 1 of 3
Barium, Total (mg/L)	GWA-16[*G...	0.03094	n/a	3/26/2019	0.023	No	11	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWA-2	0.04056	n/a	3/27/2019	0.00049ND	No	9	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWA-3	0.02627	n/a	3/27/2019	0.00049ND	No	29	0	sqrt(x)	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-1	0.05878	n/a	3/27/2019	0.00049ND	No	12	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-10	0.03811	n/a	3/27/2019	0.00049ND	No	32	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-11	0.0203	n/a	3/27/2019	0.00049ND	No	31	0	ln(x)	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-12	0.0152	n/a	3/27/2019	0.00049ND	No	32	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-15[*G...	0.02884	n/a	3/26/2019	0.028	No	11	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-17	0.02221	n/a	3/27/2019	0.00049ND	No	11	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-18	0.06681	n/a	3/27/2019	0.00049ND	No	11	0	No	0.000...	Param Intra 1 of 3

EPD Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR Printed 8/8/2019, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Barium, Total (mg/L)	GWC-19	0.06387	n/a	3/27/2019	0.00049ND	No	11	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-20	0.05247	n/a	3/27/2019	0.00049ND	No	11	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-21	0.03087	n/a	3/27/2019	0.00049ND	No	11	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-23	0.06971	n/a	3/27/2019	0.00049ND	No	6	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-4A[*G...	0.03553	n/a	3/26/2019	0.023	No	32	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-5[*GW...	0.06758	n/a	3/26/2019	0.046	No	13	0	No	0.000...	Param Intra 1 of 3
Barium, Total (mg/L)	GWC-9	0.03069	n/a	3/27/2019	0.00049ND	No	32	0	No	0.000...	Param Intra 1 of 3
Beryllium, Total (mg/L)	GWA-13	0.0025	n/a	3/26/2019	0.0025ND	No	10	90	n/a	0.00344	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWA-14	0.0025	n/a	3/26/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWA-16[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWA-2	0.0025	n/a	3/27/2019	0.0025ND	No	32	90.63	n/a	0.000...	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWA-3	0.0025	n/a	3/27/2019	0.0025ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-1	0.0025	n/a	3/27/2019	0.0025ND	No	31	80.65	n/a	0.000...	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-10	0.0025	n/a	3/27/2019	0.0025ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-11	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-12	0.0025	n/a	3/27/2019	0.0025ND	No	32	81.25	n/a	0.000...	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-15[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-17	0.0006948	n/a	3/27/2019	0.00034ND	No	10	0	No	0.000...	Param Intra 1 of 3
Beryllium, Total (mg/L)	GWC-18	0.0025	n/a	3/27/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-19	0.0025	n/a	3/27/2019	0.0025ND	No	11	45.45	n/a	0.002806	NP Intra (normality) 1 of 3
Beryllium, Total (mg/L)	GWC-20	0.0025	n/a	3/27/2019	0.0025ND	No	11	45.45	n/a	0.002806	NP Intra (normality) 1 of 3
Beryllium, Total (mg/L)	GWC-21	0.0025	n/a	3/27/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-23	0.0025	n/a	3/27/2019	0.0025ND	No	6	100	n/a	0.01143	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-4A[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-5[*GW...	0.0025	n/a	3/26/2019	0.0025ND	No	32	90.63	n/a	0.000...	NP Intra (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-9	0.0025	n/a	3/27/2019	0.0025ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-13	0.0025	n/a	3/26/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-14	0.0025	n/a	3/26/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-16[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-2	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-3	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-1	0.0025	n/a	3/27/2019	0.0025ND	No	31	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-10	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-11	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-12	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-15[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-17	0.0007932	n/a	3/27/2019	0.00034ND	No	11	0	No	0.000...	Param Intra 1 of 3
Cadmium, Total (mg/L)	GWC-18	0.0025	n/a	3/27/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-19	0.0025	n/a	3/27/2019	0.0025ND	No	11	81.82	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-20	0.001036	n/a	3/27/2019	0.0025ND	No	11	45.45	ln(x)	0.000...	Param Intra 1 of 3
Cadmium, Total (mg/L)	GWC-21	0.0025	n/a	3/27/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-23	0.0025	n/a	3/27/2019	0.0025ND	No	6	100	n/a	0.01143	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-4A[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-5[*GW...	0.0025	n/a	3/26/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-9	0.0025	n/a	3/27/2019	0.0025ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Calcium (mg/L)	GWA-13	0.4504	n/a	3/26/2019	0.3	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWA-14	0.683	n/a	3/26/2019	0.42	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWA-16[*G...	0.4861	n/a	3/26/2019	0.37	No	10	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWA-2	0.9516	n/a	3/27/2019	0.13ND	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWA-3	1.111	n/a	3/27/2019	0.13ND	No	11	0	No	0.000...	Param Intra 1 of 3

EPD Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR Printed 8/8/2019, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	GWC-1	3.341	n/a	3/27/2019	0.13ND	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-10	27	n/a	3/27/2019	0.13ND	No	12	0	n/a	0.002173	NP Intra (normality) 1 of 3
Calcium (mg/L)	GWC-11	12.54	n/a	3/27/2019	0.13ND	No	12	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-12	0.8404	n/a	3/27/2019	0.13ND	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-15[*G...	0.7184	n/a	3/26/2019	0.58	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-17	2.454	n/a	3/27/2019	0.13ND	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-18	24.48	n/a	3/27/2019	0.13ND	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-19	11.37	n/a	3/27/2019	0.13ND	No	12	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-20	2.498	n/a	3/27/2019	0.13ND	No	11	0	sqrt(x)	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-21	1.327	n/a	3/27/2019	0.13ND	No	9	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-23	11.76	n/a	3/27/2019	0.13ND	No	9	0	sqrt(x)	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-4A[*G...	3.648	n/a	3/26/2019	0.53	No	11	0	sqrt(x)	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-5[*GW...	4.254	n/a	3/26/2019	2.8	No	11	0	No	0.000...	Param Intra 1 of 3
Calcium (mg/L)	GWC-9	0.552	n/a	3/27/2019	0.13ND	No	11	0	No	0.000...	Param Intra 1 of 3
Chromium, Total (mg/L)	GWA-13	0.0094	n/a	3/26/2019	0.0011ND	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Chromium, Total (mg/L)	GWA-14	0.0025	n/a	3/26/2019	0.0025ND	No	10	90	n/a	0.00344	NP Intra (NDs) 1 of 3
Chromium, Total (mg/L)	GWA-16[*G...	0.001792	n/a	3/26/2019	0.0011ND	No	10	50	No	0.000...	Param Intra 1 of 3
Chromium, Total (mg/L)	GWA-2	0.002494	n/a	3/27/2019	0.0011ND	No	31	25.81	No	0.000...	Param Intra 1 of 3
Chromium, Total (mg/L)	GWA-3	0.003331	n/a	3/27/2019	0.0011ND	No	31	32.26	sqrt(x)	0.000...	Param Intra 1 of 3
Chromium, Total (mg/L)	GWC-1	0.003449	n/a	3/27/2019	0.0025ND	No	31	38.71	sqrt(x)	0.000...	Param Intra 1 of 3
Chromium, Total (mg/L)	GWC-10	0.0076	n/a	3/27/2019	0.0035	No	32	28.13	n/a	0.000...	NP Intra (normality) 1 of 3
Chromium, Total (mg/L)	GWC-11	0.009619	n/a	3/27/2019	0.0031	No	32	3.125	No	0.000...	Param Intra 1 of 3
Chromium, Total (mg/L)	GWC-12	0.01	n/a	3/27/2019	0.0011ND	No	32	25	n/a	0.000...	NP Intra (normality) 1 of 3
Chromium, Total (mg/L)	GWC-15[*G...	0.0025	n/a	3/26/2019	0.0011ND	No	10	60	n/a	0.00344	NP Intra (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-17	0.01	n/a	3/27/2019	0.0028	No	10	50	n/a	0.00344	NP Intra (normality) 1 of 3
Chromium, Total (mg/L)	GWC-18	0.003136	n/a	3/27/2019	0.0025	No	10	0	No	0.000...	Param Intra 1 of 3
Chromium, Total (mg/L)	GWC-19	0.002682	n/a	3/27/2019	0.0011ND	No	9	0	No	0.000...	Param Intra 1 of 3
Chromium, Total (mg/L)	GWC-20	0.0025	n/a	3/27/2019	0.0025ND	No	10	90	n/a	0.00344	NP Intra (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-21	0.0025	n/a	3/27/2019	0.0025ND	No	10	90	n/a	0.00344	NP Intra (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-23	0.0025	n/a	3/27/2019	0.0025ND	No	6	83.33	n/a	0.01143	NP Intra (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-4A[*G...	0.0096	n/a	3/26/2019	0.0025ND	No	32	65.63	n/a	0.000...	NP Intra (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-5[*GW...	0.004	n/a	3/26/2019	0.0025ND	No	31	64.52	n/a	0.000...	NP Intra (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-9	0.0038	n/a	3/27/2019	0.0025ND	No	31	64.52	n/a	0.000...	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWA-13	0.0013	n/a	3/26/2019	0.0025ND	No	11	18.18	No	0.000...	Param Intra 1 of 3
Cobalt, Total (mg/L)	GWA-14	0.00129	n/a	3/26/2019	0.0025ND	No	11	45.45	x^(1/3)	0.000...	Param Intra 1 of 3
Cobalt, Total (mg/L)	GWA-16[*G...	0.001495	n/a	3/26/2019	0.0025ND	No	10	0	No	0.000...	Param Intra 1 of 3
Cobalt, Total (mg/L)	GWA-2	0.01	n/a	3/27/2019	0.0004ND	No	32	65.63	n/a	0.000...	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWA-3	0.0025	n/a	3/27/2019	0.0025ND	No	31	96.77	n/a	0.000...	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-1	0.0025	n/a	3/27/2019	0.0004ND	No	31	58.06	n/a	0.000...	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-10	0.0025	n/a	3/27/2019	0.0025ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-11	0.0071	n/a	3/27/2019	0.0025ND	No	32	78.13	n/a	0.000...	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-12	0.012	n/a	3/27/2019	0.0004ND	No	31	61.29	n/a	0.000...	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-15[*G...	0.002063	n/a	3/26/2019	0.0025ND	No	10	0	No	0.000...	Param Intra 1 of 3
Cobalt, Total (mg/L)	GWC-17	0.00213	n/a	3/27/2019	0.0025ND	No	11	18.18	No	0.000...	Param Intra 1 of 3
Cobalt, Total (mg/L)	GWC-18	0.0025	n/a	3/27/2019	0.0025ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-19	0.0025	n/a	3/27/2019	0.0025ND	No	11	63.64	n/a	0.002806	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-20	0.009441	n/a	3/27/2019	0.0004ND	No	11	0	No	0.000...	Param Intra 1 of 3
Cobalt, Total (mg/L)	GWC-21	0.002258	n/a	3/27/2019	0.0004ND	No	10	0	No	0.000...	Param Intra 1 of 3
Cobalt, Total (mg/L)	GWC-23	0.01074	n/a	3/27/2019	0.006	No	6	0	x^2	0.000...	Param Intra 1 of 3
Cobalt, Total (mg/L)	GWC-4A[*G...	0.013	n/a	3/26/2019	0.0037	No	32	65.63	n/a	0.000...	NP Intra (NDs) 1 of 3

EPD Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR Printed 8/8/2019, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Cobalt, Total (mg/L)	GWC-5[*GW...	0.011	n/a	3/26/2019	0.0004ND	No	32	62.5	n/a	0.000...	NP Intra (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-9	0.0055	n/a	3/27/2019	0.0004ND	No	32	65.63	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWA-13	0.0025	n/a	3/26/2019	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWA-14	0.0025	n/a	3/26/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWA-16[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWA-2	0.003	n/a	3/27/2019	0.0025ND	No	30	96.67	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWA-3	0.0034	n/a	3/27/2019	0.0025ND	No	29	89.66	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-1	0.0025	n/a	3/27/2019	0.0025ND	No	29	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-10	0.0025	n/a	3/27/2019	0.0025ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-11	0.0027	n/a	3/27/2019	0.0025ND	No	30	93.33	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-12	0.0025	n/a	3/27/2019	0.0025ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-15[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-17	0.0025	n/a	3/27/2019	0.0025ND	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-18	0.0025	n/a	3/27/2019	0.0025ND	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-19	0.0025	n/a	3/27/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-20	0.0025	n/a	3/27/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-21	0.0025	n/a	3/27/2019	0.0025ND	No	8	75	n/a	0.005912	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-23	0.0025	n/a	3/27/2019	0.0025ND	No	4	75	n/a	0.02654	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-4A[*G...	0.0025	n/a	3/26/2019	0.0021ND	No	30	96.67	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-5[*GW...	0.0025	n/a	3/26/2019	0.0025ND	No	30	93.33	n/a	0.000...	NP Intra (NDs) 1 of 3
Copper, Total (mg/L)	GWC-9	0.0025	n/a	3/27/2019	0.0025ND	No	30	96.67	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWA-13	0.0013	n/a	3/26/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWA-14	0.0013	n/a	3/26/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWA-16[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWA-2	0.0013	n/a	3/27/2019	0.0013ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWA-3	0.0013	n/a	3/27/2019	0.0013ND	No	31	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-1	0.0013	n/a	3/27/2019	0.0013ND	No	31	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-10	0.0013	n/a	3/27/2019	0.0013ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-11	0.0013	n/a	3/27/2019	0.0013ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-12	0.0013	n/a	3/27/2019	0.0013ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-15[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-17	0.0013	n/a	3/27/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-18	0.0013	n/a	3/27/2019	0.0013ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-19	0.0013	n/a	3/27/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-20	0.0013	n/a	3/27/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-21	0.0013	n/a	3/27/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-23	0.0013	n/a	3/27/2019	0.0013ND	No	6	100	n/a	0.01143	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-4A[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-5[*GW...	0.0013	n/a	3/26/2019	0.0013ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Lead, Total (mg/L)	GWC-9	0.0013	n/a	3/27/2019	0.0013ND	No	31	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-13	0.0025	n/a	3/26/2019	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-14	0.0025	n/a	3/26/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-16[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-2	0.0043	n/a	3/27/2019	0.0025ND	No	30	86.67	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-3	0.0025	n/a	3/27/2019	0.0025ND	No	28	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-1	0.0025	n/a	3/27/2019	0.0025ND	No	29	86.21	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-10	0.0025	n/a	3/27/2019	0.0025ND	No	30	96.67	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-11	0.0029	n/a	3/27/2019	0.0025ND	No	29	89.66	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-12	0.0043	n/a	3/27/2019	0.0025ND	No	29	89.66	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-15[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3

EPD Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR Printed 8/8/2019, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Nickel, Total (mg/L)	GWC-17	0.004317	n/a	3/27/2019	0.0018ND	No	9	11.11	No	0.000...	Param Intra 1 of 3
Nickel, Total (mg/L)	GWC-18	0.002133	n/a	3/27/2019	0.0025ND	No	9	44.44	No	0.000...	Param Intra 1 of 3
Nickel, Total (mg/L)	GWC-19	0.003042	n/a	3/27/2019	0.0025ND	No	9	0	No	0.000...	Param Intra 1 of 3
Nickel, Total (mg/L)	GWC-20	0.005981	n/a	3/27/2019	0.0025ND	No	7	42.86	No	0.000...	Param Intra 1 of 3
Nickel, Total (mg/L)	GWC-21	0.0025	n/a	3/27/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-23	0.00634	n/a	3/27/2019	0.0018ND	No	4	0	No	0.000...	Param Intra 1 of 3
Nickel, Total (mg/L)	GWC-4A[*G...	0.0048	n/a	3/26/2019	0.0018ND	No	29	75.86	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-5[*GW...	0.0031	n/a	3/26/2019	0.0025ND	No	30	93.33	n/a	0.000...	NP Intra (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-9	0.0033	n/a	3/27/2019	0.0025ND	No	30	90	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-13	0.0013	n/a	3/26/2019	0.0013ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-14	0.0013	n/a	3/26/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-16[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-2	0.0013	n/a	3/27/2019	0.0013ND	No	32	90.63	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWA-3	0.002	n/a	3/27/2019	0.0013ND	No	32	90.63	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-1	0.0013	n/a	3/27/2019	0.0013ND	No	31	96.77	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-10	0.0013	n/a	3/27/2019	0.0013ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-11	0.0013	n/a	3/27/2019	0.0013ND	No	32	90.63	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-12	0.0013	n/a	3/27/2019	0.0013ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-15[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-17	0.0013	n/a	3/27/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-18	0.0013	n/a	3/27/2019	0.0013ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-19	0.0013	n/a	3/27/2019	0.0013ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-20	0.0021	n/a	3/27/2019	0.0013ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-21	0.0013	n/a	3/27/2019	0.0013ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-23	0.0013	n/a	3/27/2019	0.0013ND	No	6	100	n/a	0.01143	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-4A[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	32	93.75	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-5[*GW...	0.0013	n/a	3/26/2019	0.0013ND	No	32	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Selenium (mg/L)	GWC-9	0.0013	n/a	3/27/2019	0.0013ND	No	31	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWA-13	0.0013	n/a	3/26/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWA-14	0.0013	n/a	3/26/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWA-16[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWA-2	0.0013	n/a	3/27/2019	0.0013ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWA-3	0.0013	n/a	3/27/2019	0.0013ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-1	0.0013	n/a	3/27/2019	0.0013ND	No	29	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-10	0.0013	n/a	3/27/2019	0.0013ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-11	0.0013	n/a	3/27/2019	0.0013ND	No	30	96.67	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-12	0.0013	n/a	3/27/2019	0.0013ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-15[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-17	0.0013	n/a	3/27/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-18	0.0013	n/a	3/27/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-19	0.0013	n/a	3/27/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-20	0.0013	n/a	3/27/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-21	0.0013	n/a	3/27/2019	0.0013ND	No	9	100	n/a	0.004675	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-23	0.0013	n/a	3/27/2019	0.0013ND	No	4	100	n/a	0.02654	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-4A[*G...	0.0013	n/a	3/26/2019	0.0013ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-5[*GW...	0.0013	n/a	3/26/2019	0.0013ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Silver, Total (mg/L)	GWC-9	0.0013	n/a	3/27/2019	0.0013ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-13	0.0005	n/a	3/26/2019	0.0005ND	No	11	81.82	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-14	0.0005	n/a	3/26/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-16[*G...	0.0005	n/a	3/26/2019	0.0005ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3

EPD Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR Printed 8/8/2019, 3:50 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Thallium (mg/L)	GWA-2	0.0005	n/a	3/27/2019	0.0005ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWA-3	0.0005	n/a	3/27/2019	0.0005ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-1	0.0005	n/a	3/27/2019	0.0005ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-10	0.0005	n/a	3/27/2019	0.0005ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-11	0.0005	n/a	3/27/2019	0.0005ND	No	30	96.67	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-12	0.0005	n/a	3/27/2019	0.0005ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-15[*G...	0.0005	n/a	3/26/2019	0.0005ND	No	11	100	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-17	0.0005	n/a	3/27/2019	0.0005ND	No	11	45.45	n/a	0.002806	NP Intra (normality) 1 of 3
Thallium (mg/L)	GWC-18	0.0001532	n/a	3/27/2019	0.0005ND	No	10	0	No	0.000...	Param Intra 1 of 3
Thallium (mg/L)	GWC-19	0.0005	n/a	3/27/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-20	0.0005	n/a	3/27/2019	0.0005ND	No	11	45.45	n/a	0.002806	NP Intra (normality) 1 of 3
Thallium (mg/L)	GWC-21	0.0005	n/a	3/27/2019	0.0005ND	No	11	90.91	n/a	0.002806	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-23	0.0001287	n/a	3/27/2019	0.000085ND	No	6	50	x^(1/3)	0.000...	Param Intra 1 of 3
Thallium (mg/L)	GWC-4A[*G...	0.0005	n/a	3/26/2019	0.0005ND	No	30	96.67	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-5[*GW...	0.0005	n/a	3/26/2019	0.0005ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Thallium (mg/L)	GWC-9	0.0005	n/a	3/27/2019	0.0005ND	No	30	100	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-13	0.0025	n/a	3/26/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-14	0.0025	n/a	3/26/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-16[*G...	0.0025	n/a	3/26/2019	0.0025ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-2	0.0051	n/a	3/27/2019	0.0025ND	No	30	93.33	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-3	0.005	n/a	3/27/2019	0.0014ND	No	29	86.21	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-1	0.0032	n/a	3/27/2019	0.0025ND	No	29	89.66	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-10	0.0027	n/a	3/27/2019	0.0014ND	No	30	83.33	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-11	0.0025	n/a	3/27/2019	0.0025ND	No	29	75.86	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-12	0.0025	n/a	3/27/2019	0.0014ND	No	30	93.33	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-15[*G...	0.0025	n/a	3/26/2019	0.0014ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-17	0.0025	n/a	3/27/2019	0.0014ND	No	9	88.89	n/a	0.004675	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-18	0.005907	n/a	3/27/2019	0.0014ND	No	9	0	sqrt(x)	0.000...	Param Intra 1 of 3
Vanadium, Total (mg/L)	GWC-19	0.003546	n/a	3/27/2019	0.0025ND	No	9	22.22	No	0.000...	Param Intra 1 of 3
Vanadium, Total (mg/L)	GWC-20	0.0034	n/a	3/27/2019	0.0014ND	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-21	0.0029	n/a	3/27/2019	0.0014ND	No	9	77.78	n/a	0.004675	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-23	0.007298	n/a	3/27/2019	0.0014ND	No	4	50	No	0.000...	Param Intra 1 of 3
Vanadium, Total (mg/L)	GWC-4A[*G...	0.0033	n/a	3/26/2019	0.0027ND	No	30	93.33	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-5[*GW...	0.0035	n/a	3/26/2019	0.0025ND	No	30	93.33	n/a	0.000...	NP Intra (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-9	0.0027	n/a	3/27/2019	0.0014ND	No	29	93.1	n/a	0.000...	NP Intra (NDs) 1 of 3
Zinc, Total (mg/L)	GWA-13	0.02	n/a	3/26/2019	0.02ND	No	9	33.33	n/a	0.004675	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWA-14	0.02	n/a	3/26/2019	0.02ND	No	9	33.33	n/a	0.004675	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWA-16[*G...	0.02	n/a	3/26/2019	0.02ND	No	9	33.33	n/a	0.004675	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWA-2	0.02	n/a	3/27/2019	0.02ND	No	30	33.33	n/a	0.000...	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWA-3	0.045	n/a	3/27/2019	0.02ND	No	29	44.83	n/a	0.000...	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWC-1	0.02	n/a	3/27/2019	0.02ND	No	29	27.59	n/a	0.000...	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWC-10	0.02	n/a	3/27/2019	0.02ND	No	30	70	n/a	0.000...	NP Intra (NDs) 1 of 3
Zinc, Total (mg/L)	GWC-11	0.02	n/a	3/27/2019	0.02ND	No	29	65.52	n/a	0.000...	NP Intra (NDs) 1 of 3
Zinc, Total (mg/L)	GWC-12	0.02	n/a	3/27/2019	0.02ND	No	30	30	n/a	0.000...	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWC-15[*G...	0.006346	n/a	3/26/2019	0.02ND	No	9	33.33	ln(x)	0.000...	Param Intra 1 of 3
Zinc, Total (mg/L)	GWC-17	0.02	n/a	3/27/2019	0.02ND	No	9	33.33	n/a	0.004675	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWC-18	0.006285	n/a	3/27/2019	0.02ND	No	9	33.33	x^(1/3)	0.000...	Param Intra 1 of 3
Zinc, Total (mg/L)	GWC-19	0.01317	n/a	3/27/2019	0.02ND	No	9	33.33	x^(1/3)	0.000...	Param Intra 1 of 3
Zinc, Total (mg/L)	GWC-20	0.0103	n/a	3/27/2019	0.02ND	No	9	33.33	sqrt(x)	0.000...	Param Intra 1 of 3
Zinc, Total (mg/L)	GWC-21	0.01164	n/a	3/27/2019	0.02ND	No	9	44.44	No	0.000...	Param Intra 1 of 3

EPD Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR Printed 8/8/2019, 3:50 PM

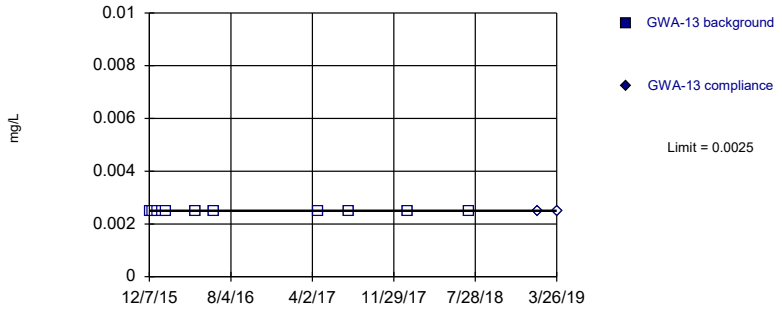
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Zinc, Total (mg/L)	GWC-23	0.01693	n/a	3/27/2019	0.02ND	No	4	50	No	0.000...	Param Intra 1 of 3
Zinc, Total (mg/L)	GWC-4A[*G...	0.02	n/a	3/26/2019	0.0065ND	No	29	27.59	n/a	0.000...	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWC-5[*GW...	0.02	n/a	3/26/2019	0.02ND	No	30	33.33	n/a	0.000...	NP Intra (normality) 1 of 3
Zinc, Total (mg/L)	GWC-9	0.02	n/a	3/27/2019	0.02ND	No	30	63.33	n/a	0.000...	NP Intra (NDs) 1 of 3

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

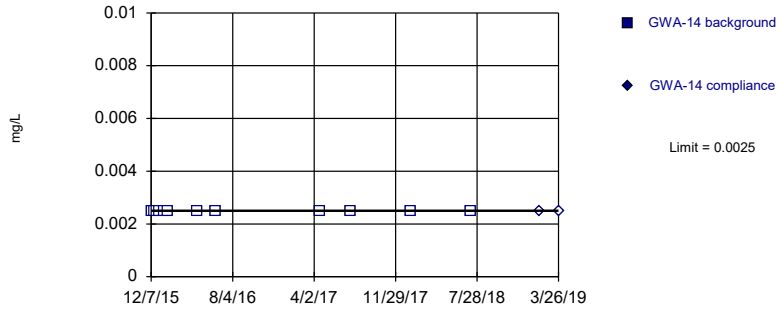
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

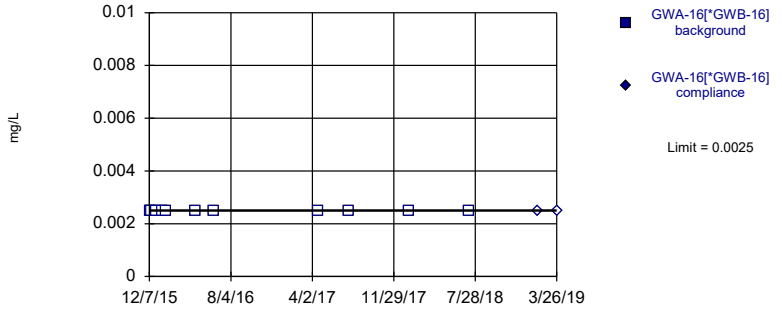
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

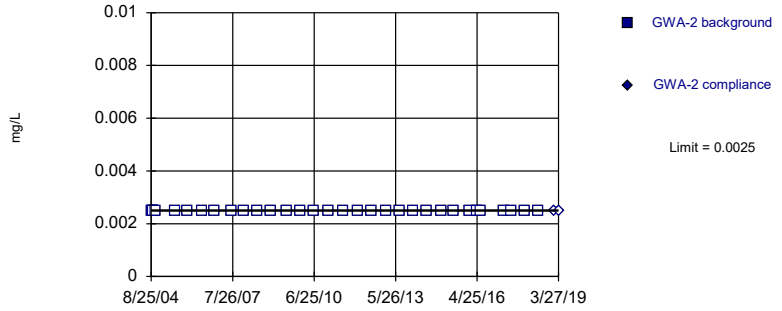
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

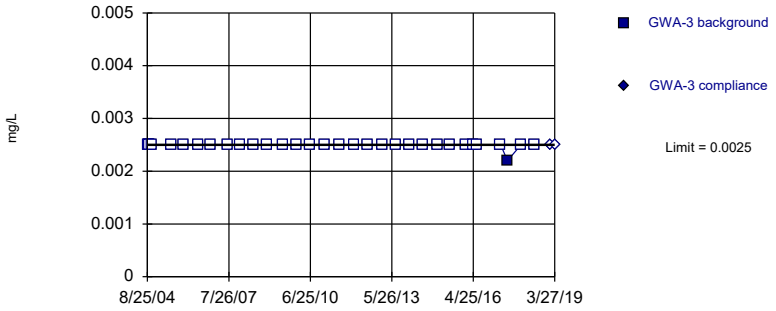
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

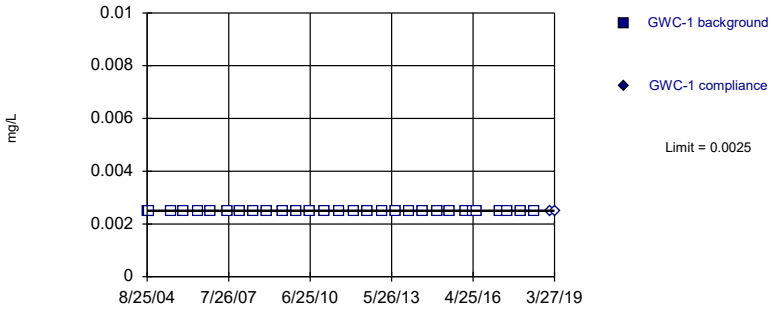
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

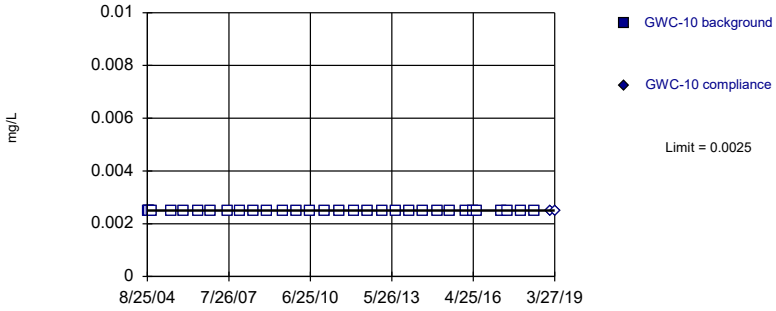
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

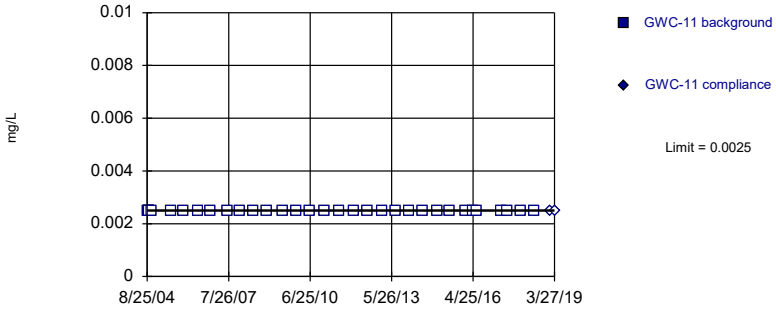
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

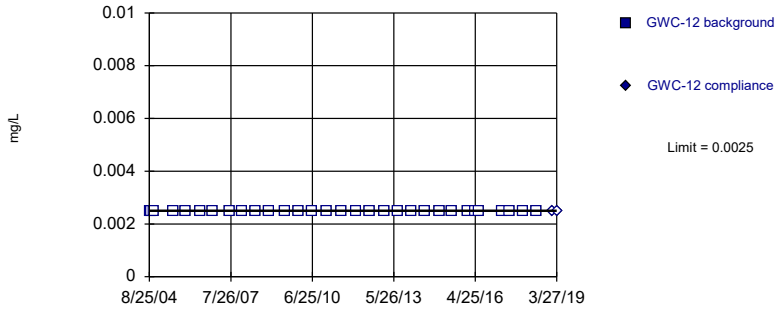
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

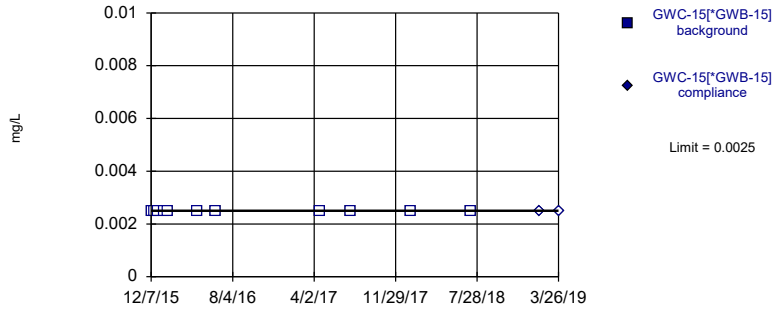
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

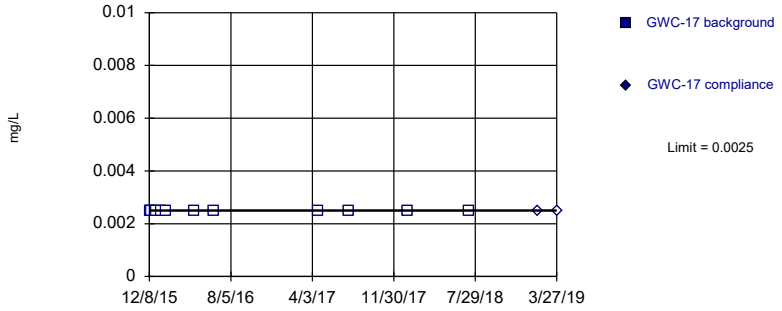
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

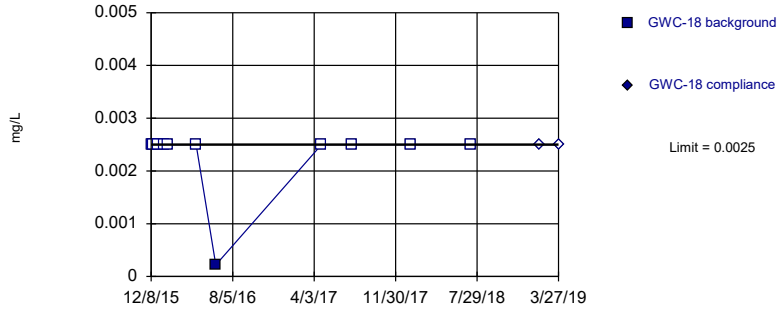
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

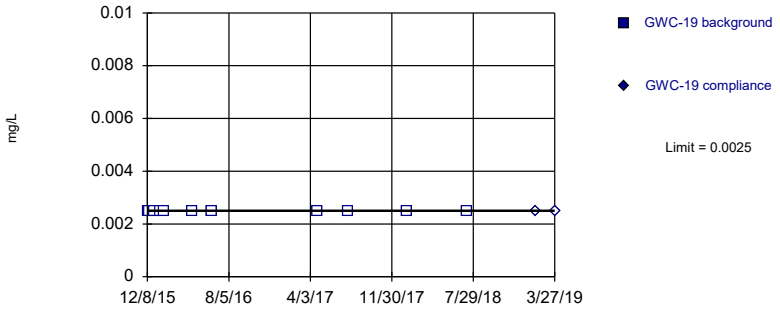
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

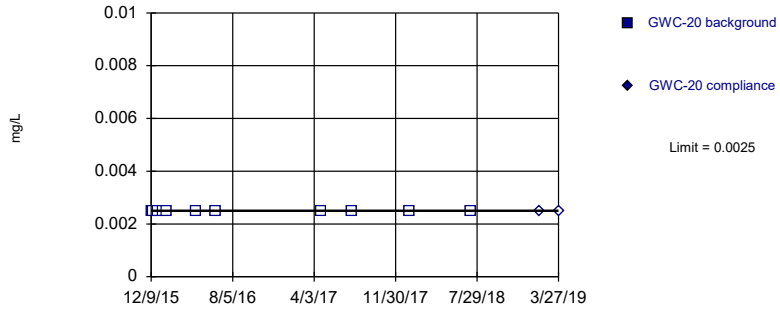
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:40 PM

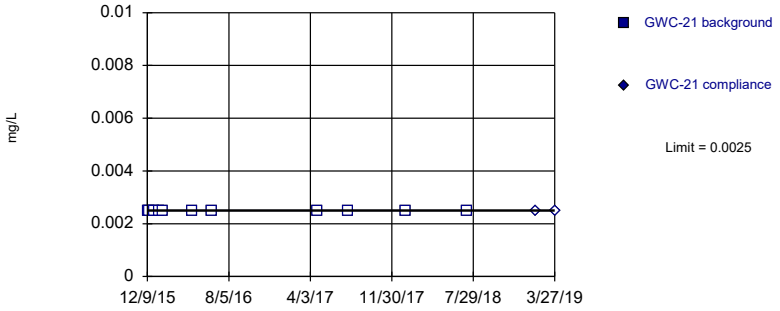
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:41 PM

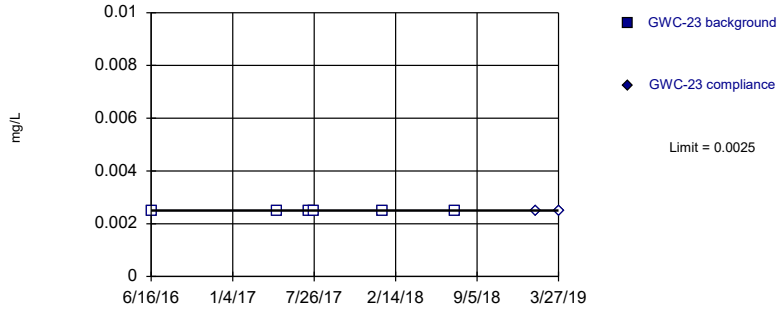
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 6) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02273. Individual comparison alpha = 0.01143 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:41 PM

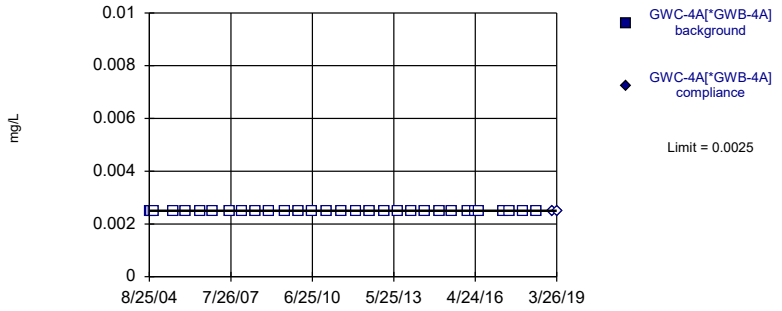
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:41 PM

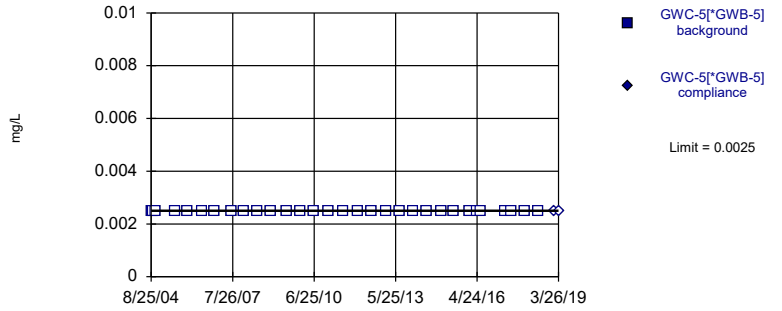
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:41 PM

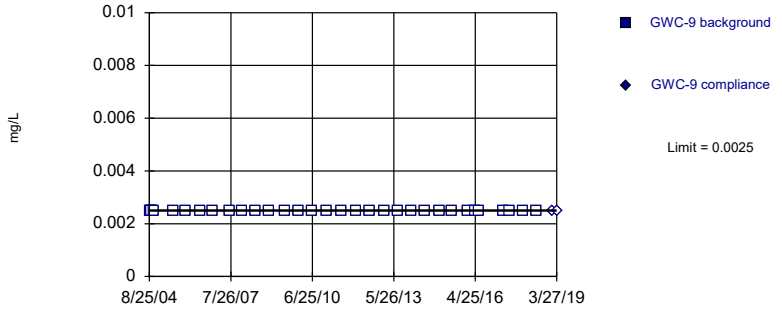
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Antimony Analysis Run 8/8/2019 3:41 PM

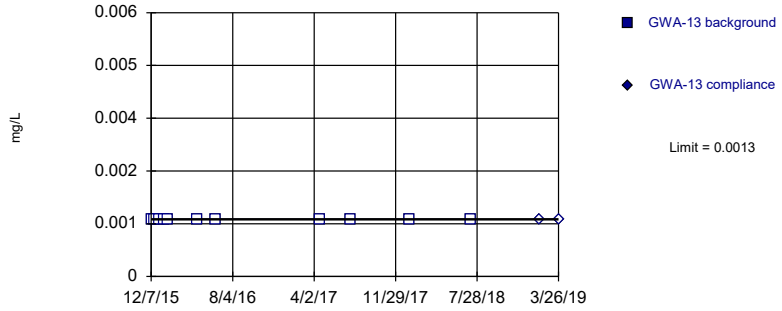
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

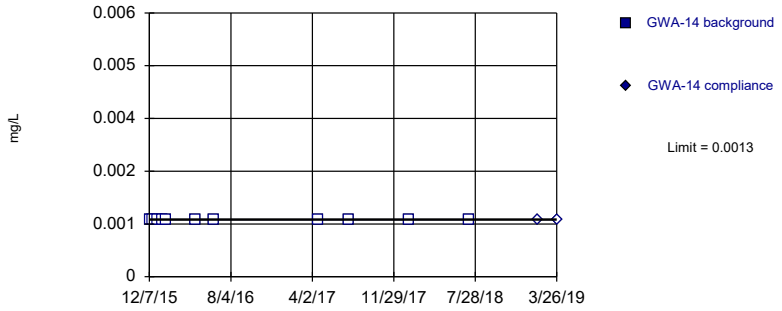
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

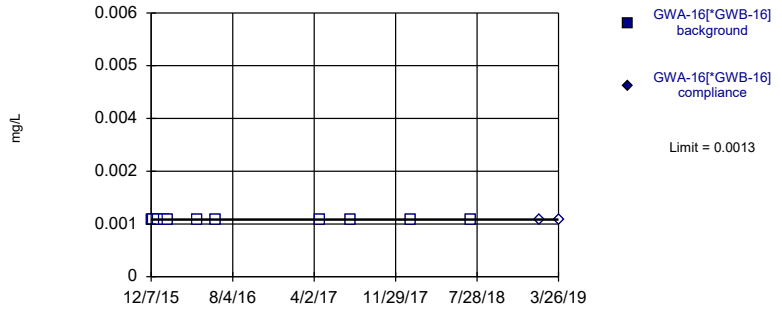
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

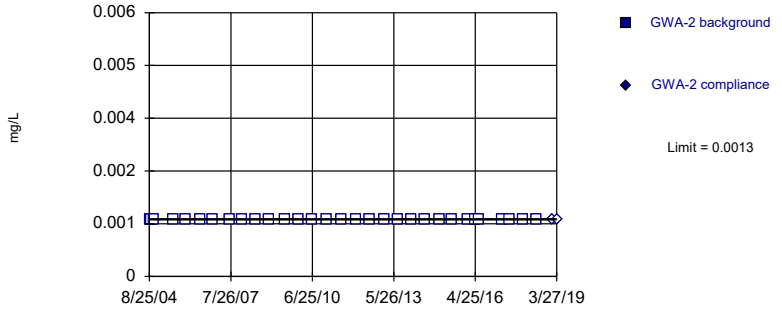
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

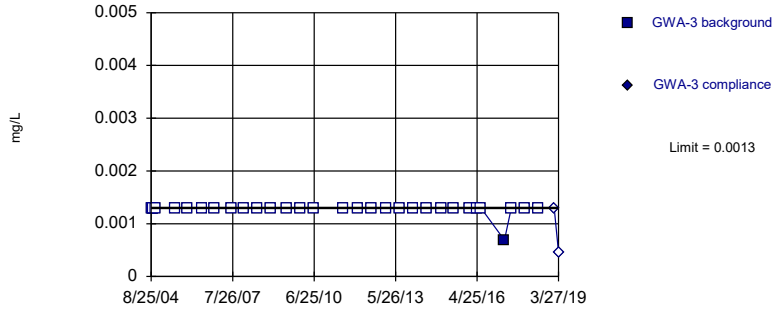
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

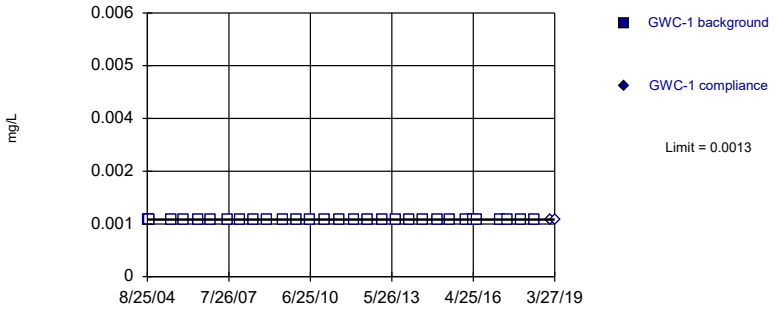
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

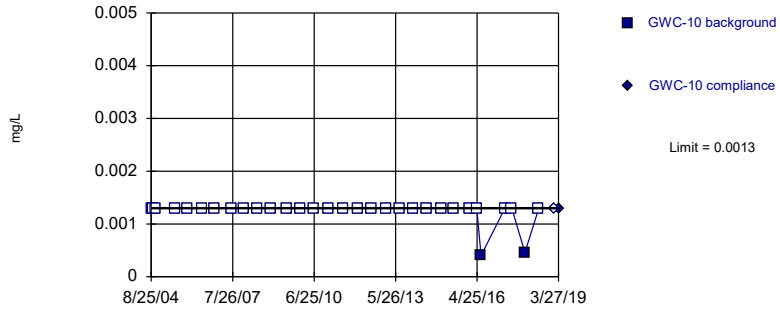
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

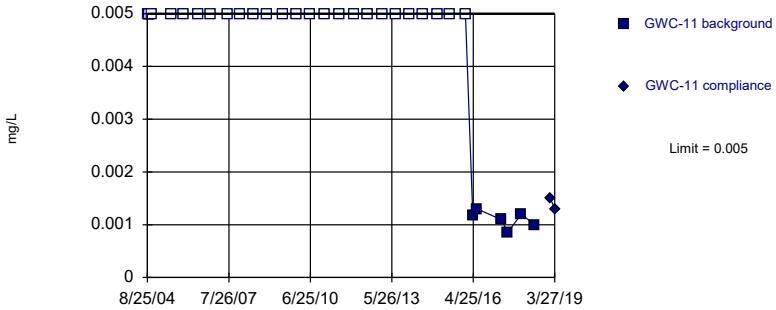
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

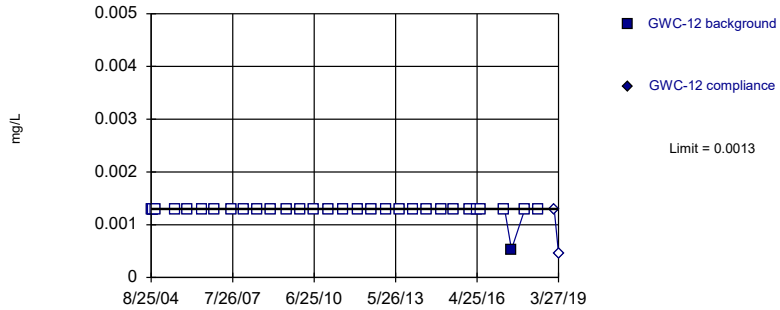
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

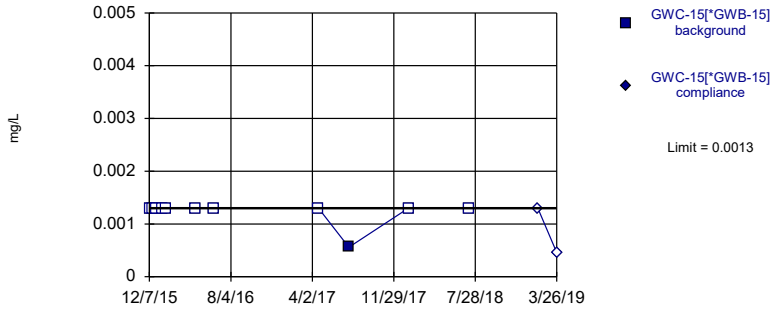
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

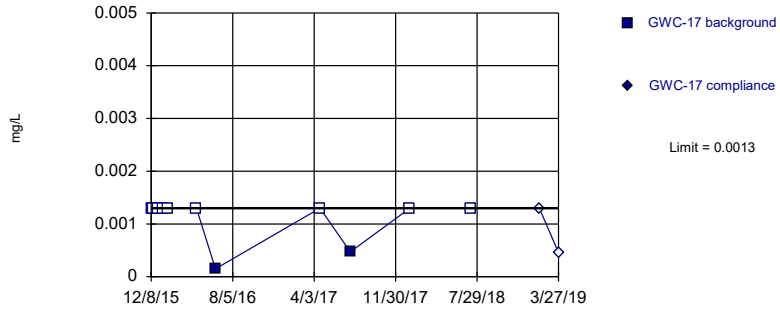
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

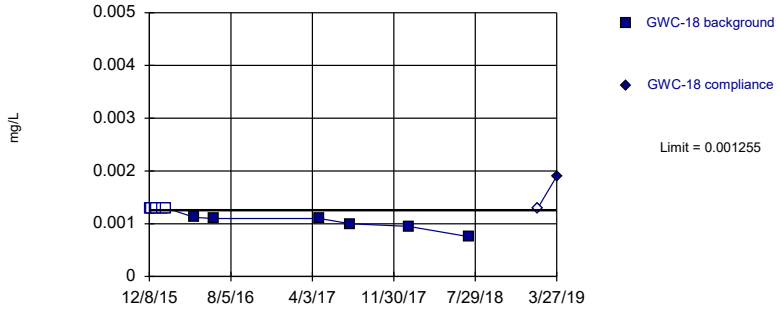
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0009707, Std. Dev.=0.0001315, n=11, 45.45% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8419, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

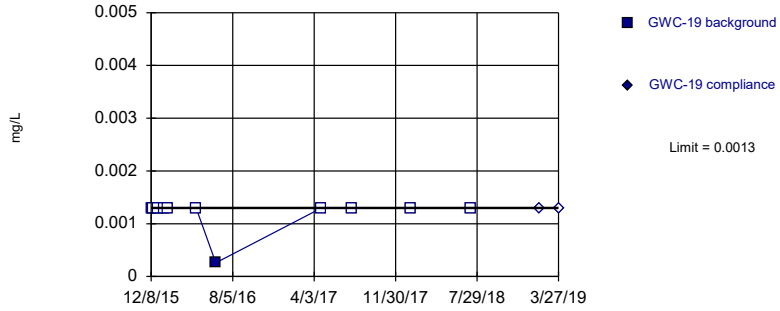
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

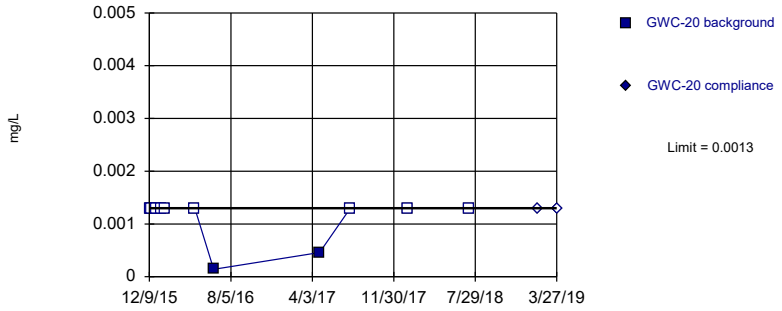
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

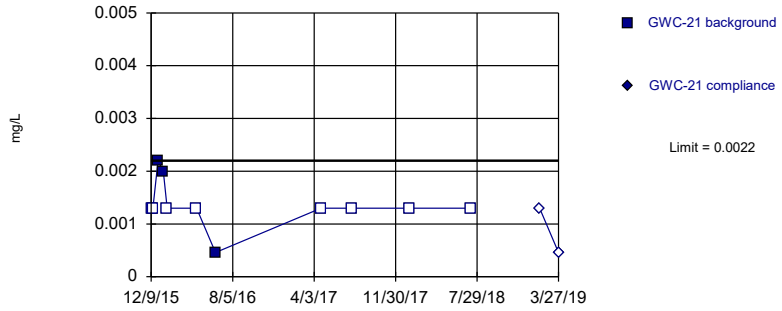
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 72.73% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

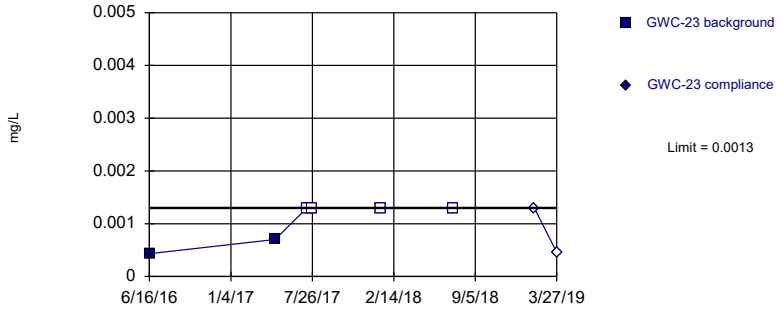
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 6 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.02273. Individual comparison alpha = 0.01143 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

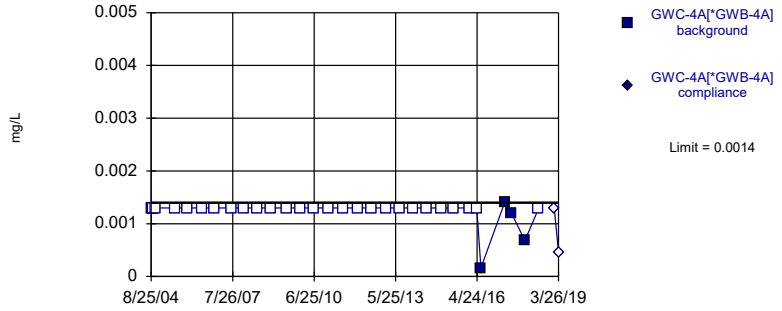
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

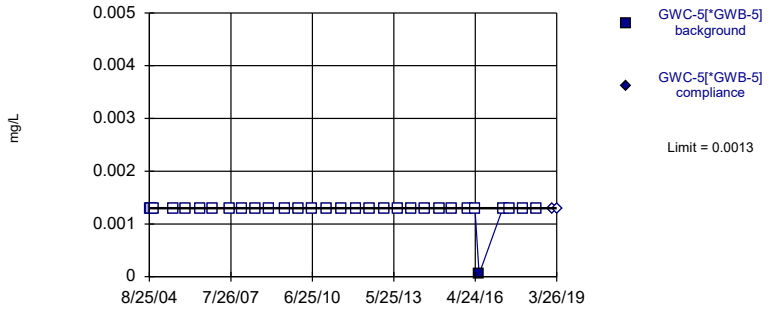
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 96.88% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

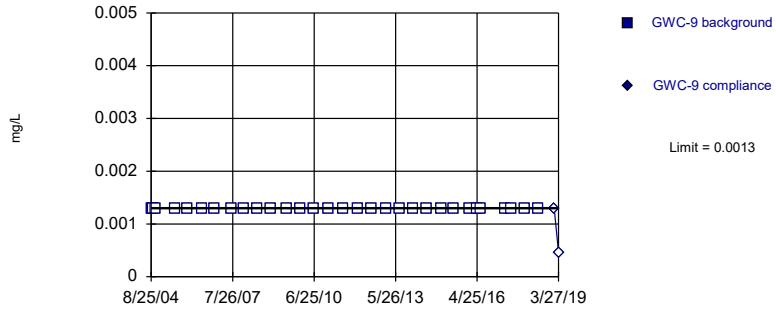
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Arsenic, Total Analysis Run 8/8/2019 3:41 PM

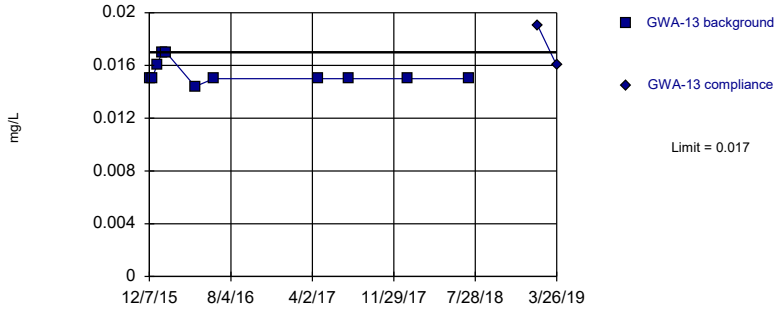
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

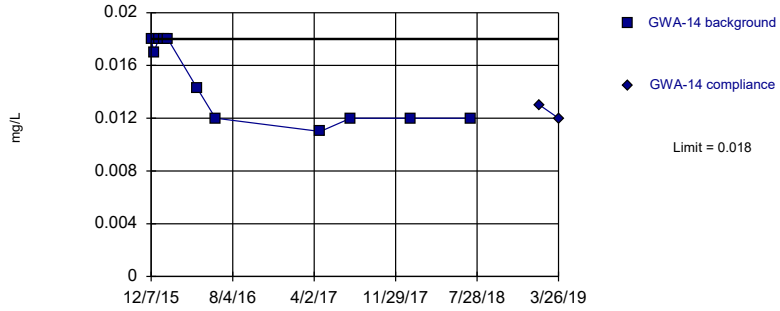
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

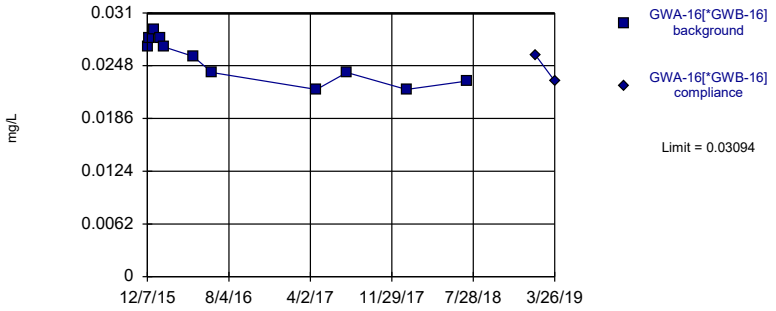
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02545, Std. Dev.=0.002542, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9119, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

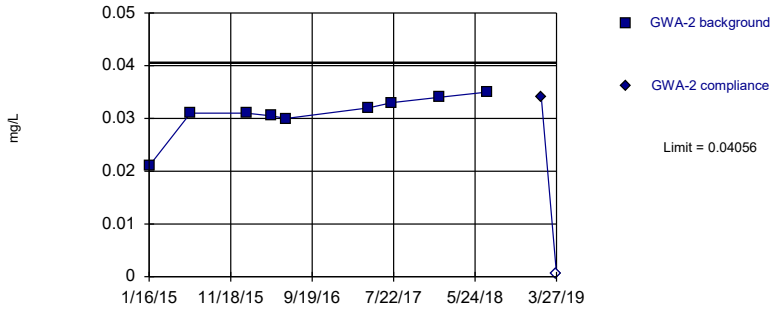
Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.03083, Std. Dev.=0.004047, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7833, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

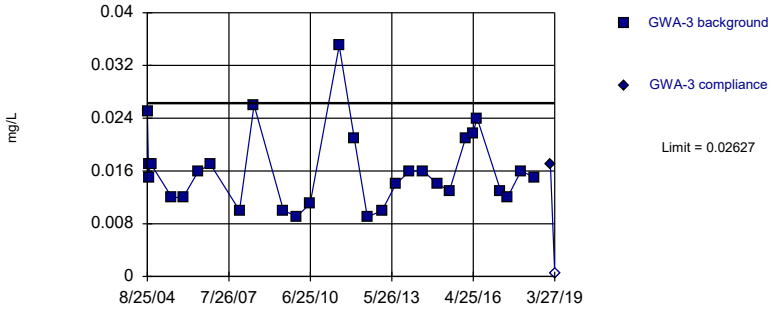
Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1251, Std. Dev.=0.0221, n=29. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.936, critical = 0.898. Kappa = 1.672 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

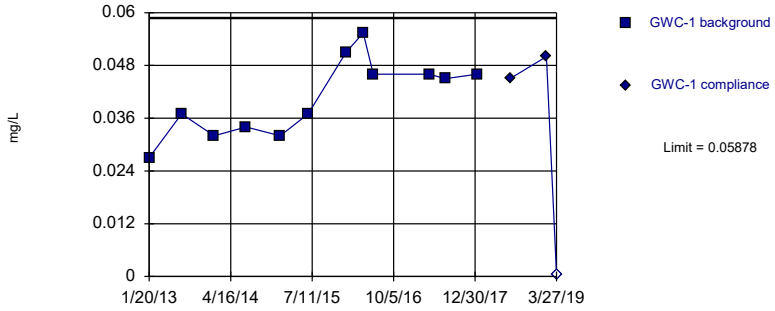
Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0407, Std. Dev.=0.008719, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9461, critical = 0.805. Kappa = 2.073 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

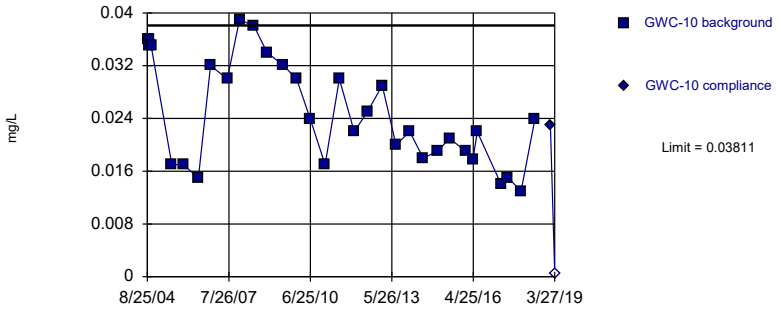
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02493, Std. Dev.=0.007985, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9227, critical = 0.904. Kappa = 1.65 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

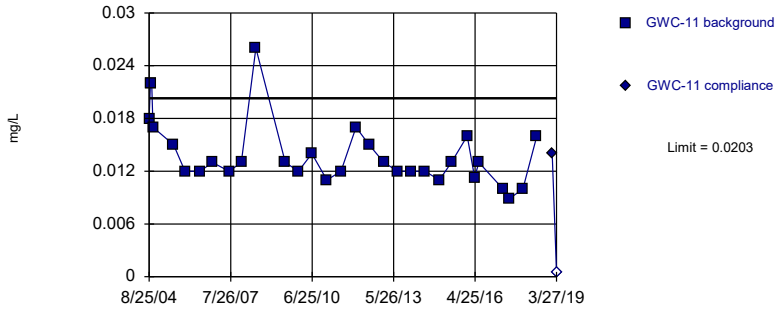
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-4.299, Std. Dev.=0.2425, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9211, critical = 0.902. Kappa = 1.656 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

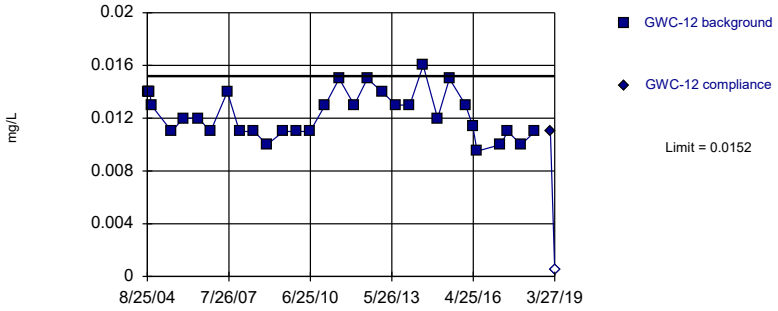
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.01234, Std. Dev.=0.001731, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9337, critical = 0.904. Kappa = 1.65 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

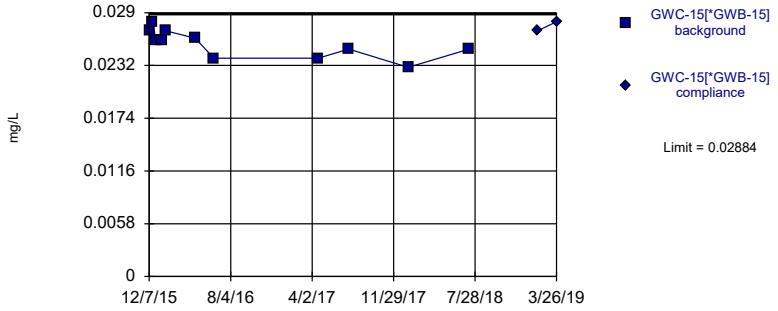
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02556, Std. Dev.=0.001515, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9685, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

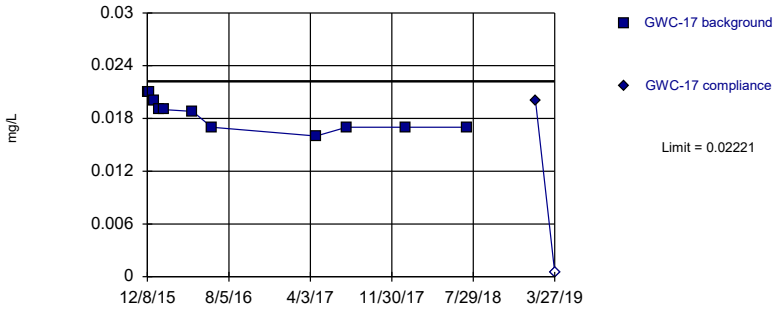
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.01844, Std. Dev.=0.001748, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8952, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

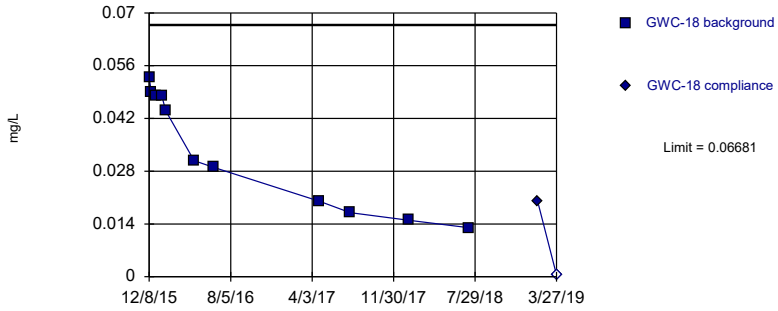
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.03335, Std. Dev.=0.01548, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8728, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

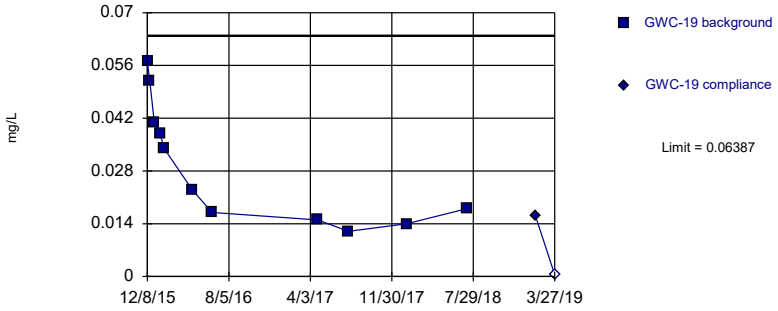
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02918, Std. Dev.=0.01604, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8874, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

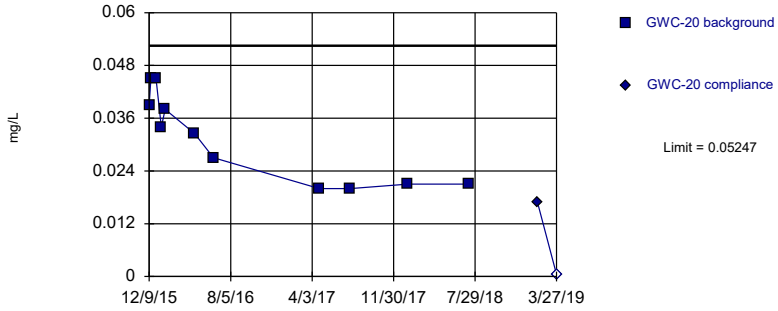
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.03114, Std. Dev.=0.009869, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8798, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

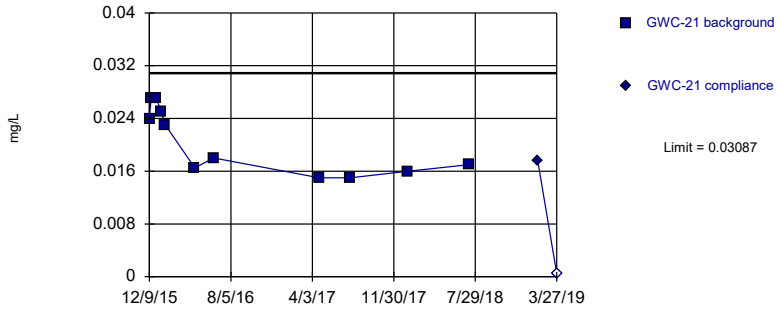
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02032, Std. Dev.=0.00488, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8494, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

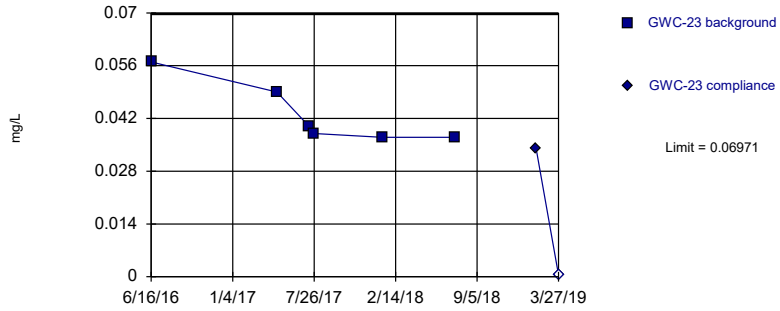
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.043, Std. Dev.=0.008222, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7961, critical = 0.713. Kappa = 3.249 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

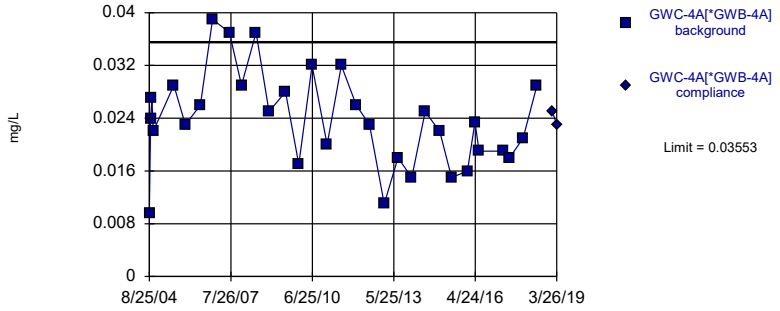
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02366, Std. Dev.=0.007198, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9793, critical = 0.904. Kappa = 1.65 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

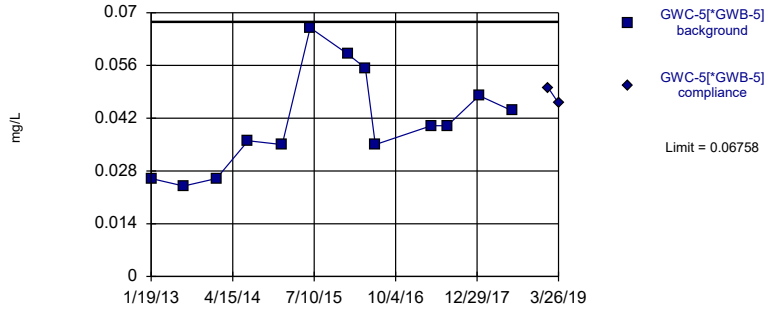
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0411, Std. Dev.=0.01307, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9435, critical = 0.814. Kappa = 2.027 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

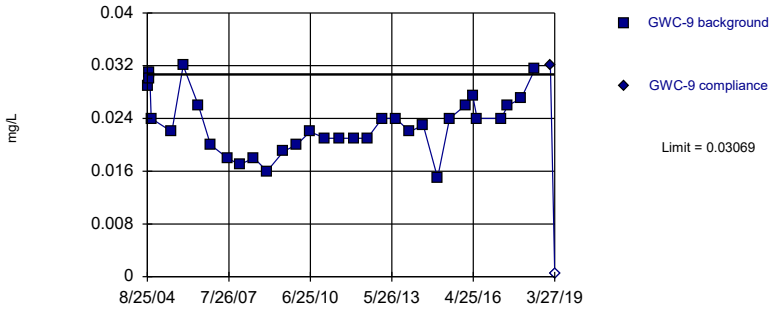
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02331, Std. Dev.=0.004471, n=32. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9689, critical = 0.904. Kappa = 1.65 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Barium, Total Analysis Run 8/8/2019 3:41 PM

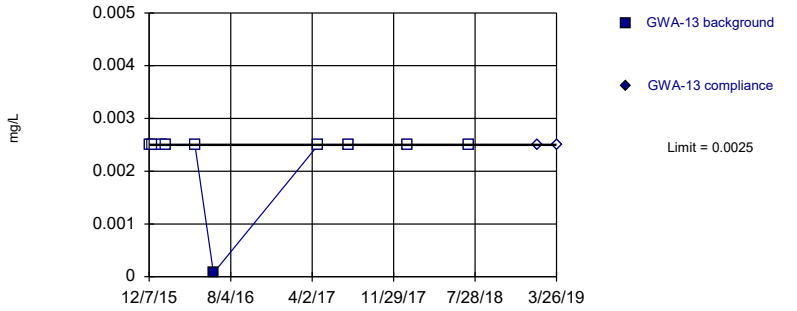
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:41 PM

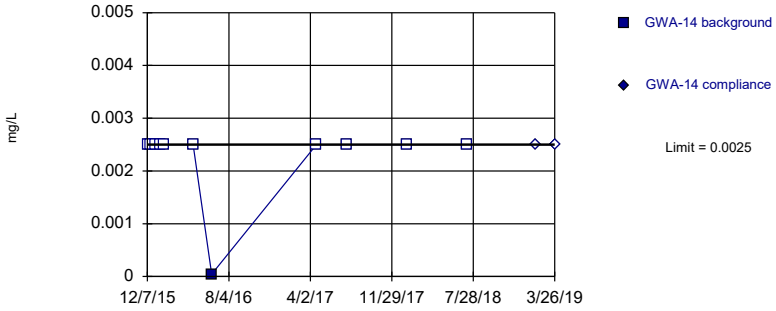
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:41 PM

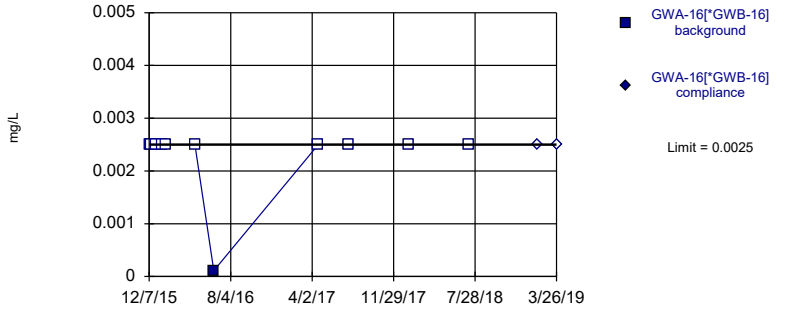
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:41 PM

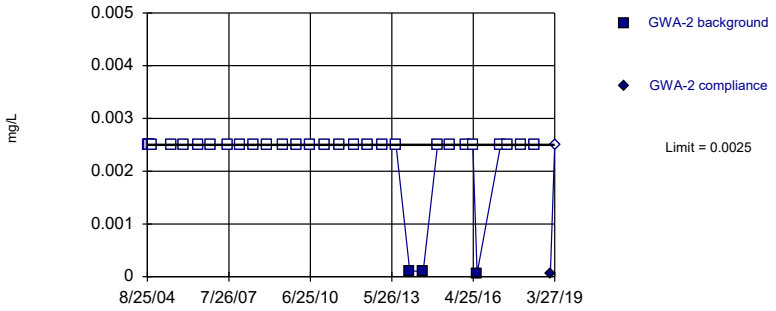
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

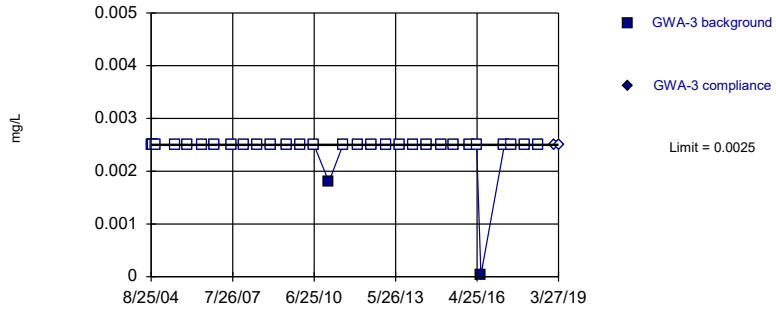
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

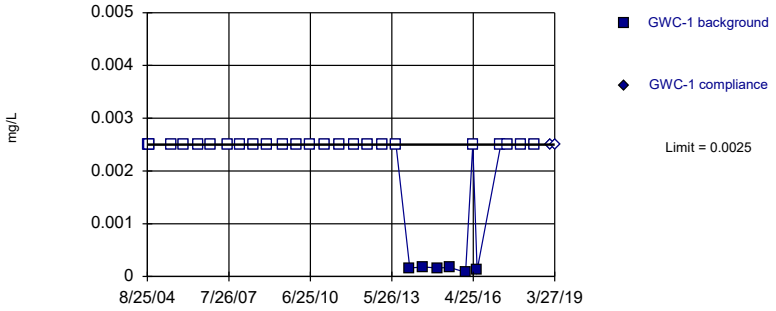
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 80.65% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

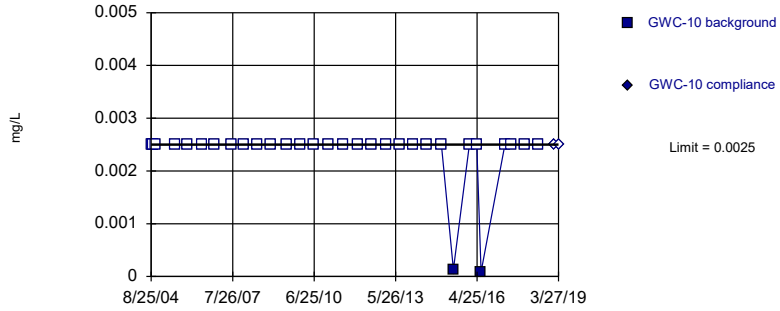
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

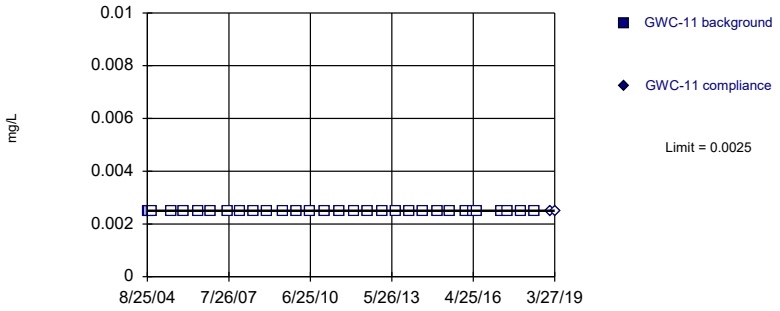
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

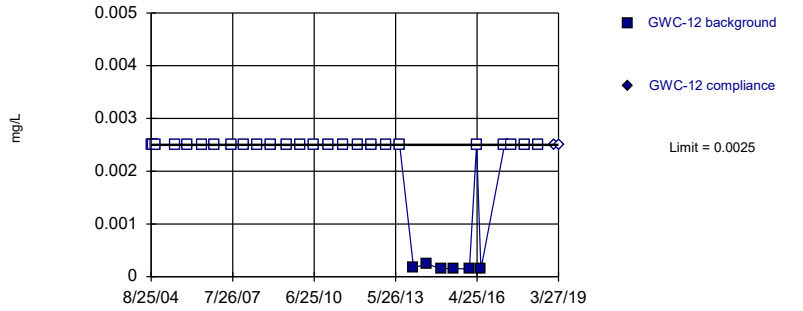
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 81.25% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

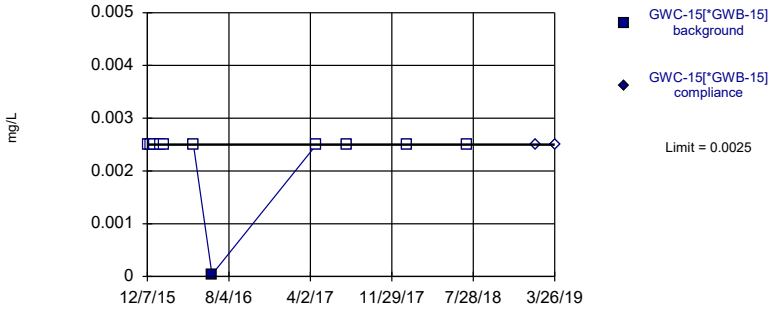
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

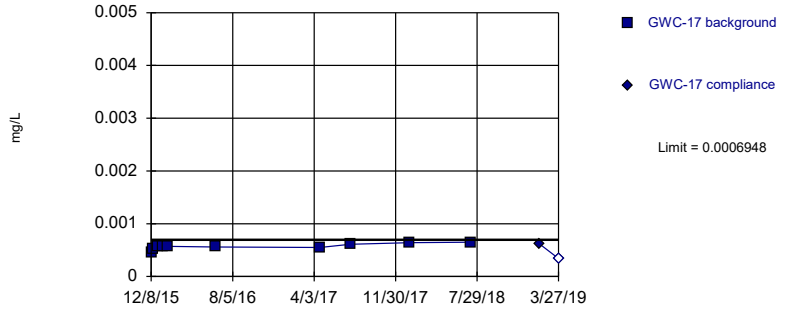
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.000569, Std. Dev.=0.00005587, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9459, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

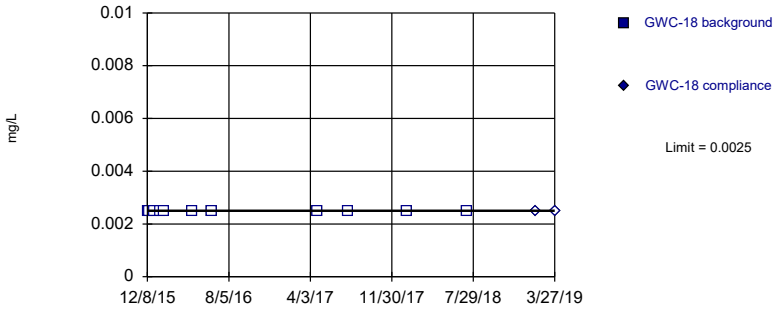
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

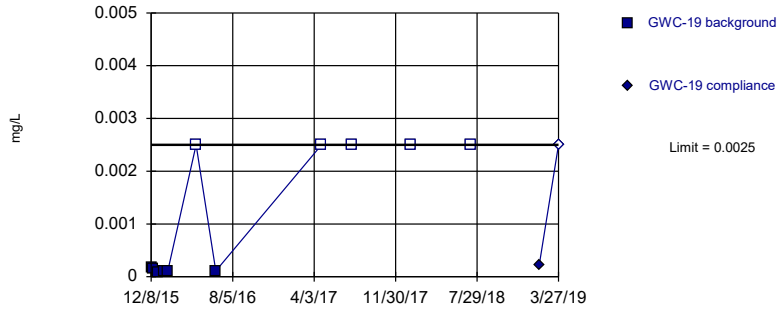
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

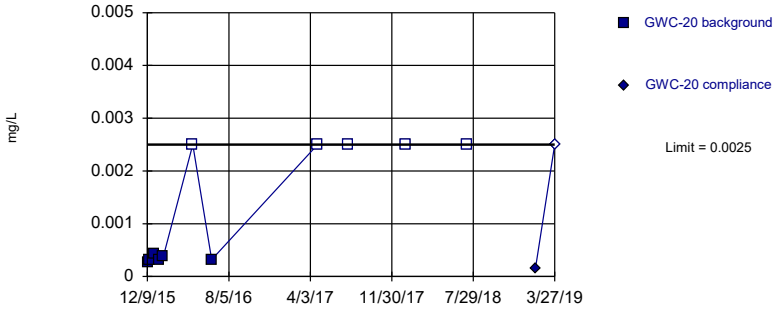
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

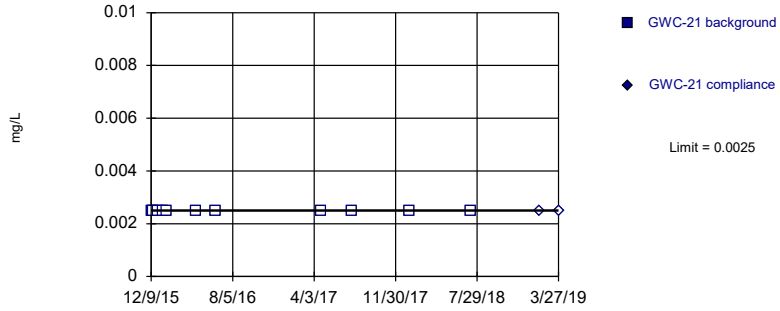
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

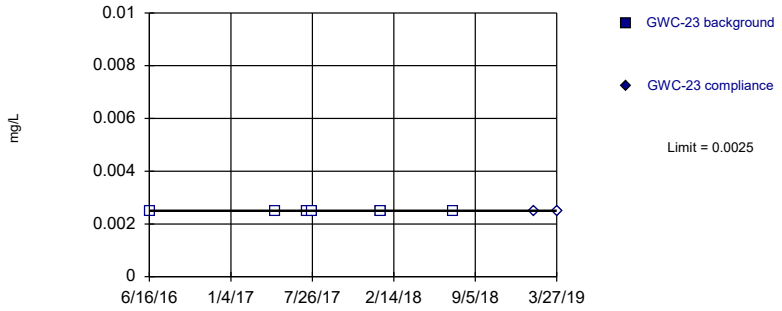
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 6) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02273. Individual comparison alpha = 0.01143 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

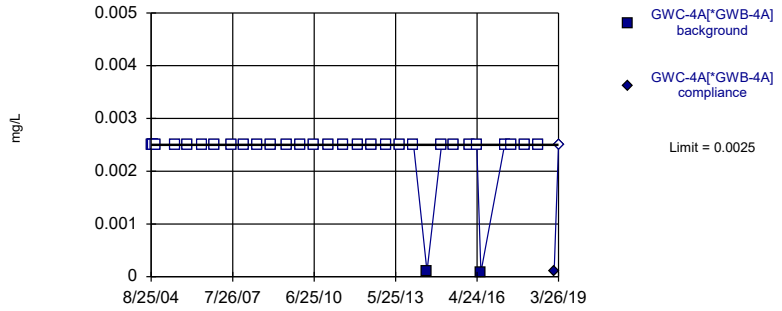
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

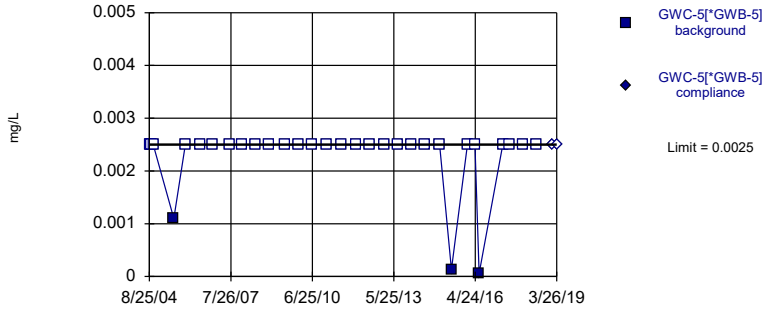
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

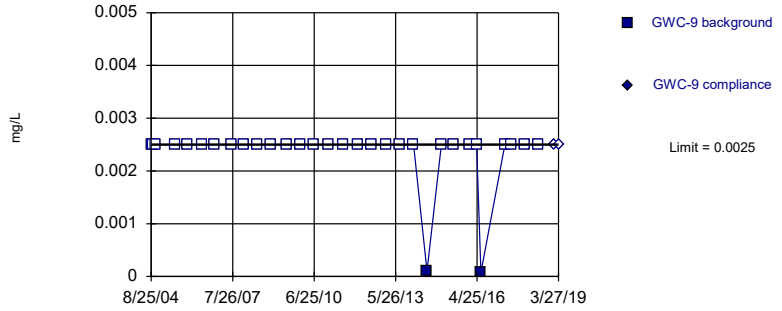
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Beryllium, Total Analysis Run 8/8/2019 3:42 PM

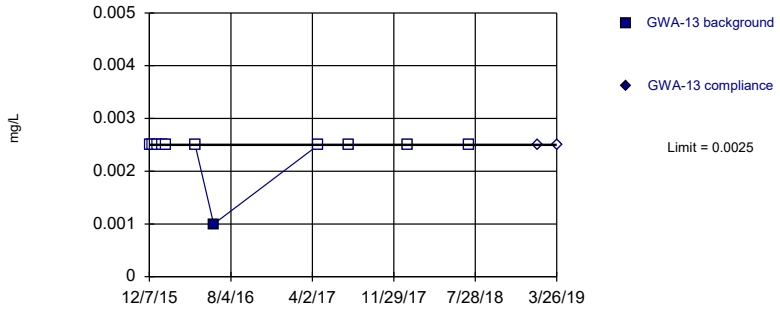
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

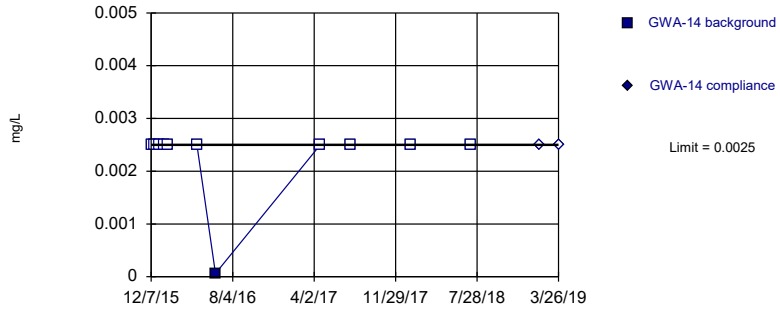
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

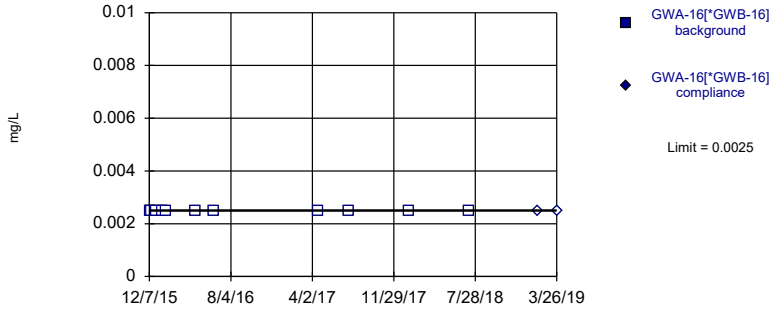
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

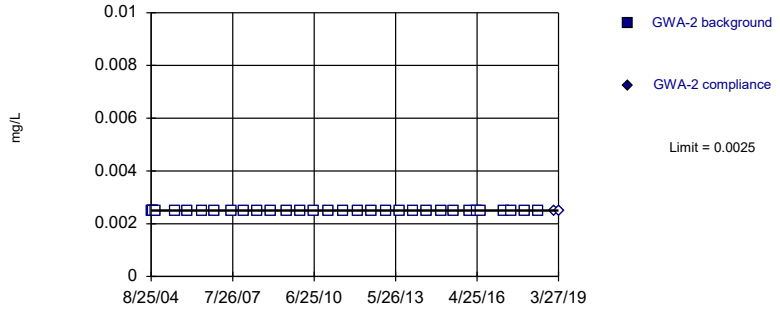
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

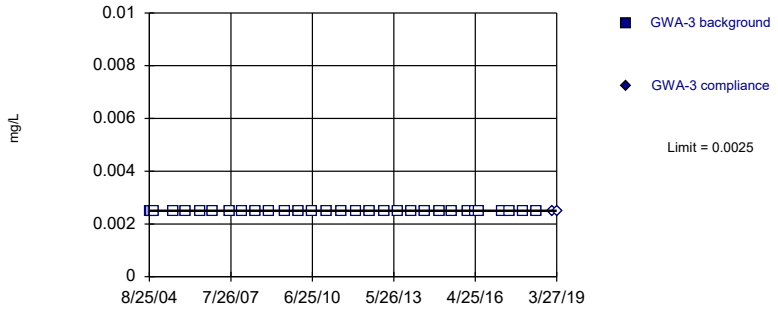
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

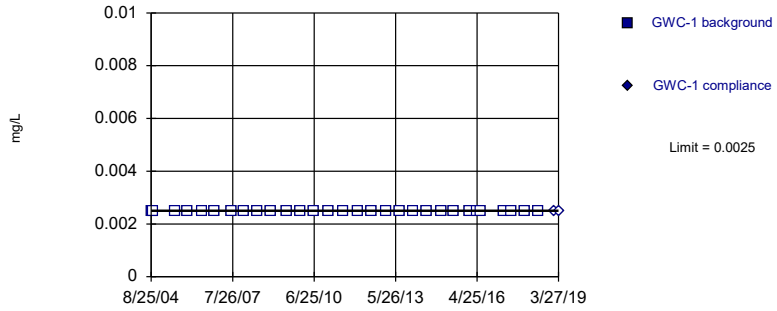
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

