ARCADIS

Georgia Power

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

Plant Yates - Gypsum Landfill

Newnan, Georgia

July 30, 2021

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

Plant Yates - Gypsum Landfill
Newnan, Georgia

Samantha Thomas
Project Task Manager

Prepared for:

Georgia Power Company
Newnan, Georgia
Coweta County

Geoffrey Gay
Technical Expert (Eng) / Project Manager

Prepared by:

Arcadis U.S., Inc.
2839 Paces Ferry Road
Suite 900
Atlanta
Georgia 30339
Tel 770 431 8666
Fax 770 435 2666

Date:

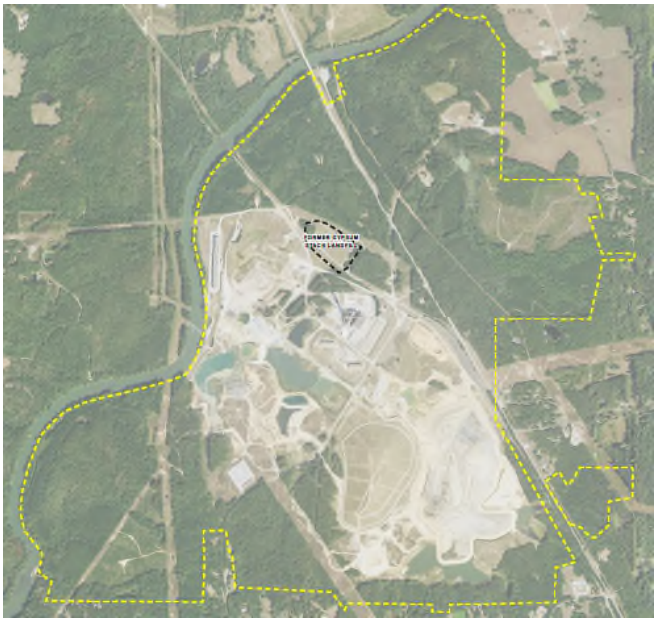
July 30, 2021

SUMMARY

This summary of the 2021 Annual Monitoring and Corrective Action Report provides the status of groundwater monitoring and corrective action program through March 2021 at Georgia Power Company's (Georgia Power's) Plant Yates Gypsum Landfill (the Site). This summary was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6[1] of the U.S. Environmental Protection Agency (USEPA) Coal Combustion Residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D).

Plant Yates is located at 708 Dyer Road, approximately 8 miles northwest of Newnan and 13 miles southeast of Carrollton in Coweta County, Georgia. Plant Yates originally operated seven coal-fired steam generating units. Five of the units were retired in 2015, and two units were converted from coal to natural gas. CCR material resulting from power generation have historically been transferred and stored at the Site. The Site is located on the northern portion of the Plant Yates property. The Gypsum Landfill was closed by removal of CCR material.

Groundwater at the Site is monitored using a monitoring system comprised of one upgradient and six downgradient wells installed at the Site. A permit application package for the Gypsum Landfill was submitted in November 2018 to comply with the CCR rule and is currently under review. Routine sampling and reporting began in 2019 after the completion of eight background sampling events. Based on groundwater conditions at the Site, an assessment monitoring program was established on November 13, 2019. During the 2021 annual reporting period, the Site remained in assessment monitoring.



Plant Yates and the Site

During the 2021 annual reporting period, Arcadis conducted groundwater sampling events in August 2020, September 2020, and March 2021. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Per the CCR rule, groundwater results were evaluated in accordance with the certified statistical methods. That evaluation showed statistically significant values of Appendix III[2] parameters in wells provided in the table below. There were no statistically significant levels (SSLs) for Appendix IV[3] parameters[4].

[1] 80 FR 21468, Apr. 17, 2015, as amended at 81 FR 51807, Aug. 5, 2016; 83 FR 36452, July 30, 2018; 85 FR 53561, Aug. 28, 2020
[2] Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)
[3] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228.
[4] A state statistically significant level SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, or the calculated background interwell prediction limit. A federal SSL-related constituent is

Appendix III Parameter	September 2020	March 2021
Boron	GWC-4R	GWC-4R
Calcium	GWC-1R, GWC-2R, GWC-5R, GWC-6R	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R
Chloride	GWC-2R, GWC-4R	GWC-1R, GWC-2R, GWC-4R
Sulfate	GWC-1R, GWC-2R, GWC-5R, GWC-6R	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R
Total Dissolved Solids	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to the website and provided to Georgia Environmental Protection Division (GAEPD) semiannually.

determined by comparing the confidence intervals developed to either the constituent's MCL, if available, the USEPA RSL, if no MCL is available, or the calculated background interwell prediction limit.

CONTENTS

Acronyms and Abbreviations iii

Professional Certification iv

1 Introduction 1

1.1 Site Description and Background 1

1.2 Site Geology and Hydrogeologic Setting 1

1.3 Groundwater Monitoring Well Network and CCR Unit Description 2

2 Groundwater Monitoring 2

2.1 Monitoring Well Installation and Maintenance 3

2.2 Assessment Monitoring 3

3 Sample Methodology and Analysis 3

3.1 Groundwater Flow Direction, Gradient, and Velocity 3

3.2 Groundwater Sampling 4

3.3 Laboratory Analysis 4

3.4 Data Quality Assurance/Quality Control and Validation 4

4 Statistical Analysis 5

4.1 Statistical Methods 5

4.1.1 Permit-Required Appendix I and II Metals 5

4.1.2 Appendix III Monitoring Statistics 6

4.1.3 Appendix IV Assessment Monitoring Statistics 6

4.2 Statistical Analysis Results 8

4.2.1 Permit-Required Appendix I and II Metals 8

4.2.2 Appendix III Constituents 8

4.2.3 Appendix IV Assessment Monitoring Constituents 8

5 Monitoring Program Status 9

6 Conclusions and Future Actions 9

7 References 9

TABLES

Table 1. Monitoring Well Network Summary

Table 2. Groundwater Sampling Event Summary

Table 3. Summary of Groundwater Monitoring Parameters

Table 4. Summary of Groundwater Elevations

Table 5. Groundwater Flow Velocity Calculations

Table 6. Summary of Groundwater Analytical Data

Table 7. Background Levels and Groundwater Protection Standards

FIGURES

Figure 1. Site Location Map

Figure 2. Plant Yates Ash Removal Areas

Figure 3. Well Location Map

Figure 4. Groundwater Elevation Map August 2020

Figure 5. Groundwater Elevation Map September 2020

Figure 6. Groundwater Elevation Map March 2021

APPENDICES

Appendix A. Laboratory Analytical Reports and Data Validation Reports

Appendix B. Field Sampling Reports

Appendix C. Statistical Analysis Results

ACRONYMS AND ABBREVIATIONS

ACC	Atlantic Coast Consulting, Inc.
CCR	Coal Combustion Residuals
CCR Units	the combined monitoring systems of AP-3, A, B, and B', and the R6 Landfill
CFR	Code of Federal Regulations
DO	dissolved oxygen
GAEPD	Georgia Environmental Protection Division
GPC	Georgia Power Company
GWPS	Groundwater Protection Standard
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
mg/L	milligrams per liter
ORP	oxidation-reduction potential
QA/QC	Quality Assurance/Quality Control
SSI	Statistically Significant Increase
SSL	statistically significant level
TDS	total dissolved solids
USEPA	United States Environmental Protection Agency

PROFESSIONAL CERTIFICATION

This 2021 Annual Groundwater Monitoring and Corrective Action Report for the Georgia Power Company Plant Yates Gypsum Landfill has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residual rule (40 Code of Federal Regulations 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 Arcadis, U.S., Inc.

Arcadis U.S., Inc.

7.30.21

J. Geoffrey Gay, P.E.
Technical Expert (Eng)
Georgia Registration No. PE 27801

Date

1 INTRODUCTION

This 2021 Annual Groundwater Monitoring and Corrective Action Report presents groundwater monitoring activities conducted at the Georgia Power Company (GPC) Plant Yates Gypsum Landfill (the Site) in the second half of 2020 and the first half of 2021. This report was prepared in accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residuals (CCR) Rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division (GAEPD) Rules for Solid Waste Management 391-3-4-.10. Groundwater monitoring requirements for the Site are specified by GAEPD Rule 391-3-4-.10(6)(a), which also incorporates the USEPA CCR Rule. For ease of reference, the USEPA CCR Rules are cited within this report.

A permit application package for the Plant Yates Gypsum Stack Landfill was submitted in November 2018 to comply with GAEPD's Rule 391-3-4-.10 and is currently under review. The list of analytes included in the groundwater monitoring program was modified to meet the requirements of 40 CFR §§ 257.90 through 257.95 of the Federal CCR Rule through a minor modification in August 2017. A notice of assessment monitoring was placed in the operating record in November 2019 based on statistically significant increases (SSIs) documented in the Supplemental 2019 First Semiannual Groundwater Monitoring Report (ACC 2019). This report presents the results of both the annual monitoring for Appendix IV of 40 CFR Part 257 conducted in August 2020 and two semiannual monitoring events conducted in September 2020 and March 2021.

1.1 Site Description and Background

Plant Yates is located at 708 Dyer Road on the east bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line. The Site is approximately 8 miles northwest of the City of Newnan and 13 miles southeast of the City of Carrollton. Plant Yates occupies approximately 2,400 acres. **Figure 1** depicts the site location relative to the surrounding area.

The Site ceased accepting CCR before October 19, 2015, and is therefore not subject to federal monitoring requirements. The Site was closed following the removal of all gypsum and liner material. A closure certification report was submitted to GAEPD in January 2017. Areas where CCR Removal Reports have been submitted to GA EPD are shown in **Figure 2**.

1.2 Site Geology and Hydrogeologic Setting

Plant Yates is located in the Inner Piedmont Physiographic Province of western Georgia, immediately southeast of the Brevard Zone, a regional fault zone that separates the Piedmont from the Blue Ridge. Rock units at Plant Yates are primarily interlayered gneiss and schists. The rocks in the area have been subjected to extensive metamorphism, deformation, and igneous intrusions. Extensive fracture sets are present in the underlying bedrock. Surface expressions of these fractures are observed on topographic maps and aerial photos of the Plant Yates area (ACC 2019).

A thin layer of soil from 1 to 2 feet thick overlies a thick layer of saprolite. The saprolite, which extends to typical depths of 20 to 40 feet below ground surface, was formed in place by the physical and chemical weathering of the underlying metamorphic rocks. The saprolite typically consists of clay and silt-rich soils

that grade to sandier soils with depth. A zone of variable thickness (approximately 5 to 20 feet) of transitionally weathered rock typically exists between the saprolite and competent bedrock. The lithology of the transition zone is highly variable and ranges from medium to coarse unconsolidated material to highly fractured and weathered rock fragments. Localized alluvial soils consisting of generally coarser material (silty-sand, clayey silt, and silty clay with well-rounded gravel and cobbles) observed in saprolite may be related to historical river channel migration.

At Plant Yates, groundwater is typically encountered slightly above the saprolite/weathered rock interface. Groundwater flow in the saprolite zone is through interconnected pores and relict textures and fractures. As the rock becomes increasingly competent with depth, groundwater flow occurs mainly through joints and fractures (i.e., secondary porosity). Recharge to the water-bearing zones in fractured bedrock takes place by seepage through the overlying mantle of soil/saprolite or by direct entrance through openings in outcrops. The average depth of the water table at Plant Yates varies with topography, ranging from approximately 5 to 50 feet below ground surface. The water table occurs in the saprolite and in the transitionally weathered zone, at least several feet above the top of rock.

Field hydraulic conductivity tests (i.e., slug tests) have been performed in saprolite and weathered bedrock at multiple locations on the Site. The average hydraulic conductivity for the unit is 2.3×10^{-4} centimeters per second based on multiple rising-head and falling-head slug tests (SCS 1992). This indicates a fairly uniform medium across the saprolite and weathered rock horizon. The hydraulic conductivity values from the field tests fall within a range consistent with that of Piedmont overburden (Newell et al. 1990).

1.3 Groundwater Monitoring Well Network and CCR Unit Description

A groundwater monitoring system was previously installed within the uppermost aquifer at the Site. The monitoring system was designed to monitor groundwater passing the unit boundary within the uppermost aquifer. Wells were placed to serve as upgradient and downgradient monitoring points based on groundwater flow direction. **Table 1** presents a summary of the monitoring well network depicted on **Figure 3**.

2 GROUNDWATER MONITORING

Pursuant to 40 CFR § 257.90(e), the following describes monitoring-related activities performed in the second half of 2020 and first half of 2021 and presents the status of the monitoring program. Groundwater sampling was performed in accordance with 40 CFR § 257.93. Samples were collected from each well in the certified monitoring system shown on **Figure 3**.

Table 2 summarizes groundwater sampling events conducted by Arcadis at the Site during the past year. During the August 2020 event, groundwater samples were collected and analyzed for 40 CFR 257 Appendix IV constituents to meet the requirement of 40 CFR § 257.95(b). During the September 2020 and March 2021 semiannual sampling events, groundwater samples were collected for both 40 CFR 257 Appendix III and the Appendix IV constituents detected during the August 2020 event as well as permit-required Appendix I constituents pursuant to Rule 391-3-4-.14. Analytical laboratory reports and data validation reports are included in **Appendix A**. Field sampling logs are provided in **Appendix B**.

2.1 Monitoring Well Installation and Maintenance

Monitoring well-related activities were limited to visual inspection of well conditions before sampling, recording the site conditions, and performing exterior maintenance to provide safe access for sampling. Well inspection records are included in **Appendix B**.

2.2 Assessment Monitoring

SSIs of Appendix III constituents were identified in the initial detection monitoring event (June 2019). The initial assessment scan monitoring event was conducted in August 2020. Semiannual assessment monitoring events were conducted in September 2020 and March 2021. Pursuant to § 257.95(d)(1), groundwater samples collected from the CCR monitoring wells were analyzed for Appendix III constituents, those Appendix IV constituents detected during the initial assessment event, and the Appendix I and II metals required by the existing state permit. **Table 3** provides a summary of the constituents monitored during the events.

3 SAMPLE METHODOLOGY AND ANALYSIS

Groundwater monitoring methods used at the Site are described in the following sections.

3.1 Groundwater Flow Direction, Gradient, and Velocity

Before each assessment sampling event, static water levels were recorded from the wells in the well network for the Gypsum Landfill. Groundwater elevations recorded during the August 2020, September 2020, and March 2021 monitoring events are summarized in **Table 4**. Potentiometric surface maps are provided on **Figures 4 through 6** for the August 2020, September 2020, and March 2021 sampling events. The general direction of groundwater flow across the Site is towards the west and is consistent with historical patterns.

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

Specifically:

$$v = \frac{k\left(\frac{dh}{dl}\right)}{n_e}$$

where:
v = groundwater seepage velocity
k = hydraulic conductivity
dh/dl = hydraulic gradient
n_e = effective porosity

Groundwater flow velocities were calculated for the Site based on hydraulic gradients, average hydraulic conductivity based on previous slug test data, and an estimated effective porosity of 0.20 (based on a review of several sources including Driscoll 1986, USEPA 1989, and Freeze and Cherry 1979). An alternate effective porosity of 0.48 was also used to define the range of groundwater flow velocities (SCS 1992). Groundwater flow velocity calculations are presented in **Table 5**. The calculated flow velocity ranged from 0.043 foot per day (16 feet per year) to 0.109 foot per day (40 feet per year).

3.2 Groundwater Sampling

Groundwater samples were collected using low-flow sampling procedures in accordance with 40 CFR § 257.93(a). Monitoring wells were purged and sampled using a dedicated bladder pump until water quality parameters stabilized. For wells sampled with non-dedicated bladder pumps, the pumps were lowered into the 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.

An AquaTroll 600™ (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, conductivity, temperature, oxidation-reduction potential [ORP], and dissolved oxygen [DO]) during well purging to verify stabilization before sampling. Turbidity was measured using a portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met for a minimum of three consecutive readings:

- ± 0.1 standard units for pH;
- ± 5% for specific conductance;
- Turbidity measurements less than 5 nephelometric turbidity units.

Once stabilization was achieved, samples were collected directly into laboratory-supplied sample containers with preservative (where applicable). The samples were placed on ice in an insulated cooler following collection. The samples were submitted to Pace Analytical Services, LLC following chain-of-custody protocol. Stabilization logs for each well are included in **Appendix B**.

3.3 Laboratory Analysis

Groundwater samples collected from the August 2020 initial assessment monitoring event were analyzed for Appendix IV parameters. Groundwater samples collected during the subsequent semiannual assessment events were analyzed for Appendix III constituents, Appendix IV constituents detected during the initial assessment event, and the 40 CFR Part 258 Appendix I and II metals required by the existing state permit. Appendix IV parameter molybdenum was not detected during the initial assessment event. **Table 3** provides a summary of the constituents monitored during the events. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in **Appendix A**.

Analytical data collected from the initial assessment scan and semiannual sampling events are summarized in **Table 6**.

Laboratory analyses were performed by Pace Analytical Services, LLC, which is accredited by the National Environmental Laboratory Accreditation Program and maintains this certification for all parameters analyzed for this project. Laboratory reports and chain-of-custody records for the monitoring events are presented in **Appendix A**.

3.4 Data Quality Assurance/Quality Control and Validation

During each sampling event, quality assurance/quality control (QA/QC) samples were collected at a rate of one per 10 samples. QA/QC samples included equipment blanks (where non-dedicated equipment is used), field blanks, and duplicate samples. Groundwater quality data in this report were validated in

accordance with USEPA guidance (USEPA 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post-digestion spikes, laboratory and field duplicate relative percent differences, equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags have been applied to the data using USEPA procedures as guidance (USEPA 2017). The data validation report, prepared by Arcadis and included in **Appendix A,** summarizes the validation actions and applicable interpretation.

The purpose of the data quality evaluation was to determine the reliability of the chemical analyses and the accuracy and precision of information acquired from the laboratory. Data quality was assessed through the review and evaluation of field sampling activities, quality control samples, and data associated with the chemical analytical results. The data are considered useable for meeting project objectives, and the results are considered valid. The complete results of the data quality evaluations are provided in **Appendix A**.

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

4 STATISTICAL ANALYSIS

Statistical analysis of Appendix III and IV groundwater monitoring data was performed on samples collected from the Gypsum Landfill groundwater monitoring network pursuant to § 257.93(f) in September 2020 and March 2021. The statistical method used at the Site was developed in accordance with 40 CFR § 257.93(f) using methodology presented in Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*,* March 2009, US EPA 530/R-09-007 (USEPA 2009).

4.1 Statistical Methods

The Sanitas™ groundwater statistical software was used to perform the statistical analyses. Sanitas™ is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the Unified Guidance document (USEPA 2009). Although assessment monitoring has been implemented, statistical evaluation of both Appendix III constituents and permit required Appendix I and II metals is performed.

4.1.1 Permit-Required Appendix I and II Metals

A minor permit modification was submitted to GAEPD following submittal of the 2019 First Supplemental Semiannual Groundwater Monitoring Report to allow use of intrawell methods for evaluation of state metals. The statistical methodology was revised to an intrawell method following the June 2019 monitoring event.

Statistical tests used to evaluate the groundwater monitoring data consist of intrawell prediction limits (PLs) combined with a 1-of-2 verification resample plan for all required metals. In an intrawell comparison,

analytical results from an individual well are compared to historical analytical results from that same well. If data from a sampling event initially exceed the PL, the resampling strategy may be used to verify the result. In 1-of-2 resampling, an independent resample may be collected and evaluated within 90 days to determine whether the initial exceedance is verified. If a resample exceeds the PL, the initial exceedance is verified, and 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.

4.1.2 Appendix III Monitoring Statistics

Groundwater data were evaluated using interwell prediction limits for Appendix III parameters boron, calcium, chloride, sulfate, and total dissolved solids (TDS) combined with a 1-of-2 verification resample plan. Monitoring results for fluoride and pH were evaluated using intrawell prediction limits combined with a 1-of-2 verification resample plan. Interwell prediction limits pool upgradient well data to establish a background statistical limit. The most recent sample from each downgradient well is compared to the background limit to determine whether there are exceedances of background. When the most recent sample exceeds its respective background statistical limit, an SSI is identified. The following criteria were applied to the evaluation:

- Statistical analyses were not performed on analytes containing 100 percent non-detects.
- When data contained less than 15 percent non-detects in background, simple substitution of one half the reporting limit was used in the statistical analysis. The reporting limit used for non-detects is the practical quantification limit reported by the laboratory.
- When data contained between 15 and 50 percent non-detects, the Kaplan-Meier non-detect adjustment was applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Non-parametric PLs were used on data containing greater than 50 percent non-detects.

4.1.3 Appendix IV Assessment Monitoring Statistics

Parametric tolerance limits were used to calculate background limits from pooled sitewide upgradient well data for Appendix IV parameters with a target of 95 percent confidence and 95 percent coverage. The pool of upgradient data is representative of the range and variability of naturally occurring concentrations at Plant Yates. The background wells at Plant Yates are identified below.

Background Wells		
YGWA-47	YGWA-5D	YGWA-30I
YGWA-1I	YGWA-5I	YGWA-4I
YGWA-1D	YGWA-17S	YGWA-21I
YGWA-2I	YGWA-18I	YGWA-39
YGWA-3I	YGWA-18S	YGWA-40

Background Wells	
YGWA-3D	YGWA-20S
GWA-2	YGWA-14S

The confidence and coverage levels for non-parametric tolerance limits depend on the number of background samples. The background limits were then used when determining the Groundwater Protection Standards (GWPS) established under 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a).

As described in 40 CFR § 257.95(h)(1-3), the GWPS is:

- The maximum contaminant level (MCL) established under §§ 141.62 and 141.66 of this title;
- For the following constituents:
  - Cobalt 0.006 milligram per liter (mg/L)
  - Lead 0.015 mg/L
  - Lithium 0.040 mg/L
  - Molybdenum 0.100 mg/L.
- The background level for constituents for which the background level is higher than the MCL or rule identified GWPS.

USEPA revised the federal CCR Rule on July 30, 2018, providing GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR 257.95(h)(2). Presently, those updated GWPS have not yet been incorporated in the current GAEPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, background concentrations are considered when determining the GWPS for constituents for which an MCL has not been established (or where background is higher than the MCL). Under the existing GAEPD rules, the GWPS is:

- The MCL; or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above federal and state rules, GWPS have been established for statistical comparison of Appendix IV constituents at the Gypsum Landfill. **Table 7** summarizes the background limits established at each monitoring well for the September 2020 and March 2021 sampling events along with the GWPS established under federal and state rules.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV parameters in each downgradient well. Those confidence intervals were compared to the GWPS established under the federal and state rules. A well/constituent pair was considered to exceed its respective standard only when the entire confidence interval exceeded a GWPS. If there was an exceedance of the established standard, a statistically significant level (SSL) exceedance was identified.

4.2 Statistical Analysis Results

4.2.1 Permit-Required Appendix I and II Metals

Analytes required by the existing state permit were analyzed during the semiannual monitoring events. Concentrations of target metals that exceeded their respective intrawell PLs calculated from the September 2020 sampling event include:

- Nickel: GWA-2 (upgradient);
- Selenium: GWC-1R;
- Zinc: GWA-2 (upgradient) and GWC-5R.