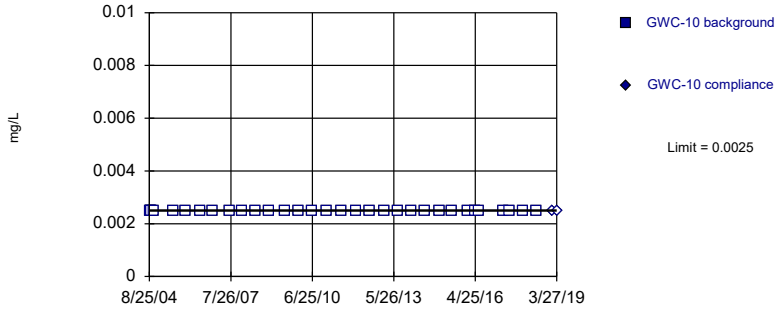
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

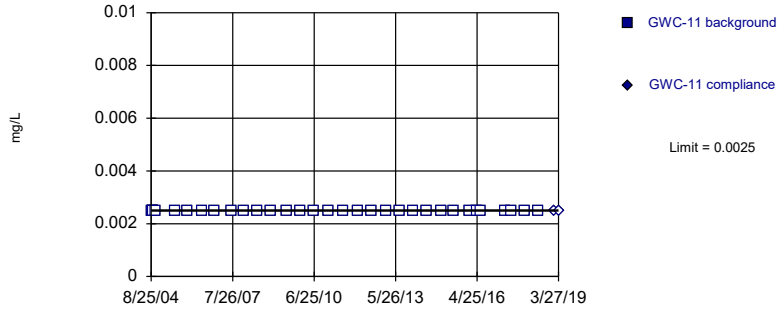
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

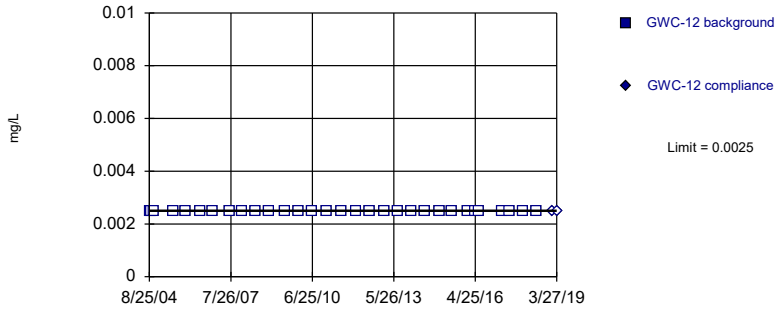
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

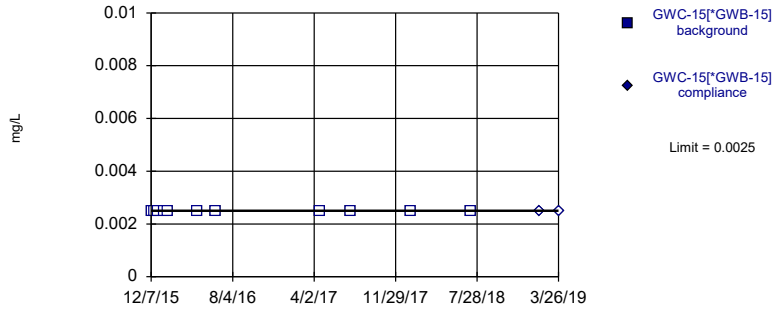
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

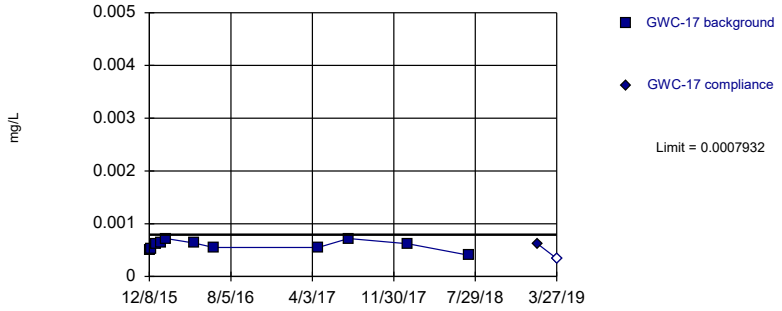
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0005866, Std. Dev.=0.00009556, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9533, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

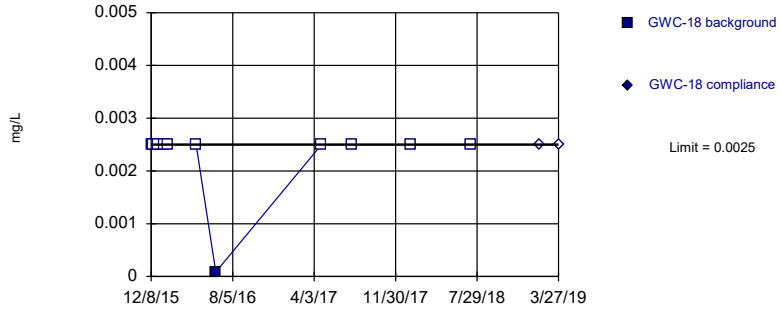
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

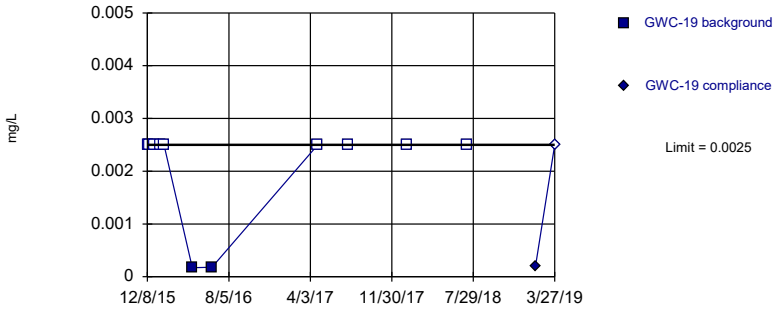
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

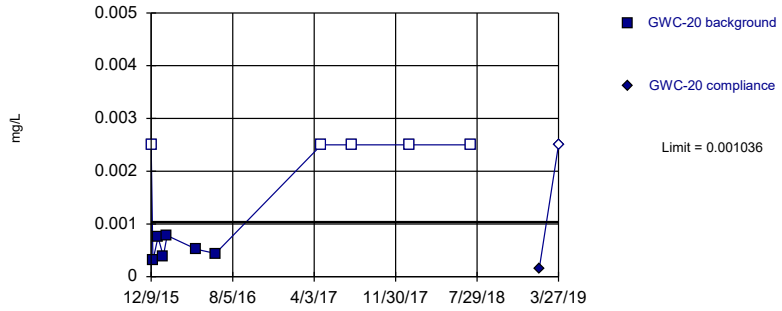
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-7.595, Std. Dev.=0.3342, n=11, 45.45% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8042, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

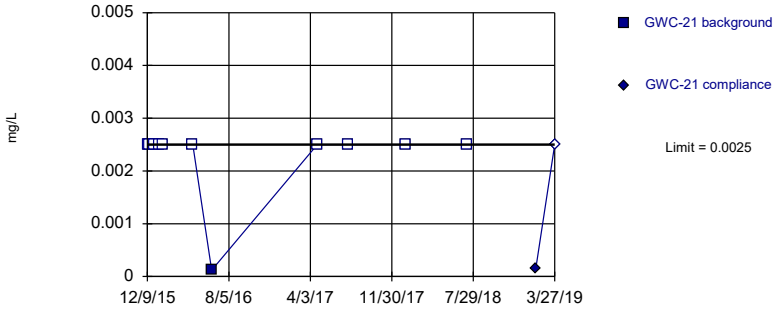
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

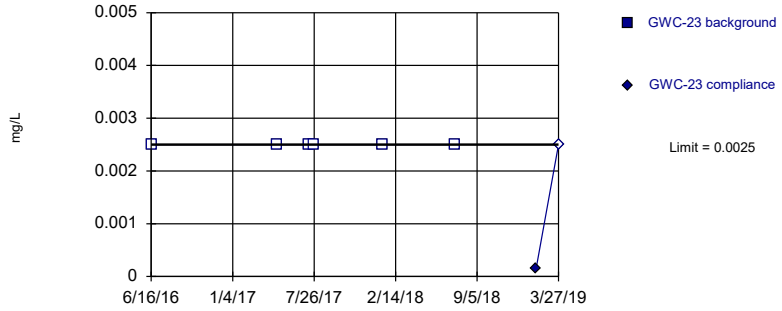
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 6) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02273. Individual comparison alpha = 0.01143 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

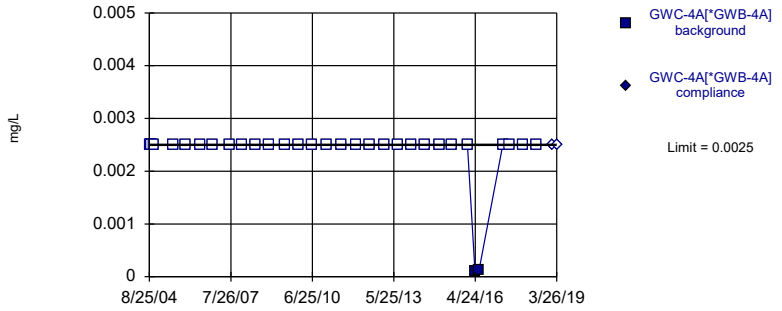
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

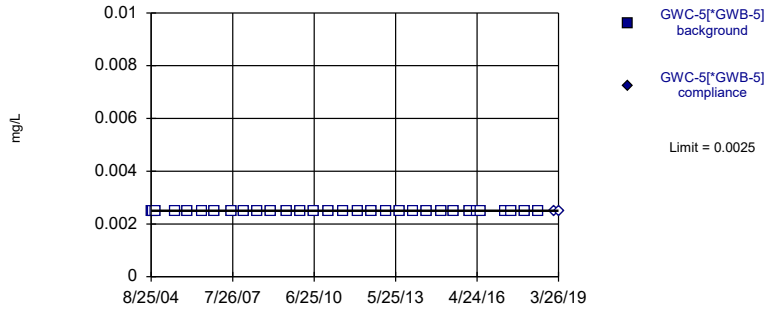
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

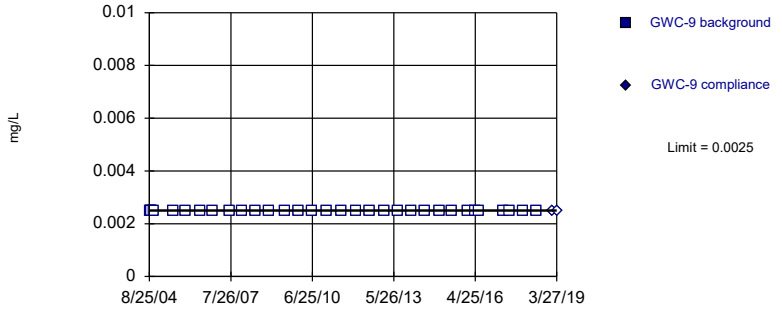
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cadmium, Total Analysis Run 8/8/2019 3:42 PM

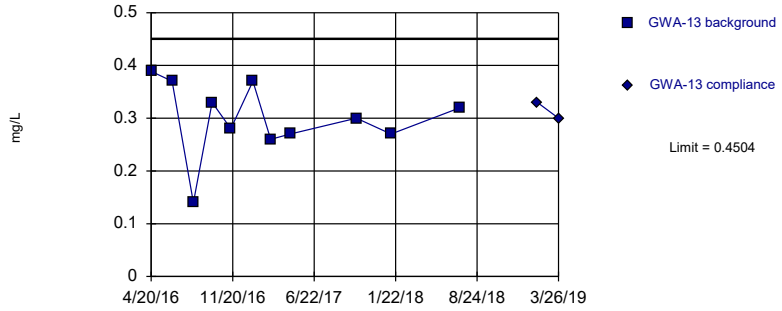
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2999, Std. Dev.=0.06959, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9098, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

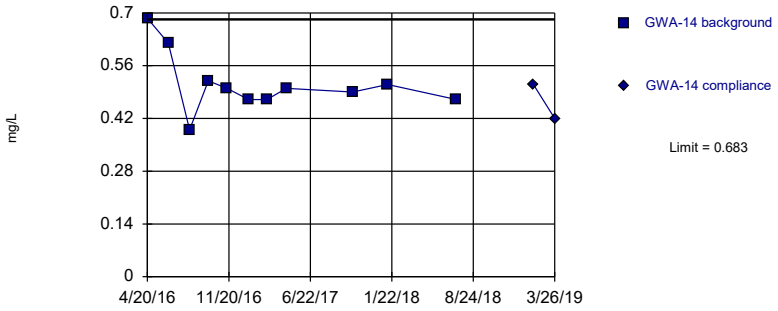
Constituent: Calcium Analysis Run 8/8/2019 3:42 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.5115, Std. Dev.=0.07934, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.864, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

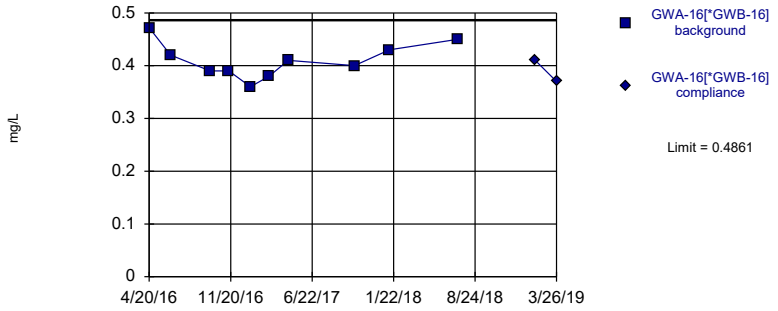
Constituent: Calcium Analysis Run 8/8/2019 3:42 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4102, Std. Dev.=0.03374, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9752, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:42 PM

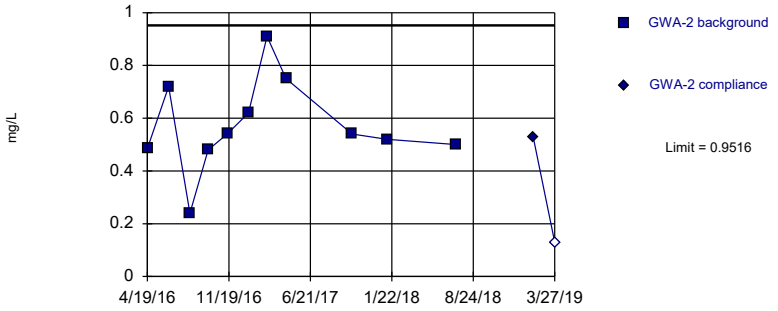
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.5732, Std. Dev.=0.175, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9394, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:42 PM

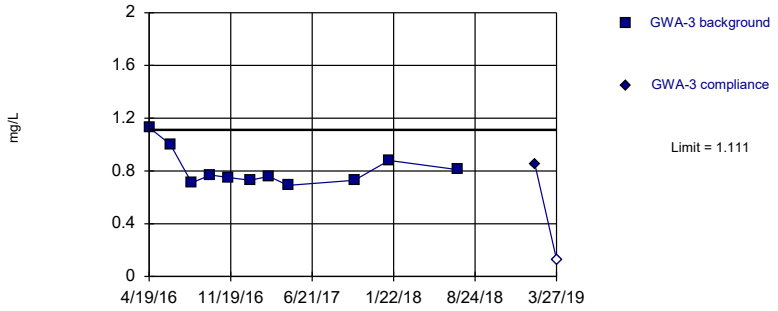
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.8145, Std. Dev.=0.1371, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8058, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:42 PM

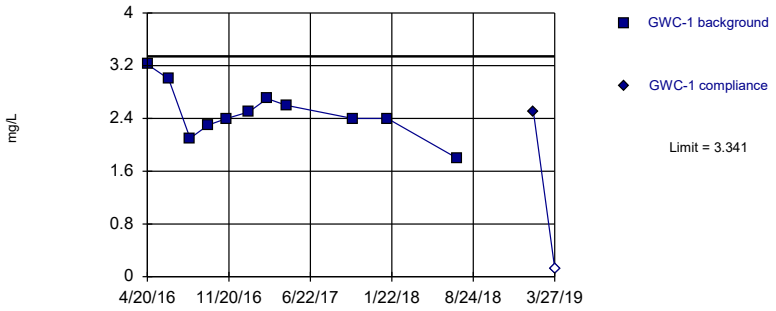
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.493, Std. Dev.=0.3922, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9673, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:42 PM

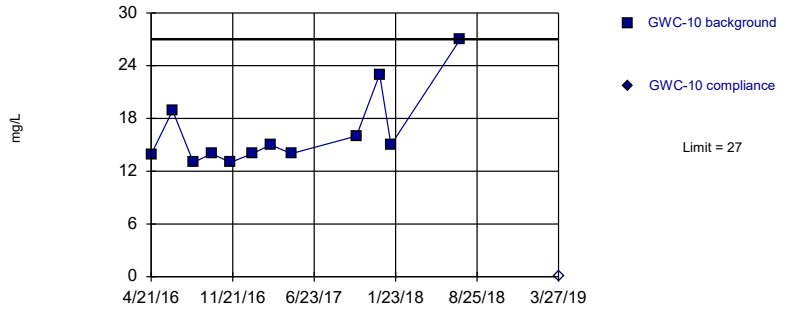
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 12 background values. Well-constituent pair annual alpha = 0.004342. Individual comparison alpha = 0.002173 (1 of 3).

Constituent: Calcium Analysis Run 8/8/2019 3:42 PM

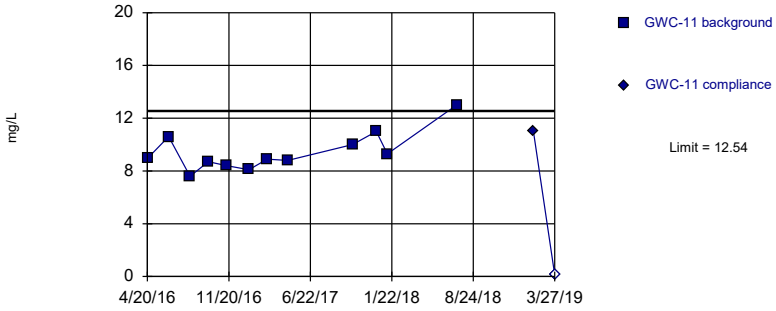
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=9.445, Std. Dev.=1.494, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8963, critical = 0.805. Kappa = 2.073 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

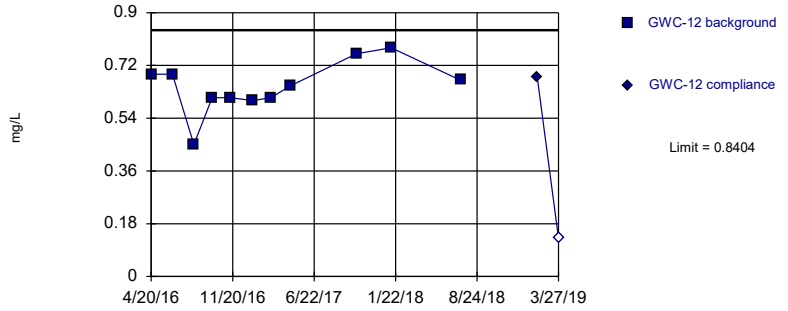
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.6473, Std. Dev.=0.08934, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9239, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

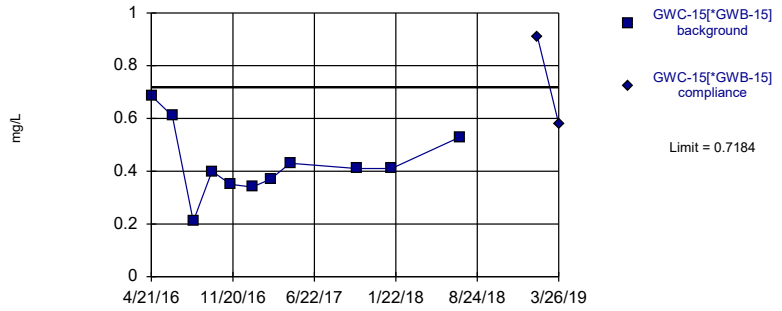
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.4315, Std. Dev.=0.1327, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9363, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

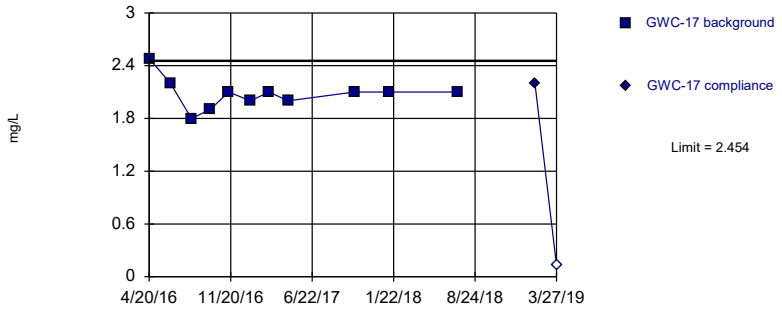
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.08, Std. Dev.=0.1732, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8917, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

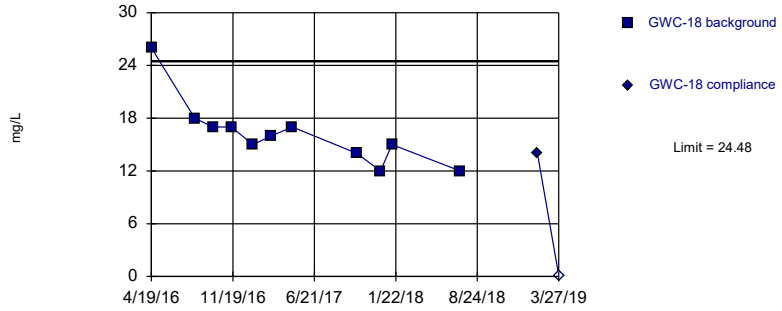
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=16.27, Std. Dev.=3.797, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8291, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

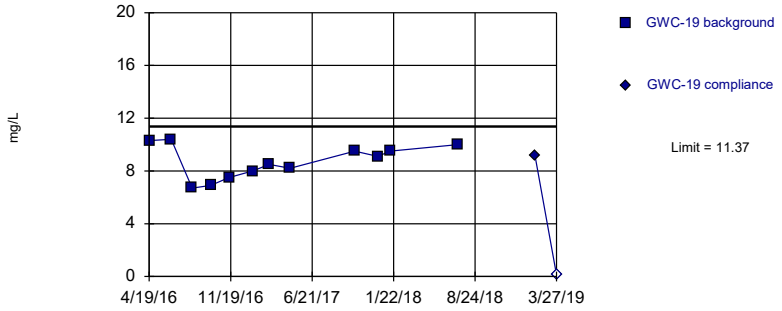
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.717, Std. Dev.=1.281, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9406, critical = 0.805. Kappa = 2.073 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

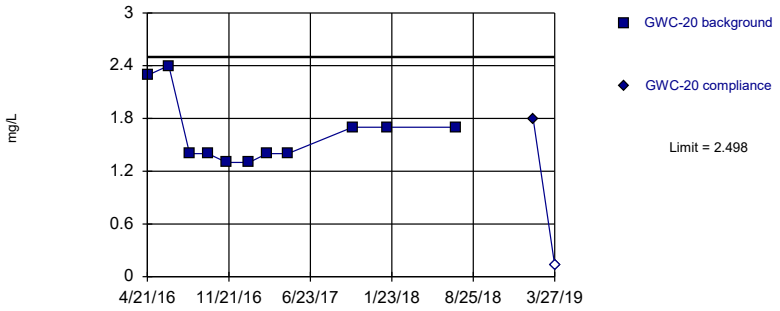
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.272, Std. Dev.=0.143, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8052, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

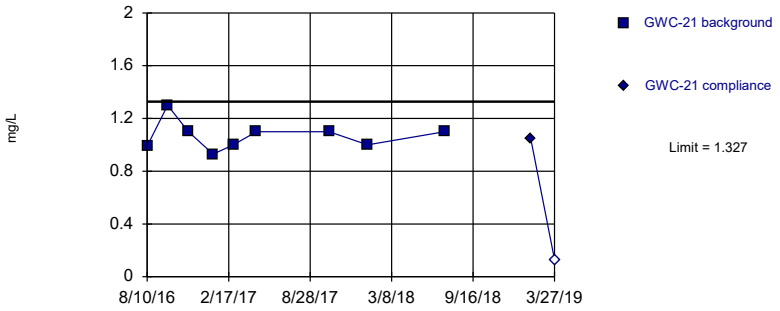
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1.069, Std. Dev.=0.1074, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8664, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

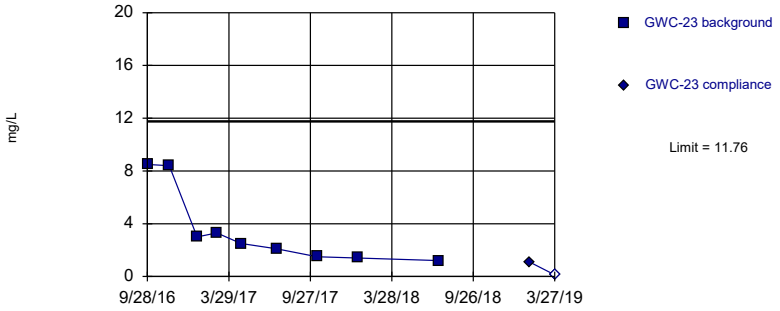
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.766, Std. Dev.=0.6914, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8209, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

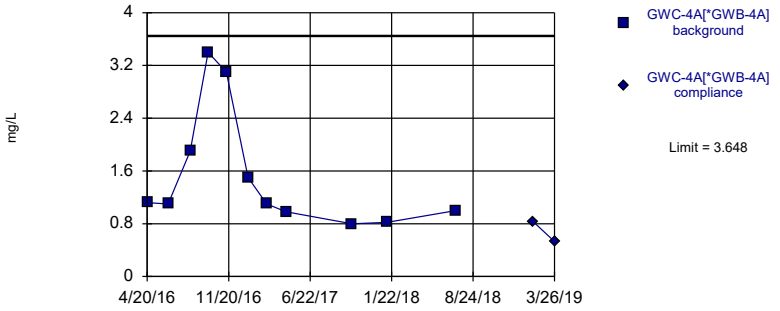
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=1.196, Std. Dev.=0.3303, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8026, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

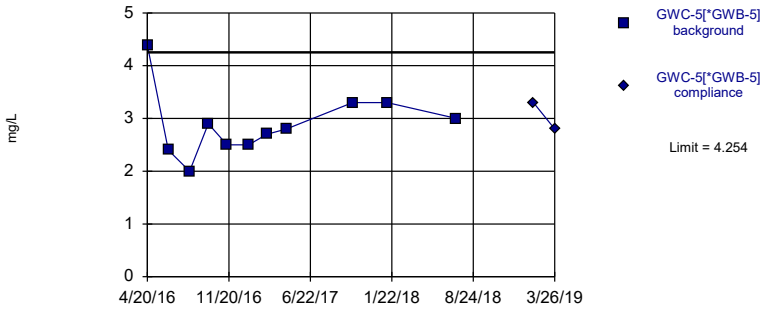
Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2.89, Std. Dev.=0.6308, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9103, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

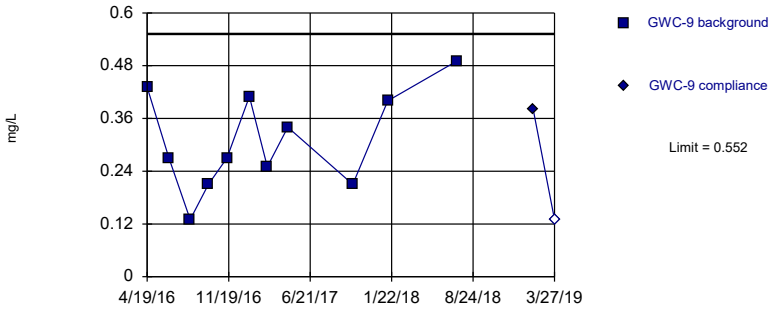
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.3101, Std. Dev.=0.1119, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9581, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Calcium Analysis Run 8/8/2019 3:43 PM

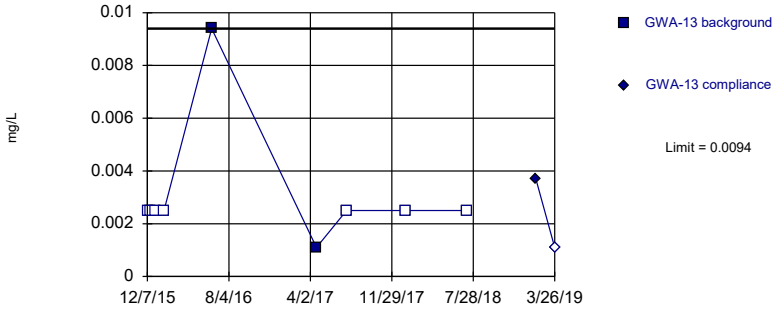
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

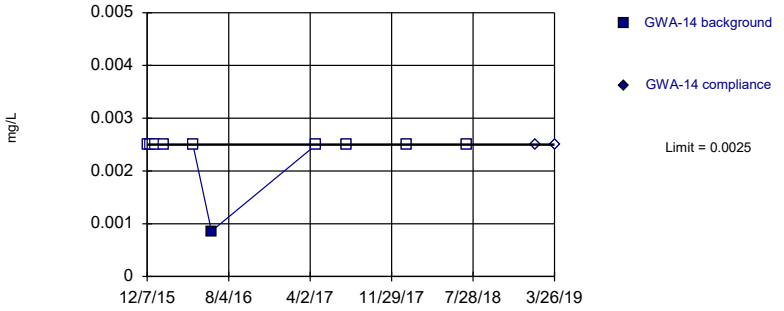
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

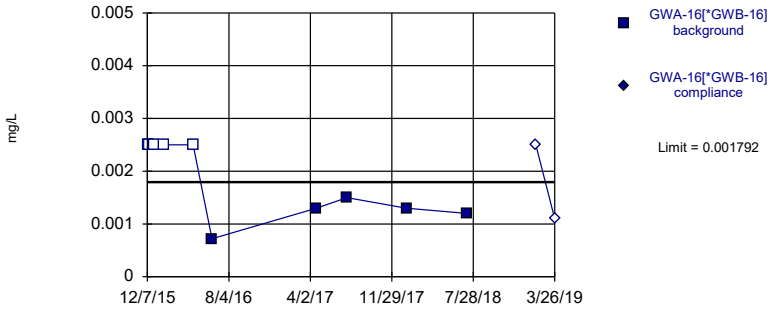
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001136, Std. Dev.=0.0002916, n=10, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7895, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

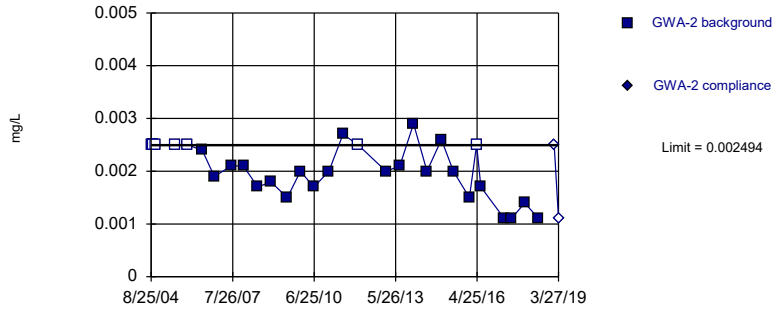
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001625, Std. Dev.=0.0005247, n=31, 25.81% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9311, critical = 0.902. Kappa = 1.656 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

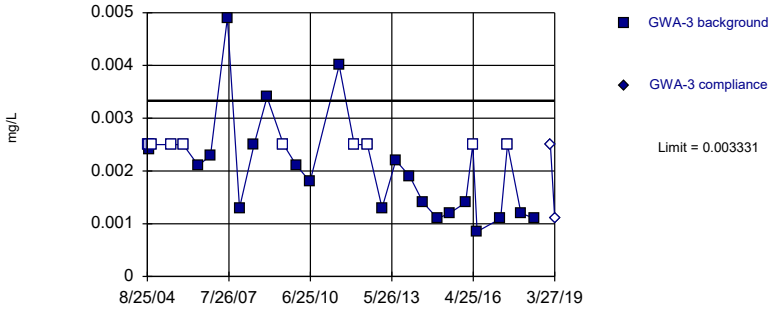
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.04012, Std. Dev.=0.01063, n=31, 32.26% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9119, critical = 0.902. Kappa = 1.656 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

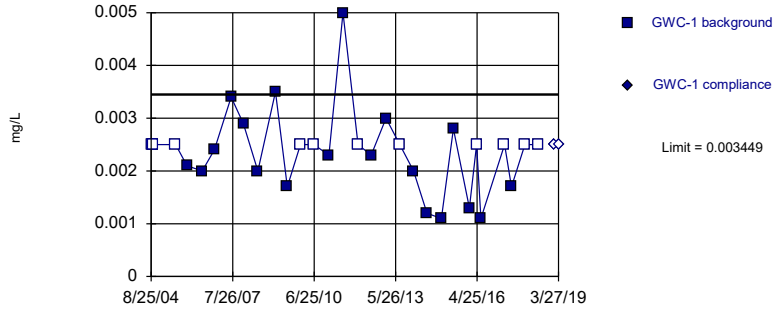
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.04281, Std. Dev.=0.009611, n=31, 38.71% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9061, critical = 0.902. Kappa = 1.656 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

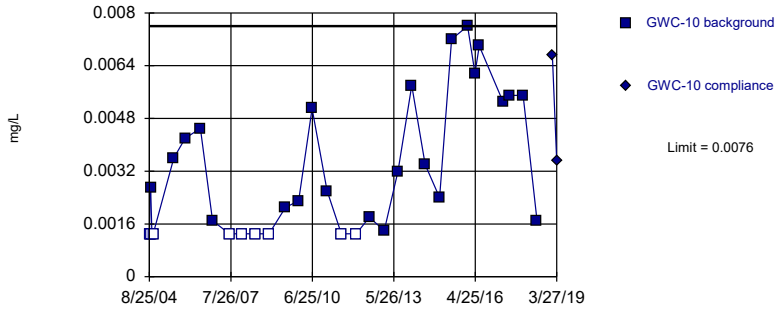
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 28.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

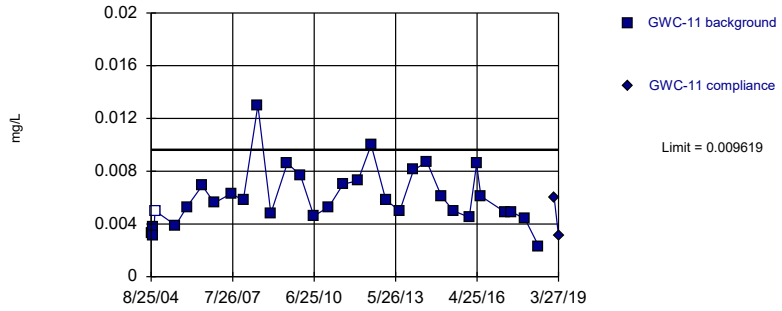
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.005989, Std. Dev.=0.0022, n=32, 3.125% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9325, critical = 0.904. Kappa = 1.65 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

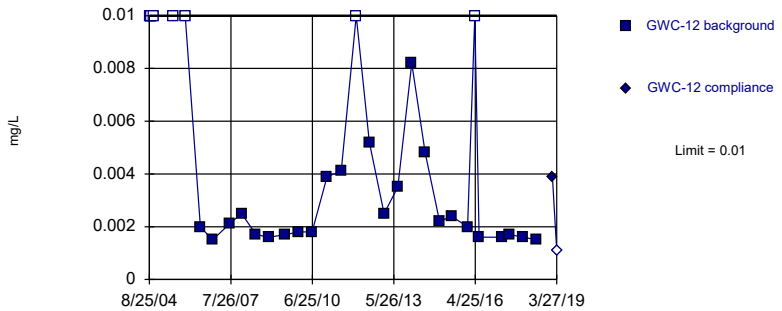
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 32 background values. 25% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

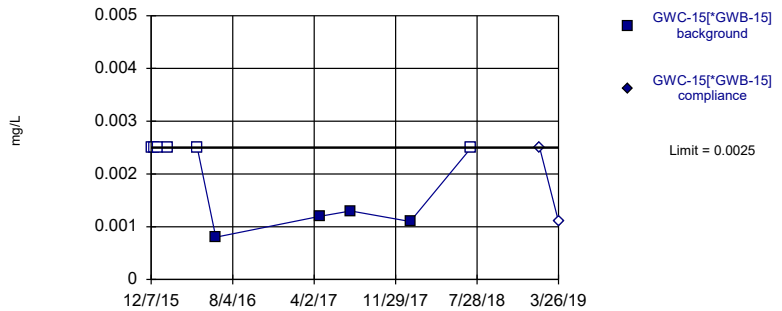
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

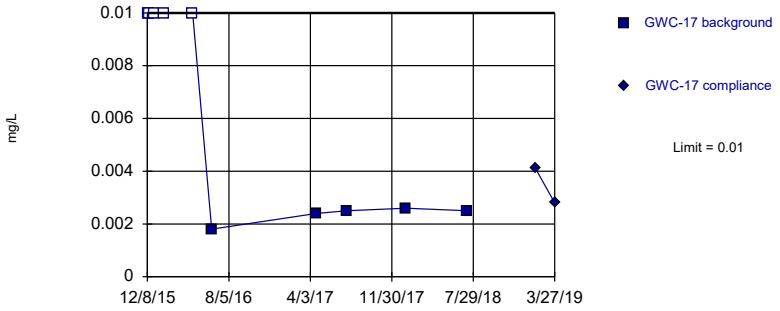
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 50% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

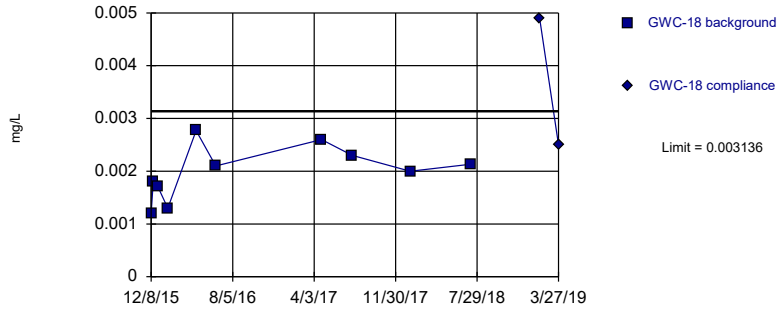
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00199, Std. Dev.=0.0005088, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9685, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

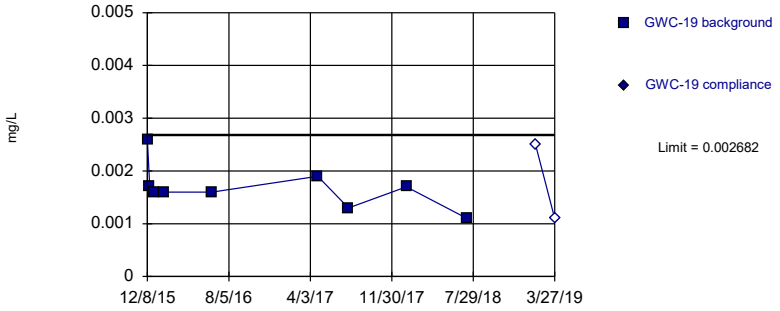
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.001678, Std. Dev.=0.0004177, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8782, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

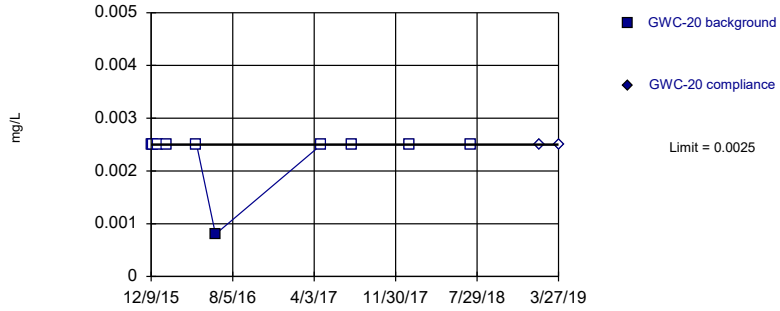
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

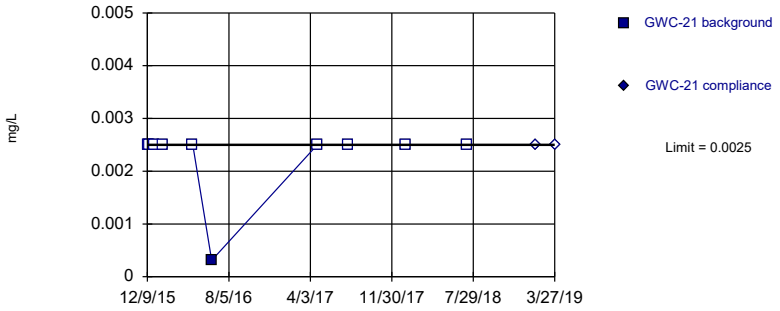
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

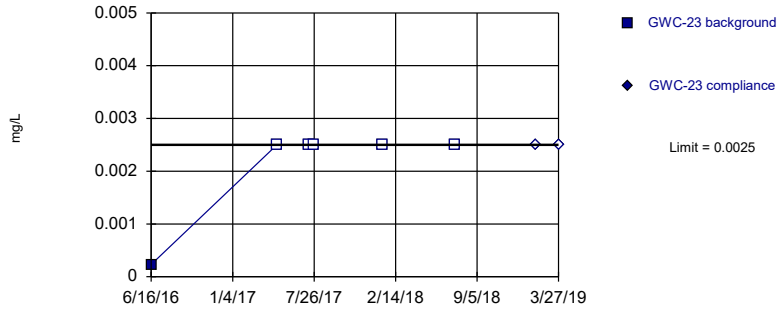
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 6 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.02273. Individual comparison alpha = 0.01143 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

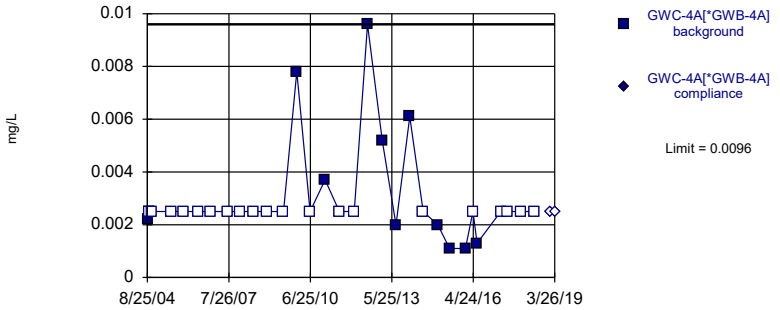
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 65.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

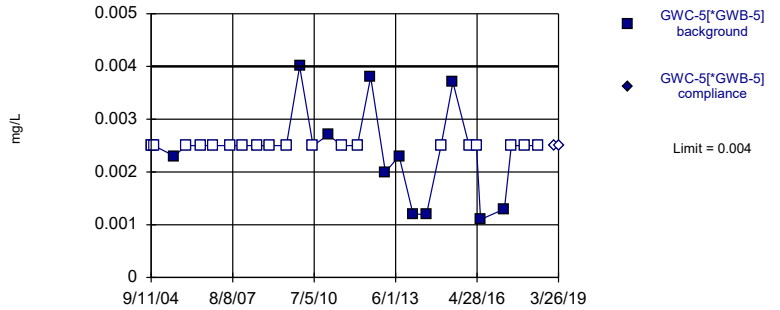
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

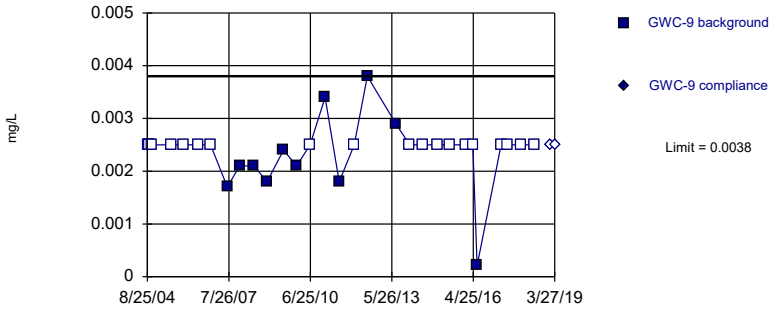
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Chromium, Total Analysis Run 8/8/2019 3:43 PM

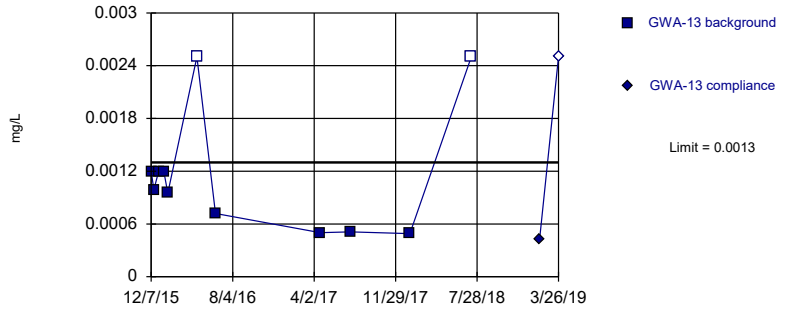
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0007496, Std. Dev.=0.0002548, n=11, 18.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7977, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

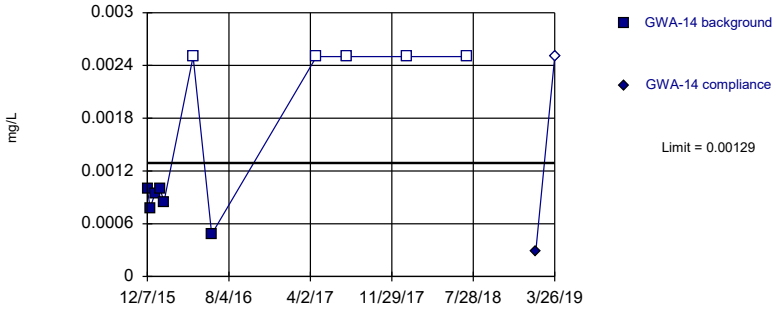
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.0923, Std. Dev.=0.007658, n=11, 45.45% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7942, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

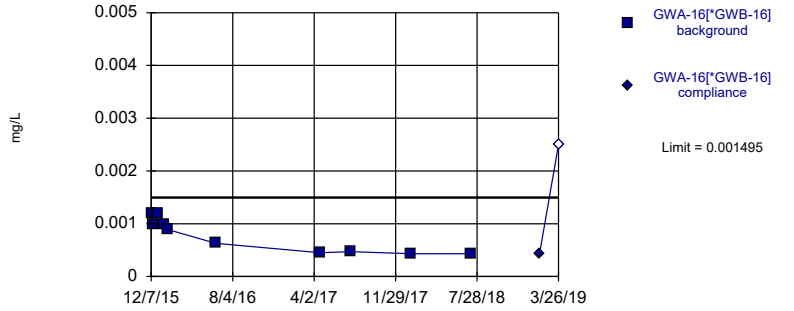
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00077, Std. Dev.=0.000322, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8456, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

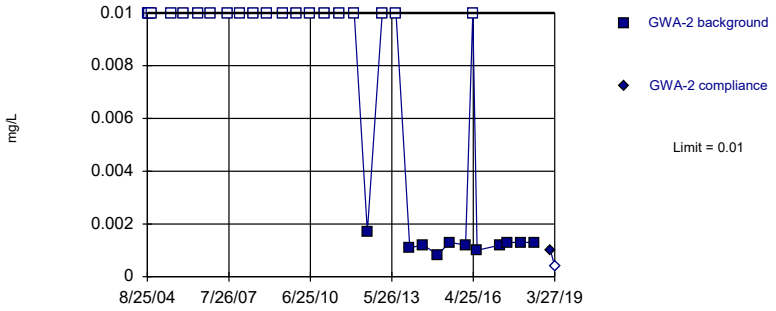
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 65.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

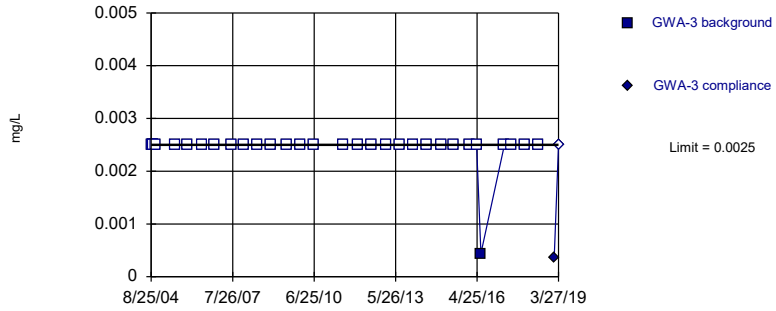
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

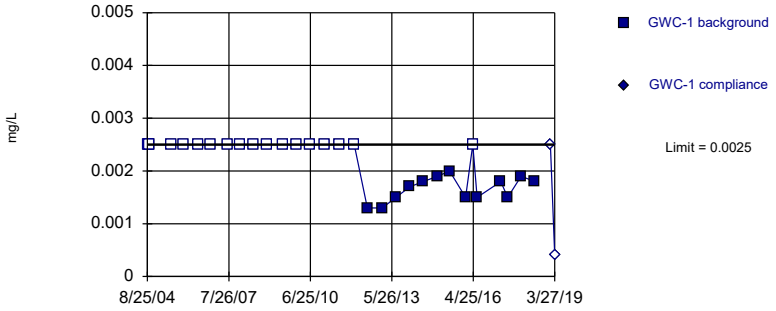
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 58.06% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

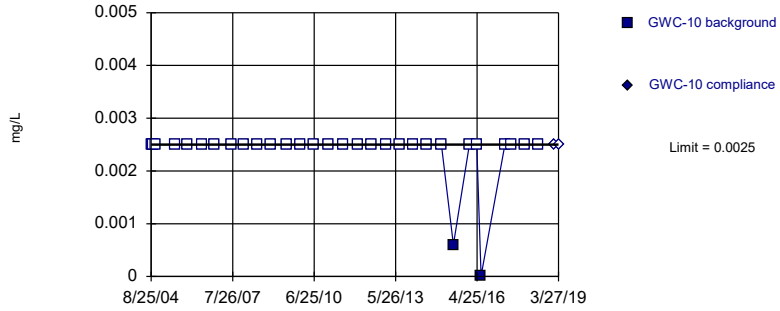
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

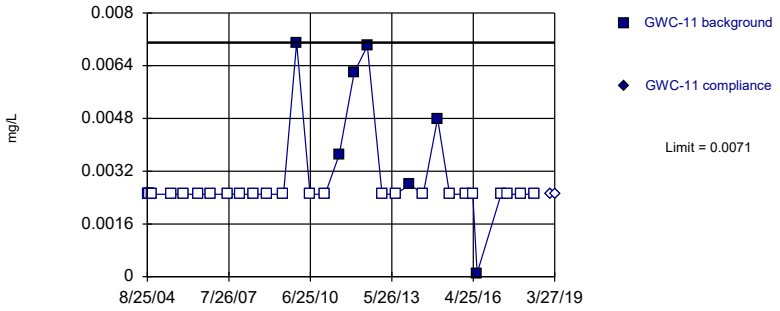
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 78.13% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

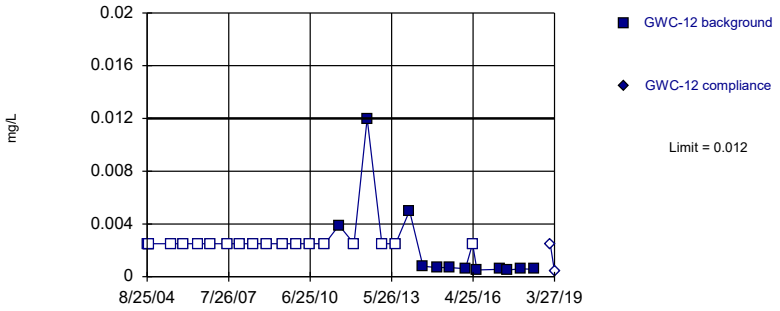
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 61.29% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

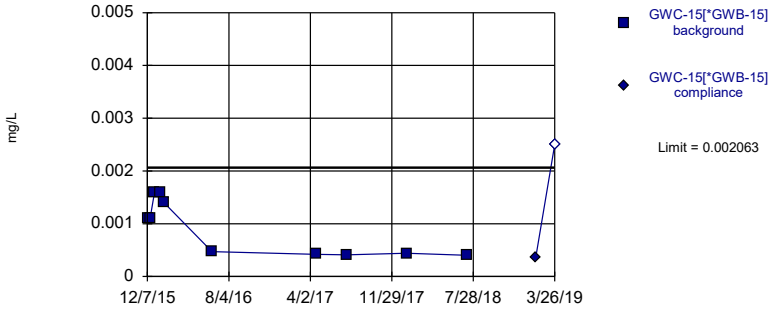
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.000894, Std. Dev.=0.0005193, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8031, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

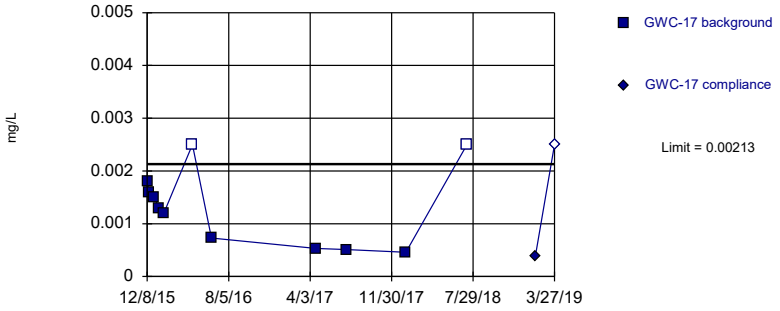
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.00107, Std. Dev.=0.0004901, n=11, 18.18% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9065, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:43 PM

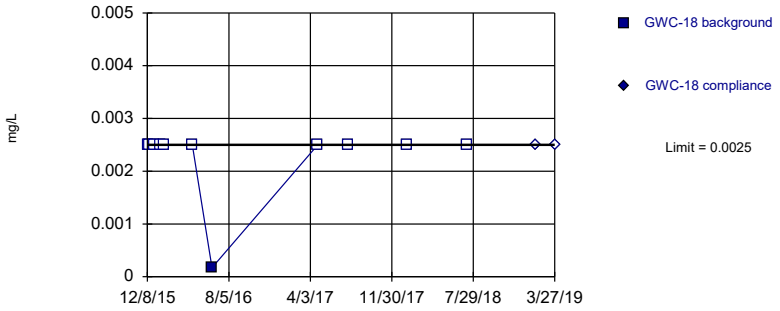
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:44 PM

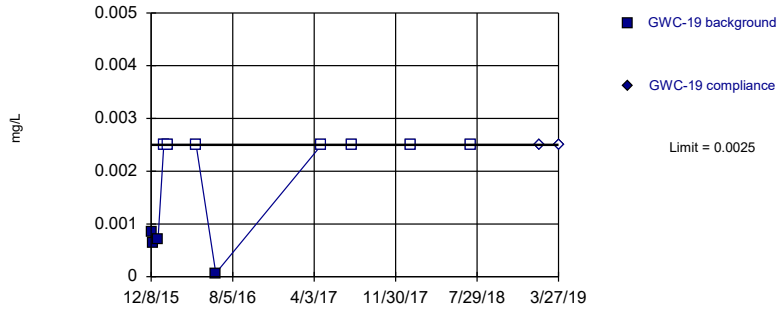
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 63.64% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:44 PM

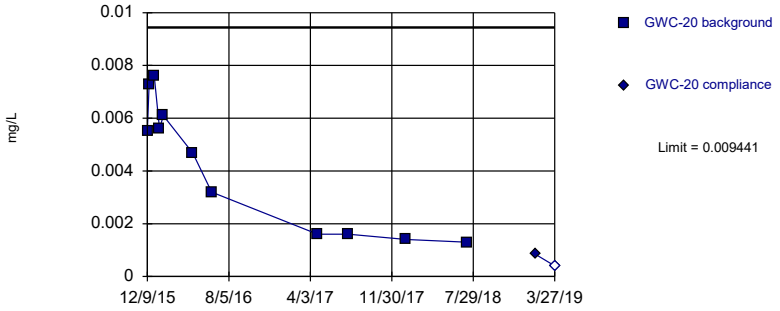
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.004171, Std. Dev.=0.002438, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8804, critical = 0.792. Kappa = 2.162 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:44 PM

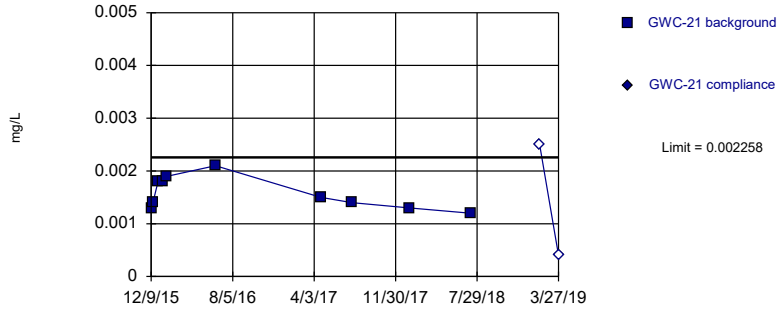
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00157, Std. Dev.=0.0003057, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9082, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

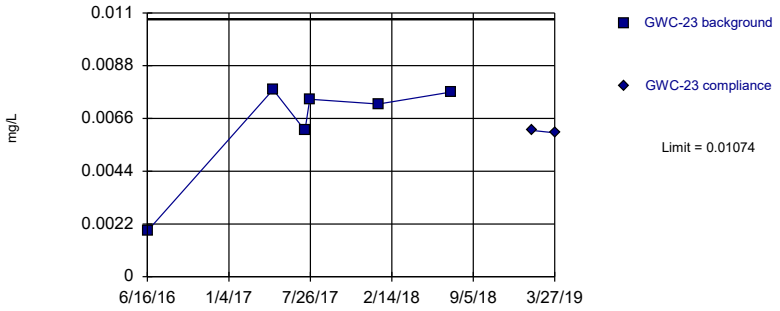
Constituent: Cobalt, Total Analysis Run 8/8/2019 3:44 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=0.00004459, Std. Dev.=0.00002177, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7895, critical = 0.713. Kappa = 3.249 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:44 PM

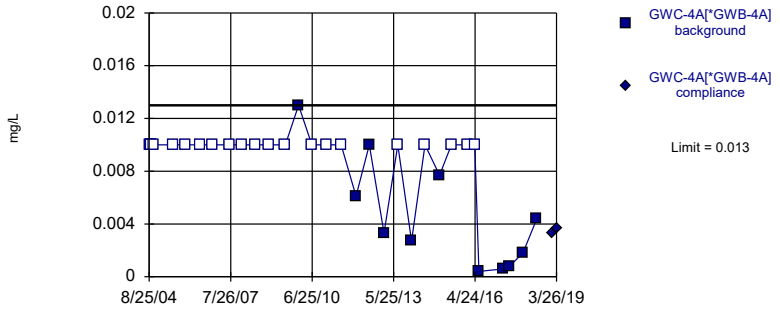
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 65.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:44 PM

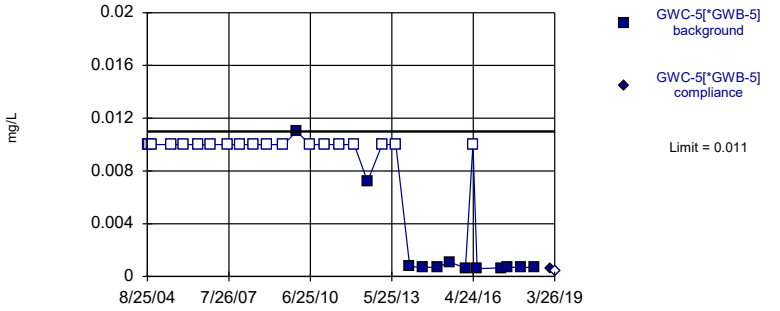
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 62.5% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:44 PM

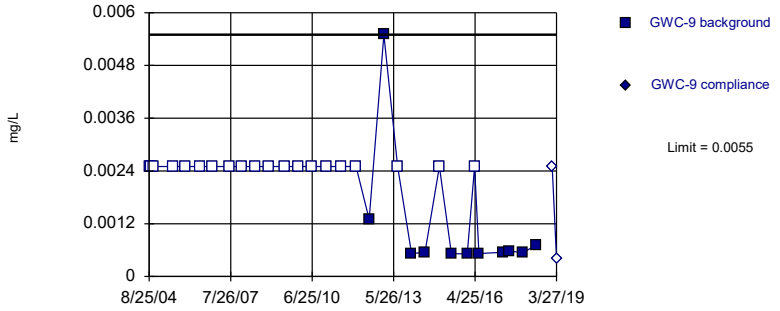
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 65.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Cobalt, Total Analysis Run 8/8/2019 3:44 PM

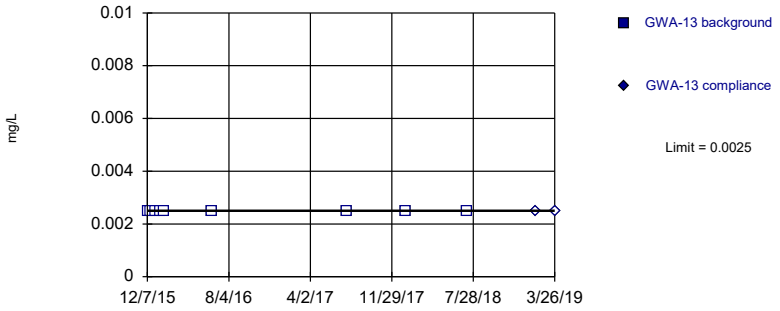
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

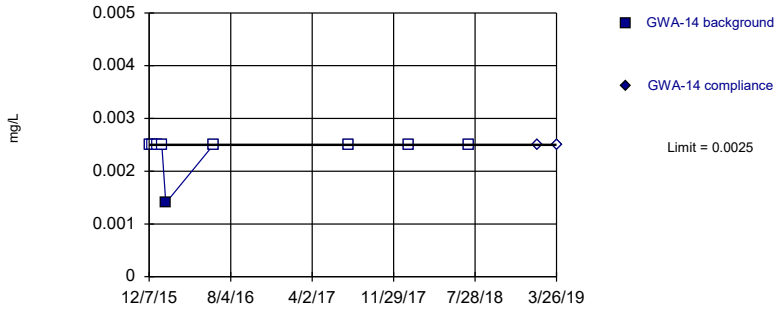
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

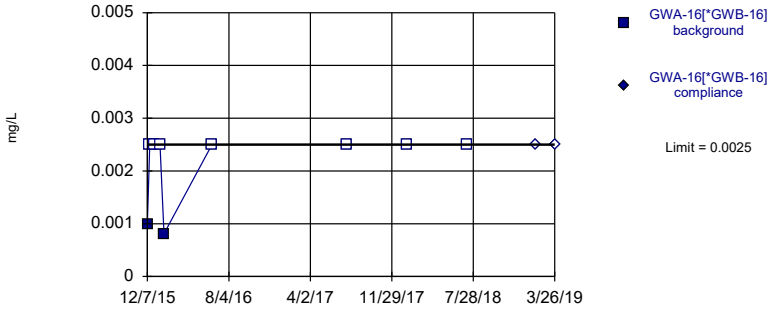
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

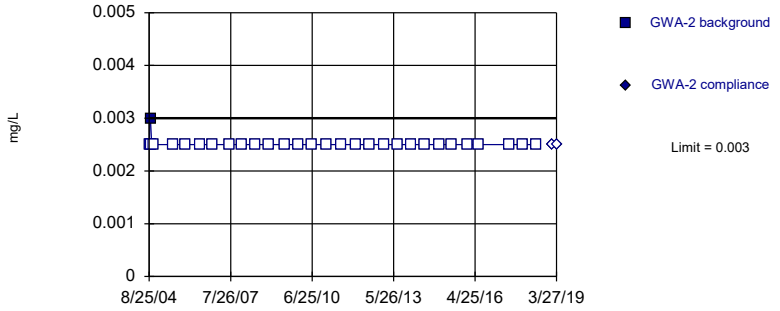
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

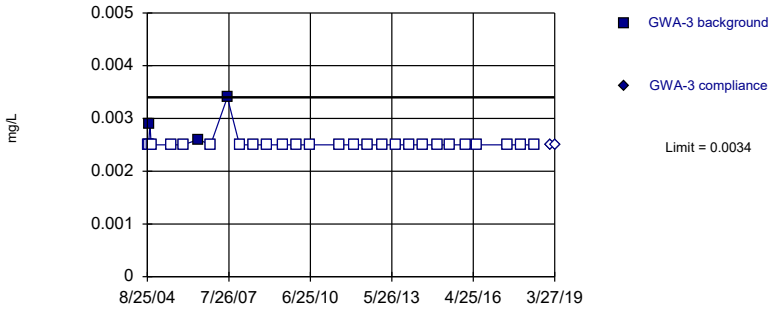
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 89.66% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

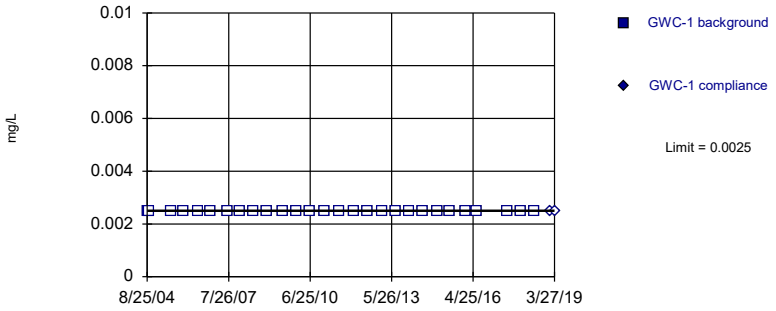
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

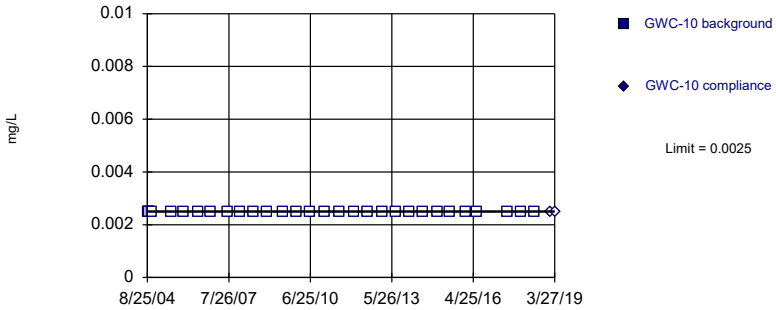
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

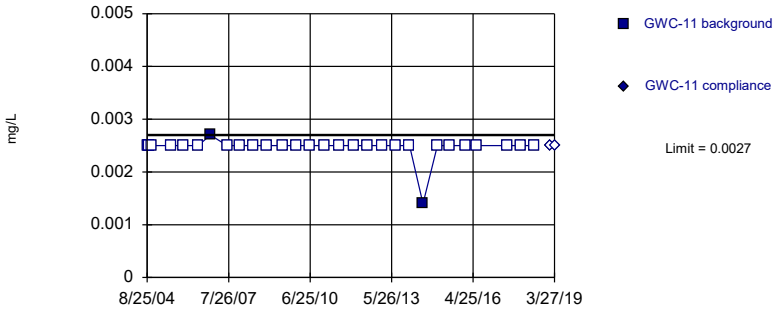
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

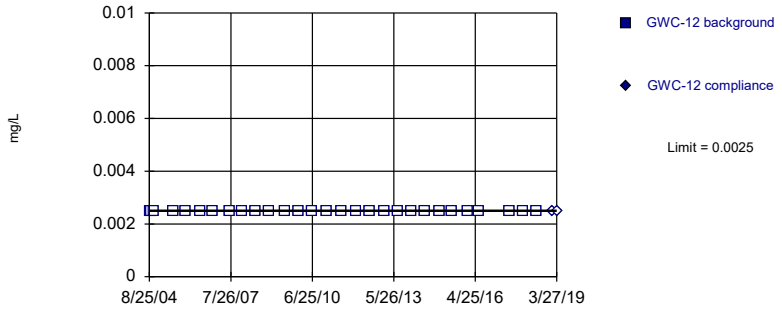
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

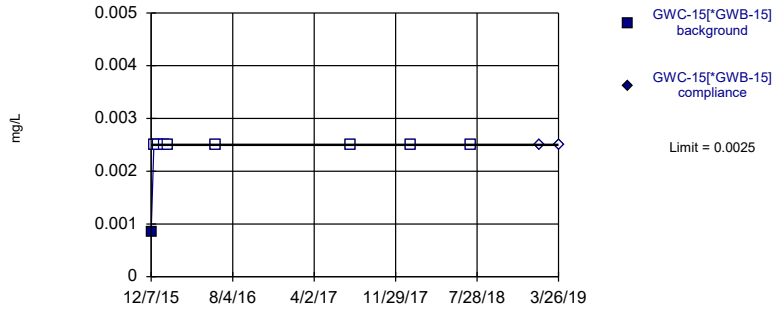
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

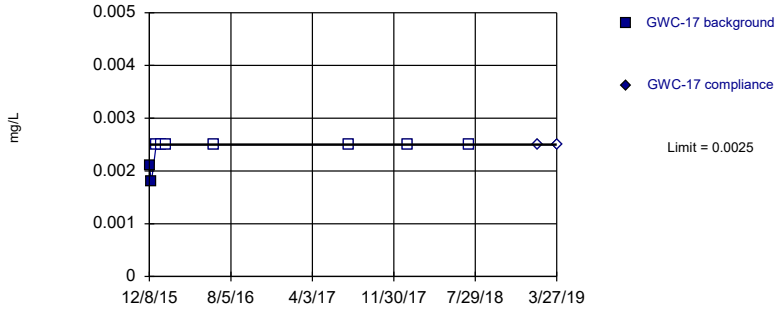
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

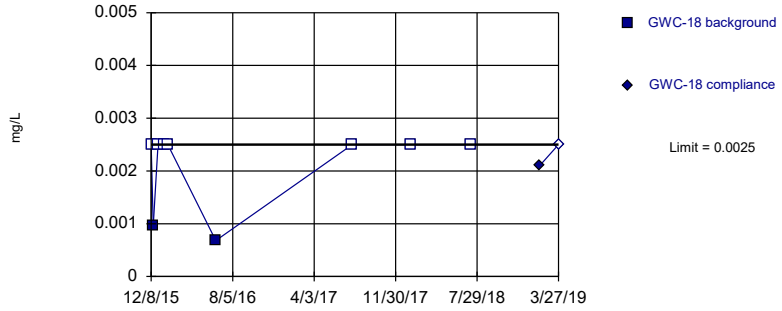
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

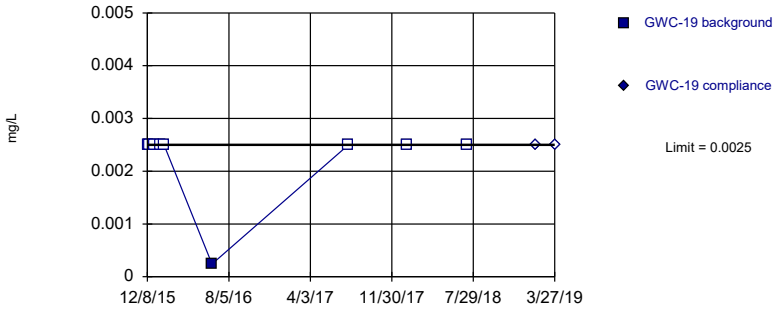
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

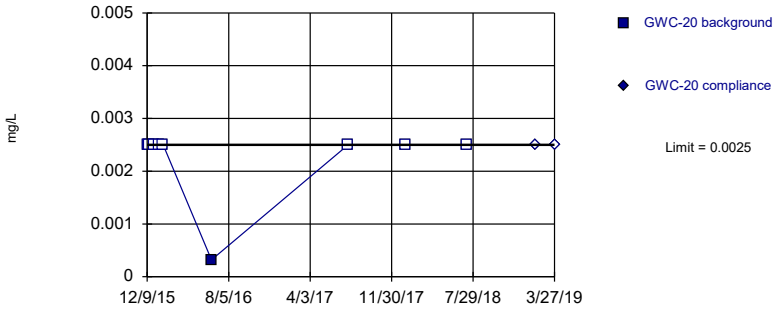
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

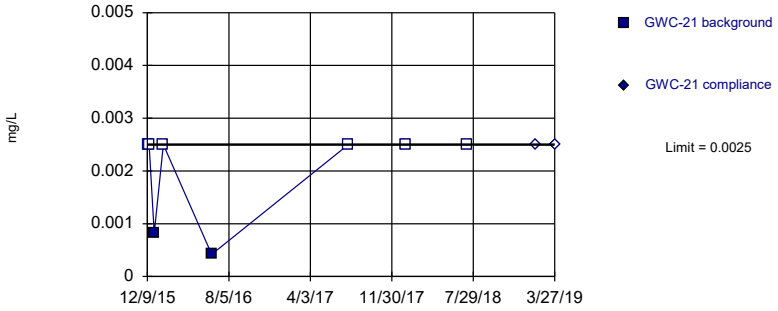
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

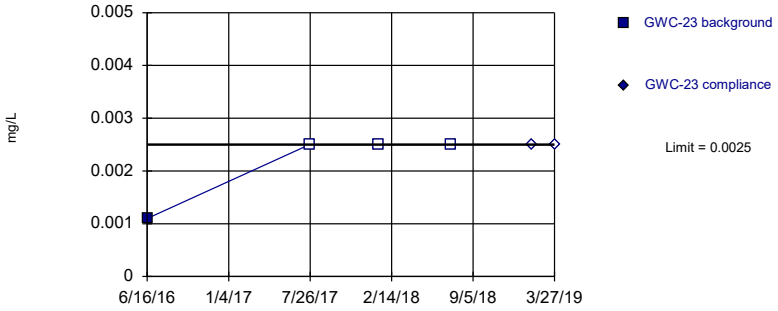
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 4 background values. 75% NDs. Well-constituent pair annual alpha = 0.05238. Individual comparison alpha = 0.02654 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

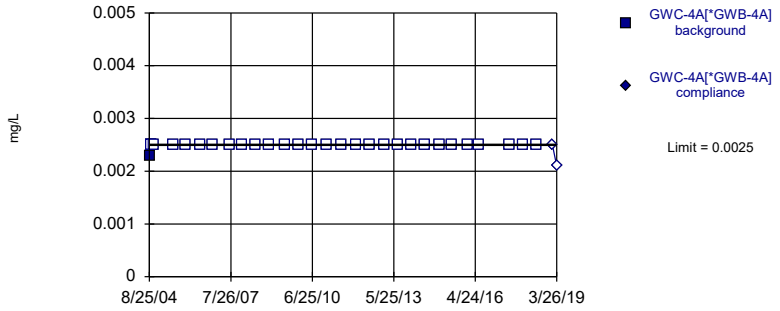
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

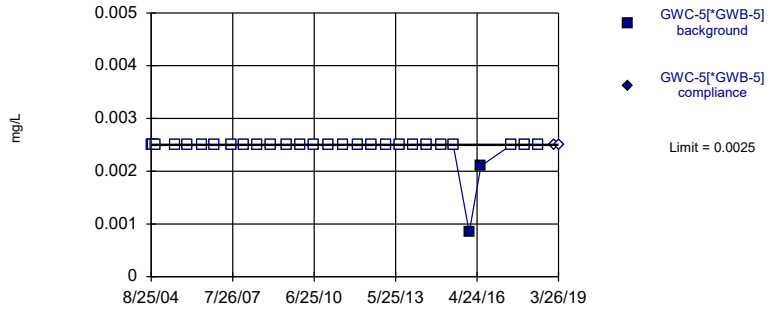
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

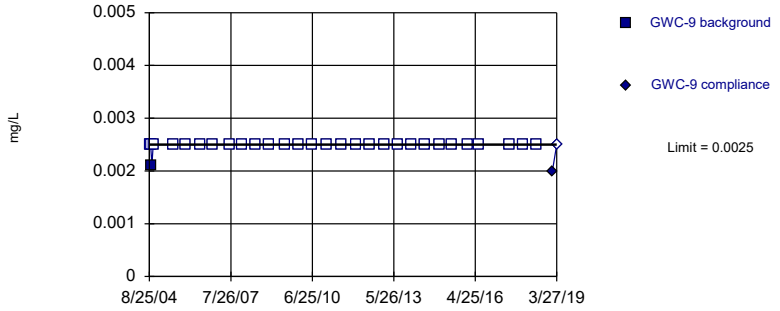
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Copper, Total Analysis Run 8/8/2019 3:44 PM

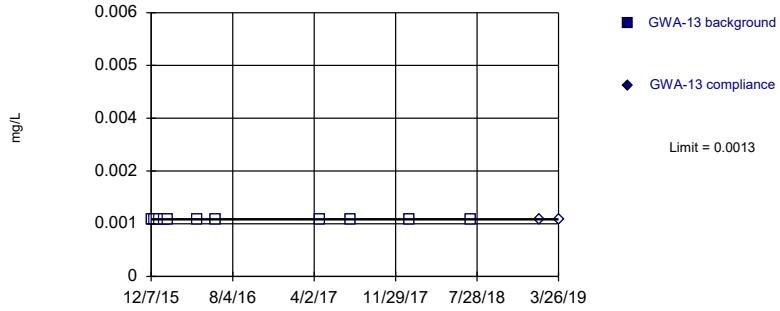
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

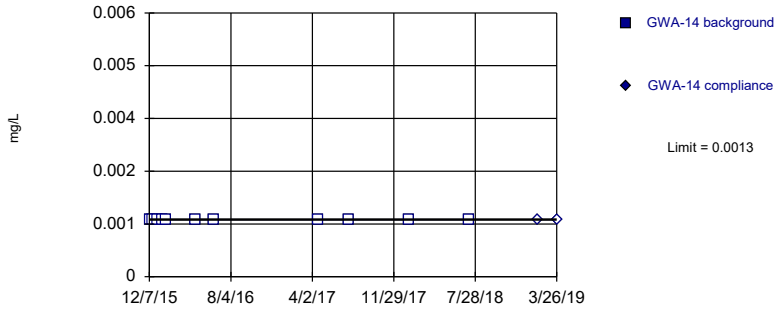
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

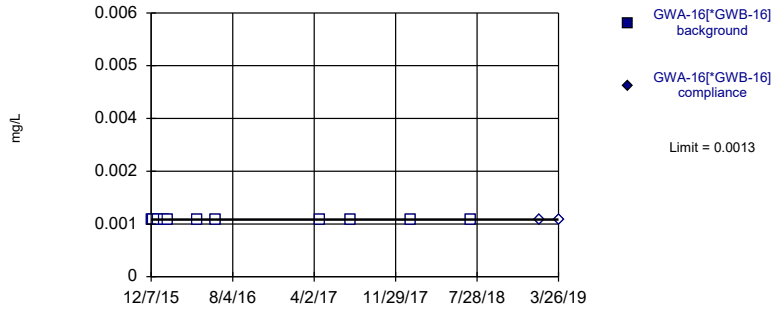
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

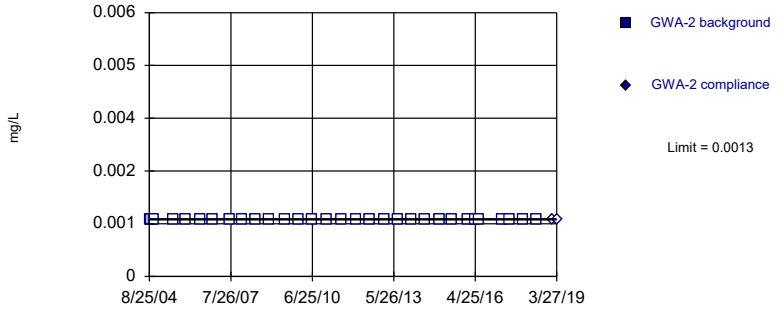
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

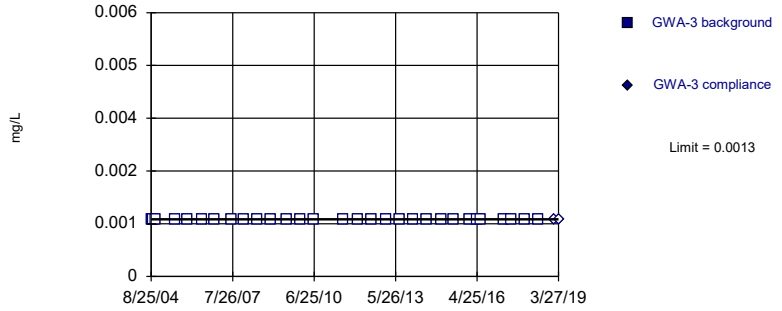
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

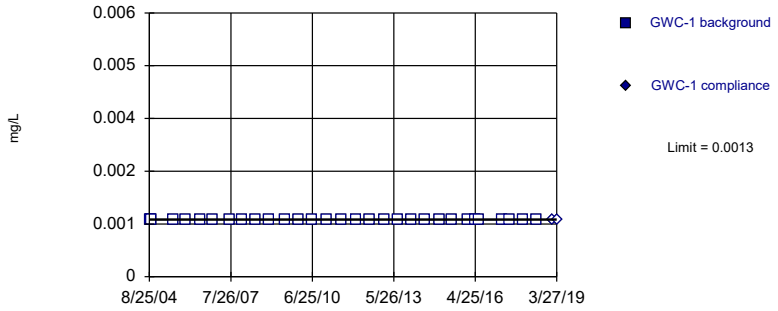
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

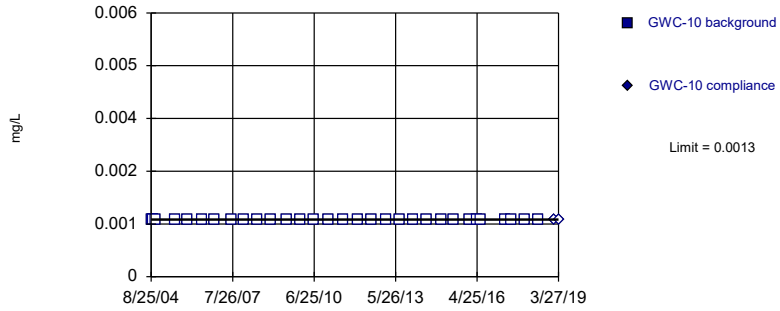
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

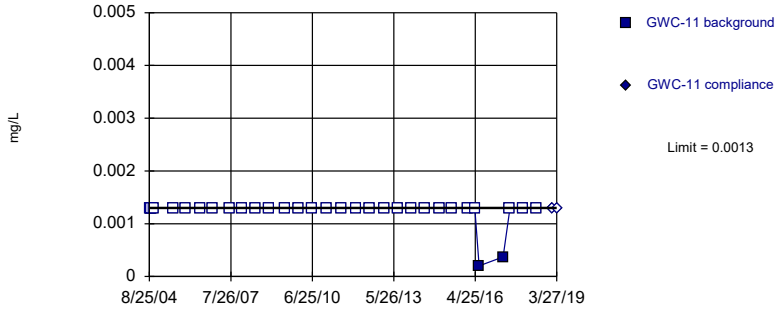
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

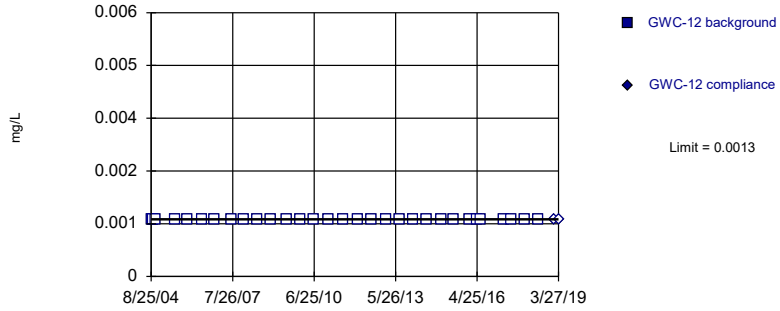
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

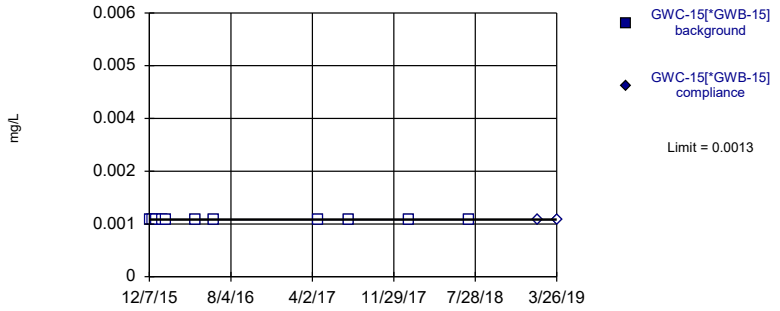
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

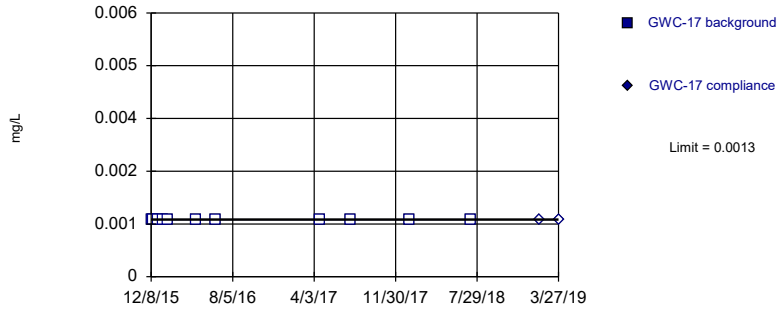
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

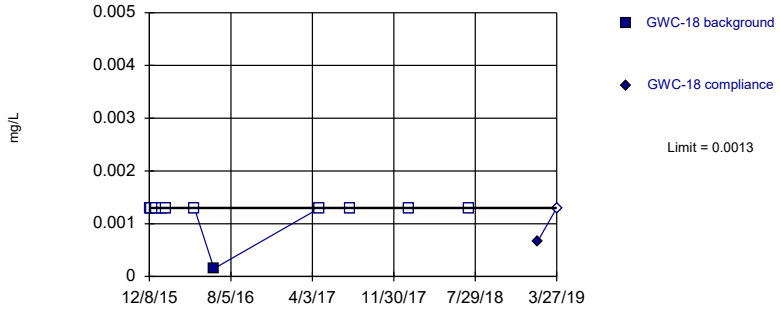
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

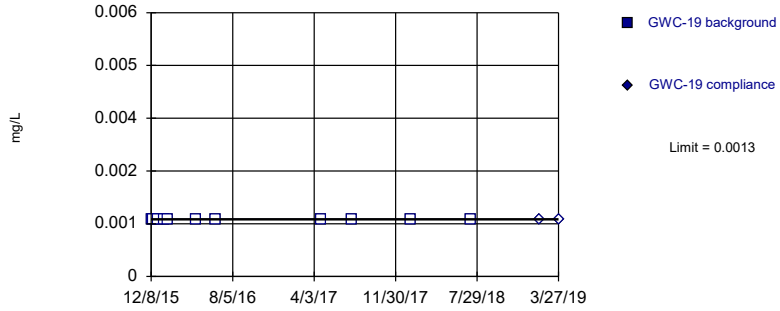
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

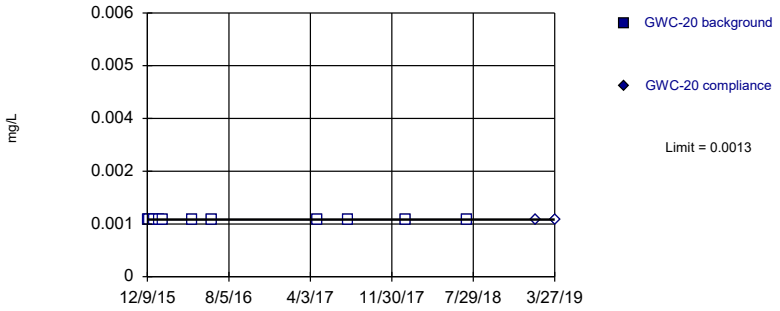
Constituent: Lead, Total Analysis Run 8/8/2019 3:44 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



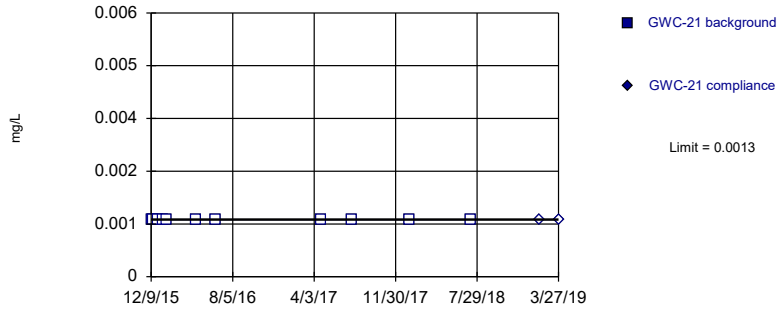
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:45 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



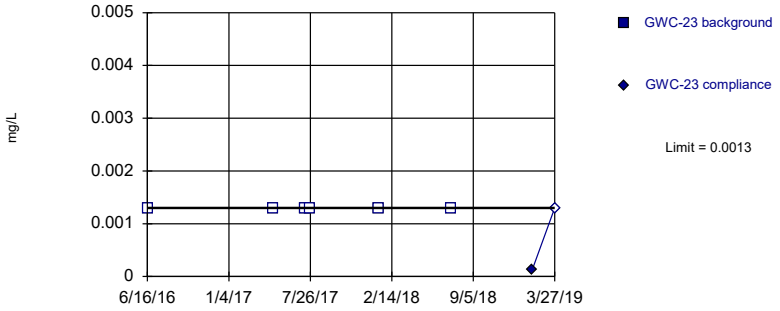
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:45 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



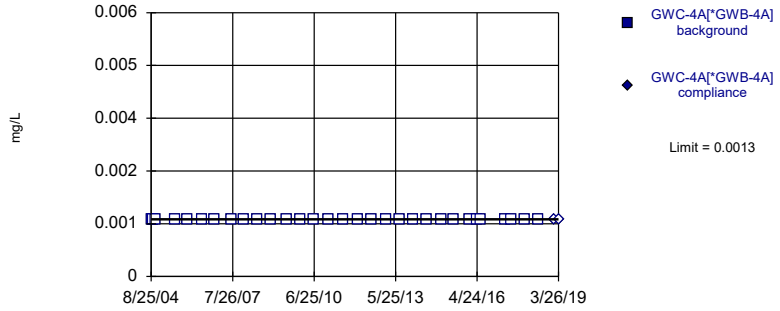
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 6) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02273. Individual comparison alpha = 0.01143 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:45 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

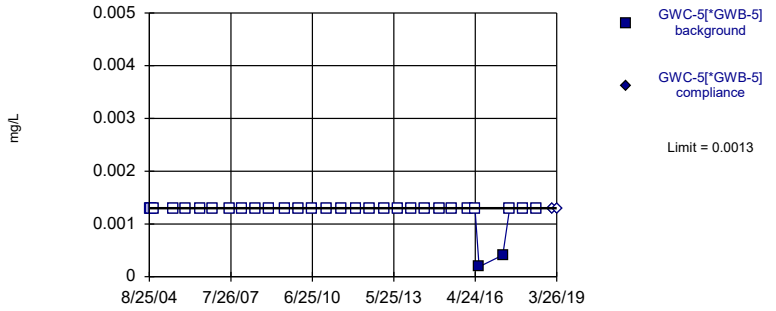
Constituent: Lead, Total Analysis Run 8/8/2019 3:45 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:45 PM

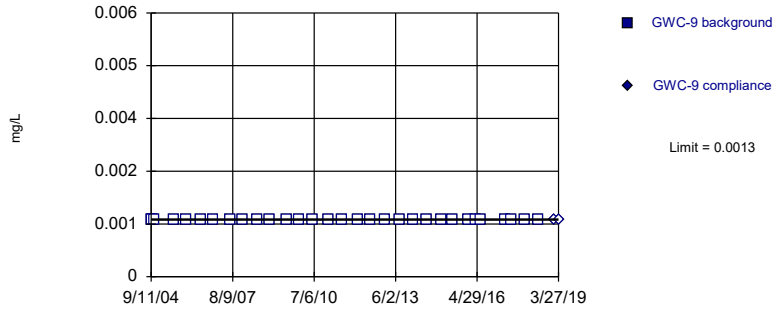
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 8/8/2019 3:45 PM

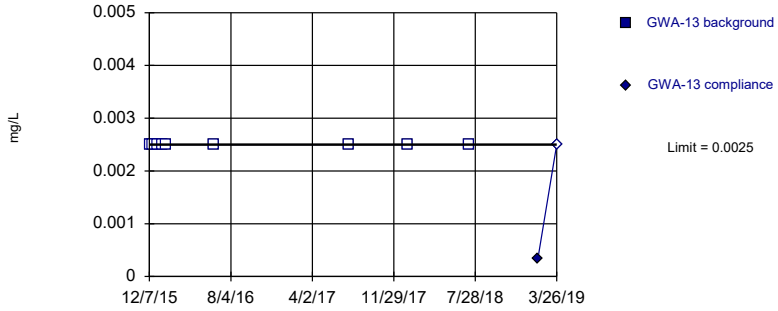
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

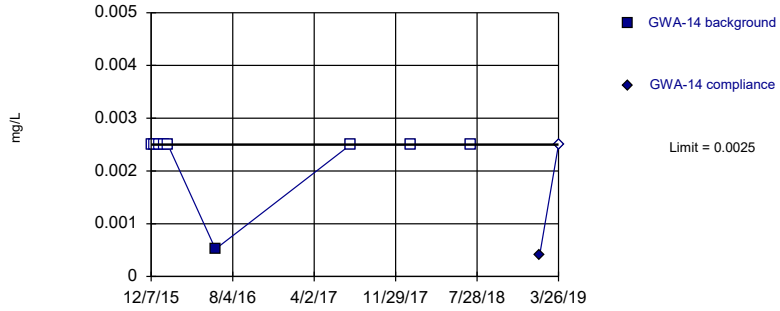
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