While a PL exceedance was noted for selenium in well GWC-1R and zinc in GWC-5R (**Appendix C**), the concentrations at these wells are below the groundwater protection standard of 0.05 mg/L for selenium and 5.0 mg/L for zinc.

Concentrations of target metals that exceeded their respective intrawell PLs calculated from the March 2021 sampling event include the constituents listed below. The RLs decreased for beryllium, cadmium, chromium, lead, mercury, and selenium; however, the GWPSs are not affected.

- Beryllium: GWC-5R;
- Cadmium: GWC-5R;
- Cobalt: GWC-3R;
- Nickel: GWA-2 (upgradient);
- Selenium: GWC-1R and GWC-3R;
- Zinc: GWA-2 (upgradient) and GWC-5R.

While a PL exceedance was noted for beryllium in GWC-5R, cadmium in GWC-5R, and selenium for GWC-1R and GWC-3R, concentrations at these wells are below their respective groundwater protection standards of 0.004 mg/L, 0.005 mg/L, and 0.05 mg/L. Other downgradient well concentrations of cobalt at GWC-3R and zinc at GWC-5R are below the groundwater protection standards.

4.2.2 Appendix III Constituents

Based on review of the Appendix III statistical analysis presented in **Appendix C**, Appendix III constituents have not returned to background levels, and assessment monitoring should continue pursuant to 40 CFR § 257.95(f). A table identifying the site monitoring wells in which analytical sampling results have revealed constituents with SSIs is included in **Appendix C**.

4.2.3 Appendix IV Assessment Monitoring Constituents

Statistical analysis of the September 2020 and March 2021 Appendix IV data at the Gypsum Landfill was completed using the GWPS established according to both 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a). No SSLs were identified.

5 MONITORING PROGRAM STATUS

In accordance with GAEPD rule 391-3-4-.10(6)(a) and 40 CFR §257.94(e), an assessment monitoring program was initiated in November 2019. The Site will remain in assessment monitoring due to SSIs for Appendix III parameters.

6 CONCLUSIONS AND FUTURE ACTIONS

This 2021 Annual Groundwater Monitoring and Corrective Action Report was prepared to fulfill the requirements of USEPA's CCR Rule 40 CFR § 257.95 and GAEPD Rule 391-3-4-.10. Statistical evaluations of the groundwater monitoring data for the Site identified SSIs of Appendix III constituents.

The next assessment monitoring event is scheduled for August 2021. The August semiannual monitoring event will be a combined event to meet the requirements of GAEPD Rule 391-3-4-.10(6) and 40 CFR §§ 257.95(b) and (d)(1) and will include sampling and analysis of all Appendix I, II, III and IV constituents.

7 REFERENCES

ACC. 2019. *Supplemental 2019 First Semiannual Groundwater Monitoring Report*. Prepared for Georgia Environmental Protection Division. February 2019.

Driscoll, F.G. 1986. *Groundwater and Wells*, Johnson Screens, Saint Paul, Minnesota, 1089 pp.

Freeze, R.A. and Cherry, J.A. 1979. *Groundwater*, Prentice-Hall, Englewood Cliffs, New Jersey, 604 pp.

SCS. 1992. The Geology and Hydrogeology of the Plant Yates CT121 Project Gypsum Stacking Area.

Newell, C.J., L.P. Hopkins, and P.B. Bedient. 1990. A Hydrogeologic Database for Ground-Water Modeling. *Ground Water. 28(5)*:703-714.

USEPA. 1989. RCRA Facility Investigation (RFI) Guidance, Interim Final, Vol I [EPA 530/SW-89-031], OWSER Directive 9502.00-6D.

USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March.

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

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 Network Summary
2021 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Well	Installation Date	Top of Casing Elevation (ft)	Bottom Depth (ft bTOC)	Bottom Elevation (ft)	Depth to Top of Screen (ft bTOC)	Top of Screen Elevation (ft)	Purpose
GWA-2	2007	805.62	52.02	753.60	41.82	763.80	Upgradient
GWC-1R	5/12/2011	773.27	36.37	736.90	26.07	747.20	Downgradient
GWC-2R	10/19/2010	769.76	44.00	725.76	33.70	736.06	Downgradient
GWC-3R	5/11/2011	775.25	38.45	736.80	28.15	747.10	Downgradient
GWC-4R	10/20/2010	757.48	30.20	727.28	19.90	737.58	Downgradient
GWC-5R	5/11/2011	782.45	42.35	740.10	32.05	750.40	Downgradient
GWC-6R	8/11/2009	788.98	55.25	733.73	41.94	747.04	Downgradient

Notes:

ft bTOC - feet below top of casing

Elevation in U.S. Survey Feet (NAVD88) based on June 2020 survey

Table 2
Groundwater Sampling Event Summary
2021 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Well	Hydraulic Location	Summary of Sampling Events		
		August 2020	September 2020	March 2021
		Initial Assessment	Semiannual Assessment	Semiannual Assessment
GWA-2	Upgradient	Scan	A-01	A-02
GWC-1R	Downgradient	Scan	A-01	A-02
GWC-2R	Downgradient	Scan	A-01	A-02
GWC-3R	Downgradient	Scan	A-01	A-02
GWC-4R	Downgradient	Scan	A-01	A-02
GWC-5R	Downgradient	Scan	A-01	A-02
GWC-6R	Downgradient	Scan	A-01	A-02

Notes

1. Scan - All Appendix IV
2. A-XX - Assessment Event Number (Appendix III and Detected Appendix IV)

Table 3
Summary of Groundwater Monitoring Parameters
2021 Annual Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

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

Notes:
Italicized groundwater monitoring parameters not detected during the annual assessment monitoring event and, therefore, was not sampled during the semiannual monitoring events.

Table 4
Summary of Groundwater Elevations
2021 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Well ID	Date Measured	Top of Casing Elevation (ft) [1]	Depth to Water (ft bTOC)	Groundwater Elevation (ft)
GWA-2	8/26/2020	805.62	34.80	770.82
GWC-1R	8/26/2020	773.27	21.58	751.69
GWC-2R	8/26/2020	769.76	27.64	742.12
GWC-3R	8/26/2020	775.25	26.09	749.16
GWC-4R	8/26/2020	757.48	15.34	742.14
GWC-5R	8/26/2020	782.45	27.87	754.58
GWC-6R	8/26/2020	788.98	33.69	755.29
GWA-2	9/21/2020	805.62	34.98	770.64
GWC-1R	9/21/2020	773.27	21.91	751.36
GWC-2R	9/21/2020	769.76	27.96	741.80
GWC-3R	9/21/2020	775.25	27.04	748.21
GWC-4R	9/21/2020	757.48	15.56	741.92
GWC-5R	9/21/2020	782.45	28.25	754.20
GWC-6R	9/21/2020	788.98	34.04	754.94
GWA-2	3/1/2021	805.62	35.74	769.88
GWC-1R	3/1/2021	773.27	24.39	748.88
GWC-2R	3/1/2021	769.76	27.35	742.41
GWC-3R	3/1/2021	775.25	26.64	748.61
GWC-4R	3/1/2021	757.48	14.66	742.82
GWC-5R	3/1/2021	782.45	27.32	755.13
GWC-6R	3/1/2021	788.98	33.67	755.31

Notes

ft bTOC - feet below top of casing

[1] Elevation in U.S. Survey Feet (NAVD88) based on June 2020 survey.

Equation

$$\frac{V = K\,(dh/dl)}{n_e}$$

where:
V = groundwater velocity
K = hydraulic conductivity
dh/dl = hydraulic gradient
n_e = effective porosity

Values Used in Calculation

Value			Source
K:	2.30E-04	cm/sec	See note 1
	0.66	ft/day	
			Hydraulic gradient from:
i_1 =	0.033	unitless	GWA-2 to GWC-4R (Aug. 2020)
i_1 =	0.033	unitless	GWA-2 to GWC-4R (Sep. 2020)
i_1 =	0.031	unitless	GWA-2 to GWC-4R (Mar. 2021)
n_e =	0.48	unitless	See note 1
n_e =	0.20	unitless	See note 2

Site-specific groundwater linear velocity using porosity value of 0.48

Aug. & Sep. 2020

$$v = \frac{(0.66)\,(0.033)}{0.48}$$

v = 0.045 ft/day or 16 ft/year

Mar. 2021

$$v = \frac{(0.66)\,(0.031)}{0.48}$$

v = 0.043 ft/day or 16 ft/year

Groundwater linear velocity using literature porosity value of 0.20

Aug. & Sep. 2020

$$v = \frac{(0.66)\,(0.033)}{0.20}$$

v = 0.109 ft/day or 40 ft/year

Mar. 2021

$$v = \frac{(0.66)\,(0.031)}{0.20}$$

v = 0.102 ft/day or 37 ft/year

Notes

1. The Geology & Hydrogeology of the Plant Yates CT-121 Project Gypsum Stacking Area (SCS, 1992)
2. Default value recommended by USEPA for silty sand-type soil (USEPA 1989).

Table 6
Summary of Groundwater Analytical Data
2021 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Analyte	Units	GWA-2 8/26/2020	GWA-2 9/22/2020	GWA-2 3/2/2021	GWC-1R 8/27/2020	GWC-1R 9/22/2020	GWC-1R 3/1/2021	GWC-2R 8/28/2020	GWC-2R 9/22/2020
Appendix III (40 CFR 257)									
pH (field)	SU	5.67	5.78	5.42	5.39	5.25	5.25	5.45	5.34
Boron	mg/L	--	0.0079 J	< 0.0052	--	0.025 J	0.046	--	0.046 J
Calcium	mg/L	--	31.0	34.2	--	98.8	117	--	40.5
Chloride	mg/L	--	4.2	4.1	--	5.5	8.6	--	24.7
Fluoride	mg/L	0.068 J	0.058 J	0.073 J	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulfate	mg/L	--	145	156	--	478	525	--	216
Total Dissolved Solids	mg/L	--	281	296	--	675	974	--	394
Appendix IV (40 CFR 257)									
Antimony	mg/L	0.00042 JB	0.00044 J	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	0.0017 J
Arsenic	mg/L	< 0.00078	< 0.00078	< 0.00078	0.0011 J	< 0.00078	0.0022 J	< 0.00078	< 0.00078
Barium	mg/L	0.044	0.045	0.039	0.072	0.068	0.063	0.044	0.040
Beryllium	mg/L	< 0.000046	< 0.000046	< 0.000046	0.00024 J	0.00021 J	0.00023 J	0.00020 J	0.00021 J
Cadmium	mg/L	< 0.00012	< 0.00012	< 0.00012	0.00012 J	0.00016 J	0.00013 J	0.00015 J	0.00016 J
Chromium	mg/L	< 0.00055	< 0.00055	< 0.00055	0.0013 J	0.0012 J	0.0012 J	0.00057 J	< 0.00055
Cobalt	mg/L	0.20	0.16	0.21	0.00081 J	0.00080 J	0.00083 J	0.0072	0.0054
Fluoride	mg/L	0.068 J	0.058 J	0.073 J	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Lead	mg/L	< 0.000036	0.00010 J	< 0.000036	0.000067 J	< 0.000036	< 0.000036	0.000084 J	0.000082 J
Lithium	mg/L	0.0032 J	0.0029 J	0.0033 J	0.0017 J	0.0015 J	0.0015 J	0.0047 J	0.0042 J
Mercury	mg/L	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
Molybdenum	mg/L	< 0.00069	--	--	< 0.00069	--	--	< 0.00069	--
Radium	mg/L	1.75	0.688 U	0.948 U	0.413 U	0.700 U	0.966 U	1.52	2.09
Selenium	mg/L	< 0.0016	< 0.0016	< 0.0016	0.011	0.012	0.011	0.0037 J	0.0056 J
Thallium	mg/L	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014
Appendix I & II Metals (State Permit) [4]									
Copper	mg/L	--	0.0041 J	0.0027 J	--	< 0.0017	< 0.0017	--	< 0.0017
Nickel	mg/L	--	0.027	0.034	--	0.0021 J	0.0024 J	--	< 0.00069
Silver	mg/L	--	< 0.00036	< 0.00036	--	< 0.00036	< 0.00036	--	< 0.00036
Vanadium	mg/L	--	< 0.0022	< 0.0022	--	< 0.0022	< 0.0022	--	< 0.0022
Zinc	mg/L	--	0.033	0.031	--	0.0029 J	< 0.0035	--	0.0030 J

Notes on last page

Table 6
Summary of Groundwater Analytical Data
2021 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Analyte	Units	GWC-2R 3/1/2021	GWC-3R 8/28/2020	GWC-3R 9/22/2020	GWC-3R 3/2/2021	GWC-4R 8/28/2020	GWC-4R 9/22/2020	GWC-4R 3/1/2021	GWC-5R 8/27/2020
Appendix III (40 CFR 257)									
pH (field)	SU	5.17	5.20	5.11	4.82	5.38	5.43	5.62	5.17
Boron	mg/L	0.087	--	0.0066 J	0.0071 J	--	1.0	5.1	--
Calcium	mg/L	54.1	--	6.2	17.9	--	21.8	69.5	--
Chloride	mg/L	49.6	--	4.2	5.5	--	60.2	194	--
Fluoride	mg/L	< 0.050	0.097 J	< 0.050	0.15	< 0.050	< 0.050	< 0.050	0.064 J
Sulfate	mg/L	244	--	55.1	95.5	--	72.1	177	--
Total Dissolved Solids	mg/L	516	--	110	167	--	217	666	--
Appendix IV (40 CFR 257)									
Antimony	mg/L	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	0.00053 J	< 0.00028	< 0.00028
Arsenic	mg/L	0.0011 J	< 0.00078	< 0.00078	0.0017 J	< 0.00078	< 0.00078	< 0.00078	0.0016 J
Barium	mg/L	0.043	0.014	0.014	0.015	0.026	0.026	0.035	0.013
Beryllium	mg/L	0.00032 J	0.00050 J	0.00042 J	0.00081	< 0.000046	0.000058 J	0.000060 J	0.0023 J
Cadmium	mg/L	0.00016 J	0.00014 J	0.00013 J	0.00021 J	< 0.00012	< 0.00012	< 0.00012	0.00091 J
Chromium	mg/L	< 0.00055	0.00088 J	0.0011 J	0.0010 J	< 0.00055	< 0.00055	< 0.00055	0.0022 J
Cobalt	mg/L	0.00074 J	0.0041 J	0.0021 J	0.0086	0.00049 J	0.00039 J	0.0016 J	< 0.00038
Fluoride	mg/L	< 0.050	0.097 J	< 0.050	0.15	< 0.050	< 0.050	< 0.050	0.064 J
Lead	mg/L	0.000070 J	0.000054 J	0.000064 J	0.000096 J	< 0.000036	0.000041 J	< 0.000036	0.000049 J
Lithium	mg/L	0.0039 J	< 0.00081	< 0.00081	0.00088 J	0.0011 J	0.0013 J	< 0.00081	0.0013 J
Mercury	mg/L	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
Molybdenum	mg/L	--	< 0.00069	--	--	< 0.00069	--	--	< 0.00069
Radium	mg/L	0.976	0.494 U	1.24 U	1.13 U	0.336 U	0.509 U	0.349 U	0.691 U
Selenium	mg/L	0.0043 J	0.0045 J	0.0091 J	0.012	0.0031 J	0.0032 J	0.0041 J	0.021
Thallium	mg/L	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014
Appendix I & II Metals (State Permit) [4]									
Copper	mg/L	< 0.0017	--	< 0.0017	< 0.0017	--	< 0.0017	< 0.0017	--
Nickel	mg/L	< 0.00069	--	< 0.00069	< 0.00069	--	0.00077 J	0.0021 J	--
Silver	mg/L	< 0.00036	--	< 0.00036	< 0.00036	--	< 0.00036	< 0.00036	--
Vanadium	mg/L	< 0.0022	--	< 0.0022	< 0.0022	--	< 0.0022	< 0.0022	--
Zinc	mg/L	< 0.0035	--	0.0036 J	0.0069 J	--	< 0.0022	< 0.0035	--

Notes on last page

Table 6
Summary of Groundwater Analytical Data
2021 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Analyte	Units	GWC-5R 9/23/2020	GWC-5R 3/2/2021	GWC-6R 8/27/2020	GWC-6R 9/23/2020	GWC-6R 3/3/2021
Appendix III (40 CFR 257)						
pH (field)	SU	5.04	4.63	5.77	5.81	5.78
Boron	mg/L	0.028 J	0.023 J	--	0.0055 J	< 0.0052
Calcium	mg/L	144	145	--	103	105
Chloride	mg/L	3.0	2.9	--	4.7	5.0
Fluoride	mg/L	< 0.050	0.094 J	< 0.050	< 0.050	< 0.050
Sulfate	mg/L	992	906	--	518	476
Total Dissolved Solids	mg/L	1000	980	--	820	942
Appendix IV (40 CFR 257)						
Antimony	mg/L	0.00031 J	< 0.00028	< 0.00028	< 0.00028	< 0.00028
Arsenic	mg/L	0.00092 J	0.0024 J	0.0011 J	< 0.00078	< 0.00078
Barium	mg/L	0.012	0.011	0.045	0.044	0.043
Beryllium	mg/L	0.0023 J	0.0037	< 0.000046	< 0.000046	< 0.000046
Cadmium	mg/L	0.00094 J	0.0011	< 0.00012	< 0.00012	< 0.00012
Chromium	mg/L	0.0020 J	0.0021 J	0.0012 J	0.0015 J	0.0014 J
Cobalt	mg/L	< 0.00038	0.00039 J	< 0.00038	< 0.00038	< 0.00038
Fluoride	mg/L	< 0.050	0.094 J	< 0.050	< 0.050	< 0.050
Lead	mg/L	0.00019 J	0.000054 J	< 0.000036	< 0.000036	< 0.000036
Lithium	mg/L	0.0012 J	0.0016 J	0.0083 J	0.0023 J	0.0018 J
Mercury	mg/L	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
Molybdenum	mg/L	--	--	< 0.00069	--	--
Radium	mg/L	0.000 U	0.686 U	0.514 U	0.960 U	0.721 U
Selenium	mg/L	0.026	0.019	0.0027 J	0.0031 J	0.0020 J
Thallium	mg/L	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014
Appendix I & II Metals (State Permit) [4]						
Copper	mg/L	< 0.0017	< 0.0017	--	< 0.0017	< 0.0017
Nickel	mg/L	0.0012 J	0.0014 J	--	0.0016 J	0.0016 J
Silver	mg/L	< 0.00036	< 0.00036	--	< 0.00036	< 0.00036
Vanadium	mg/L	< 0.0022	< 0.0022	--	< 0.0022	< 0.0022
Zinc	mg/L	0.018	0.022	--	< 0.0022	< 0.0035

Notes on last page

Notes:

1. Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.
2. Appendix III = Indicator parameters evaluated during Detection Monitoring.
3. Appendix IV = Parameters evaluated during Assessment Monitoring.
4. Appendix I parameter included to meet EPD Rule 391-3-4-.14 requirements that is not included in the Appendix IV parameter list

-- Not analyzed for this constituent.

< Analyte was not detected above the laboratory method detection limit (MDL).

Laboratory Qualifiers:

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

U = The substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.

B = Analyte was detected in the associated method blank.

Table 7 - Background Levels and Groundwater Protection Standards
2021 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates - Gypsum Landfill

Constituent	Units	Background	Federal GWPS	State GWPS
September 2020				
Antimony	mg/L	0.0047	0.006	0.006
Arsenic	mg/L	0.005	0.01	0.01
Barium	mg/L	0.071	2	2
Beryllium	mg/L	0.003	0.004	0.004
Cadmium	mg/L	0.0025	0.005	0.005
Chromium	mg/L	0.0100	0.1	0.1
Cobalt	mg/L	0.035 [1]	0.035 [1]	0.035 [1]
Fluoride	mg/L	0.68	4	4
Lead	mg/L	0.005	0.015	0.005
Lithium	mg/L	0.03	0.040	0.03
Mercury	mg/L	0.0005	0.002	0.002
Molybdenum	mg/L	0.014	0.1	0.014
Selenium	mg/L	0.01	0.05	0.05
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	6.92 [1]	6.92 [1]	6.92 [1]
March 2021				
Antimony	mg/L	0.0047	0.006	0.006
Arsenic	mg/L	0.005	0.01	0.01
Barium	mg/L	0.071	2	2
Beryllium	mg/L	0.0005	0.004	0.004
Cadmium	mg/L	0.0005	0.005	0.005
Chromium	mg/L	0.0093	0.1	0.1
Cobalt	mg/L	0.035 [1]	0.035 [1]	0.035 [1]
Fluoride	mg/L	0.68	4	4
Lead	mg/L	0.0013	0.015	0.005
Lithium	mg/L	0.03	0.040	0.03
Mercury	mg/L	0.0002	0.002	0.002
Molybdenum	mg/L	0.014	0.1	0.014
Selenium	mg/L	0.01	0.05	0.05
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	6.92 [1]	6.92 [1]	6.92 [1]

Notes

1. Background concentration is higher than the federally promulgated value (0.006); therefore background is the GWPS.

Site background - Tolerance limits calculated from pooled upgradient well data.

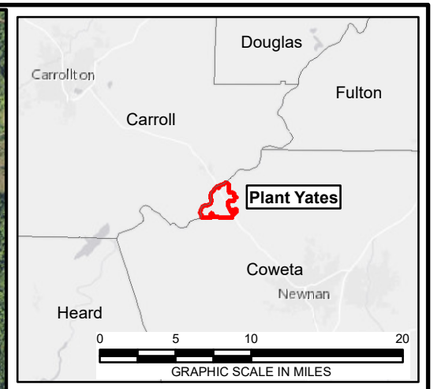
State GWPS - Groundwater Protection Standard per Georgia EPD Rule 391-3-4-.10(6)(a).

Federal GWPS - Groundwater Protection Standard per 40 CFR §257.95(h).