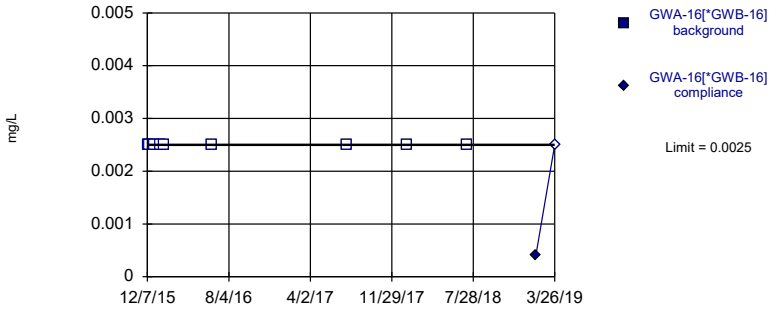
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

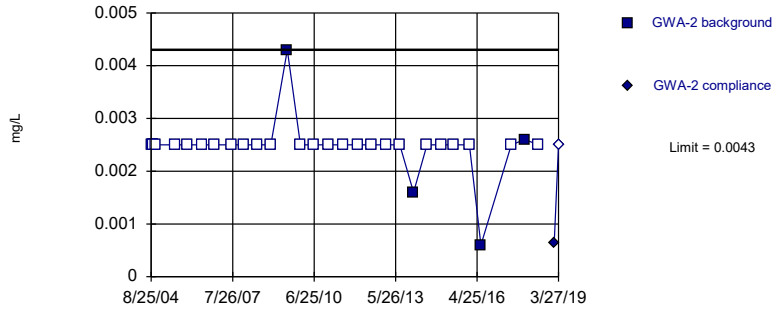
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 86.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

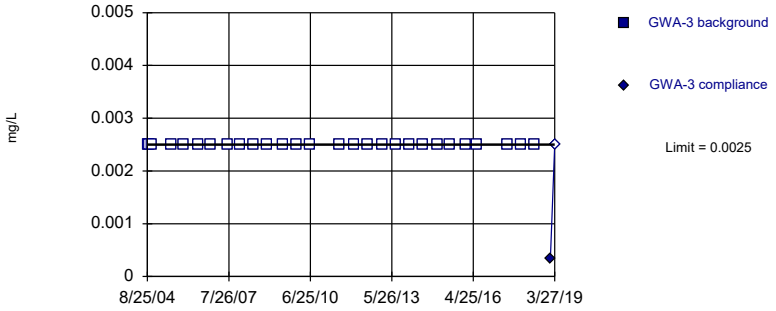
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 28) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

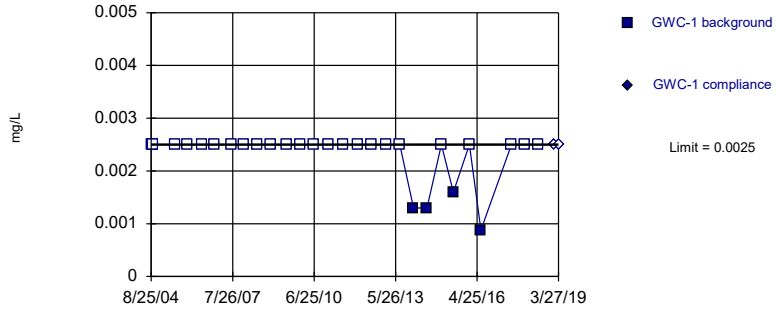
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 86.21% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

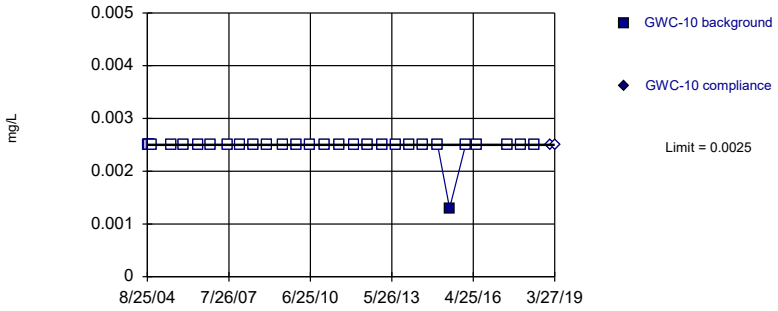
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

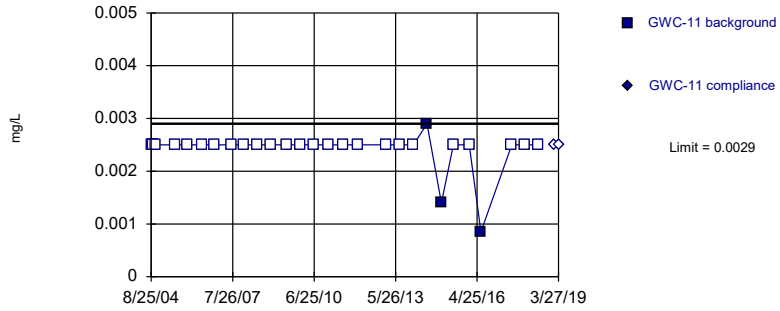
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 89.66% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

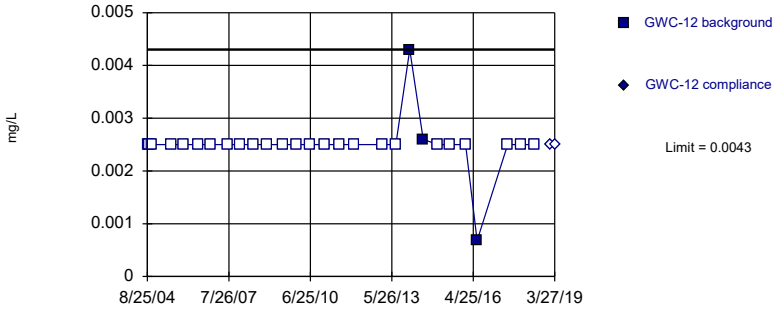
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 89.66% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

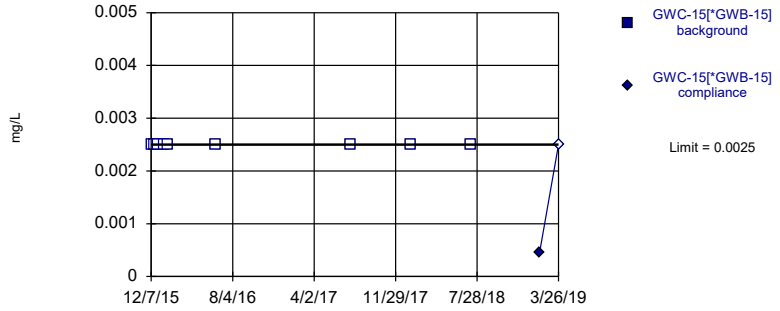
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

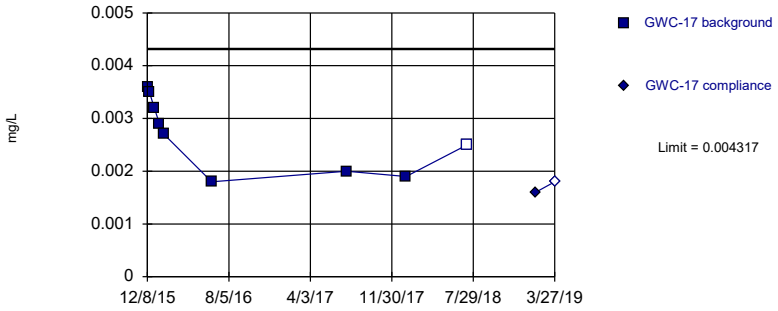
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.002678, Std. Dev.=0.0006815, n=9, 11.11% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.925, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

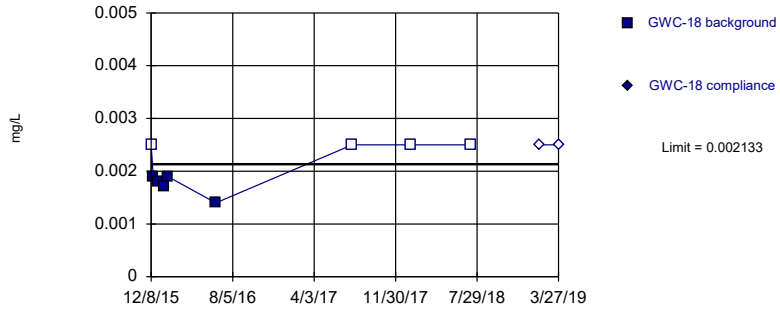
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001687, Std. Dev.=0.0001857, n=9, 44.44% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8348, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

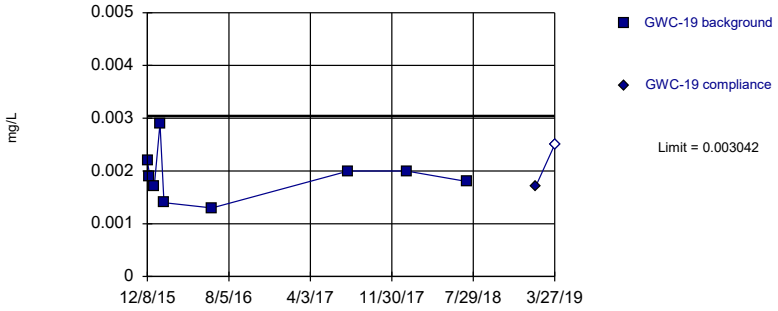
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.001911, Std. Dev.=0.0004702, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.926, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

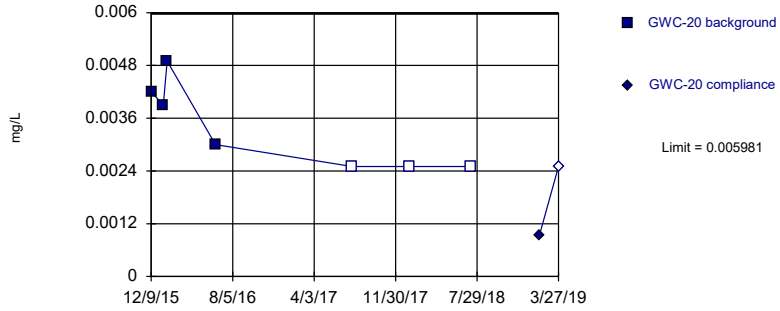
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.003357, Std. Dev.=0.0009037, n=7, 42.86% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8522, critical = 0.73. Kappa = 2.904 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

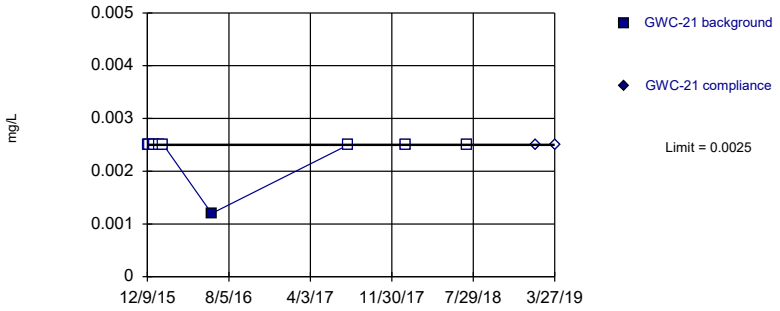
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

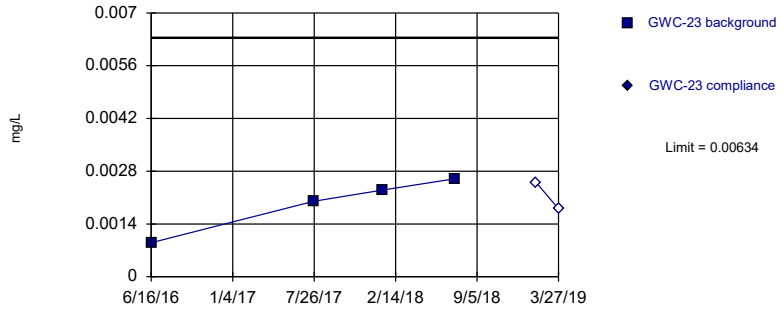
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00195, Std. Dev.=0.0007416, n=4. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8999, critical = 0.687. Kappa = 5.92 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

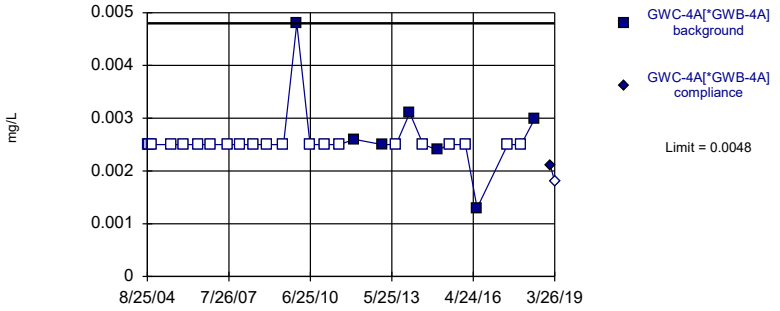
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 75.86% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

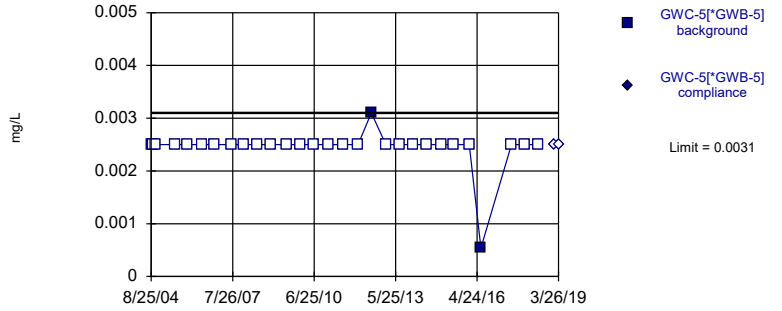
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

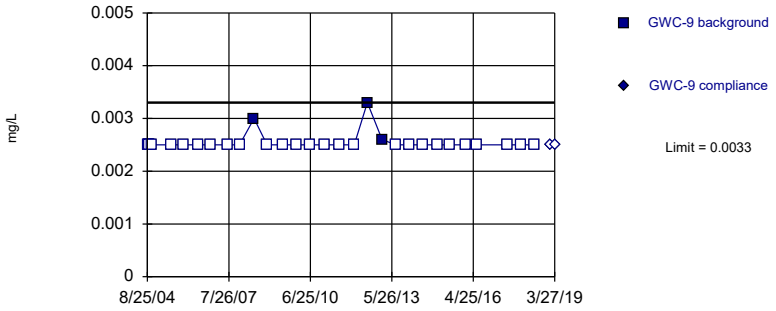
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 90% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Nickel, Total Analysis Run 8/8/2019 3:45 PM

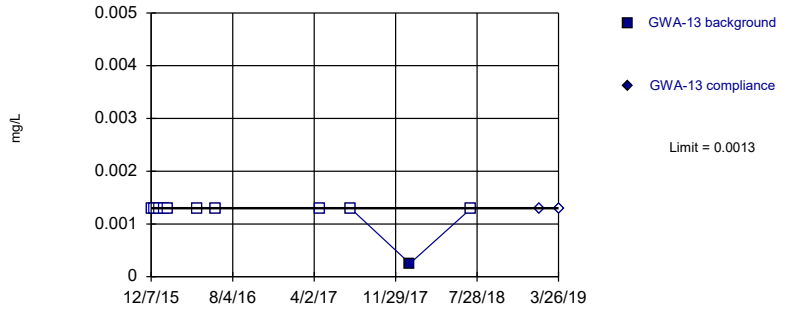
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

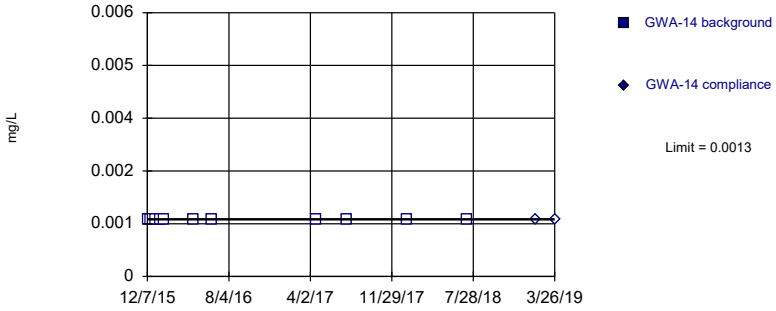
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

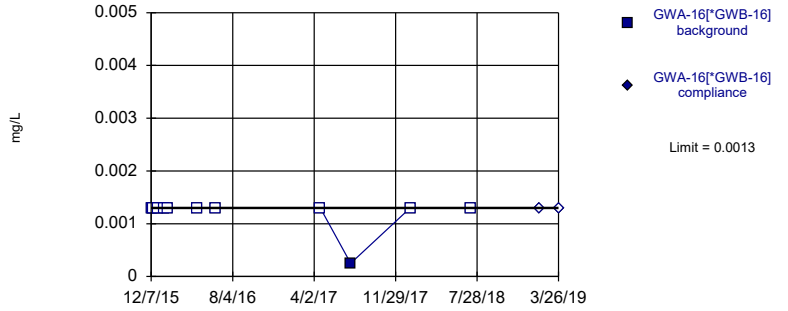
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

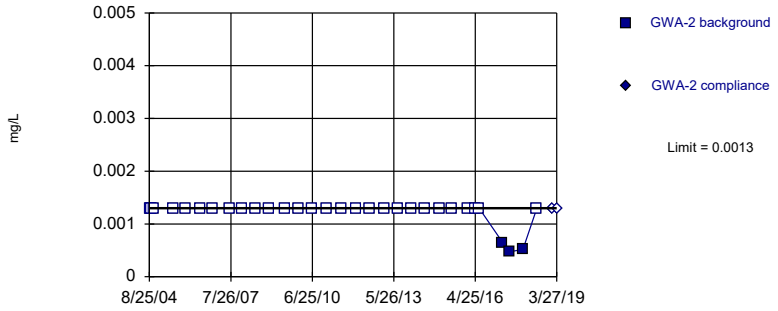
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

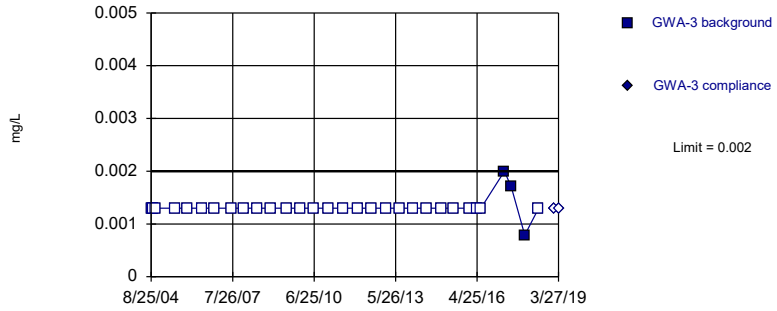
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

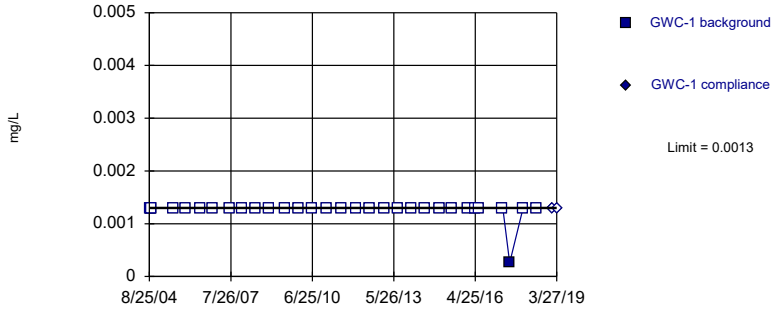
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

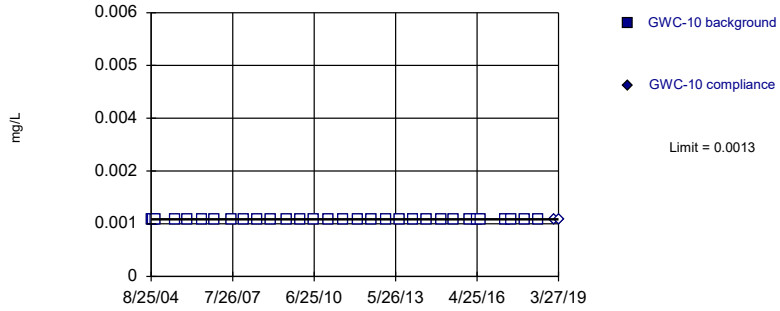
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

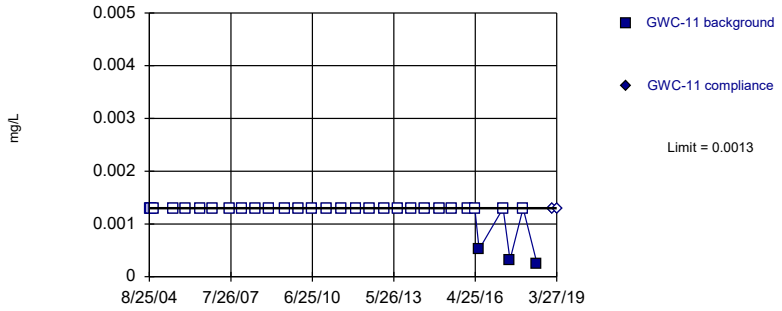
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 90.63% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

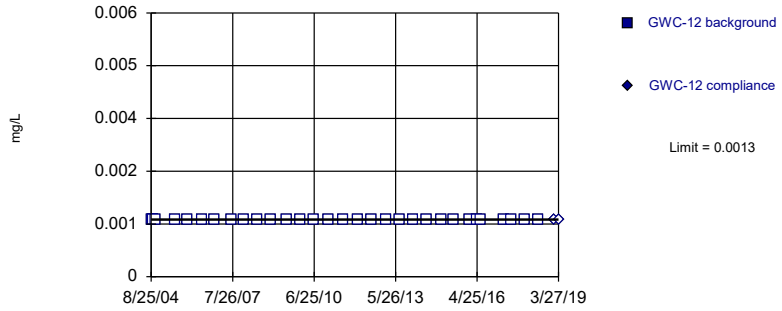
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

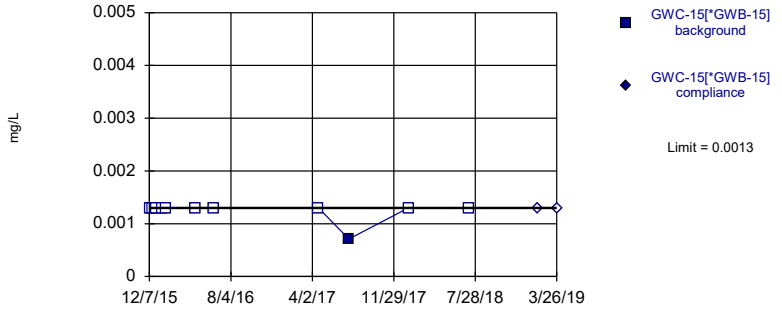
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

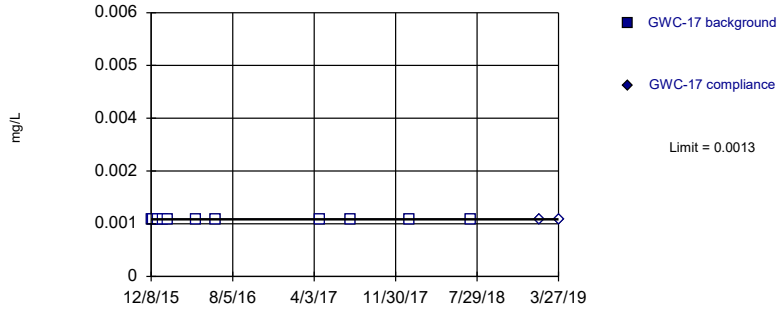
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

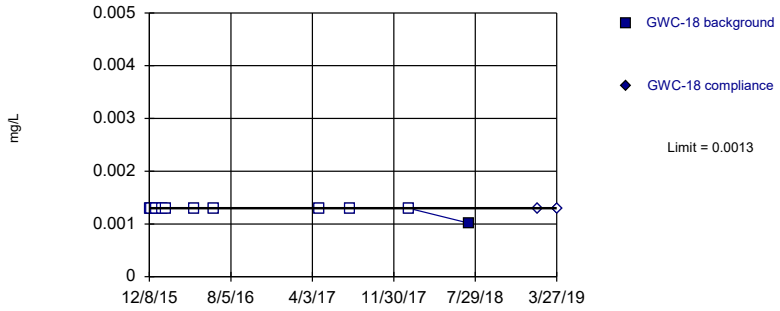
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

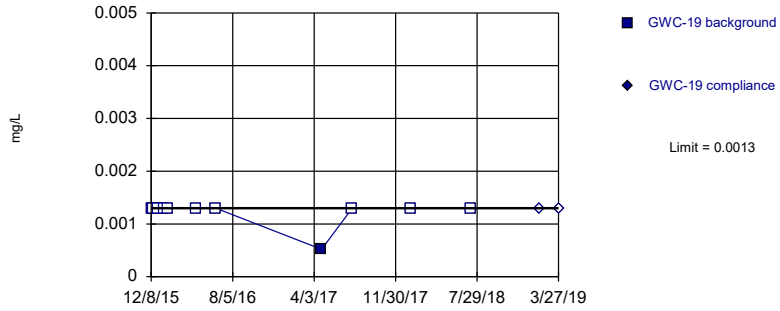
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

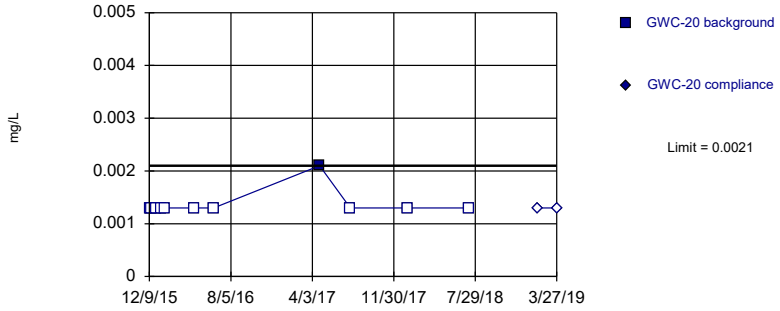
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

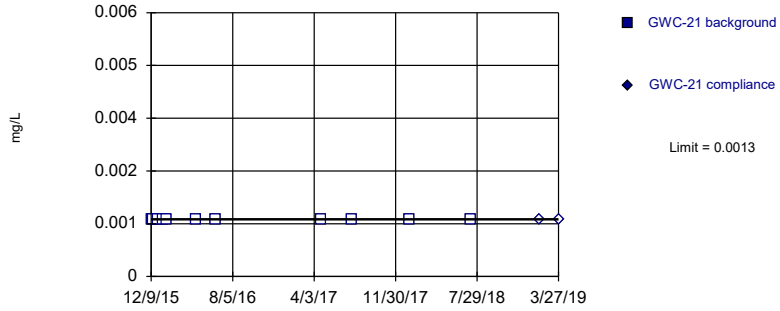
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

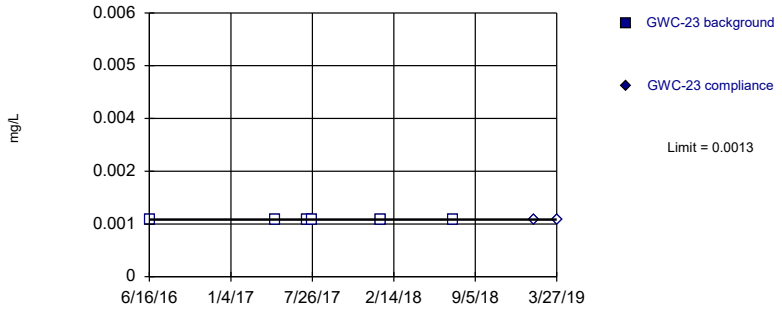
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 6) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.02273. Individual comparison alpha = 0.01143 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

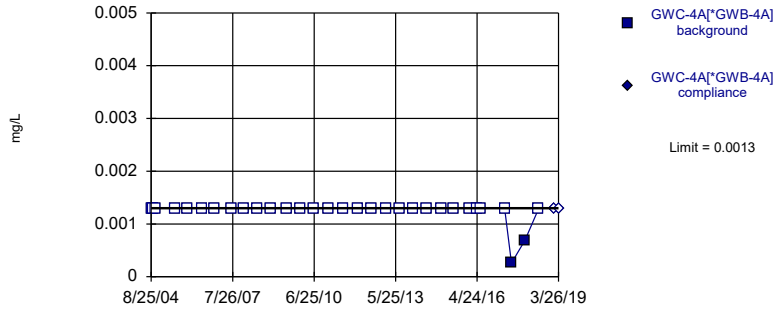
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 32 background values. 93.75% NDs. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

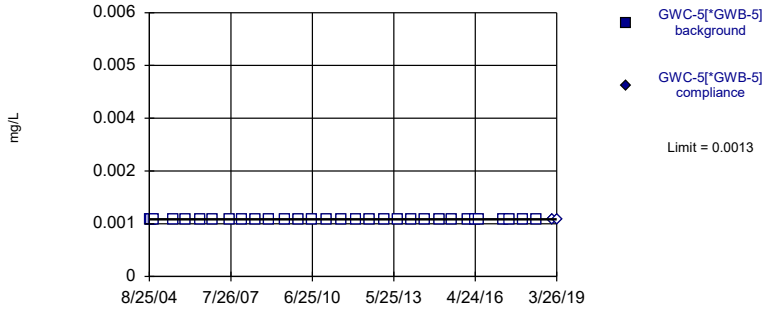
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 32) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003144. Individual comparison alpha = 0.0001572 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

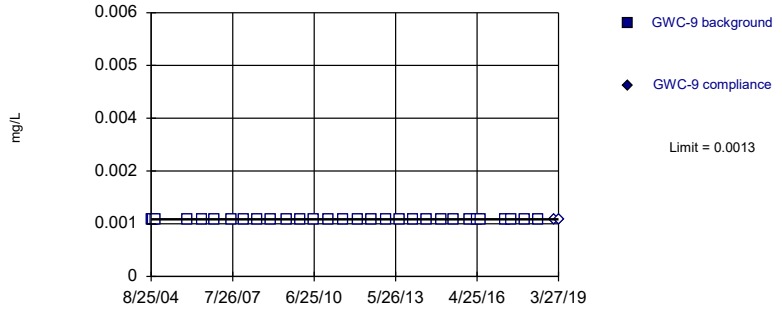
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 8/8/2019 3:45 PM

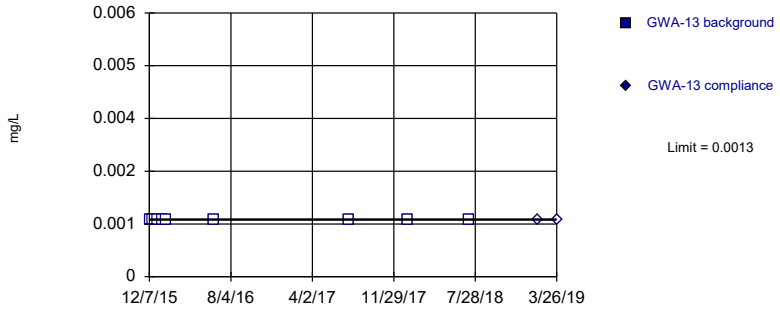
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

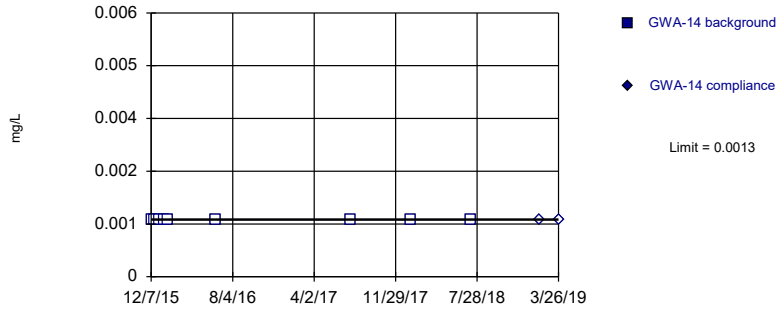
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

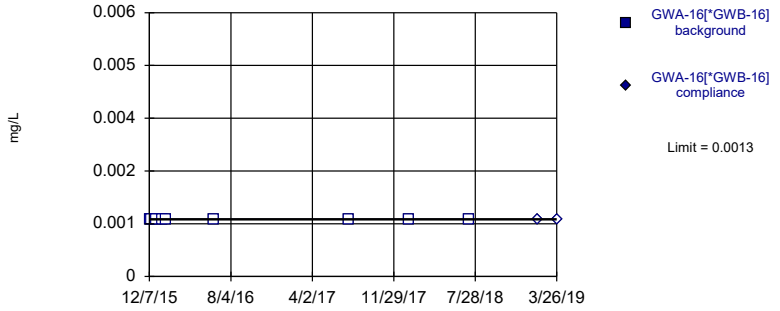
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

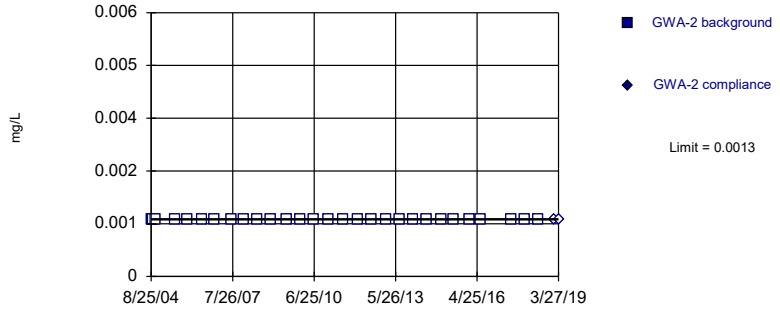
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

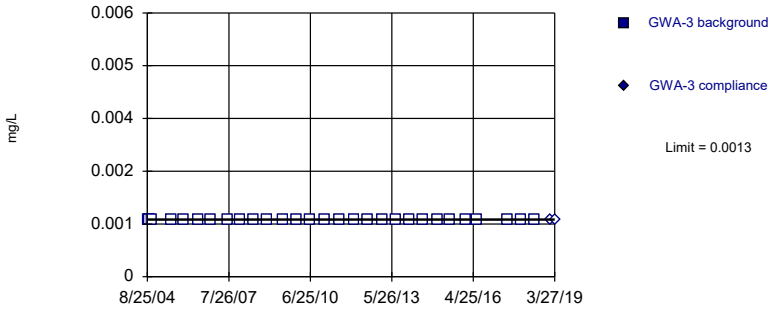
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

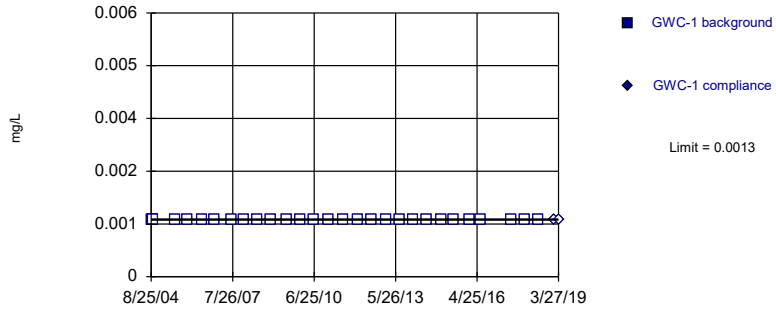
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

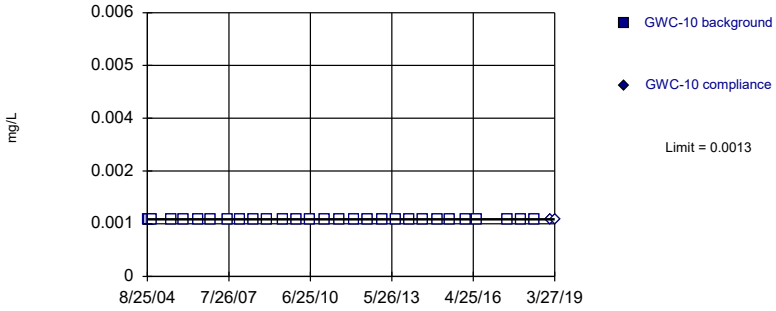
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

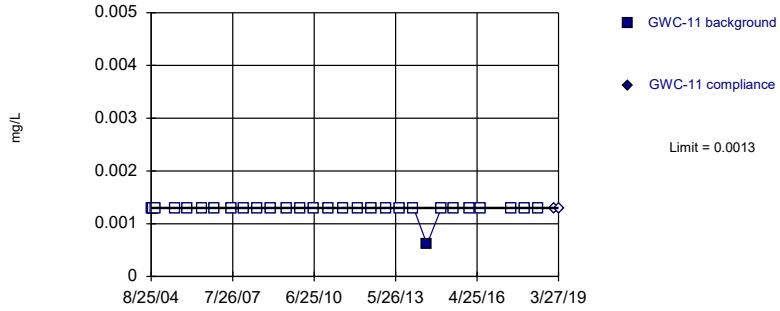
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

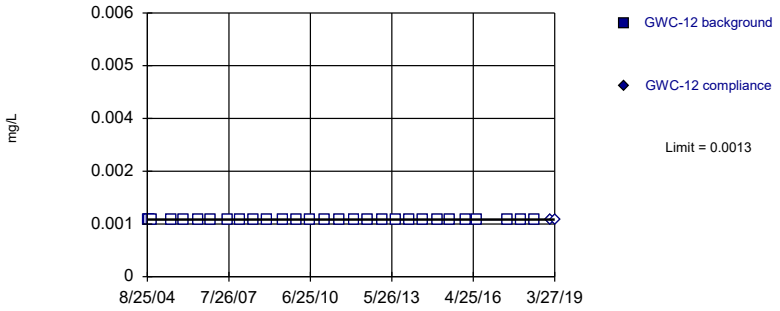
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

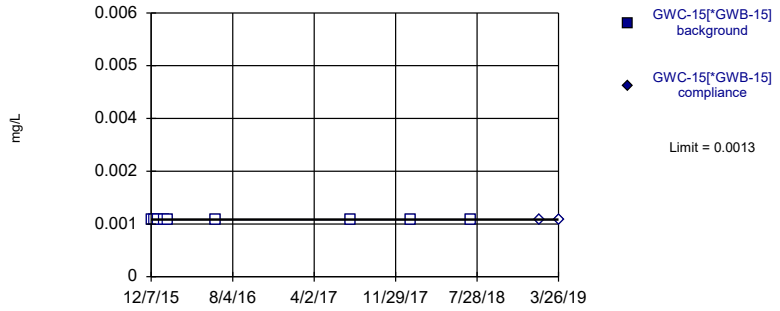
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

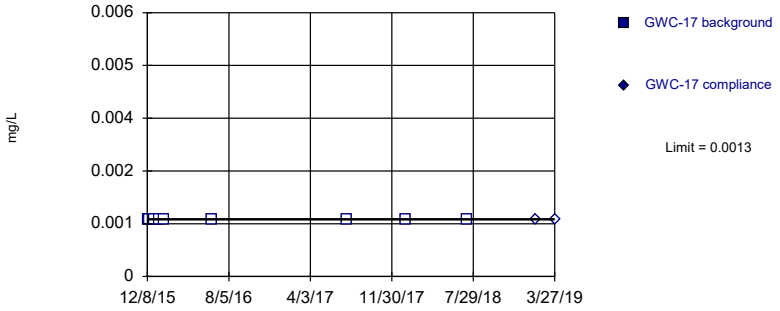
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

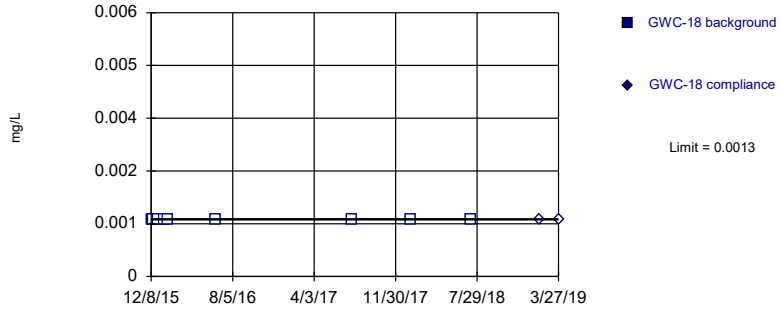
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

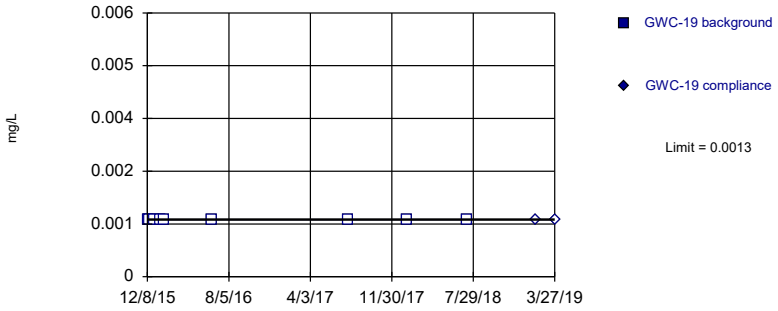
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

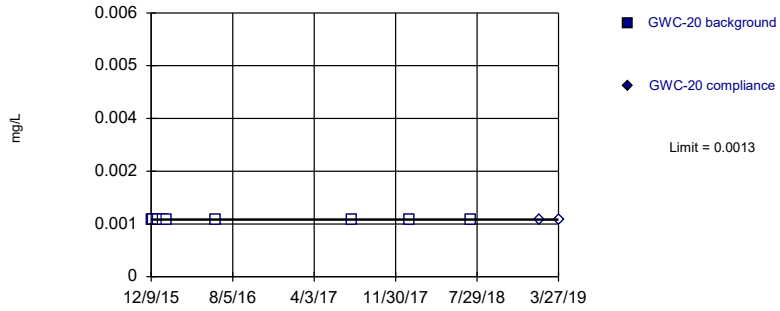
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

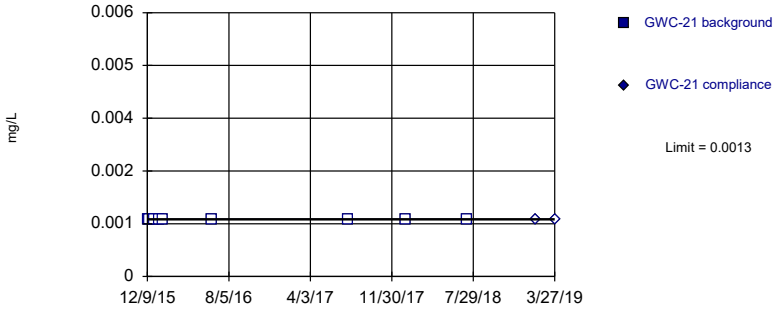
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 9) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

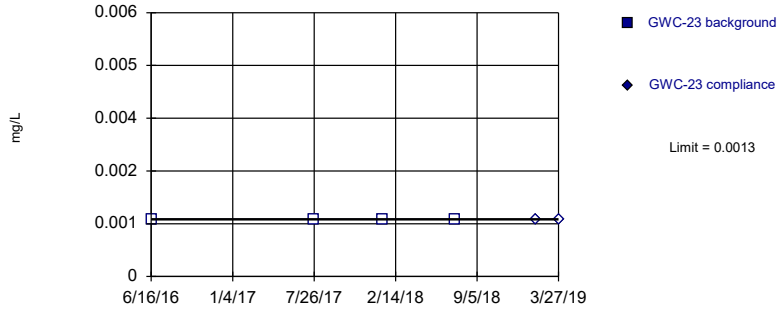
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 4) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.05238. Individual comparison alpha = 0.02654 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

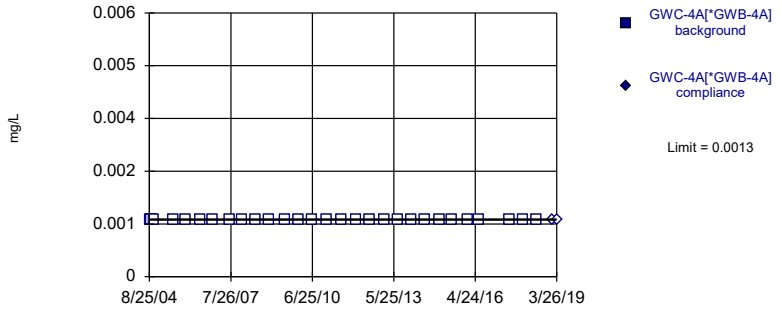
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

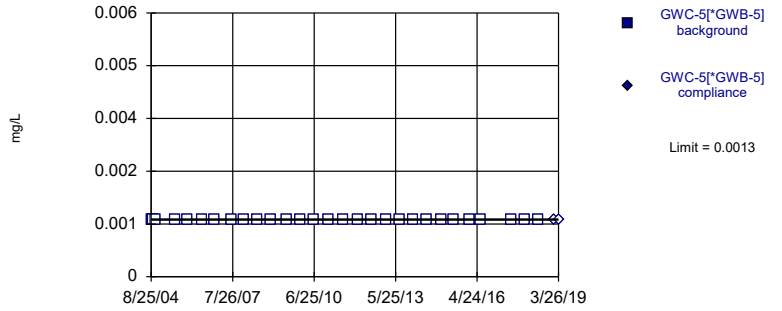
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

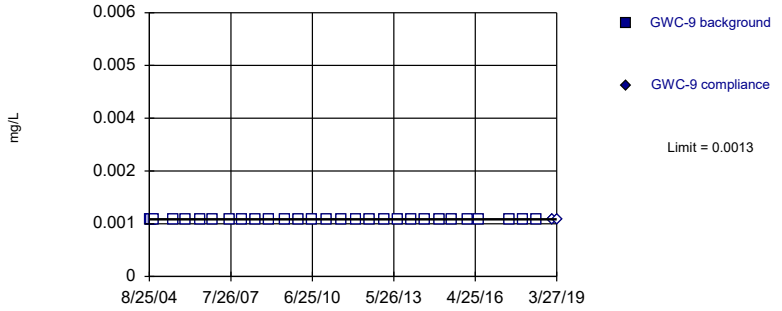
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Silver, Total Analysis Run 8/8/2019 3:46 PM

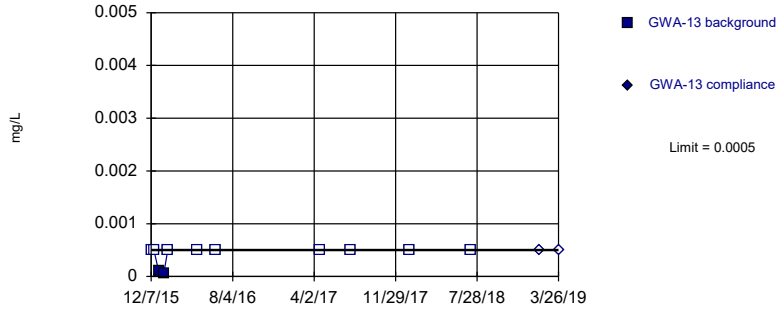
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 81.82% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

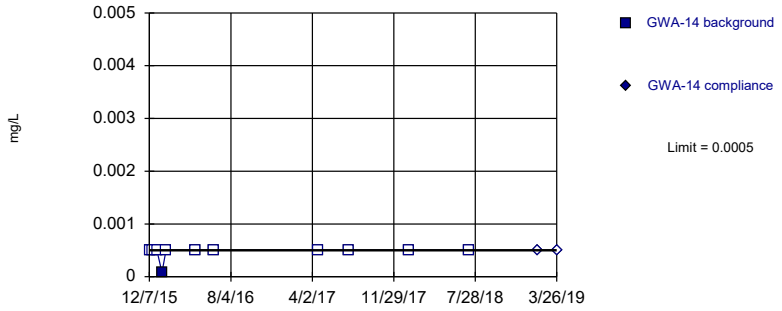
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

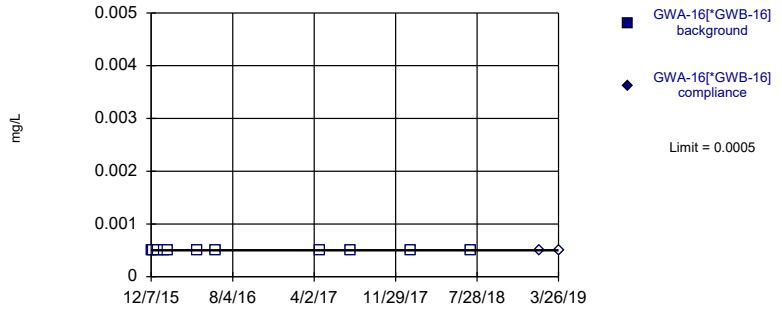
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

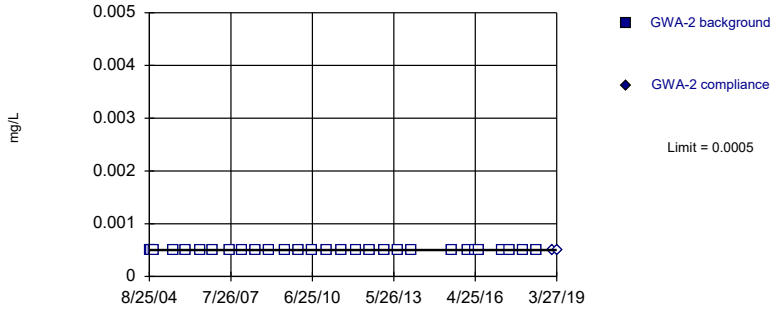
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

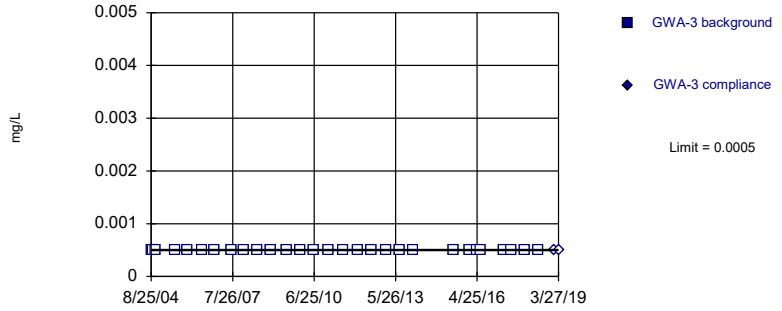
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

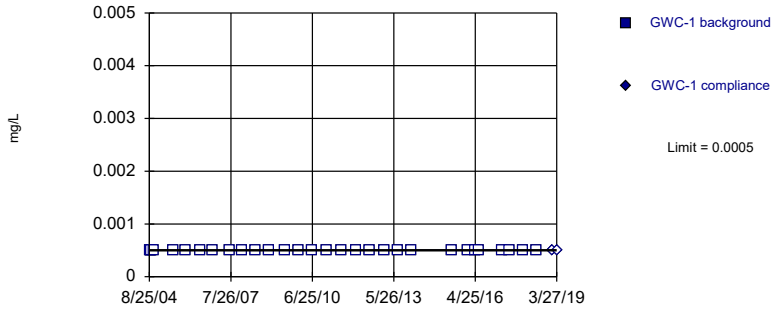
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

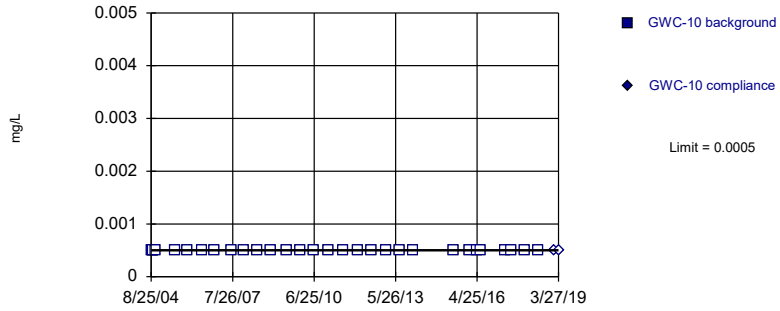
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

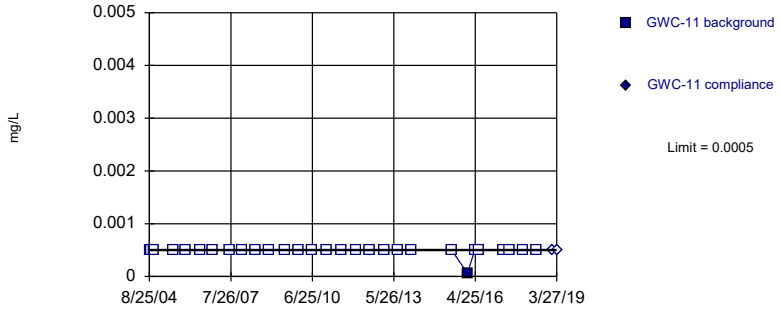
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

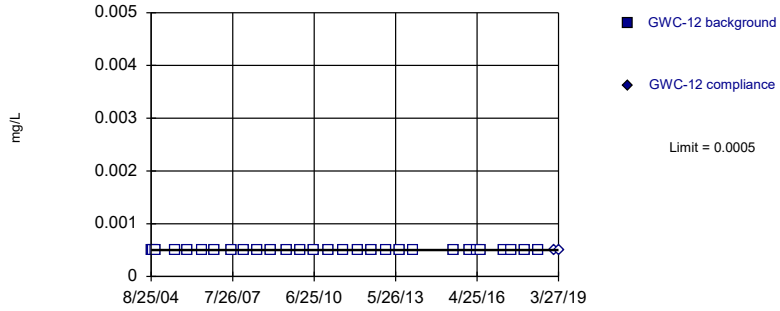
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

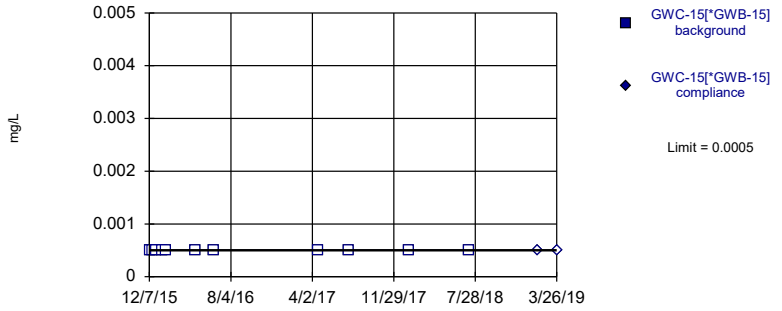
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 11) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

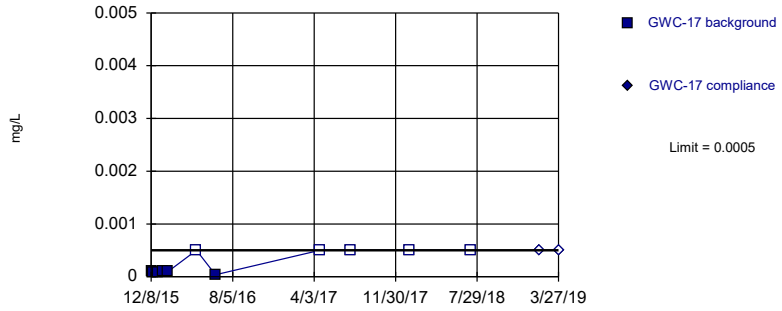
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

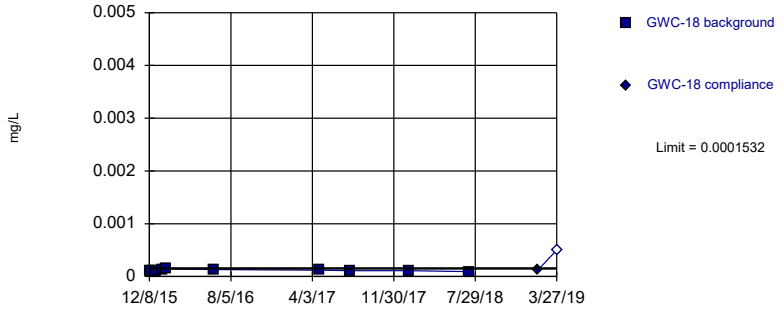
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0001141, Std. Dev.=0.0000174, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9154, critical = 0.781. Kappa = 2.251 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

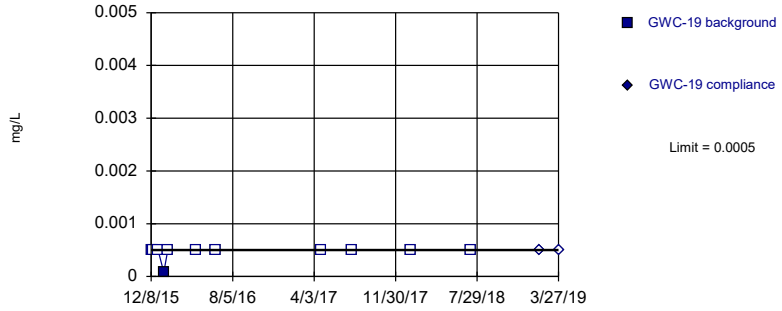
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

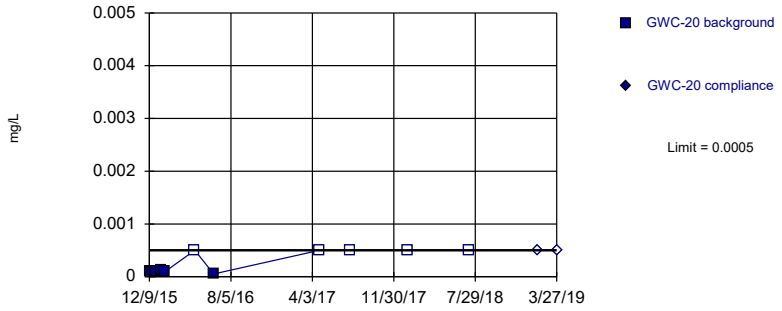
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 11 background values. 45.45% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

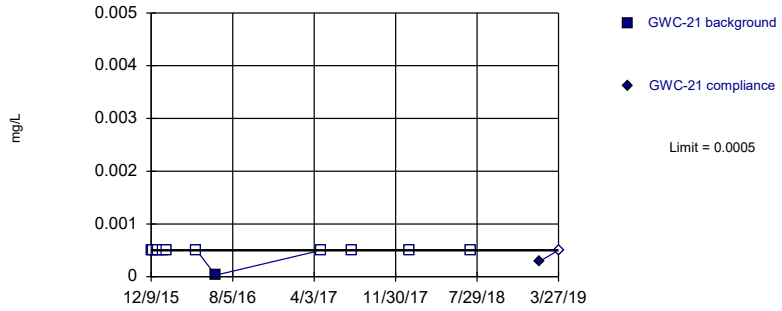
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 11 background values. 90.91% NDs. Well-constituent pair annual alpha = 0.005605. Individual comparison alpha = 0.002806 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

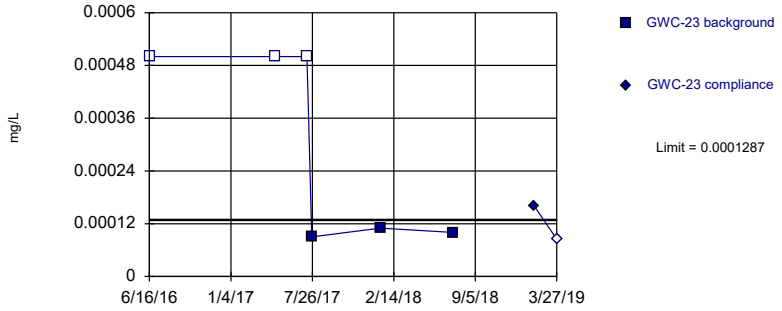
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.04638, Std. Dev.=0.001266, n=6, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7154, critical = 0.713. Kappa = 3.249 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

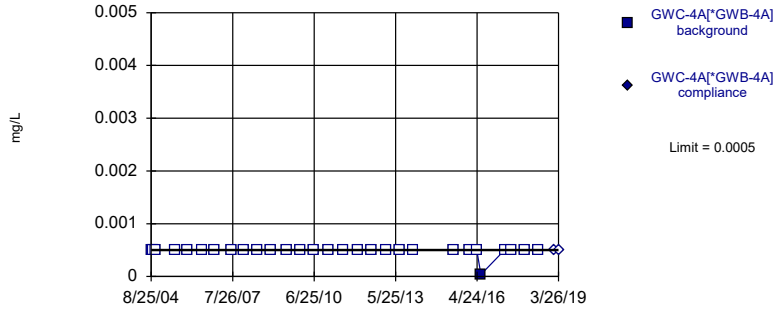
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:46 PM

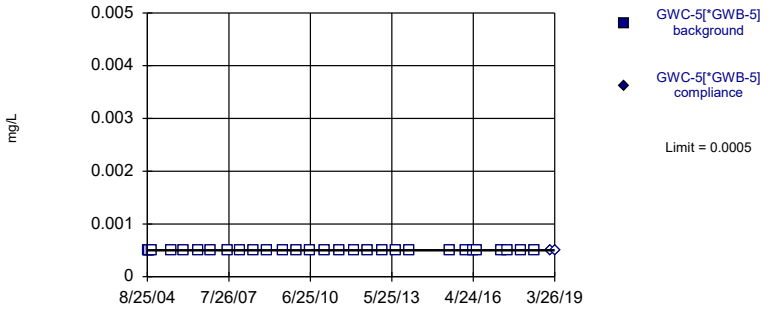
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:47 PM

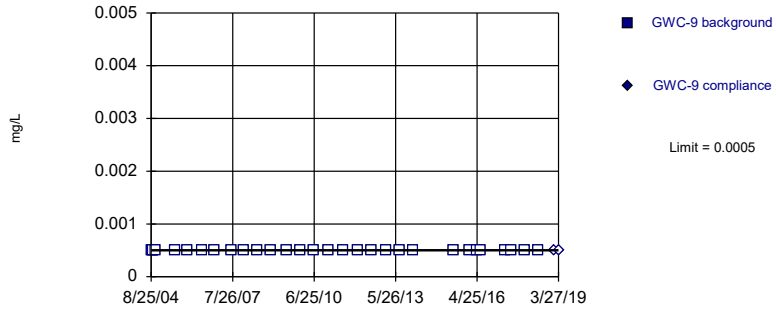
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Thallium Analysis Run 8/8/2019 3:47 PM

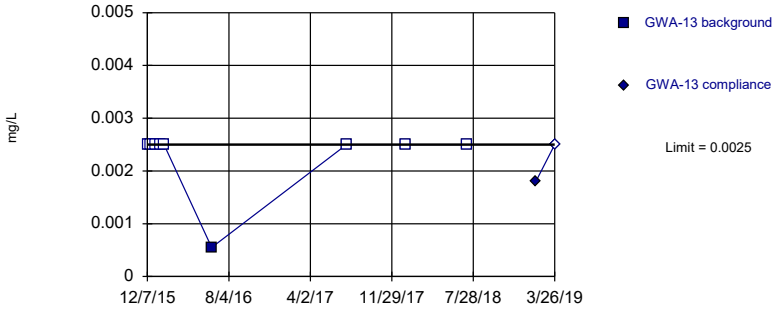
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

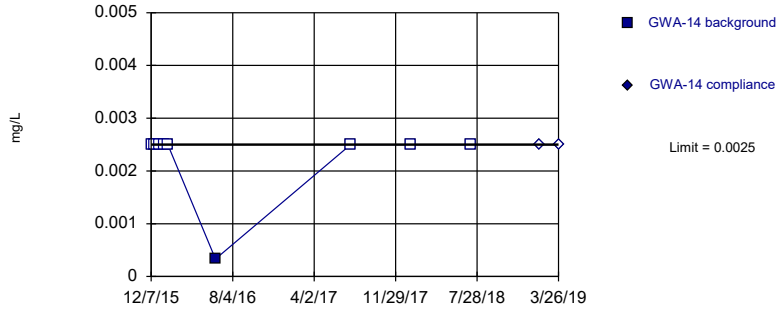
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

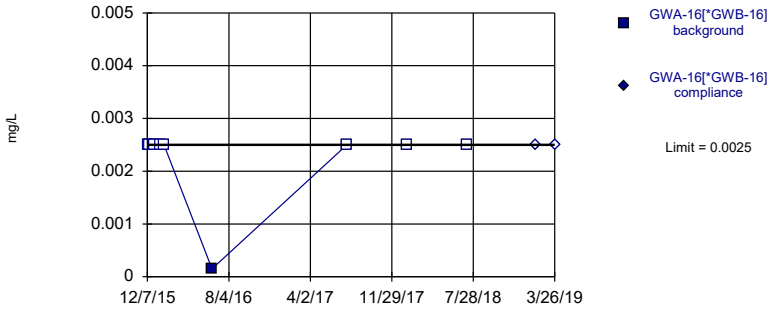
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

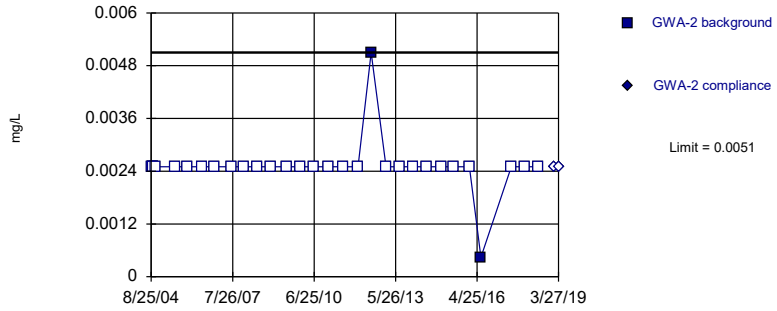
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

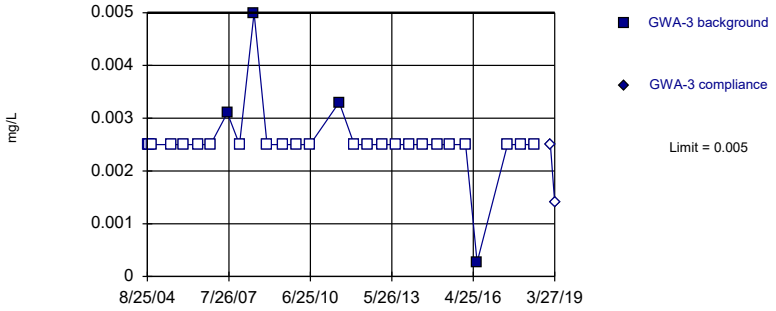
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 86.21% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

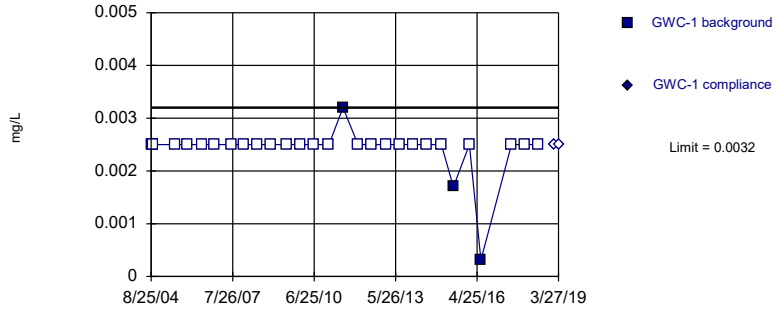
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 89.66% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

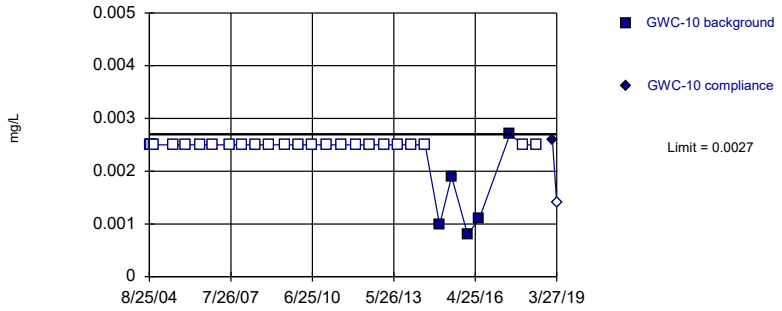
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 83.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

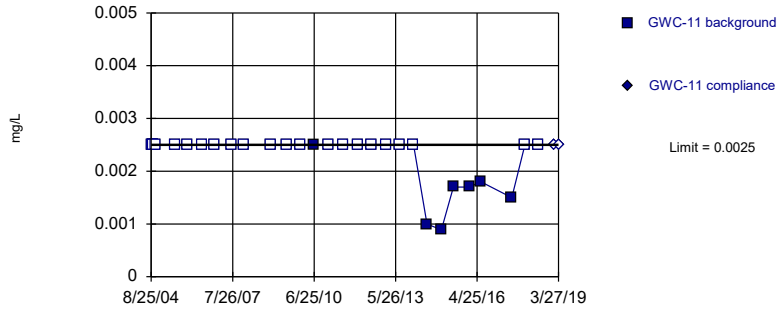
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 75.86% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

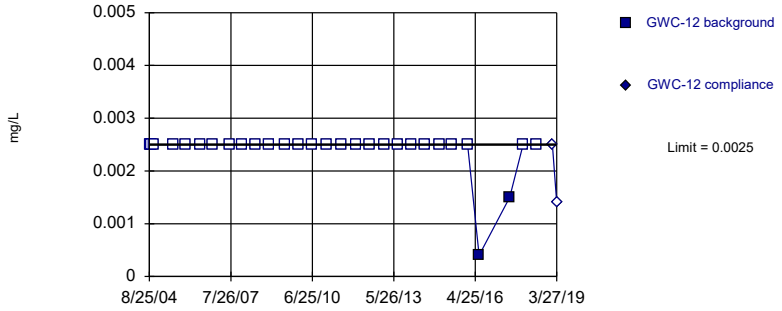
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

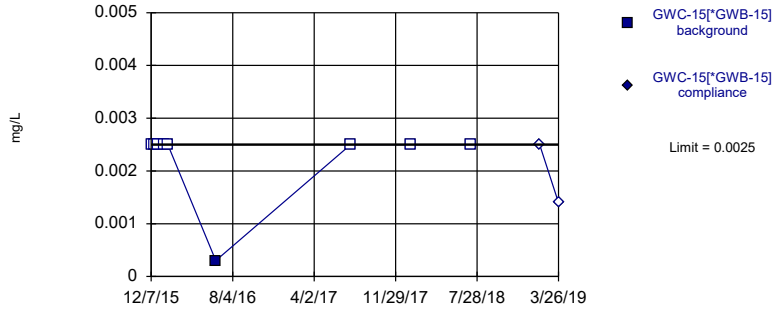
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

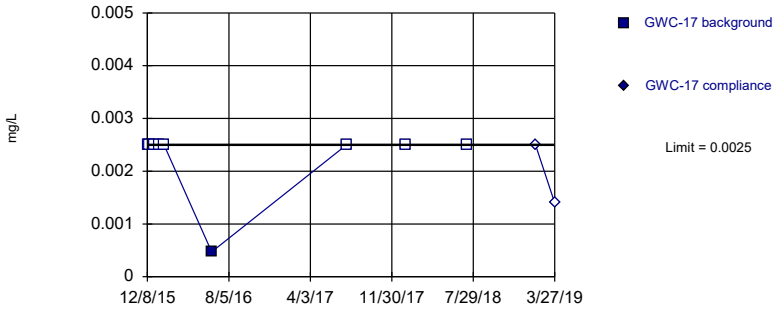
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

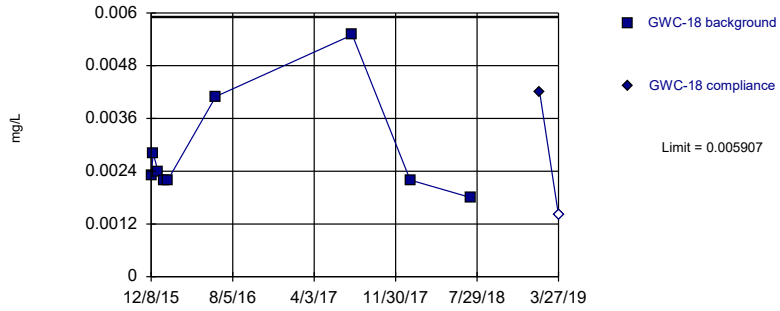
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.05236, Std. Dev.=0.01019, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7907, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

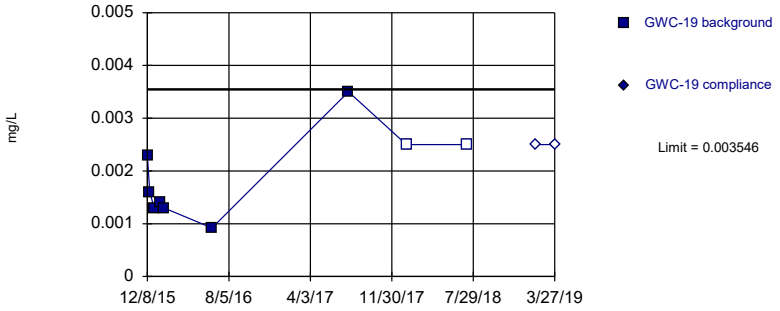
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001639, Std. Dev.=0.0007927, n=9, 22.22% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9122, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

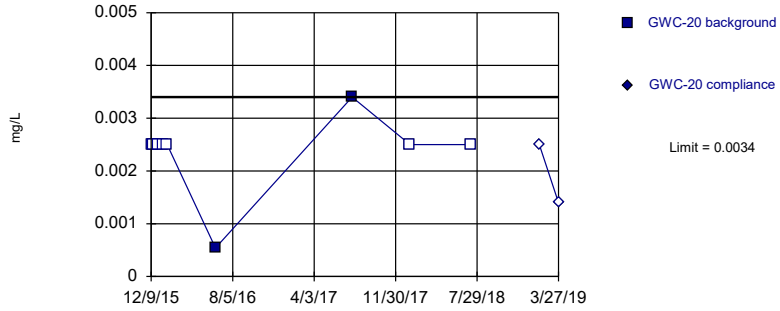
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

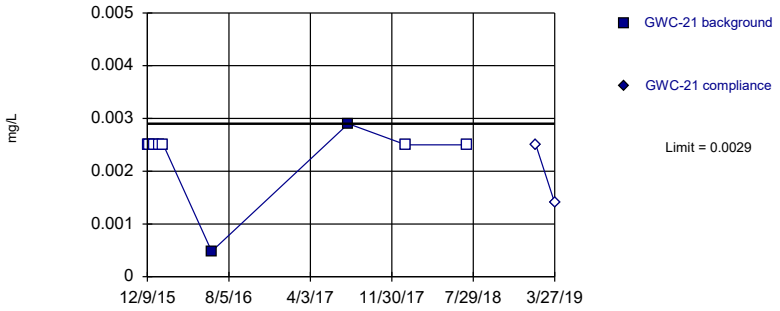
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

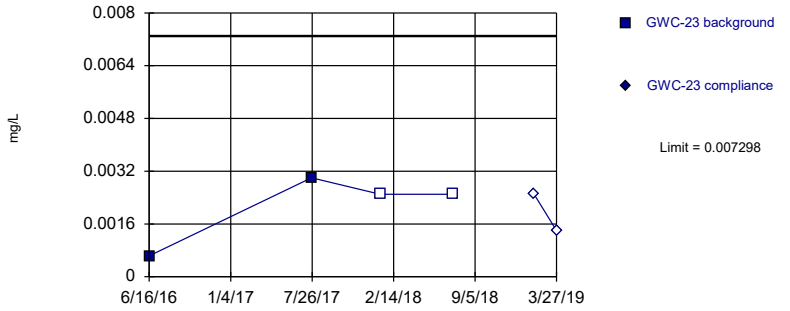
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001223, Std. Dev.=0.001026, n=4, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8093, critical = 0.687. Kappa = 5.92 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

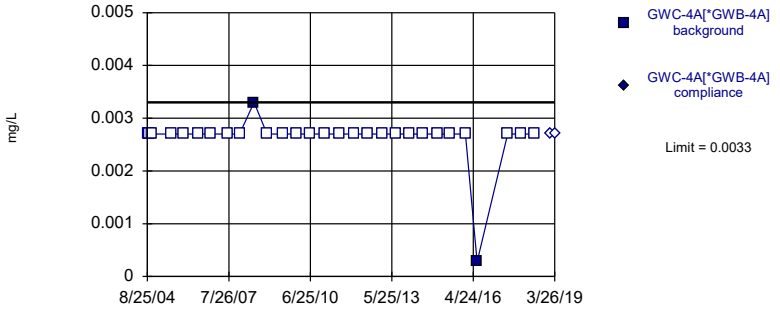
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

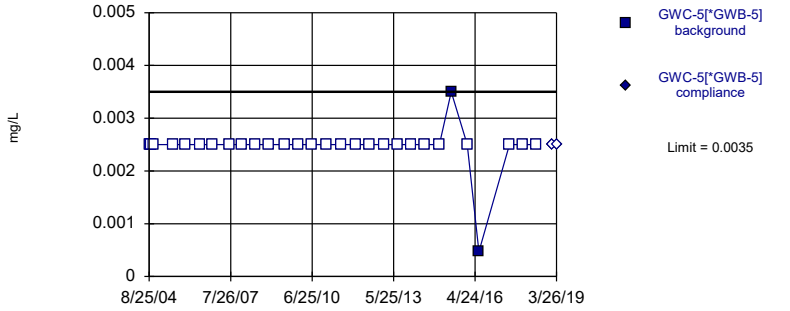
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 93.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

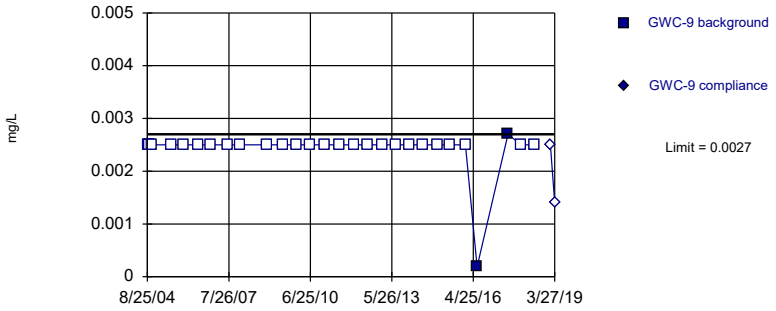
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 93.1% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 8/8/2019 3:47 PM

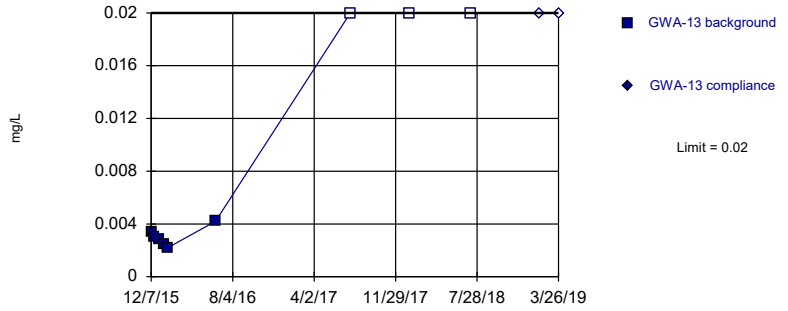
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

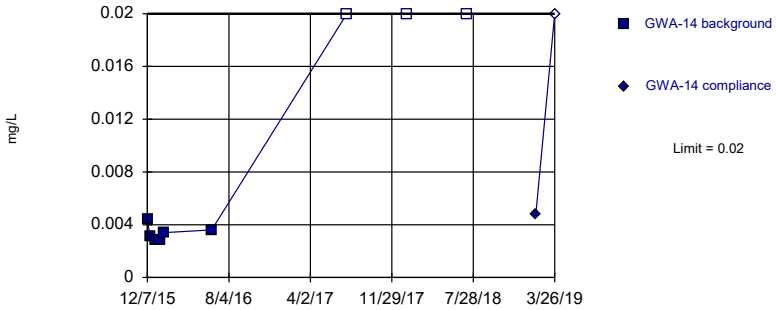
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

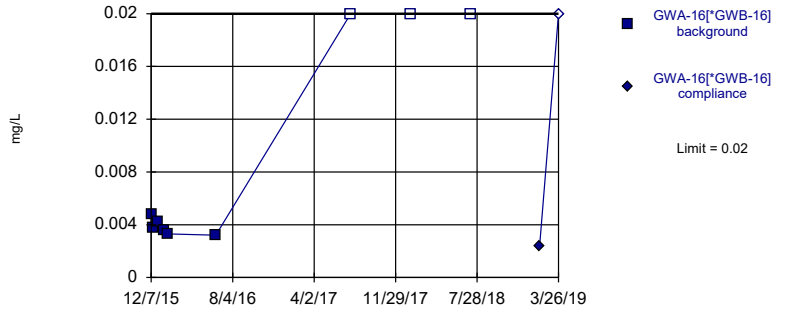
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

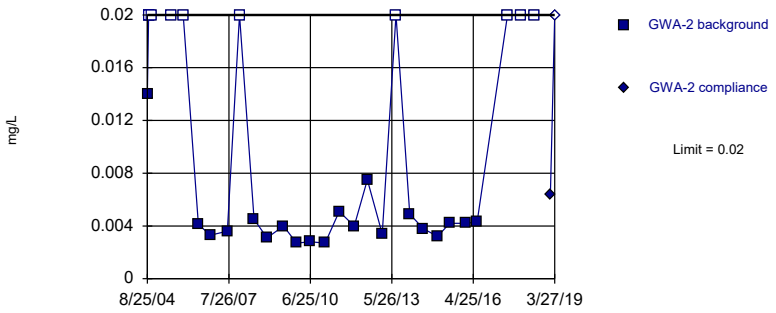
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

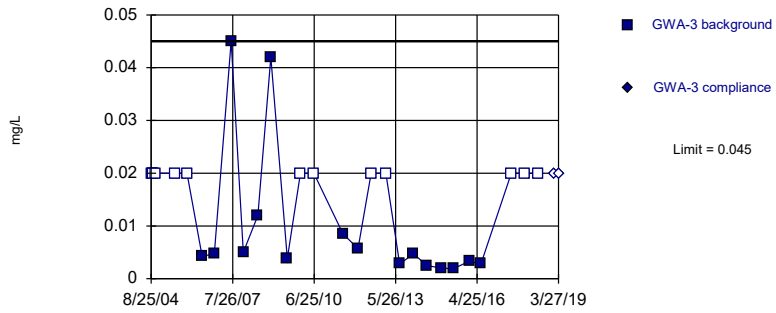
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. 44.83% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

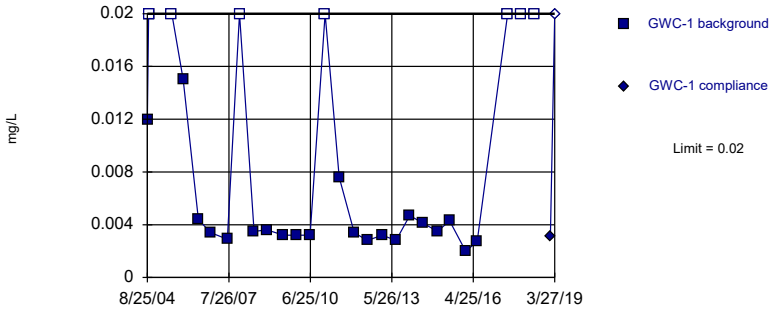
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. 27.59% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

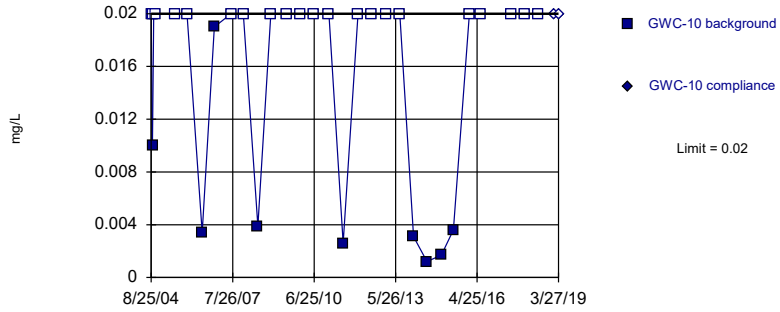
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 70% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

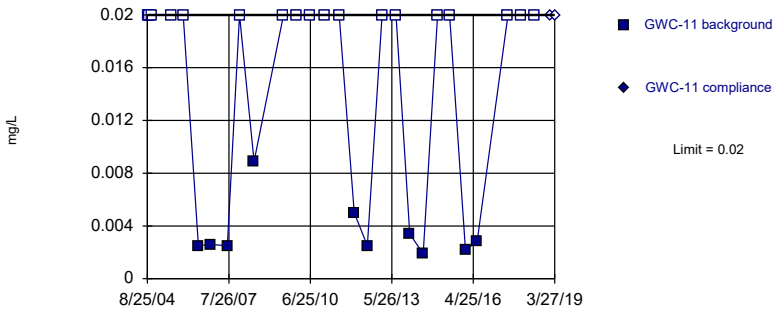
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 65.52% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

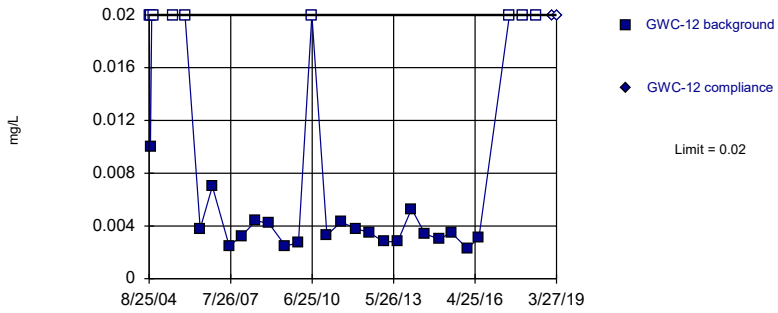
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 30% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

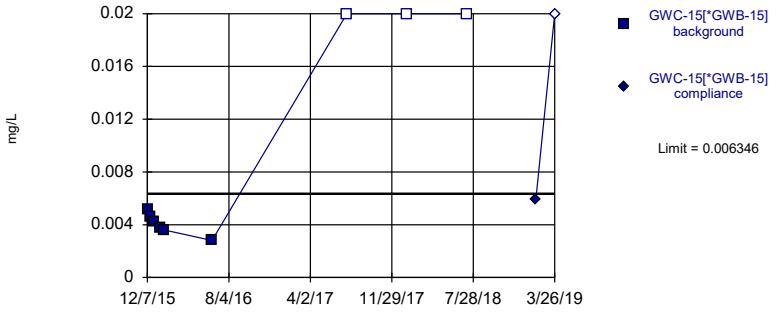
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.532, Std. Dev.=0.1962, n=9, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7763, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

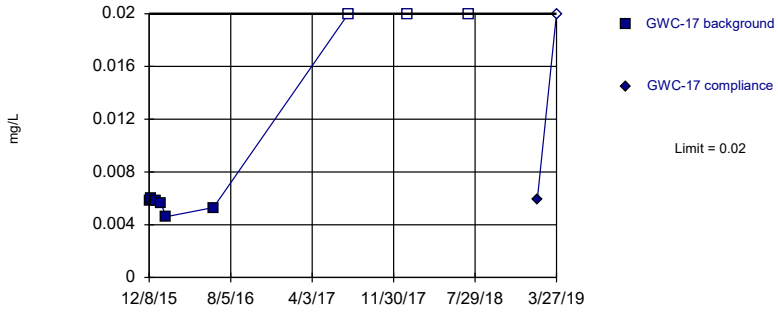
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 9 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

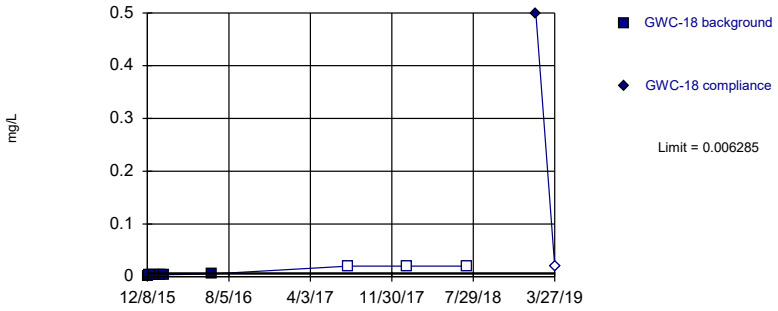
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.142, Std. Dev.=0.01769, n=9, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.785, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

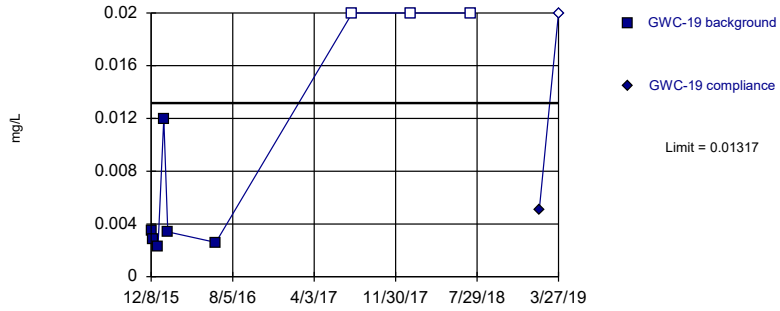
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.1569, Std. Dev.=0.03294, n=9, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7702, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

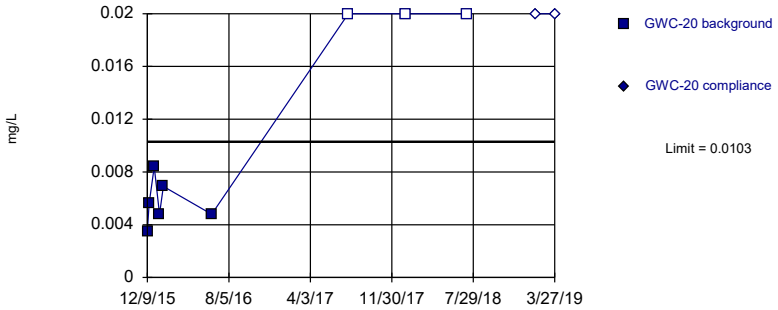
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.07286, Std. Dev.=0.0119, n=9, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8007, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

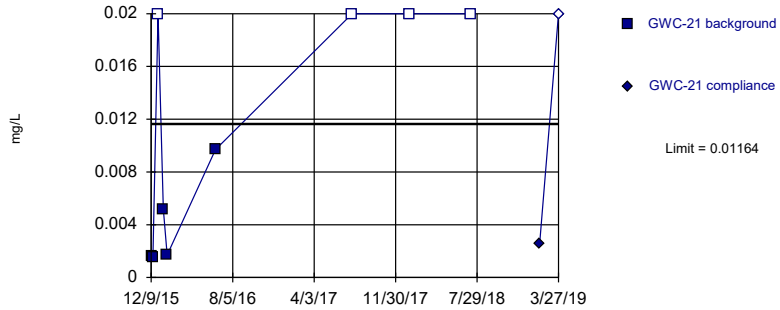
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.00394, Std. Dev.=0.0032, n=9, 44.44% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7667, critical = 0.764. Kappa = 2.405 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

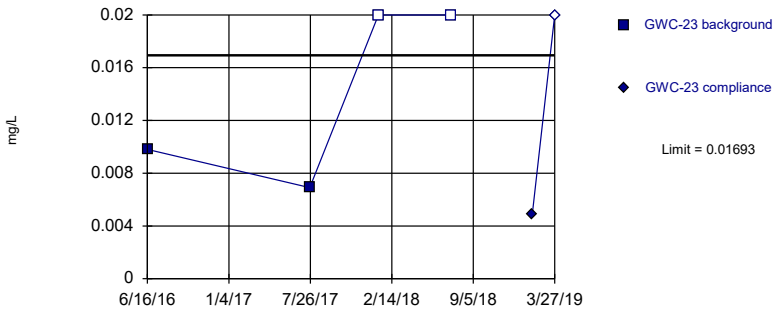
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.00835, Std. Dev.=0.00145, n=4, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8202, critical = 0.687. Kappa = 5.92 (c=16, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003658.

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

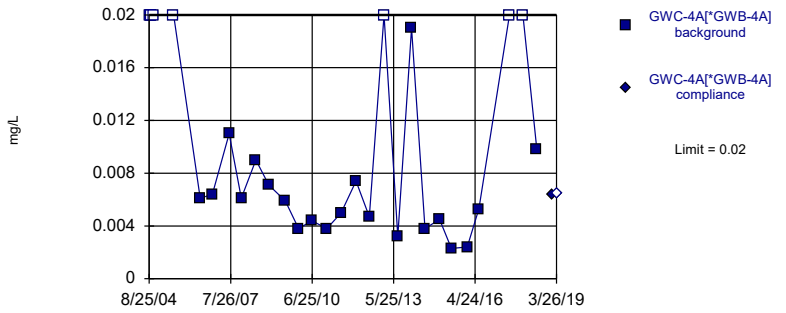
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. 27.59% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

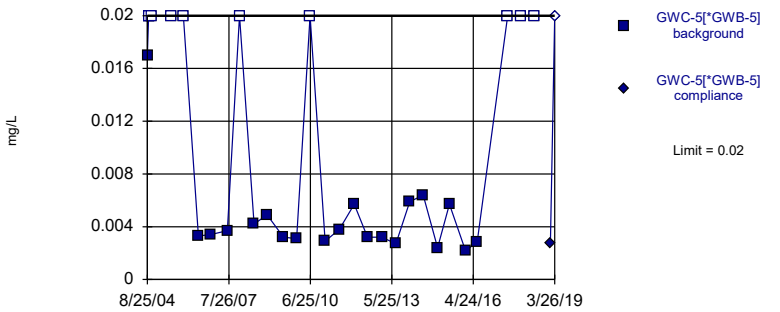
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

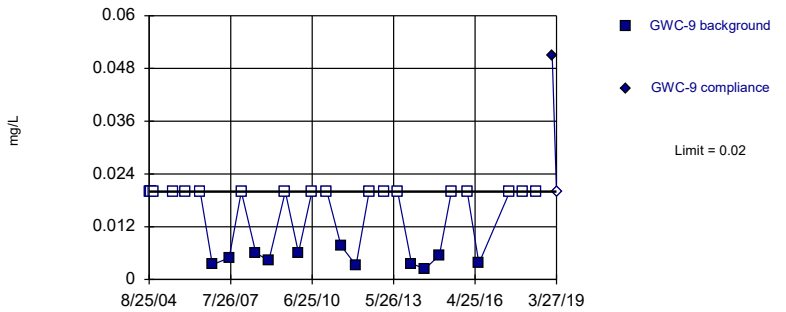
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



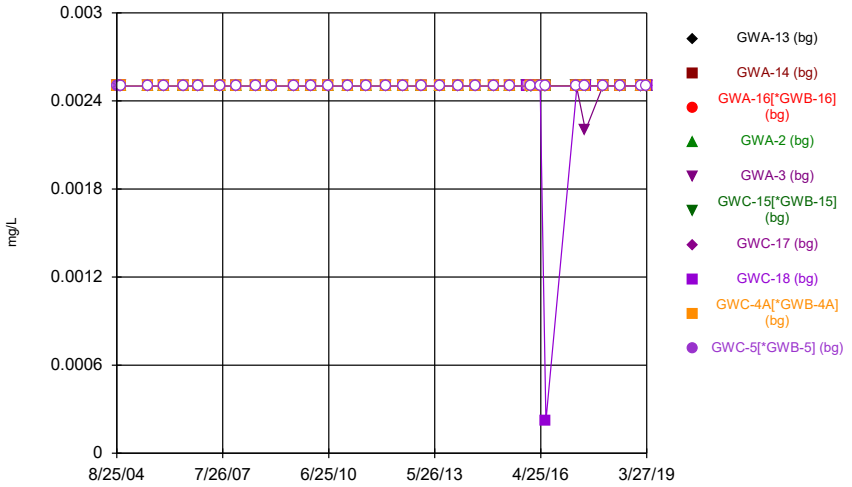
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 63.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Zinc, Total Analysis Run 8/8/2019 3:47 PM

Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

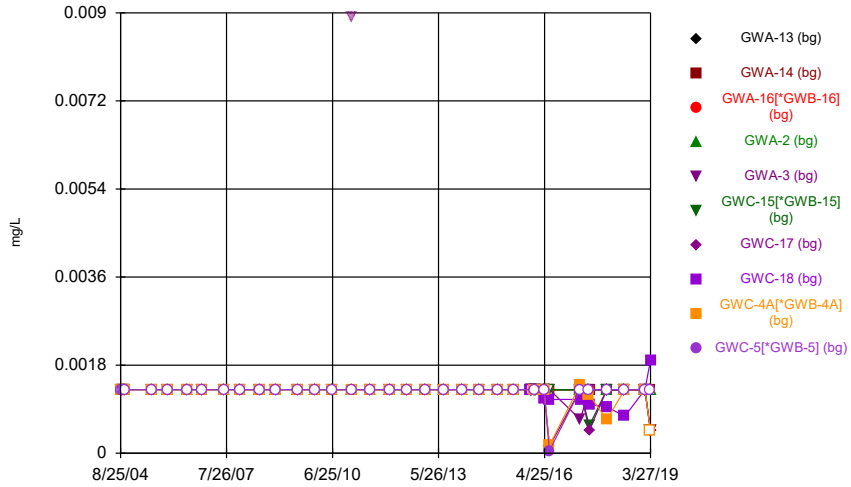
Time Series



Constituent: Antimony Analysis Run 8/8/2019 4:06 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

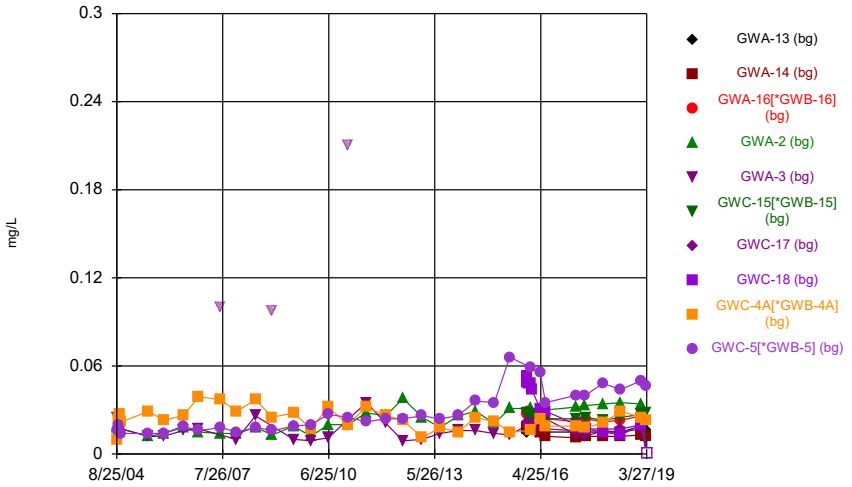
Time Series



Constituent: Arsenic, Total Analysis Run 8/8/2019 4:06 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

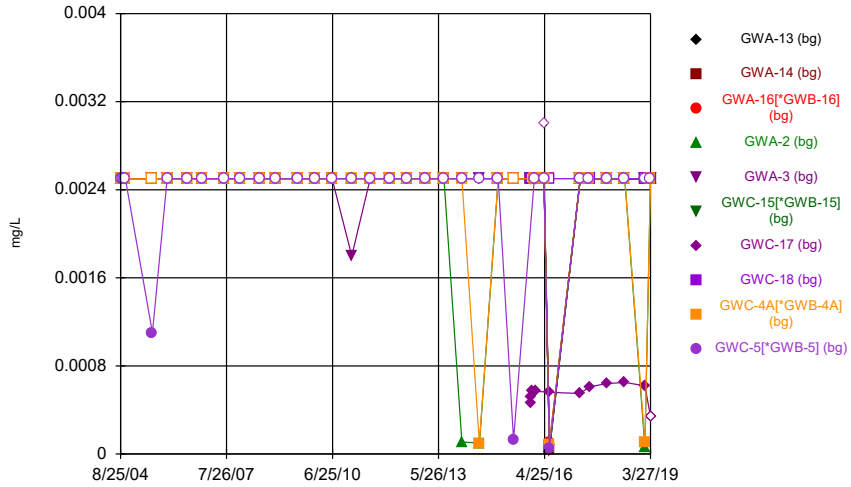
Time Series



Constituent: Barium, Total Analysis Run 8/8/2019 4:06 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

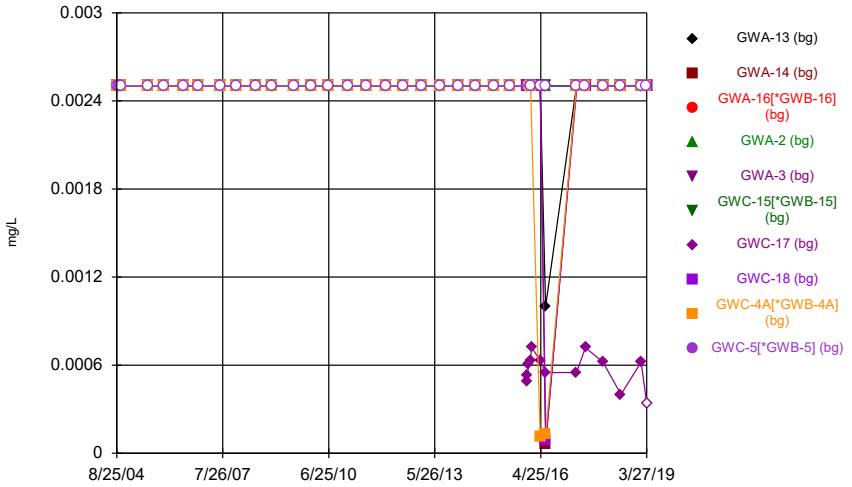
Time Series



Constituent: Beryllium, Total Analysis Run 8/8/2019 4:06 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

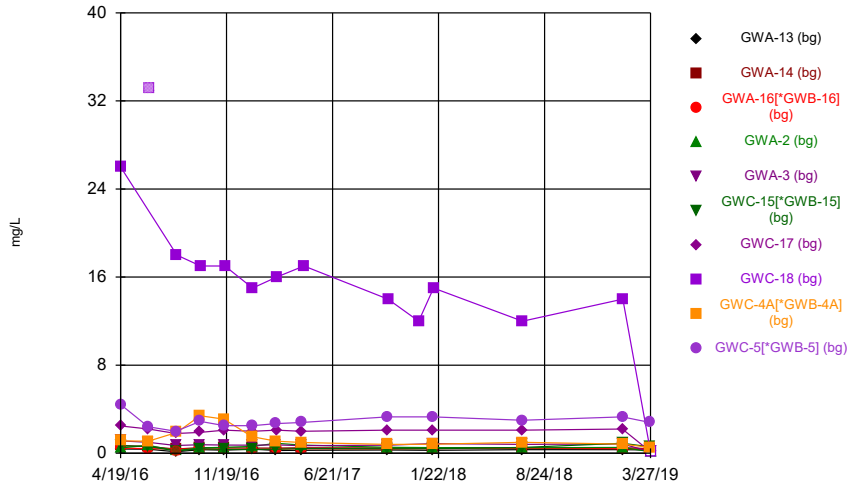
Time Series



Constituent: Cadmium, Total Analysis Run 8/8/2019 4:06 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

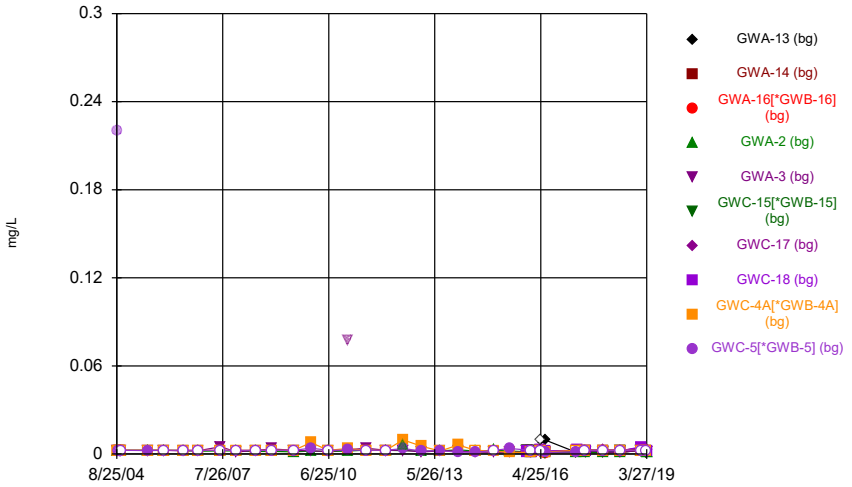
Time Series



Constituent: Calcium Analysis Run 8/8/2019 4:06 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

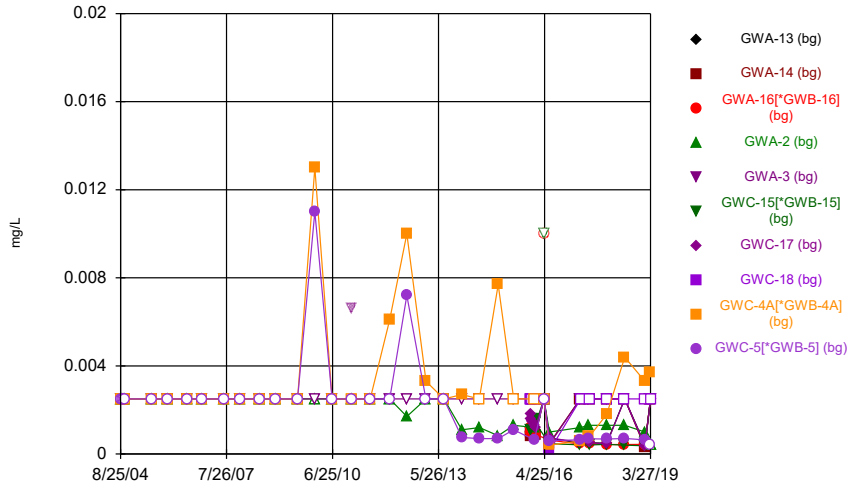
Time Series



Constituent: Chromium, Total Analysis Run 8/8/2019 4:06 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

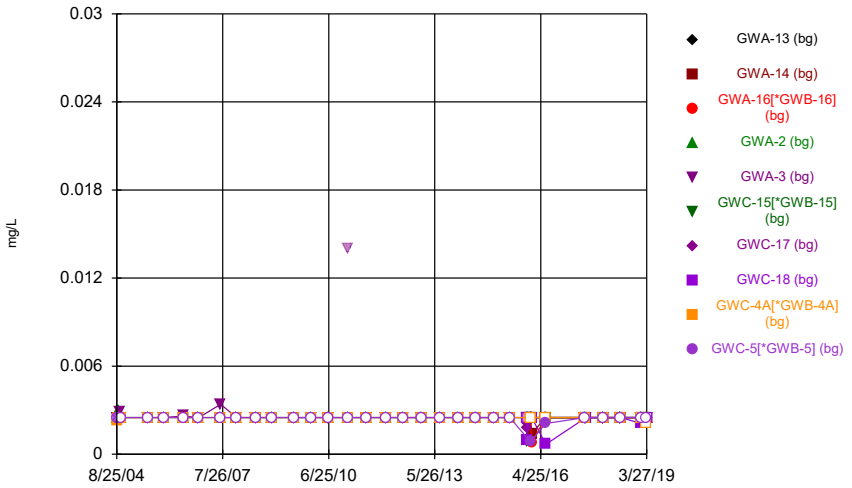
Time Series



Constituent: Cobalt, Total Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

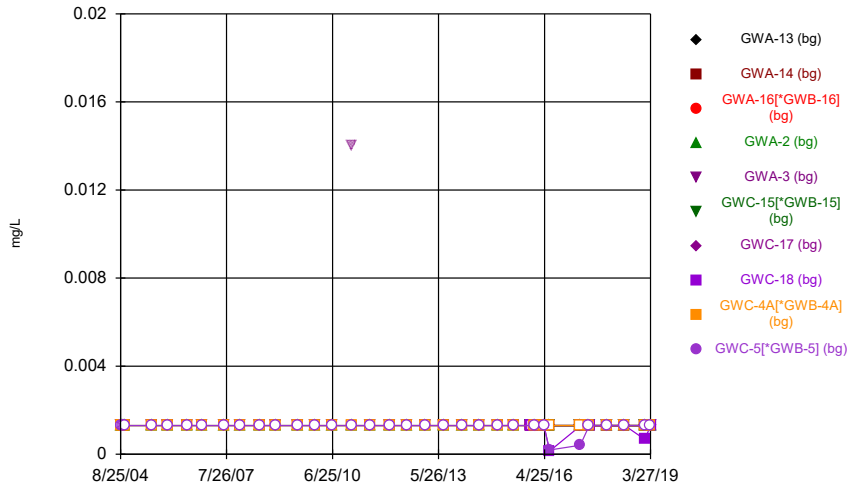
Time Series



Constituent: Copper, Total Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

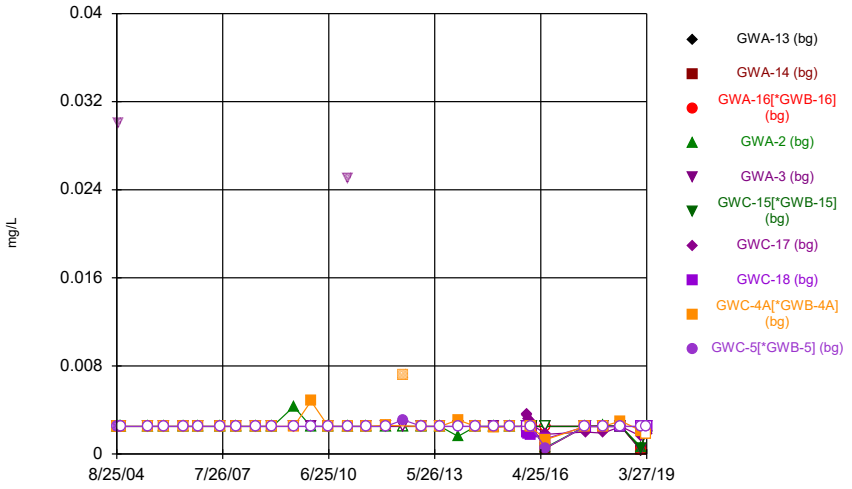
Time Series



Constituent: Lead, Total Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

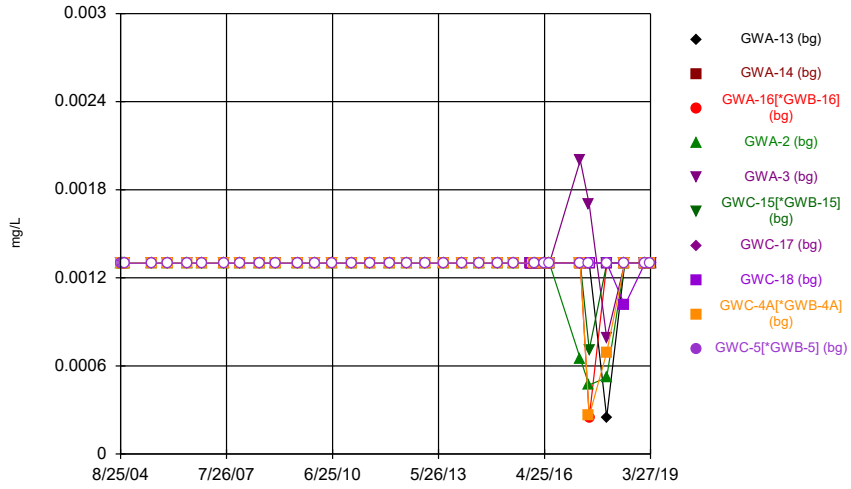
Time Series



Constituent: Nickel, Total Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

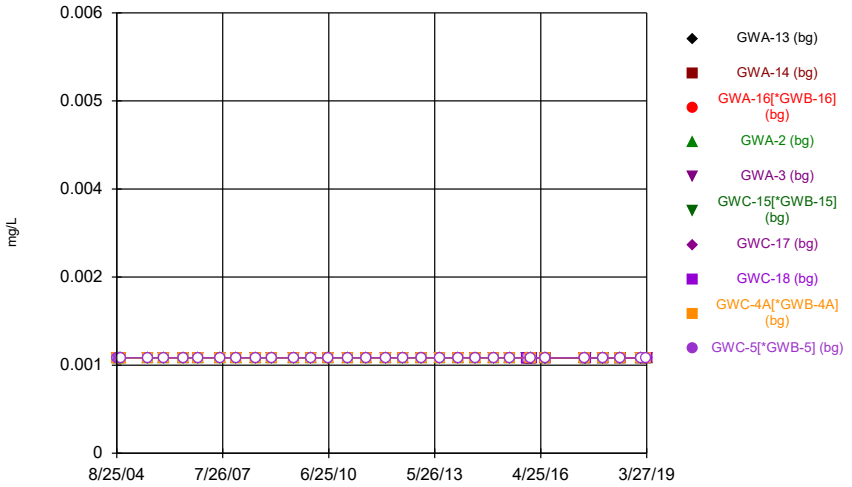
Time Series



Constituent: Selenium Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

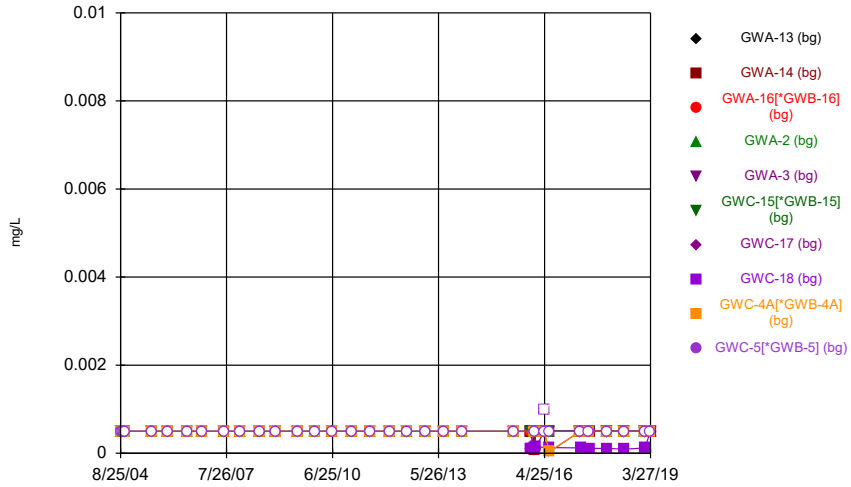
Time Series



Constituent: Silver, Total Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

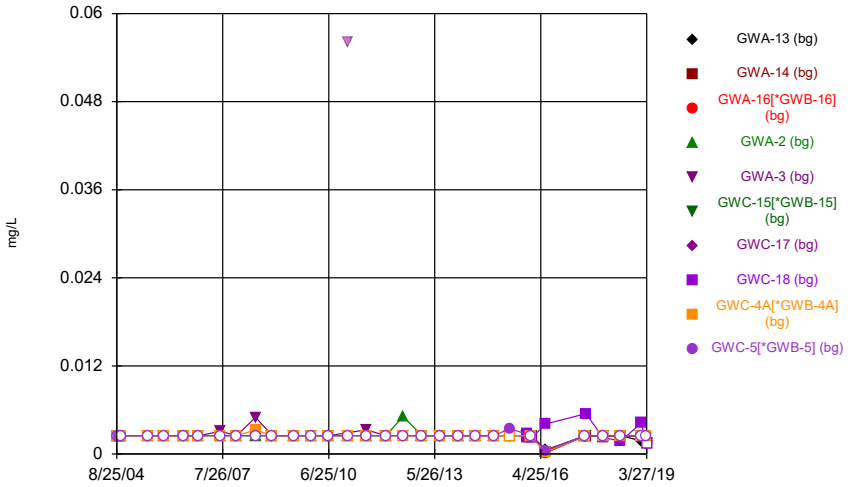
Time Series



Constituent: Thallium Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

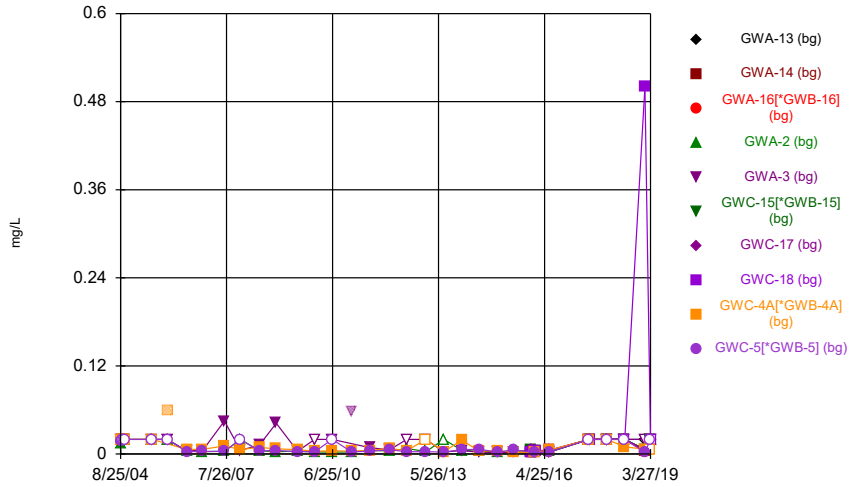
Time Series



Constituent: Vanadium, Total Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

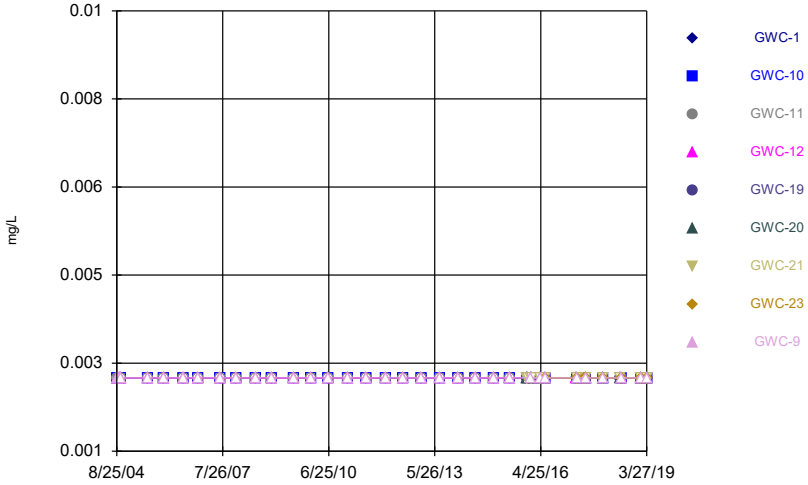
Time Series



Constituent: Zinc, Total Analysis Run 8/8/2019 4:07 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

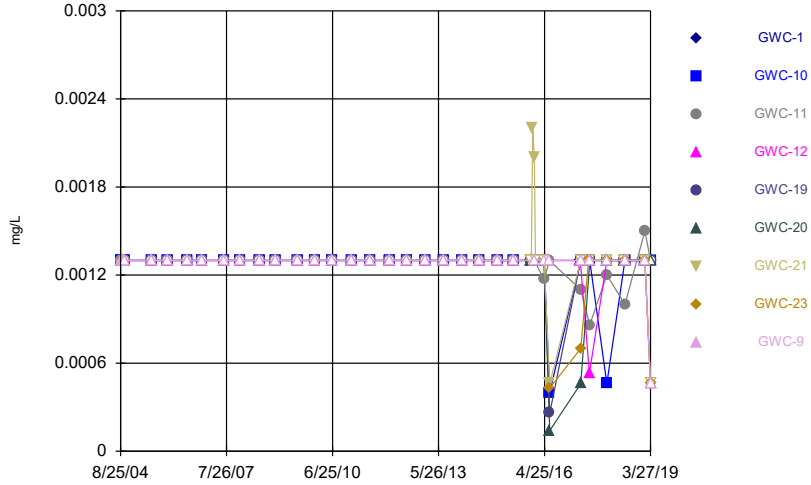
Time Series



Constituent: Antimony Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

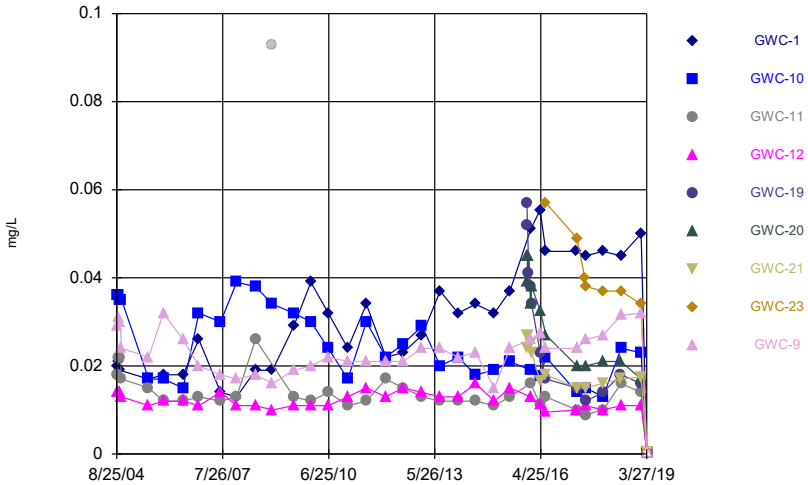
Time Series



Constituent: Arsenic, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

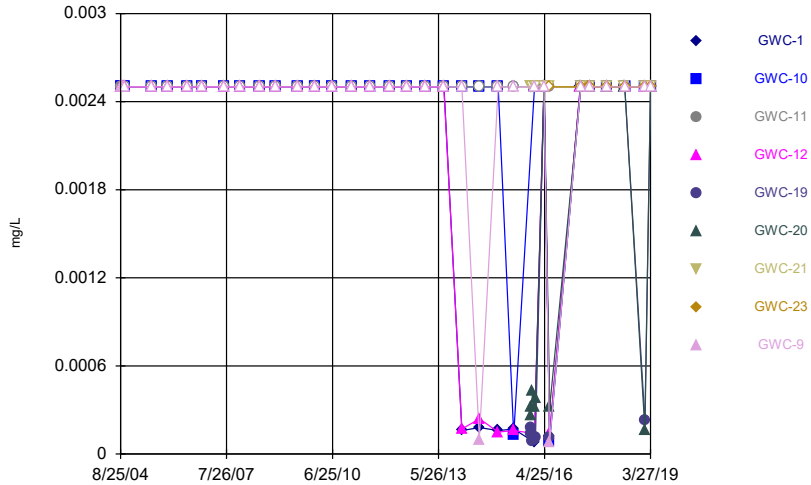
Time Series



Constituent: Barium, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

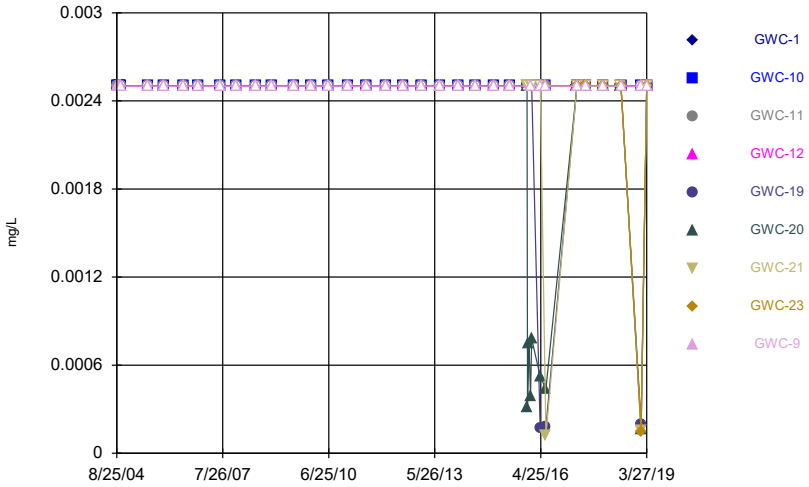
Time Series



Constituent: Beryllium, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

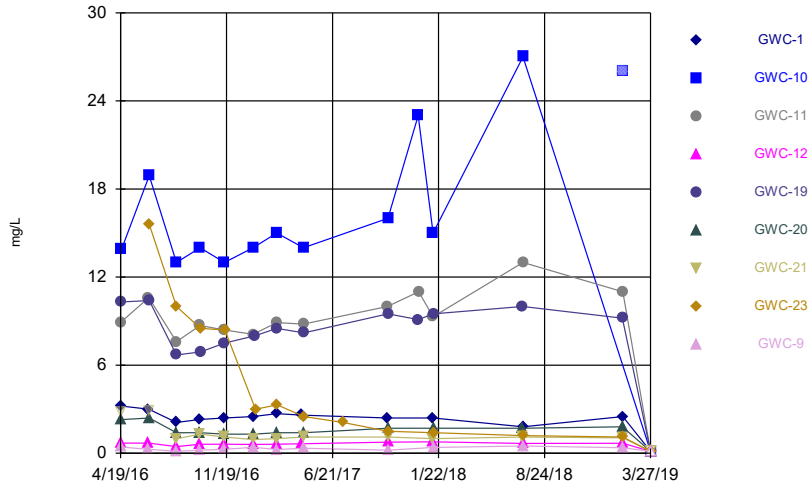
Time Series



Constituent: Cadmium, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

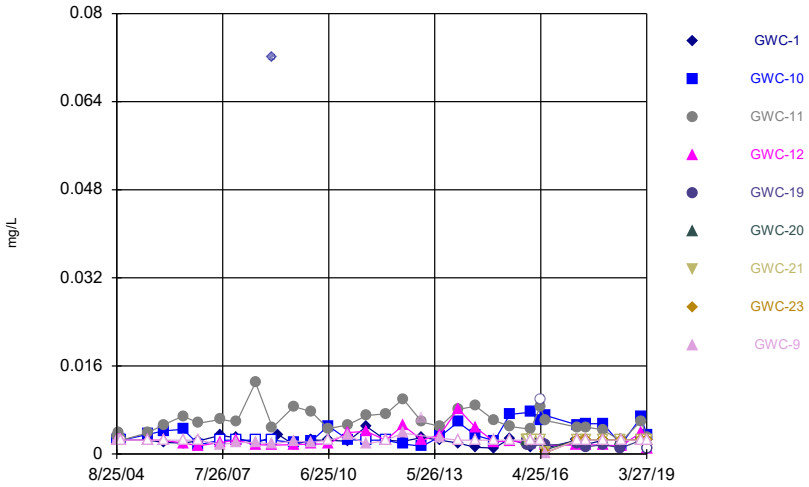
Time Series



Constituent: Calcium Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

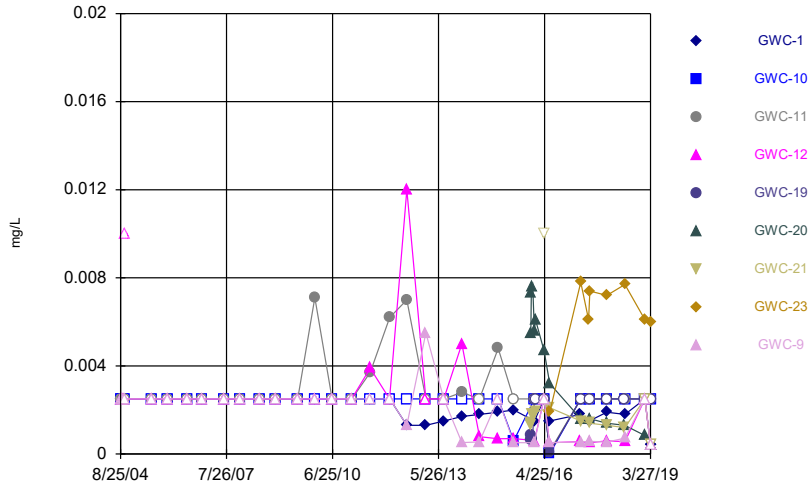
Time Series



Constituent: Chromium, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

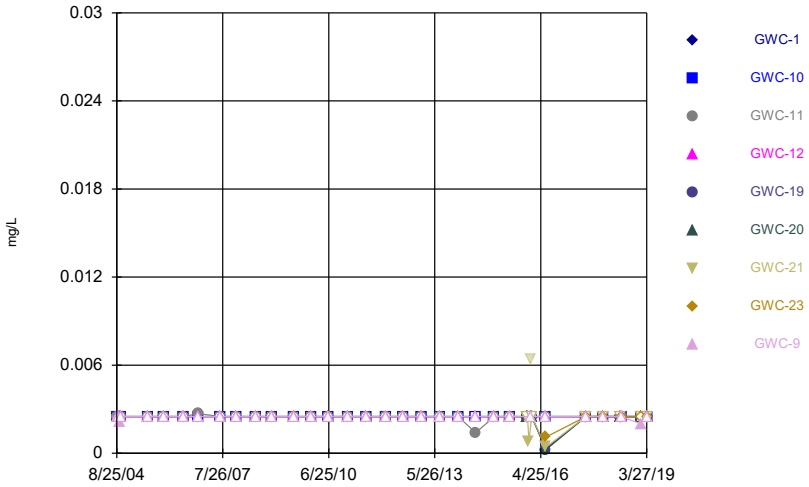
Time Series



Constituent: Cobalt, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

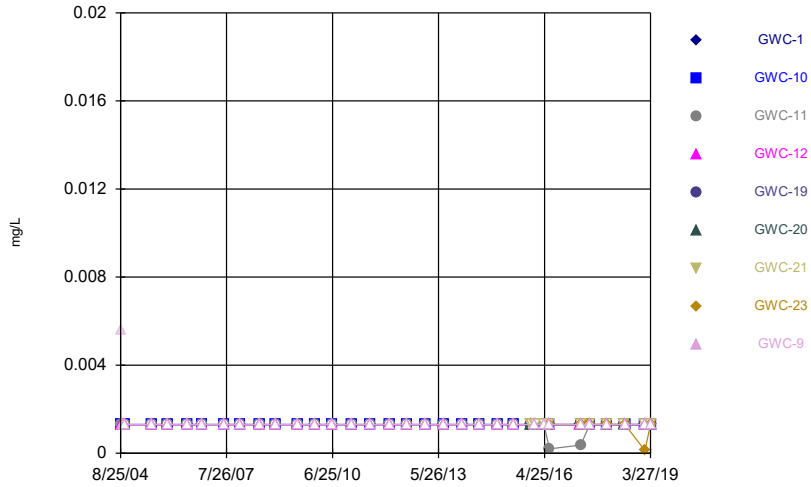
Time Series



Constituent: Copper, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

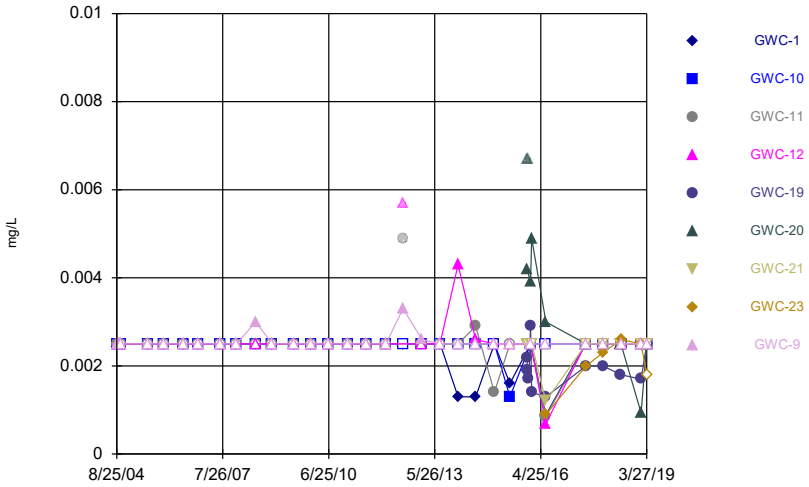
Time Series



Constituent: Lead, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

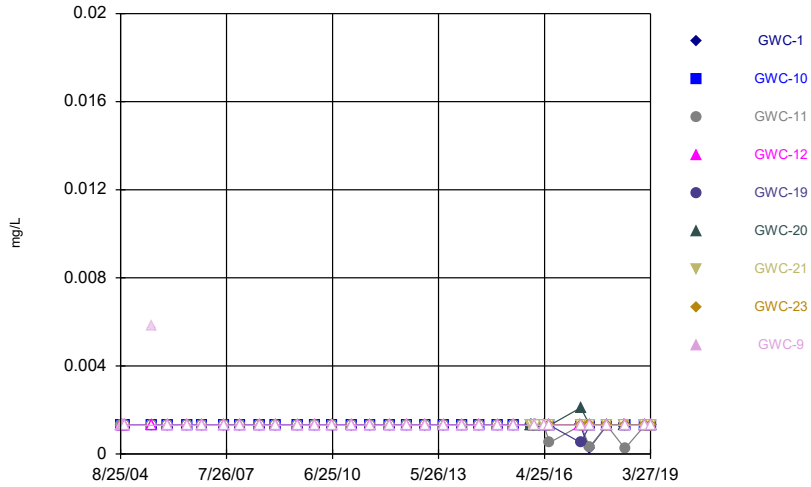
Time Series



Constituent: Nickel, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

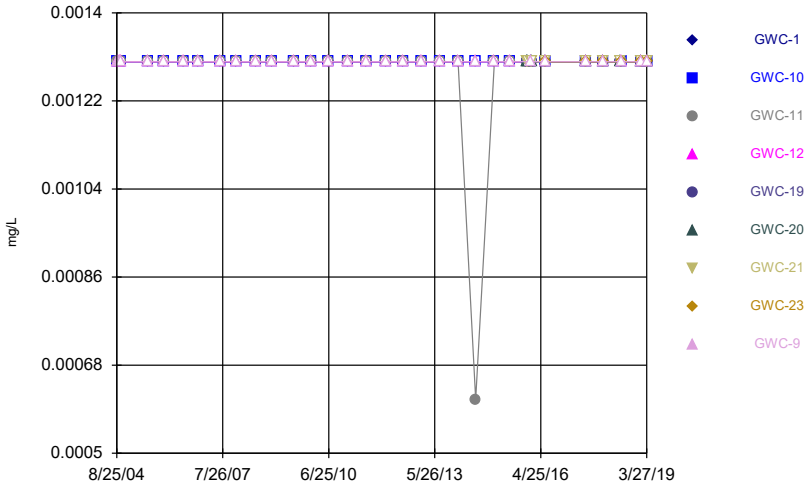
Time Series



Constituent: Selenium Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

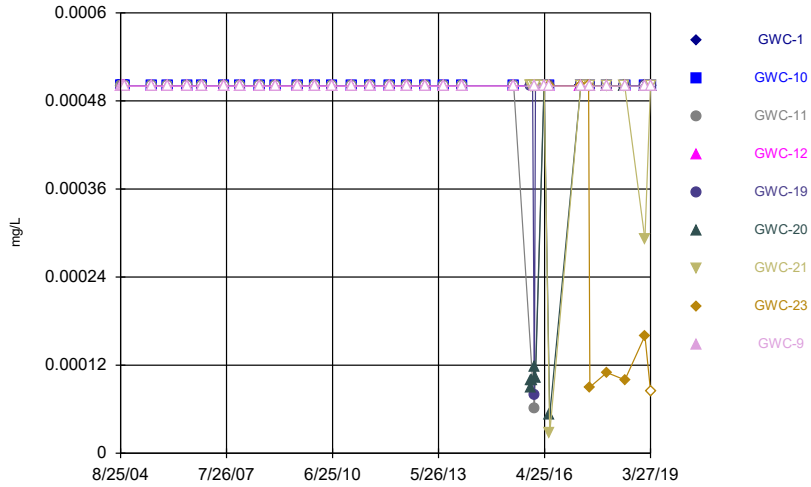
Time Series



Constituent: Silver, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

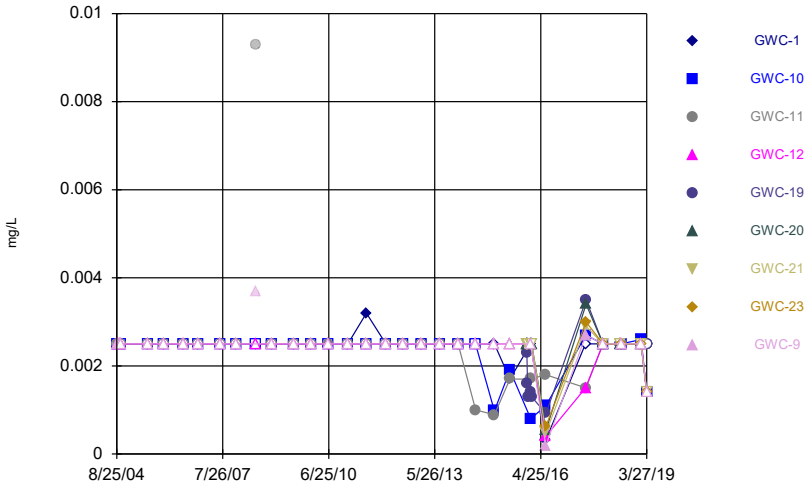
Time Series



Constituent: Thallium Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

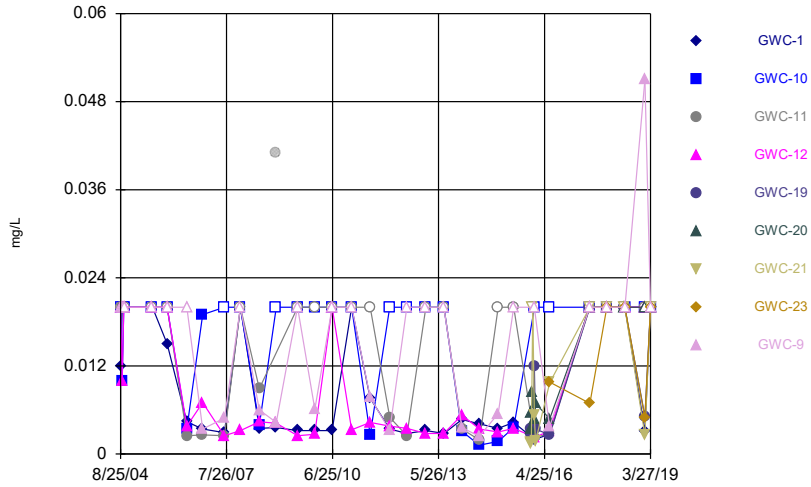
Time Series



Constituent: Vanadium, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Sanitas™ v.9.6.20 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc, Total Analysis Run 8/8/2019 4:11 PM
Plant McIntosh Client: GEI Data: McIntosh LF4 CCR

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:42 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Antimony (mg/L)	GWA-13 (bg)	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWA-14 (bg)	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWA-2 (bg)	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWA-3 (bg)	34	0.002491	0.0000...	0.0000...	0.0025	0.0022	0.0025	97.06
Antimony (mg/L)	GWC-1	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-10	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-11	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-12	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-17 (bg)	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-18 (bg)	13	0.002325	0.0006324	0.0001754	0.0025	0.00022	0.0025	92.31
Antimony (mg/L)	GWC-19	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-20	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-21	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-23	8	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-9	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-4A[*G...	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-5[*GW...	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWC-15[*G...	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Antimony (mg/L)	GWA-16[*G...	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Arsenic, Total (mg/L)	GWA-13 (bg)	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWA-14 (bg)	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWA-2 (bg)	34	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWA-3 (bg)	34	0.001481	0.001323	0.0002268	0.0013	0.00046	0.0089	94.12
Arsenic, Total (mg/L)	GWC-1	33	0.0013	0	0	0.0013	0.0013	0.0013	100
Arsenic, Total (mg/L)	GWC-10	34	0.001249	0.0002079	0.0000...	0.0013	0.0004	0.0013	91.18
Arsenic, Total (mg/L)	GWC-11	34	0.001271	0.0001049	0.0000...	0.0013	0.00086	0.0015	76.47
Arsenic, Total (mg/L)	GWC-12	34	0.001253	0.0001925	0.0000...	0.0013	0.00046	0.0013	97.06
Arsenic, Total (mg/L)	GWC-17 (bg)	13	0.001083	0.0004189	0.0001162	0.0013	0.00015	0.0013	84.62
Arsenic, Total (mg/L)	GWC-18 (bg)	13	0.001205	0.0002782	0.0000...	0.0013	0.0007	0.0019	46.15
Arsenic, Total (mg/L)	GWC-19	13	0.00122	0.0002884	0.00008	0.0013	0.00026	0.0013	92.31
Arsenic, Total (mg/L)	GWC-20	13	0.001146	0.0003812	0.0001057	0.0013	0.00014	0.0013	84.62
Arsenic, Total (mg/L)	GWC-21	13	0.001294	0.0004753	0.0001318	0.0013	0.00046	0.0022	76.92
Arsenic, Total (mg/L)	GWC-23	8	0.001011	0.0004063	0.0001436	0.0013	0.00043	0.0013	75
Arsenic, Total (mg/L)	GWC-9	34	0.001275	0.0001441	0.0000...	0.0013	0.00046	0.0013	100
Arsenic, Total (mg/L)	GWC-4A[*G...	34	0.001224	0.0002588	0.0000...	0.0013	0.00016	0.0014	88.24
Arsenic, Total (mg/L)	GWC-5[*GW...	34	0.001263	0.0002144	0.0000...	0.0013	0.00005	0.0013	97.06
Arsenic, Total (mg/L)	GWC-15[*G...	13	0.001178	0.0002974	0.0000...	0.0013	0.00046	0.0013	92.31
Arsenic, Total (mg/L)	GWA-16[*G...	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Barium, Total (mg/L)	GWA-13 (bg)	13	0.01572	0.001277	0.0003541	0.015	0.0144	0.019	0
Barium, Total (mg/L)	GWA-14 (bg)	13	0.01441	0.0029	0.0008044	0.013	0.011	0.018	0
Barium, Total (mg/L)	GWA-2 (bg)	34	0.0225	0.008624	0.001479	0.02	0.00049	0.038	2.941
Barium, Total (mg/L)	GWA-3 (bg)	31	0.01565	0.006416	0.001152	0.015	0.00049	0.035	3.226
Barium, Total (mg/L)	GWC-1	33	0.03003	0.01313	0.002286	0.029	0.00049	0.0554	3.03
Barium, Total (mg/L)	GWC-10	34	0.02416	0.008803	0.00151	0.0225	0.00049	0.039	2.941
Barium, Total (mg/L)	GWC-11	33	0.0136	0.004382	0.0007628	0.013	0.00049	0.026	3.03
Barium, Total (mg/L)	GWC-12	34	0.01195	0.00264	0.0004528	0.012	0.00049	0.016	2.941
Barium, Total (mg/L)	GWC-17 (bg)	13	0.01718	0.005279	0.001464	0.0188	0.00049	0.021	7.692
Barium, Total (mg/L)	GWC-18 (bg)	13	0.02979	0.01705	0.004729	0.029	0.00049	0.053	7.692
Barium, Total (mg/L)	GWC-19	13	0.02596	0.01692	0.004693	0.018	0.00049	0.057	7.692
Barium, Total (mg/L)	GWC-20	13	0.02769	0.01278	0.003544	0.027	0.00049	0.045	7.692

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:42 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Barium, Total (mg/L)	GWC-21	13	0.01854	0.007077	0.001963	0.017	0.00049	0.027	7.692
Barium, Total (mg/L)	GWC-23	8	0.03656	0.01645	0.005816	0.0375	0.00049	0.057	12.5
Barium, Total (mg/L)	GWC-9	34	0.02288	0.006034	0.001035	0.0235	0.00049	0.032	2.941
Barium, Total (mg/L)	GWC-4A[*G...	34	0.02368	0.006981	0.001197	0.0232	0.0096	0.039	0
Barium, Total (mg/L)	GWC-5[*GW...	34	0.02904	0.01452	0.002489	0.024	0.014	0.066	0
Barium, Total (mg/L)	GWC-15[*G...	13	0.02586	0.001576	0.000437	0.026	0.023	0.028	0
Barium, Total (mg/L)	GWA-16[*G...	13	0.0253	0.002426	0.0006729	0.0259	0.022	0.029	0
Beryllium, Total (mg/L)	GWA-13 (bg)	12	0.002298	0.0007012	0.0002024	0.0025	0.000071	0.0025	91.67
Beryllium, Total (mg/L)	GWA-14 (bg)	13	0.002311	0.0006812	0.0001889	0.0025	0.000044	0.0025	92.31
Beryllium, Total (mg/L)	GWA-2 (bg)	34	0.002216	0.00079	0.0001355	0.0025	0.000063	0.0025	88.24
Beryllium, Total (mg/L)	GWA-3 (bg)	34	0.002407	0.0004364	0.0000...	0.0025	0.000032	0.0025	94.12
Beryllium, Total (mg/L)	GWC-1	33	0.002072	0.0009225	0.0001606	0.0025	0.00008	0.0025	81.82
Beryllium, Total (mg/L)	GWC-10	34	0.002359	0.0005714	0.000098	0.0025	0.000085	0.0025	94.12
Beryllium, Total (mg/L)	GWC-11	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Beryllium, Total (mg/L)	GWC-12	34	0.002088	0.000903	0.0001549	0.0025	0.00014	0.0025	82.35
Beryllium, Total (mg/L)	GWC-17 (bg)	13	0.000...	0.0005459	0.0001514	0.00057	0.00034	0.0025	15.38
Beryllium, Total (mg/L)	GWC-18 (bg)	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Beryllium, Total (mg/L)	GWC-19	13	0.001228	0.001227	0.0003402	0.00023	0.00009	0.0025	46.15
Beryllium, Total (mg/L)	GWC-20	13	0.001322	0.001136	0.0003152	0.00043	0.00016	0.0025	46.15
Beryllium, Total (mg/L)	GWC-21	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Beryllium, Total (mg/L)	GWC-23	8	0.0025	0	0	0.0025	0.0025	0.0025	100
Beryllium, Total (mg/L)	GWC-9	34	0.002358	0.000576	0.0000...	0.0025	0.000077	0.0025	94.12
Beryllium, Total (mg/L)	GWC-4A[*G...	34	0.002288	0.0006913	0.0001185	0.0025	0.000087	0.0025	91.18
Beryllium, Total (mg/L)	GWC-5[*GW...	34	0.002317	0.0006136	0.0001052	0.0025	0.000054	0.0025	91.18
Beryllium, Total (mg/L)	GWC-15[*G...	13	0.002311	0.0006828	0.0001894	0.0025	0.000038	0.0025	92.31
Beryllium, Total (mg/L)	GWA-16[*G...	13	0.002316	0.0006629	0.0001838	0.0025	0.00011	0.0025	92.31
Cadmium, Total (mg/L)	GWA-13 (bg)	13	0.002385	0.000416	0.0001154	0.0025	0.001	0.0025	92.31
Cadmium, Total (mg/L)	GWA-14 (bg)	13	0.002312	0.0006762	0.0001875	0.0025	0.000062	0.0025	92.31
Cadmium, Total (mg/L)	GWA-2 (bg)	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWA-3 (bg)	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-1	33	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-10	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-11	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-12	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-17 (bg)	13	0.000...	0.0001117	0.0000...	0.00061	0.00034	0.00072	7.692
Cadmium, Total (mg/L)	GWC-18 (bg)	13	0.002314	0.0006698	0.0001858	0.0025	0.000085	0.0025	92.31
Cadmium, Total (mg/L)	GWC-19	13	0.001965	0.001016	0.0002818	0.0025	0.00017	0.0025	76.92
Cadmium, Total (mg/L)	GWC-20	13	0.001412	0.001061	0.0002943	0.00078	0.00016	0.0025	46.15
Cadmium, Total (mg/L)	GWC-21	13	0.002135	0.00089	0.0002468	0.0025	0.00012	0.0025	84.62
Cadmium, Total (mg/L)	GWC-23	8	0.002206	0.0008309	0.0002937	0.0025	0.00015	0.0025	87.5
Cadmium, Total (mg/L)	GWC-9	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-4A[*G...	34	0.00236	0.0005683	0.0000...	0.0025	0.000111	0.0025	94.12
Cadmium, Total (mg/L)	GWC-5[*GW...	34	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWC-15[*G...	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Cadmium, Total (mg/L)	GWA-16[*G...	13	0.0025	0	0	0.0025	0.0025	0.0025	100
Calcium (mg/L)	GWA-13 (bg)	13	0.3022	0.06407	0.01777	0.3	0.14	0.389	0
Calcium (mg/L)	GWA-14 (bg)	13	0.5043	0.07673	0.02128	0.5	0.39	0.686	0
Calcium (mg/L)	GWA-2 (bg)	13	0.5358	0.2013	0.05584	0.53	0.13	0.91	7.692
Calcium (mg/L)	GWA-3 (bg)	13	0.7646	0.2283	0.06332	0.76	0.13	1.13	7.692
Calcium (mg/L)	GWC-1	13	2.312	0.7469	0.2071	2.4	0.13	3.22	7.692

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:42 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Calcium (mg/L)	GWC-10	13	15.38	6.536	1.813	14	0.13	27	7.692
Calcium (mg/L)	GWC-11	14	8.891	2.901	0.7754	8.92	0.13	13	7.143
Calcium (mg/L)	GWC-12	13	0.61	0.1659	0.04602	0.65	0.13	0.78	7.692
Calcium (mg/L)	GWC-17 (bg)	13	1.939	0.5671	0.1573	2.1	0.13	2.48	7.692
Calcium (mg/L)	GWC-18 (bg)	14	16.17	7.319	1.956	15.5	0.13	33.2	7.143
Calcium (mg/L)	GWC-19	14	8.138	2.592	0.6926	8.8	0.13	10.4	7.143
Calcium (mg/L)	GWC-20	13	1.532	0.5498	0.1525	1.4	0.13	2.4	7.692
Calcium (mg/L)	GWC-21	13	1.264	0.7508	0.2082	1.1	0.13	2.9	7.692
Calcium (mg/L)	GWC-23	13	4.518	4.639	1.287	2.5	0.13	15.6	7.692
Calcium (mg/L)	GWC-9	13	0.3016	0.1161	0.03219	0.27	0.13	0.49	7.692
Calcium (mg/L)	GWC-4A[*G...	13	1.398	0.8908	0.2471	1.1	0.53	3.4	0
Calcium (mg/L)	GWC-5[*GW...	13	2.915	0.5879	0.1631	2.8	2	4.39	0
Calcium (mg/L)	GWC-15[*G...	13	0.4797	0.1819	0.05044	0.41	0.21	0.91	0
Calcium (mg/L)	GWA-16[*G...	13	0.3902	0.06778	0.0188	0.4	0.19	0.472	0
Chromium, Total (mg/L)	GWA-13 (bg)	12	0.002942	0.002145	0.0006193	0.0025	0.0011	0.0094	75
Chromium, Total (mg/L)	GWA-14 (bg)	12	0.002363	0.0004734	0.0001367	0.0025	0.00086	0.0025	91.67
Chromium, Total (mg/L)	GWA-2 (bg)	33	0.00203	0.0005151	0.0000...	0.002	0.0011	0.0029	30.3
Chromium, Total (mg/L)	GWA-3 (bg)	33	0.002126	0.0008795	0.0001531	0.0023	0.00085	0.0049	36.36
Chromium, Total (mg/L)	GWC-1	33	0.002388	0.000739	0.0001286	0.0025	0.0011	0.005	42.42
Chromium, Total (mg/L)	GWC-10	34	0.003702	0.001834	0.0003145	0.00265	0.0014	0.0076	26.47
Chromium, Total (mg/L)	GWC-11	34	0.005831	0.002261	0.0003878	0.00545	0.0023	0.013	2.941
Chromium, Total (mg/L)	GWC-12	34	0.002603	0.001382	0.0002371	0.00245	0.0011	0.0082	26.47
Chromium, Total (mg/L)	GWC-17 (bg)	12	0.0026	0.0005257	0.0001518	0.0025	0.0018	0.0041	41.67
Chromium, Total (mg/L)	GWC-18 (bg)	12	0.002281	0.0009566	0.0002762	0.00215	0.0012	0.0049	0
Chromium, Total (mg/L)	GWC-19	12	0.001767	0.0005211	0.0001504	0.00165	0.0011	0.0026	25
Chromium, Total (mg/L)	GWC-20	12	0.002358	0.0004907	0.0001417	0.0025	0.0008	0.0025	91.67
Chromium, Total (mg/L)	GWC-21	12	0.002317	0.0006322	0.0001825	0.0025	0.00031	0.0025	91.67
Chromium, Total (mg/L)	GWC-23	8	0.002216	0.0008026	0.0002837	0.0025	0.00023	0.0025	87.5
Chromium, Total (mg/L)	GWC-9	34	0.002524	0.0008875	0.0001522	0.0025	0.00021	0.0065	64.71
Chromium, Total (mg/L)	GWC-4A[*G...	34	0.002929	0.00174	0.0002983	0.0025	0.0011	0.0096	67.65
Chromium, Total (mg/L)	GWC-5[*GW...	33	0.002442	0.000623	0.0001085	0.0025	0.0011	0.004	66.67
Chromium, Total (mg/L)	GWC-15[*G...	12	0.001917	0.0007297	0.0002106	0.0025	0.0008	0.0025	66.67
Chromium, Total (mg/L)	GWA-16[*G...	12	0.001843	0.0007086	0.0002046	0.002	0.00072	0.0025	58.33
Cobalt, Total (mg/L)	GWA-13 (bg)	13	0.001207	0.000789	0.0002188	0.00099	0.00043	0.0025	23.08
Cobalt, Total (mg/L)	GWA-14 (bg)	13	0.001565	0.0009222	0.0002558	0.001	0.00029	0.0025	46.15
Cobalt, Total (mg/L)	GWA-2 (bg)	34	0.00198	0.0006951	0.0001192	0.0025	0.0004	0.0025	64.71
Cobalt, Total (mg/L)	GWA-3 (bg)	34	0.002497	0.0008821	0.0001513	0.0025	0.00035	0.0066	91.18
Cobalt, Total (mg/L)	GWC-1	33	0.002103	0.0005353	0.0000...	0.0025	0.0004	0.0025	60.61
Cobalt, Total (mg/L)	GWC-10	34	0.002371	0.0005292	0.0000...	0.0025	0.00001	0.0025	94.12
Cobalt, Total (mg/L)	GWC-11	34	0.002918	0.001367	0.0002345	0.0025	0.00011	0.0071	79.41
Cobalt, Total (mg/L)	GWC-12	34	0.002333	0.002015	0.0003456	0.0025	0.0004	0.012	64.71
Cobalt, Total (mg/L)	GWC-17 (bg)	13	0.001347	0.0008049	0.0002233	0.0013	0.00038	0.0025	23.08
Cobalt, Total (mg/L)	GWC-18 (bg)	13	0.002321	0.0006462	0.0001792	0.0025	0.00017	0.0025	92.31
Cobalt, Total (mg/L)	GWC-19	13	0.001904	0.0009466	0.0002625	0.0025	0.000067	0.0025	69.23
Cobalt, Total (mg/L)	GWC-20	13	0.003625	0.002596	0.0007199	0.0032	0.0004	0.0076	7.692
Cobalt, Total (mg/L)	GWC-21	13	0.001623	0.0005703	0.0001582	0.0015	0.0004	0.0025	23.08
Cobalt, Total (mg/L)	GWC-23	8	0.006275	0.001918	0.0006782	0.00665	0.0019	0.0078	0
Cobalt, Total (mg/L)	GWC-9	34	0.001977	0.001095	0.0001878	0.0025	0.0004	0.0055	67.65
Cobalt, Total (mg/L)	GWC-4A[*G...	34	0.003244	0.002496	0.000428	0.0025	0.0004	0.013	61.76
Cobalt, Total (mg/L)	GWC-5[*GW...	34	0.002249	0.001999	0.0003428	0.0025	0.0004	0.011	61.76

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:42 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Cobalt, Total (mg/L)	GWC-15[*G...	13	0.001101	0.0007802	0.0002164	0.0011	0.00037	0.0025	15.38
Cobalt, Total (mg/L)	GWA-16[*G...	13	0.001011	0.0007231	0.0002005	0.00089	0.00043	0.0025	15.38
Copper, Total (mg/L)	GWA-13 (bg)	11	0.0025	0	0	0.0025	0.0025	0.0025	100
Copper, Total (mg/L)	GWA-14 (bg)	11	0.0024	0.0003317	0.0001	0.0025	0.0014	0.0025	90.91
Copper, Total (mg/L)	GWA-2 (bg)	32	0.002516	0.0000...	0.0000...	0.0025	0.0025	0.003	96.88
Copper, Total (mg/L)	GWA-3 (bg)	32	0.002903	0.002032	0.0003593	0.0025	0.0025	0.014	87.5
Copper, Total (mg/L)	GWC-1	31	0.0025	0	0	0.0025	0.0025	0.0025	100
Copper, Total (mg/L)	GWC-10	32	0.0025	0	0	0.0025	0.0025	0.0025	100
Copper, Total (mg/L)	GWC-11	32	0.002472	0.0001988	0.0000...	0.0025	0.0014	0.0027	93.75
Copper, Total (mg/L)	GWC-12	32	0.0025	0	0	0.0025	0.0025	0.0025	100
Copper, Total (mg/L)	GWC-17 (bg)	11	0.0024	0.0002324	0.0000...	0.0025	0.0018	0.0025	81.82
Copper, Total (mg/L)	GWC-18 (bg)	11	0.002158	0.0006752	0.0002036	0.0025	0.00068	0.0025	72.73
Copper, Total (mg/L)	GWC-19	11	0.002295	0.0006814	0.0002055	0.0025	0.00024	0.0025	90.91
Copper, Total (mg/L)	GWC-20	11	0.002302	0.0006573	0.0001982	0.0025	0.00032	0.0025	90.91
Copper, Total (mg/L)	GWC-21	11	0.002513	0.001495	0.0004508	0.0025	0.00042	0.0064	72.73
Copper, Total (mg/L)	GWC-23	6	0.002267	0.0005715	0.0002333	0.0025	0.0011	0.0025	83.33
Copper, Total (mg/L)	GWC-9	32	0.002472	0.0001114	0.0000...	0.0025	0.002	0.0025	93.75
Copper, Total (mg/L)	GWC-4A[*G...	32	0.002481	0.0000...	0.0000...	0.0025	0.0021	0.0025	96.88
Copper, Total (mg/L)	GWC-5[*GW...	32	0.002436	0.0002996	0.0000...	0.0025	0.00084	0.0025	93.75
Copper, Total (mg/L)	GWC-15[*G...	11	0.002349	0.0005005	0.0001509	0.0025	0.00084	0.0025	90.91
Copper, Total (mg/L)	GWA-16[*G...	11	0.00221	0.0006466	0.000195	0.0025	0.00081	0.0025	81.82
Lead, Total (mg/L)	GWA-13 (bg)	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWA-14 (bg)	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWA-2 (bg)	34	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWA-3 (bg)	34	0.001674	0.002178	0.0003735	0.0013	0.0013	0.014	97.06
Lead, Total (mg/L)	GWC-1	33	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWC-10	34	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWC-11	34	0.00124	0.0002433	0.0000...	0.0013	0.0002	0.0013	94.12
Lead, Total (mg/L)	GWC-12	34	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWC-17 (bg)	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWC-18 (bg)	13	0.001163	0.0003507	0.0000...	0.0013	0.00015	0.0013	84.62
Lead, Total (mg/L)	GWC-19	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWC-20	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWC-21	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWC-23	8	0.001154	0.0004137	0.0001463	0.0013	0.00013	0.0013	87.5
Lead, Total (mg/L)	GWC-9	34	0.001426	0.0007374	0.0001265	0.0013	0.0013	0.0056	97.06
Lead, Total (mg/L)	GWC-4A[*G...	34	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWC-5[*GW...	34	0.001241	0.0002404	0.0000...	0.0013	0.00019	0.0013	94.12
Lead, Total (mg/L)	GWC-15[*G...	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Lead, Total (mg/L)	GWA-16[*G...	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Nickel, Total (mg/L)	GWA-13 (bg)	11	0.002303	0.0006543	0.0001973	0.0025	0.00033	0.0025	90.91
Nickel, Total (mg/L)	GWA-14 (bg)	11	0.002129	0.0008257	0.0002489	0.0025	0.0004	0.0025	81.82
Nickel, Total (mg/L)	GWA-2 (bg)	32	0.002413	0.0005937	0.000105	0.0025	0.0006	0.0043	84.38
Nickel, Total (mg/L)	GWA-3 (bg)	30	0.002428	0.0003944	0.000072	0.0025	0.00034	0.0025	96.67
Nickel, Total (mg/L)	GWC-1	31	0.002341	0.0004295	0.0000...	0.0025	0.00088	0.0025	87.1
Nickel, Total (mg/L)	GWC-10	32	0.002462	0.0002121	0.0000375	0.0025	0.0013	0.0025	96.88
Nickel, Total (mg/L)	GWC-11	32	0.002502	0.0005638	0.0000...	0.0025	0.00085	0.0049	87.5
Nickel, Total (mg/L)	GWC-12	32	0.002602	0.0007288	0.0001288	0.0025	0.00068	0.0057	87.5
Nickel, Total (mg/L)	GWC-17 (bg)	11	0.0025	0.000728	0.0002195	0.0025	0.0016	0.0036	18.18
Nickel, Total (mg/L)	GWC-18 (bg)	11	0.002155	0.000418	0.000126	0.0025	0.0014	0.0025	54.55

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:42 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Nickel, Total (mg/L)	GWC-19	11	0.001945	0.0004634	0.0001397	0.0019	0.0013	0.0029	9.091
Nickel, Total (mg/L)	GWC-20	11	0.003666	0.001834	0.000553	0.003	0.00093	0.0067	36.36
Nickel, Total (mg/L)	GWC-21	11	0.002382	0.000392	0.0001182	0.0025	0.0012	0.0025	90.91
Nickel, Total (mg/L)	GWC-23	6	0.002017	0.0006242	0.0002548	0.00215	0.0009	0.0026	33.33
Nickel, Total (mg/L)	GWC-9	32	0.002544	0.0001645	0.0000...	0.0025	0.0025	0.0033	90.63
Nickel, Total (mg/L)	GWC-4A[*G...	32	0.002681	0.000968	0.0001711	0.0025	0.0013	0.0072	71.88
Nickel, Total (mg/L)	GWC-5[*GW...	32	0.002457	0.0003656	0.0000...	0.0025	0.00054	0.0031	93.75
Nickel, Total (mg/L)	GWC-15[*G...	11	0.002315	0.0006151	0.0001855	0.0025	0.00046	0.0025	90.91
Nickel, Total (mg/L)	GWA-16[*G...	11	0.002309	0.0006332	0.0001909	0.0025	0.0004	0.0025	90.91
Selenium (mg/L)	GWA-13 (bg)	13	0.001219	0.0002912	0.0000...	0.0013	0.00025	0.0013	92.31
Selenium (mg/L)	GWA-14 (bg)	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWA-2 (bg)	34	0.001234	0.0002181	0.0000374	0.0013	0.00047	0.0013	91.18
Selenium (mg/L)	GWA-3 (bg)	34	0.001317	0.0001651	0.0000...	0.0013	0.00079	0.002	91.18
Selenium (mg/L)	GWC-1	33	0.001268	0.000181	0.0000...	0.0013	0.00026	0.0013	96.97
Selenium (mg/L)	GWC-10	34	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-11	34	0.001217	0.0002719	0.0000...	0.0013	0.00025	0.0013	91.18
Selenium (mg/L)	GWC-12	34	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-17 (bg)	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-18 (bg)	13	0.001234	0.0002385	0.0000...	0.0013	0.00044	0.0013	92.31
Selenium (mg/L)	GWC-19	13	0.00124	0.0002163	0.00006	0.0013	0.00052	0.0013	92.31
Selenium (mg/L)	GWC-20	13	0.001362	0.0002219	0.0000...	0.0013	0.0013	0.0021	92.31
Selenium (mg/L)	GWC-21	13	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-23	8	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-9	34	0.001432	0.0007717	0.0001324	0.0013	0.0013	0.0058	97.06
Selenium (mg/L)	GWC-4A[*G...	34	0.001251	0.000204	0.0000...	0.0013	0.00026	0.0013	94.12
Selenium (mg/L)	GWC-5[*GW...	34	0.0013	0	0	0.0013	0.0013	0.0013	100
Selenium (mg/L)	GWC-15[*G...	13	0.001255	0.0001636	0.0000...	0.0013	0.00071	0.0013	92.31
Selenium (mg/L)	GWA-16[*G...	13	0.001219	0.0002912	0.0000...	0.0013	0.00025	0.0013	92.31
Silver, Total (mg/L)	GWA-13 (bg)	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWA-14 (bg)	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWA-2 (bg)	32	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWA-3 (bg)	32	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-1	31	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-10	32	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-11	32	0.001278	0.000122	0.0000...	0.0013	0.00061	0.0013	96.88
Silver, Total (mg/L)	GWC-12	32	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-17 (bg)	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-18 (bg)	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-19	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-20	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-21	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-23	6	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-9	32	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-4A[*G...	32	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-5[*GW...	32	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWC-15[*G...	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Silver, Total (mg/L)	GWA-16[*G...	11	0.0013	0	0	0.0013	0.0013	0.0013	100
Thallium (mg/L)	GWA-13 (bg)	13	0.000...	0.0001579	0.0000438	0.0005	0.00006	0.0005	84.62
Thallium (mg/L)	GWA-14 (bg)	13	0.000...	0.0001168	0.0000...	0.0005	0.000079	0.0005	92.31
Thallium (mg/L)	GWA-2 (bg)	32	0.0005	0	0	0.0005	0.0005	0.0005	100

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:42 AM

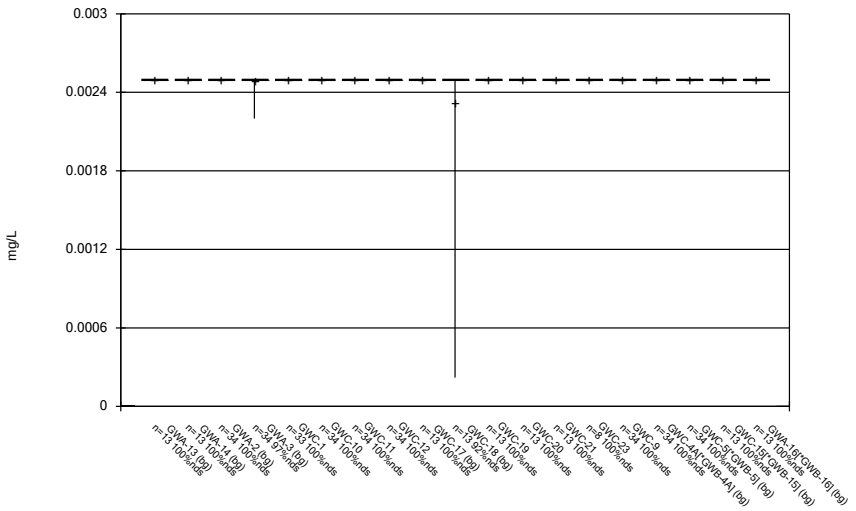
Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Thallium (mg/L)	GWA-3 (bg)	32	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-1	32	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-10	32	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-11	32	0.000...	0.0000776	0.0000...	0.0005	0.000061	0.0005	96.88
Thallium (mg/L)	GWC-12	32	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-17 (bg)	13	0.000...	0.0002156	0.0000598	0.0005	0.000038	0.0005	53.85
Thallium (mg/L)	GWC-18 (bg)	13	0.000...	0.0001454	0.0000...	0.00012	0.000095	0.0005	15.38
Thallium (mg/L)	GWC-19	13	0.000...	0.0001168	0.0000...	0.0005	0.000079	0.0005	92.31
Thallium (mg/L)	GWC-20	13	0.000...	0.0002113	0.0000...	0.0005	0.000052	0.0005	53.85
Thallium (mg/L)	GWC-21	13	0.000...	0.0001312	0.0000...	0.0005	0.000027	0.0005	92.31
Thallium (mg/L)	GWC-23	8	0.000...	0.0002036	0.000072	0.000135	0.000085	0.0005	50
Thallium (mg/L)	GWC-9	32	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-4A[*G...	32	0.000...	0.0000...	0.0000145	0.0005	0.000036	0.0005	96.88
Thallium (mg/L)	GWC-5[*GW...	32	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWC-15[*G...	13	0.0005	0	0	0.0005	0.0005	0.0005	100
Thallium (mg/L)	GWA-16[*G...	13	0.0005	0	0	0.0005	0.0005	0.0005	100
Vanadium, Total (mg/L)	GWA-13 (bg)	11	0.002259	0.0006045	0.0001823	0.0025	0.00055	0.0025	81.82
Vanadium, Total (mg/L)	GWA-14 (bg)	11	0.002303	0.0006543	0.0001973	0.0025	0.00033	0.0025	90.91
Vanadium, Total (mg/L)	GWA-2 (bg)	32	0.002517	0.0005955	0.0001053	0.0025	0.00044	0.0051	93.75
Vanadium, Total (mg/L)	GWA-3 (bg)	31	0.002518	0.0006689	0.0001201	0.0025	0.00027	0.005	87.1
Vanadium, Total (mg/L)	GWC-1	31	0.002426	0.0004381	0.0000...	0.0025	0.00031	0.0032	90.32
Vanadium, Total (mg/L)	GWC-10	32	0.002315	0.0004989	0.0000...	0.0025	0.0008	0.0027	81.25
Vanadium, Total (mg/L)	GWC-11	32	0.002512	0.001318	0.000233	0.0025	0.00089	0.0093	75
Vanadium, Total (mg/L)	GWC-12	32	0.002369	0.0004425	0.0000...	0.0025	0.0004	0.0025	93.75
Vanadium, Total (mg/L)	GWC-17 (bg)	11	0.002215	0.0006664	0.0002009	0.0025	0.00047	0.0025	90.91
Vanadium, Total (mg/L)	GWC-18 (bg)	11	0.002809	0.001258	0.0003793	0.0023	0.0014	0.0055	9.091
Vanadium, Total (mg/L)	GWC-19	11	0.002029	0.0007744	0.0002335	0.0023	0.00092	0.0035	36.36
Vanadium, Total (mg/L)	GWC-20	11	0.002304	0.0007374	0.0002223	0.0025	0.00054	0.0034	81.82
Vanadium, Total (mg/L)	GWC-21	11	0.002253	0.0006912	0.0002084	0.0025	0.00048	0.0029	81.82
Vanadium, Total (mg/L)	GWC-23	6	0.002088	0.0008877	0.0003624	0.0025	0.00063	0.003	66.67
Vanadium, Total (mg/L)	GWC-9	32	0.002437	0.0005048	0.0000...	0.0025	0.00019	0.0037	90.63
Vanadium, Total (mg/L)	GWC-4A[*G...	32	0.002456	0.0004214	0.0000745	0.0025	0.00028	0.0033	93.75
Vanadium, Total (mg/L)	GWC-5[*GW...	32	0.002468	0.0004051	0.0000...	0.0025	0.00047	0.0035	93.75
Vanadium, Total (mg/L)	GWC-15[*G...	11	0.0022	0.0007113	0.0002145	0.0025	0.0003	0.0025	90.91
Vanadium, Total (mg/L)	GWA-16[*G...	11	0.002286	0.0007086	0.0002136	0.0025	0.00015	0.0025	90.91
Zinc, Total (mg/L)	GWA-13 (bg)	11	0.01074	0.008883	0.002678	0.0042	0.0022	0.02	45.45
Zinc, Total (mg/L)	GWA-14 (bg)	11	0.009536	0.008318	0.002508	0.0044	0.0028	0.02	36.36
Zinc, Total (mg/L)	GWA-2 (bg)	32	0.009869	0.007708	0.001363	0.0047	0.0027	0.02	34.38
Zinc, Total (mg/L)	GWA-3 (bg)	29	0.01255	0.008068	0.001498	0.02	0.0019	0.02	51.72
Zinc, Total (mg/L)	GWC-1	31	0.008987	0.007629	0.00137	0.0041	0.002	0.02	29.03
Zinc, Total (mg/L)	GWC-10	32	0.01589	0.007276	0.001286	0.02	0.0012	0.02	71.88
Zinc, Total (mg/L)	GWC-11	31	0.01465	0.007958	0.001429	0.02	0.0019	0.02	67.74
Zinc, Total (mg/L)	GWC-12	32	0.009419	0.007909	0.001398	0.00425	0.0023	0.02	34.38
Zinc, Total (mg/L)	GWC-17 (bg)	11	0.01082	0.007289	0.002198	0.0059	0.0046	0.02	36.36
Zinc, Total (mg/L)	GWC-18 (bg)	10	0.00993	0.008714	0.002756	0.0044	0.0017	0.02	40
Zinc, Total (mg/L)	GWC-19	11	0.01015	0.008243	0.002485	0.0051	0.0023	0.02	36.36
Zinc, Total (mg/L)	GWC-20	11	0.01218	0.007586	0.002287	0.0084	0.0035	0.02	45.45
Zinc, Total (mg/L)	GWC-21	11	0.01111	0.008818	0.002659	0.0097	0.0015	0.02	45.45
Zinc, Total (mg/L)	GWC-23	6	0.0136	0.007182	0.002932	0.0149	0.0049	0.02	50
Zinc, Total (mg/L)	GWC-9	32	0.01568	0.009824	0.001737	0.02	0.0024	0.051	62.5

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/13/2020, 10:42 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Zinc, Total (mg/L)	GWC-4A[*G...	31	0.009803	0.006826	0.001226	0.0064	0.0023	0.02	29.03
Zinc, Total (mg/L)	GWC-5[*GW...	32	0.009762	0.007939	0.001403	0.0053	0.0022	0.02	34.38
Zinc, Total (mg/L)	GWC-15[*G...	11	0.01001	0.007962	0.002401	0.0052	0.0028	0.02	36.36
Zinc, Total (mg/L)	GWA-16[*G...	11	0.009573	0.008288	0.002499	0.0042	0.0024	0.02	36.36

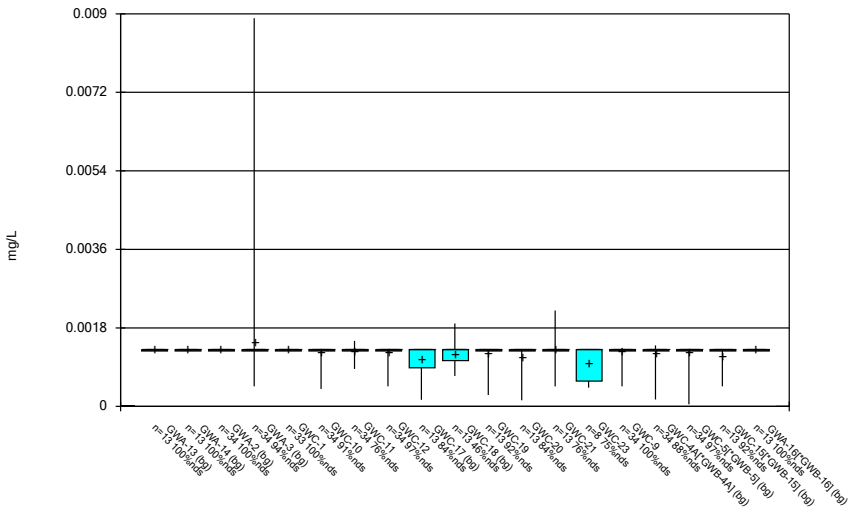
Box & Whiskers Plot



Constituent: Antimony Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

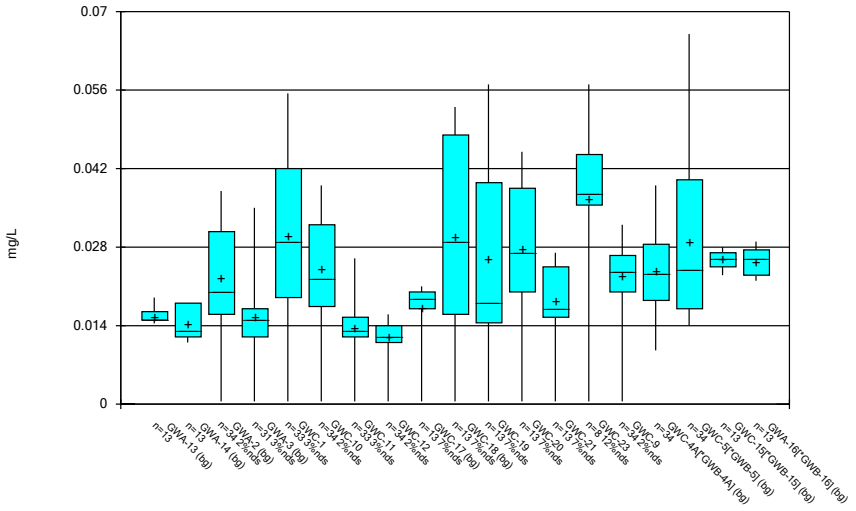
Box & Whiskers Plot



Constituent: Arsenic, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

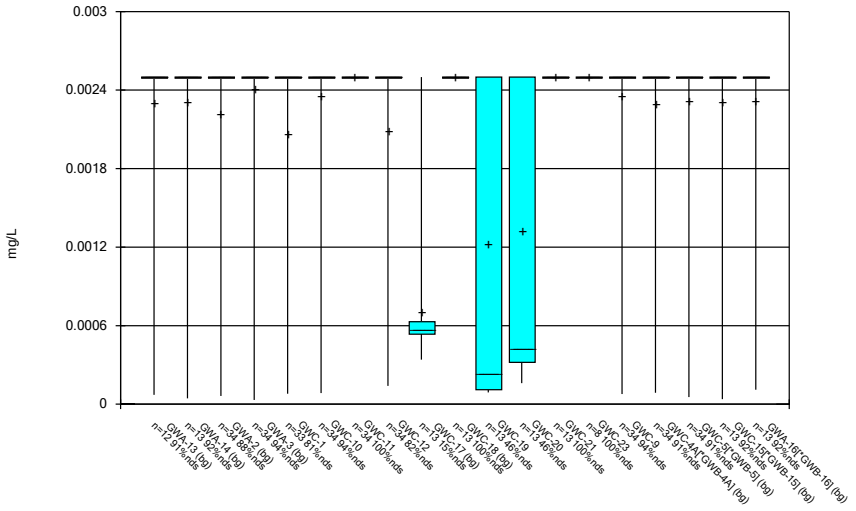
Box & Whiskers Plot



Constituent: Barium, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

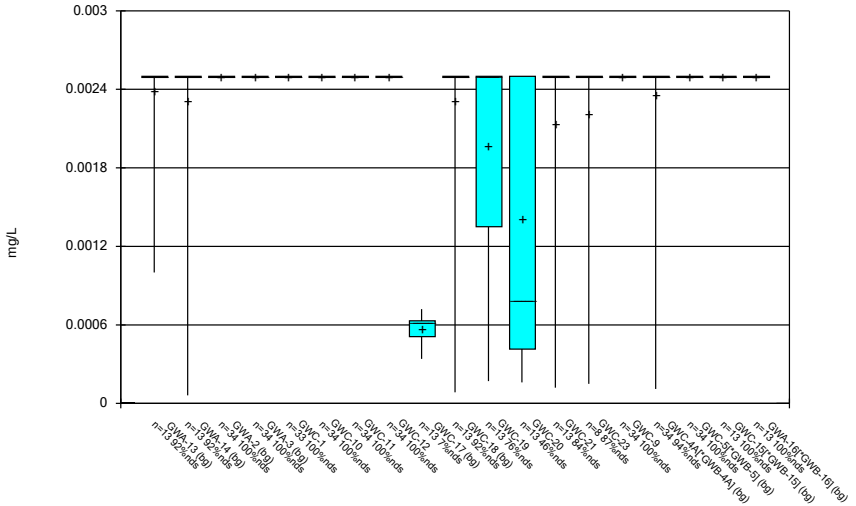
Box & Whiskers Plot



Constituent: Beryllium, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

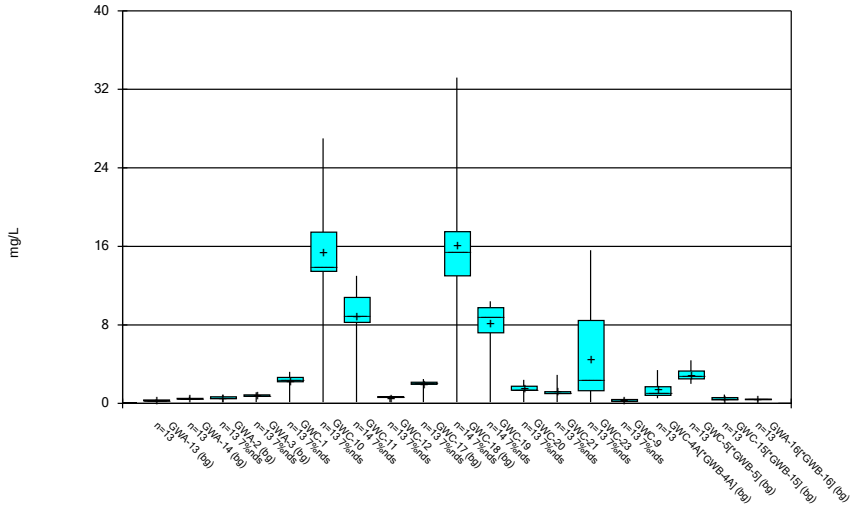
Box & Whiskers Plot



Constituent: Cadmium, Total Analysis Run 1/13/2020 10:42 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

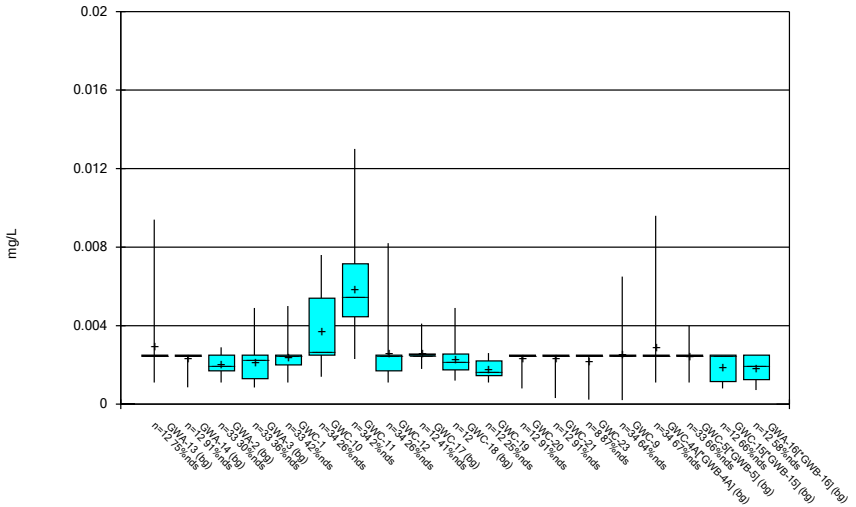
Box & Whiskers Plot



Constituent: Calcium Analysis Run 1/13/2020 10:42 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

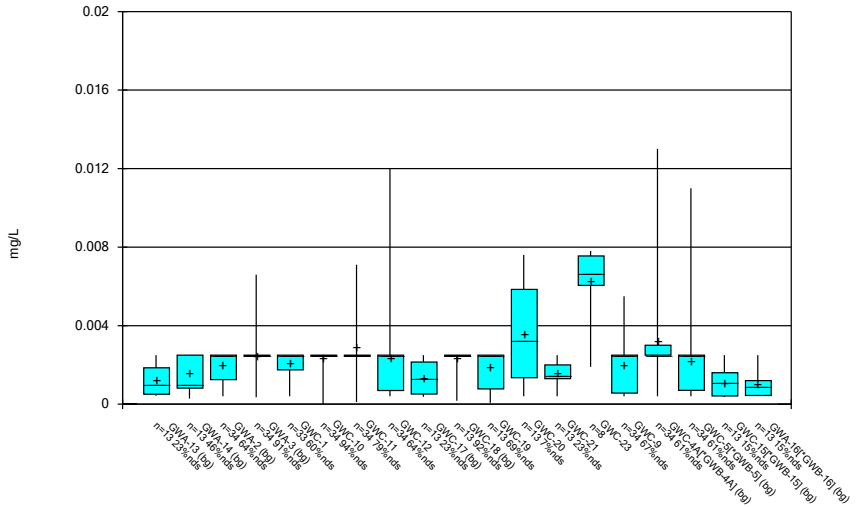
Box & Whiskers Plot



Constituent: Chromium, Total Analysis Run 1/13/2020 10:42 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

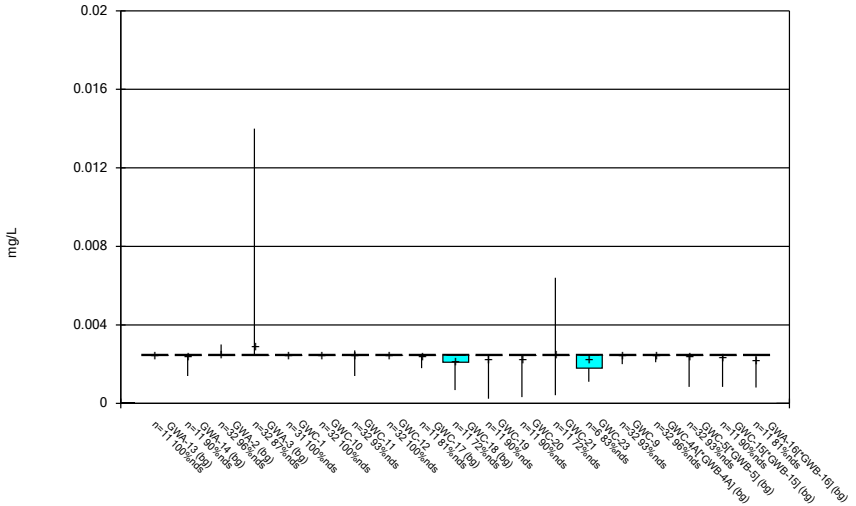
Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Cobalt, Total Analysis Run 1/13/2020 10:42 AM
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