Acronyms and Abbreviations:

GWPS - Grounwater Protection Standard
mg/L - millgrams per liter
pCi/L - picocuries per liter

FIGURES



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- PERMITTED UNIT BOUNDARY

NOTE:
AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 650 1,300 2,600

GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES GYPSUM LANDFILL
NEWNAN, GA
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

LEGEND

- SAPROLITE NETWORK MONITORING WELL LOCATION
- TRANSITION NETWORK MONITORING WELL LOCATION
- BEDROCK NETWORK MONITORING WELL LOCATION
- SAPROLITE NON-NETWORK WELL/PIEZOMETER
- TRANSITION NON-NETWORK WELL/PIEZOMETER
- BEDROCK NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY
- AREA WHERE ASH HAS BEEN CERTIFIED REMOVED AS OF 7/30/2021

NOTE:
AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 450 900 1,800
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power
PLANT YATES GYPSUM LANDFILL
NEWNAN, GA
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLANT YATES CCR REMOVAL AREAS

ARCADIS

FIGURE
2

84°54'10"W
84°54'0"W
84°53'50"W
33°28'0"N
33°27'50"N

GWC-4R
GWC-2R
GWC-1R
GWC-6R
GWC-3R
FORMER GYPSUM STACK LANDFILL
GWC-5R
GWA-2

LEGEND

- SAPROLITE NETWORK MONITORING
- BEDROCK NETWORK MONITORING
- PERMITTED UNIT BOUNDARY

NOTE:
AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 112.5 225 450
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES GYPSUM LANDFILL
NEWNAN, GA
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WELL LOCATION MAP

ARCADIS

FIGURE
3

84°54'10"W
84°54'0"W
84°53'50"W
33°28'0"N
33°27'50"N

GWC-4R
742.14
GWC-2R
742.12
GWC-1R
751.69
GWC-3R
749.16
GWC-5R
754.58
GWC-6R
755.29
GWA-2
770.82
FORMER GYPSUM STACK LANDFILL
745
750
755
760
765
770

LEGEND

- SAPROLITE NETWORK MONITORING
- BEDROCK NETWORK MONITORING
- PERMITTED UNIT BOUNDARY
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- 742.12 GROUNDWATER ELEVATION (FEET)

NOTES:
1. ELEVATION IS PRESENTED IN U.S. SURVEY FEET (NAVD 1988).

2. AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 112.5 225 450
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES GYPSUM LANDFILL
NEWNAN, GA
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP AUGUST 2020

ARCADIS

FIGURE
4

84°54'10"W
84°54'0"W
84°53'50"W
33°28'0"N
33°27'50"N

LEGEND

- SAPROLITE NETWORK MONITORING
- BEDROCK NETWORK MONITORING
- PERMITTED UNIT BOUNDARY
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- 741.80 GROUNDWATER ELEVATION (FEET)

NOTES:
1. ELEVATION IS PRESENTED IN U.S. SURVEY FEET (NAVD 1988).

2. AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 112.5 225 450

GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES GYPSUM LANDFILL
NEWNAN, GA

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP SEPTEMBER 2020

ARCADIS

FIGURE
5

84°54'10"W
84°54'0"W
84°53'50"W
33°28'0"N
33°27'50"N

GWC-4R
742.82
GWC-2R
742.41
GWC-1R
748.88
GWC-6R
755.31
GWC-3R
748.61
GWC-5R
755.13
GWA-2
769.88
FORMER GYPSUM STACK LANDFILL
745
750
755
760
765

LEGEND

- SAPROLITE NETWORK MONITORING
- BEDROCK NETWORK MONITORING
- PERMITTED UNIT BOUNDARY
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- 741.80 GROUNDWATER ELEVATION (FEET)

NOTES:
1. ELEVATION IS PRESENTED IN U.S. SURVEY FEET (NAVD 1988).

2. AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 112.5 225 450
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power
PLANT YATES GYPSUM LANDFILL
NEWNAN, GA
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP MARCH 2021

ARCADIS

FIGURE
6

APPENDIX A

Laboratory Analytical Reports and Data Validation Report

August & September 2020 Events

ARCADIS Design & Consultancy for natural and built assets

Georgia Power Co. – Plant Yates

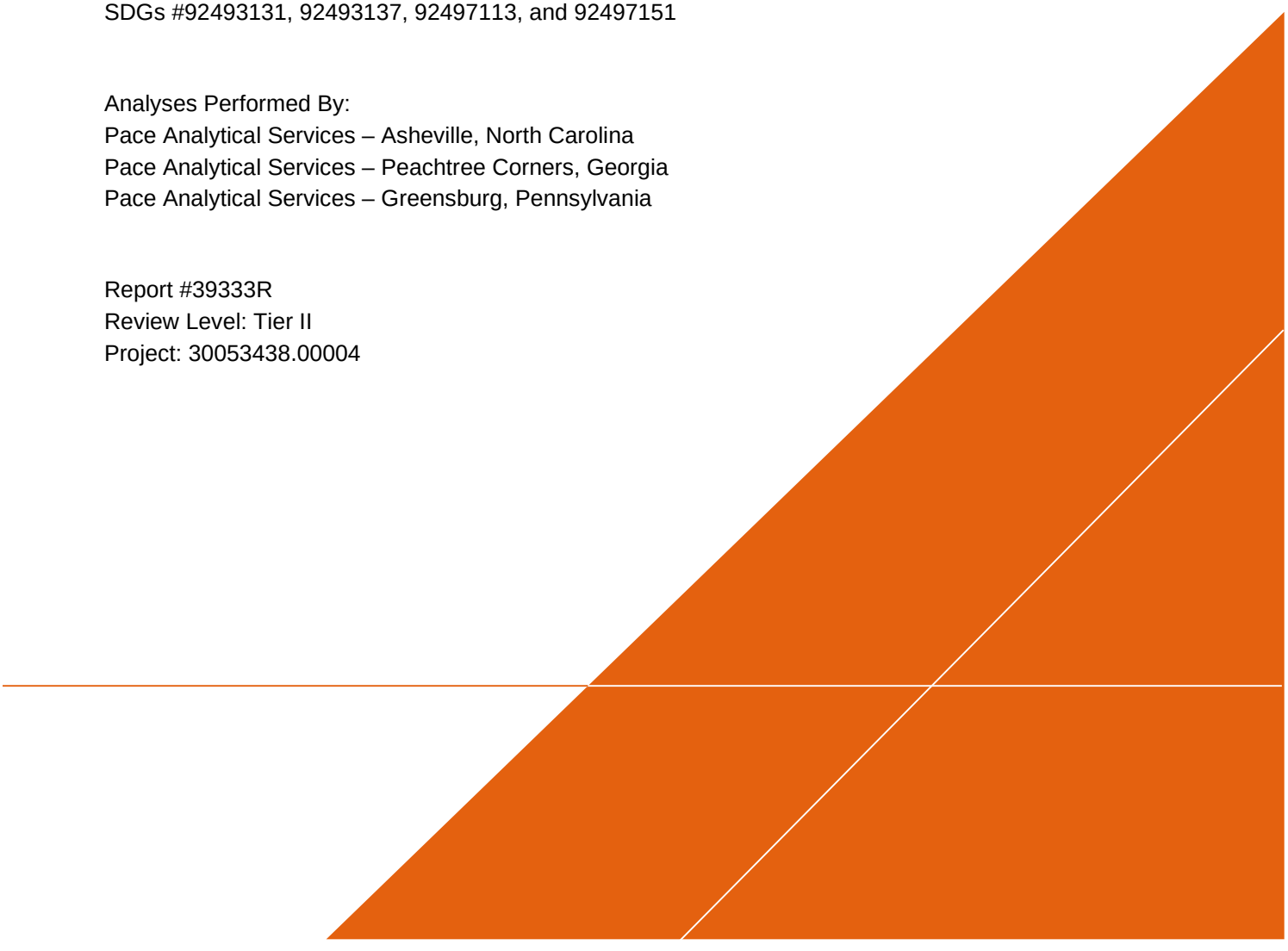
DATA REVIEW

Metals, Radium, and General Chemistry Analyses

SDGs #92493131, 92493137, 92497113, and 92497151

Analyses Performed By:
Pace Analytical Services – Asheville, North Carolina
Pace Analytical Services – Peachtree Corners, Georgia
Pace Analytical Services – Greensburg, Pennsylvania

Report #39333R
Review Level: Tier II
Project: 30053438.00004



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) #92493131, 92493137, 92497113, and 92497151 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
92493131 92493137	GWA-2 (08/26/2020)	92493131001 92493137001	Water	8/26/2020		X	X	X
	GWC-1R (08/27/2020)	92493131002 92493137002	Water	8/27/2020		X	X	X
	GWC-2R (08/28/2020)	92493131003 92493137003	Water	8/28/2020		X	X	X
	GWC-3R (08/28/2020)	92493131004 92493137004	Water	8/28/2020		X	X	X
	GWC-4R (08/28/2020)	92493131005 92493137005	Water	8/28/2020		X	X	X
	GWC-5R (08/27/2020)	92493131006 92493137006	Water	8/27/2020		X	X	X
	GWC-6R (08/27/2020)	92493131007 92493137007	Water	8/27/2020		X	X	X
	DUP-1	92493131008 92493137008	Water	8/28/2020	GWC-3R (08/28/2020)	X	X	X
	EB-1	92493131009 92493137009	Water	8/28/2020		X	X	X
92497113 92497151	GWC-2R (09/22/2020)	92497113001 92497151001	Water	9/22/2020		X	X	X
	GWC-4R (09/22/2020)	92497113002 92497151002	Water	9/22/2020		X	X	X
	GWC-5R (09/23/2020)	92497113003 92497151003	Water	9/23/2020		X	X	X
	GWC-6R (09/23/2020)	92497113004 92497151004	Water	9/23/2020		X	X	X
	DUP-01 (09/23/2020)	92497113005 92497151005	Water	9/23/2020	GWC-5R (09/23/2020)	X	X	X

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
	EQUIPMENT BLANK (09/23/2020)	92497113006 92497151006	Water	9/23/2020		X	X	X
	FIELD BLANK (09/22/2020)	92497113007 92497151007	Water	9/22/2020		X	X	X
	GWA-2 (09/22/2020)	92497113008 92497151008	Water	9/22/2020		X	X	X
	GWA-1R (09/22/2020)	92497113009 92497151009	Water	9/22/2020		X	X	X
	GWA-3R (09/22/2020)	92497113010 92497151010	Water	9/22/2020		X	X	X

Notes:

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 9315, and 9320; Standard Method (SM) SM4500-H+ B and SM2540C; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January2017).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. “R” values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDG #92493137: All analytes exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
GWA-2 (08/26/2020)	Antimony (MB)	Detected sample results <RL and <BAL	"UB" at the RL

Note:

MB Method blank

RL Reporting limit

SDG #92497151: Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

SDG #92493137: The MS/MSD analysis performed using sample GWA-2 (08/26/2020) in association with SW-846 7470A analysis exhibited recoveries within the control limits.

SDG #92497151: MS/MSD analysis was not performed using a sample from this SDG.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

SDG #92493137: MS/MSD analysis was performed using sample GWA-2 (08/26/2020) in association with SW-846 7470A analysis in replacement of laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable an RPD.

SDG #92497151: Laboratory duplicate analysis was not performed using a sample from this SDG.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWC-3R (08/28/2020) / DUP-1	Barium	0.014	0.014	
	Beryllium	0.00050 J	0.00046 J	
	Cadmium	0.00014 J	0.00014 J	
	Chromium	0.00088 J	0.00092 J	AC
	Cobalt	0.0041 J	0.0039 J	
	Lead	0.000054 J	0.0050 U	
	Selenium	0.0045 J	0.0043 J	
GWC-5R (09/23/2020) / DUP-01 (09/23/2020)	Calcium	144	152	5.4%
	Antimony	0.00031 J	0.0030 U	AC

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Arsenic	0.00092 J	0.00093 J	
	Barium	0.012	0.013	
	Beryllium	0.0023 J	0.0021 J	
	Boron	0.028 J	0.021 J	
	Cadmium	0.00094 J	0.00085 J	
	Chromium	0.0020 J	0.0018 J	
	Lead	0.00019 J	0.000038 J	
	Lithium	0.0012 J	0.0011 J	
	Nickel	0.0012 J	0.0012 J	
	Selenium	0.026	0.025	
	Zinc	0.018	0.016	

Notes:

AC = Acceptable

The differences in the results between the parent sample GWC-3R (08/28/2020) and field duplicate sample DUP-1 were acceptable.