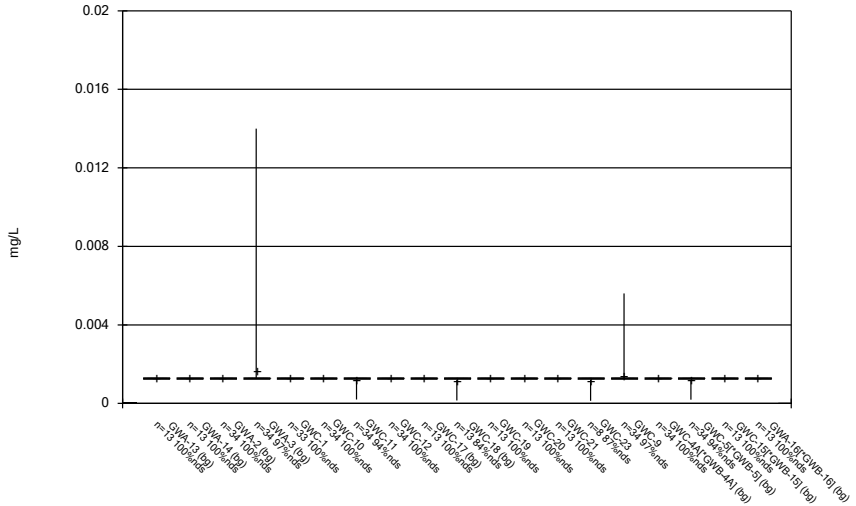


Constituent: Copper, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

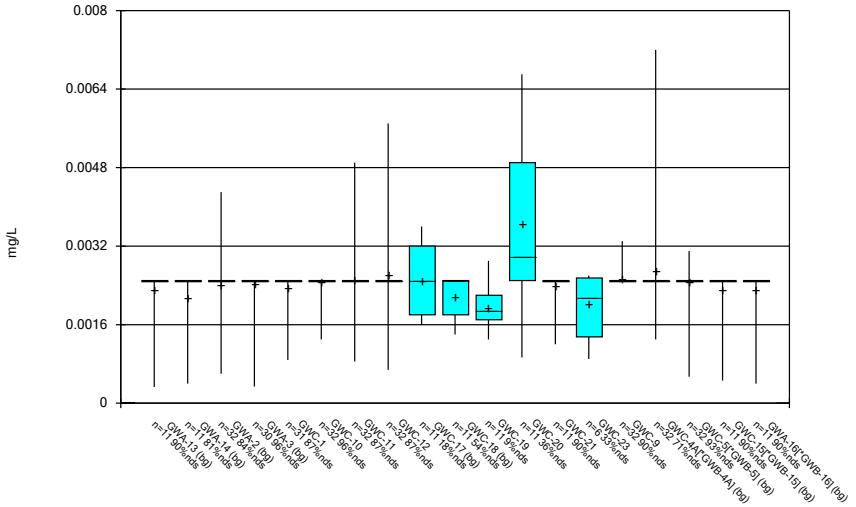


Constituent: Lead, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

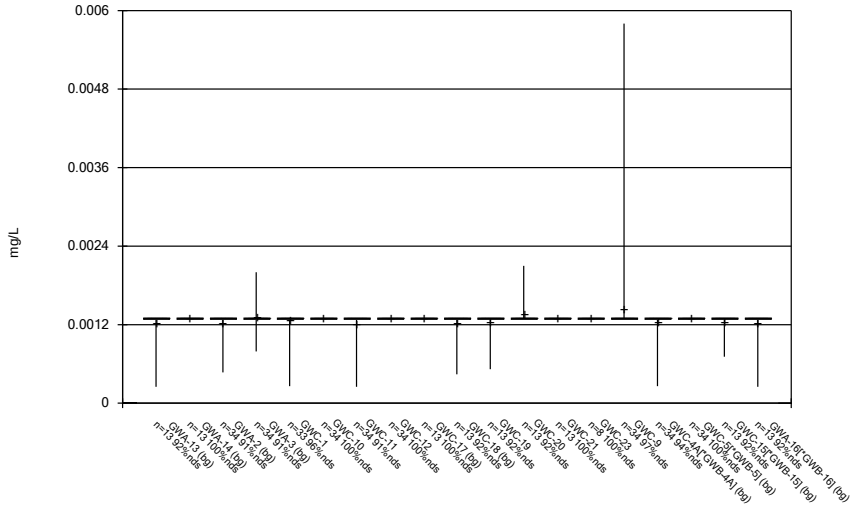


Constituent: Nickel, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

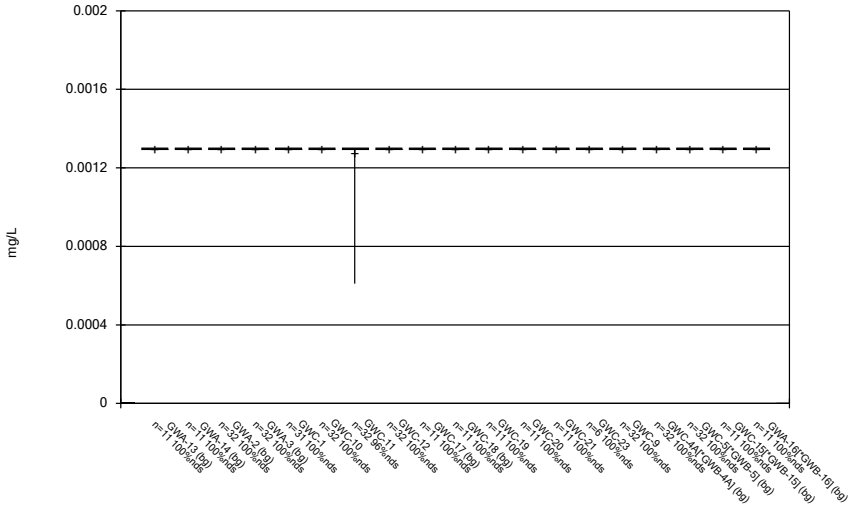
Box & Whiskers Plot



Constituent: Selenium Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

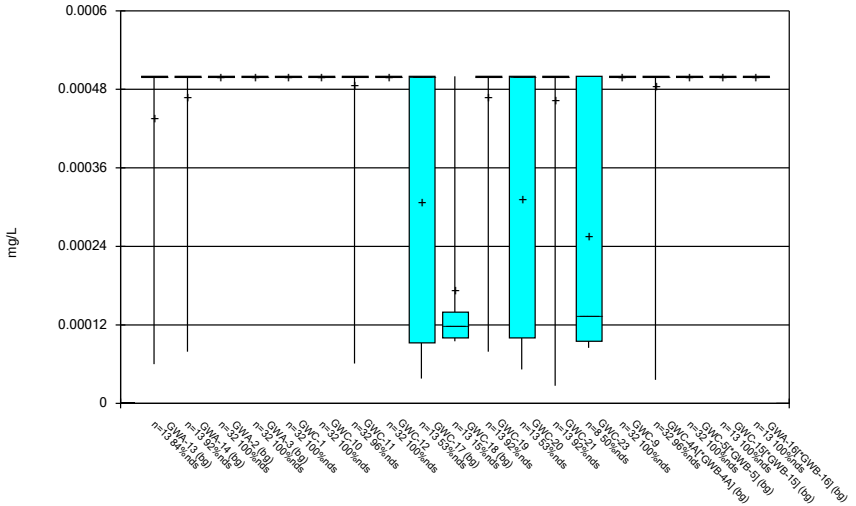
Box & Whiskers Plot



Constituent: Silver, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

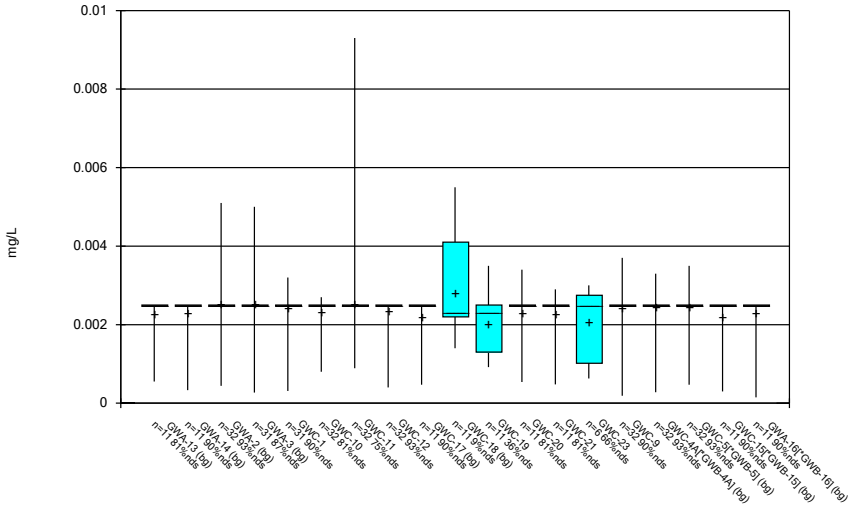
Box & Whiskers Plot



Constituent: Thallium Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

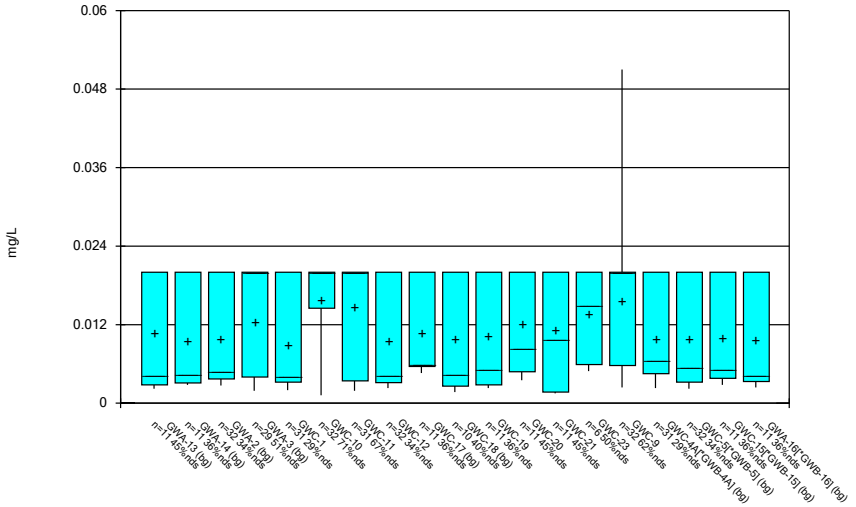
Box & Whiskers Plot



Constituent: Vanadium, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot



Constituent: Zinc, Total Analysis Run 1/13/2020 10:42 AM

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Appendix D3

Sanitas Outputs for State Appendix I Parameters – September 2019

Intrawell Prediction Limit - Significant Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 2:22 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Barium, Total (mg/L)	**GWA-13**	**0.017**	**n/a**	**9/10/2019**	**0.03**	**Yes**	**10**	**0**	**n/a**	**0.00344**	NP (normality) 1 of 3
Barium, Total (mg/L)	**GWA-16[*GWB-16]**	**0.03134**	**n/a**	**9/10/2019**	**0.039**	**Yes**	**10**	**0**	**No**	**0.0003901**	Param 1 of 3
Beryllium, Total (mg/L)	**GWC-17**	**0.0006811**	**n/a**	**9/11/2019**	**0.001**	**Yes**	**9**	**0**	**No**	**0.0003901**	Param 1 of 3
Chromium, Total (mg/L)	**GWA-3**	**0.003358**	**n/a**	**9/11/2019**	**0.0034**	**Yes**	**30**	**33.33**	**ln(x)**	**0.0003901**	Param 1 of 3
Chromium, Total (mg/L)	**GWC-18**	**0.00325**	**n/a**	**9/11/2019**	**0.0049**	**Yes**	**9**	**0**	**No**	**0.0003901**	Param 1 of 3
Chromium, Total (mg/L)	**GWC-19**	**0.002714**	**n/a**	**9/11/2019**	**0.0043**	**Yes**	**8**	**0**	**No**	**0.0003901**	Param 1 of 3
Chromium, Total (mg/L)	**GWC-23**	**0.0025**	**n/a**	**9/11/2019**	**0.004**	**Yes**	**5**	**80**	**n/a**	**0.01896**	NP (NDs) 1 of 3
Zinc, Total (mg/L)	**GWA-3**	**0.008042**	**n/a**	**9/11/2019**	**0.012**	**Yes**	**26**	**46.15**	**ln(x)**	**0.0003901**	Param 1 of 3
Zinc, Total (mg/L)	**GWC-4A[*GWB-4A]**	**0.01115**	**n/a**	**9/10/2019**	**0.012**	**Yes**	**28**	**28.57**	**x^(1/3)**	**0.0003901**	Param 1 of 3
Zinc, Total (mg/L)	**GWC-5[*GWB-5]**	**0.02**	**n/a**	**9/10/2019**	**0.022**	**Yes**	**29**	**31.03**	**n/a**	**0.0002074**	NP (normality) 1 of 3

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 2:22 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GWA-13	0.0025	n/a	9/10/2019	0.00052	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-14	0.0025	n/a	9/10/2019	0.002ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-2	0.0025	n/a	9/11/2019	0.002ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-3	0.05	n/a	9/11/2019	0.00081	No	31	96.77	n/a	0.0001701	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-1	0.0025	n/a	9/11/2019	0.002ND	No	30	100	n/a	0.0001831	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-10	0.0025	n/a	9/11/2019	0.002ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-11	0.0025	n/a	9/11/2019	0.002ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-12	0.0025	n/a	9/11/2019	0.002ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-17	0.0025	n/a	9/11/2019	0.002ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-18	0.005	n/a	9/11/2019	0.002ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-19	0.0025	n/a	9/11/2019	0.002ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-20	0.0025	n/a	9/11/2019	0.002ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-21	0.0025	n/a	9/11/2019	0.002ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-23	0.0025	n/a	9/11/2019	0.002ND	No	5	100	n/a	0.01896	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-9	0.0025	n/a	9/11/2019	0.002ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-4A[*GWB-4A]	0.0025	n/a	9/10/2019	0.002ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-5[*GWB-5]	0.0025	n/a	9/10/2019	0.002ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Antimony (mg/L)	GWC-15[*GWB-15]	0.0025	n/a	9/11/2019	0.002ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Antimony (mg/L)	GWA-16[*GWB-16]	0.0025	n/a	9/10/2019	0.002ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-13	0.0013	n/a	9/10/2019	0.00076	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-14	0.0013	n/a	9/10/2019	0.00043	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-2	0.0013	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-3	0.0089	n/a	9/11/2019	0.001ND	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-1	0.0013	n/a	9/11/2019	0.001ND	No	30	100	n/a	0.0001831	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-10	0.005	n/a	9/11/2019	0.00082	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-11	0.005	n/a	9/11/2019	0.0017	No	31	83.87	n/a	0.0001701	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-12	0.005	n/a	9/11/2019	0.00032	No	31	96.77	n/a	0.0001701	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-17	0.005	n/a	9/11/2019	0.00038	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-18	0.005	n/a	9/11/2019	0.0012	No	10	50	n/a	0.00344	NP (normality) 1 of 3
Arsenic, Total (mg/L)	GWC-19	0.005	n/a	9/11/2019	0.00057	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-20	0.005	n/a	9/11/2019	0.00066	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-21	0.005	n/a	9/11/2019	0.00064	No	10	70	n/a	0.00344	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-23	0.0013	n/a	9/11/2019	0.00051	No	5	60	n/a	0.01896	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-9	0.0013	n/a	9/11/2019	0.00044	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-4A[*GWB-4A]	0.005	n/a	9/10/2019	0.00051	No	31	87.1	n/a	0.0001701	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-5[*GWB-5]	0.005	n/a	9/10/2019	0.00035	No	31	96.77	n/a	0.0001701	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWC-15[*GWB-15]	0.005	n/a	9/11/2019	0.00033	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Arsenic, Total (mg/L)	GWA-16[*GWB-16]	0.0013	n/a	9/10/2019	0.00036	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Barium, Total (mg/L)	**GWA-13**	**0.017**	**n/a**	**9/10/2019**	**0.03**	**Yes**	**10**	**0**	**n/a**	**0.00344**	NP (normality) 1 of 3
Barium, Total (mg/L)	GWA-14	0.0218	n/a	9/10/2019	0.016	No	10	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWA-2	0.03472	n/a	9/11/2019	0.034	No	31	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWA-3	0.02647	n/a	9/11/2019	0.015	No	28	0	sqrt(x)	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-1	0.04925	n/a	9/11/2019	0.038	No	30	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-10	0.03828	n/a	9/11/2019	0.021	No	31	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-11	0.02022	n/a	9/11/2019	0.011	No	30	0	ln(x)	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-12	0.01524	n/a	9/11/2019	0.01	No	31	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-17	0.02252	n/a	9/11/2019	0.021	No	10	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-18	0.06803	n/a	9/11/2019	0.018	No	10	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-19	0.06689	n/a	9/11/2019	0.015	No	10	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-20	0.0539	n/a	9/11/2019	0.021	No	10	0	No	0.0003901	Param 1 of 3

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 2:22 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Barium, Total (mg/L)	GWC-21	0.03179	n/a	9/11/2019	0.019	No	10	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-23	0.08275	n/a	9/11/2019	0.023	No	5	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-9	0.03007	n/a	9/11/2019	0.029	No	31	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-4A[*GWB-4A]	0.03538	n/a	9/10/2019	0.026	No	31	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-5[*GWB-5]	0.05149	n/a	9/10/2019	0.044	No	31	0	ln(x)	0.0003901	Param 1 of 3
Barium, Total (mg/L)	GWC-15[*GWB-15]	0.02914	n/a	9/11/2019	0.023	No	10	0	No	0.0003901	Param 1 of 3
Barium, Total (mg/L)	**GWA-16[*GWB-16]**	**0.03134**	**n/a**	**9/10/2019**	**0.039**	**Yes**	**10**	**0**	**No**	**0.0003901**	Param 1 of 3
Beryllium, Total (mg/L)	GWA-13	0.003	n/a	9/10/2019	0.0008	No	9	88.89	n/a	0.004675	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWA-14	0.003	n/a	9/10/2019	0.00025	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWA-2	0.003	n/a	9/11/2019	0.001ND	No	31	90.32	n/a	0.0001701	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWA-3	0.003	n/a	9/11/2019	0.001ND	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-1	0.003	n/a	9/11/2019	0.00021	No	30	80	n/a	0.0001831	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-10	0.003	n/a	9/11/2019	0.001ND	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-11	0.0025	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-12	0.003	n/a	9/11/2019	0.00022	No	31	80.65	n/a	0.0001701	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	**GWC-17**	**0.0006811**	**n/a**	**9/11/2019**	**0.001**	**Yes**	**9**	**0**	**No**	**0.0003901**	Param 1 of 3
Beryllium, Total (mg/L)	GWC-18	0.0025	n/a	9/11/2019	0.00026	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-19	0.003	n/a	9/11/2019	0.00058	No	10	40	n/a	0.00344	NP (normality) 1 of 3
Beryllium, Total (mg/L)	GWC-20	0.003	n/a	9/11/2019	0.00052	No	10	40	n/a	0.00344	NP (normality) 1 of 3
Beryllium, Total (mg/L)	GWC-21	0.0025	n/a	9/11/2019	0.00054	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-23	0.0025	n/a	9/11/2019	0.00026	No	5	100	n/a	0.01896	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-9	0.003	n/a	9/11/2019	0.00021	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-4A[*GWB-4A]	0.003	n/a	9/10/2019	0.0006	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-5[*GWB-5]	0.003	n/a	9/10/2019	0.001ND	No	31	90.32	n/a	0.0001701	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWC-15[*GWB-15]	0.003	n/a	9/11/2019	0.001ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Beryllium, Total (mg/L)	GWA-16[*GWB-16]	0.003	n/a	9/10/2019	0.00036	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-13	0.0025	n/a	9/10/2019	0.00035	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-14	0.0025	n/a	9/10/2019	0.001ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-2	0.0025	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-3	0.0025	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-1	0.0025	n/a	9/11/2019	0.001ND	No	30	100	n/a	0.0001831	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-10	0.0025	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-11	0.0025	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-12	0.0025	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-17	0.000776	n/a	9/11/2019	0.00064	No	10	0	No	0.0003901	Param 1 of 3
Cadmium, Total (mg/L)	GWC-18	0.0025	n/a	9/11/2019	0.001ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-19	0.0025	n/a	9/11/2019	0.00031	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-20	0.0009738	n/a	9/11/2019	0.00029	No	10	40	sqrt(x)	0.0003901	Param 1 of 3
Cadmium, Total (mg/L)	GWC-21	0.0025	n/a	9/11/2019	0.00029	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-23	0.0025	n/a	9/11/2019	0.00018	No	5	100	n/a	0.01896	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-9	0.0025	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-4A[*GWB-4A]	0.005	n/a	9/10/2019	0.00019	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-5[*GWB-5]	0.0025	n/a	9/10/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWC-15[*GWB-15]	0.0025	n/a	9/11/2019	0.001ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Cadmium, Total (mg/L)	GWA-16[*GWB-16]	0.0025	n/a	9/10/2019	0.00015	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWA-13	0.01	n/a	9/10/2019	0.0052	No	9	77.78	n/a	0.004675	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWA-14	0.01	n/a	9/10/2019	0.004	No	9	88.89	n/a	0.004675	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWA-2	0.01	n/a	9/11/2019	0.004	No	30	26.67	n/a	0.0001831	NP (normality) 1 of 3
Chromium, Total (mg/L)	**GWA-3**	**0.003358**	**n/a**	**9/11/2019**	**0.0034**	**Yes**	**30**	**33.33**	**ln(x)**	**0.0003901**	Param 1 of 3
Chromium, Total (mg/L)	GWC-1	0.01	n/a	9/11/2019	0.0035	No	29	37.93	n/a	0.0002074	NP (normality) 1 of 3

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 2:22 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Chromium, Total (mg/L)	GWC-10	0.006933	n/a	9/11/2019	0.004	No	31	29.03	x^(1/3)	0.0003901	Param 1 of 3
Chromium, Total (mg/L)	GWC-11	0.009602	n/a	9/11/2019	0.0071	No	31	3.226	No	0.0003901	Param 1 of 3
Chromium, Total (mg/L)	GWC-12	0.01	n/a	9/11/2019	0.0036	No	31	25.81	n/a	0.0001701	NP (normality) 1 of 3
Chromium, Total (mg/L)	GWC-17	0.01	n/a	9/11/2019	0.0059	No	9	55.56	n/a	0.004675	NP (NDs) 1 of 3
Chromium, Total (mg/L)	**GWC-18**	**0.00325**	**n/a**	**9/11/2019**	**0.0049**	**Yes**	**9**	**0**	**No**	**0.0003901**	Param 1 of 3
Chromium, Total (mg/L)	**GWC-19**	**0.002714**	**n/a**	**9/11/2019**	**0.0043**	**Yes**	**8**	**0**	**No**	**0.0003901**	Param 1 of 3
Chromium, Total (mg/L)	GWC-20	0.01	n/a	9/11/2019	0.0034	No	9	88.89	n/a	0.004675	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-21	0.01	n/a	9/11/2019	0.0025	No	9	88.89	n/a	0.004675	NP (NDs) 1 of 3
Chromium, Total (mg/L)	**GWC-23**	**0.0025**	**n/a**	**9/11/2019**	**0.004**	**Yes**	**5**	**80**	**n/a**	**0.01896**	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-9	0.01	n/a	9/11/2019	0.0025	No	20	95	n/a	0.0005627	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-4A[*GWB-4A]	0.01	n/a	9/10/2019	0.0031	No	31	64.52	n/a	0.0001701	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-5[*GWB-5]	0.01	n/a	9/10/2019	0.0041	No	30	63.33	n/a	0.0001831	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWC-15[*GWB-15]	0.01	n/a	9/11/2019	0.0038	No	9	55.56	n/a	0.004675	NP (NDs) 1 of 3
Chromium, Total (mg/L)	GWA-16[*GWB-16]	0.01	n/a	9/10/2019	0.004	No	9	55.56	n/a	0.004675	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWA-13	0.01	n/a	9/10/2019	0.00064	No	10	10	n/a	0.00344	NP (normality) 1 of 3
Cobalt, Total (mg/L)	GWA-14	0.001307	n/a	9/10/2019	0.00042	No	10	40	x^(1/3)	0.0003901	Param 1 of 3
Cobalt, Total (mg/L)	GWA-2	0.01	n/a	9/11/2019	0.0015	No	31	67.74	n/a	0.0001701	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWA-3	0.01	n/a	9/11/2019	0.00039	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-1	0.01	n/a	9/11/2019	0.002	No	30	60	n/a	0.0001831	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-10	0.01	n/a	9/11/2019	0.0001	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-11	0.01	n/a	9/11/2019	0.0005ND	No	31	77.42	n/a	0.0001701	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-12	0.012	n/a	9/11/2019	0.00067	No	31	64.52	n/a	0.0001701	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-17	0.00896	n/a	9/11/2019	0.00034	No	10	10	ln(x)	0.0003901	Param 1 of 3
Cobalt, Total (mg/L)	GWC-18	0.01	n/a	9/11/2019	0.000082	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-19	0.01	n/a	9/11/2019	0.000099	No	10	60	n/a	0.00344	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-20	0.009718	n/a	9/11/2019	0.0014	No	10	0	No	0.0003901	Param 1 of 3
Cobalt, Total (mg/L)	GWC-21	0.002308	n/a	9/11/2019	0.0012	No	9	0	No	0.0003901	Param 1 of 3
Cobalt, Total (mg/L)	GWC-23	0.01695	n/a	9/11/2019	0.0059	No	5	0	No	0.0003901	Param 1 of 3
Cobalt, Total (mg/L)	GWC-9	0.01	n/a	9/11/2019	0.00083	No	31	67.74	n/a	0.0001701	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-4A[*GWB-4A]	0.013	n/a	9/10/2019	0.0031	No	31	67.74	n/a	0.0001701	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-5[*GWB-5]	0.011	n/a	9/10/2019	0.00074	No	31	64.52	n/a	0.0001701	NP (NDs) 1 of 3
Cobalt, Total (mg/L)	GWC-15[*GWB-15]	0.002181	n/a	9/11/2019	0.00044	No	9	0	No	0.0003901	Param 1 of 3
Cobalt, Total (mg/L)	GWA-16[*GWB-16]	0.001561	n/a	9/10/2019	0.0005	No	9	0	No	0.0003901	Param 1 of 3
Copper, Total (mg/L)	GWA-13	0.0025	n/a	9/10/2019	0.00066	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWA-14	0.025	n/a	9/10/2019	0.00076	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWA-2	0.025	n/a	9/11/2019	0.002ND	No	29	96.55	n/a	0.0002074	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWA-3	0.025	n/a	9/11/2019	0.00092	No	29	86.21	n/a	0.0002074	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-1	0.0025	n/a	9/11/2019	0.001	No	28	100	n/a	0.0002317	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-10	0.0025	n/a	9/11/2019	0.002ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-11	0.025	n/a	9/11/2019	0.002ND	No	29	93.1	n/a	0.0002074	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-12	0.0025	n/a	9/11/2019	0.00069	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-17	0.025	n/a	9/11/2019	0.0012	No	8	75	n/a	0.005912	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-18	0.005	n/a	9/11/2019	0.0011	No	8	75	n/a	0.005912	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-19	0.005	n/a	9/11/2019	0.00085	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-20	0.005	n/a	9/11/2019	0.0012	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-21	0.005	n/a	9/11/2019	0.00066	No	7	71.43	n/a	0.008668	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-9	0.025	n/a	9/11/2019	0.00092	No	29	96.55	n/a	0.0002074	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-4A[*GWB-4A]	0.025	n/a	9/10/2019	0.0016	No	29	96.55	n/a	0.0002074	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-5[*GWB-5]	0.013	n/a	9/10/2019	0.002ND	No	29	93.1	n/a	0.0002074	NP (NDs) 1 of 3
Copper, Total (mg/L)	GWC-15[*GWB-15]	0.025	n/a	9/11/2019	0.002ND	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 2:22 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Copper, Total (mg/L)	GWA-16[*GWB-16]	0.025	n/a	9/10/2019	0.002ND	No	8	75	n/a	0.005912	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWA-13	0.0013	n/a	9/10/2019	0.00058	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWA-14	0.0013	n/a	9/10/2019	0.00013	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWA-2	0.0013	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWA-3	0.014	n/a	9/11/2019	0.001ND	No	31	96.77	n/a	0.0001701	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-1	0.0013	n/a	9/11/2019	0.001ND	No	30	100	n/a	0.0001831	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-10	0.0013	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-11	0.013	n/a	9/11/2019	0.001ND	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-12	0.0013	n/a	9/11/2019	0.001ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-17	0.0013	n/a	9/11/2019	0.001ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-18	0.013	n/a	9/11/2019	0.00017	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-19	0.0013	n/a	9/11/2019	0.001ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-20	0.0013	n/a	9/11/2019	0.00024	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-21	0.0013	n/a	9/11/2019	0.00021	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-23	0.0013	n/a	9/11/2019	0.00018	No	5	100	n/a	0.01896	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-9	0.013	n/a	9/11/2019	0.001ND	No	31	96.77	n/a	0.0001701	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-4A[*GWB-4A]	0.0013	n/a	9/10/2019	0.00051	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-5[*GWB-5]	0.013	n/a	9/10/2019	0.00074	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWC-15[*GWB-15]	0.0013	n/a	9/11/2019	0.001ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Lead, Total (mg/L)	GWA-16[*GWB-16]	0.0013	n/a	9/10/2019	0.00013	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-13	0.0025	n/a	9/10/2019	0.0004	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-14	0.0025	n/a	9/10/2019	0.00056	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-2	0.005	n/a	9/11/2019	0.00091	No	29	86.21	n/a	0.0002074	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-3	0.0025	n/a	9/11/2019	0.00045	No	27	100	n/a	0.000256	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-1	0.005	n/a	9/11/2019	0.0013	No	28	85.71	n/a	0.0002317	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-10	0.01	n/a	9/11/2019	0.001ND	No	29	96.55	n/a	0.0002074	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-11	0.005	n/a	9/11/2019	0.00042	No	29	86.21	n/a	0.0002074	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-12	0.0057	n/a	9/11/2019	0.001	No	29	86.21	n/a	0.0002074	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-17	0.004531	n/a	9/11/2019	0.0018	No	8	0	No	0.0003901	Param 1 of 3
Nickel, Total (mg/L)	GWC-18	0.002156	n/a	9/11/2019	0.0012	No	8	37.5	No	0.0003901	Param 1 of 3
Nickel, Total (mg/L)	GWC-19	0.003189	n/a	9/11/2019	0.0018	No	8	0	No	0.0003901	Param 1 of 3
Nickel, Total (mg/L)	GWC-20	0.007315	n/a	9/11/2019	0.0014	No	8	25	No	0.0003901	Param 1 of 3
Nickel, Total (mg/L)	GWC-21	0.0025	n/a	9/11/2019	0.00097	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-9	0.01	n/a	9/11/2019	0.00065	No	29	89.66	n/a	0.0002074	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-4A[*GWB-4A]	0.0072	n/a	9/10/2019	0.002	No	29	75.86	n/a	0.0002074	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-5[*GWB-5]	0.005	n/a	9/10/2019	0.00043	No	29	93.1	n/a	0.0002074	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWC-15[*GWB-15]	0.0025	n/a	9/11/2019	0.00042	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Nickel, Total (mg/L)	GWA-16[*GWB-16]	0.0025	n/a	9/10/2019	0.00036	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-13	0.01	n/a	9/10/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-14	0.0013	n/a	9/10/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-2	0.013	n/a	9/11/2019	0.005ND	No	31	90.32	n/a	0.0001701	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-3	0.013	n/a	9/11/2019	0.005ND	No	31	90.32	n/a	0.0001701	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-1	0.013	n/a	9/11/2019	0.005ND	No	30	96.67	n/a	0.0001831	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-10	0.0013	n/a	9/11/2019	0.005ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-11	0.013	n/a	9/11/2019	0.005ND	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-12	0.0013	n/a	9/11/2019	0.005ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-17	0.0013	n/a	9/11/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-18	0.0013	n/a	9/11/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-19	0.01	n/a	9/11/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-20	0.01	n/a	9/11/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 2:22 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Selenium (mg/L)	GWC-21	0.0013	n/a	9/11/2019	0.005ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-23	0.0013	n/a	9/11/2019	0.005ND	No	5	100	n/a	0.01896	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-9	0.013	n/a	9/11/2019	0.005ND	No	31	96.77	n/a	0.0001701	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-4A[*GWB-4A]	0.013	n/a	9/10/2019	0.005ND	No	31	93.55	n/a	0.0001701	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-5[*GWB-5]	0.0013	n/a	9/10/2019	0.005ND	No	31	100	n/a	0.0001701	NP (NDs) 1 of 3
Selenium (mg/L)	GWC-15[*GWB-15]	0.01	n/a	9/11/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Selenium (mg/L)	GWA-16[*GWB-16]	0.01	n/a	9/10/2019	0.005ND	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWA-13	0.0013	n/a	9/10/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWA-14	0.0013	n/a	9/10/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWA-2	0.0013	n/a	9/11/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWA-3	0.0013	n/a	9/11/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-1	0.0013	n/a	9/11/2019	0.001ND	No	28	100	n/a	0.0002317	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-10	0.0013	n/a	9/11/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-11	0.01	n/a	9/11/2019	0.001ND	No	29	96.55	n/a	0.0002074	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-12	0.0013	n/a	9/11/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-17	0.0013	n/a	9/11/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-18	0.0013	n/a	9/11/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-19	0.0013	n/a	9/11/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-20	0.0013	n/a	9/11/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-21	0.0013	n/a	9/11/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-9	0.0013	n/a	9/11/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-4A[*GWB-4A]	0.0013	n/a	9/10/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-5[*GWB-5]	0.0013	n/a	9/10/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWC-15[*GWB-15]	0.0013	n/a	9/11/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Silver, Total (mg/L)	GWA-16[*GWB-16]	0.0013	n/a	9/10/2019	0.001ND	No	8	100	n/a	0.005912	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-13	0.001	n/a	9/10/2019	0.00057	No	10	80	n/a	0.00344	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-14	0.001	n/a	9/10/2019	0.00021	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-2	0.0005	n/a	9/11/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-3	0.0005	n/a	9/11/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-1	0.0005	n/a	9/11/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-10	0.0005	n/a	9/11/2019	0.0002	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-11	0.01	n/a	9/11/2019	0.001ND	No	29	96.55	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-12	0.0005	n/a	9/11/2019	0.00017	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-17	0.0001479	n/a	9/11/2019	0.001ND	No	10	40	sqrt(x)	0.0003901	Param 1 of 3
Thallium (mg/L)	GWC-18	0.0001556	n/a	9/11/2019	0.00018	No	9	0	No	0.0003901	Param 1 of 3
Thallium (mg/L)	GWC-19	0.001	n/a	9/11/2019	0.00019	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-20	0.0001495	n/a	9/11/2019	0.00034	No	10	40	sqrt(x)	0.0003901	Param 1 of 3
Thallium (mg/L)	GWC-21	0.001	n/a	9/11/2019	0.00041	No	10	90	n/a	0.00344	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-23	0.001	n/a	9/11/2019	0.00034	No	5	60	n/a	0.01896	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-9	0.0005	n/a	9/11/2019	0.00023	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-4A[*GWB-4A]	0.01	n/a	9/10/2019	0.00033	No	29	96.55	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-5[*GWB-5]	0.0005	n/a	9/10/2019	0.001ND	No	29	100	n/a	0.0002074	NP (NDs) 1 of 3
Thallium (mg/L)	GWC-15[*GWB-15]	0.0005	n/a	9/11/2019	0.001ND	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Thallium (mg/L)	GWA-16[*GWB-16]	0.0005	n/a	9/10/2019	0.0002	No	10	100	n/a	0.00344	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-13	0.005	n/a	9/10/2019	0.0027	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-14	0.005	n/a	9/10/2019	0.002	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-2	0.01	n/a	9/11/2019	0.0014	No	29	93.1	n/a	0.0002074	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-3	0.01	n/a	9/11/2019	0.0012	No	28	85.71	n/a	0.0002317	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-1	0.005	n/a	9/11/2019	0.0013	No	28	89.29	n/a	0.0002317	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-10	0.01	n/a	9/11/2019	0.0022	No	29	82.76	n/a	0.0002074	NP (NDs) 1 of 3

Intrawell Prediction Limit - All Results

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 2:22 PM

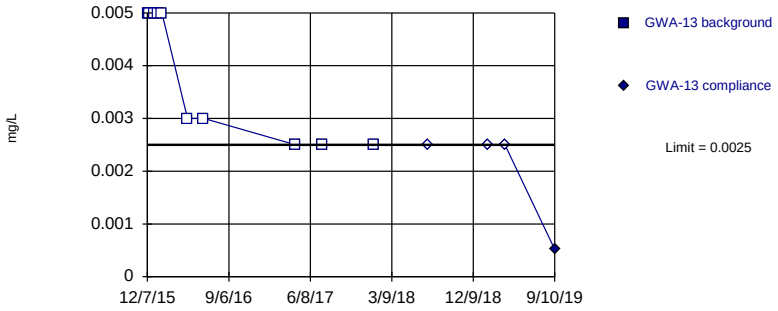
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Vanadium, Total (mg/L)	GWC-11	0.01	n/a	9/11/2019	0.0025	No	29	72.41	n/a	0.0002074	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-12	0.01	n/a	9/11/2019	0.0011	No	29	93.1	n/a	0.0002074	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-17	0.005	n/a	9/11/2019	0.0018	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-18	0.006693	n/a	9/11/2019	0.0037	No	8	0	ln(x)	0.0003901	Param 1 of 3
Vanadium, Total (mg/L)	GWC-19	0.004004	n/a	9/11/2019	0.0023	No	8	12.5	No	0.0003901	Param 1 of 3
Vanadium, Total (mg/L)	GWC-20	0.005	n/a	9/11/2019	0.0018	No	8	75	n/a	0.005912	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-21	0.005	n/a	9/11/2019	0.0015	No	8	75	n/a	0.005912	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-9	0.01	n/a	9/11/2019	0.0015	No	29	89.66	n/a	0.0002074	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-4A[*GWB-4A]	0.01	n/a	9/10/2019	0.0018	No	29	93.1	n/a	0.0002074	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-5[*GWB-5]	0.01	n/a	9/10/2019	0.0018	No	29	93.1	n/a	0.0002074	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWC-15[*GWB-15]	0.005	n/a	9/11/2019	0.0016	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Vanadium, Total (mg/L)	GWA-16[*GWB-16]	0.005	n/a	9/10/2019	0.0019	No	8	87.5	n/a	0.005912	NP (NDs) 1 of 3
Zinc, Total (mg/L)	GWA-13	0.02	n/a	9/10/2019	0.0061	No	8	25	n/a	0.005912	NP (normality) 1 of 3
Zinc, Total (mg/L)	GWA-14	0.02	n/a	9/10/2019	0.0069	No	8	25	n/a	0.005912	NP (normality) 1 of 3
Zinc, Total (mg/L)	GWA-2	0.02	n/a	9/11/2019	0.0089	No	29	31.03	n/a	0.0002074	NP (normality) 1 of 3
Zinc, Total (mg/L)	**GWA-3**	**0.008042**	**n/a**	**9/11/2019**	**0.012**	**Yes**	**26**	**46.15**	**ln(x)**	**0.0003901**	Param 1 of 3
Zinc, Total (mg/L)	GWC-1	0.02	n/a	9/11/2019	0.0088	No	28	25	n/a	0.0002317	NP (normality) 1 of 3
Zinc, Total (mg/L)	GWC-10	0.02	n/a	9/11/2019	0.0058	No	29	68.97	n/a	0.0002074	NP (NDs) 1 of 3
Zinc, Total (mg/L)	GWC-11	0.02	n/a	9/11/2019	0.005	No	28	64.29	n/a	0.0002317	NP (NDs) 1 of 3
Zinc, Total (mg/L)	GWC-12	0.02	n/a	9/11/2019	0.0066	No	29	27.59	n/a	0.0002074	NP (normality) 1 of 3
Zinc, Total (mg/L)	GWC-17	0.02	n/a	9/11/2019	0.013	No	8	25	n/a	0.005912	NP (normality) 1 of 3
Zinc, Total (mg/L)	GWC-18	0.006307	n/a	9/11/2019	0.0058	No	8	25	sqrt(x)	0.0003901	Param 1 of 3
Zinc, Total (mg/L)	GWC-19	0.01356	n/a	9/11/2019	0.0046	No	8	25	sqrt(x)	0.0003901	Param 1 of 3
Zinc, Total (mg/L)	GWC-20	0.01059	n/a	9/11/2019	0.0073	No	8	25	sqrt(x)	0.0003901	Param 1 of 3
Zinc, Total (mg/L)	GWC-21	0.01125	n/a	9/11/2019	0.0063	No	8	37.5	No	0.0003901	Param 1 of 3
Zinc, Total (mg/L)	GWC-9	0.02	n/a	9/11/2019	0.0058	No	29	62.07	n/a	0.0002074	NP (NDs) 1 of 3
Zinc, Total (mg/L)	**GWC-4A[*GWB-4A]**	**0.01115**	**n/a**	**9/10/2019**	**0.012**	**Yes**	**28**	**28.57**	**x^(1/3)**	**0.0003901**	Param 1 of 3
Zinc, Total (mg/L)	**GWC-5[*GWB-5]**	**0.02**	**n/a**	**9/10/2019**	**0.022**	**Yes**	**29**	**31.03**	**n/a**	**0.0002074**	NP (normality) 1 of 3
Zinc, Total (mg/L)	GWC-15[*GWB-15]	0.006497	n/a	9/11/2019	0.0062	No	8	25	ln(x)	0.0003901	Param 1 of 3
Zinc, Total (mg/L)	GWA-16[*GWB-16]	0.02	n/a	9/10/2019	0.006	No	8	25	n/a	0.005912	NP (normality) 1 of 3

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

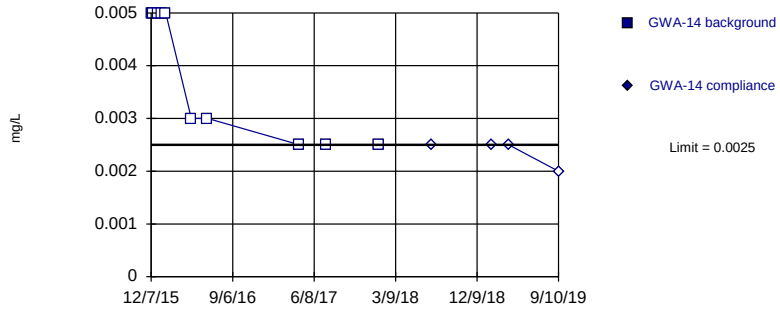
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

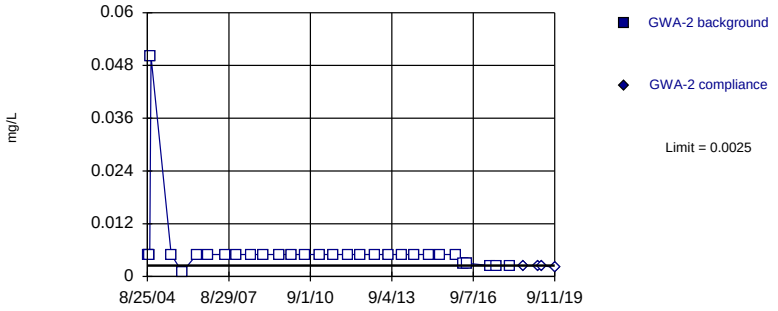
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

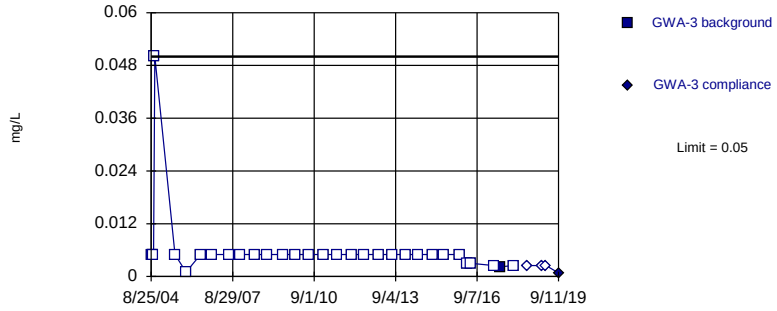
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

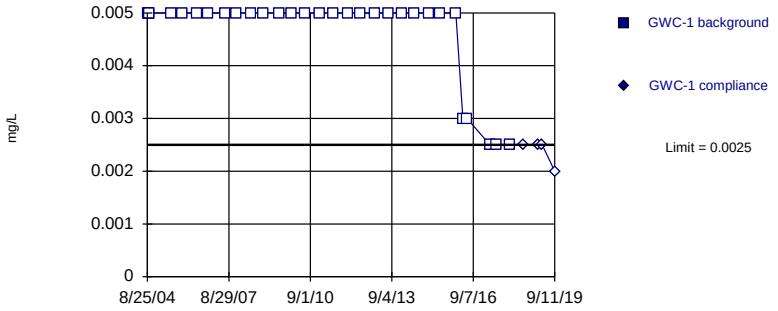
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

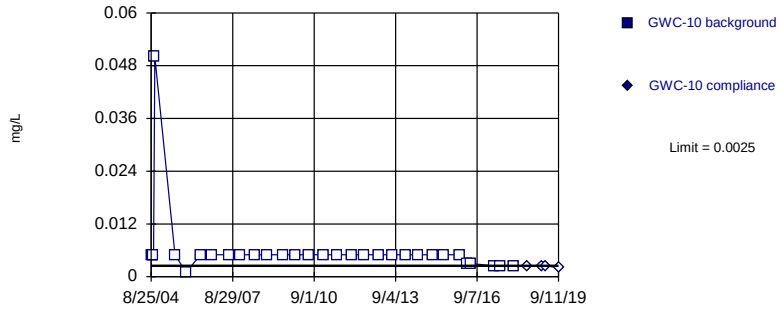
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

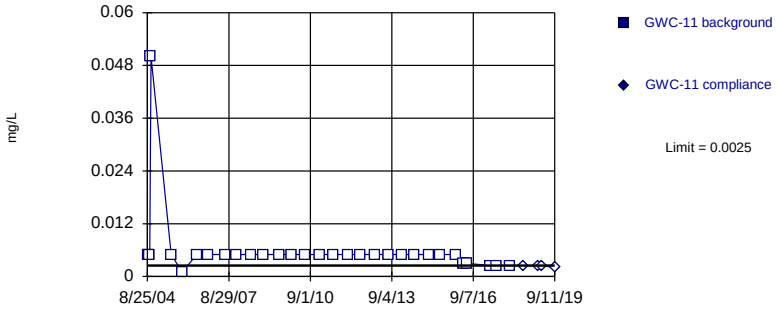
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

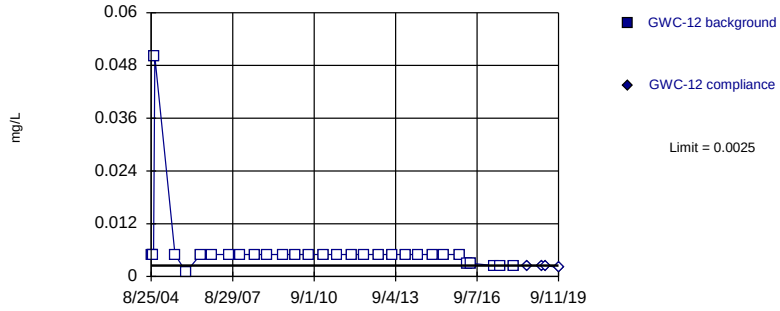
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

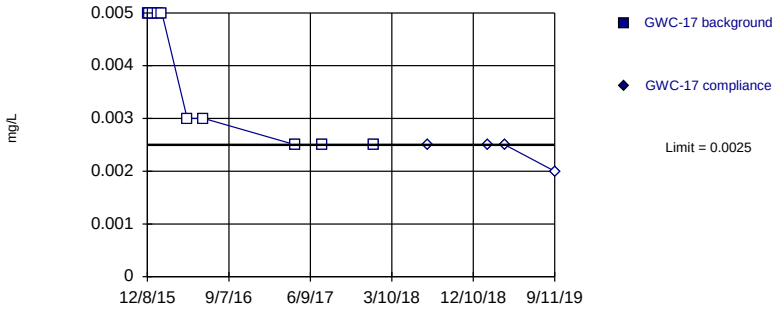
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

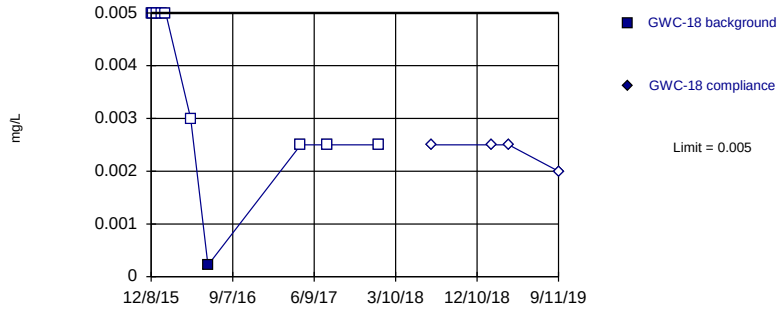
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

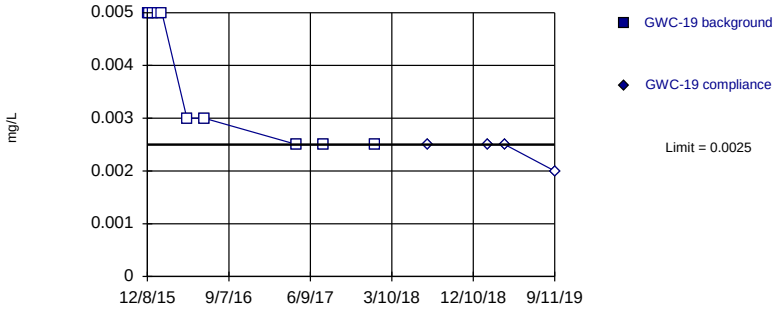
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

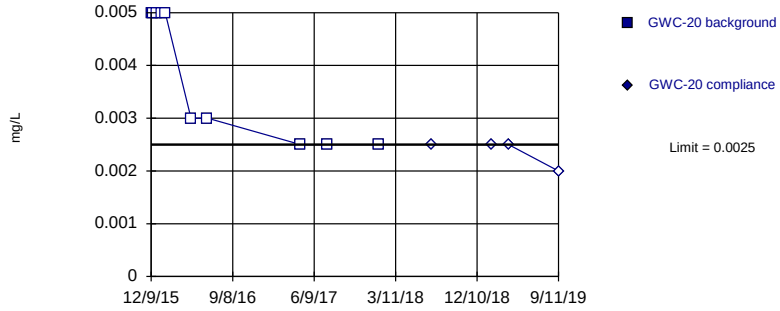
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

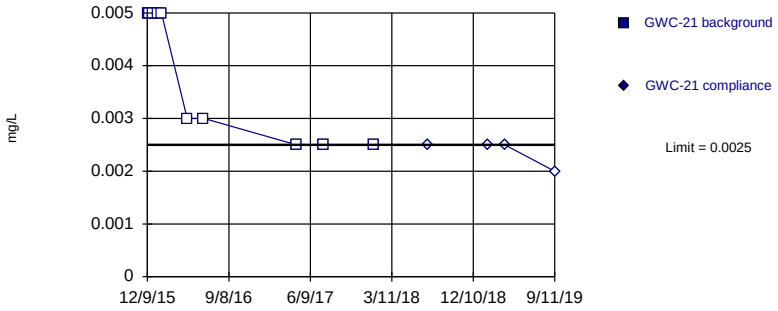
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

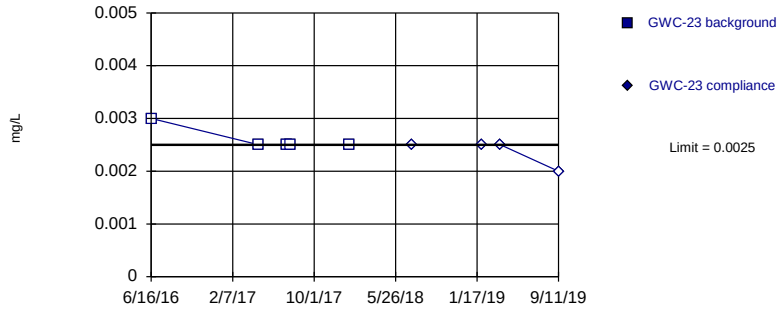
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

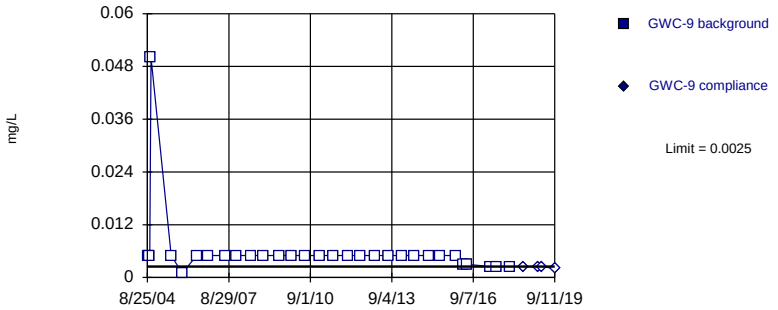
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

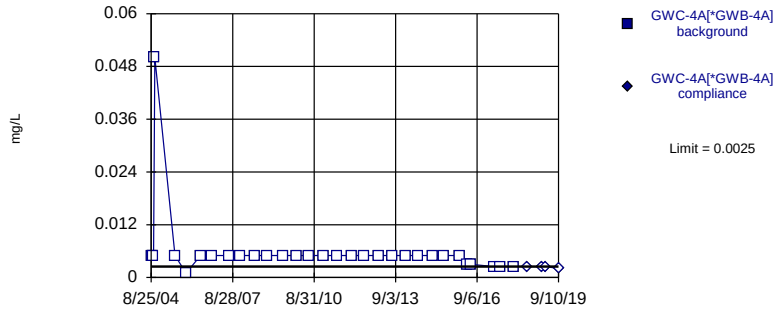
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

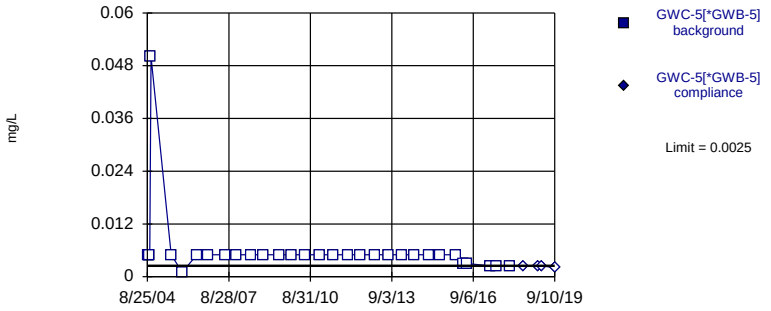
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

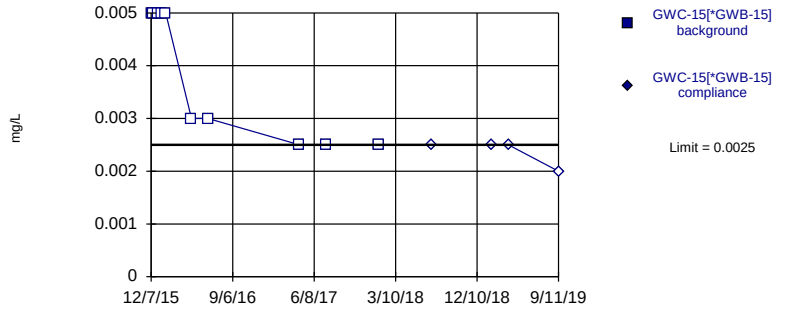
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

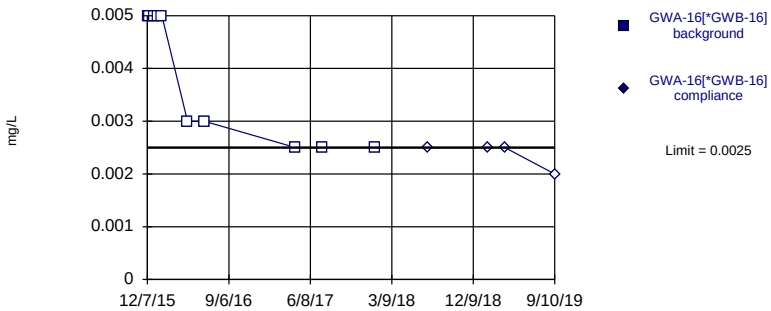
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Antimony Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

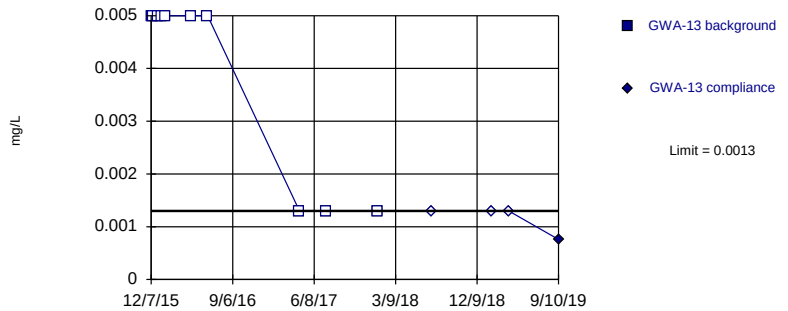
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

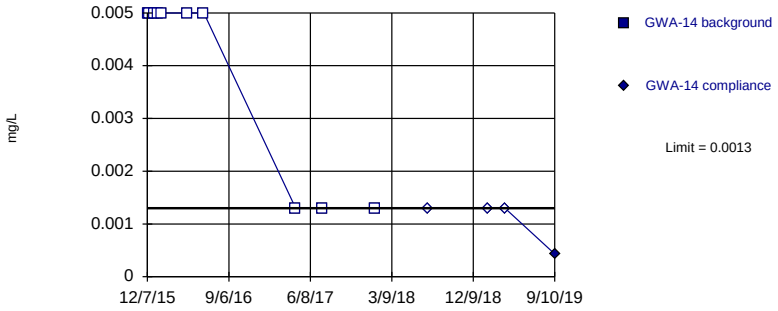
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

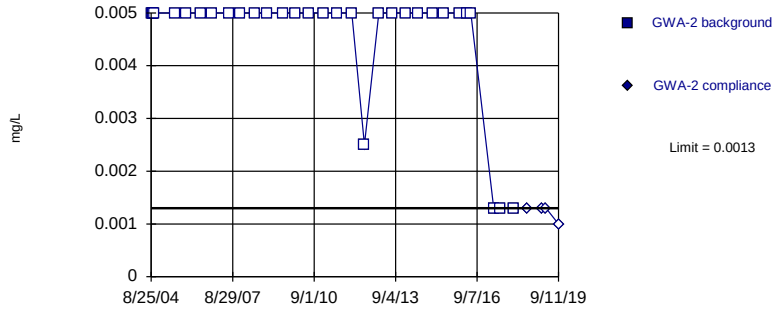
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

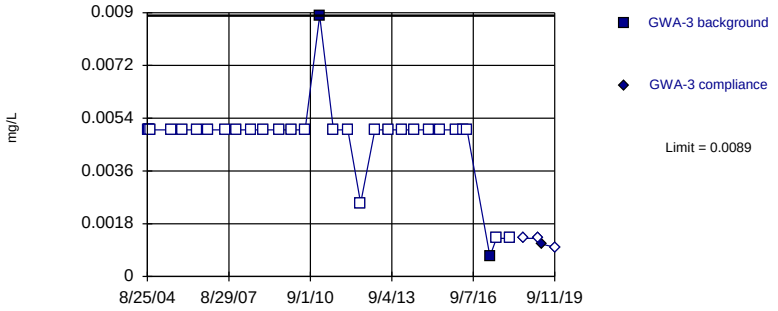
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

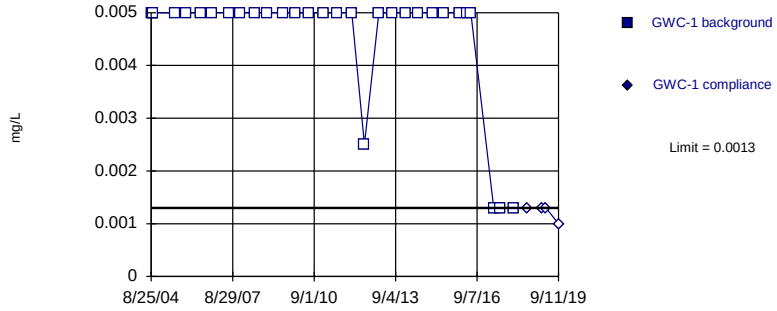
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

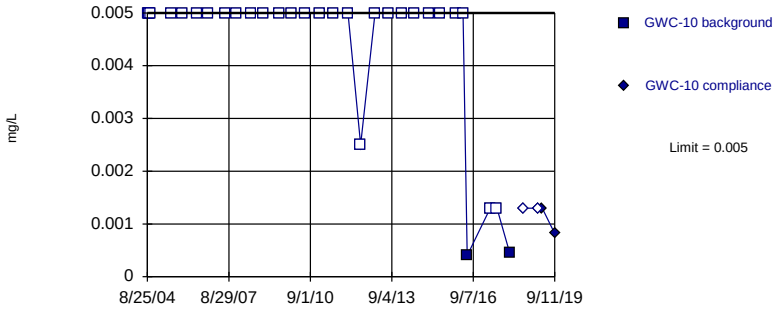
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

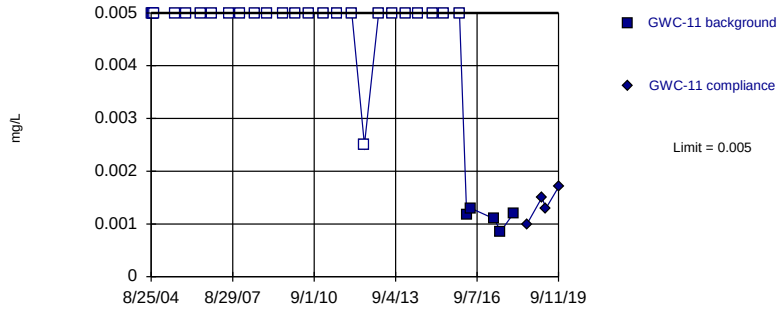
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 83.87% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

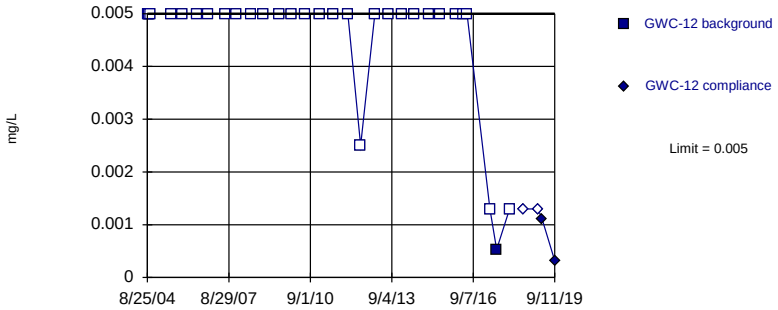
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

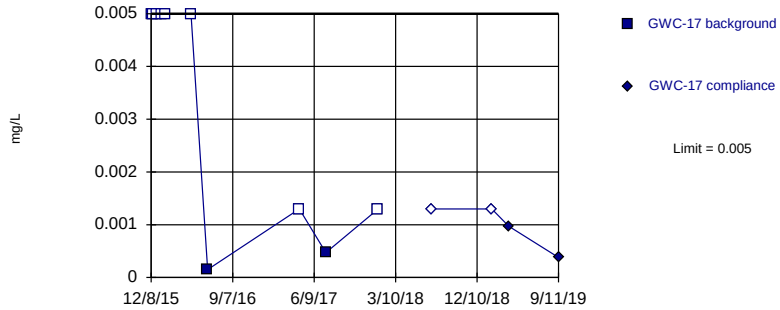
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

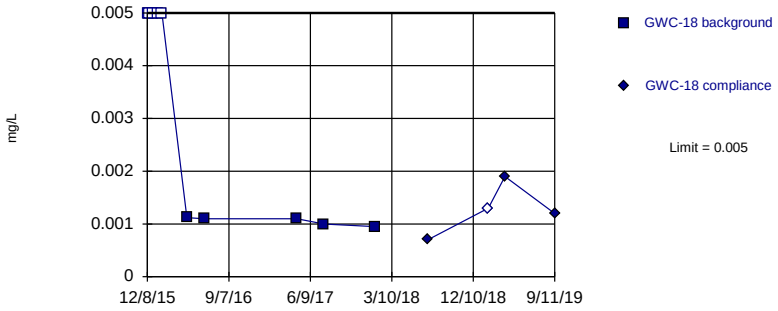
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 50% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

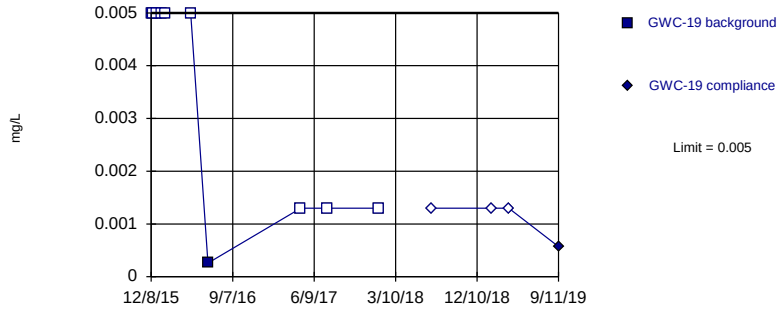
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

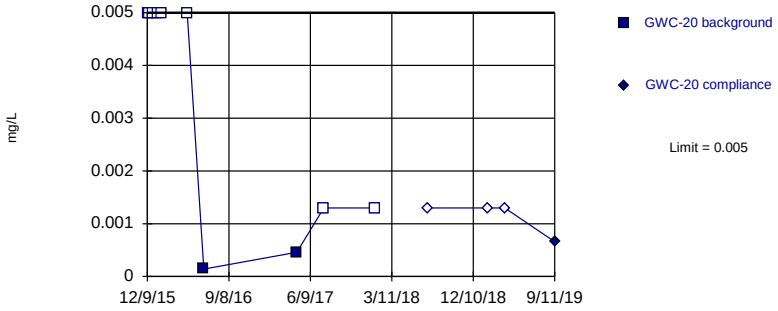
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

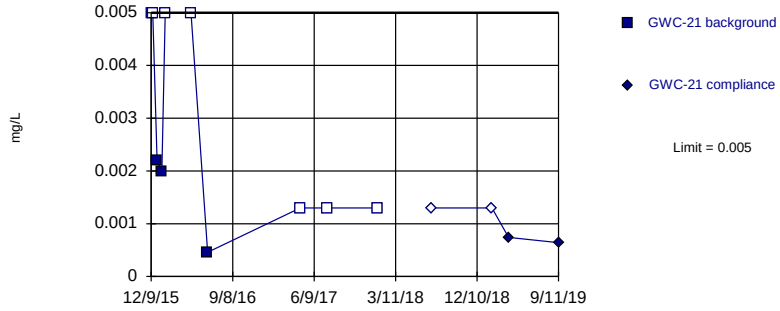
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 70% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

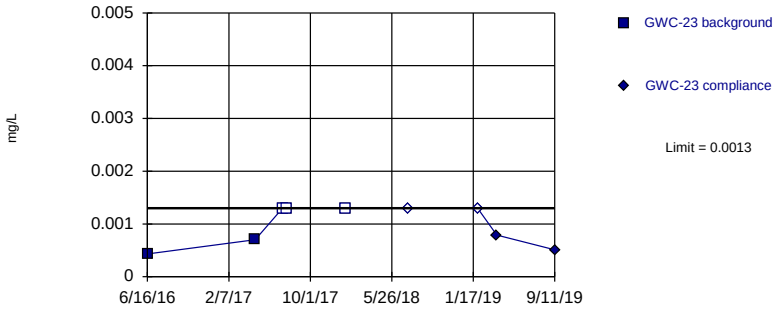
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 60% NDs. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

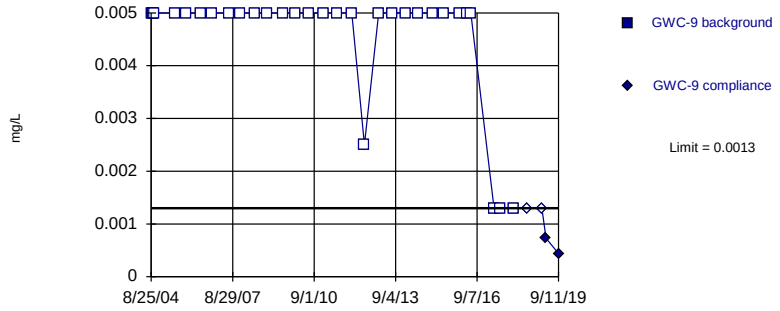
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

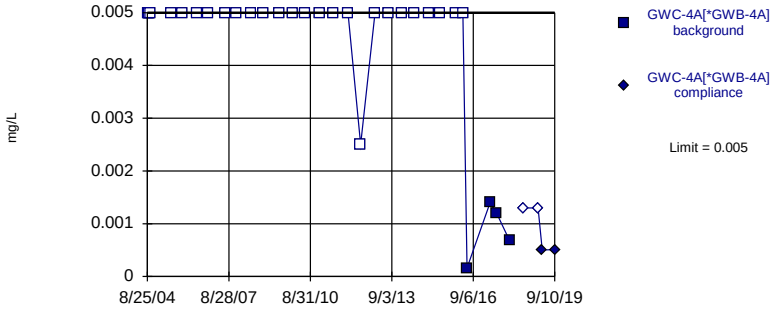
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 87.1% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

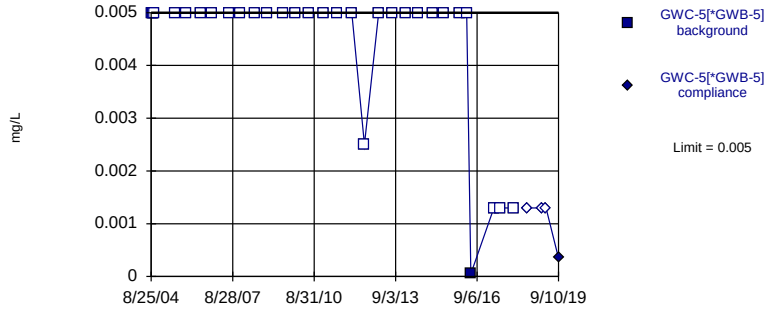
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

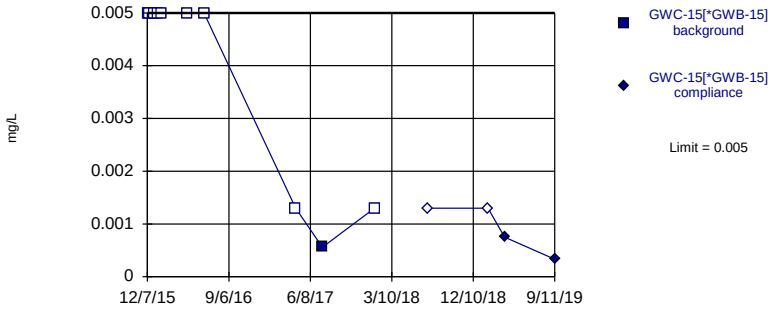
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

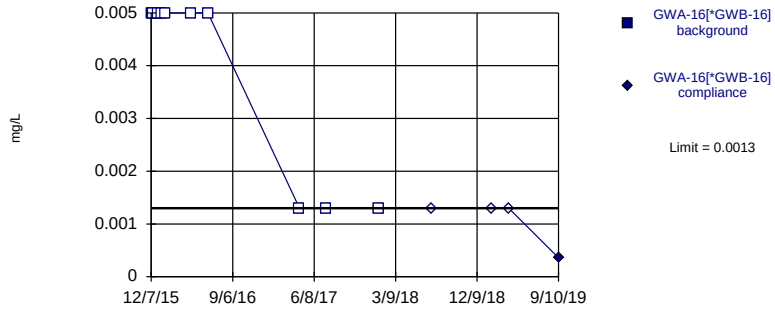
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Arsenic, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

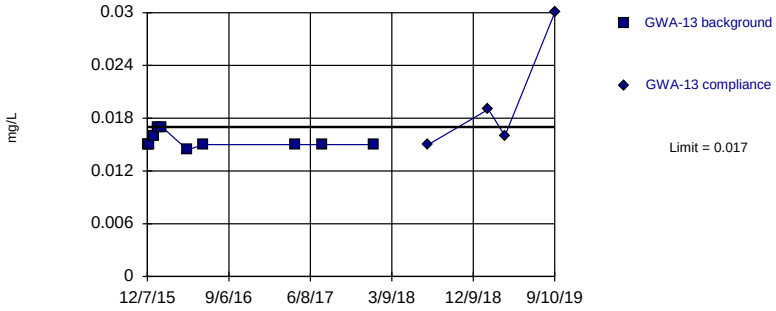
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

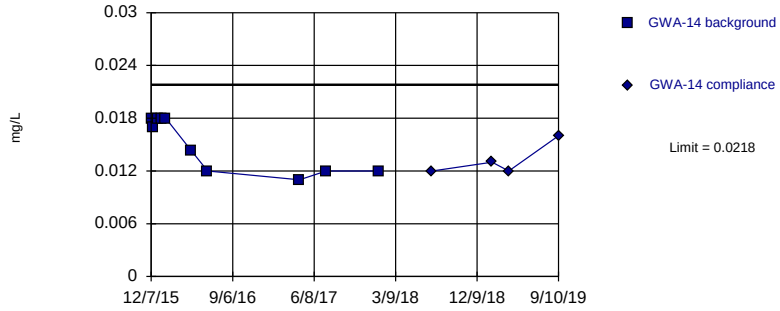
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.01503, Std. Dev.=0.003046, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7895, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

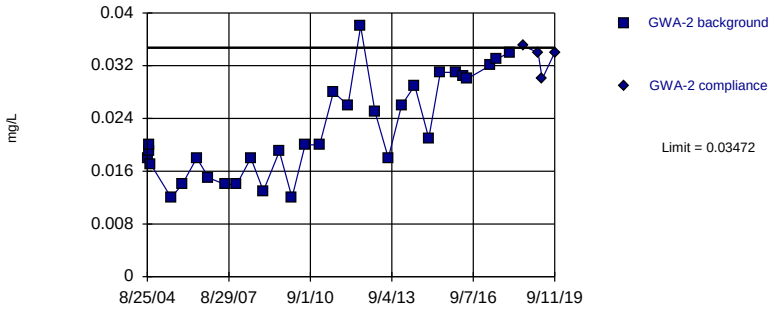
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02244, Std. Dev.=0.007486, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9266, critical = 0.902. Kappa = 1.641 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

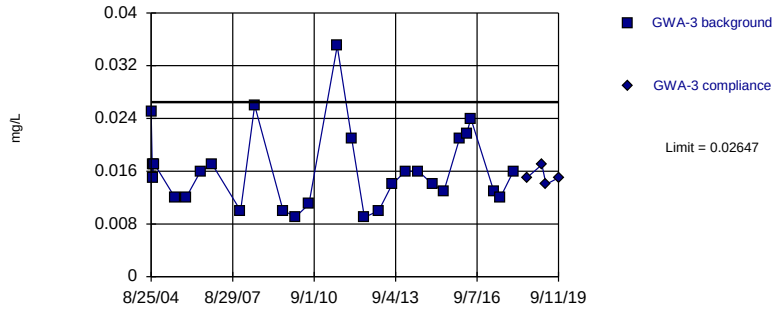
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1252, Std. Dev.=0.02249, n=28. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9362, critical = 0.896. Kappa = 1.666 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

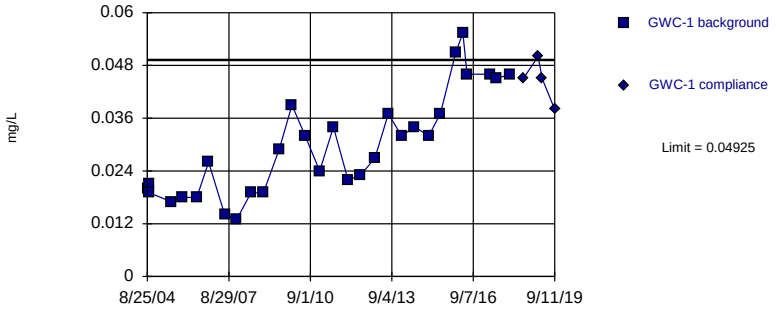
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02985, Std. Dev.=0.01178, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9346, critical = 0.9. Kappa = 1.648 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

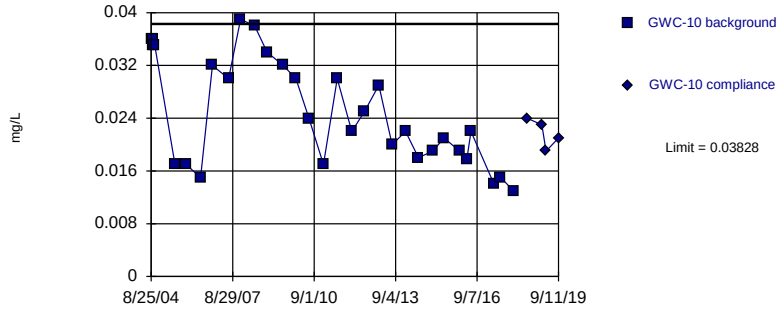
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02496, Std. Dev.=0.008115, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9166, critical = 0.902. Kappa = 1.641 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

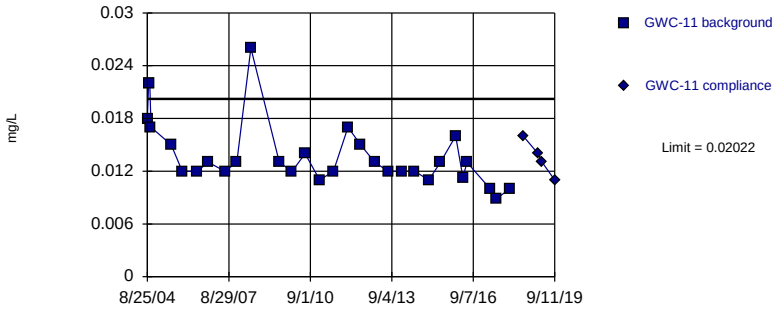
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-4.304, Std. Dev.=0.2447, n=30. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9099, critical = 0.9. Kappa = 1.648 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

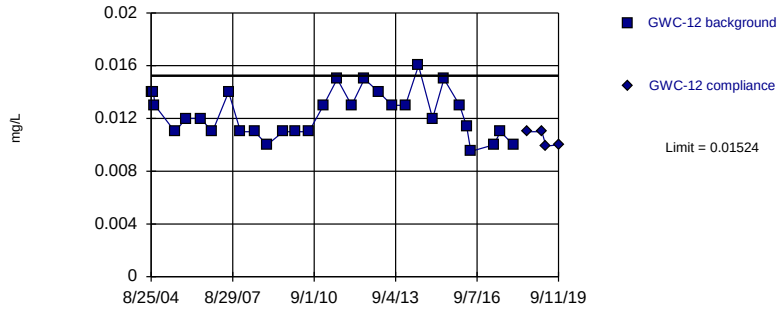
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.01238, Std. Dev.=0.001742, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9394, critical = 0.902. Kappa = 1.641 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

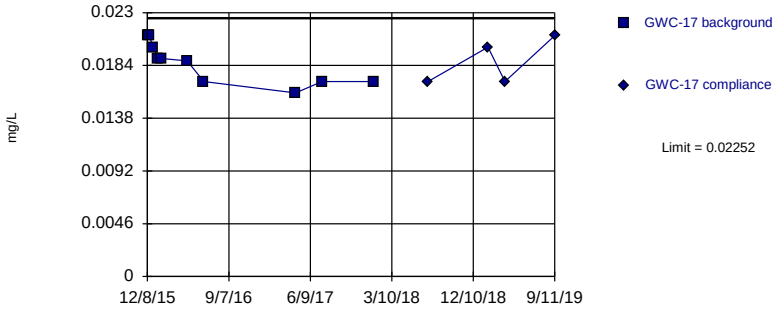
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.01858, Std. Dev.=0.001773, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.913, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

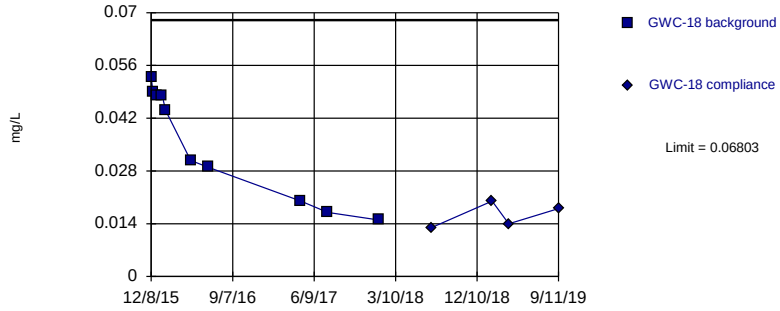
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.03538, Std. Dev.=0.01468, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8743, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

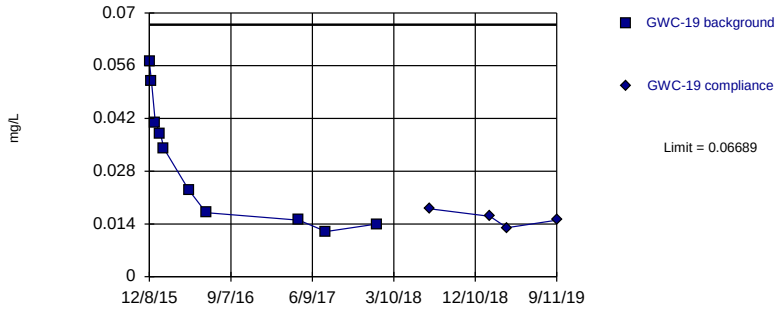
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0303, Std. Dev.=0.01645, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9032, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

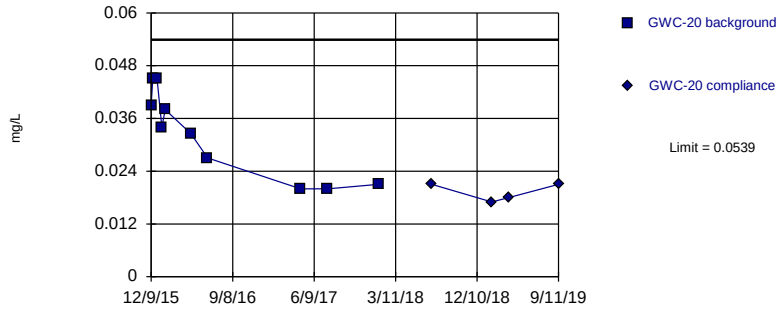
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.03215, Std. Dev.=0.009781, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8998, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

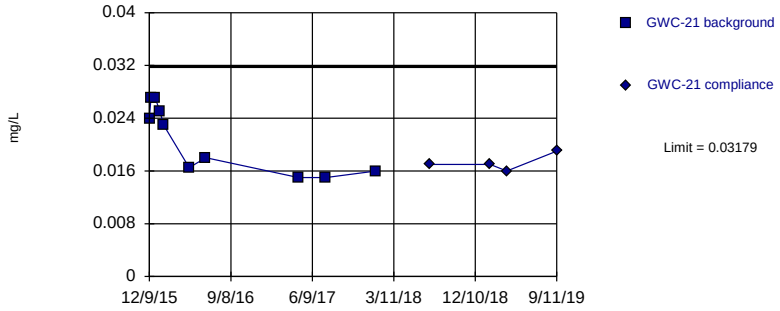
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02065, Std. Dev.=0.005011, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8524, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

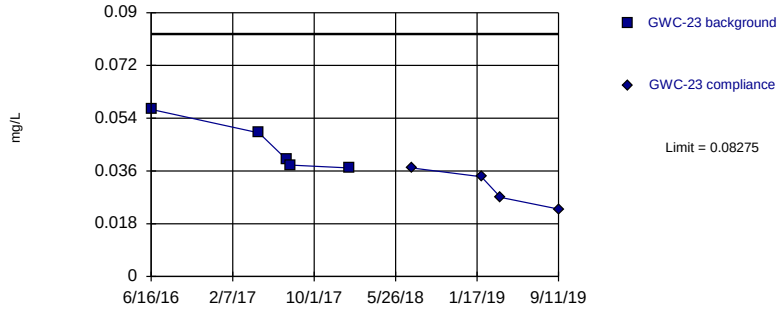
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0442, Std. Dev.=0.008585, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8626, critical = 0.686. Kappa = 4.49 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

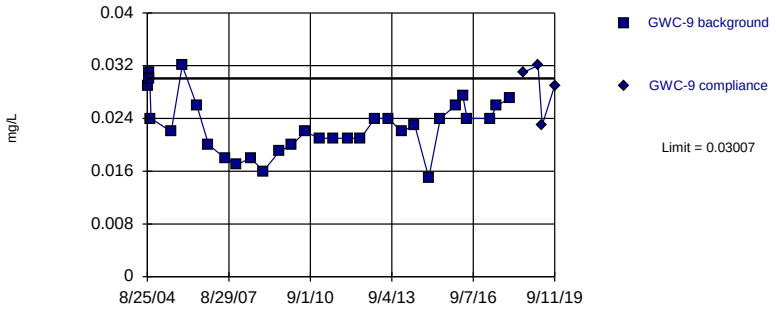
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02305, Std. Dev.=0.004283, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9769, critical = 0.902. Kappa = 1.641 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

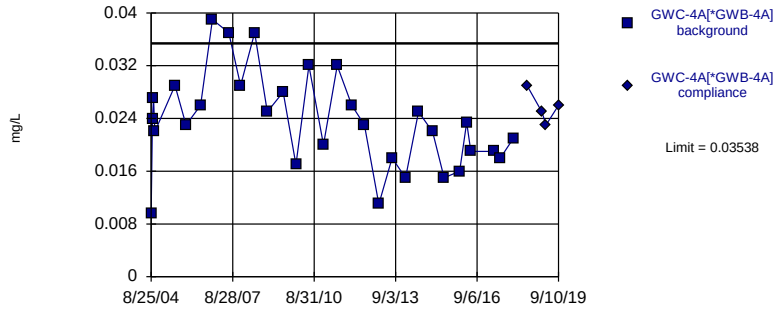
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02348, Std. Dev.=0.007249, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9764, critical = 0.902. Kappa = 1.641 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

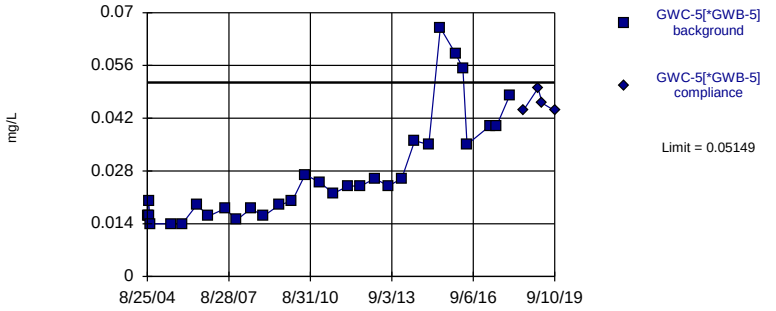
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-3.706, Std. Dev.=0.4506, n=31. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9182, critical = 0.902. Kappa = 1.641 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

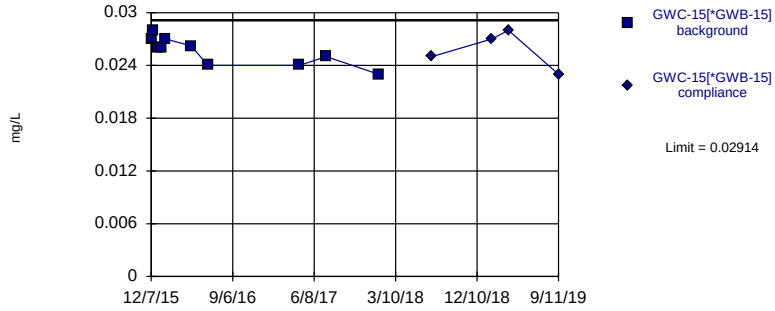
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02562, Std. Dev.=0.001585, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9553, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

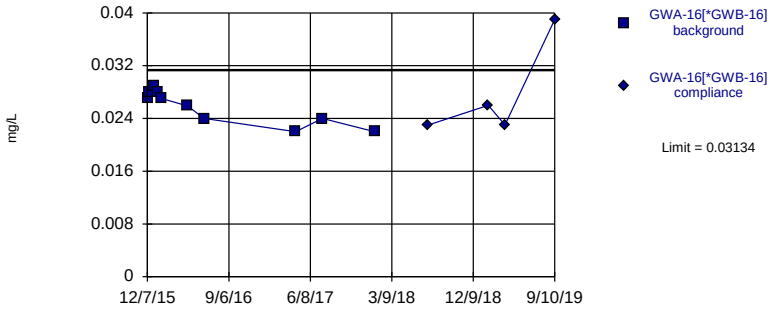
Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02569, Std. Dev.=0.00254, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9078, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Barium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

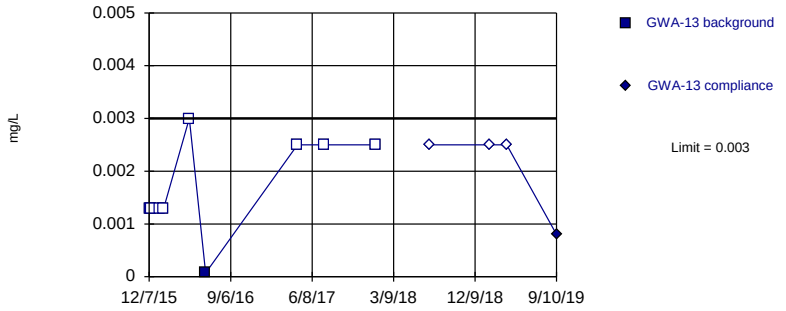
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

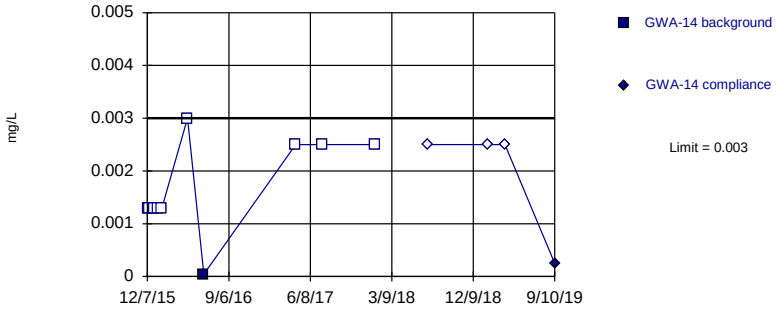
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

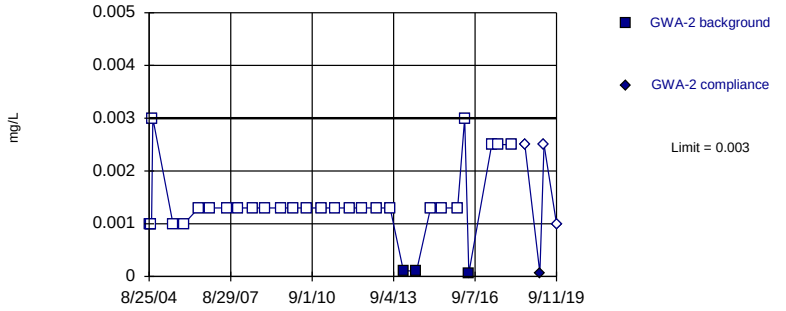
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 90.32% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

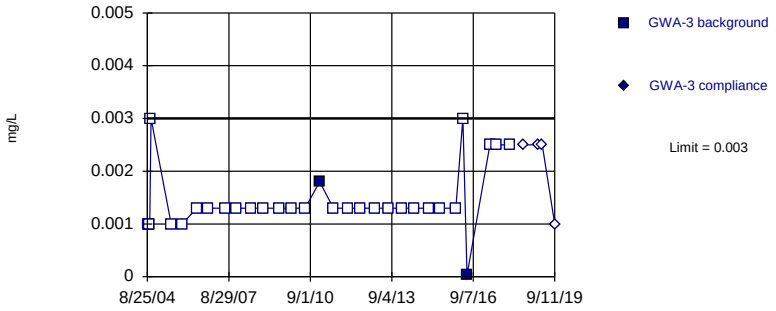
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

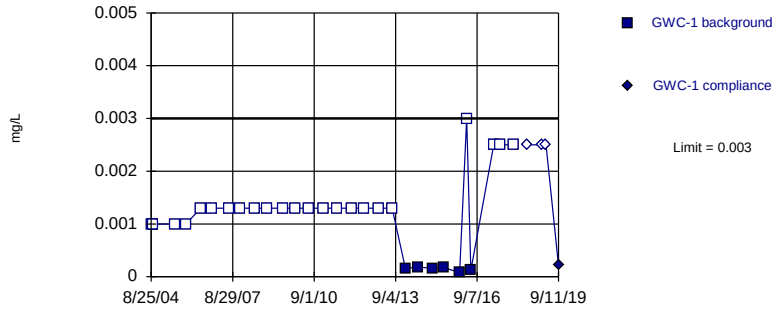
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 80% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

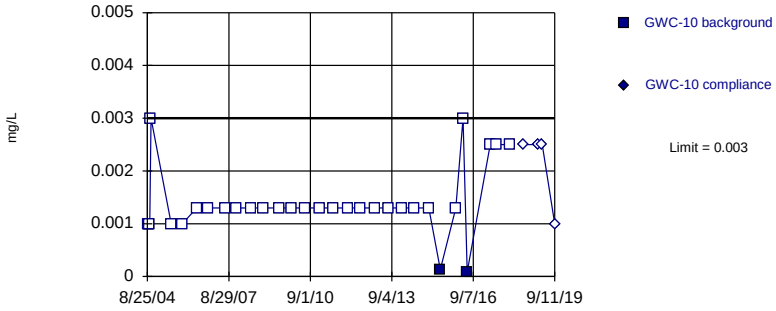
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:16 PM View: LF4 EPD

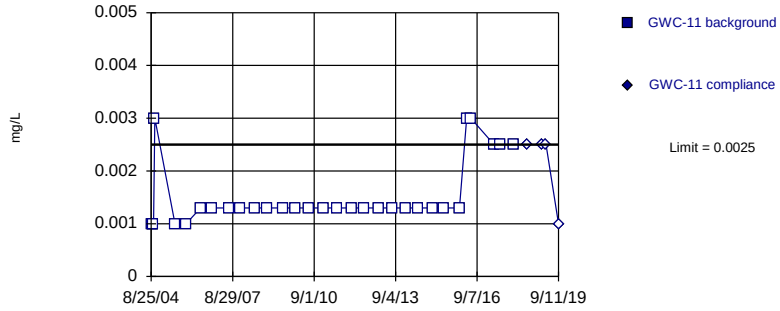
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

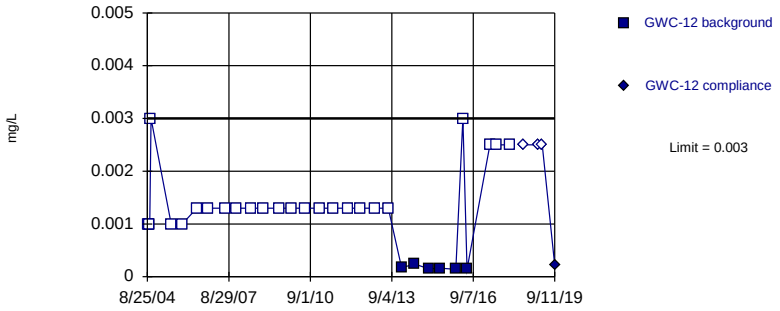
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 80.65% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

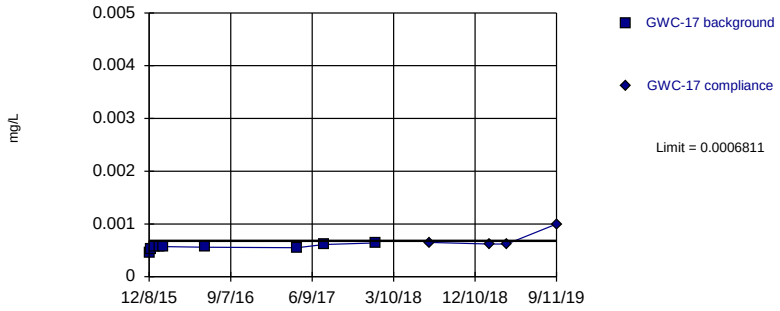
Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00056, Std. Dev.=0.00005099, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9434, critical = 0.764. Kappa = 2.374 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

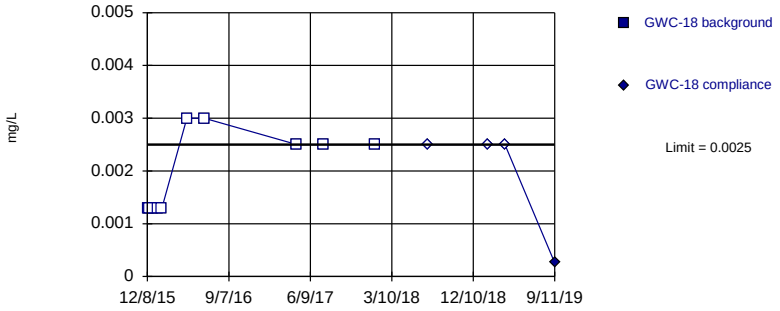
Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

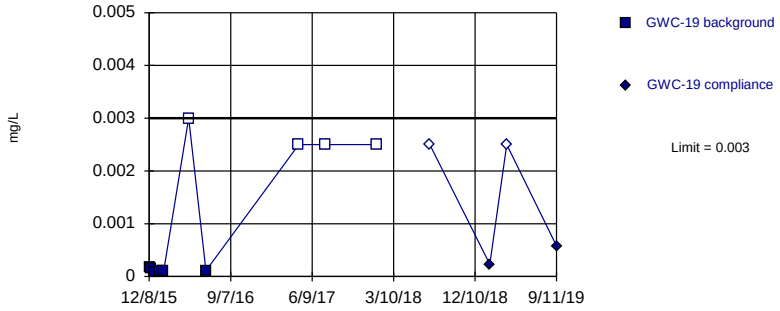
Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 40% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

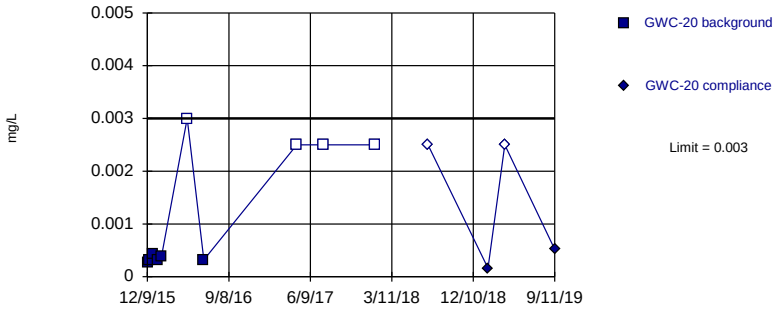
Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 40% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

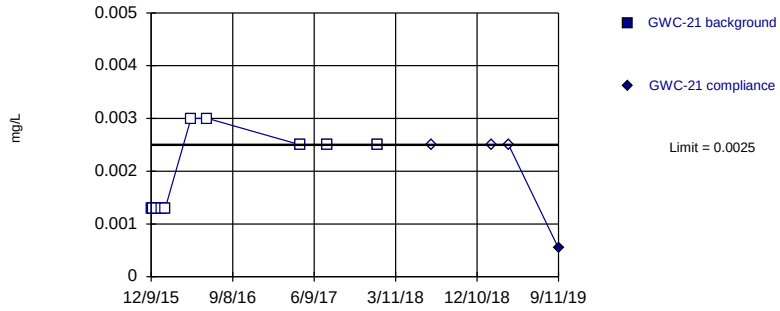
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

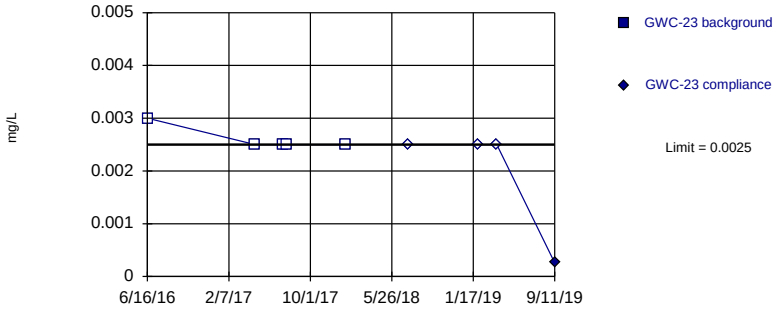
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

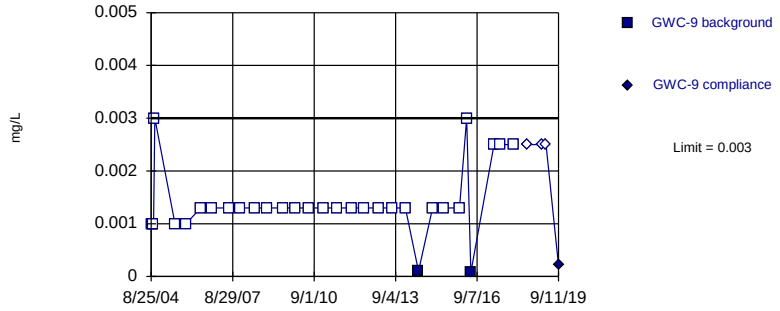
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

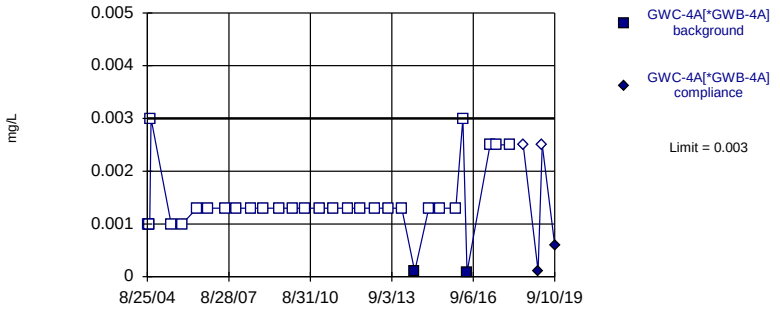
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

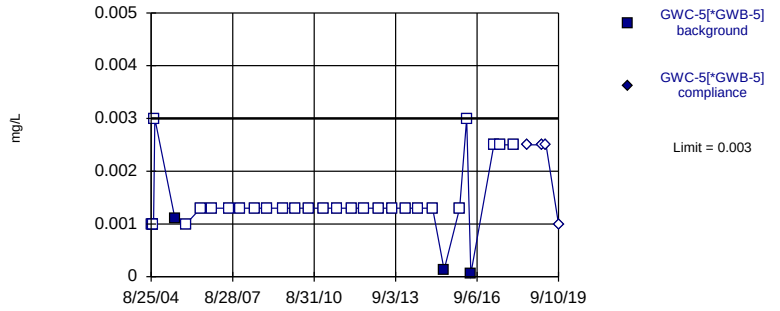
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 90.32% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

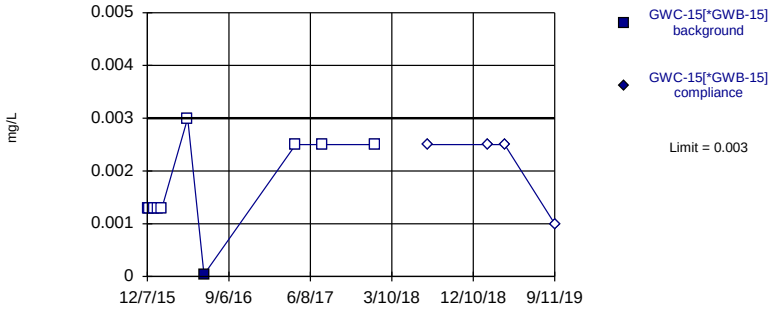
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

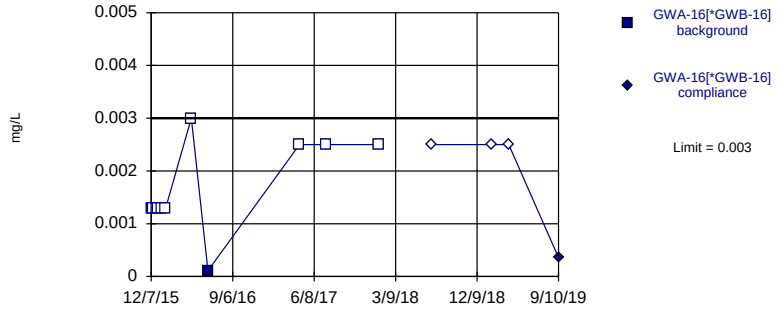
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Beryllium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

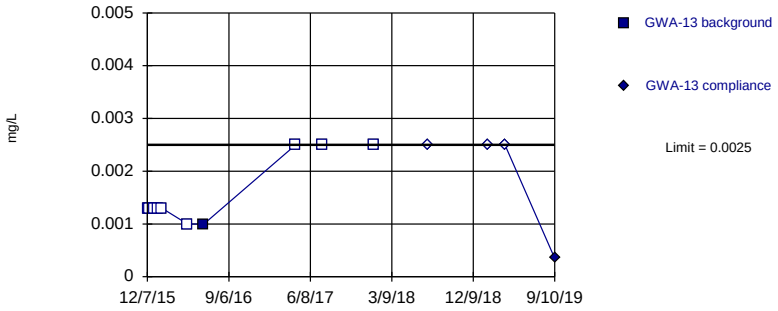
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

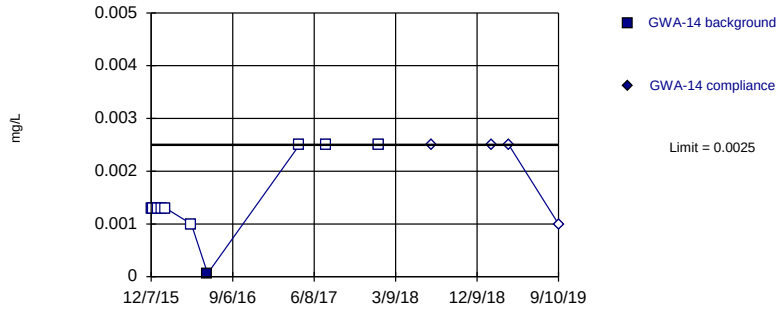
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

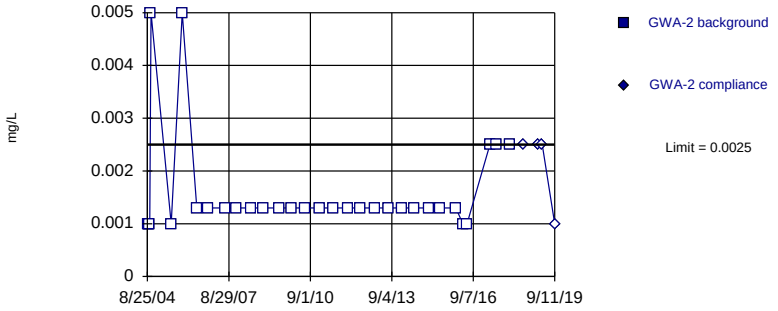
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

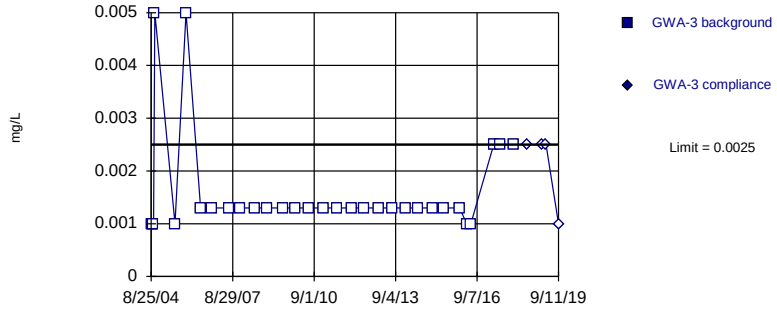
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

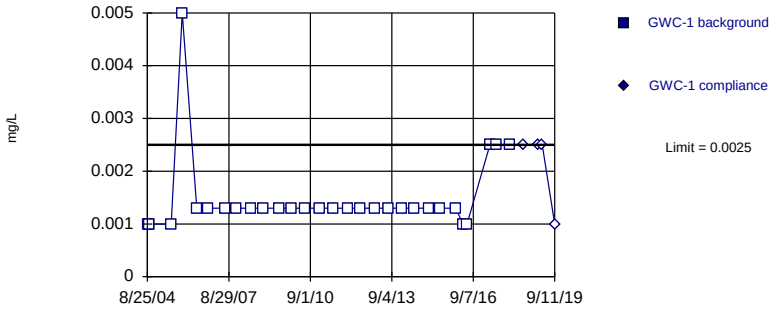
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

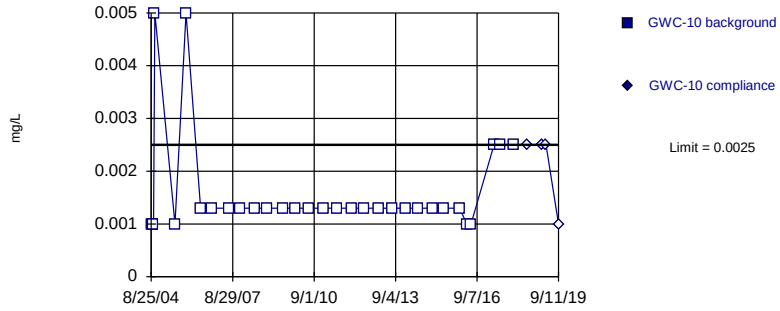
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

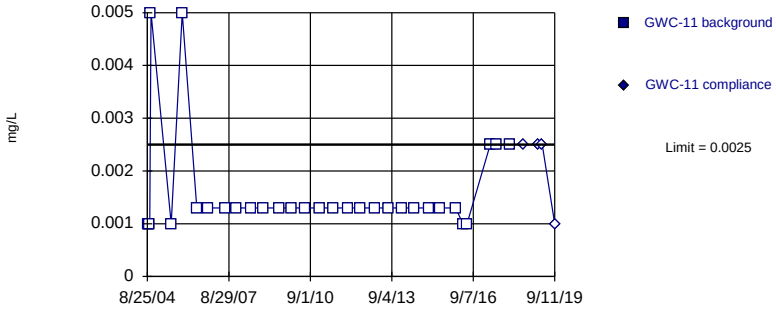
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

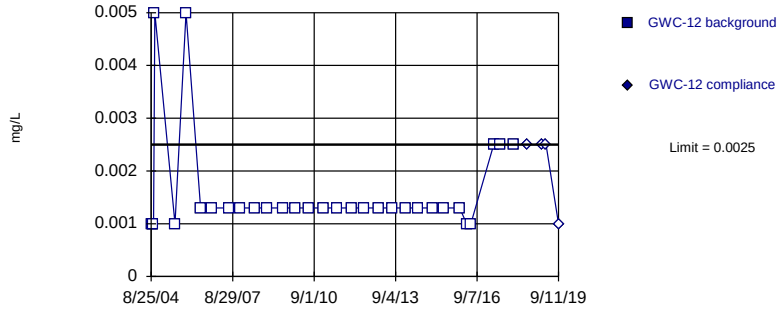
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

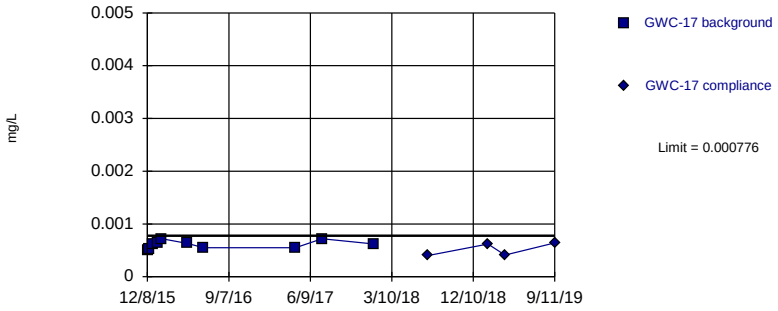
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0006053, Std. Dev.=0.00007674, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9338, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

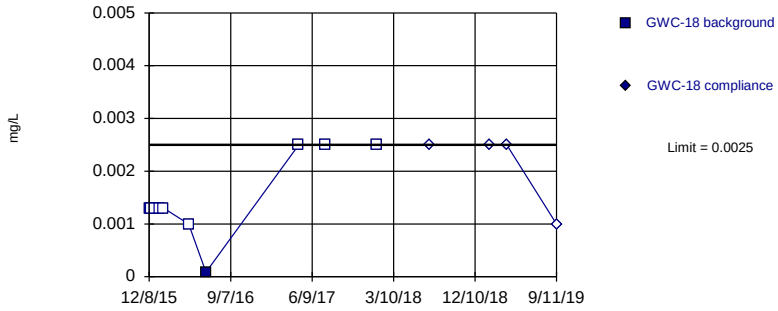
Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

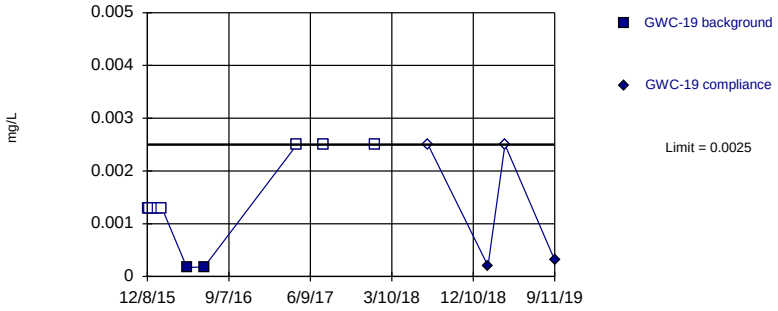
Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

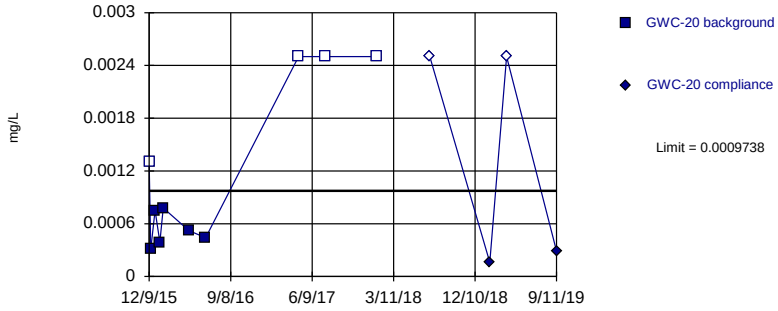
Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.02274, Std. Dev.=0.003806, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.834, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

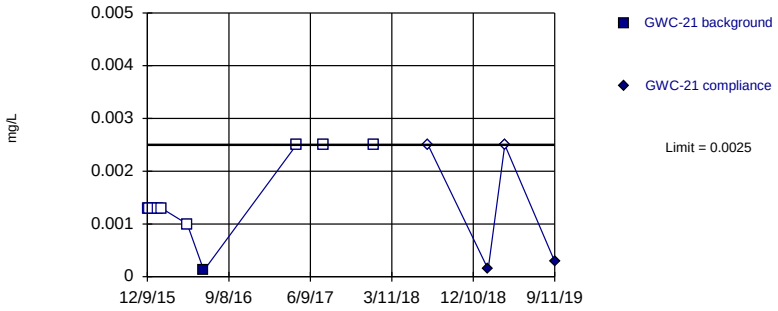
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

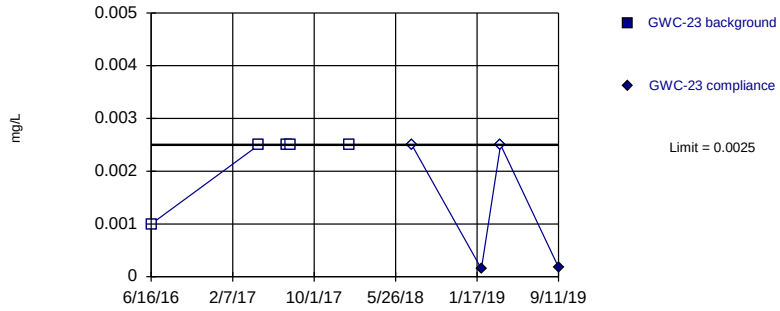
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

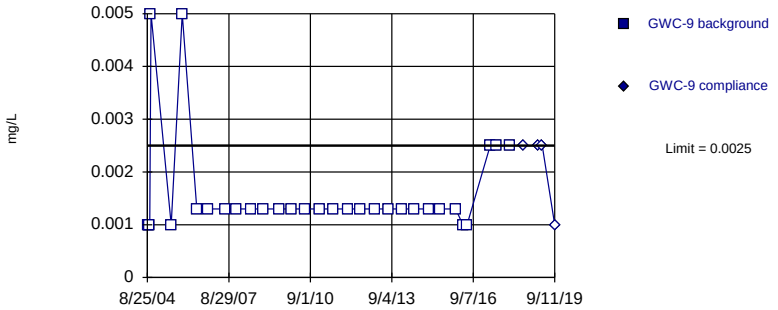
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

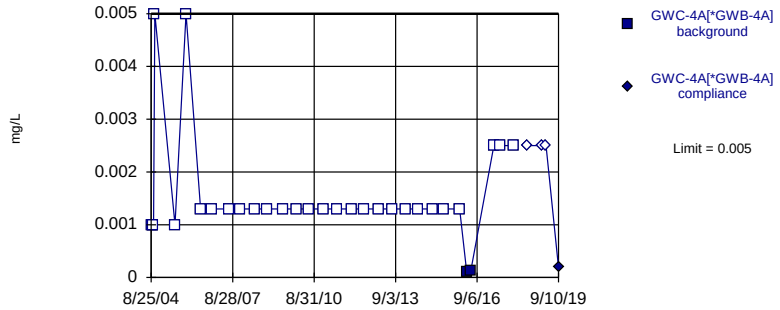
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

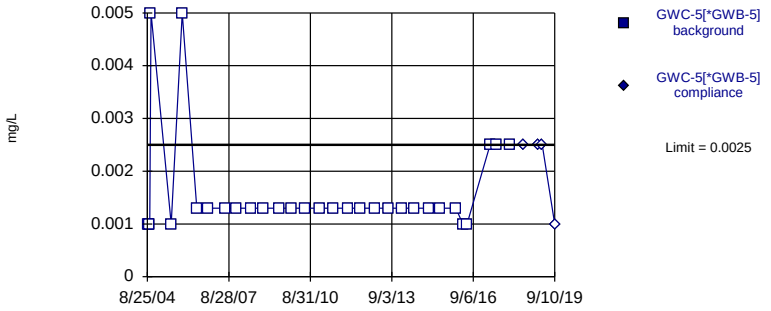
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

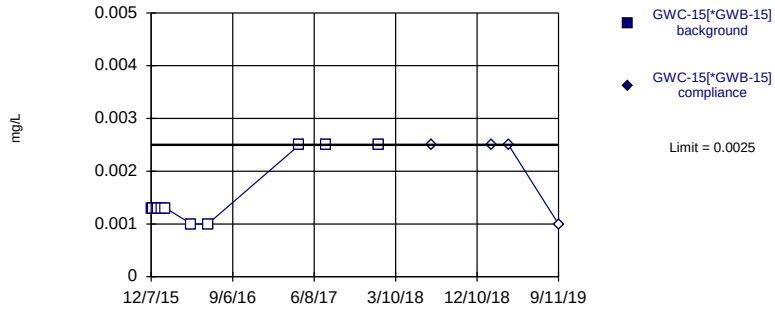
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

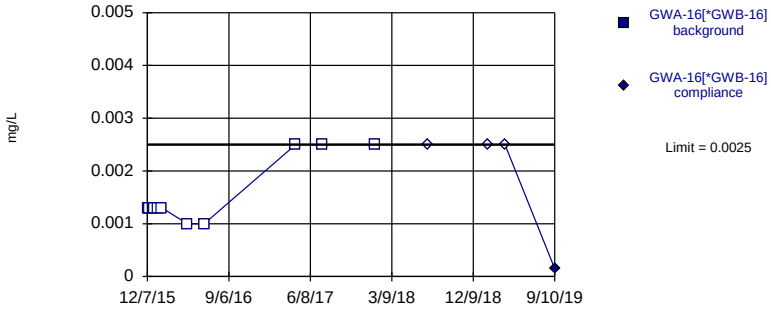
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cadmium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

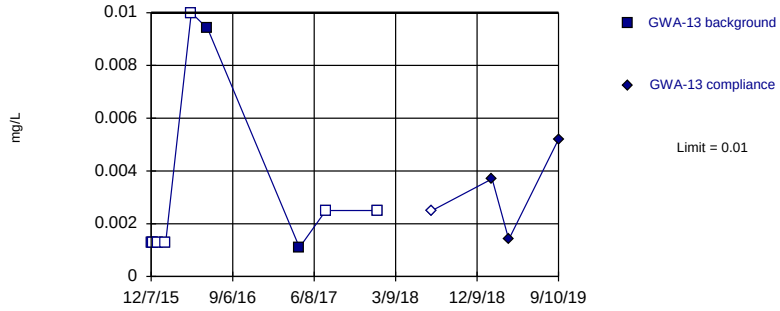
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

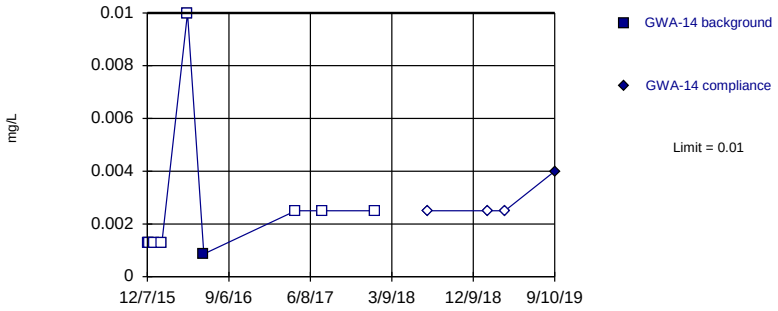
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

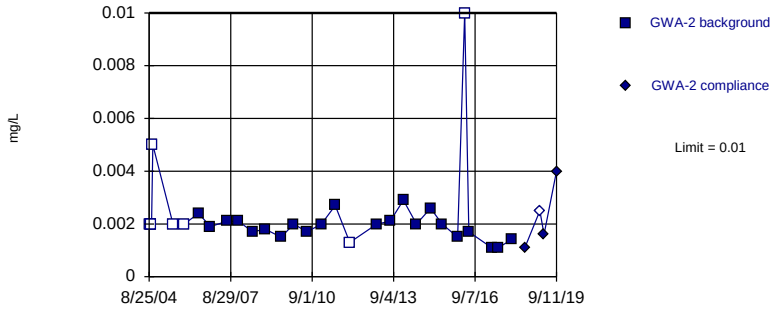
Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 30 background values. 26.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

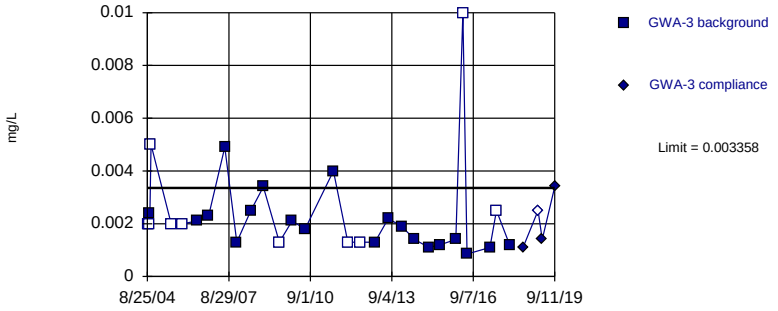
Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.516, Std. Dev.=0.4976, n=30, 33.33% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9111, critical = 0.9. Kappa = 1.648 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

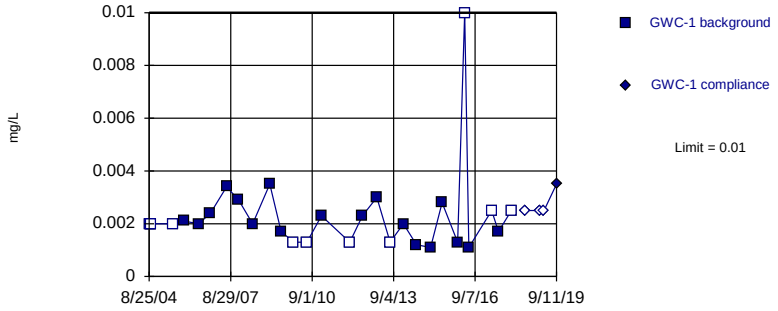
Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. 37.93% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

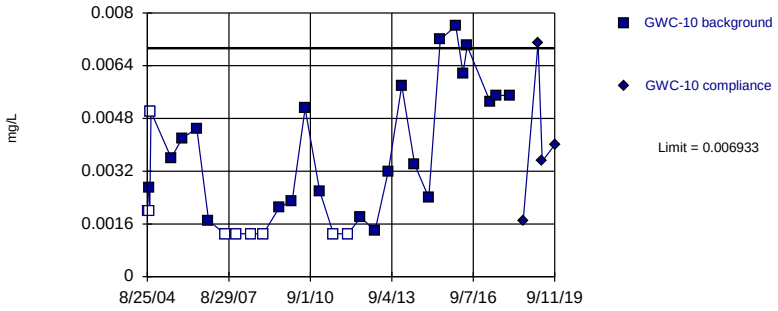
Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.1421, Std. Dev.=0.02958, n=31, 29.03% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9033, critical = 0.902. Kappa = 1.641 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

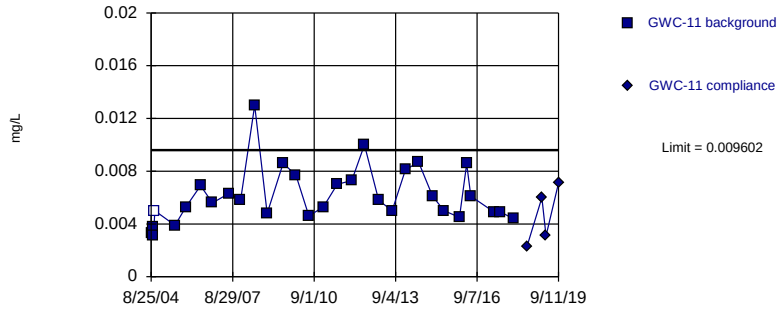
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.006108, Std. Dev.=0.002129, n=31, 3.226% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9087, critical = 0.902. Kappa = 1.641 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

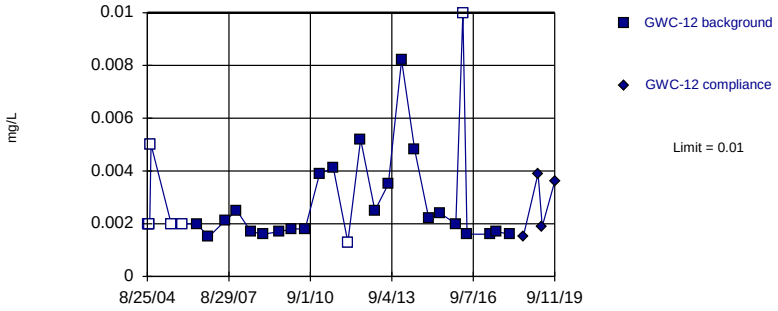
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 31 background values. 25.81% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

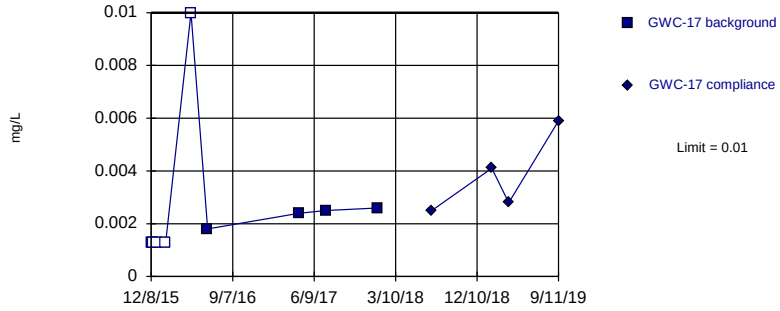
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

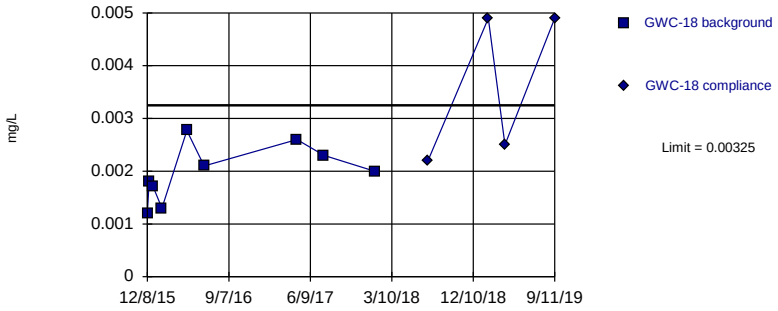
Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.001974, Std. Dev.=0.000537, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9663, critical = 0.764. Kappa = 2.374 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

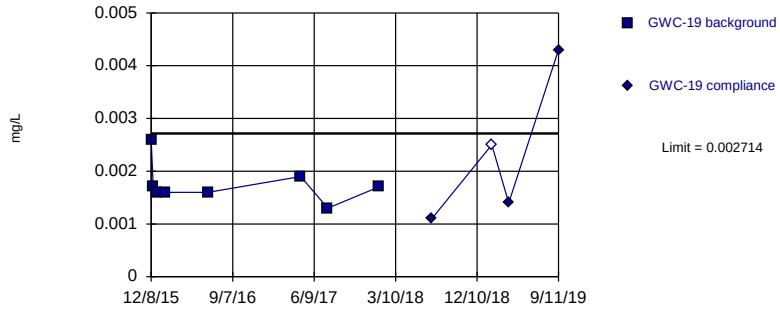
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00175, Std. Dev.=0.0003817, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8025, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

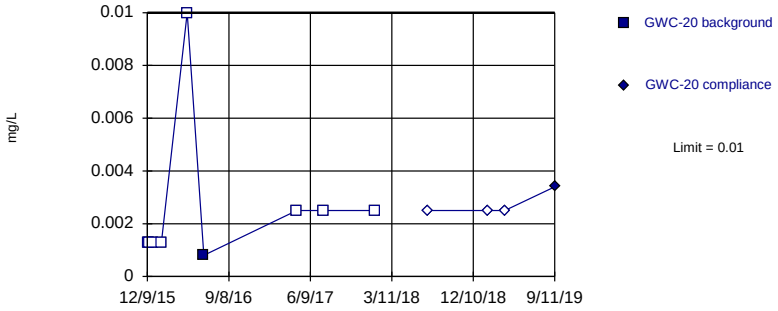
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

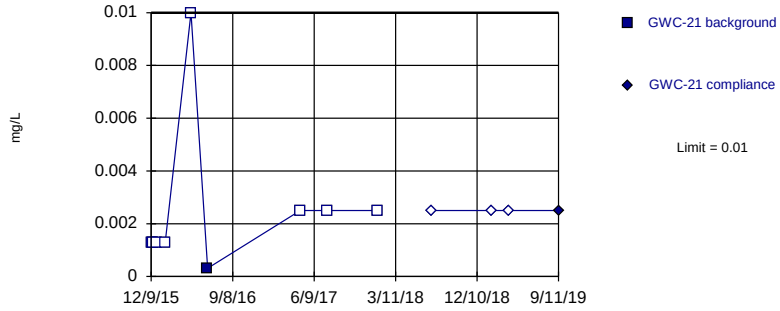
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

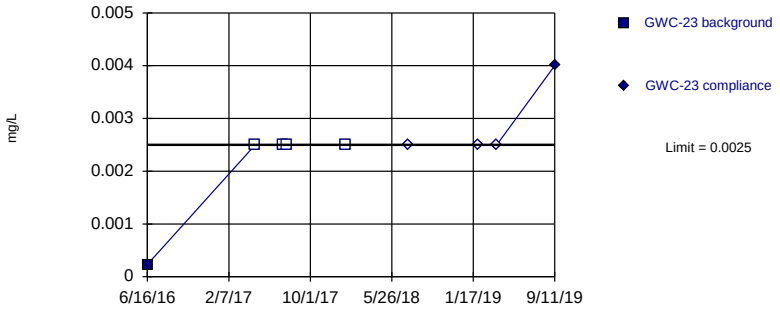
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 80% NDs. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

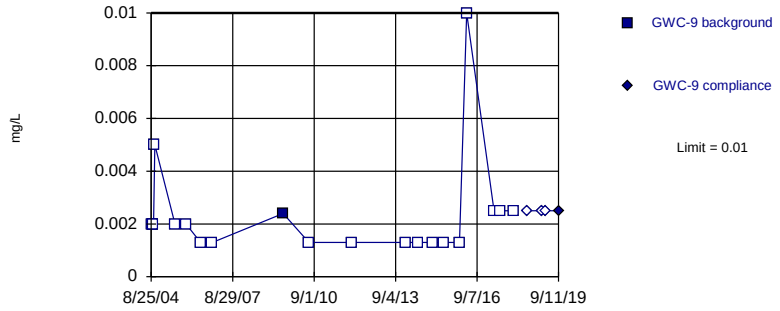
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDs. Well-constituent pair annual alpha = 0.001125. Individual comparison alpha = 0.0005627 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

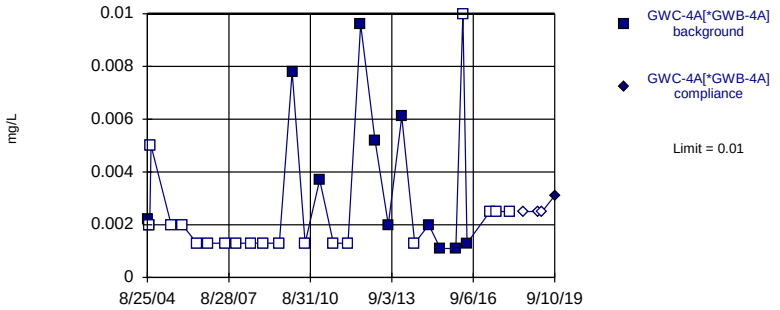
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

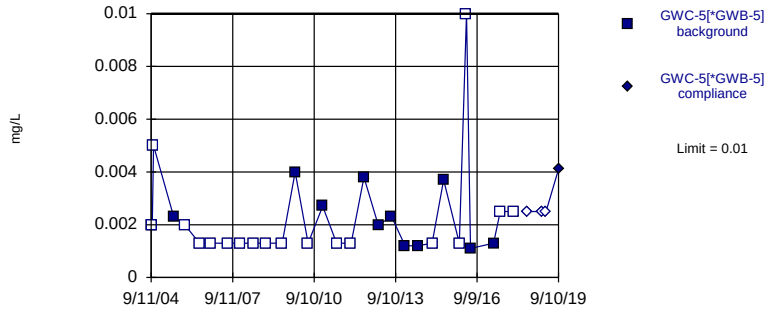
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 63.33% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

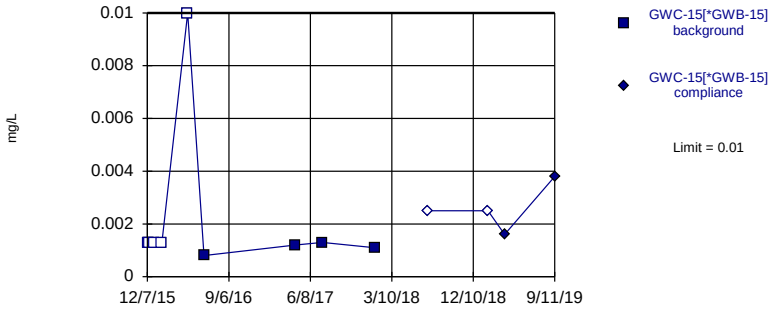
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

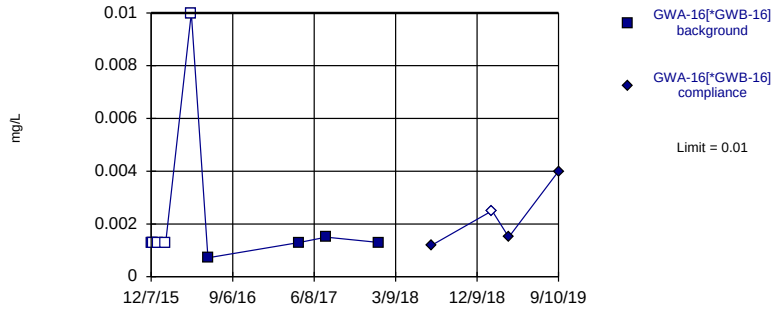
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.009329. Individual comparison alpha = 0.004675 (1 of 3).

Constituent: Chromium, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

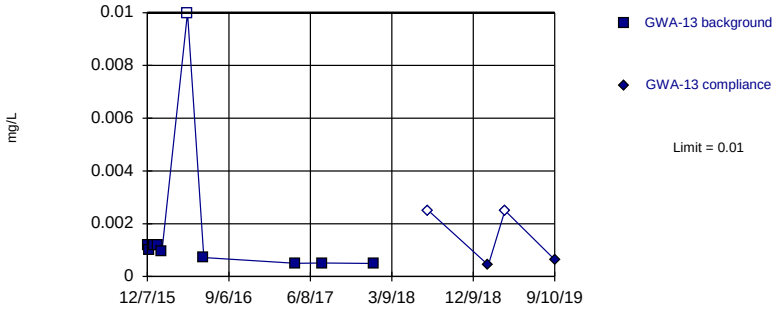
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 10 background values. 10% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

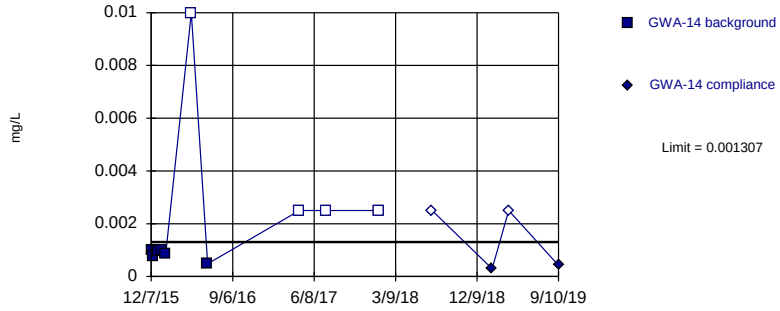
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.0923, Std. Dev.=0.007658, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7942, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

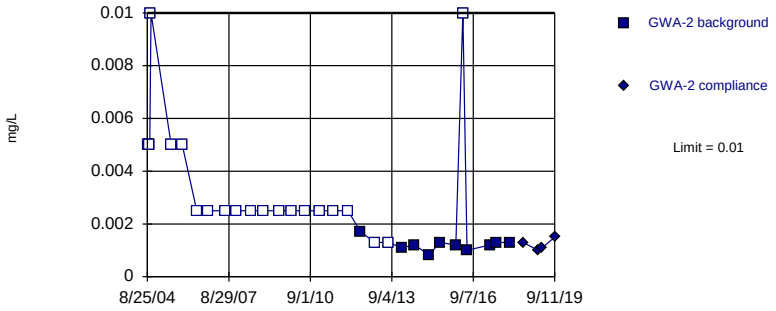
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 67.74% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

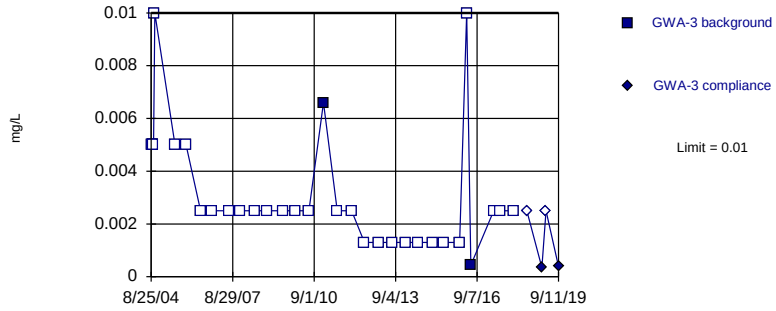
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

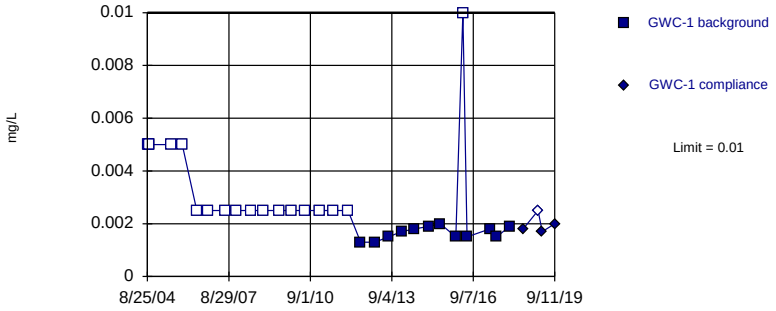
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 60% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

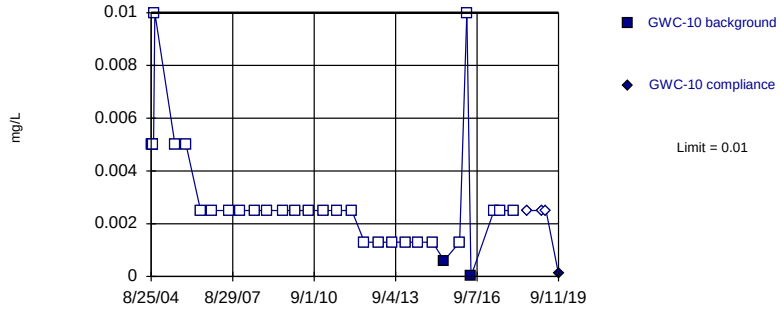
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

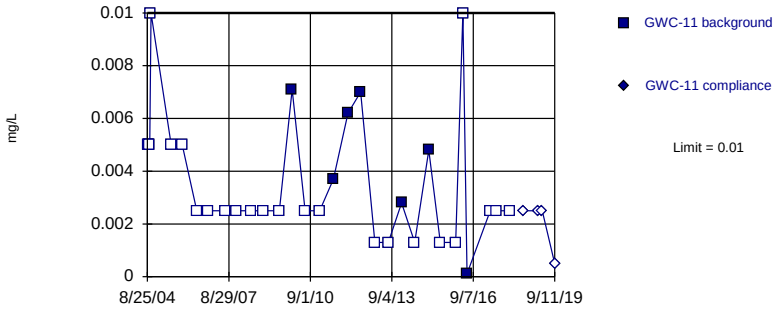
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 77.42% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

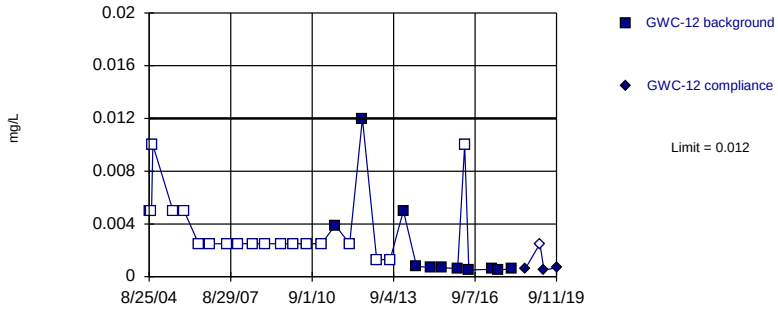
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

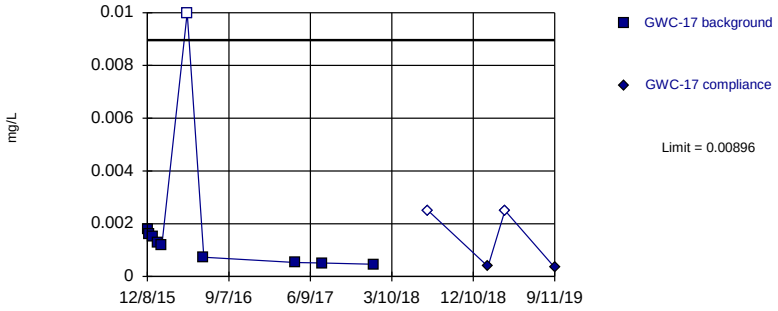
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-6.727, Std. Dev.=0.9046, n=10, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8554, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

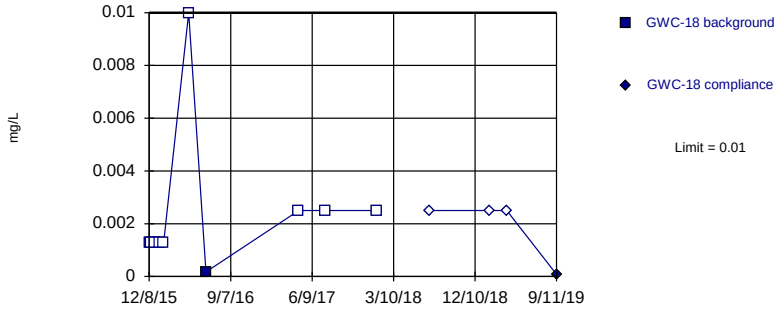
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

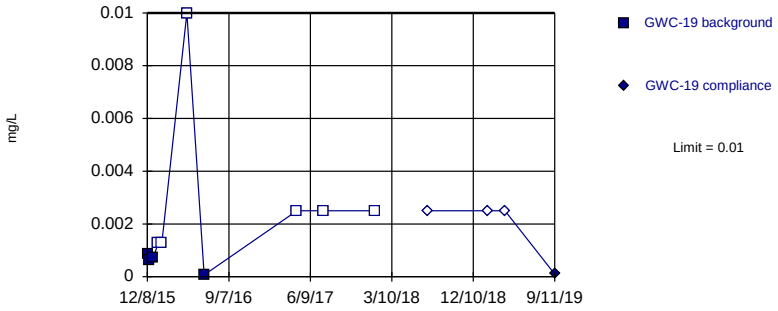
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 60% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

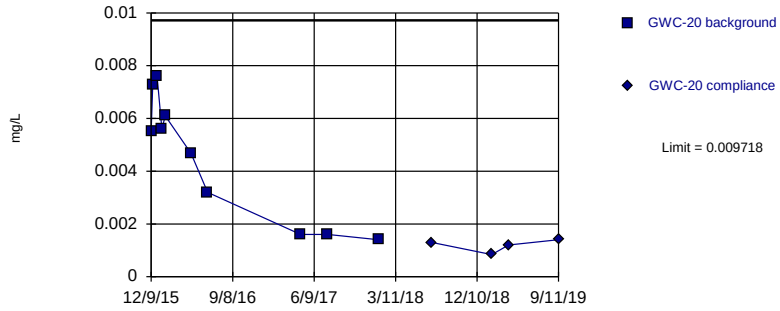
Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.004458, Std. Dev.=0.002365, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8979, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:17 PM View: LF4 EPD

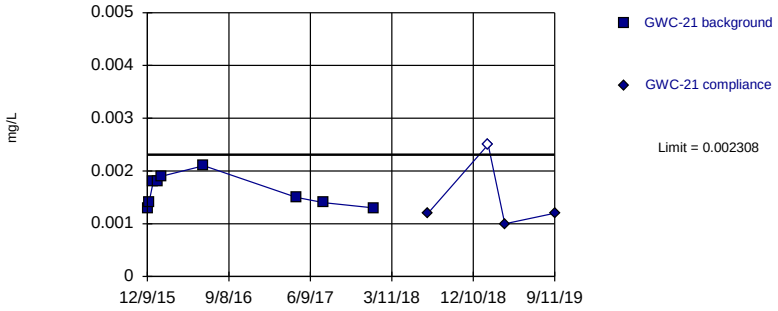
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.001611, Std. Dev.=0.0002934, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8891, critical = 0.764. Kappa = 2.374 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

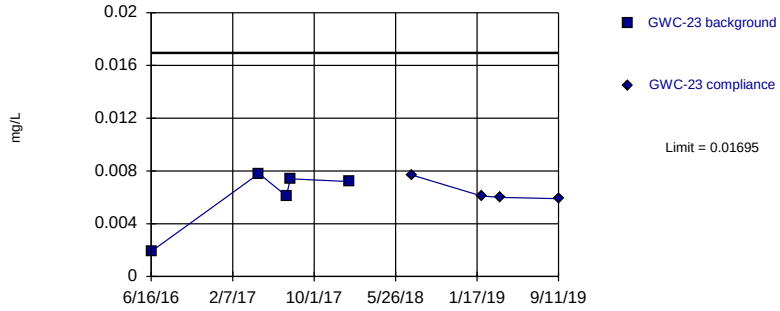
Constituent: Cobalt, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00608, Std. Dev.=0.00242, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7655, critical = 0.686. Kappa = 4.49 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

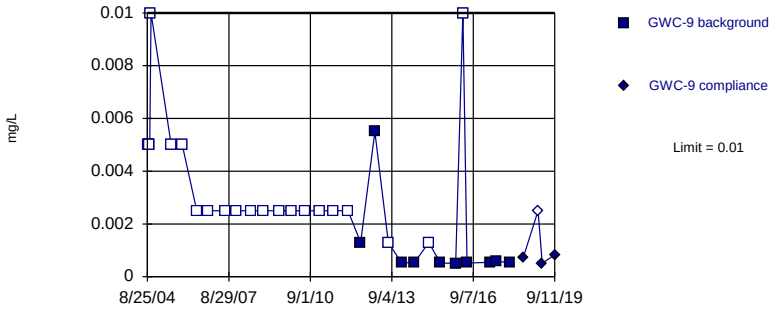
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 67.74% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

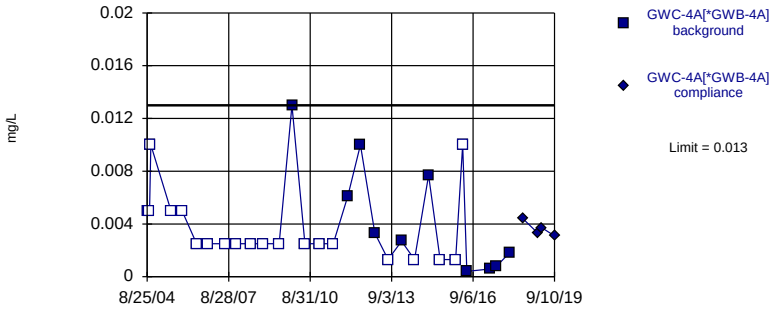
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 67.74% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

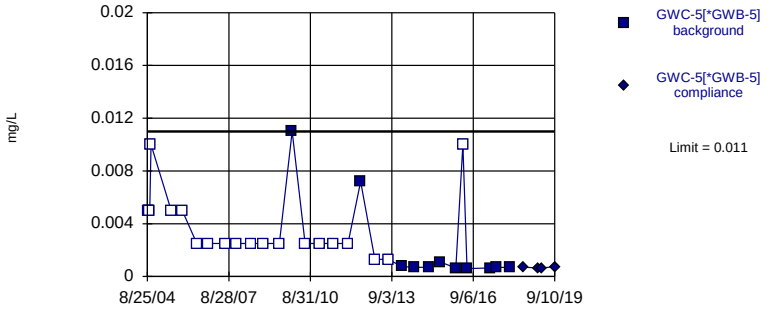
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 64.52% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

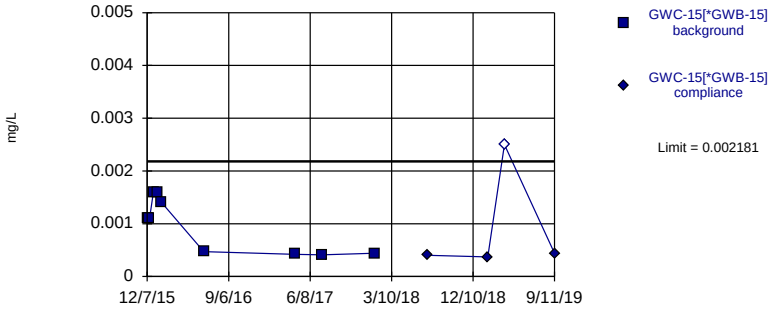
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0009489, Std. Dev.=0.0005191, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8241, critical = 0.764. Kappa = 2.374 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

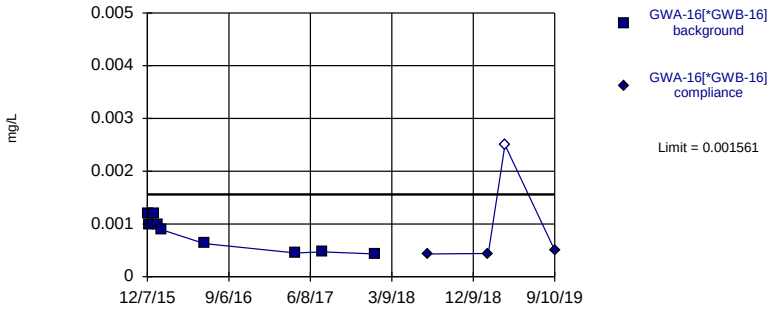
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0008078, Std. Dev.=0.0003172, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8694, critical = 0.764. Kappa = 2.374 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Cobalt, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

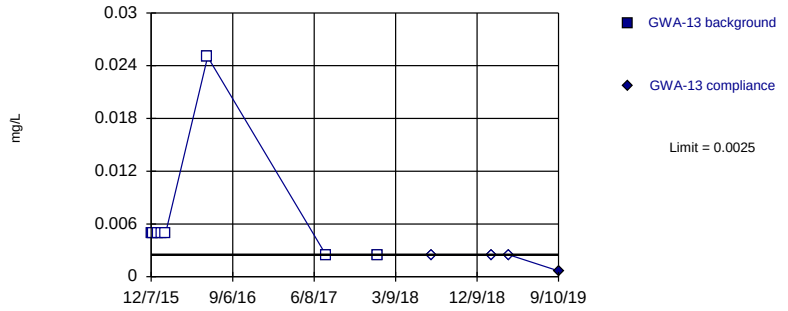
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

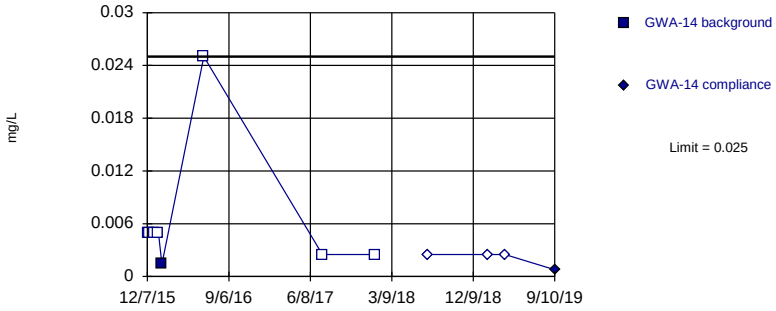
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

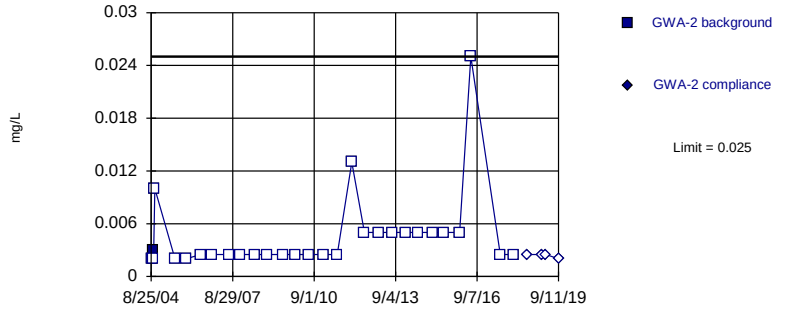
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 96.55% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

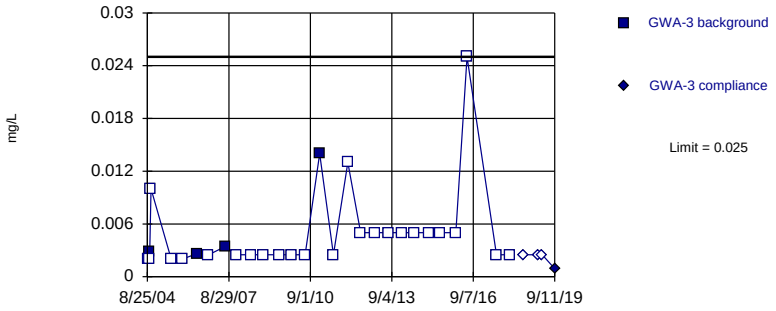
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 86.21% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

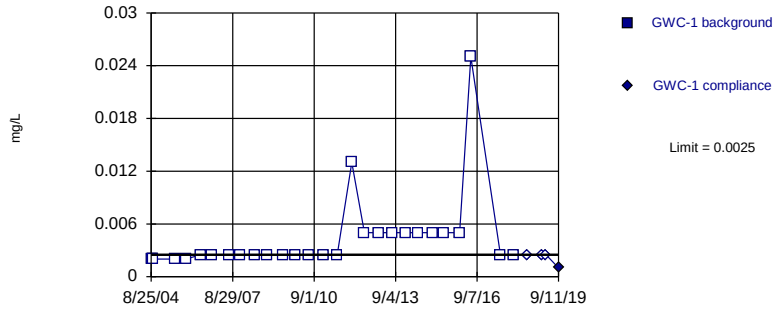
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 28) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

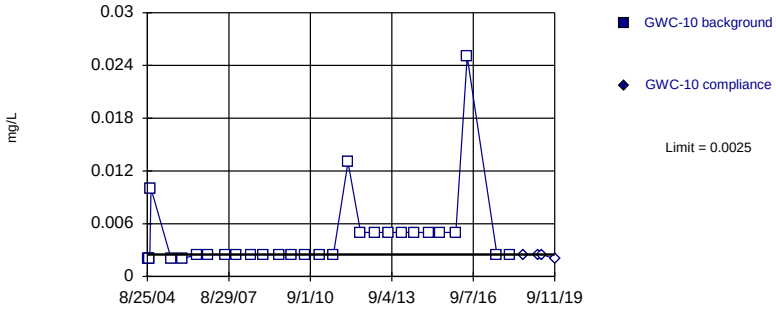
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

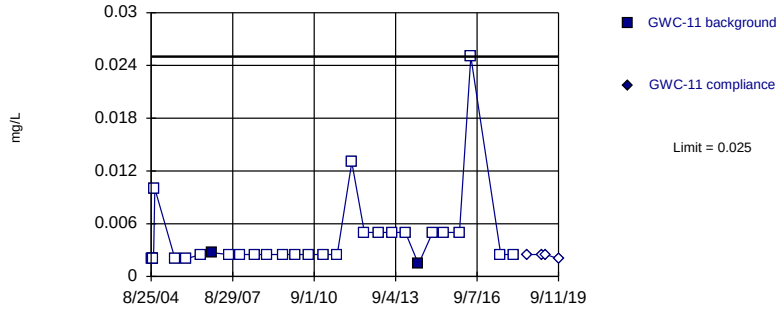
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 93.1% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

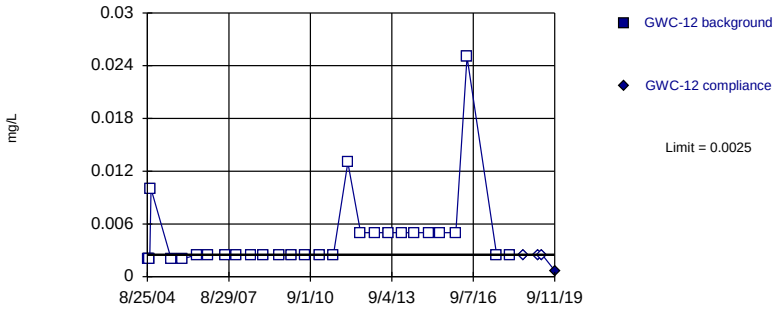
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

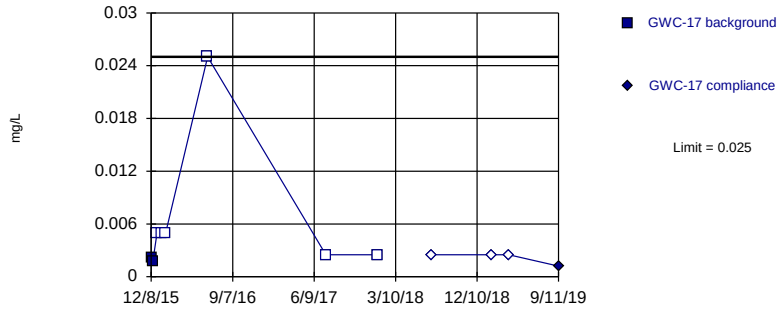
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

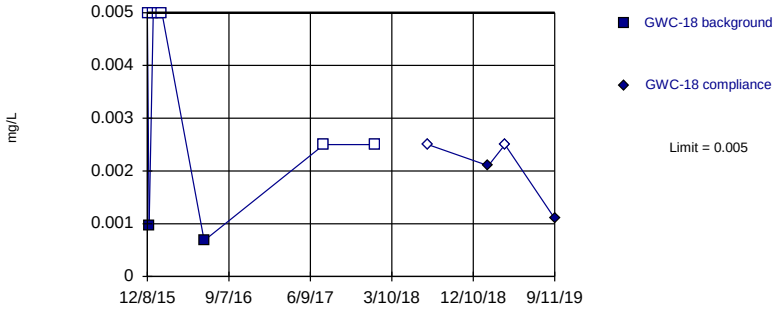
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

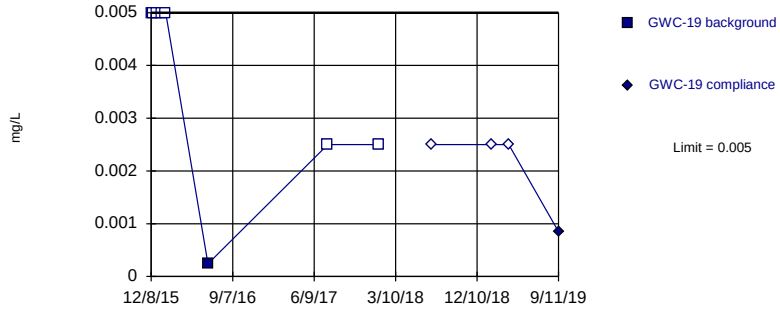
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

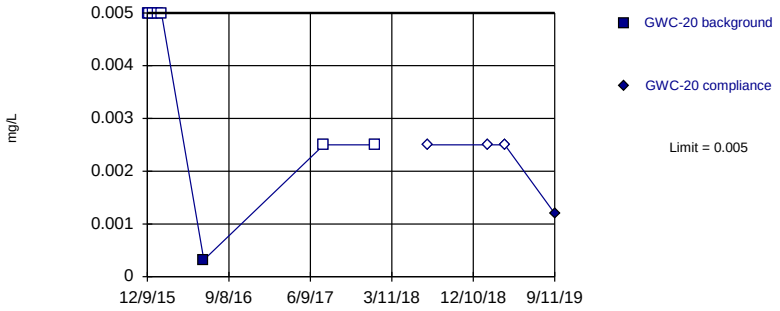
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

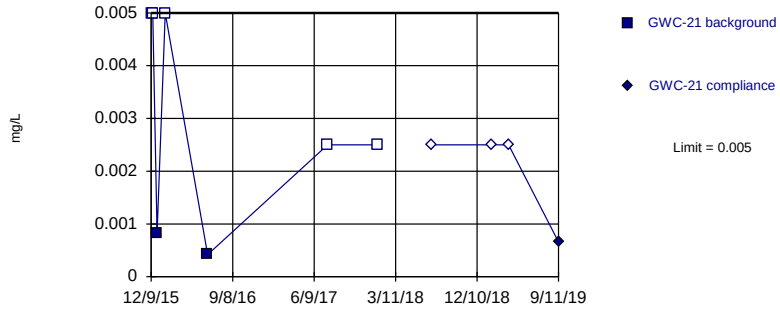
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 7 background values. 71.43% NDs. Well-constituent pair annual alpha = 0.01726. Individual comparison alpha = 0.008668 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

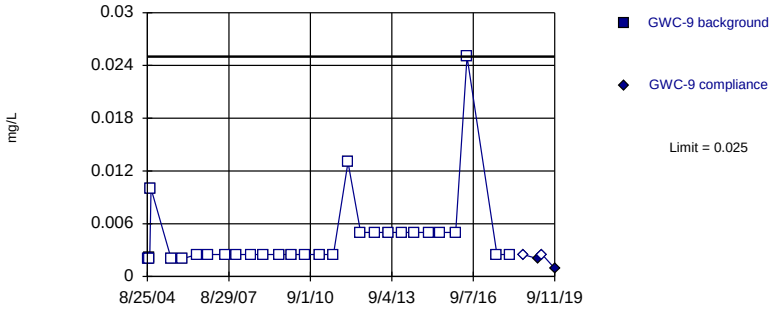
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 96.55% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

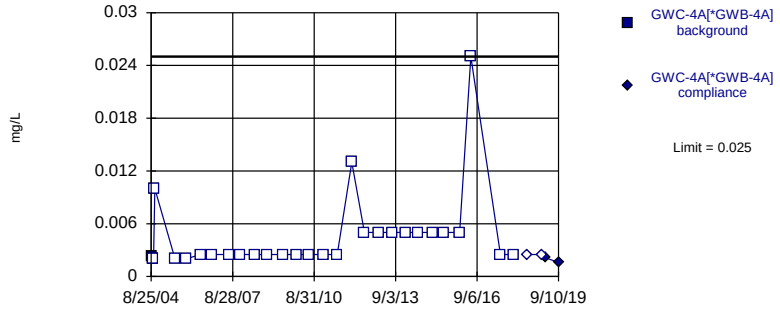
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 96.55% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

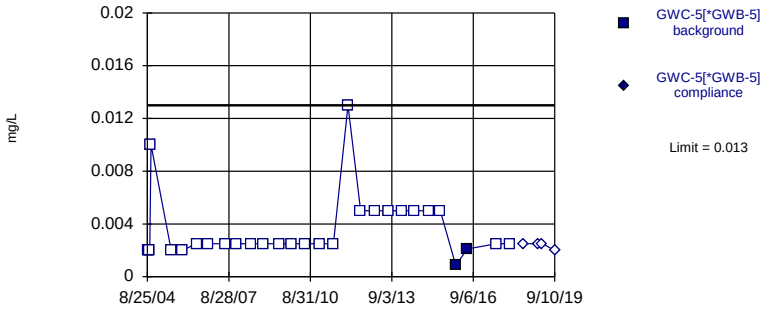
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 93.1% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

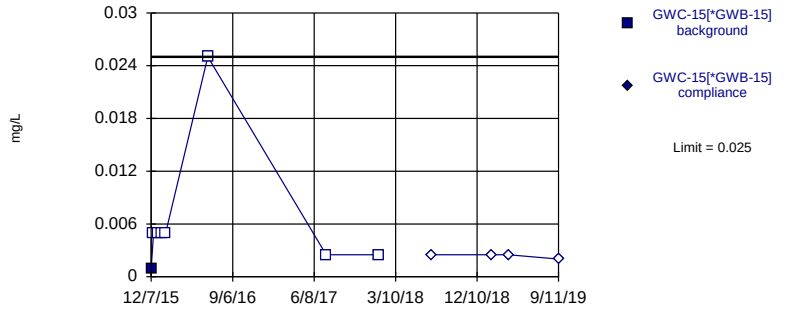
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

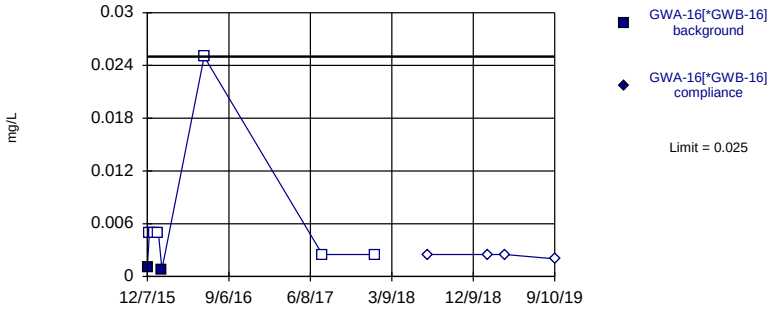
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Copper, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

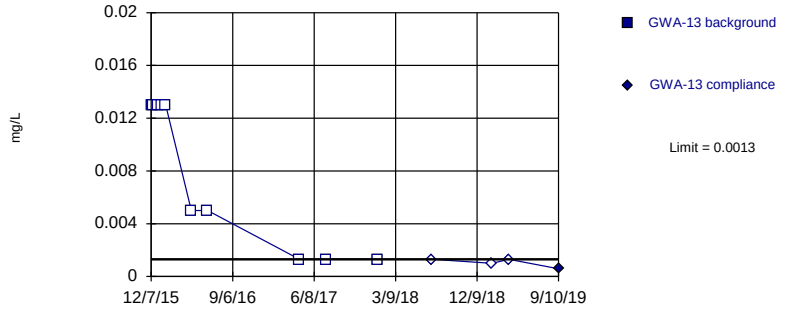
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

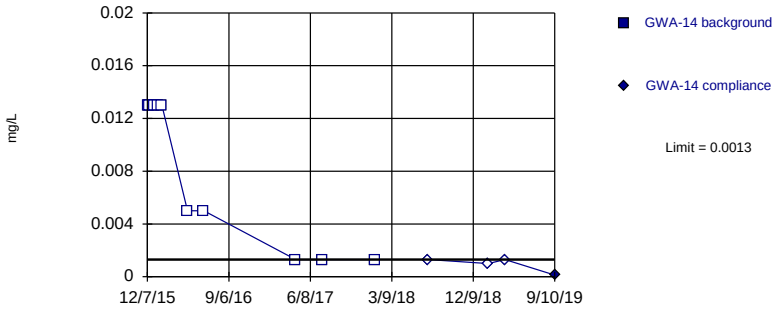
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

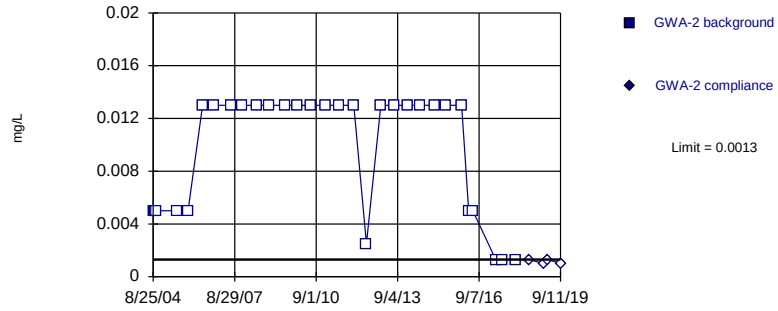
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

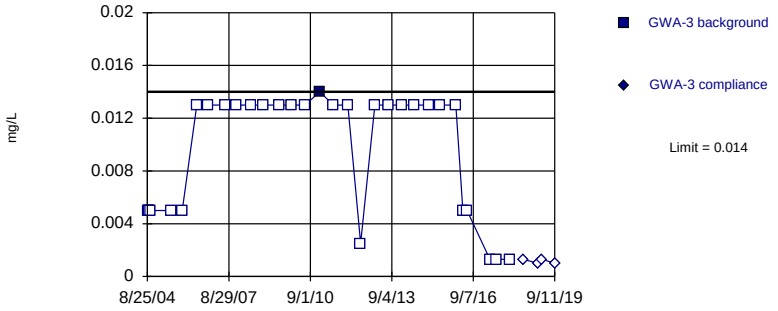
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

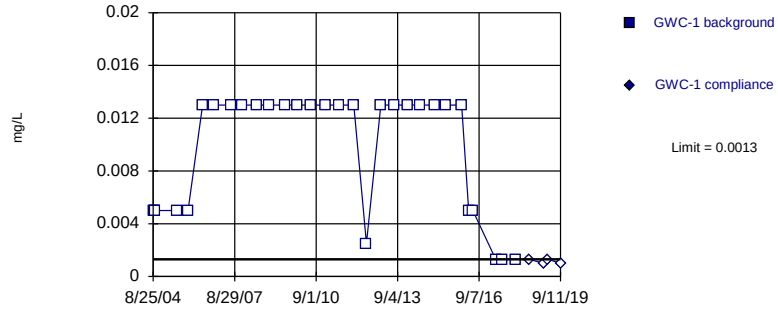
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 30) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

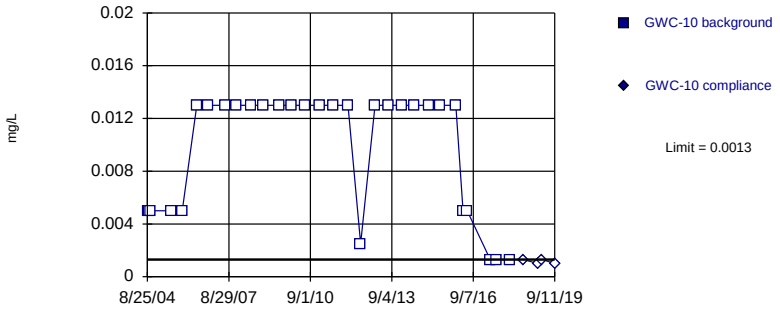
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

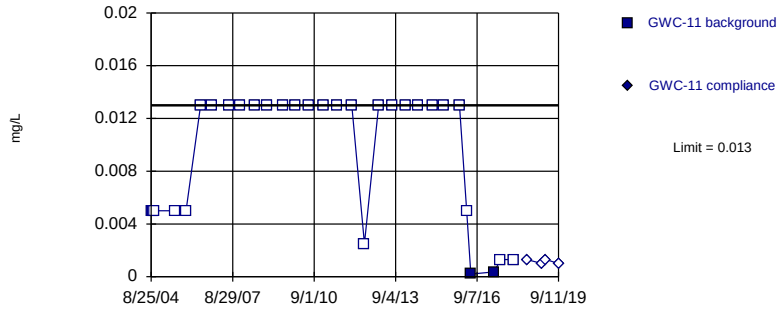
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

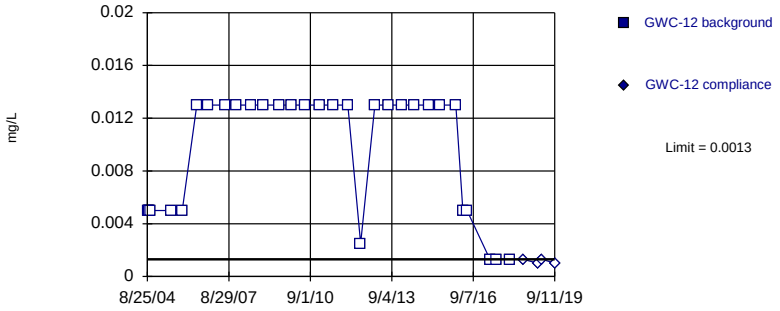
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

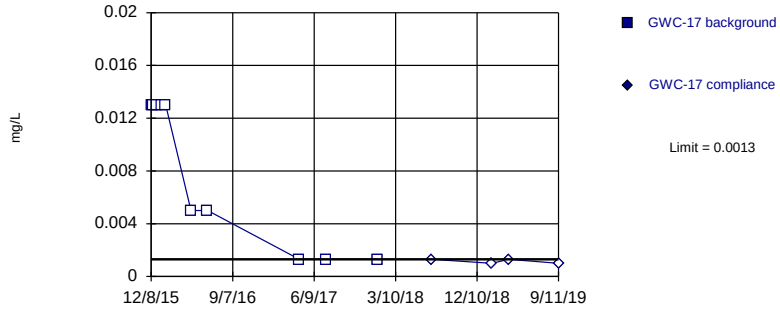
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

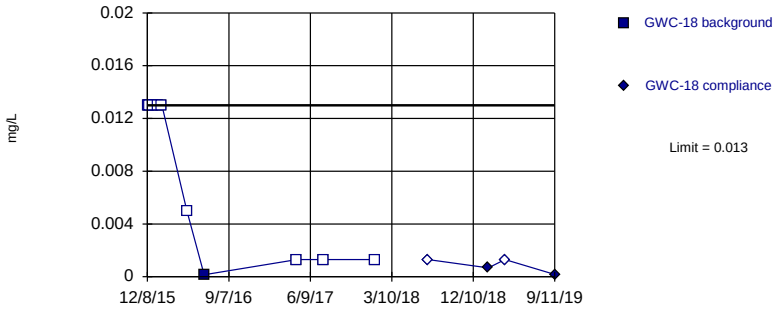
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

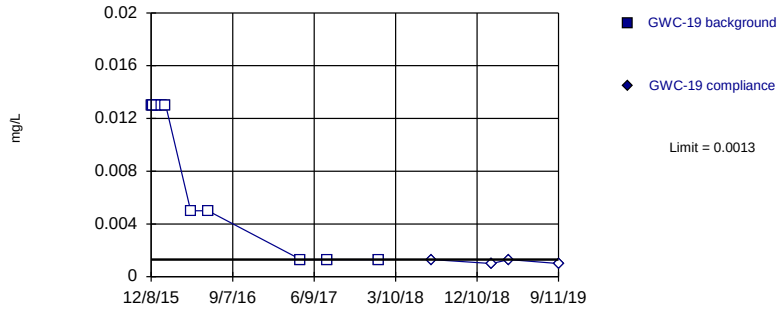
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

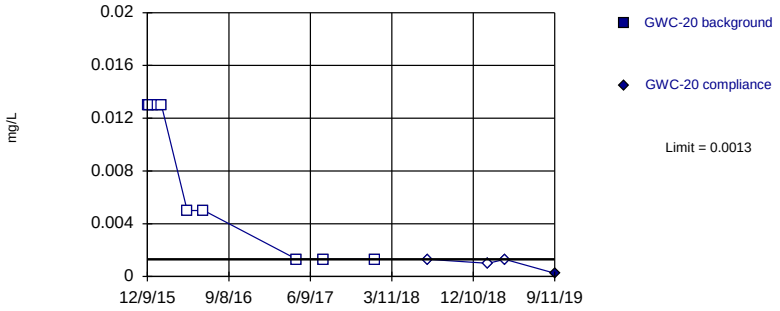
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

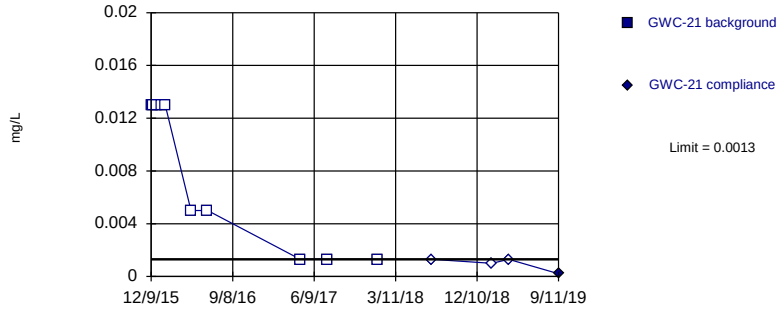
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

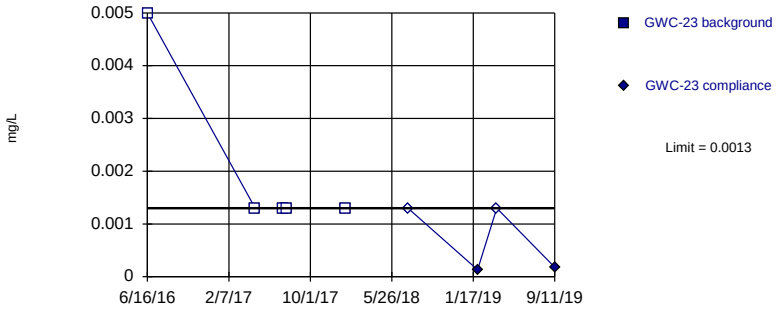
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

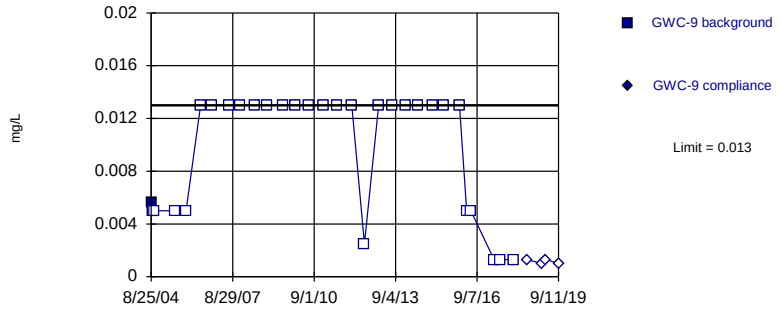
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

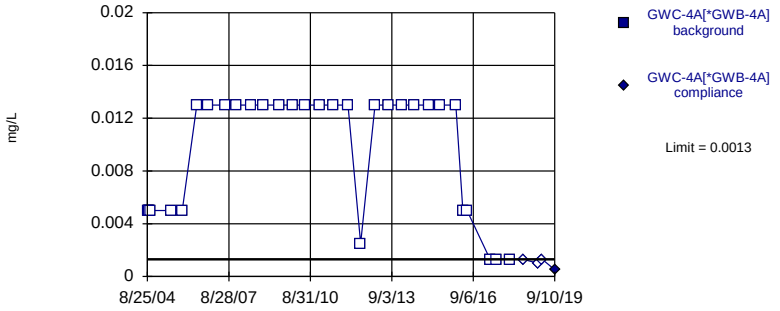
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

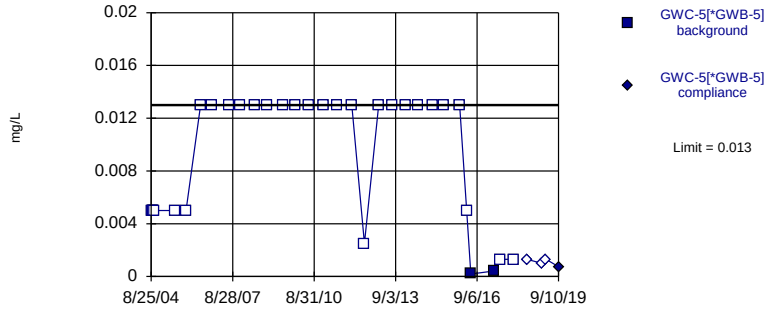
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

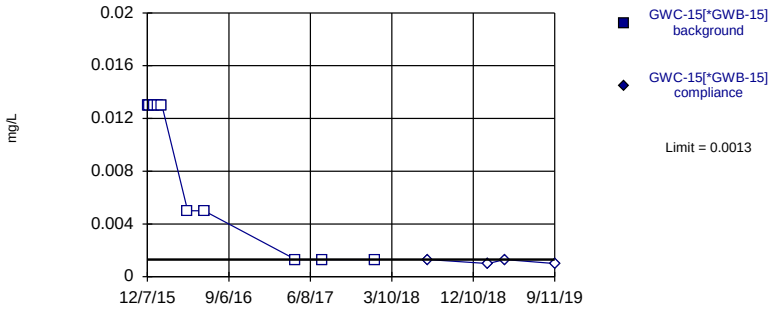
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

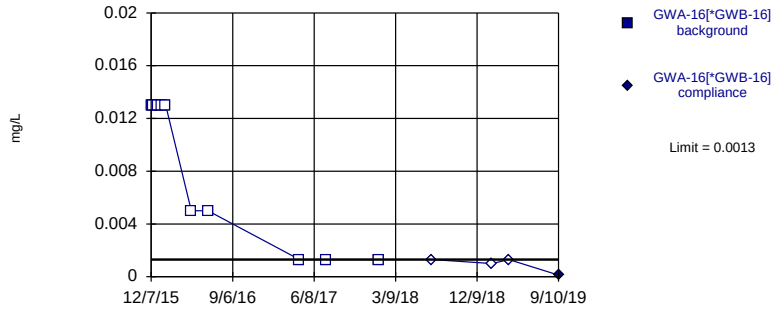
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Lead, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

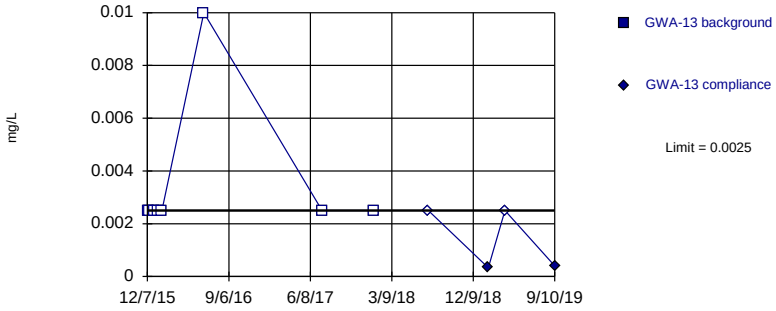
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

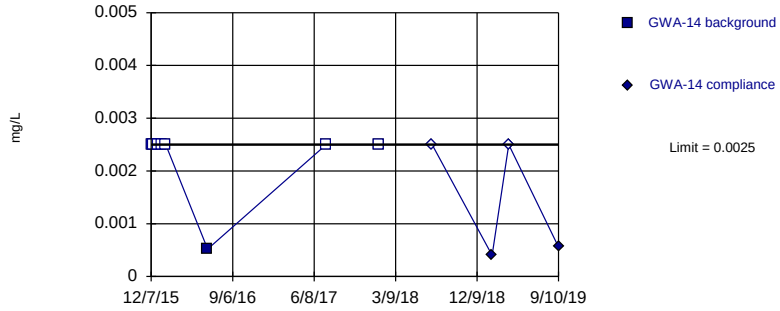
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

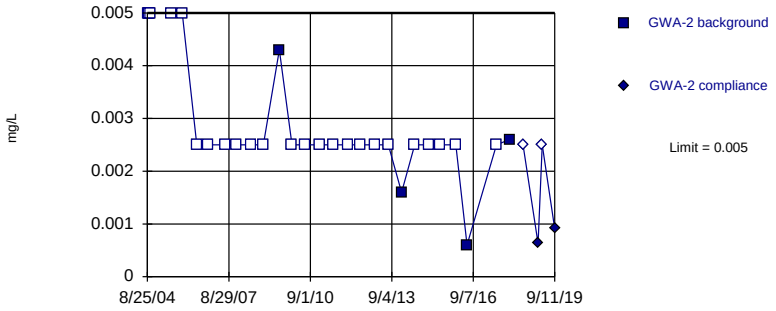
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 86.21% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

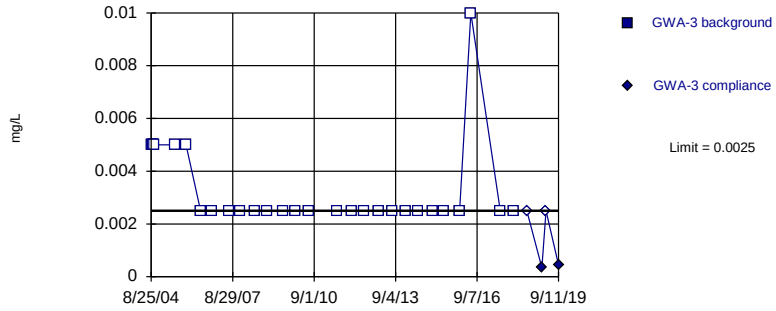
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0005119. Individual comparison alpha = 0.000256 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

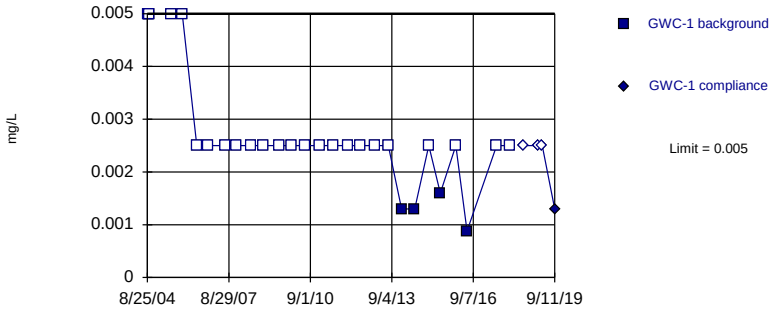
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 28 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

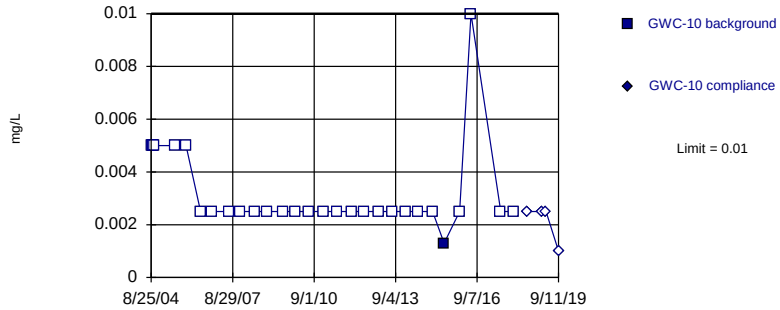
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 96.55% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

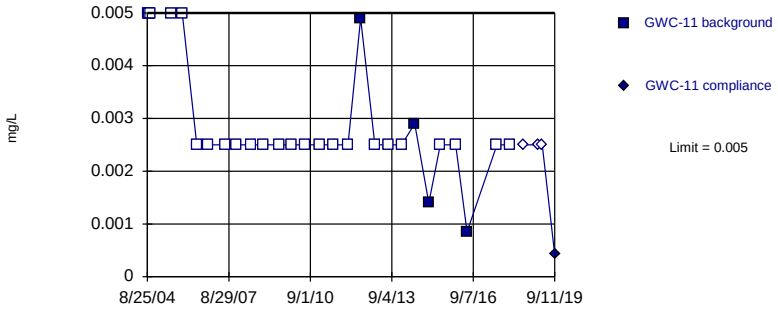
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 86.21% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

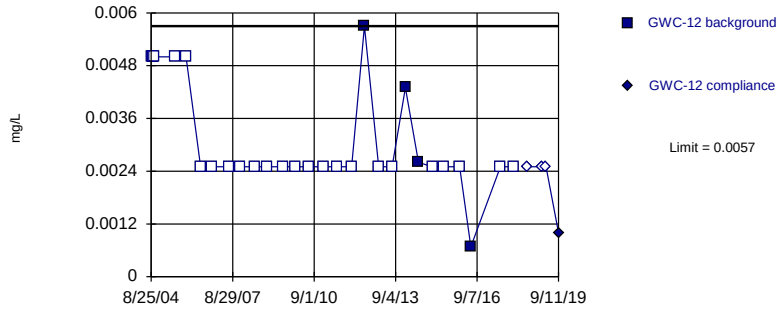
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 86.21% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