The differences in the results between the parent sample GWC-5R (09/23/2020) and field duplicate sample DUP-01 (09/23/2020) were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)					
Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)					
Cold Vapor Atomic Absorption (CVAA)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X	X		
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Reporting Limit Verification		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

SDG #92493137: The MS/MSD analysis performed using sample GWC-2R (08/28/2020) in association with fluoride analysis exhibited recoveries within the control limits.

SDG #92497151: The MS/MSD analysis performed using samples EQUIPMENT BLANK (09/23/2020) and FIELD BLANK (09/22/2020) in association with chloride, fluoride, and sulfate exhibited recoveries within control limits.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

SDG #92493137: MS/MSD analysis was performed using sample GWC-2R (08/28/2020) in association with fluoride analysis in replacement of laboratory duplicate analysis. The MS/MSD recoveries exhibited an acceptable RPD.

SDG #92497151: The laboratory duplicate analyses performed on sample location GWC-2R (09/22/2020) in association with TDS analysis exhibited an RPD within the control limit.

SDG #92497151: MS/MSD analysis was performed using samples EQUIPMENT BLANK (09/23/2020) and FIELD BLANK (09/22/2020) in association with chloride, fluoride, and sulfate analysis in replacement of laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPDs.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWC-3R (08/28/2020) / DUP-1	Fluoride	0.097 J	0.067 J	AC
GWC-5R (09/23/2020) / DUP-01 (09/23/2020)	TDS	1,000	1,350	29.5%
	Chloride	3.0	2.9	AC
	Fluoride	0.10 U	0.10 U	AC
	Sulfate	992	990	0.2%

Notes:

AC = Acceptable

The difference in the fluoride results between the parent sample GWC-3R (08/28/2020) and field duplicate sample DUP-1 was acceptable.

The differences in the results between the parent sample GWC-5R (09/23/2020) and field duplicate sample DUP-01 (09/23/2020) were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: SM4500-H+ B, SM2540C, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R Percent recovery

RPD Relative percent difference

RADIOLOGICAL ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits (+/- 2 sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the minimum detectable concentration (MDC)?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$Normalized\ \ absolute\ difference_{\ MethodBlank} = \frac{|\ Sample\ -\ Blank\ |}{\sqrt{(U_{Sample}\ )^2 + (U_{Blank}\ )^2}}$$

Where:

U_{Sample} = uncertainty of the sample

U_{Blank} = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

SDG #92493131: Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

SDG #92497113: Radium-228 was detected in the method blank at an activity greater than the MDC. The calculated NAD for sample GWC-2R (09/22/2020) was less than 1.96, hence, the radium-228 and total radium results were assigned “J” qualifiers.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte’s concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of < +/- 3 sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x_0 = measured concentration of the unspiked sample.

c = spike concentration added.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between +/-3 sigma. Warning limits have been established as +/- 2 sigma.

MS analysis was not performed using a sample from these SDGs.

3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

$$Z_{Dup} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

x_1, x_2 = two measured activity concentrations.

$u^2(x_1)$, $u^2(x_2)$ = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

The laboratory duplicate performed on sample Drake for Lead 210 exhibited a RPD within the control limits.

SDG #92493131: Laboratory duplicate analysis was not performed using a sample from this SDG.

SDG #92497113: The laboratory duplicate performed on sample GWC-2R (09/22/2020) in association with SW-846 9315 analysis exhibited an RPD within the control limits.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

For all analyses in soil matrices, data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWC-3R (08/28/2020) / DUP-1	Radium-226	0.0868 ± 0.458	0.113 ± 0.267	AC
	Radium-228	0.407 ± 0.544	0.782 ± 0.526	
	Total Radium	0.494 ± 1.00	0.895 ± 0.793	
GWC-5R (09/23/2020) / DUP-01 (09/23/2020)	Radium-226	-0.0254 ± 0.145	0.164 ± 0.210	AC
	Radium-228	-0.442 ± 0.504	0.2415 ± 0.388	
	Total Radium	0.00 ± 0.649	0.579 ± 0.598	

Notes:

AC = Acceptable

The differences in the results between the parent sample GWC-3R (08/28/2020) and field duplicate sample DUP-1 were acceptable.

The differences in the results between the parent sample GWC-5R (09/23/2020) and field duplicate sample DUP-01 (09/23/2020) were acceptable.

5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to110% is applied to each sample spiked with either a carrier and/or a tracer.

SDG #92493135: The tracer and carrier analyses exhibited recoveries within the control limits.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated

by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$ = combined standard uncertainty of the result squared.

$u^2(c)$ = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- SDG #92493131: GWC-3R (08/28/2020), GWC-5R (08/27/2020), DUP-1, and EB-1; SDG #92497113: GWC-4R (09/22/2020), GWC-5R (09/23/2020), GWC-6R (09/23/2020), DUP-01 (09/23/2020) , EQUIPMENT BLANK (09/23/2020), FIELD BLANK (09/22/2020) , GWA-2 (09/22/2020), GWC-1R (09/22/2020), and GWC-3R (09/22/2020) – Radium-226, Radium-228, and total Radium
- SDG #92493131: GWC-1R (08/27/2020), GWC-4R (08/28/2020), GWC-6R (08/27/2020) – Radium-228 and total Radium
- SDG #92493131: GWC-2R (08/28/2020) – Radium-228
- SDG #92497113: GWC-2R (09/22/2020) – Radium-226

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR RADIOLOGICALS

RADIOLOGICALS: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Gas-Flow Proportional System					
Tier II Validation					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X	X		
B. Equipment/Field Blanks		X		X	
Carrier (Surrogate) %R		X		X	
Tracer (Surrogate) %R		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate (LCSD)		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Field/Lab Duplicate (RPD)		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: December 11, 2020

PEER REVIEW: Dennis Capria

DATE: December 14, 2020

CHAIN OF CUSTODY / DATA QUALIFIER SUMMARY TABLE

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Arcadis (GA Power)	Report To: Becky Steever	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates Gypsum Landfill	Pace Project Manager: kevin.herring@pacelabs.com,
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency: State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): 300.0 - F	App IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	4249731J7
1	GWA-2 (08/26/2020) ph: 5.67	WT		8/26	1620				4			X							X	X	X		001
2	GWC-1R (08/27/2020) ph: 5.39	WT		8/27	1710				4			X							X	X	X		002
3	GWC-2R (08/28/2020) ph: 5.45	WT		8/28	1030				4			X							X	X	X		003
4	GWC-3R (08/28/2020) ph: 5.20	WT		8/28	1230				4			X							X	X	X		004
5	GWC-4R	WT																	X	X	X		005
6	GWC-5R (08/27/2020) ph: 5.17	WT		8/27	1115														X	X	X		006
7	GWC-6R (08/27/2020) ph: 5.77	WT		8/27	1530														X	X	X		007
8	DUP-1	WT		8/28	—														X	X	X		008
9	EB-1			8/28	⊖														X	X	X		009
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
IV: Sb, As, Ba, Be, Cd, Cr, Co, Hg, Pb, Li, Mo, Se, Tl	Jake Swanson	8/28	1750	Pace	8/28/20	1620	
	Becky Steever	8/28	1814		8/28/20	1814	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: DATE Signed: 8/28/20

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-In Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Arcadis (GA Power)
Address: 2839 Paces Ferry Rd
Report To: Becky Steeves
Copy To:
Customer Project Name/Number: Yates Gypsum Landfill
Phone:
Email:
Collected By (print):
Collected By (signature):
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____

Billing Information:
Email To:
Site Collection Info/Address:
State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Site/Facility ID #: Yates Gypsum Landfill
Purchase Order #:
Quote #:
Turnaround Date Required:
Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
Compliance Monitoring? [ ] Yes [ ] No
DW PWS ID #:
DW Location Code:
Immediately Packed on Ice: [ ] Yes [ ] No
Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: _____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	300.0 - F	APP IV Metals	Radels	Lab Sample # / Comments
GWC-4R(08/28/2020)	WT	Grab	8/28	1730					X	X	X	92493137 Ph: 5.38 005

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2421491

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____ oC
Cooler 1 Therm Corr. Factor: _____ oC
Cooler 1 Corrected Temp: 3.3 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	8/29/20		
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
			8/29/20 1054
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____ of: _____

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)384-6526 Fax
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Sleever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N)	Requested Analysis Filtered (Y/N): TDS	Anions	App I, II, III, IV & Hg	RAD 9315/9320	Residual Chlorine (Y/N)	
1	GWC-2R (09/22/2020)			9/22	1325				5	✓		✓							✓	✓	✓	✓		92497151
2	GWC-4R (09/22/2020)			9/22	1730				5	✓		✓							✓	✓	✓	✓		5.34=Ph
3	GWC-5R (09/23/2020)			9/23	1005				5	✓		✓							✓	✓	✓	✓		5.43=Ph
4	GWC-6R (09/23/2020)			9/23	1110				5	✓		✓							✓	✓	✓	✓		5.04=Ph
5	DUP-01 (09/23/2020)			9/23	-				5	✓		✓							✓	✓	✓	✓		5.81=Ph
6	~~FB-01 (09/22/2020)~~			9/22	1130				5	✓		✓							✓	✓	✓	✓		-
7	~~EB~~ 01 Equipment Blank (9/23/2020)			9/23	1120				5	✓		✓							✓	✓	✓	✓		JS
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS: NO MS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Jake Swanson	9/23/20	1511		9/23/2020	15:11	
	9/23/20	1740	Chad Lafferty	9/23/20	1740	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 9/23/20

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Canton, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App I, II, III, IV & Hg	RAD 9315/8320	Residual Chlorine (Y/N)	
		MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																						9249/7151
1	DUP	WT																	x	x	x	x		
2	FIELD BLANK (092220)	WT				9/22/2020	1130		5	X		X							x	x	x	x		—
3	~~EQUIPMENT BLANK~~	WT																	x	x	x	x		
4	GWA-2 (092220)	WT	G			9/22/2020	1100		5	X		X							x	x	x	x		pH : 5.78
5	GWC-9R (092220)	WT	G			9/22/2020	1320		5	X		X							x	x	x	x		pH : 5.25
6	~~GWC-3R~~	WT																	x	x	x	x		~~pH : 5.11 (PA)~~
7	~~GWC-1R~~	WT																	x	x	x	x		
8	GWC-3R (092220)	WT	G			9/22/2020	1540		5	X		X							x	x	x	x		pH : 5.11 (PA)
9	~~GWC-4R~~	WT																	x	x	x	x		
10	GWC-2R	WT																	x	x	x	x		
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
NO MO		9/22/2020	1730		9/22/20	1730	
		9/23/20	1511		9/23/20	1511	
		9/23/20	1746	9/23/20	9/23/20	1746	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Peter Argyrakis

SIGNATURE of SAMPLER: DATE Signed: 09/22/2020

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92493131	No qualifiers assigned						
92493137	GWA-2 (08/26/2020)	SW846 6020B	Antimony	0.0030	mg/L	UB	Blank contamination
92497113	GWC-2R (09/22/2020)	SW846 9320	Radium-228	1.70 ± 0.643	pCi/L	J	Blank contamination
		Calculation	Total Radium	2.09 ± 0.906	pCi/L	J	Blank contamination
92497151	No qualifiers assigned						

Abbreviations:
mg/L = milligrams per liter
pCi/L = picoCuries per liter

Qualifiers:
UB = not detected due to blank contamination

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

October 16, 2020

Ms. Lauren Petty
Southern Co. Services
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92497113001	**GWC-2R (09/22/2020)**	Water	09/22/20 13:25	09/23/20 17:40
92497113002	**GWC-4R (09/22/2020)**	Water	09/22/20 12:30	09/23/20 17:40
92497113003	**GWC-5R (09/23/2020)**	Water	09/23/20 10:05	09/23/20 17:40
92497113004	**GWC-6R (09/23/2020)**	Water	09/23/20 11:10	09/23/20 17:40
92497113005	**DUP-01 (09/23/2020)**	Water	09/23/20 00:00	09/23/20 17:40
92497113006	**EQUIPMENT BLANK (09/23/2020)**	Water	09/23/20 11:20	09/23/20 17:40
92497113007	**FIELD BLANK (09/22/2020)**	Water	09/22/20 11:30	09/23/20 17:40
92497113008	**GWA-2 (09/22/2020)**	Water	09/22/20 11:00	09/23/20 17:40
92497113009	**GWC-1R (09/22/2020)**	Water	09/22/20 13:20	09/23/20 17:40
92497113010	**GWC-3R (09/22/2020)**	Water	09/22/20 15:40	09/23/20 17:40

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92497113001	**GWC-2R (09/22/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113002	**GWC-4R (09/22/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113003	**GWC-5R (09/23/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113004	**GWC-6R (09/23/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113005	**DUP-01 (09/23/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113006	**EQUIPMENT BLANK (09/23/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113007	**FIELD BLANK (09/22/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113008	**GWA-2 (09/22/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113009	**GWC-1R (09/22/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92497113010	**GWC-3R (09/22/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497113001	**GWC-2R (09/22/2020)**					
EPA 9315	Radium-226	0.393 ± 0.263 (0.404) C:83% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	1.70 ± 0.643 (1.02) C:70% T:83%	pCi/L		10/15/20 11:10	
Total Radium Calculation	Total Radium	2.09 ± 0.906 (1.42)	pCi/L		10/16/20 12:16	
92497113002	**GWC-4R (09/22/2020)**					
EPA 9315	Radium-226	0.0865 ± 0.221 (0.531) C:80% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	0.422 ± 0.537 (1.15) C:70% T:78%	pCi/L		10/15/20 11:10	
Total Radium Calculation	Total Radium	0.509 ± 0.758 (1.68)	pCi/L		10/16/20 12:16	
92497113003	**GWC-5R (09/23/2020)**					
EPA 9315	Radium-226	-0.0254 ± 0.145 (0.437) C:85% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	-0.442 ± 0.504 (1.22) C:64% T:85%	pCi/L		10/15/20 11:10	
Total Radium Calculation	Total Radium	0.000 ± 0.649 (1.66)	pCi/L		10/16/20 12:16	
92497113004	**GWC-6R (09/23/2020)**					
EPA 9315	Radium-226	0.202 ± 0.201 (0.369) C:87% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	0.758 ± 0.552 (1.08) C:72% T:89%	pCi/L		10/15/20 13:55	
Total Radium Calculation	Total Radium	0.960 ± 0.753 (1.45)	pCi/L		10/16/20 12:16	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497113005	**DUP-01 (09/23/2020)**					
EPA 9315	Radium-226	0.164 ± 0.210 (0.436) C:87% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	0.415 ± 0.388 (0.796) C:73% T:83%	pCi/L		10/15/20 14:28	
Total Radium Calculation	Total Radium	0.579 ± 0.598 (1.23)	pCi/L		10/16/20 12:16	
92497113006	**EQUIPMENT BLANK (09/23/2020)**					
EPA 9315	Radium-226	0.0795 ± 0.182 (0.434) C:78% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	0.725 ± 0.444 (0.843) C:75% T:82%	pCi/L		10/15/20 14:32	
Total Radium Calculation	Total Radium	0.805 ± 0.626 (1.28)	pCi/L		10/16/20 12:16	
92497113007	**FIELD BLANK (09/22/2020)**					
EPA 9315	Radium-226	0.0465 ± 0.185 (0.474) C:76% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	0.758 ± 0.432 (0.794) C:78% T:76%	pCi/L		10/15/20 14:32	
Total Radium Calculation	Total Radium	0.805 ± 0.617 (1.27)	pCi/L		10/16/20 12:16	
92497113008	**GWA-2 (09/22/2020)**					
EPA 9315	Radium-226	0.429 ± 0.302 (0.469) C:73% T:NA	pCi/L		10/14/20 06:24	
EPA 9320	Radium-228	0.259 ± 0.408 (0.885) C:78% T:76%	pCi/L		10/15/20 14:29	
Total Radium Calculation	Total Radium	0.688 ± 0.710 (1.35)	pCi/L		10/16/20 12:16	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497113009	**GWC-1R (09/22/2020)**					
EPA 9315	Radium-226	0.137 ± 0.249 (0.567) C:82% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	0.563 ± 0.459 (0.918) C:66% T:75%	pCi/L		10/15/20 14:28	
Total Radium Calculation	Total Radium	0.700 ± 0.708 (1.49)	pCi/L		10/16/20 12:16	
92497113010	**GWC-3R (09/22/2020)**					
EPA 9315	Radium-226	0.287 ± 0.257 (0.468) C:80% T:NA	pCi/L		10/14/20 07:09	
EPA 9320	Radium-228	0.950 ± 0.570 (1.08) C:69% T:70%	pCi/L		10/15/20 14:28	
Total Radium Calculation	Total Radium	1.24 ± 0.827 (1.55)	pCi/L		10/16/20 12:16	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: GWC-2R (09/22/2020) **Lab ID: 92497113001** Collected: 09/22/20 13:25 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.393 ± 0.263 (0.404) C:83% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**1.70 ± 0.643 (1.02) C:70% T:83%**	pCi/L	10/15/20 11:10	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**2.09 ± 0.906 (1.42)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: GWC-4R (09/22/2020) **Lab ID: 92497113002** Collected: 09/22/20 12:30 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0865 ± 0.221 (0.531) C:80% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.422 ± 0.537 (1.15) C:70% T:78%**	pCi/L	10/15/20 11:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.509 ± 0.758 (1.68)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: GWC-5R (09/23/2020) **Lab ID: 92497113003** Collected: 09/23/20 10:05 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0254 ± 0.145 (0.437) C:85% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.442 ± 0.504 (1.22) C:64% T:85%**	pCi/L	10/15/20 11:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.000 ± 0.649 (1.66)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: GWC-6R (09/23/2020) **Lab ID: 92497113004** Collected: 09/23/20 11:10 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.202 ± 0.201 (0.369) C:87% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.758 ± 0.552 (1.08) C:72% T:89%**	pCi/L	10/15/20 13:55	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.960 ± 0.753 (1.45)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: DUP-01 (09/23/2020) **Lab ID: 92497113005** Collected: 09/23/20 00:00 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.164 ± 0.210 (0.436) C:87% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.415 ± 0.388 (0.796) C:73% T:83%**	pCi/L	10/15/20 14:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.579 ± 0.598 (1.23)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: EQUIPMENT BLANK (09/23/2020) **Lab ID: 92497113006** Collected: 09/23/20 11:20 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0795 ± 0.182 (0.434) C:78% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.725 ± 0.444 (0.843) C:75% T:82%**	pCi/L	10/15/20 14:32	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.805 ± 0.626 (1.28)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: FIELD BLANK (09/22/2020) **Lab ID: 92497113007** Collected: 09/22/20 11:30 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.0465 ± 0.185 (0.474) C:76% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.758 ± 0.432 (0.794) C:78% T:76%**	pCi/L	10/15/20 14:32	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.805 ± 0.617 (1.27)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: GWA-2 (09/22/2020) **Lab ID: 92497113008** Collected: 09/22/20 11:00 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.429 ± 0.302 (0.469) C:73% T:NA**	pCi/L	10/14/20 06:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.259 ± 0.408 (0.885) C:78% T:76%**	pCi/L	10/15/20 14:29	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.688 ± 0.710 (1.35)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: GWC-1R (09/22/2020) **Lab ID: 92497113009** Collected: 09/22/20 13:20 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.137 ± 0.249 (0.567) C:82% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.563 ± 0.459 (0.918) C:66% T:75%**	pCi/L	10/15/20 14:28	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.700 ± 0.708 (1.49)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Sample: GWC-3R (09/22/2020) **Lab ID: 92497113010** Collected: 09/22/20 15:40 Received: 09/23/20 17:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.287 ± 0.257 (0.468) C:80% T:NA**	pCi/L	10/14/20 07:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.950 ± 0.570 (1.08) C:69% T:70%**	pCi/L	10/15/20 14:28	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.24 ± 0.827 (1.55)**	pCi/L	10/16/20 12:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

QC Batch: 417131
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497113001, 92497113002, 92497113003, 92497113004, 92497113005, 92497113006, 92497113007, 92497113008, 92497113009, 92497113010

METHOD BLANK: 2016812 Matrix: Water
Associated Lab Samples: 92497113001, 92497113002, 92497113003, 92497113004, 92497113005, 92497113006, 92497113007, 92497113008, 92497113009, 92497113010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.888 ± 0.380 (0.600) C:70% T:99%	pCi/L	10/15/20 11:15	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

QC Batch: 417130
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92497113001, 92497113002, 92497113003, 92497113004, 92497113005, 92497113006, 92497113007, 92497113008, 92497113009, 92497113010

METHOD BLANK: 2016810 Matrix: Water
Associated Lab Samples: 92497113001, 92497113002, 92497113003, 92497113004, 92497113005, 92497113006, 92497113007, 92497113008, 92497113009, 92497113010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00529 ± 0.135 (0.392) C:94% T:NA	pCi/L	10/14/20 07:09	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES GYPSUM LF RADS
Pace Project No.: 92497113

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497113001	**GWC-2R (09/22/2020)**	EPA 9315	417130		
92497113002	**GWC-4R (09/22/2020)**	EPA 9315	417130		
92497113003	**GWC-5R (09/23/2020)**	EPA 9315	417130		
92497113004	**GWC-6R (09/23/2020)**	EPA 9315	417130		
92497113005	**DUP-01 (09/23/2020)**	EPA 9315	417130		
92497113006	**EQUIPMENT BLANK (09/23/2020)**	EPA 9315	417130		
92497113007	**FIELD BLANK (09/22/2020)**	EPA 9315	417130		
92497113008	**GWA-2 (09/22/2020)**	EPA 9315	417130		
92497113009	**GWC-1R (09/22/2020)**	EPA 9315	417130		
92497113010	**GWC-3R (09/22/2020)**	EPA 9315	417130		
92497113001	**GWC-2R (09/22/2020)**	EPA 9320	417131		
92497113002	**GWC-4R (09/22/2020)**	EPA 9320	417131		
92497113003	**GWC-5R (09/23/2020)**	EPA 9320	417131		
92497113004	**GWC-6R (09/23/2020)**	EPA 9320	417131		
92497113005	**DUP-01 (09/23/2020)**	EPA 9320	417131		
92497113006	**EQUIPMENT BLANK (09/23/2020)**	EPA 9320	417131		
92497113007	**FIELD BLANK (09/22/2020)**	EPA 9320	417131		
92497113008	**GWA-2 (09/22/2020)**	EPA 9320	417131		
92497113009	**GWC-1R (09/22/2020)**	EPA 9320	417131		
92497113010	**GWC-3R (09/22/2020)**	EPA 9320	417131		
92497113001	**GWC-2R (09/22/2020)**	Total Radium Calculation	418910		
92497113002	**GWC-4R (09/22/2020)**	Total Radium Calculation	418910		
92497113003	**GWC-5R (09/23/2020)**	Total Radium Calculation	418910		
92497113004	**GWC-6R (09/23/2020)**	Total Radium Calculation	418910		
92497113005	**DUP-01 (09/23/2020)**	Total Radium Calculation	418910		
92497113006	**EQUIPMENT BLANK (09/23/2020)**	Total Radium Calculation	418910		
92497113007	**FIELD BLANK (09/22/2020)**	Total Radium Calculation	418910		
92497113008	**GWA-2 (09/22/2020)**	Total Radium Calculation	418910		
92497113009	**GWC-1R (09/22/2020)**	Total Radium Calculation	418910		
92497113010	**GWC-3R (09/22/2020)**	Total Radium Calculation	418910		