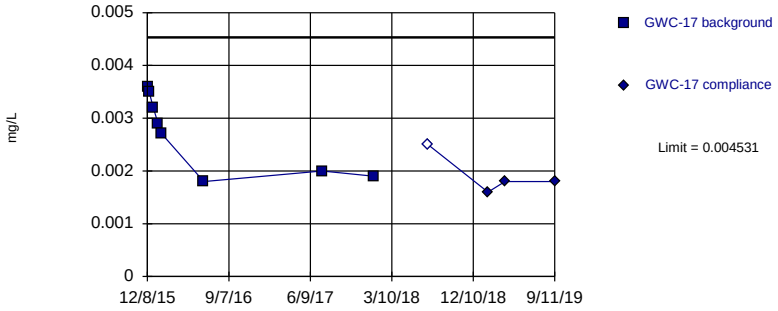
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0027, Std. Dev.=0.0007251, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8961, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

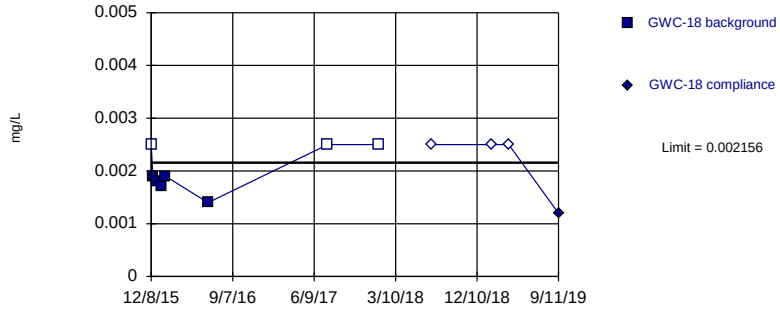
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.001687, Std. Dev.=0.0001857, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8632, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

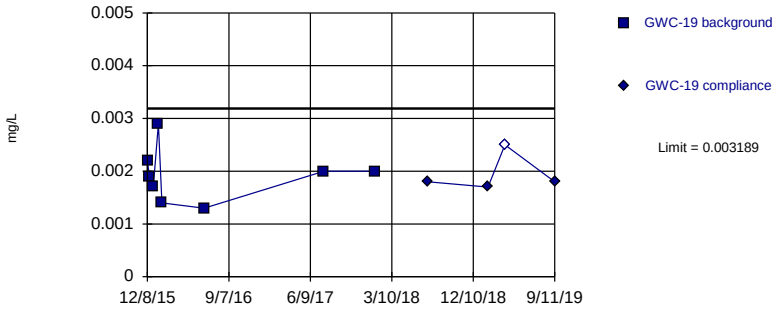
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.001925, Std. Dev.=0.0005007, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9326, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

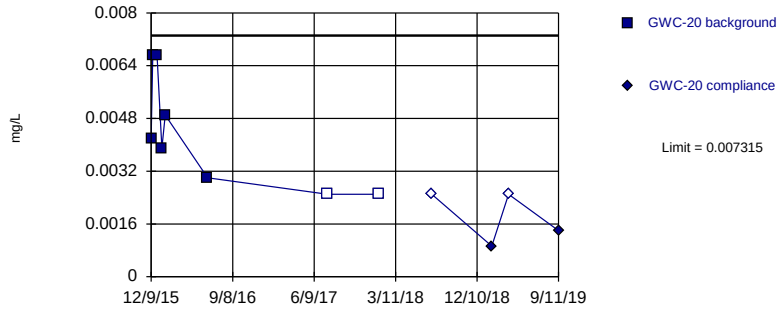
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0039, Std. Dev.=0.001352, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8802, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

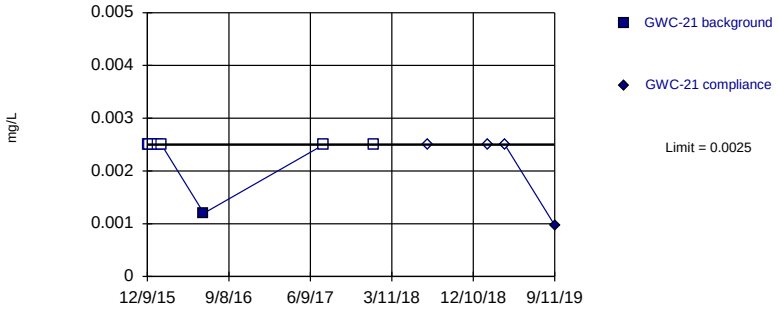
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

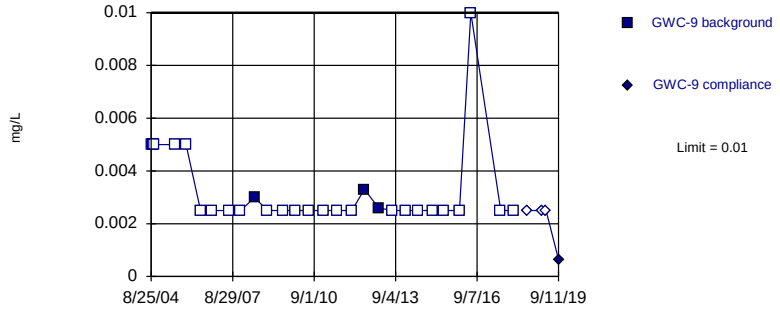
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 89.66% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

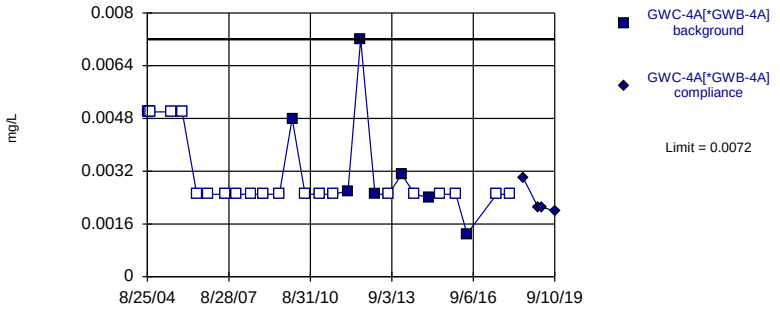
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 75.86% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

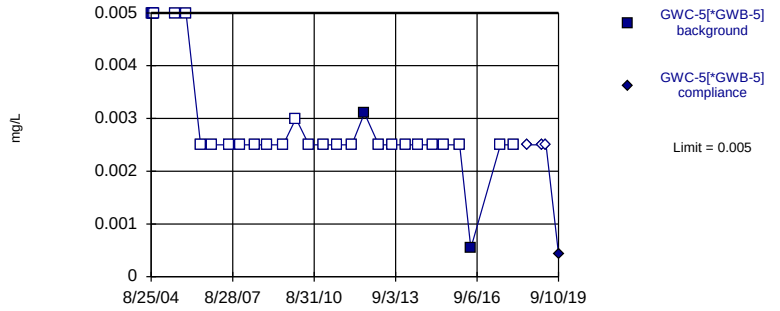
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 93.1% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

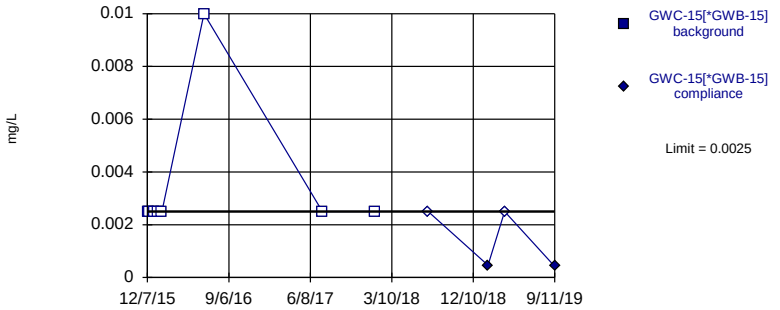
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

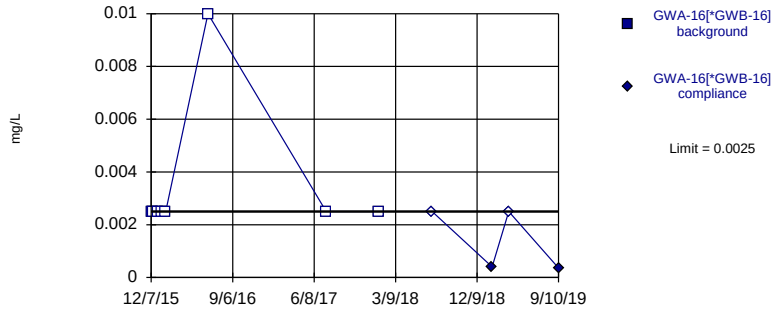
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Nickel, Total Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

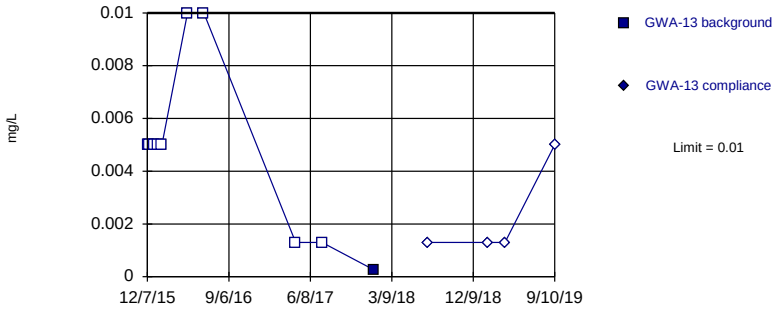
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

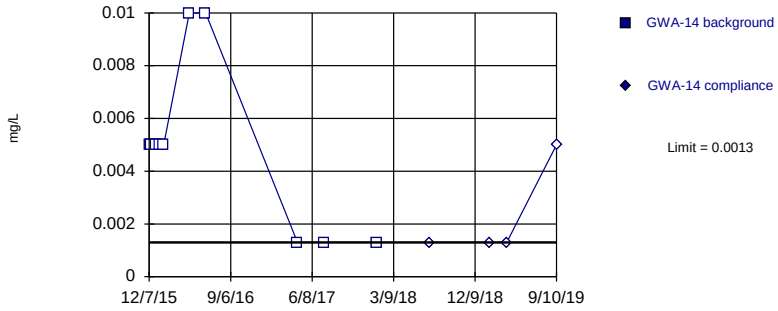
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

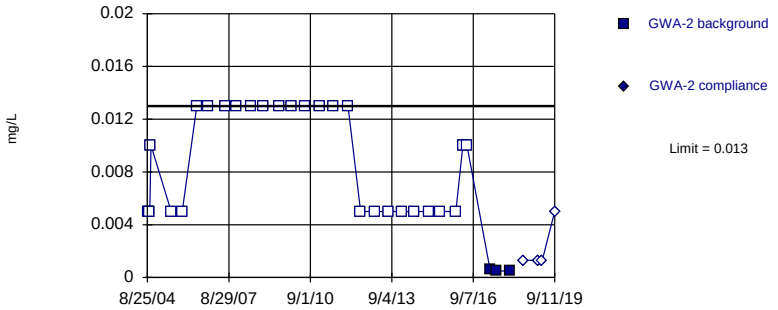
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 90.32% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

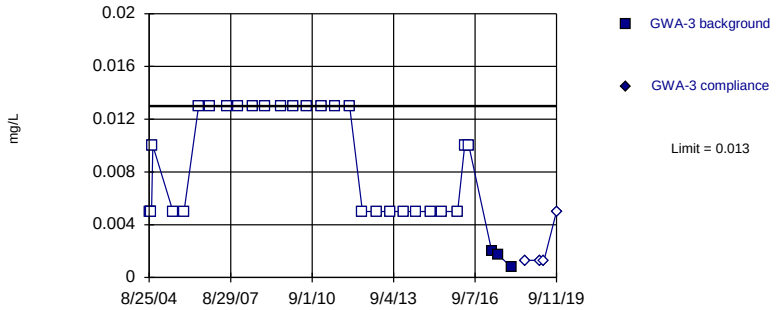
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 90.32% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:18 PM View: LF4 EPD

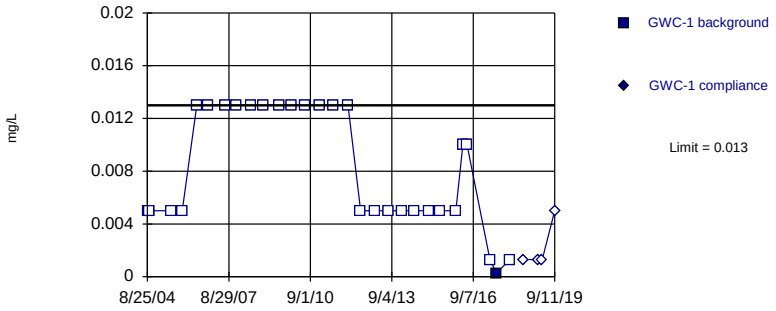
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 30 background values. 96.67% NDs. Well-constituent pair annual alpha = 0.0003661. Individual comparison alpha = 0.0001831 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

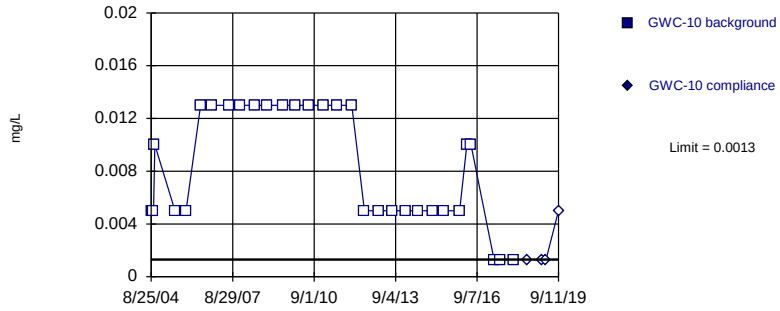
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

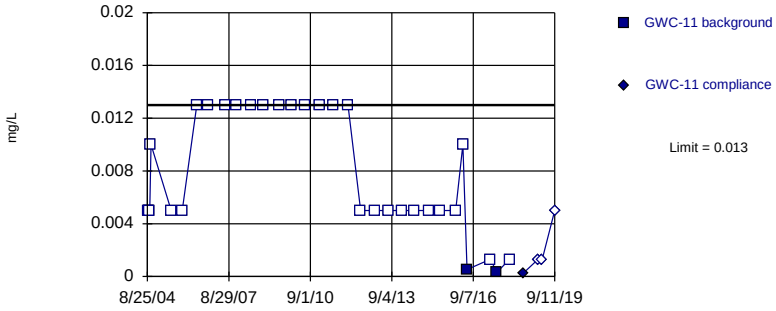
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

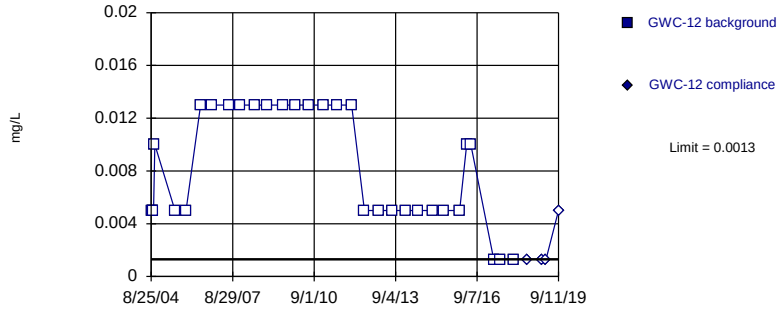
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

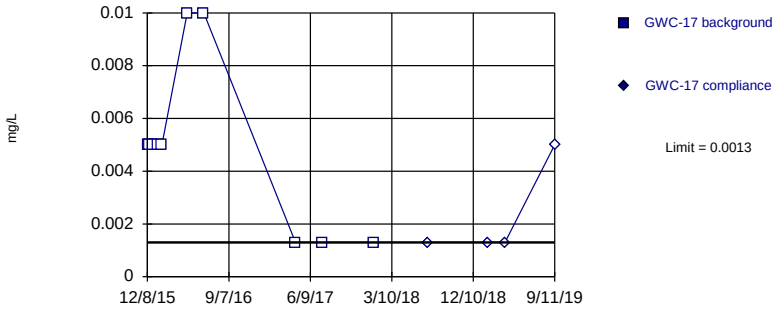
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

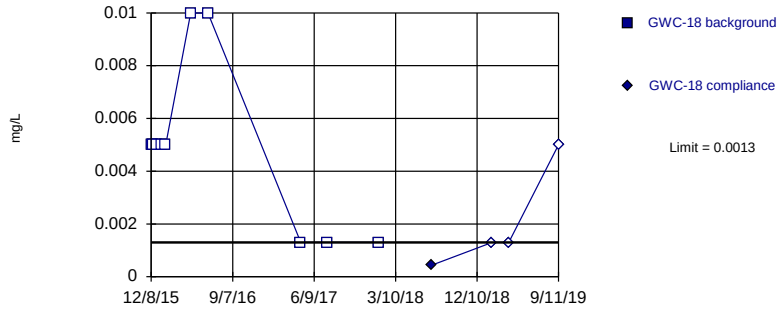
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

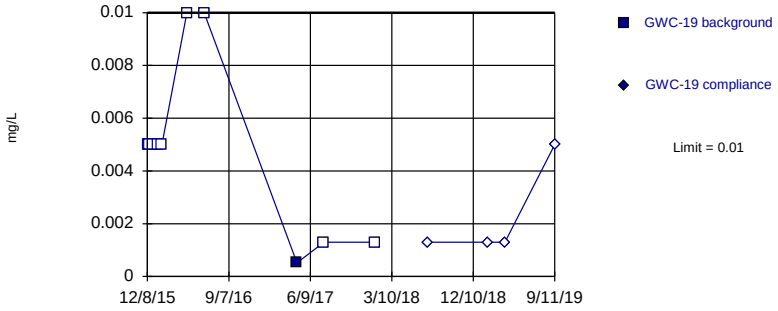
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

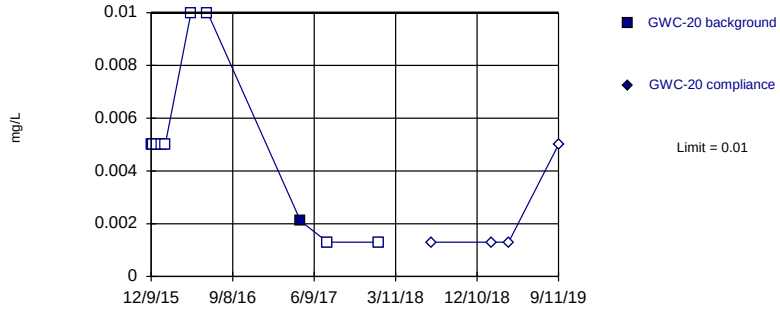
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

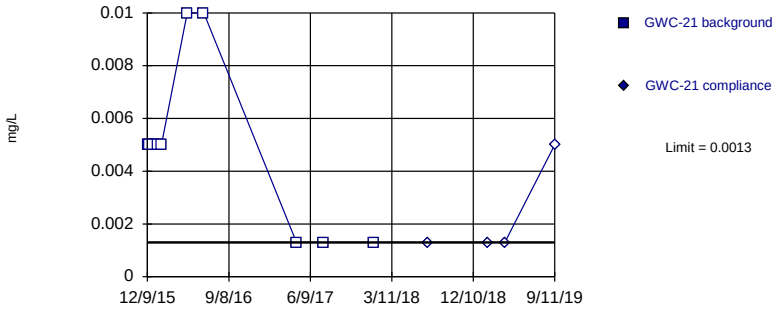
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

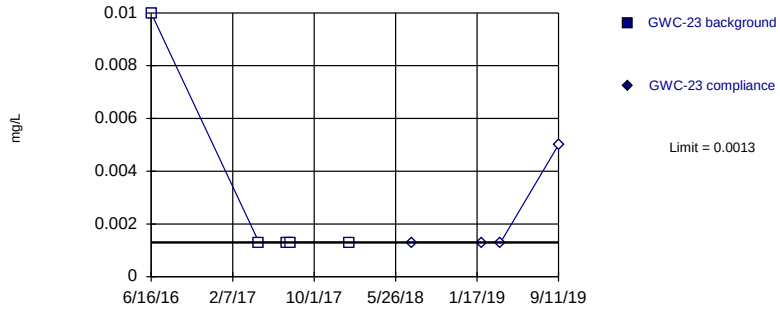
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 5) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

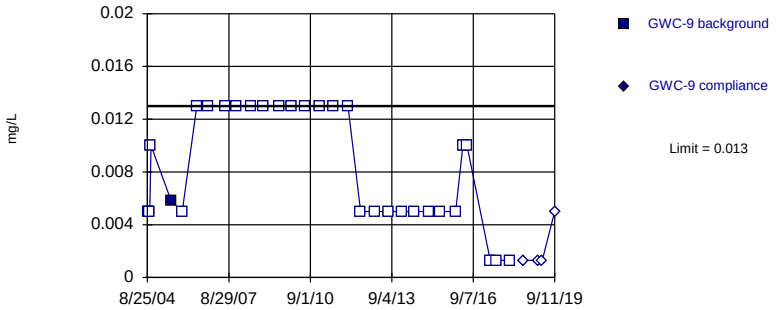
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 96.77% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

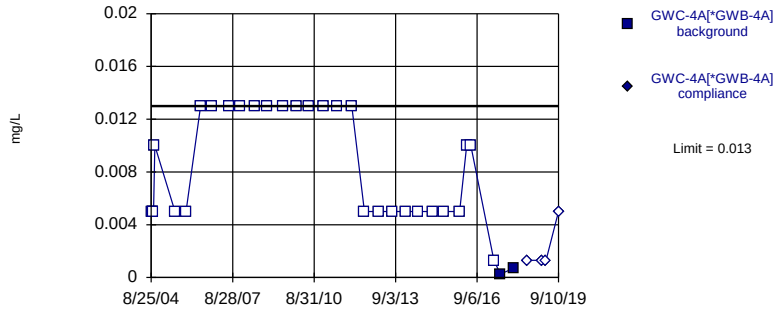
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 31 background values. 93.55% NDs. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

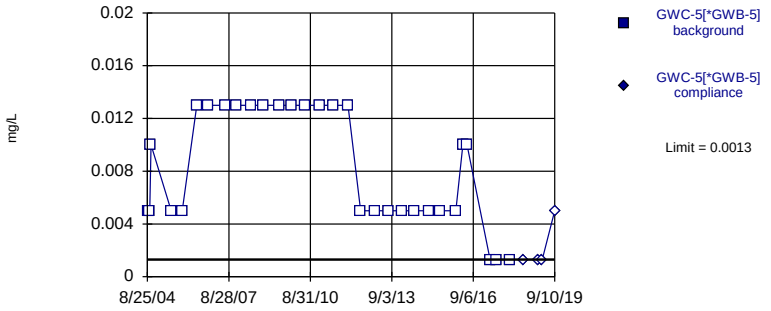
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 31) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0003403. Individual comparison alpha = 0.0001701 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

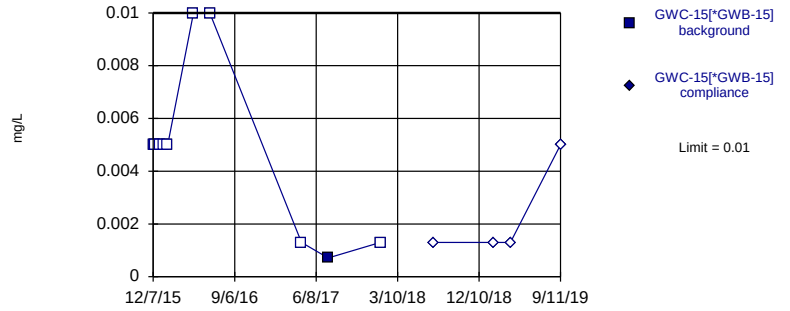
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

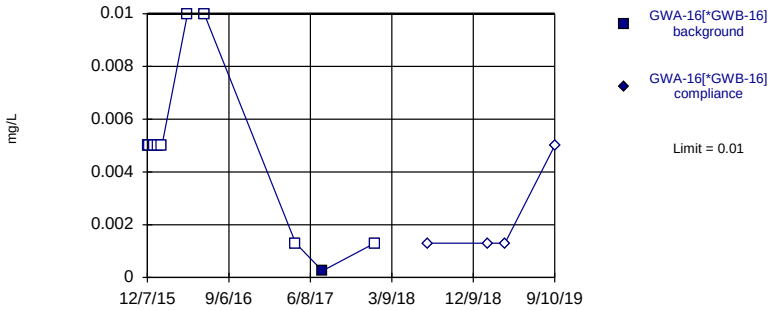
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Selenium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

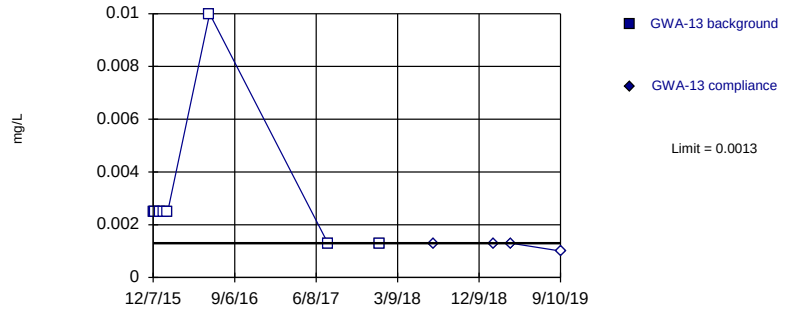
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

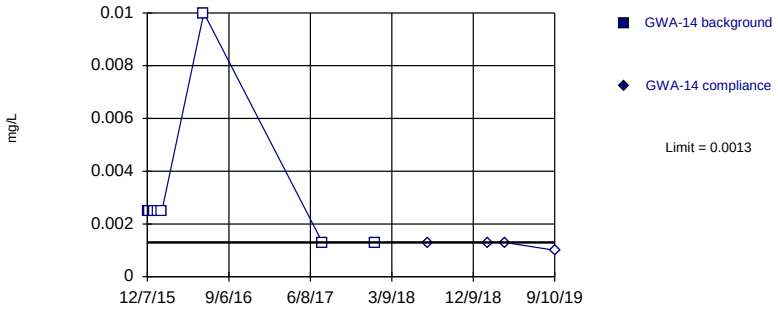
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

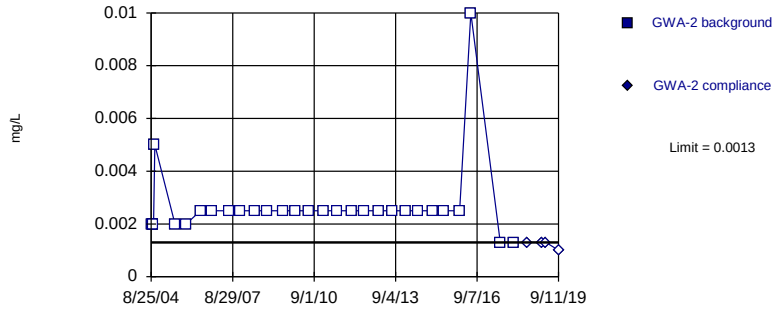
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

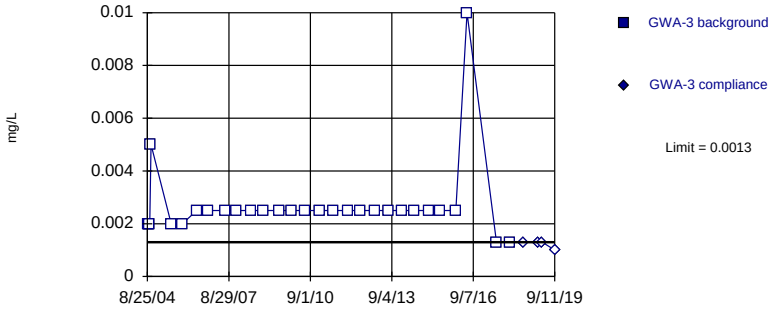
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

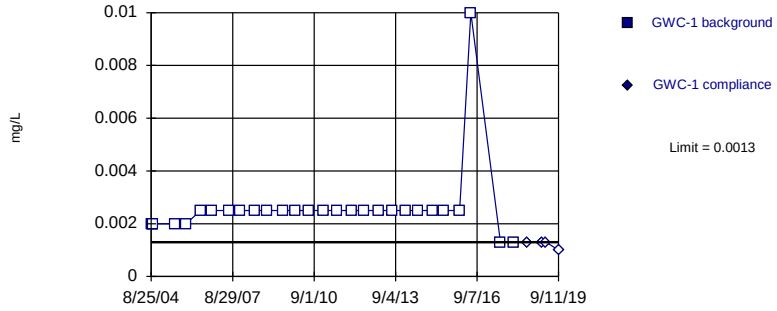
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 28) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

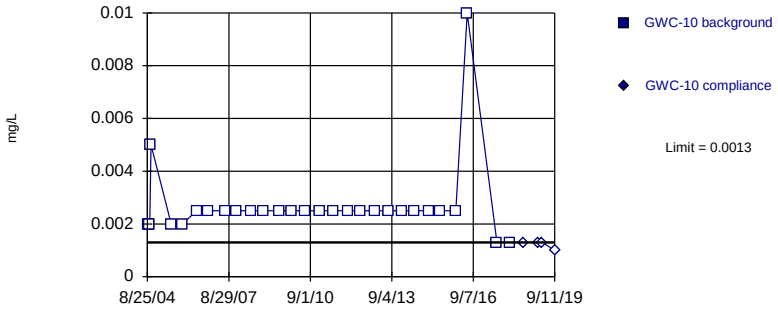
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

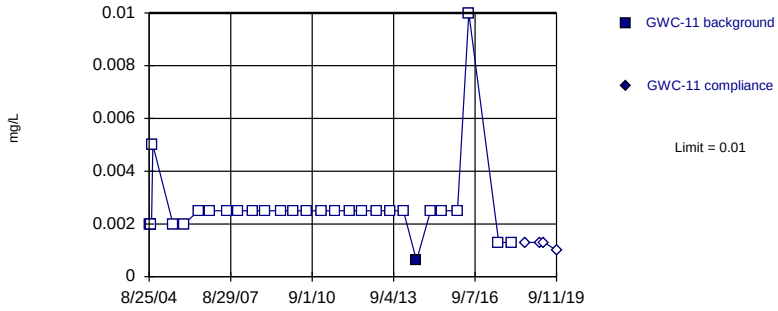
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 96.55% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

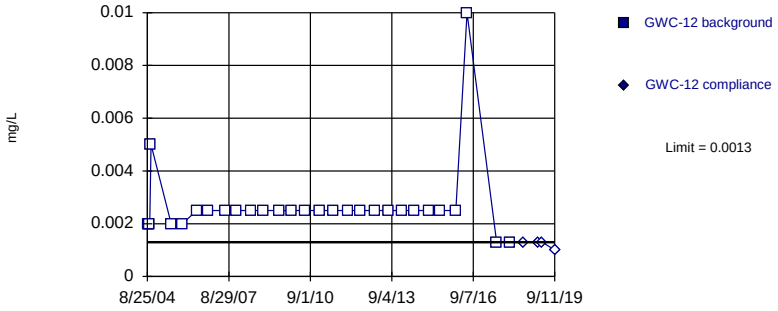
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

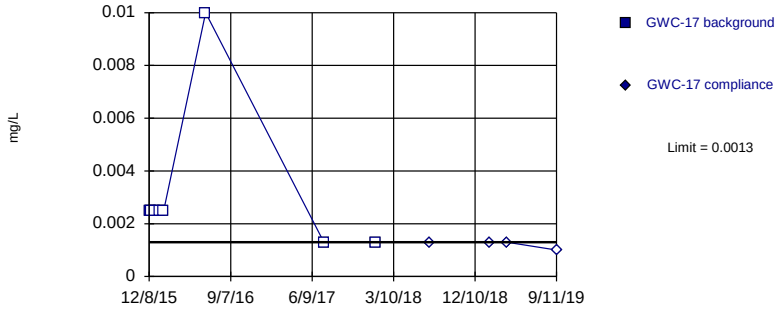
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

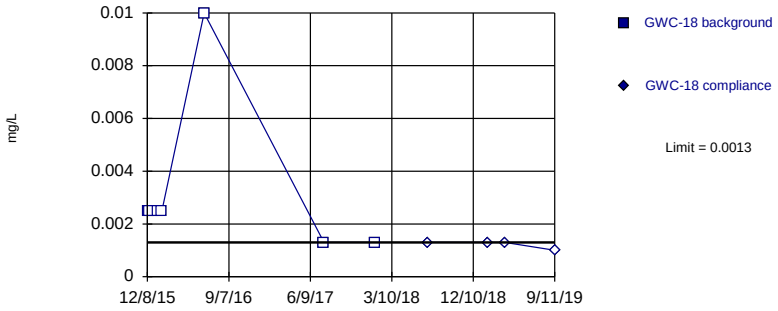
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

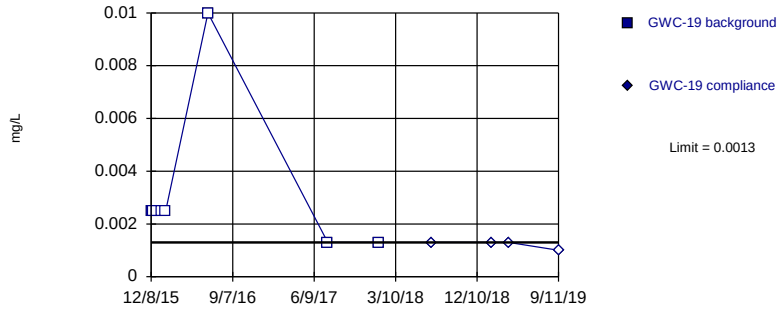
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

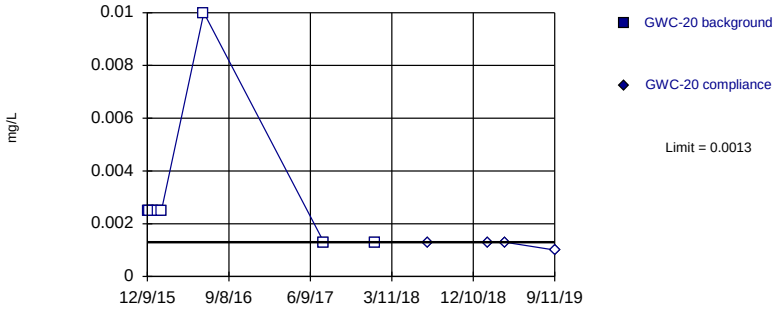
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

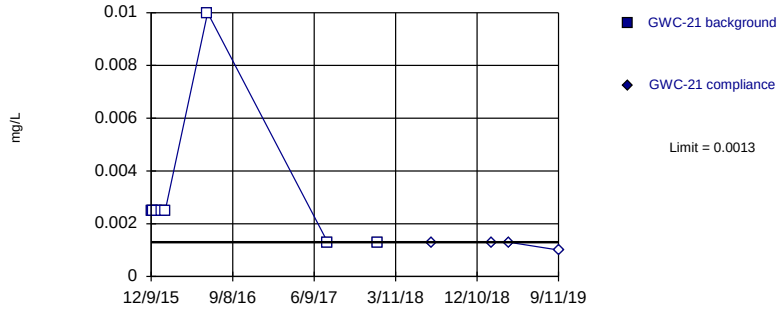
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

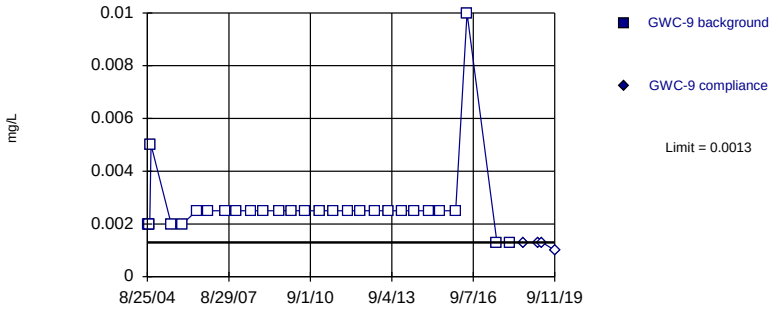
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

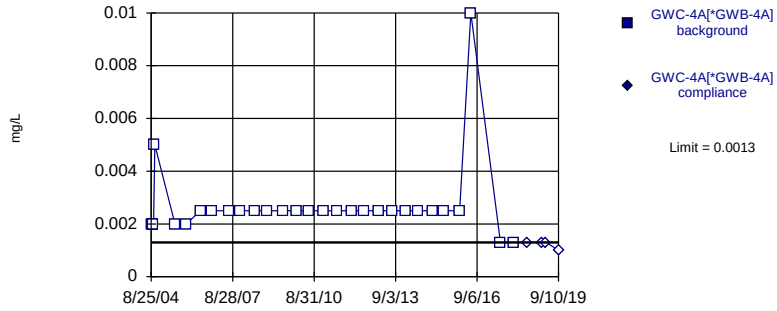
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

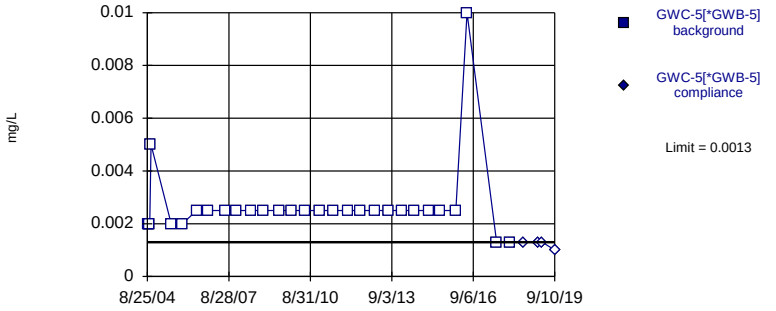
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

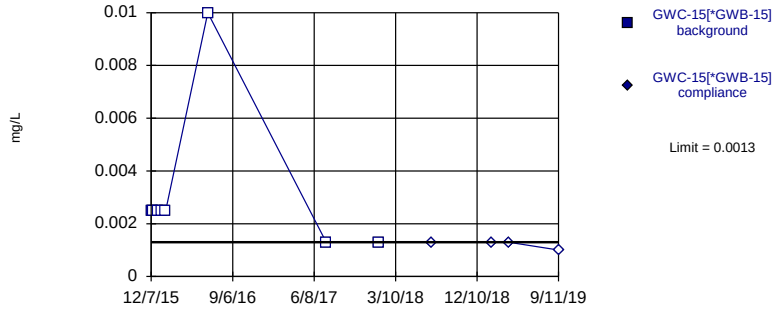
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

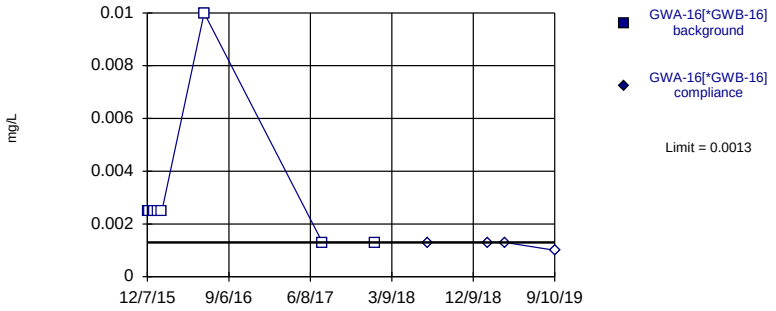
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 8) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Silver, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

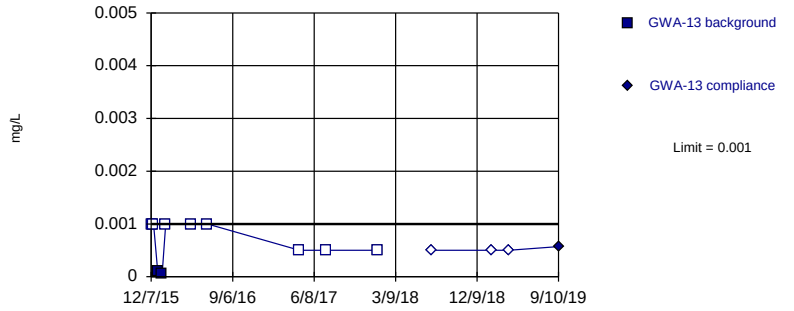
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 80% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

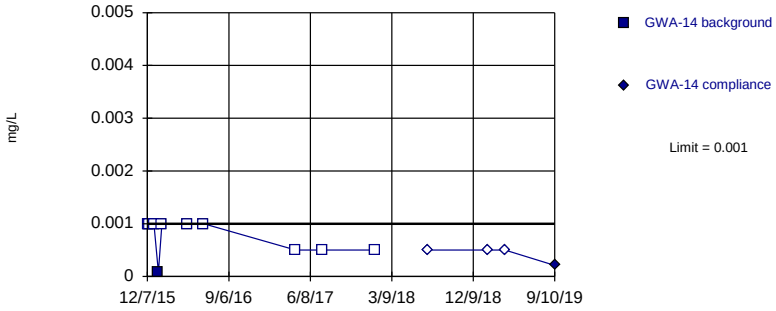
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

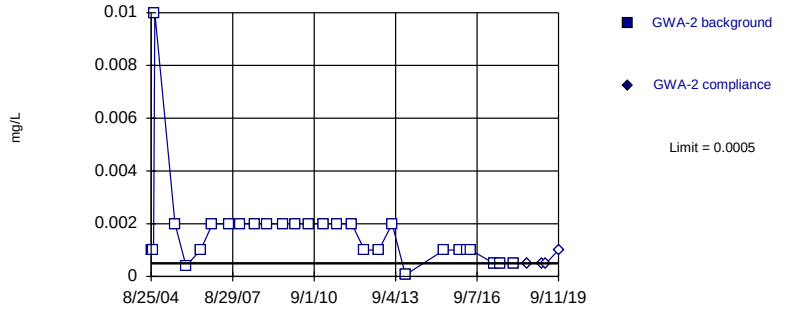
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

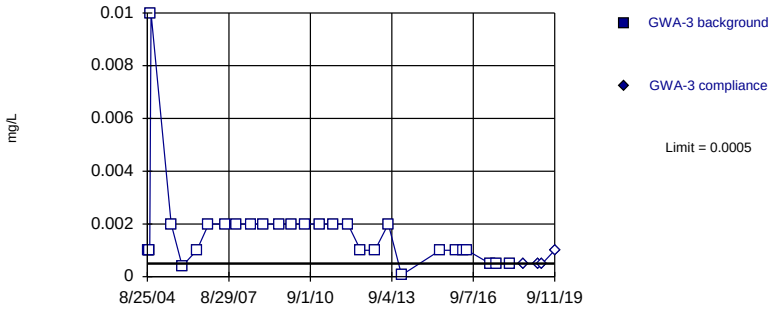
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

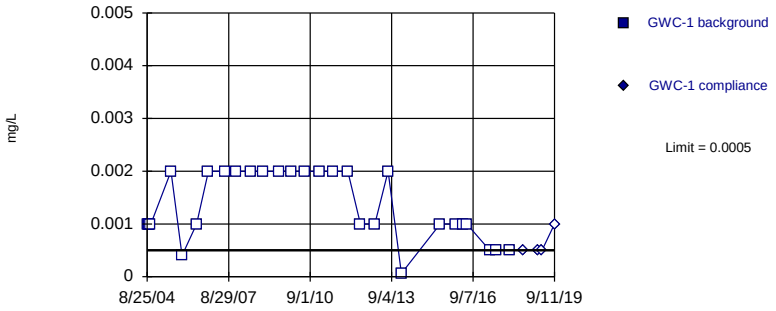
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

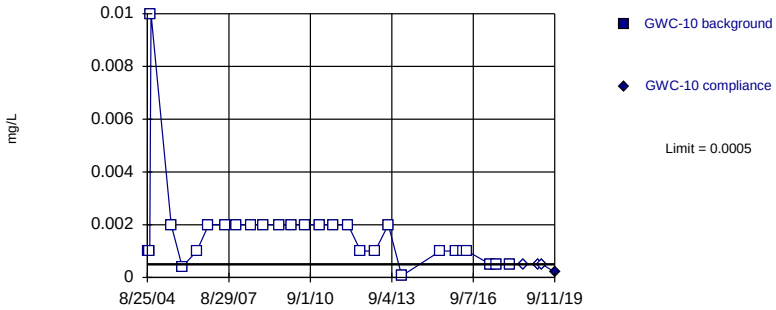
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

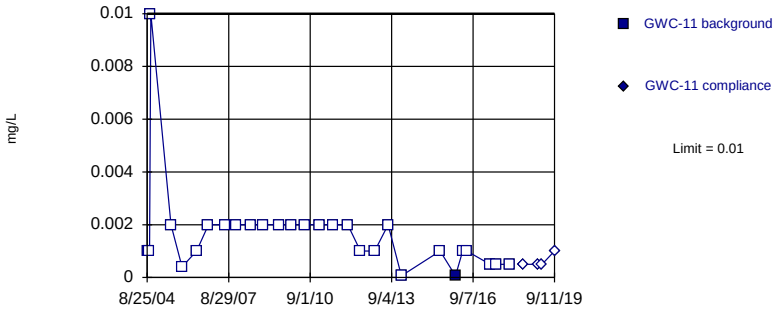
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 96.55% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

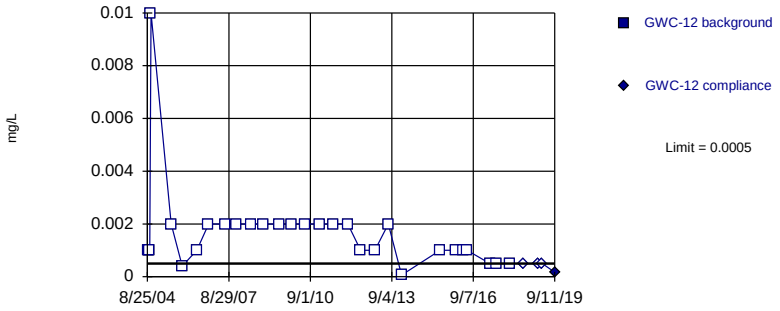
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

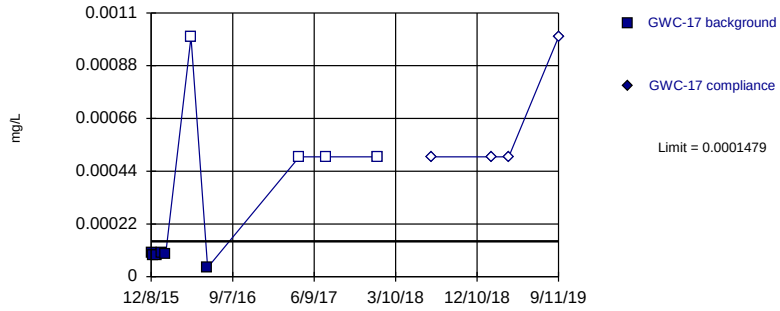
Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.008242, Std. Dev.=0.001763, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8193, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

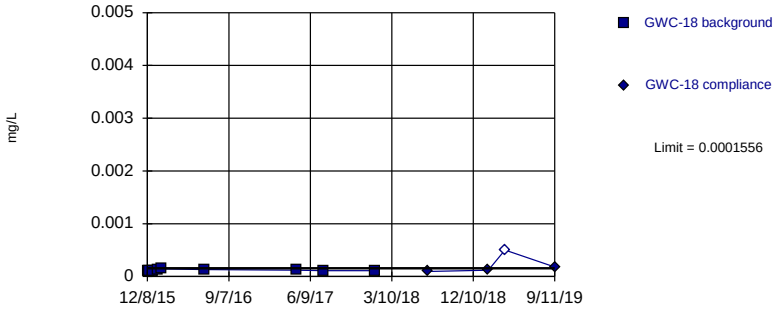
Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.0001166, Std. Dev.=0.00001646, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8778, critical = 0.764. Kappa = 2.374 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

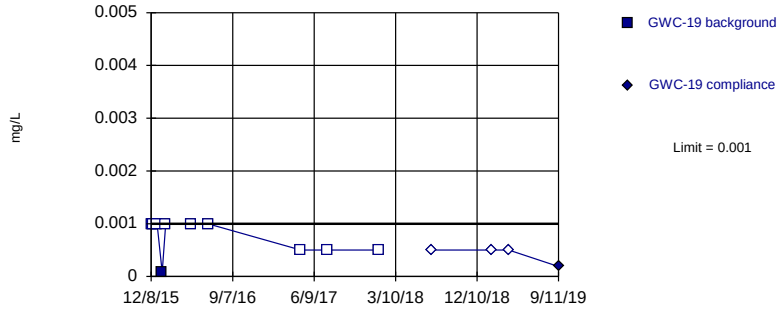
Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

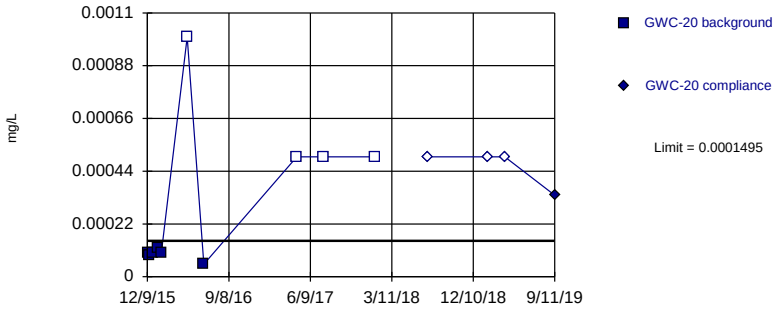
Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.009335, Std. Dev.=0.001301, n=10, 40% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8159, critical = 0.781. Kappa = 2.224 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

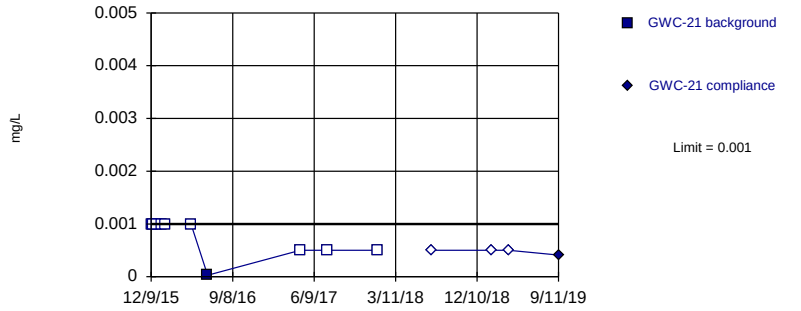
Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 10 background values. 90% NDs. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

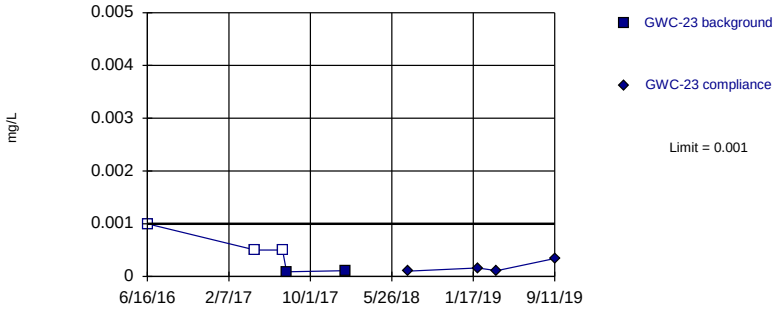
Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 5 background values. 60% NDs. Well-constituent pair annual alpha = 0.03756. Individual comparison alpha = 0.01896 (1 of 3).

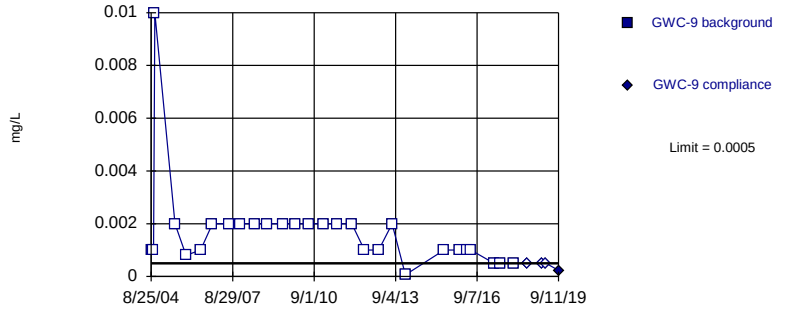
Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

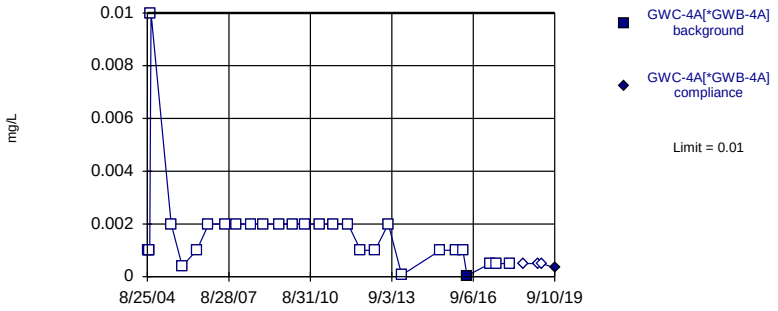
Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 96.55% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

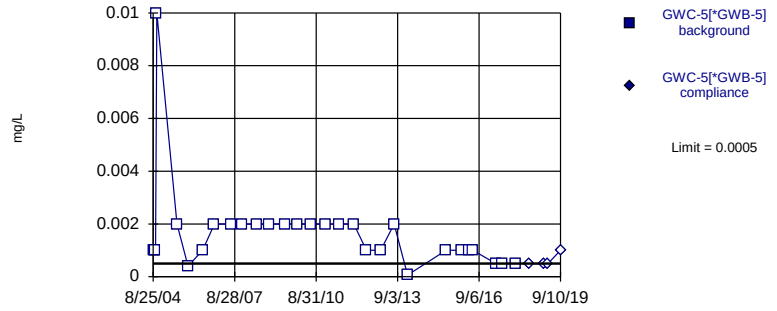
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 29) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

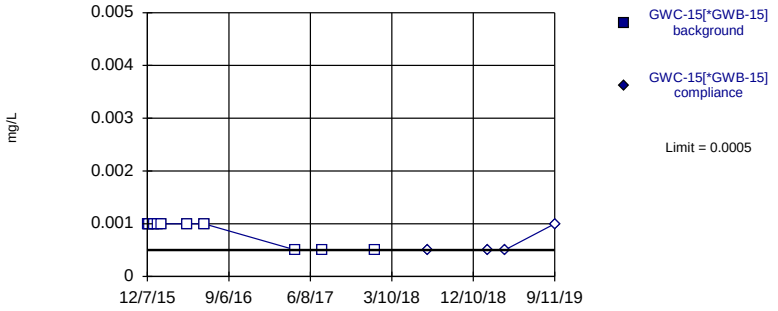
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

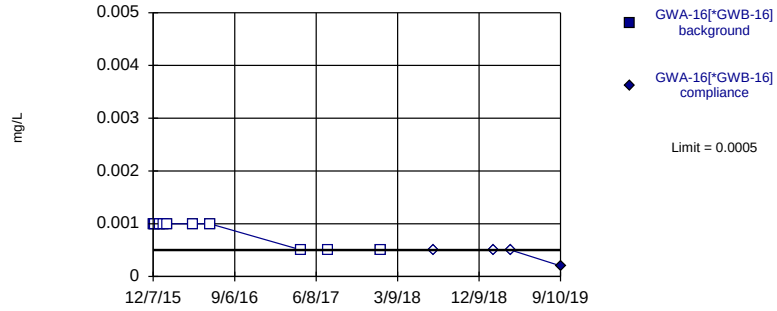
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 10) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006868. Individual comparison alpha = 0.00344 (1 of 3).

Constituent: Thallium Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

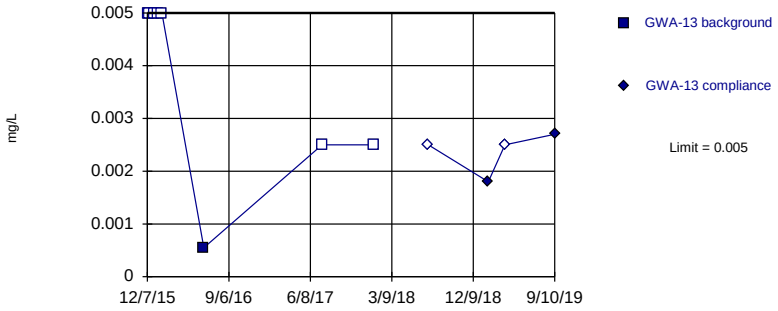
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

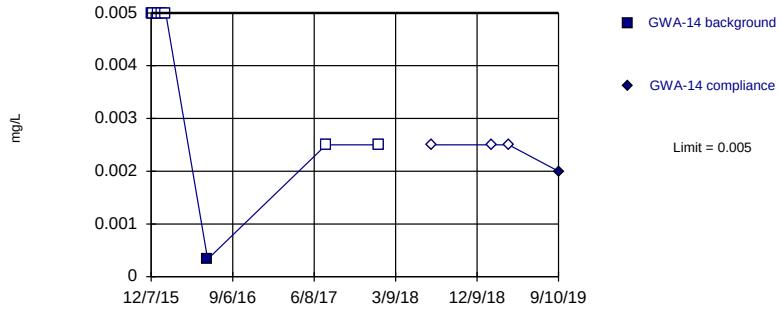
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

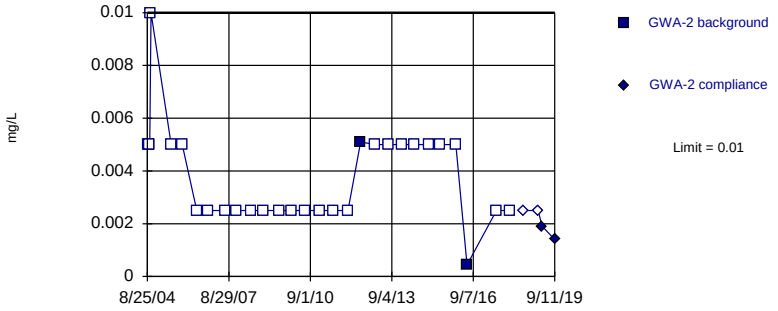
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 93.1% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

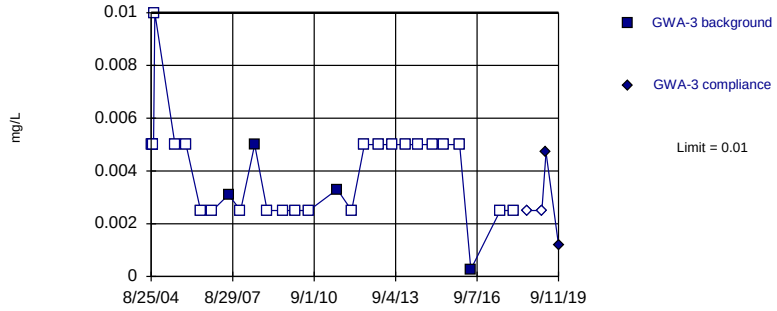
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 28 background values. 85.71% NDs. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

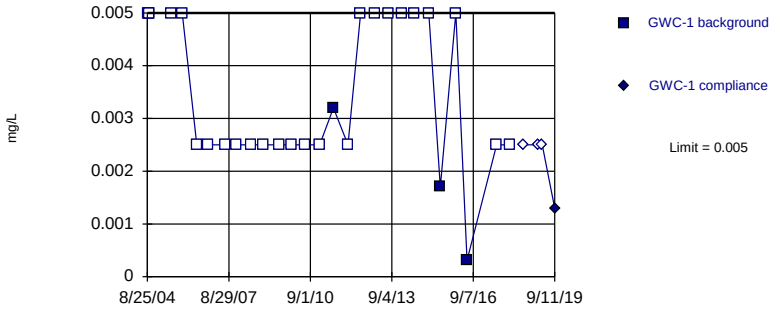
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 28 background values. 89.29% NDs. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

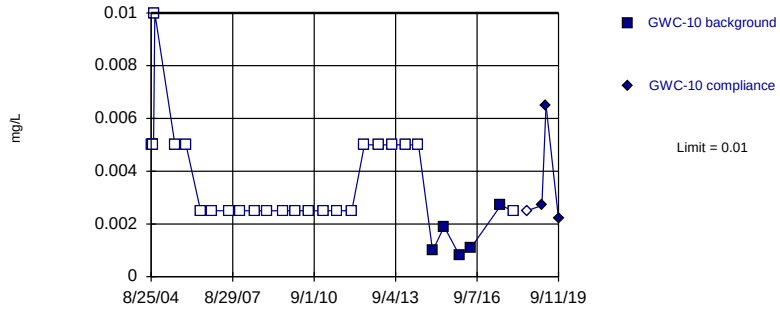
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 82.76% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

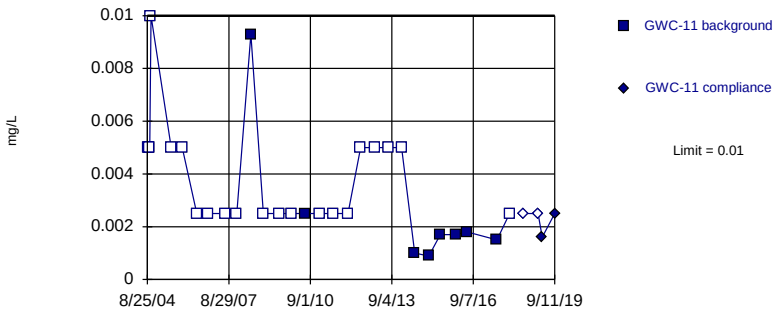
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 72.41% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

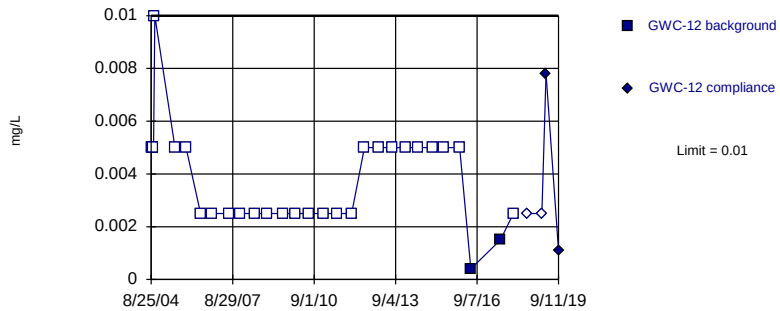
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 93.1% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

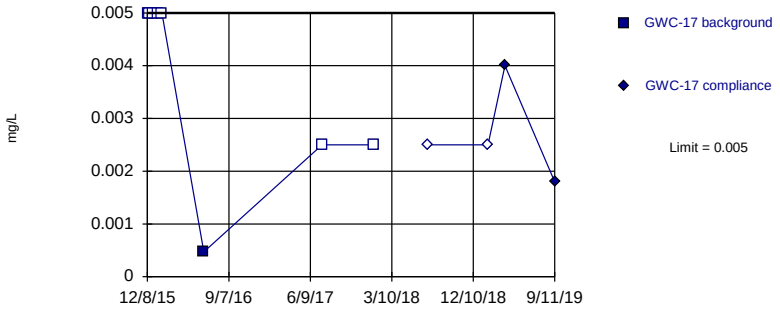
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

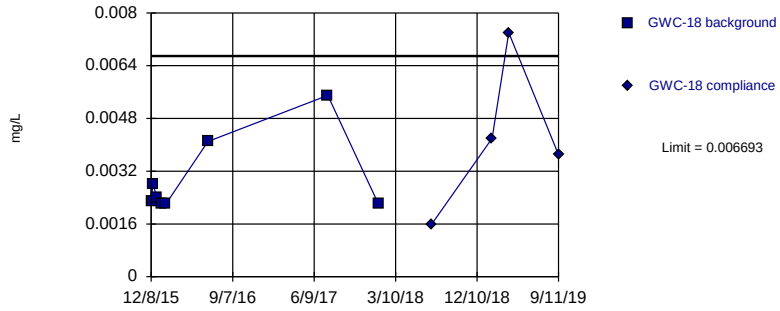
Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-5.88, Std. Dev.=0.346, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7558, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

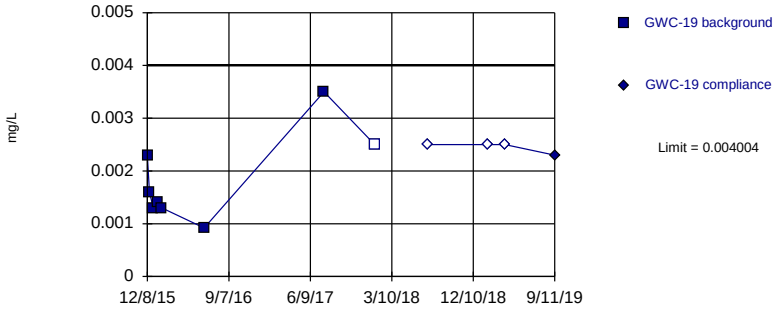
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.001852, Std. Dev.=0.0008521, n=8, 12.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8898, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

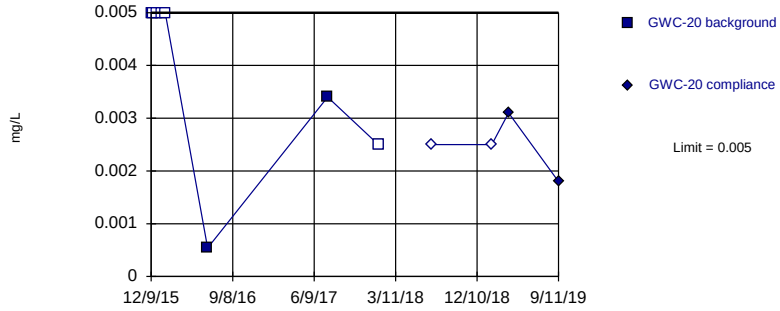
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

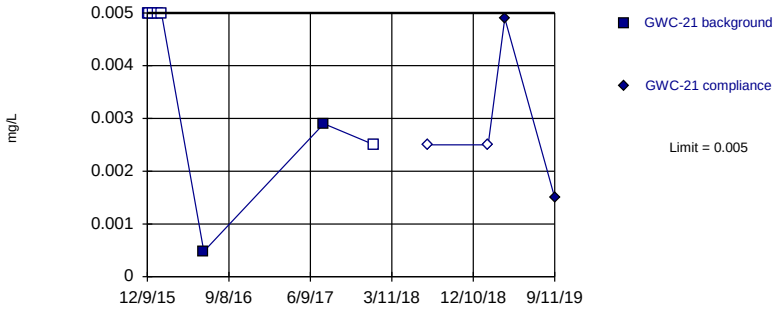
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 75% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

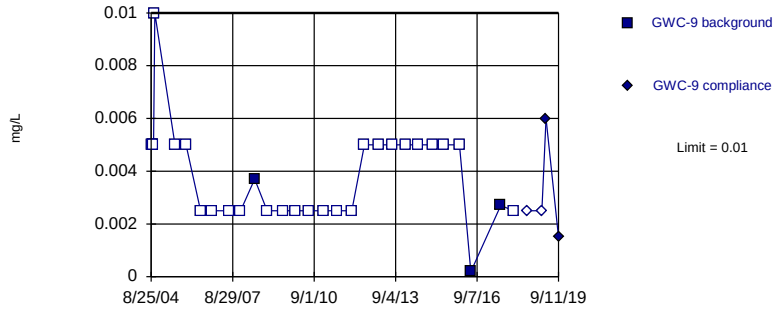
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 89.66% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:19 PM View: LF4 EPD

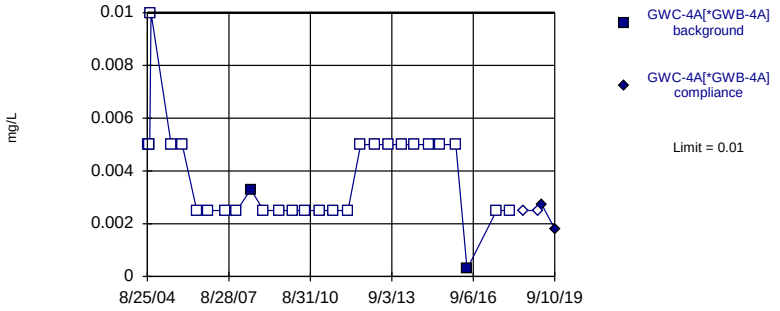
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 93.1% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

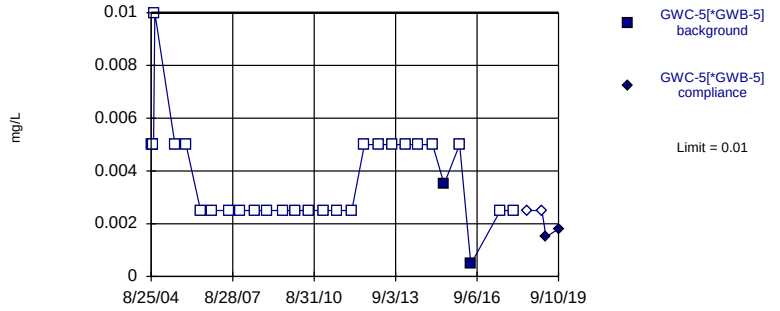
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 93.1% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

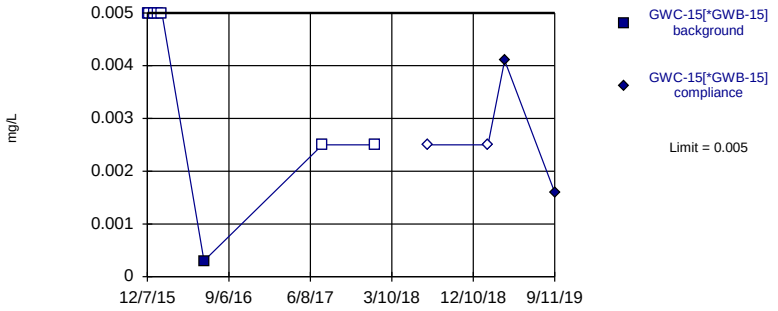
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

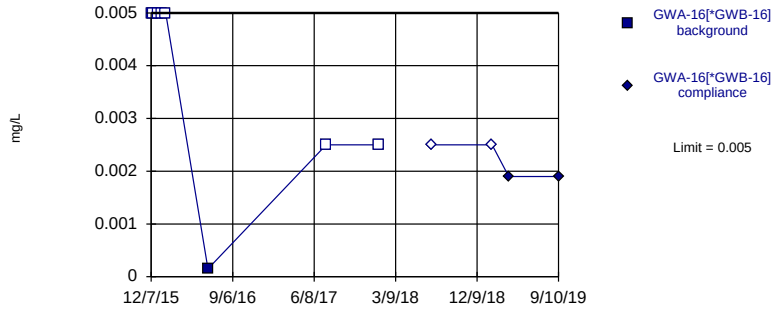
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 8 background values. 87.5% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Vanadium, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

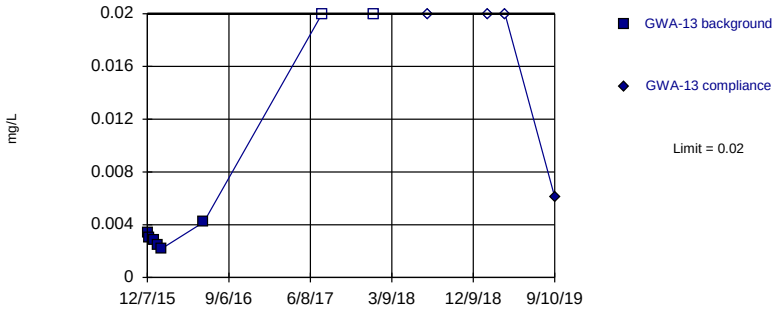
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 25% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

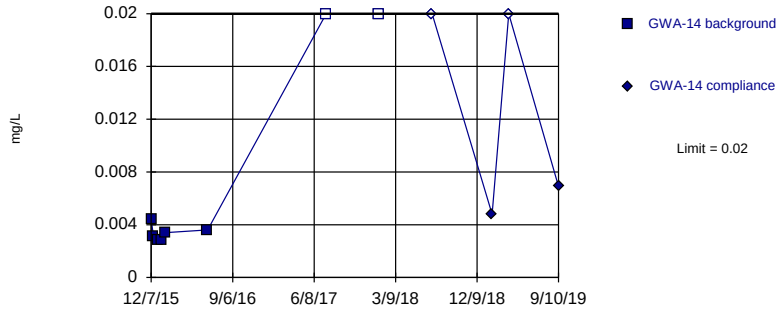
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 25% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

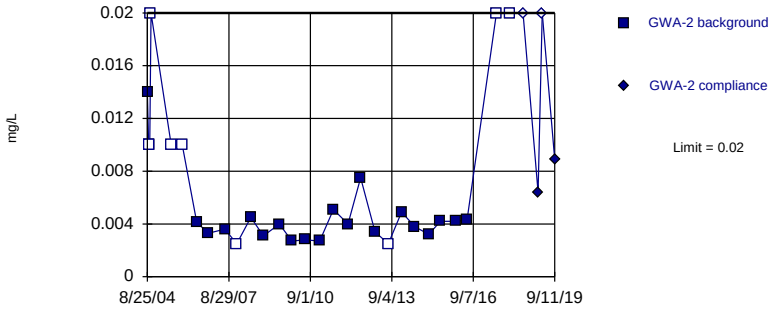
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. 31.03% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

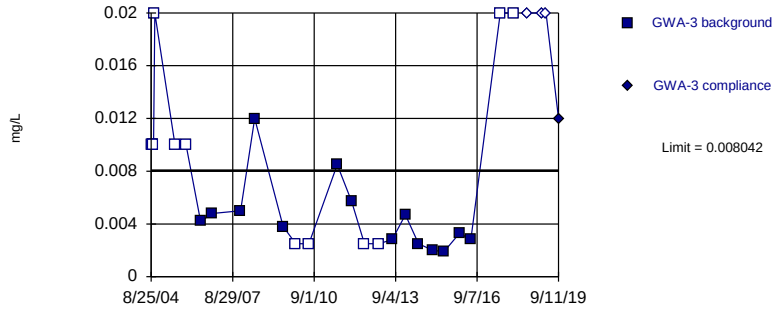
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.718, Std. Dev.=0.5313, n=26, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9059, critical = 0.891. Kappa = 1.685 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

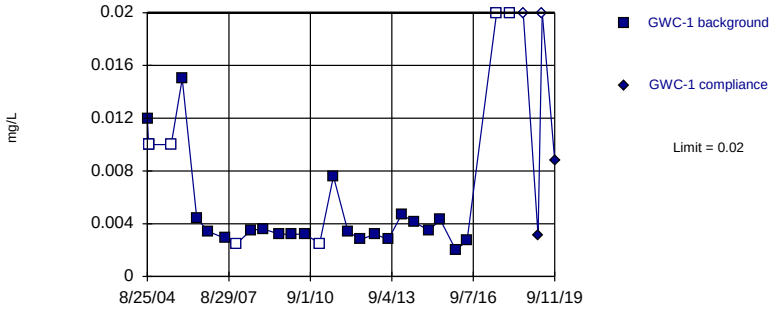
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 28 background values. 25% NDs. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

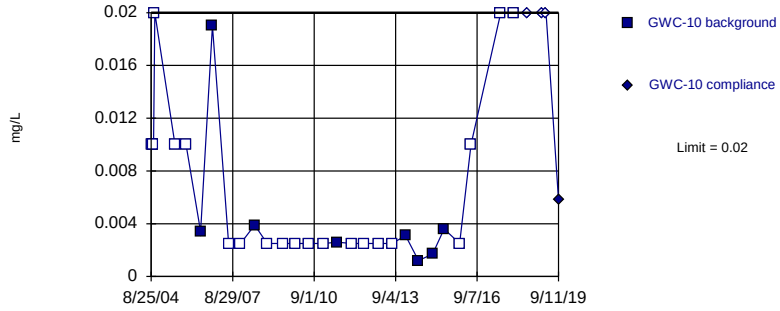
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 68.97% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

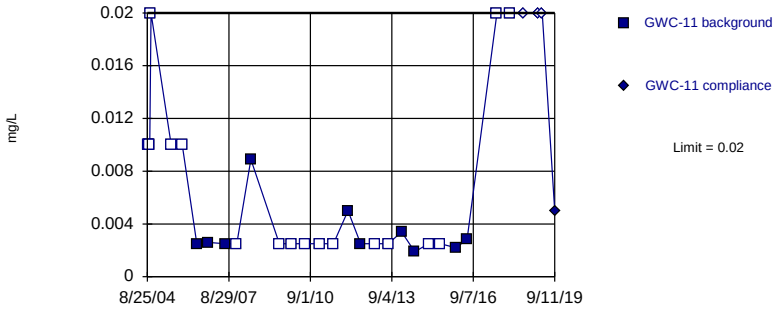
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 28 background values. 64.29% NDs. Well-constituent pair annual alpha = 0.0004633. Individual comparison alpha = 0.0002317 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

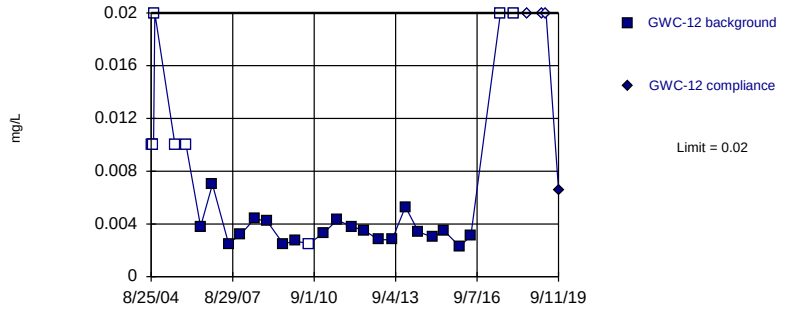
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. 27.59% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

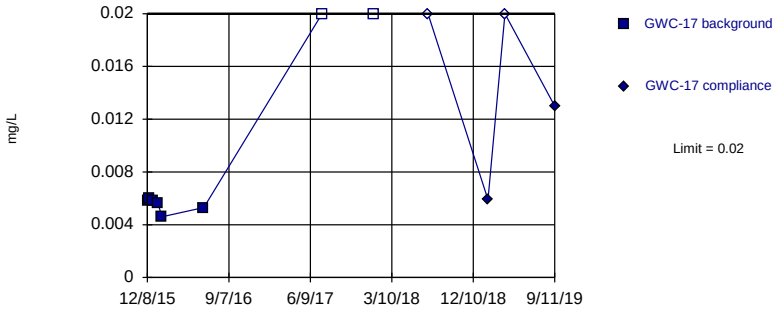
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 25% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

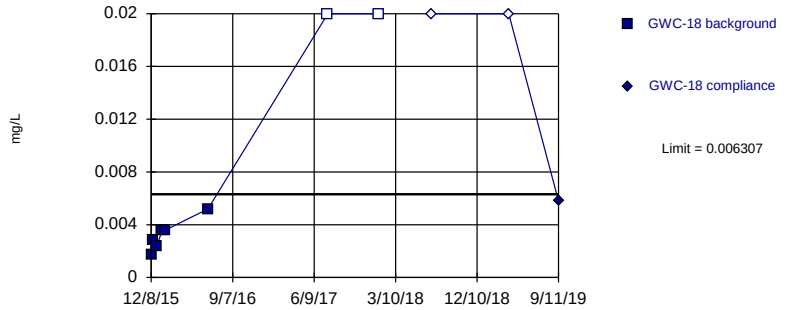
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05383, Std. Dev.=0.01013, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7528, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

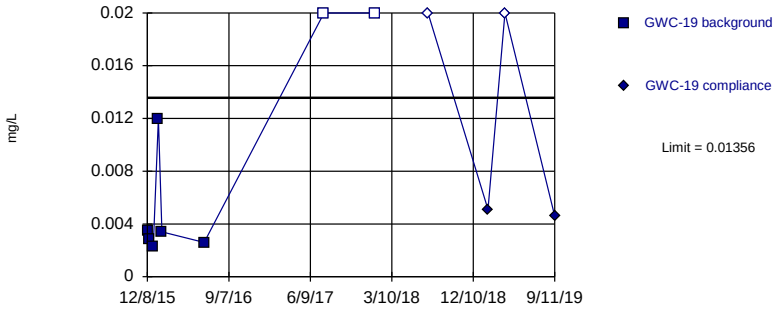
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.06315, Std. Dev.=0.02112, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7621, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

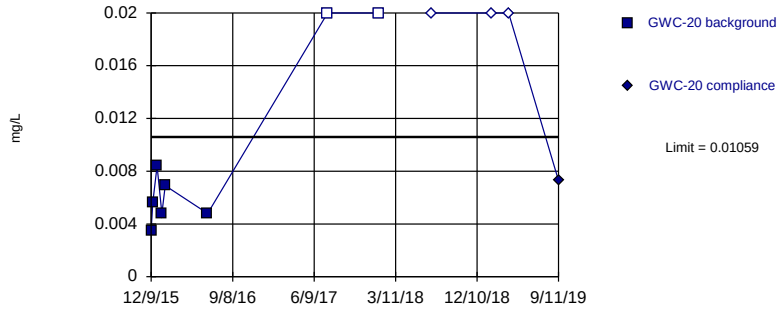
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.07286, Std. Dev.=0.0119, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8043, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

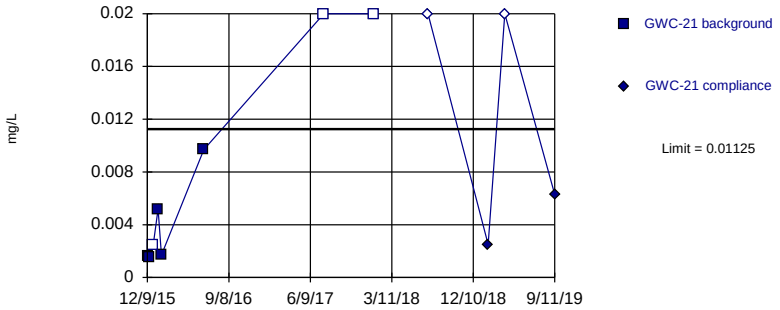
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.00355, Std. Dev.=0.003049, n=8, 37.5% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7633, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

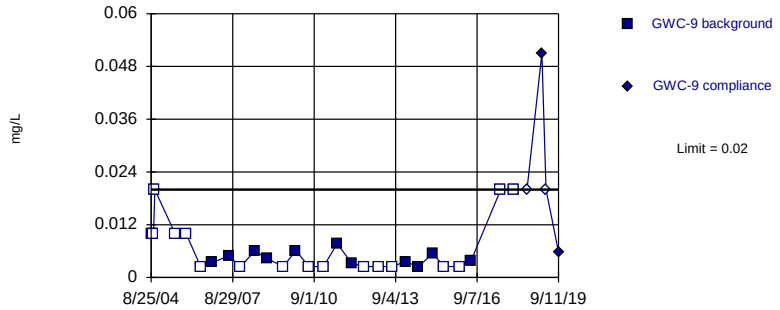
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 29 background values. 62.07% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD

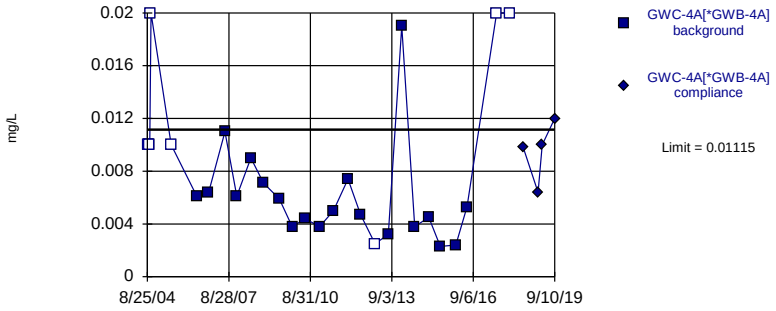
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.1704, Std. Dev.=0.0318, n=28, 28.57% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9143, critical = 0.896. Kappa = 1.666 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

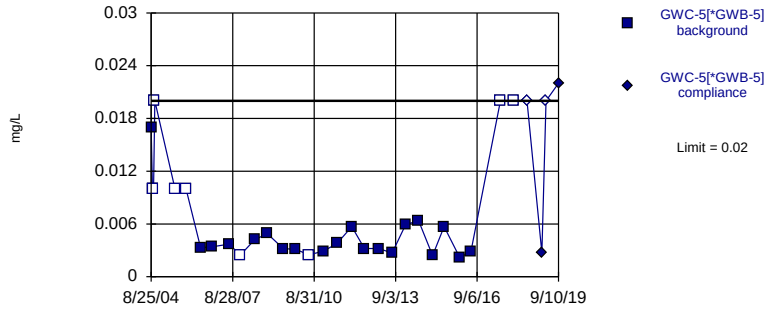
Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 29 background values. 31.03% NDs. Well-constituent pair annual alpha = 0.0004147. Individual comparison alpha = 0.0002074 (1 of 3).

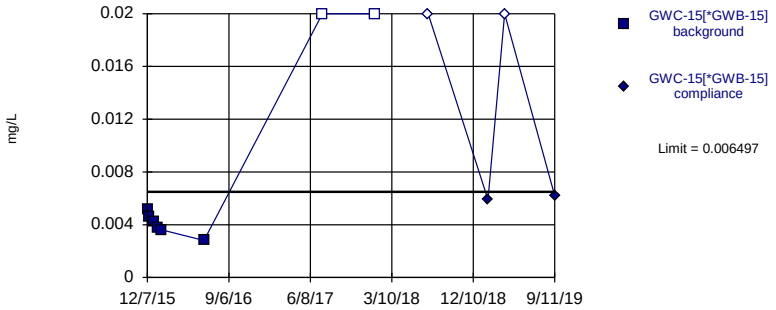
Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-5.532, Std. Dev.=0.1962, n=8, 25% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7709, critical = 0.749. Kappa = 2.525 (c=15, w=9, 1 of 3, event alpha = 0.05132). Report alpha = 0.0003901.

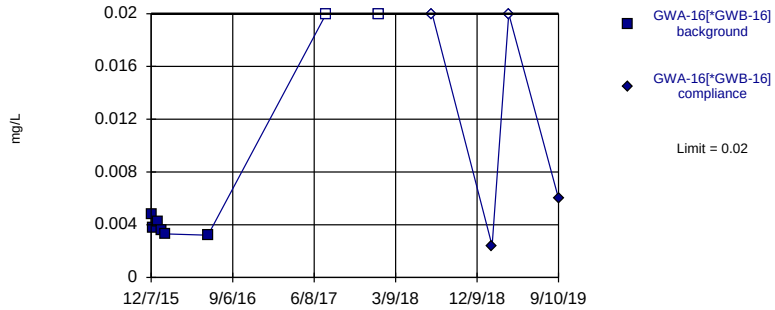
Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric

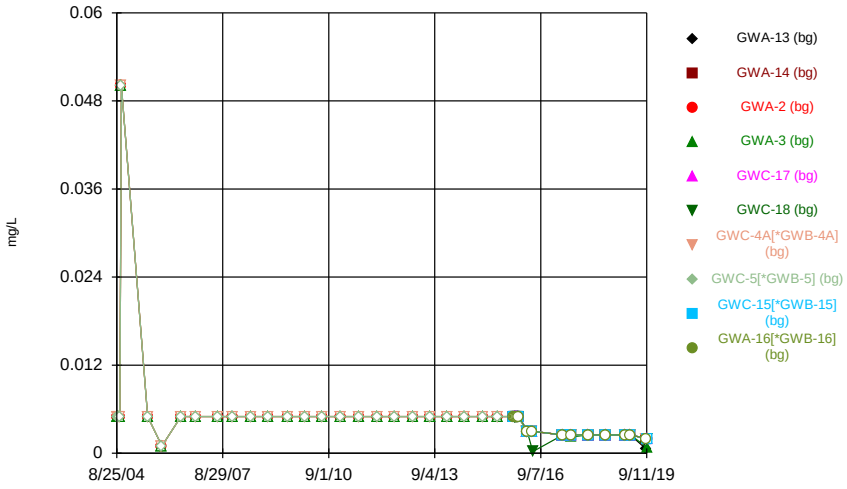


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 8 background values. 25% NDs. Well-constituent pair annual alpha = 0.01179. Individual comparison alpha = 0.005912 (1 of 3).

Constituent: Zinc, Total Analysis Run 1/20/2020 2:20 PM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

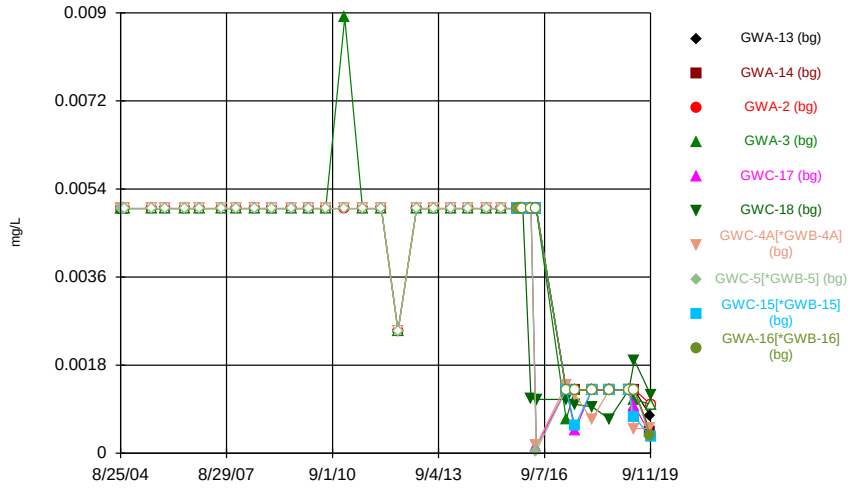
Time Series



Constituent: Antimony Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

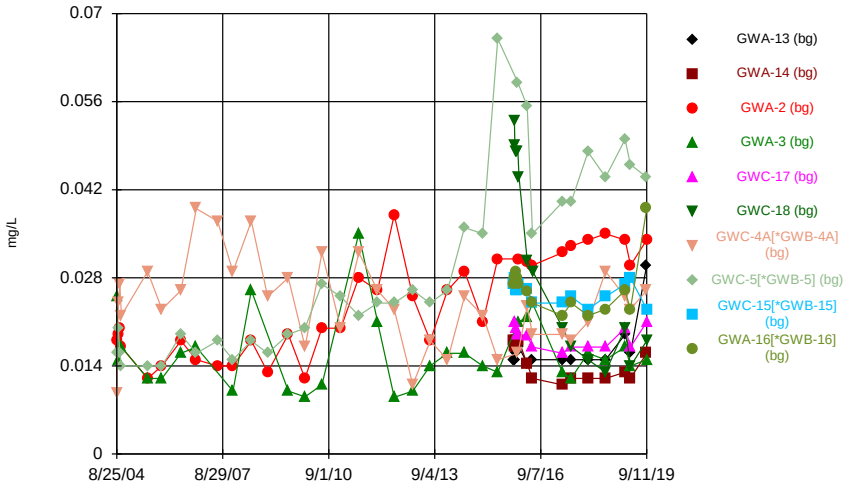
Time Series



Constituent: Arsenic, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

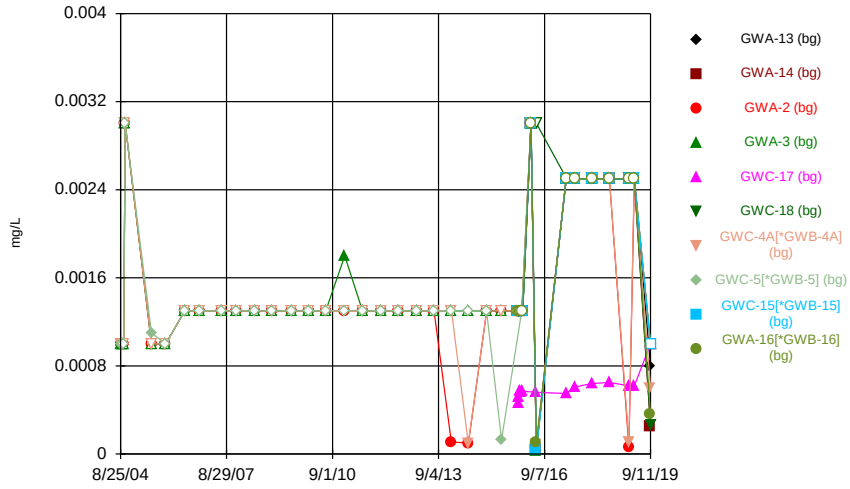
Time Series



Constituent: Barium, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

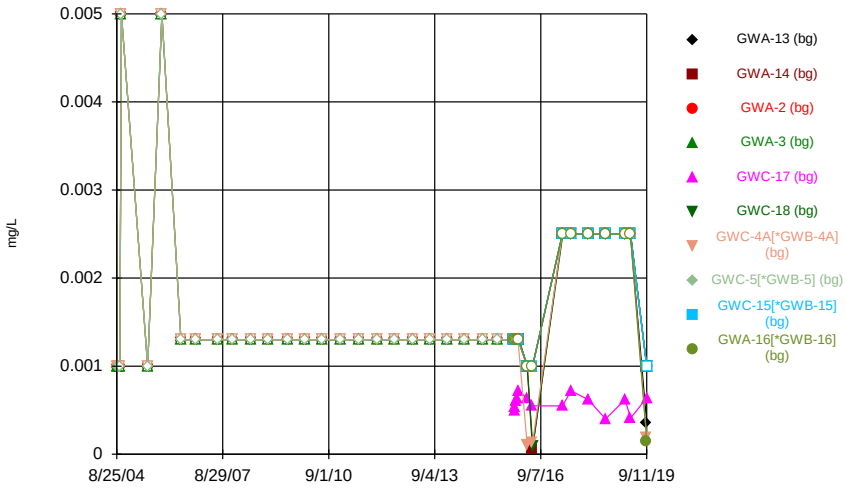
Time Series



Constituent: Beryllium, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

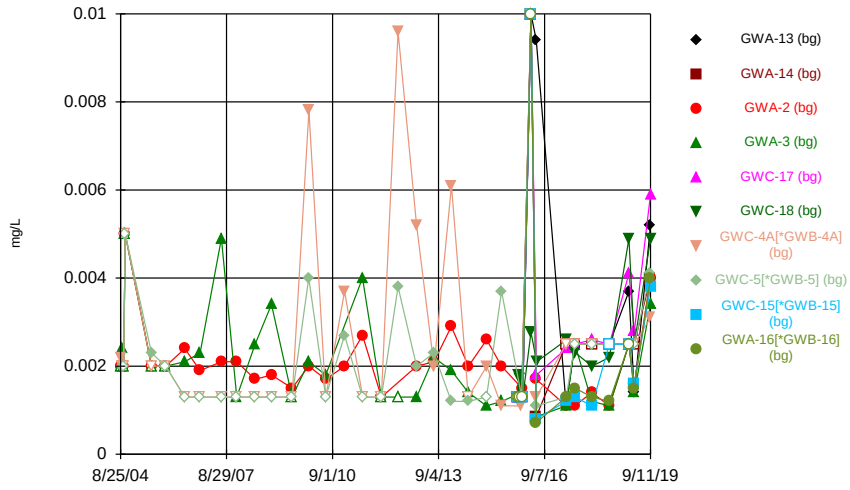
Time Series



Constituent: Cadmium, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

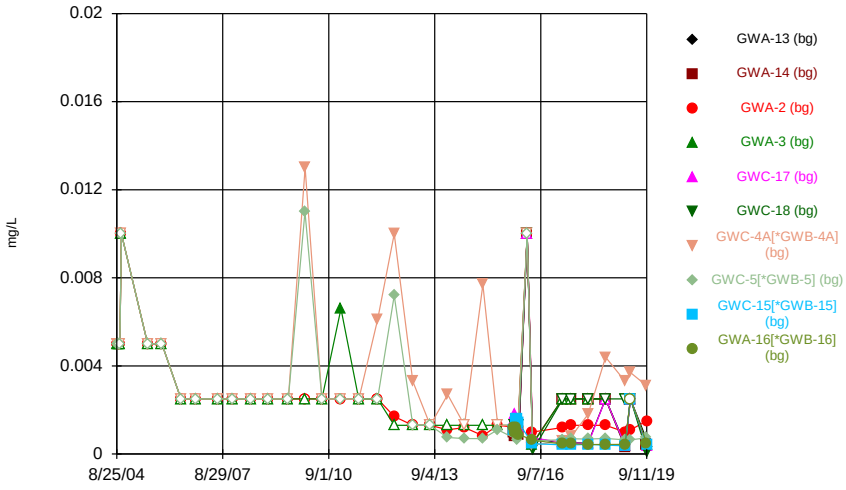
Time Series



Constituent: Chromium, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

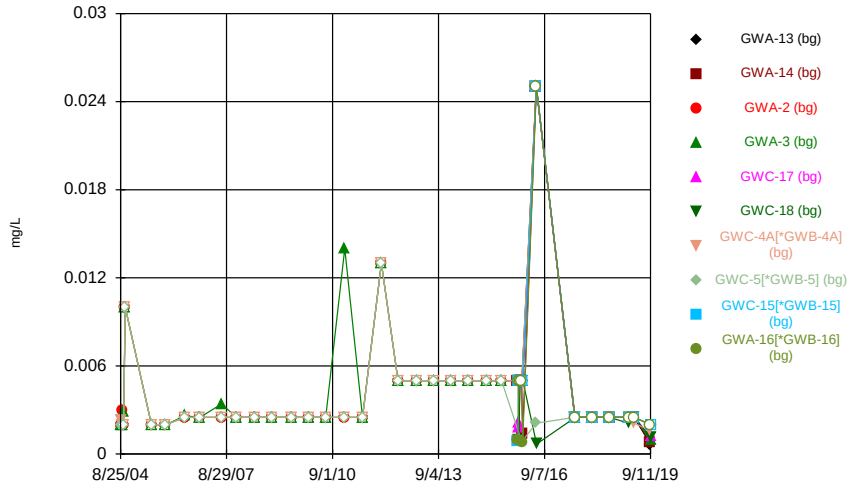
Time Series



Constituent: Cobalt, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

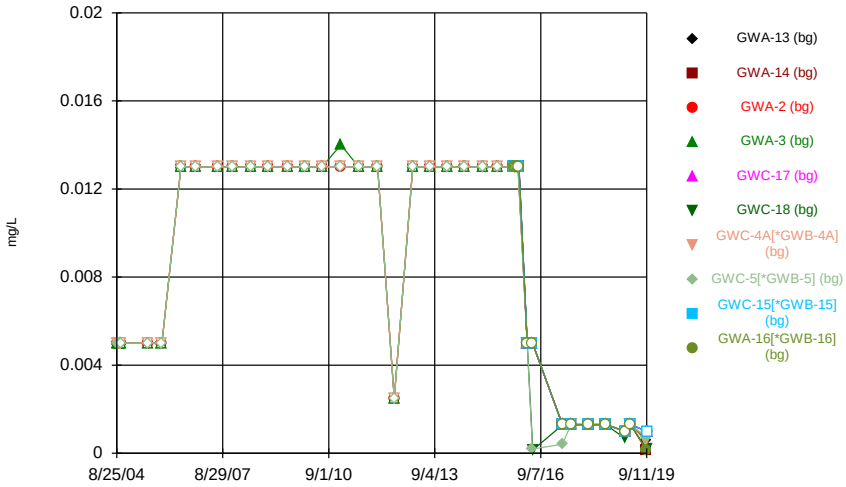
Time Series



Constituent: Copper, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

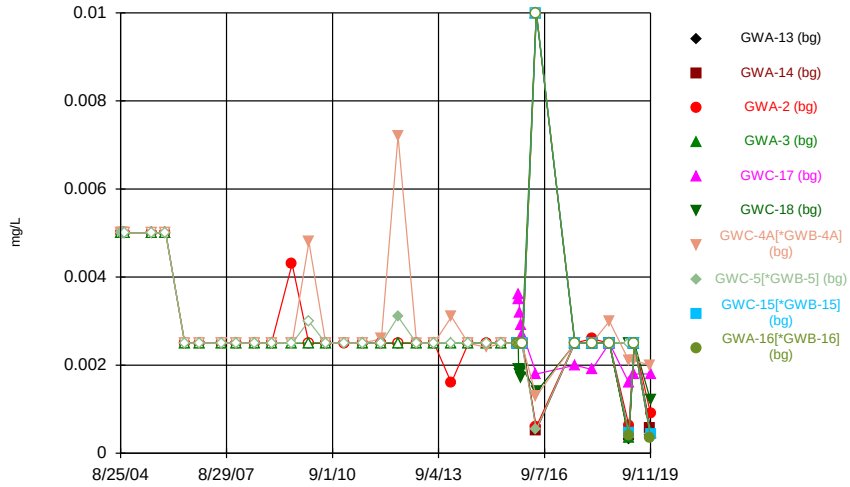
Time Series



Constituent: Lead, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

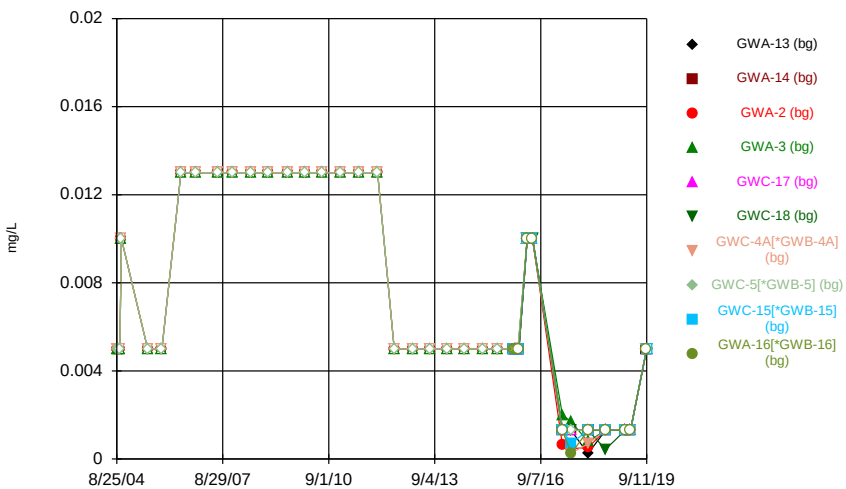
Time Series



Constituent: Nickel, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

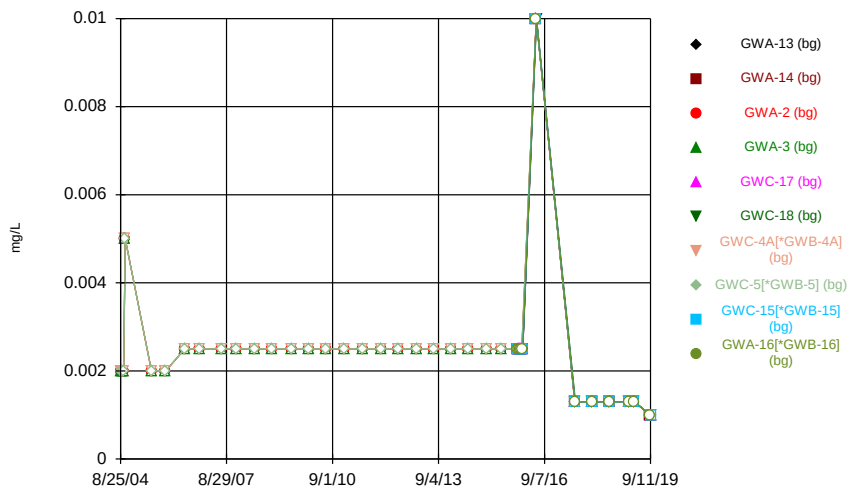
Time Series



Constituent: Selenium Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

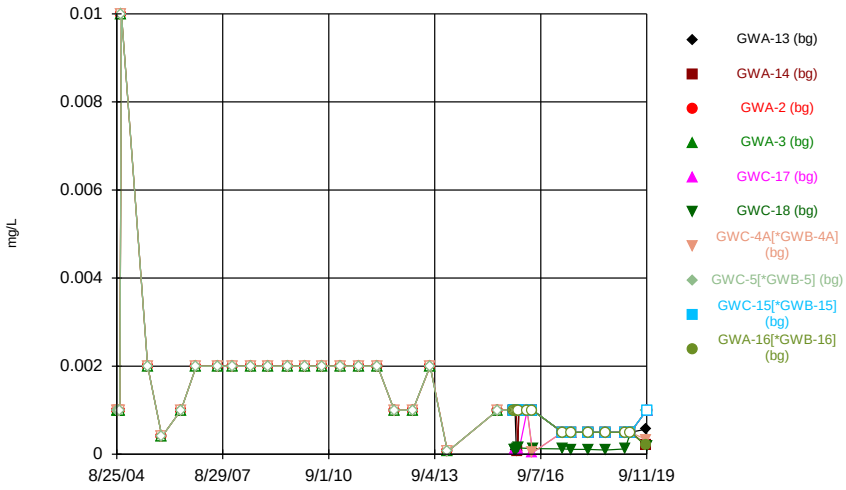
Time Series



Constituent: Silver, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

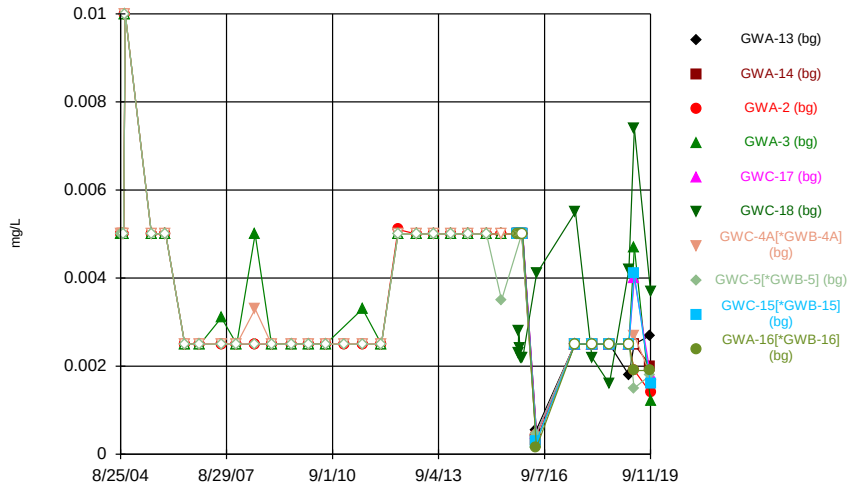
Time Series



Constituent: Thallium Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

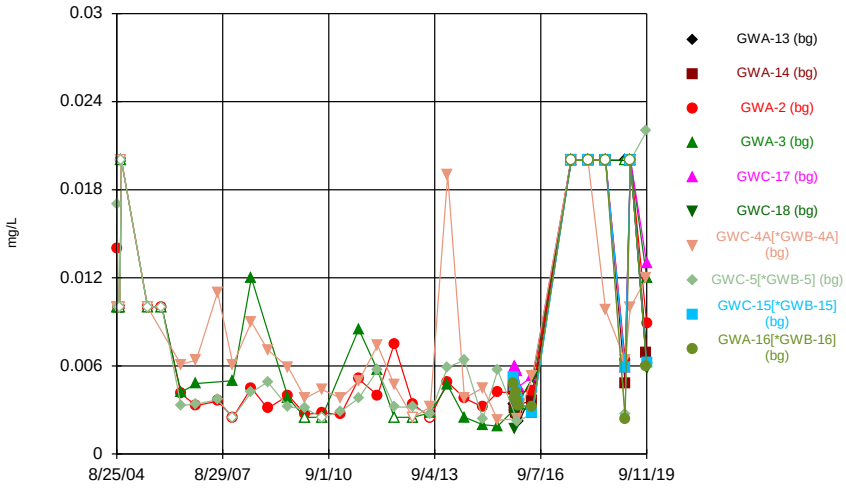
Time Series



Constituent: Vanadium, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

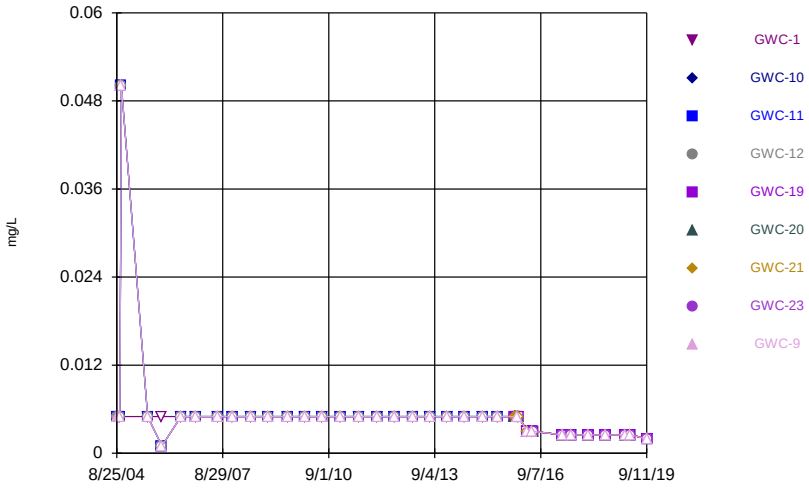
Time Series



Constituent: Zinc, Total Analysis Run 1/20/2020 11:10 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

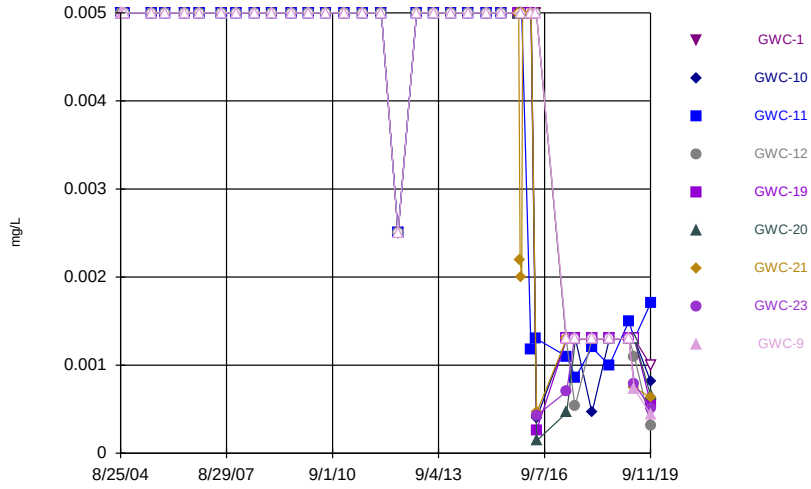
Time Series



Constituent: Antimony Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

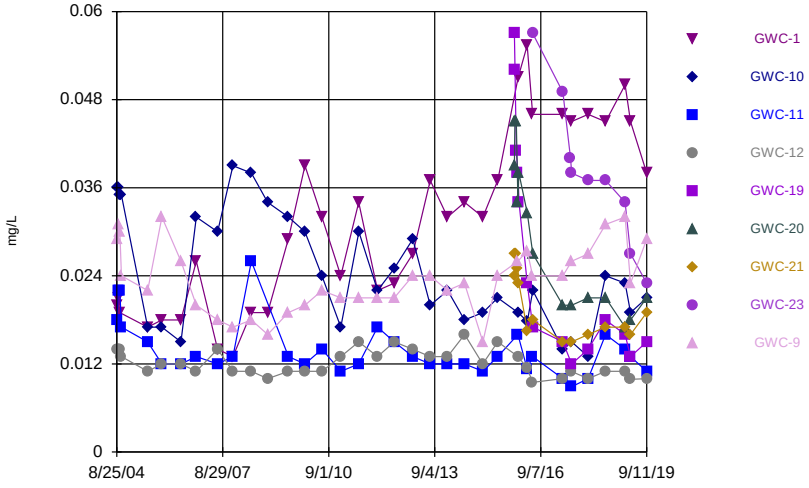
Time Series



Constituent: Arsenic, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

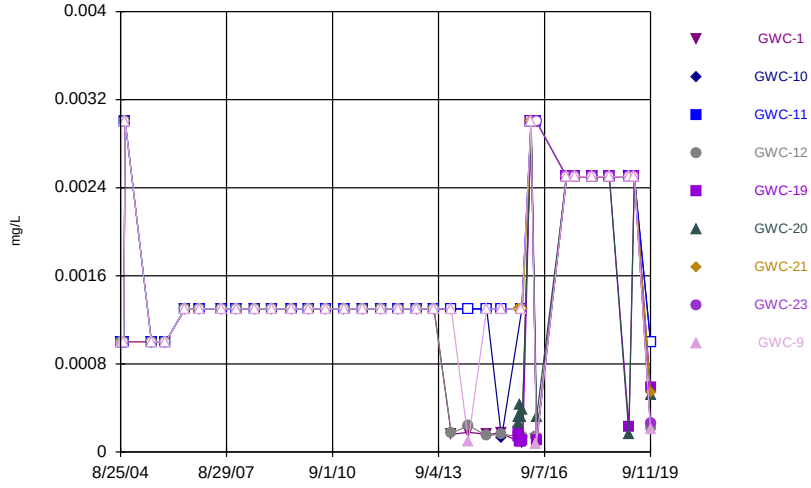
Time Series



Constituent: Barium, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

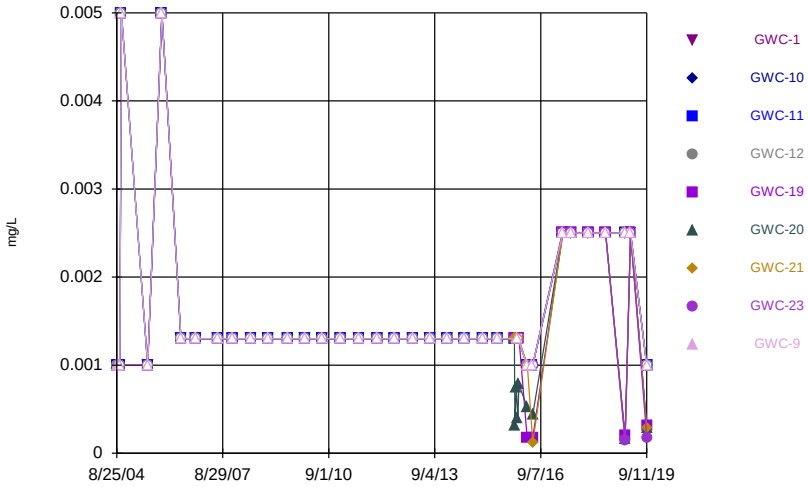
Time Series



Constituent: Beryllium, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

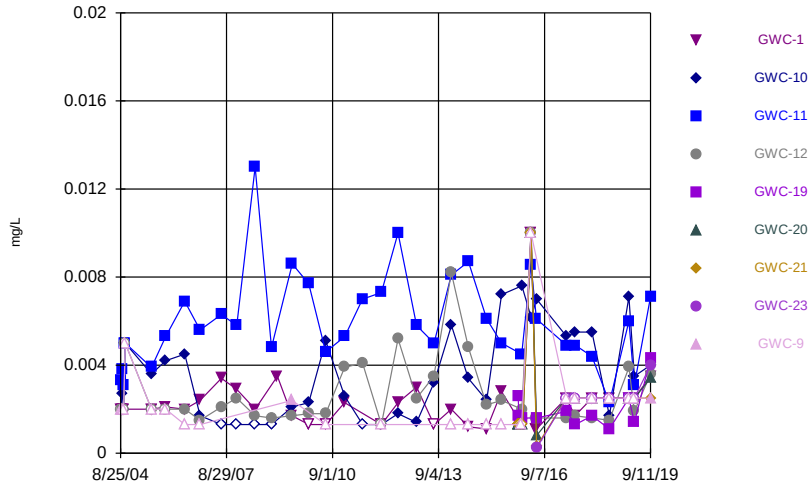
Time Series



Constituent: Cadmium, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

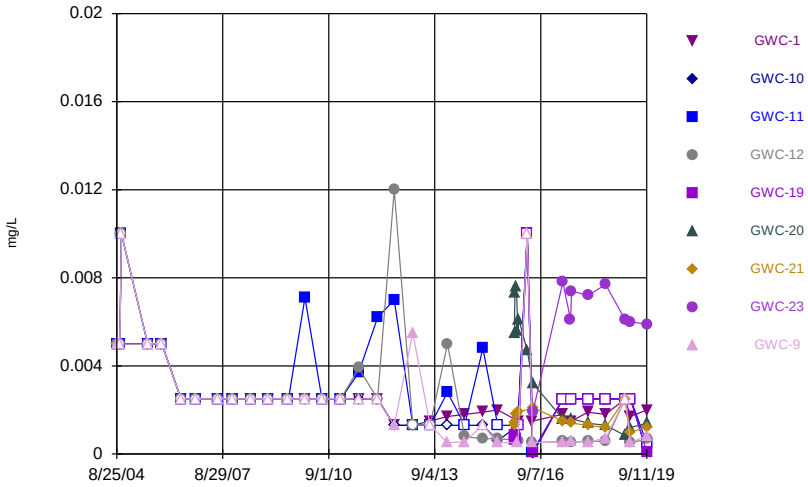
Time Series



Constituent: Chromium, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

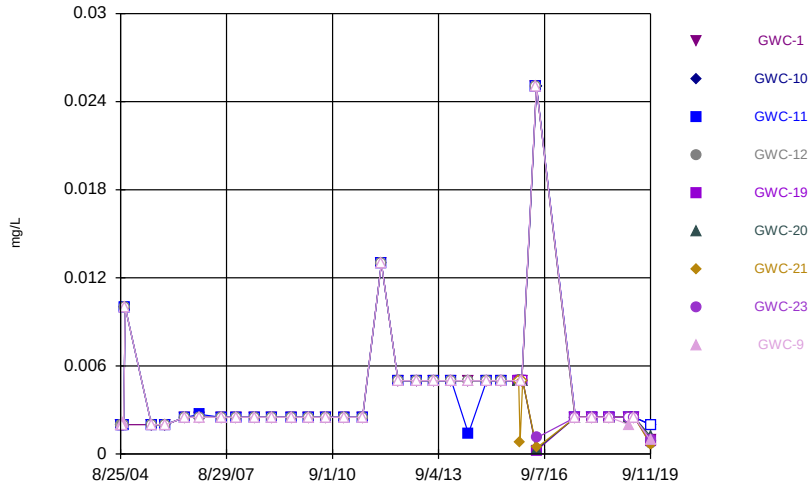
Time Series



Constituent: Cobalt, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

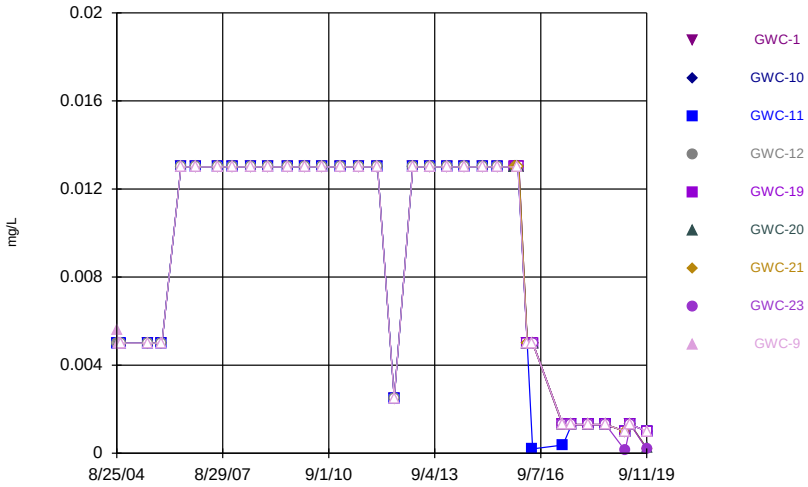
Time Series



Constituent: Copper, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

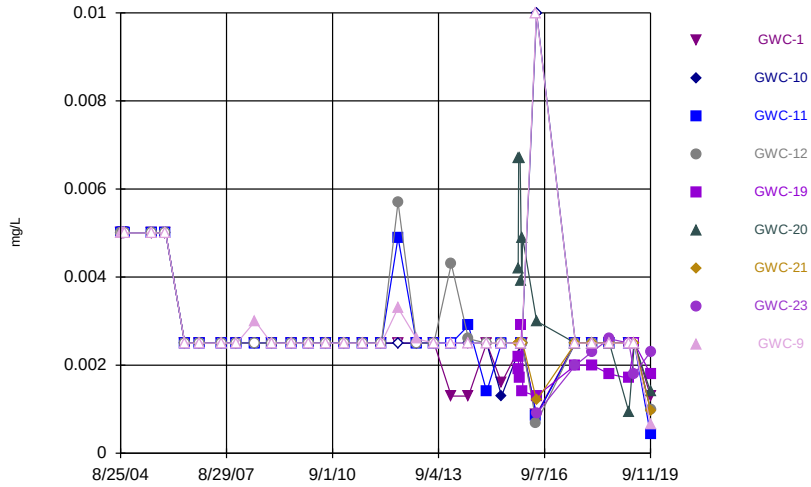
Time Series



Constituent: Lead, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

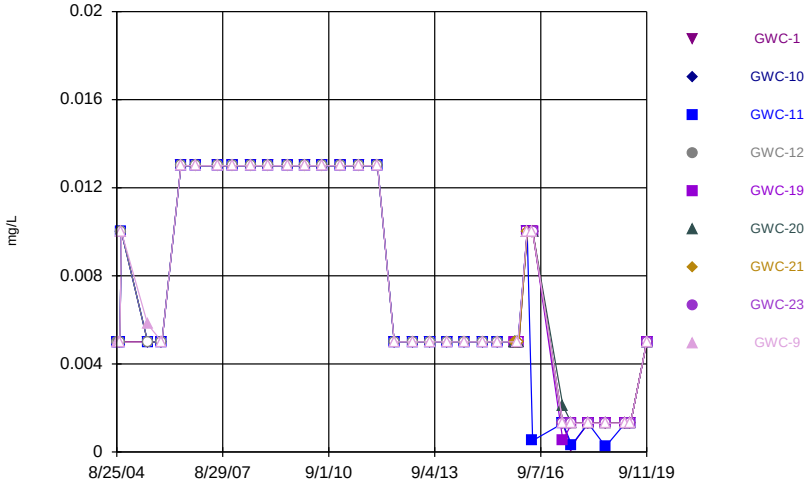
Time Series



Constituent: Nickel, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

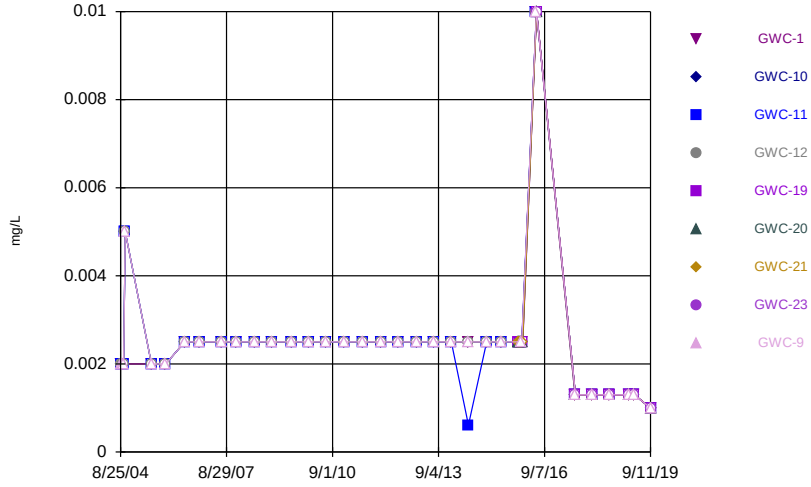
Time Series



Constituent: Selenium Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

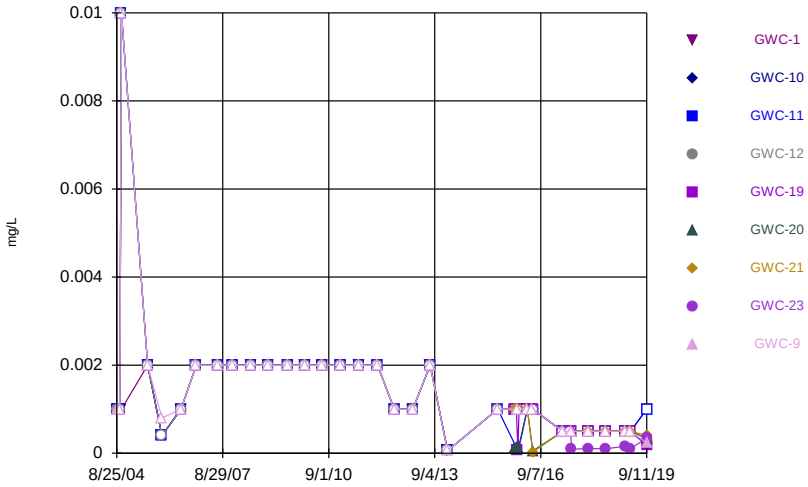
Time Series



Constituent: Silver, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

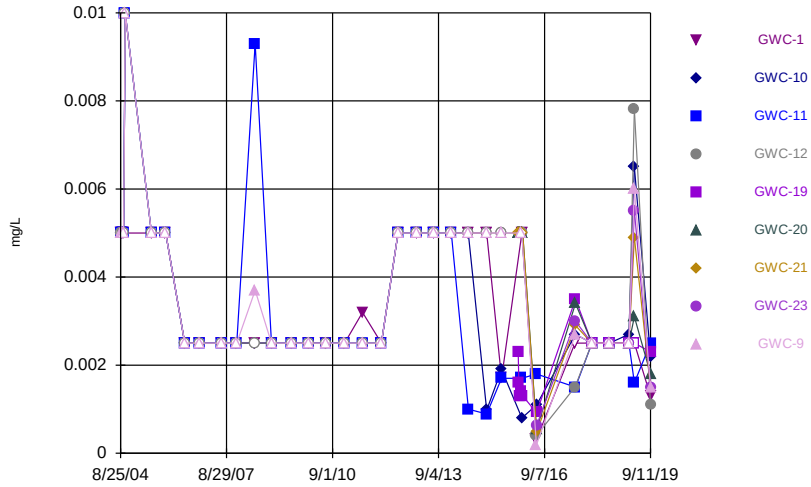
Time Series



Constituent: Thallium Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

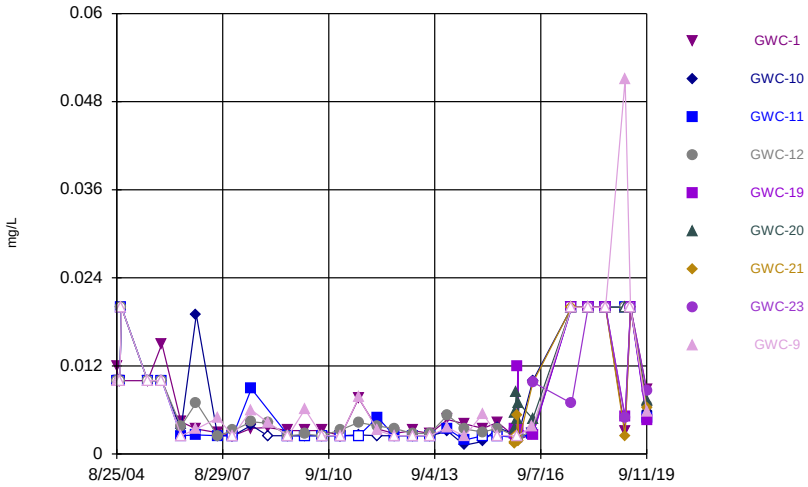
Time Series



Constituent: Vanadium, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc, Total Analysis Run 1/20/2020 11:11 AM View: LF4 EPD
Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 11:15 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Antimony (mg/L)	GWA-13 (bg)	14	0.003323	0.001419	0.0003794	0.00275	0.00052	0.005	92.86
Antimony (mg/L)	GWA-14 (bg)	14	0.003429	0.001238	0.0003309	0.00275	0.002	0.005	100
Antimony (mg/L)	GWA-2 (bg)	35	0.005543	0.007831	0.001324	0.005	0.001	0.05	100
Antimony (mg/L)	GWA-3 (bg)	35	0.0055	0.007853	0.001327	0.005	0.00081	0.05	94.29
Antimony (mg/L)	GWC-1	34	0.004353	0.001105	0.0001894	0.005	0.002	0.005	100
Antimony (mg/L)	GWC-10	35	0.005543	0.007831	0.001324	0.005	0.001	0.05	100
Antimony (mg/L)	GWC-11	35	0.005543	0.007831	0.001324	0.005	0.001	0.05	100
Antimony (mg/L)	GWC-12	35	0.005543	0.007831	0.001324	0.005	0.001	0.05	100
Antimony (mg/L)	GWC-17 (bg)	14	0.003429	0.001238	0.0003309	0.00275	0.002	0.005	100
Antimony (mg/L)	GWC-18 (bg)	14	0.00323	0.001506	0.0004025	0.0025	0.00022	0.005	92.86
Antimony (mg/L)	GWC-19	14	0.003429	0.001238	0.0003309	0.00275	0.002	0.005	100
Antimony (mg/L)	GWC-20	14	0.003429	0.001238	0.0003309	0.00275	0.002	0.005	100
Antimony (mg/L)	GWC-21	14	0.003429	0.001238	0.0003309	0.00275	0.002	0.005	100
Antimony (mg/L)	GWC-23	9	0.0025	0.00025	0.0000...	0.0025	0.002	0.003	100
Antimony (mg/L)	GWC-9	35	0.005543	0.007831	0.001324	0.005	0.001	0.05	100
Antimony (mg/L)	GWC-4A[*G...	35	0.005543	0.007831	0.001324	0.005	0.001	0.05	100
Antimony (mg/L)	GWC-5[*GW...	35	0.005543	0.007831	0.001324	0.005	0.001	0.05	100
Antimony (mg/L)	GWC-15[*G...	14	0.003429	0.001238	0.0003309	0.00275	0.002	0.005	100
Antimony (mg/L)	GWA-16[*G...	14	0.003429	0.001238	0.0003309	0.00275	0.002	0.005	100
Arsenic, Total (mg/L)	GWA-13 (bg)	14	0.003111	0.001965	0.0005251	0.00315	0.00076	0.005	92.86
Arsenic, Total (mg/L)	GWA-14 (bg)	14	0.003088	0.001997	0.0005337	0.00315	0.00043	0.005	92.86
Arsenic, Total (mg/L)	GWA-2 (bg)	35	0.00418	0.001542	0.0002607	0.005	0.001	0.005	100
Arsenic, Total (mg/L)	GWA-3 (bg)	35	0.004268	0.001776	0.0003002	0.005	0.00069	0.0089	91.43
Arsenic, Total (mg/L)	GWC-1	34	0.004156	0.001559	0.0002673	0.005	0.001	0.005	100
Arsenic, Total (mg/L)	GWC-10	35	0.004019	0.001717	0.0002903	0.005	0.0004	0.005	88.57
Arsenic, Total (mg/L)	GWC-11	35	0.003961	0.001684	0.0002847	0.005	0.00086	0.005	74.29
Arsenic, Total (mg/L)	GWC-12	35	0.004133	0.001643	0.0002777	0.005	0.00032	0.005	91.43
Arsenic, Total (mg/L)	GWC-17 (bg)	14	0.002655	0.002138	0.0005713	0.0013	0.00015	0.005	71.43
Arsenic, Total (mg/L)	GWC-18 (bg)	14	0.002526	0.00193	0.0005159	0.00125	0.0007	0.005	42.86
Arsenic, Total (mg/L)	GWC-19	14	0.002759	0.002037	0.0005444	0.0013	0.00026	0.005	85.71
Arsenic, Total (mg/L)	GWC-20	14	0.002697	0.002099	0.000561	0.0013	0.00014	0.005	78.57
Arsenic, Total (mg/L)	GWC-21	14	0.002324	0.001815	0.0004851	0.0013	0.00046	0.005	64.29
Arsenic, Total (mg/L)	GWC-23	9	0.000...	0.0003789	0.0001263	0.0013	0.00043	0.0013	55.56
Arsenic, Total (mg/L)	GWC-9	35	0.004148	0.001612	0.0002724	0.005	0.00044	0.005	94.29
Arsenic, Total (mg/L)	GWC-4A[*G...	35	0.003987	0.001779	0.0003007	0.005	0.00016	0.005	82.86
Arsenic, Total (mg/L)	GWC-5[*GW...	35	0.00402	0.001723	0.0002912	0.005	0.00005	0.005	94.29
Arsenic, Total (mg/L)	GWC-15[*G...	14	0.002989	0.002107	0.0005631	0.00315	0.00033	0.005	78.57
Arsenic, Total (mg/L)	GWA-16[*G...	14	0.003083	0.002004	0.0005356	0.00315	0.00036	0.005	92.86
Barium, Total (mg/L)	GWA-13 (bg)	14	0.01674	0.004008	0.001071	0.015	0.0144	0.03	0
Barium, Total (mg/L)	GWA-14 (bg)	14	0.01452	0.002819	0.0007533	0.01365	0.011	0.018	0
Barium, Total (mg/L)	GWA-2 (bg)	35	0.02367	0.007879	0.001332	0.021	0.012	0.038	0
Barium, Total (mg/L)	GWA-3 (bg)	32	0.01606	0.005688	0.001006	0.015	0.009	0.035	0
Barium, Total (mg/L)	GWC-1	34	0.03157	0.01213	0.00208	0.032	0.013	0.0554	0
Barium, Total (mg/L)	GWC-10	35	0.02459	0.007721	0.001305	0.022	0.013	0.039	0
Barium, Total (mg/L)	GWC-11	34	0.01389	0.00368	0.0006311	0.013	0.0089	0.026	0
Barium, Total (mg/L)	GWC-12	35	0.01217	0.001758	0.0002971	0.012	0.0095	0.016	0
Barium, Total (mg/L)	GWC-17 (bg)	14	0.01863	0.001778	0.0004753	0.0189	0.016	0.021	0
Barium, Total (mg/L)	GWC-18 (bg)	14	0.02991	0.01524	0.004073	0.0245	0.013	0.053	0
Barium, Total (mg/L)	GWC-19	14	0.02607	0.01538	0.00411	0.0175	0.012	0.057	0
Barium, Total (mg/L)	GWC-20	14	0.02846	0.01019	0.002723	0.024	0.017	0.045	0

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 11:15 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Barium, Total (mg/L)	GWC-21	14	0.01968	0.004505	0.001204	0.0175	0.015	0.027	0
Barium, Total (mg/L)	GWC-23	9	0.038	0.01031	0.003436	0.037	0.023	0.057	0
Barium, Total (mg/L)	GWC-9	35	0.0237	0.004584	0.0007748	0.024	0.015	0.032	0
Barium, Total (mg/L)	GWC-4A[*G...	35	0.02374	0.006889	0.001164	0.0234	0.0096	0.039	0
Barium, Total (mg/L)	GWC-5[*GW...	35	0.02947	0.01452	0.002455	0.024	0.014	0.066	0
Barium, Total (mg/L)	GWC-15[*G...	14	0.02566	0.001696	0.0004533	0.026	0.023	0.028	0
Barium, Total (mg/L)	GWA-16[*G...	14	0.02628	0.004341	0.00116	0.02595	0.022	0.039	0
Beryllium, Total (mg/L)	GWA-13 (bg)	13	0.001852	0.000882	0.0002446	0.0025	0.000071	0.003	84.62
Beryllium, Total (mg/L)	GWA-14 (bg)	14	0.001771	0.0009242	0.000247	0.0019	0.000044	0.003	85.71
Beryllium, Total (mg/L)	GWA-2 (bg)	35	0.001378	0.0007518	0.0001271	0.0013	0.000063	0.003	88.57
Beryllium, Total (mg/L)	GWA-3 (bg)	35	0.001529	0.0006636	0.0001122	0.0013	0.000032	0.003	94.29
Beryllium, Total (mg/L)	GWC-1	34	0.001282	0.0008009	0.0001374	0.0013	0.00008	0.003	79.41
Beryllium, Total (mg/L)	GWC-10	35	0.001483	0.0006994	0.0001182	0.0013	0.000085	0.003	94.29
Beryllium, Total (mg/L)	GWC-11	35	0.0016	0.0006575	0.0001111	0.0013	0.001	0.003	100
Beryllium, Total (mg/L)	GWC-12	35	0.001335	0.000835	0.0001411	0.0013	0.00014	0.003	80
Beryllium, Total (mg/L)	GWC-17 (bg)	13	0.00061	0.0001282	0.0000...	0.00057	0.00046	0.001	0
Beryllium, Total (mg/L)	GWC-18 (bg)	14	0.001983	0.0008308	0.000222	0.0025	0.00026	0.003	92.86
Beryllium, Total (mg/L)	GWC-19	14	0.001217	0.00124	0.0003314	0.000405	0.00009	0.003	42.86
Beryllium, Total (mg/L)	GWC-20	14	0.001301	0.001162	0.0003107	0.000475	0.00016	0.003	42.86
Beryllium, Total (mg/L)	GWC-21	14	0.002003	0.0007884	0.0002107	0.0025	0.00054	0.003	92.86
Beryllium, Total (mg/L)	GWC-23	9	0.002307	0.0007851	0.0002617	0.0025	0.00026	0.003	88.89
Beryllium, Total (mg/L)	GWC-9	35	0.00146	0.0007297	0.0001233	0.0013	0.000077	0.003	91.43
Beryllium, Total (mg/L)	GWC-4A[*G...	35	0.001403	0.0007251	0.0001226	0.0013	0.000087	0.003	88.57
Beryllium, Total (mg/L)	GWC-5[*GW...	35	0.001485	0.0006994	0.0001182	0.0013	0.000054	0.003	91.43
Beryllium, Total (mg/L)	GWC-15[*G...	14	0.001824	0.0008488	0.0002269	0.0019	0.000038	0.003	92.86
Beryllium, Total (mg/L)	GWA-16[*G...	14	0.001784	0.0009011	0.0002408	0.0019	0.00011	0.003	85.71
Cadmium, Total (mg/L)	GWA-13 (bg)	14	0.001704	0.0007566	0.0002022	0.0013	0.00035	0.0025	85.71
Cadmium, Total (mg/L)	GWA-14 (bg)	14	0.001683	0.000799	0.0002135	0.0013	0.000062	0.0025	92.86
Cadmium, Total (mg/L)	GWA-2 (bg)	35	0.001657	0.000973	0.0001645	0.0013	0.001	0.005	100
Cadmium, Total (mg/L)	GWA-3 (bg)	35	0.001657	0.000973	0.0001645	0.0013	0.001	0.005	100
Cadmium, Total (mg/L)	GWC-1	34	0.001559	0.0007917	0.0001358	0.0013	0.001	0.005	100
Cadmium, Total (mg/L)	GWC-10	35	0.001657	0.000973	0.0001645	0.0013	0.001	0.005	100
Cadmium, Total (mg/L)	GWC-11	35	0.001657	0.000973	0.0001645	0.0013	0.001	0.005	100
Cadmium, Total (mg/L)	GWC-12	35	0.001657	0.000973	0.0001645	0.0013	0.001	0.005	100
Cadmium, Total (mg/L)	GWC-17 (bg)	14	0.000...	0.0000...	0.0000263	0.000615	0.0004	0.00072	0
Cadmium, Total (mg/L)	GWC-18 (bg)	14	0.001685	0.0007954	0.0002126	0.0013	0.000085	0.0025	92.86
Cadmium, Total (mg/L)	GWC-19	14	0.001419	0.0009497	0.0002538	0.0013	0.00017	0.0025	71.43
Cadmium, Total (mg/L)	GWC-20	14	0.001246	0.001008	0.0002694	0.000765	0.00016	0.0025	42.86
Cadmium, Total (mg/L)	GWC-21	14	0.001468	0.0009053	0.0002419	0.0013	0.00012	0.0025	78.57
Cadmium, Total (mg/L)	GWC-23	9	0.001814	0.001056	0.0003521	0.0025	0.00015	0.0025	77.78
Cadmium, Total (mg/L)	GWC-9	35	0.001657	0.000973	0.0001645	0.0013	0.001	0.005	100
Cadmium, Total (mg/L)	GWC-4A[*G...	35	0.001584	0.001051	0.0001777	0.0013	0.000111	0.005	91.43
Cadmium, Total (mg/L)	GWC-5[*GW...	35	0.001657	0.000973	0.0001645	0.0013	0.001	0.005	100
Cadmium, Total (mg/L)	GWC-15[*G...	14	0.00175	0.0006836	0.0001827	0.0013	0.001	0.0025	100
Cadmium, Total (mg/L)	GWA-16[*G...	14	0.001689	0.0007855	0.0002099	0.0013	0.00015	0.0025	92.86
Chromium, Total (mg/L)	GWA-13 (bg)	13	0.003346	0.003058	0.0008481	0.0025	0.0011	0.01	61.54
Chromium, Total (mg/L)	GWA-14 (bg)	13	0.002697	0.002353	0.0006526	0.0025	0.00086	0.01	84.62
Chromium, Total (mg/L)	GWA-2 (bg)	34	0.002288	0.001562	0.0002679	0.002	0.0011	0.01	26.47
Chromium, Total (mg/L)	GWA-3 (bg)	34	0.002301	0.001705	0.0002924	0.002	0.00085	0.01	32.35
Chromium, Total (mg/L)	GWC-1	33	0.002364	0.001531	0.0002666	0.002	0.0011	0.01	42.42

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 11:15 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Chromium, Total (mg/L)	GWC-10	35	0.003548	0.002024	0.0003422	0.0032	0.0013	0.0076	25.71
Chromium, Total (mg/L)	GWC-11	35	0.005939	0.002166	0.0003661	0.0056	0.0023	0.013	2.857
Chromium, Total (mg/L)	GWC-12	35	0.002834	0.001912	0.0003232	0.002	0.0013	0.01	22.86
Chromium, Total (mg/L)	GWC-17 (bg)	13	0.003062	0.00246	0.0006823	0.0025	0.0013	0.01	38.46
Chromium, Total (mg/L)	GWC-18 (bg)	13	0.002482	0.001169	0.0003242	0.0022	0.0012	0.0049	0
Chromium, Total (mg/L)	GWC-19	12	0.001942	0.0008628	0.0002491	0.00165	0.0011	0.0043	8.333
Chromium, Total (mg/L)	GWC-20	13	0.002646	0.002335	0.0006476	0.0025	0.0008	0.01	84.62
Chromium, Total (mg/L)	GWC-21	13	0.002539	0.002359	0.0006543	0.0025	0.00031	0.01	84.62
Chromium, Total (mg/L)	GWC-23	9	0.002414	0.0009577	0.0003192	0.0025	0.00023	0.004	77.78
Chromium, Total (mg/L)	GWC-9	24	0.002358	0.001821	0.0003716	0.002	0.0013	0.01	91.67
Chromium, Total (mg/L)	GWC-4A[*G...	35	0.002786	0.00232	0.0003921	0.002	0.0011	0.01	65.71
Chromium, Total (mg/L)	GWC-5[*GW...	34	0.002318	0.001692	0.0002902	0.002	0.0011	0.01	64.71
Chromium, Total (mg/L)	GWC-15[*G...	13	0.002308	0.00245	0.0006794	0.0013	0.0008	0.01	53.85
Chromium, Total (mg/L)	GWA-16[*G...	13	0.002248	0.002469	0.0006849	0.0013	0.00072	0.01	46.15
Cobalt, Total (mg/L)	GWA-13 (bg)	14	0.001702	0.002481	0.000663	0.00097	0.00043	0.01	21.43
Cobalt, Total (mg/L)	GWA-14 (bg)	14	0.002019	0.002464	0.0006585	0.001	0.00029	0.01	42.86
Cobalt, Total (mg/L)	GWA-2 (bg)	35	0.002704	0.002229	0.0003767	0.0025	0.00083	0.01	60
Cobalt, Total (mg/L)	GWA-3 (bg)	35	0.002948	0.00229	0.0003872	0.0025	0.00035	0.01	88.57
Cobalt, Total (mg/L)	GWC-1	34	0.002726	0.001711	0.0002934	0.0025	0.0013	0.01	55.88
Cobalt, Total (mg/L)	GWC-10	35	0.002852	0.002203	0.0003724	0.0025	0.00001	0.01	91.43
Cobalt, Total (mg/L)	GWC-11	35	0.003463	0.002365	0.0003997	0.0025	0.00011	0.01	80
Cobalt, Total (mg/L)	GWC-12	35	0.003006	0.002847	0.0004812	0.0025	0.00051	0.012	60
Cobalt, Total (mg/L)	GWC-17 (bg)	14	0.001811	0.00247	0.0006602	0.00125	0.00034	0.01	21.43
Cobalt, Total (mg/L)	GWC-18 (bg)	14	0.002268	0.002385	0.0006375	0.0019	0.000082	0.01	85.71
Cobalt, Total (mg/L)	GWC-19	14	0.002139	0.002456	0.0006565	0.0019	0.000067	0.01	64.29
Cobalt, Total (mg/L)	GWC-20	14	0.003523	0.002498	0.0006677	0.0024	0.00084	0.0076	0
Cobalt, Total (mg/L)	GWC-21	13	0.001569	0.000425	0.0001179	0.0014	0.001	0.0025	7.692
Cobalt, Total (mg/L)	GWC-23	9	0.006233	0.001799	0.0005995	0.0061	0.0019	0.0078	0
Cobalt, Total (mg/L)	GWC-9	35	0.002664	0.002406	0.0004068	0.0025	0.00051	0.01	62.86
Cobalt, Total (mg/L)	GWC-4A[*G...	35	0.003888	0.003004	0.0005077	0.0025	0.0004	0.013	60
Cobalt, Total (mg/L)	GWC-5[*GW...	35	0.00293	0.002851	0.0004819	0.0025	0.0006	0.011	57.14
Cobalt, Total (mg/L)	GWC-15[*G...	13	0.000...	0.0006743	0.000187	0.00047	0.00037	0.0025	7.692
Cobalt, Total (mg/L)	GWA-16[*G...	13	0.000...	0.000578	0.0001603	0.00063	0.00043	0.0025	7.692
Copper, Total (mg/L)	GWA-13 (bg)	12	0.005263	0.006391	0.001845	0.00375	0.00066	0.025	91.67
Copper, Total (mg/L)	GWA-14 (bg)	12	0.004972	0.006482	0.001871	0.0025	0.00076	0.025	83.33
Copper, Total (mg/L)	GWA-2 (bg)	33	0.004273	0.004404	0.0007666	0.0025	0.002	0.025	96.97
Copper, Total (mg/L)	GWA-3 (bg)	33	0.004616	0.004716	0.000821	0.0025	0.00092	0.025	84.85
Copper, Total (mg/L)	GWC-1	32	0.004031	0.004381	0.0007744	0.0025	0.001	0.025	96.88
Copper, Total (mg/L)	GWC-10	33	0.004242	0.004416	0.0007687	0.0025	0.002	0.025	100
Copper, Total (mg/L)	GWC-11	33	0.004139	0.004439	0.0007727	0.0025	0.0014	0.025	93.94
Copper, Total (mg/L)	GWC-12	33	0.004203	0.004443	0.0007734	0.0025	0.00069	0.025	96.97
Copper, Total (mg/L)	GWC-17 (bg)	12	0.0048	0.006494	0.001875	0.0025	0.0012	0.025	75
Copper, Total (mg/L)	GWC-18 (bg)	12	0.002903	0.001675	0.0004835	0.0025	0.00068	0.005	66.67
Copper, Total (mg/L)	GWC-19	12	0.003216	0.00173	0.0004995	0.0025	0.00024	0.005	83.33
Copper, Total (mg/L)	GWC-20	12	0.003252	0.001676	0.0004839	0.0025	0.00032	0.005	83.33
Copper, Total (mg/L)	GWC-21	11	0.002673	0.001702	0.0005131	0.0025	0.00042	0.005	72.73
Copper, Total (mg/L)	GWC-23	7	0.002074	0.0007289	0.0002755	0.0025	0.00092	0.0025	71.43
Copper, Total (mg/L)	GWC-9	33	0.004198	0.004443	0.0007733	0.0025	0.00092	0.025	90.91
Copper, Total (mg/L)	GWC-4A[*G...	33	0.004227	0.004424	0.0007701	0.0025	0.0016	0.025	90.91
Copper, Total (mg/L)	GWC-5[*GW...	33	0.003422	0.002415	0.0004203	0.0025	0.00084	0.013	93.94

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 11:15 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Copper, Total (mg/L)	GWC-15[*G...	12	0.005028	0.006449	0.001862	0.0025	0.00084	0.025	91.67
Copper, Total (mg/L)	GWA-16[*G...	12	0.004692	0.006555	0.001892	0.0025	0.00081	0.025	83.33
Lead, Total (mg/L)	GWA-13 (bg)	14	0.005934	0.005628	0.001504	0.00315	0.00058	0.013	92.86
Lead, Total (mg/L)	GWA-14 (bg)	14	0.005902	0.005662	0.001513	0.00315	0.00013	0.013	92.86
Lead, Total (mg/L)	GWA-2 (bg)	35	0.008514	0.005118	0.000865	0.013	0.001	0.013	100
Lead, Total (mg/L)	GWA-3 (bg)	35	0.008543	0.005146	0.0008698	0.013	0.001	0.014	97.14
Lead, Total (mg/L)	GWC-1	34	0.008618	0.005157	0.0008845	0.013	0.001	0.013	100
Lead, Total (mg/L)	GWC-10	35	0.008514	0.005118	0.000865	0.013	0.001	0.013	100
Lead, Total (mg/L)	GWC-11	35	0.008351	0.005315	0.0008984	0.013	0.0002	0.013	94.29
Lead, Total (mg/L)	GWC-12	35	0.008514	0.005118	0.000865	0.013	0.001	0.013	100
Lead, Total (mg/L)	GWC-17 (bg)	14	0.005964	0.005598	0.001496	0.00315	0.001	0.013	100
Lead, Total (mg/L)	GWC-18 (bg)	14	0.005535	0.005884	0.001573	0.0013	0.00015	0.013	78.57
Lead, Total (mg/L)	GWC-19	14	0.005964	0.005598	0.001496	0.00315	0.001	0.013	100
Lead, Total (mg/L)	GWC-20	14	0.00591	0.005654	0.001511	0.00315	0.00024	0.013	92.86
Lead, Total (mg/L)	GWC-21	14	0.005908	0.005656	0.001512	0.00315	0.00021	0.013	92.86
Lead, Total (mg/L)	GWC-23	9	0.001457	0.001418	0.0004728	0.0013	0.00013	0.005	77.78
Lead, Total (mg/L)	GWC-9	35	0.008531	0.005106	0.0008631	0.013	0.001	0.013	97.14
Lead, Total (mg/L)	GWC-4A[*G...	35	0.0085	0.005139	0.0008687	0.013	0.00051	0.013	97.14
Lead, Total (mg/L)	GWC-5[*GW...	35	0.008344	0.005325	0.0009	0.013	0.00019	0.013	91.43
Lead, Total (mg/L)	GWC-15[*G...	14	0.005964	0.005598	0.001496	0.00315	0.001	0.013	100
Lead, Total (mg/L)	GWA-16[*G...	14	0.005902	0.005662	0.001513	0.00315	0.00013	0.013	92.86
Nickel, Total (mg/L)	GWA-13 (bg)	12	0.002769	0.002421	0.000699	0.0025	0.00033	0.01	83.33
Nickel, Total (mg/L)	GWA-14 (bg)	12	0.001998	0.0009082	0.0002622	0.0025	0.0004	0.0025	75
Nickel, Total (mg/L)	GWA-2 (bg)	33	0.002822	0.001222	0.0002127	0.0025	0.0006	0.005	81.82
Nickel, Total (mg/L)	GWA-3 (bg)	31	0.003009	0.001716	0.0003082	0.0025	0.00034	0.01	93.55
Nickel, Total (mg/L)	GWC-1	32	0.002699	0.001103	0.000195	0.0025	0.00088	0.005	84.38
Nickel, Total (mg/L)	GWC-10	33	0.0031	0.001635	0.0002846	0.0025	0.001	0.01	96.97
Nickel, Total (mg/L)	GWC-11	33	0.002893	0.001207	0.00021	0.0025	0.00042	0.005	84.85
Nickel, Total (mg/L)	GWC-12	33	0.003008	0.001225	0.0002132	0.0025	0.00068	0.0057	84.85
Nickel, Total (mg/L)	GWC-17 (bg)	12	0.002442	0.0007229	0.0002087	0.00225	0.0016	0.0036	8.333
Nickel, Total (mg/L)	GWC-18 (bg)	12	0.002075	0.0004845	0.0001399	0.0022	0.0012	0.0025	50
Nickel, Total (mg/L)	GWC-19	12	0.001933	0.0004438	0.0001281	0.00185	0.0013	0.0029	8.333
Nickel, Total (mg/L)	GWC-20	12	0.003477	0.001867	0.000539	0.00275	0.00093	0.0067	33.33
Nickel, Total (mg/L)	GWC-21	12	0.002264	0.000553	0.0001596	0.0025	0.00097	0.0025	83.33
Nickel, Total (mg/L)	GWC-23	7	0.002057	0.0005798	0.0002192	0.0023	0.0009	0.0026	14.29
Nickel, Total (mg/L)	GWC-9	33	0.003168	0.001614	0.0002809	0.0025	0.00065	0.01	87.88
Nickel, Total (mg/L)	GWC-4A[*G...	33	0.003124	0.001307	0.0002275	0.0025	0.0013	0.0072	66.67
Nickel, Total (mg/L)	GWC-5[*GW...	33	0.002866	0.001143	0.000199	0.0025	0.00043	0.005	90.91
Nickel, Total (mg/L)	GWC-15[*G...	12	0.002782	0.002408	0.0006951	0.0025	0.00042	0.01	83.33
Nickel, Total (mg/L)	GWA-16[*G...	12	0.002772	0.002419	0.0006982	0.0025	0.00036	0.01	83.33
Selenium (mg/L)	GWA-13 (bg)	14	0.004054	0.003144	0.0008402	0.005	0.00025	0.01	92.86
Selenium (mg/L)	GWA-14 (bg)	14	0.004129	0.003057	0.0008171	0.005	0.0013	0.01	100
Selenium (mg/L)	GWA-2 (bg)	35	0.007473	0.004632	0.000783	0.005	0.00047	0.013	91.43
Selenium (mg/L)	GWA-3 (bg)	35	0.007554	0.004516	0.0007633	0.005	0.00079	0.013	91.43
Selenium (mg/L)	GWC-1	34	0.007434	0.00463	0.0007941	0.005	0.00026	0.013	97.06
Selenium (mg/L)	GWC-10	35	0.007537	0.004537	0.0007669	0.005	0.0013	0.013	100
Selenium (mg/L)	GWC-11	35	0.007208	0.004748	0.0008026	0.005	0.00025	0.013	91.43
Selenium (mg/L)	GWC-12	35	0.007537	0.004537	0.0007669	0.005	0.0013	0.013	100
Selenium (mg/L)	GWC-17 (bg)	14	0.004129	0.003057	0.0008171	0.005	0.0013	0.01	100
Selenium (mg/L)	GWC-18 (bg)	14	0.004067	0.003126	0.0008355	0.005	0.00044	0.01	92.86

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 11:15 AM

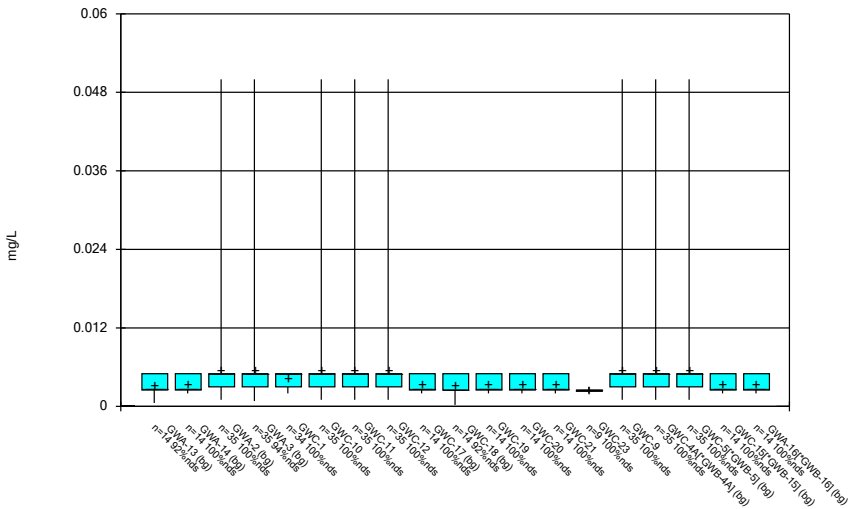
Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Selenium (mg/L)	GWC-19	14	0.004073	0.003119	0.0008337	0.005	0.00052	0.01	92.86
Selenium (mg/L)	GWC-20	14	0.004186	0.003007	0.0008038	0.005	0.0013	0.01	92.86
Selenium (mg/L)	GWC-21	14	0.004129	0.003057	0.0008171	0.005	0.0013	0.01	100
Selenium (mg/L)	GWC-23	9	0.002678	0.003006	0.001002	0.0013	0.0013	0.01	100
Selenium (mg/L)	GWC-9	35	0.00756	0.004526	0.000765	0.005	0.0013	0.013	97.14
Selenium (mg/L)	GWC-4A[*G...	35	0.00749	0.004608	0.0007788	0.005	0.00026	0.013	94.29
Selenium (mg/L)	GWC-5[*GW...	35	0.007537	0.004537	0.0007669	0.005	0.0013	0.013	100
Selenium (mg/L)	GWC-15[*G...	14	0.004086	0.003103	0.0008293	0.005	0.00071	0.01	92.86
Selenium (mg/L)	GWA-16[*G...	14	0.004054	0.003144	0.0008402	0.005	0.00025	0.01	92.86
Silver, Total (mg/L)	GWA-13 (bg)	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Silver, Total (mg/L)	GWA-14 (bg)	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Silver, Total (mg/L)	GWA-2 (bg)	33	0.0025	0.001512	0.0002633	0.0025	0.001	0.01	100
Silver, Total (mg/L)	GWA-3 (bg)	33	0.0025	0.001512	0.0002633	0.0025	0.001	0.01	100
Silver, Total (mg/L)	GWC-1	32	0.002422	0.001467	0.0002594	0.0025	0.001	0.01	100
Silver, Total (mg/L)	GWC-10	33	0.0025	0.001512	0.0002633	0.0025	0.001	0.01	100
Silver, Total (mg/L)	GWC-11	33	0.002443	0.001548	0.0002694	0.0025	0.00061	0.01	96.97
Silver, Total (mg/L)	GWC-12	33	0.0025	0.001512	0.0002633	0.0025	0.001	0.01	100
Silver, Total (mg/L)	GWC-17 (bg)	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Silver, Total (mg/L)	GWC-18 (bg)	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Silver, Total (mg/L)	GWC-19	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Silver, Total (mg/L)	GWC-20	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Silver, Total (mg/L)	GWC-21	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Silver, Total (mg/L)	GWC-23	7	0.0025	0.003309	0.001251	0.0013	0.001	0.01	100
Silver, Total (mg/L)	GWC-9	33	0.0025	0.001512	0.0002633	0.0025	0.001	0.01	100
Silver, Total (mg/L)	GWC-4A[*G...	33	0.0025	0.001512	0.0002633	0.0025	0.001	0.01	100
Silver, Total (mg/L)	GWC-5[*GW...	33	0.0025	0.001512	0.0002633	0.0025	0.001	0.01	100
Silver, Total (mg/L)	GWC-15[*G...	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Silver, Total (mg/L)	GWA-16[*G...	12	0.0025	0.002444	0.0007055	0.0019	0.001	0.01	100
Thallium (mg/L)	GWA-13 (bg)	14	0.000...	0.0003275	0.0000...	0.0005	0.00006	0.001	78.57
Thallium (mg/L)	GWA-14 (bg)	14	0.000...	0.0003266	0.0000873	0.0005	0.000079	0.001	85.71
Thallium (mg/L)	GWA-2 (bg)	33	0.001529	0.001654	0.0002879	0.001	0.00006	0.01	100
Thallium (mg/L)	GWA-3 (bg)	33	0.001529	0.001654	0.0002879	0.001	0.00006	0.01	100
Thallium (mg/L)	GWC-1	33	0.001256	0.0006513	0.0001134	0.001	0.00006	0.002	100
Thallium (mg/L)	GWC-10	33	0.001505	0.001667	0.0002903	0.001	0.00006	0.01	96.97
Thallium (mg/L)	GWC-11	33	0.001501	0.001671	0.0002909	0.001	0.00006	0.01	96.97
Thallium (mg/L)	GWC-12	33	0.001504	0.001668	0.0002904	0.001	0.00006	0.01	96.97
Thallium (mg/L)	GWC-17 (bg)	14	0.000...	0.0003253	0.0000...	0.0005	0.000038	0.001	57.14
Thallium (mg/L)	GWC-18 (bg)	13	0.000...	0.0001078	0.0000...	0.00012	0.000095	0.0005	7.692
Thallium (mg/L)	GWC-19	14	0.000...	0.0003288	0.0000...	0.0005	0.000079	0.001	85.71
Thallium (mg/L)	GWC-20	14	0.000...	0.0002709	0.0000...	0.00042	0.000052	0.001	50
Thallium (mg/L)	GWC-21	14	0.000...	0.0003172	0.0000...	0.0005	0.000027	0.001	85.71
Thallium (mg/L)	GWC-23	9	0.000...	0.0003047	0.0001016	0.00016	0.00009	0.001	33.33
Thallium (mg/L)	GWC-9	33	0.001518	0.00166	0.0002889	0.001	0.00006	0.01	96.97
Thallium (mg/L)	GWC-4A[*G...	33	0.00148	0.001682	0.0002928	0.001	0.000036	0.01	93.94
Thallium (mg/L)	GWC-5[*GW...	33	0.001529	0.001654	0.0002879	0.001	0.00006	0.01	100
Thallium (mg/L)	GWC-15[*G...	14	0.000...	0.0002568	0.0000...	0.001	0.0005	0.001	100
Thallium (mg/L)	GWA-16[*G...	14	0.000...	0.000292	0.0000...	0.00075	0.0002	0.001	92.86
Vanadium, Total (mg/L)	GWA-13 (bg)	12	0.003337	0.001571	0.0004537	0.0026	0.00055	0.005	75
Vanadium, Total (mg/L)	GWA-14 (bg)	12	0.003319	0.0016	0.0004619	0.0025	0.00033	0.005	83.33
Vanadium, Total (mg/L)	GWA-2 (bg)	33	0.003601	0.001801	0.0003135	0.0025	0.00044	0.01	87.88

Box & Whiskers Plot

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb Printed 1/20/2020, 11:15 AM

Constituent	Well	N	Mean	Std. Dev.	Std. Err.	Median	Min.	Max.	%NDs
Vanadium, Total (mg/L)	GWA-3 (bg)	32	0.00383	0.001793	0.0003169	0.004	0.00027	0.01	81.25
Vanadium, Total (mg/L)	GWC-1	32	0.003328	0.001396	0.0002468	0.0025	0.00031	0.005	87.5
Vanadium, Total (mg/L)	GWC-10	33	0.003451	0.001876	0.0003265	0.0025	0.0008	0.01	75.76
Vanadium, Total (mg/L)	GWC-11	33	0.003394	0.002098	0.0003652	0.0025	0.00089	0.01	69.7
Vanadium, Total (mg/L)	GWC-12	33	0.003736	0.001957	0.0003406	0.0025	0.0004	0.01	87.88
Vanadium, Total (mg/L)	GWC-17 (bg)	12	0.003439	0.001582	0.0004567	0.00325	0.00047	0.005	75
Vanadium, Total (mg/L)	GWC-18 (bg)	12	0.003383	0.001699	0.0004905	0.0026	0.0016	0.0074	0
Vanadium, Total (mg/L)	GWC-19	12	0.002052	0.0007425	0.0002143	0.0023	0.00092	0.0035	33.33
Vanadium, Total (mg/L)	GWC-20	12	0.003445	0.001538	0.0004441	0.00325	0.00054	0.005	66.67
Vanadium, Total (mg/L)	GWC-21	12	0.003523	0.001643	0.0004742	0.0039	0.00048	0.005	66.67
Vanadium, Total (mg/L)	GWC-23	7	0.00259	0.001511	0.0005709	0.0025	0.00063	0.0055	42.86
Vanadium, Total (mg/L)	GWC-9	33	0.00376	0.001813	0.0003156	0.0027	0.00019	0.01	84.85
Vanadium, Total (mg/L)	GWC-4A[*G...	33	0.003654	0.001765	0.0003072	0.0025	0.00028	0.01	87.88
Vanadium, Total (mg/L)	GWC-5[*GW...	33	0.003554	0.001779	0.0003096	0.0025	0.00047	0.01	87.88
Vanadium, Total (mg/L)	GWC-15[*G...	12	0.003417	0.001634	0.0004718	0.0033	0.0003	0.005	75
Vanadium, Total (mg/L)	GWA-16[*G...	12	0.003246	0.001674	0.0004832	0.0025	0.00015	0.005	75
Zinc, Total (mg/L)	GWA-13 (bg)	12	0.01035	0.008575	0.002475	0.00515	0.0022	0.02	41.67
Zinc, Total (mg/L)	GWA-14 (bg)	12	0.009317	0.007967	0.0023	0.0046	0.0028	0.02	33.33
Zinc, Total (mg/L)	GWA-2 (bg)	33	0.007567	0.006022	0.001048	0.0043	0.0025	0.02	33.33
Zinc, Total (mg/L)	GWA-3 (bg)	30	0.008533	0.006633	0.001211	0.00535	0.0019	0.02	50
Zinc, Total (mg/L)	GWC-1	32	0.00695	0.005941	0.00105	0.00355	0.002	0.02	28.13
Zinc, Total (mg/L)	GWC-10	33	0.007706	0.007005	0.001219	0.0034	0.0012	0.02	69.7
Zinc, Total (mg/L)	GWC-11	32	0.007322	0.006791	0.0012	0.0027	0.0019	0.02	65.63
Zinc, Total (mg/L)	GWC-12	33	0.007591	0.006438	0.001121	0.0042	0.0023	0.02	33.33
Zinc, Total (mg/L)	GWC-17 (bg)	12	0.011	0.006979	0.002015	0.00595	0.0046	0.02	33.33
Zinc, Total (mg/L)	GWC-18 (bg)	11	0.009555	0.00836	0.002521	0.0052	0.0017	0.02	36.36
Zinc, Total (mg/L)	GWC-19	12	0.009692	0.008021	0.002316	0.00485	0.0023	0.02	33.33
Zinc, Total (mg/L)	GWC-20	12	0.01177	0.007369	0.002127	0.00785	0.0035	0.02	41.67
Zinc, Total (mg/L)	GWC-21	12	0.00925	0.008281	0.00239	0.00575	0.0015	0.02	41.67
Zinc, Total (mg/L)	GWC-23	7	0.01289	0.006823	0.002579	0.0098	0.0049	0.02	42.86
Zinc, Total (mg/L)	GWC-9	33	0.008564	0.009741	0.001696	0.0049	0.0024	0.051	60.61
Zinc, Total (mg/L)	GWC-4A[*G...	32	0.008184	0.00521	0.000921	0.0064	0.0023	0.02	25
Zinc, Total (mg/L)	GWC-5[*GW...	33	0.007861	0.006757	0.001176	0.0042	0.0022	0.022	33.33
Zinc, Total (mg/L)	GWC-15[*G...	12	0.009692	0.00767	0.002214	0.00555	0.0028	0.02	33.33
Zinc, Total (mg/L)	GWA-16[*G...	12	0.009275	0.00797	0.002301	0.0045	0.0024	0.02	33.33

Box & Whiskers Plot

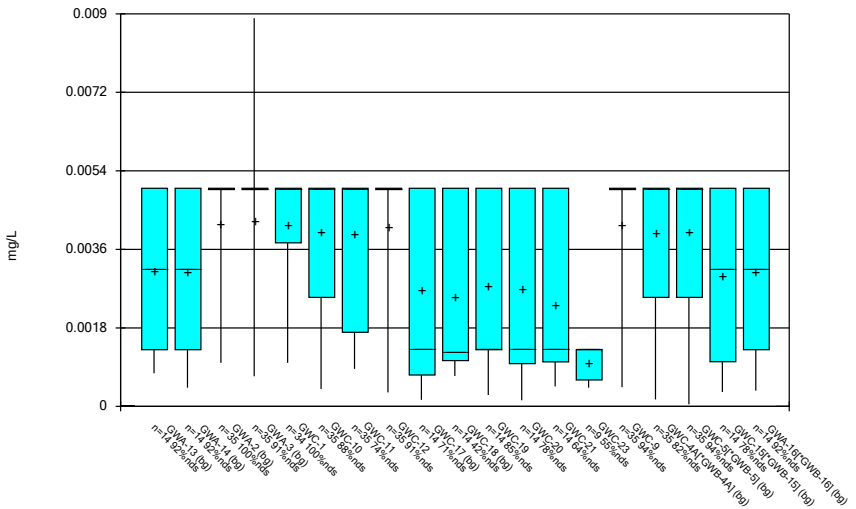


Constituent: Antimony Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

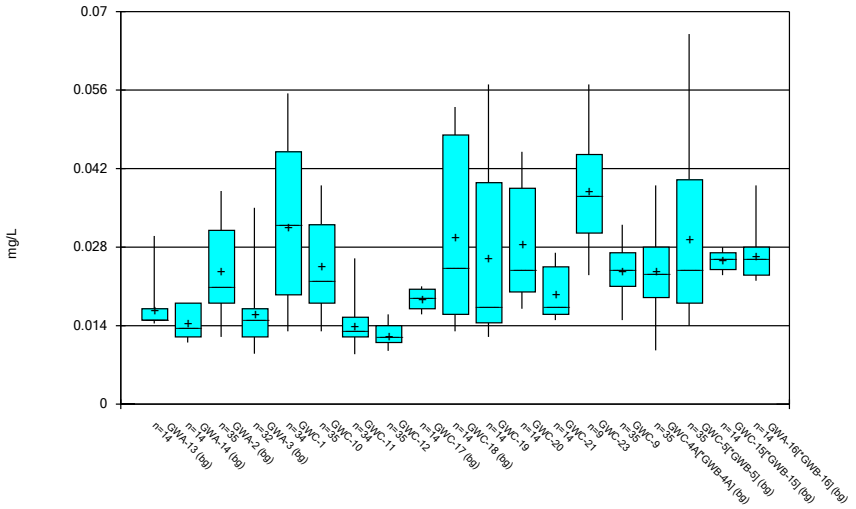


Constituent: Arsenic, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

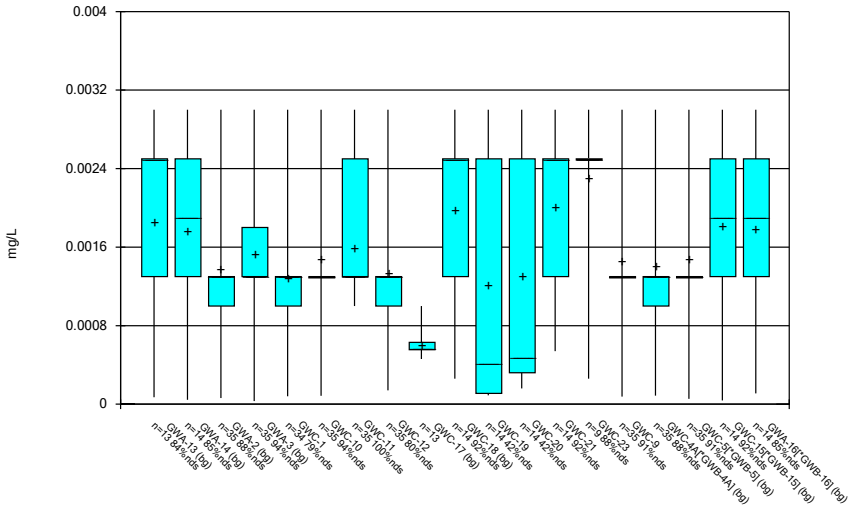


Constituent: Barium, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

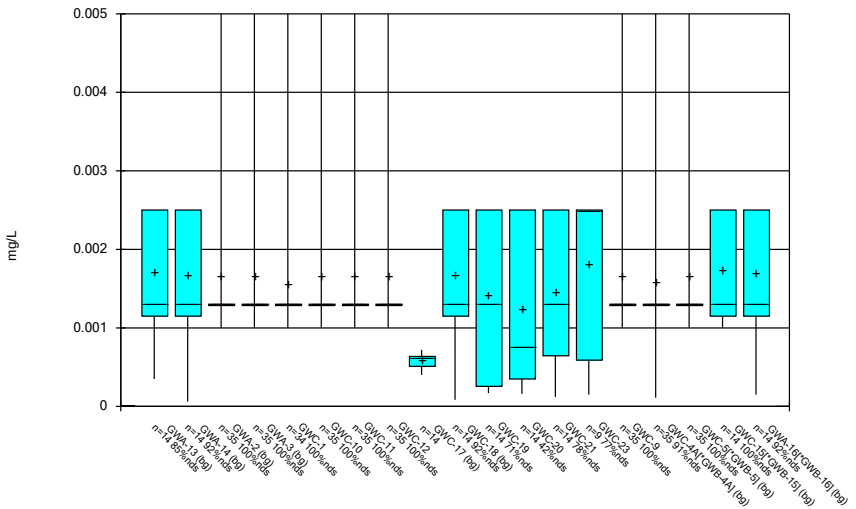
Box & Whiskers Plot



Constituent: Beryllium, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

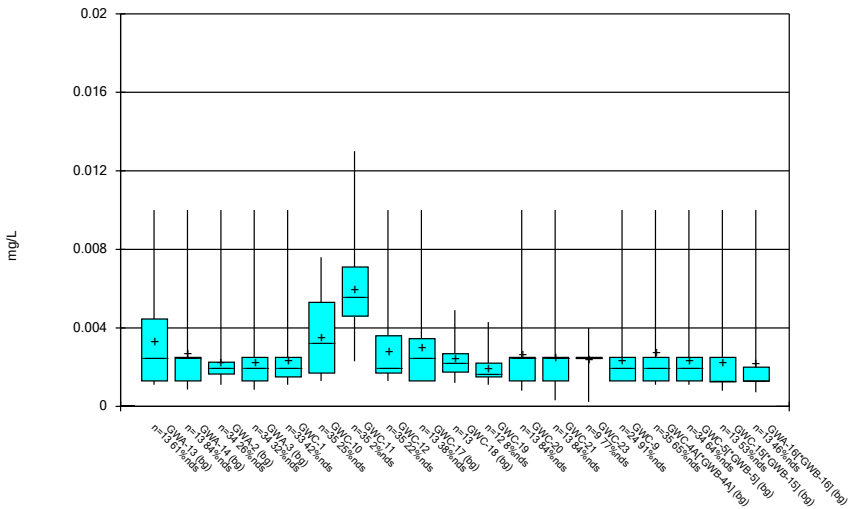


Constituent: Cadmium, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

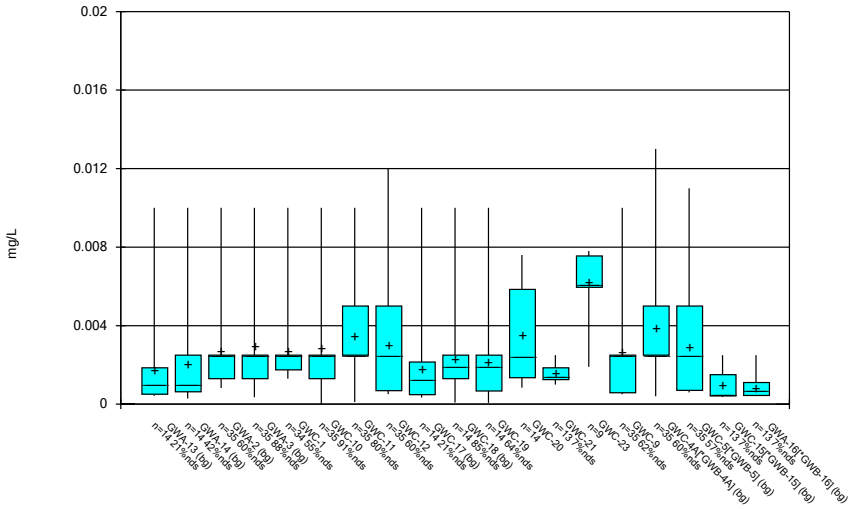


Constituent: Chromium, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

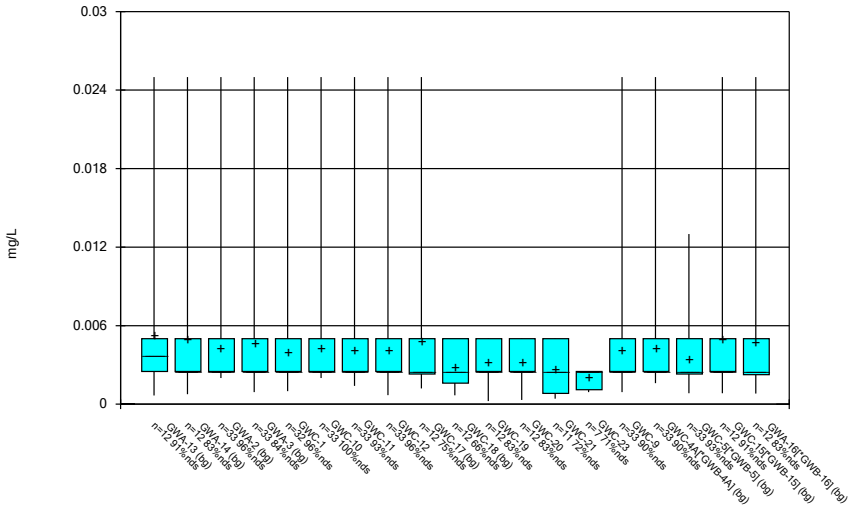


Constituent: Cobalt, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

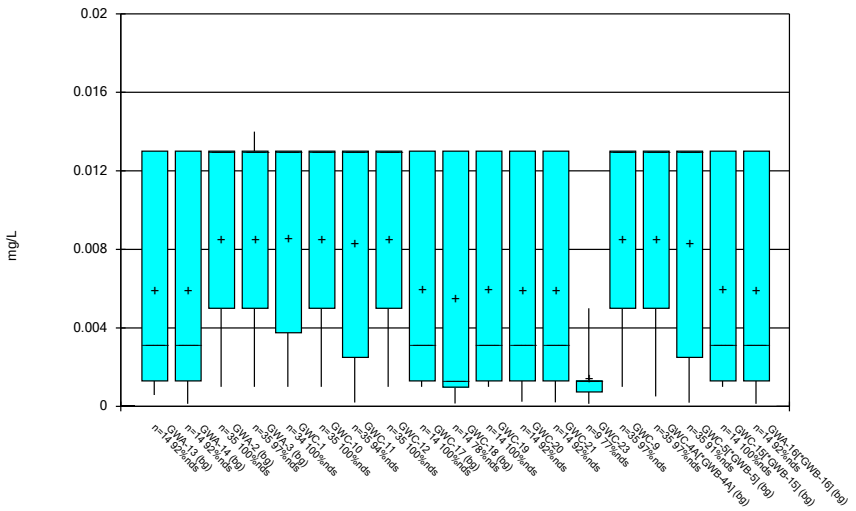
Box & Whiskers Plot



Constituent: Copper, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

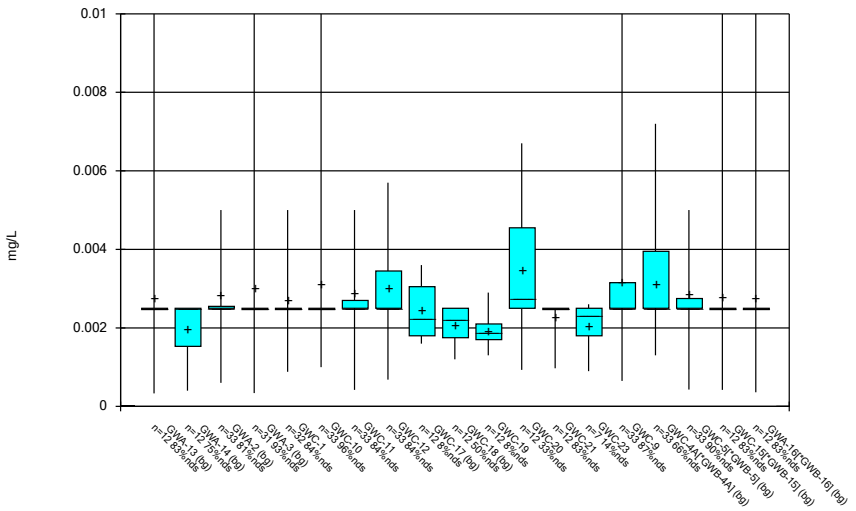
Box & Whiskers Plot



Constituent: Lead, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

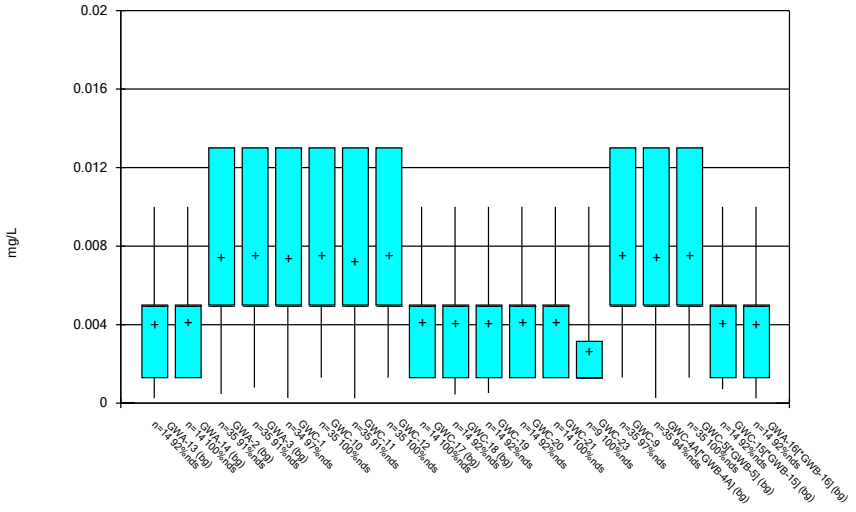
Box & Whiskers Plot



Constituent: Nickel, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

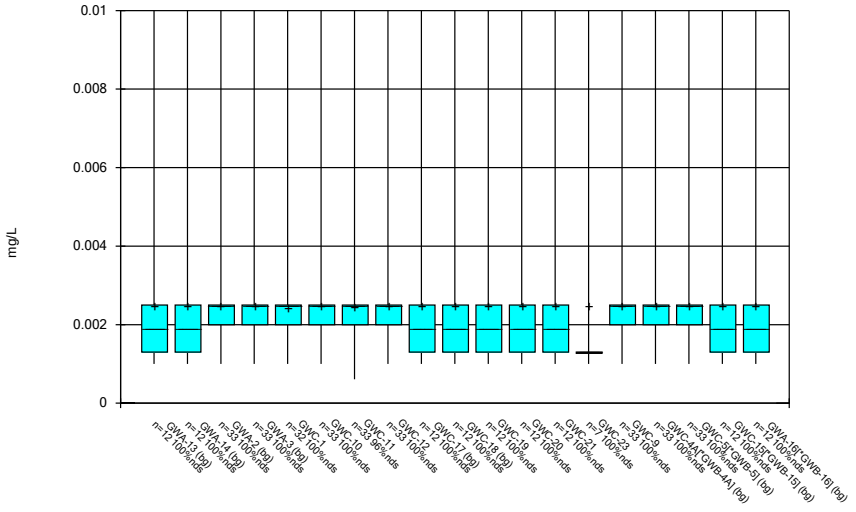
Box & Whiskers Plot



Constituent: Selenium Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

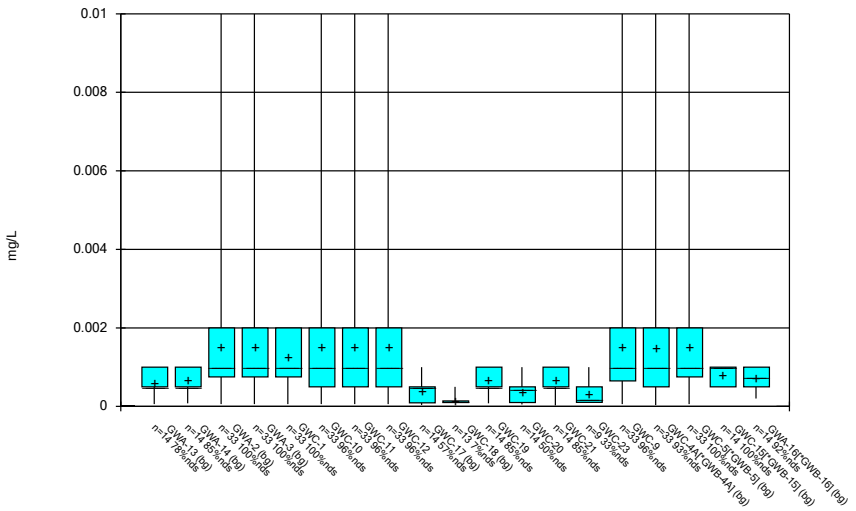
Box & Whiskers Plot



Constituent: Silver, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Box & Whiskers Plot

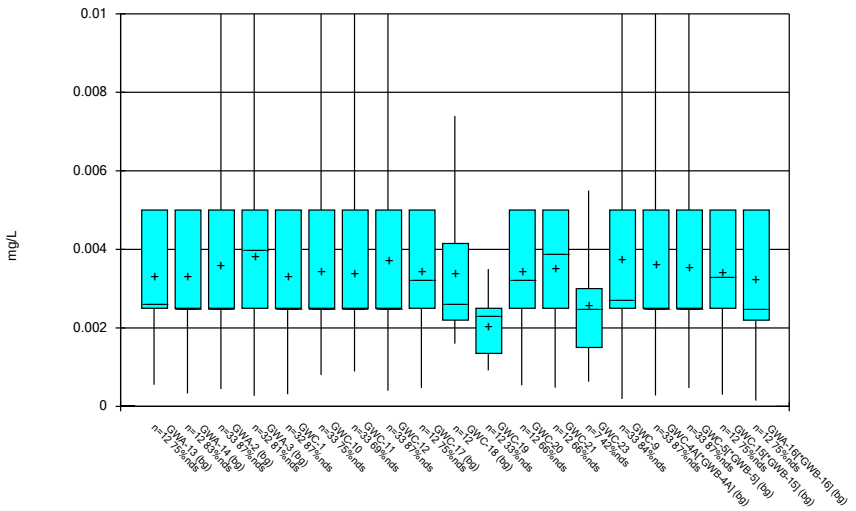


Constituent: Thallium Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot

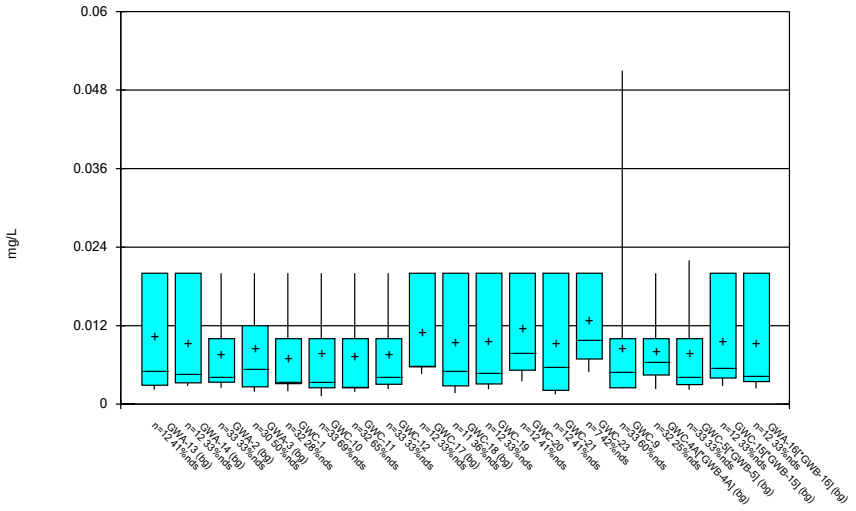


Constituent: Vanadium, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb

Sanitas™ v.9.6.24 Software licensed to GEI Consultants, Inc. P.C. UG

Box & Whiskers Plot



Constituent: Zinc, Total Analysis Run 1/20/2020 11:13 AM View: LF4 EPD

Plant McIntosh Client: GEI Data: McIntosh No 4 flat 3_28.mdb