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

WO#: 92497113

92497113

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace

Tracking #: _____

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used 230

Type of Ice: (Wet) Blue None ☐ Samples on ice; cooling process has begun

Cooler Temperature 3.4°C

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/23/20 CW

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC: (DW) 9/24/20 W	☐Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix:			
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No	
Samples checked for dechlorination:	☐Yes	☐No	☑N/A
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A
Trip Blank Present:	☐Yes	☐No	☑N/A
~~Trip Blank Custody Seals Present~~	☐Yes	☐No	☐N/A
Pace Trip Blank Lot # (if purchased): _____			

	Initial when completed	Lot # of added preservative
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12. GWC-BR is labeled GWC-1R ε 9/22/20 1320 as collection date+Time		
13.		
14.		
15.		
16.		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	Issuing Authority: Pace Carolinas Quality Office

•Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
••Bottom half of box is to list number of bottle

Project #

WO# : 92497113

PM: KLH1 Due Date: 10/14/20
CLIENT: GA-GA Power

Matrix	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)
	1																											
	2																											
	3																											
	4																											
	5																											
	6																											
	7																											
	8																											
	9																											
	10																											
	11																											
	12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10640

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): TDS	Anions	App I, II, III, IV & Hg	RAD 9315/9320	Residual Chlorine (Y/N)	
1	GWC-2R (09/22/2020)			9/22	1325				3	✓		✓							✓	✓	✓	✓		92497113
2	GWC-4R (09/22/2020)			9/22	1730				3	✓		✓							✓	✓	✓	✓		5.34=Ph
3	GWC-5R (09/23/2020)			9/23	1005				3	✓		✓							✓	✓	✓	✓		5.43=Ph
4	GWC-6R (09/23/2020)			9/23	1110				3	✓		✓							✓	✓	✓	✓		5.04=Ph
5	DUP-01 (09/23/2020			9/23	-				3	✓		✓							✓	✓	✓	✓		5.81=Ph
6	~~FB 01 (09/22/2020)~~			9/22	1130				~~3~~	~~✓~~		~~✓~~							~~✓~~	~~✓~~	~~✓~~	~~✓~~		-
7	~~EB~~ 01 Equipment Blank (9/23/2020)			9/23	1120				3	✓		✓							✓	✓	✓	✓		JS
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
NO MD	Jake Swanson	9/23/20	1511		9/23/2020	15:11	
		9/23/20	1740		9/23/20	1740	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 9/23/20

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power	Report To: Becky Steever	Attention:
Address: 1070 Bridge Mill Ave	Copy To:	Company Name:
Acton, GA 30114		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: (770)384-6526 Fax	Project Name: Yates Gypsum LF	Pace Project Manager: kevin.herring@pacelabs.com,
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency: —
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App I, II, III, IV & Hg	RAD 9315/9320	Residual Chlorine (Y/N)	
1	DUP	WT																	x	x	x	x		
2	FIELD BLANK (092220)	WT				9/22/2020	1130		5	X		X							x	x	x	x		—
3	~~EQUIPMENT BLANK~~	WT																	x	x	x	x		
4	GWA-2 (092220)	WT	G			9/22/2020	1100		5	X		X							x	x	x	x		pH : 5.78
5	GWC-4R (092220)	WT	G			9/22/2020	1320		5	X		X							x	x	x	x		pH : 5.25
6	~~GWC-3R~~	WT																	x	x	x	x		~~pH : 5.11~~ (PA)
7	~~GWC-1R~~	WT																	x	x	x	x		
8	GWC-3R (092220)	WT	G			9/22/2020	1540		5	X		X							x	x	x	x		pH : 5.11 (PA)
9	~~GWC-4R~~	WT																	x	x	x	x		
10	GWC-2R	WT																	x	x	x	x		
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
NO MO		9/22/2020	1730		9/22/20	1730	
		9/23/20	1511		9/23/20	1511	
		9/23/20	1748	9/23/20	9/23/20	1746	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Peter Argyrakis

SIGNATURE of SAMPLER:

DATE Signed: 09/22/2020

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/13/2020
Worklist:	56587
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2016810
MB concentration:	-0.005
M/B Counting Uncertainty:	0.135
MB MDC:	0.392
MB Numerical Performance Indicator:	-0.08
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS56587	LCSD56587
Count Date:	10/14/2020	10/14/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.044	24.044
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.512
Target Conc. (pCi/L, g, F):	4.732	4.697
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	4.419	4.459
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.793	0.781
Numerical Performance Indicator:	-0.77	-0.59
Percent Recovery:	93.40%	94.94%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS56587	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD56587	
Sample Result (pCi/L, g, F):	4.419	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.793	
Sample Duplicate Result (pCi/L, g, F):	4.459	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.781	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.071	92497113001
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.64%	92497113001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

CMM 10/14/2020

LAM 10/14/2020

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	10/13/2020
Worklist:	56587
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2016810
MB concentration:	-0.005
M/B Counting Uncertainty:	0.135
MB MDC:	0.392
MB Numerical Performance Indicator:	-0.08
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS56587	LCSD56587
Count Date:	10/14/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.044	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.508	
Target Conc. (pCi/L, g, F):	4.732	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.419	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.793	
Numerical Performance Indicator:	-0.77	
Percent Recovery:	93.40%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	92497113001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92497113001DUP	
Sample Result (pCi/L, g, F):	0.393	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.257	
Sample Duplicate Result (pCi/L, g, F):	0.393	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.369	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.003	92497113001
Duplicate RPD:	0.20%	92497113001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

10/14/2020

LAM 10/14/2020

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	10/13/2020
Worklist:	56588
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2016812
MB concentration:	0.888
M/B 2 Sigma CSU:	0.380
MB MDC:	0.600
MB Numerical Performance Indicator:	4.58
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS56588	LCSD56588
Count Date:	10/15/2020	10/15/2020
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	38.018	38.018
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.817	0.810
Target Conc. (pCi/L, g, F):	4.654	4.695
Uncertainty (Calculated):	0.228	0.230
Result (pCi/L, g, F):	5.189	5.370
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.207	1.191
Numerical Performance Indicator:	0.85	1.09
Percent Recovery:	111.49%	114.37%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS56588	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD56588	
Sample Result (pCi/L, g, F):	5.189	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.207	
Sample Duplicate Result (pCi/L, g, F):	5.370	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.191	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.210	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.55%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 18, 2020

Ms. Lauren Petty
Southern Co. Services
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92493131001	**GWA-2 (08/26/20)**	Water	08/26/20 16:20	08/28/20 18:14
92493131002	**GWC-1R (08/27/2020)**	Water	08/27/20 17:10	08/28/20 18:14
92493131003	**GWC-2R (08/28/2020)**	Water	08/28/20 10:30	08/28/20 18:14
92493131004	**GWC-3R (08/28/2020)**	Water	08/28/20 12:30	08/28/20 18:14
92493131005	**GWC-4R (08/28/2020)**	Water	08/28/20 17:30	08/28/20 18:14
92493131006	**GWC-5R (08/27/2020)**	Water	08/27/20 11:15	08/28/20 18:14
92493131007	**GWC-6R (08/27/2020)**	Water	08/27/20 15:30	08/28/20 18:14
92493131008	**DUP-1**	Water	08/28/20 00:00	08/28/20 18:14
92493131009	**EB-1**	Water	08/28/20 16:15	08/28/20 18:14

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92493131001	**GWA-2 (08/26/20)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92493131002	**GWC-1R (08/27/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92493131003	**GWC-2R (08/28/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92493131004	**GWC-3R (08/28/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92493131005	**GWC-4R (08/28/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92493131006	**GWC-5R (08/27/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92493131007	**GWC-6R (08/27/2020)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92493131008	**DUP-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92493131009	**EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92493131001	**GWA-2 (08/26/20)**					
EPA 9315	Radium-226	0.558 ± 0.269 (0.357) C:80% T:NA	pCi/L		09/14/20 08:57	
EPA 9320	Radium-228	1.19 ± 0.608 (1.09) C:64% T:82%	pCi/L		09/16/20 14:44	
Total Radium Calculation	Total Radium	1.75 ± 0.877 (1.45)	pCi/L		09/17/20 11:28	
92493131002	**GWC-1R (08/27/2020)**					
EPA 9315	Radium-226	0.413 ± 0.227 (0.330) C:88% T:NA	pCi/L		09/14/20 08:57	
EPA 9320	Radium-228	-0.245 ± 0.575 (1.36) C:58% T:79%	pCi/L		09/16/20 14:44	
Total Radium Calculation	Total Radium	0.413 ± 0.802 (1.69)	pCi/L		09/17/20 11:28	
92493131003	**GWC-2R (08/28/2020)**					
EPA 9315	Radium-226	0.602 ± 0.209 (0.294) C:87% T:NA	pCi/L		09/08/20 18:05	
EPA 9320	Radium-228	0.916 ± 0.502 (0.920) C:72% T:76%	pCi/L		09/16/20 11:15	
Total Radium Calculation	Total Radium	1.52 ± 0.711 (1.21)	pCi/L		09/17/20 14:16	
92493131004	**GWC-3R (08/28/2020)**					
EPA 9315	Radium-226	0.0868 ± 0.458 (0.956) C:87% T:NA	pCi/L		09/08/20 18:14	
EPA 9320	Radium-228	0.407 ± 0.544 (1.17) C:70% T:74%	pCi/L		09/16/20 14:19	
Total Radium Calculation	Total Radium	0.494 ± 1.00 (2.13)	pCi/L		09/17/20 14:16	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92493131005	**GWC-4R (08/28/2020)**					
EPA 9315	Radium-226	0.313 ± 0.131 (0.177) C:86% T:NA	pCi/L		09/08/20 18:15	
EPA 9320	Radium-228	0.0226 ± 0.447 (1.03) C:73% T:73%	pCi/L		09/16/20 14:19	
Total Radium Calculation	Total Radium	0.336 ± 0.578 (1.21)	pCi/L		09/17/20 14:16	
92493131006	**GWC-5R (08/27/2020)**					
EPA 9315	Radium-226	0.194 ± 0.154 (0.277) C:92% T:NA	pCi/L		09/08/20 18:15	
EPA 9320	Radium-228	0.497 ± 0.490 (1.02) C:71% T:81%	pCi/L		09/16/20 14:19	
Total Radium Calculation	Total Radium	0.691 ± 0.644 (1.30)	pCi/L		09/17/20 14:16	
92493131007	**GWC-6R (08/27/2020)**					
EPA 9315	Radium-226	0.270 ± 0.123 (0.171) C:89% T:NA	pCi/L		09/08/20 18:15	
EPA 9320	Radium-228	0.244 ± 0.471 (1.03) C:72% T:81%	pCi/L		09/16/20 14:19	
Total Radium Calculation	Total Radium	0.514 ± 0.594 (1.20)	pCi/L		09/17/20 14:16	
92493131008	**DUP-1**					
EPA 9315	Radium-226	0.113 ± 0.267 (0.633) C:82% T:NA	pCi/L		09/09/20 07:19	
EPA 9320	Radium-228	0.782 ± 0.526 (1.02) C:66% T:82%	pCi/L		09/16/20 11:39	
Total Radium Calculation	Total Radium	0.895 ± 0.793 (1.65)	pCi/L		09/17/20 14:16	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92493131009	**EB-1**					
EPA 9315	Radium-226	-0.00430 ± 0.227 (0.602) C:91% T:NA	pCi/L		09/09/20 07:37	
EPA 9320	Radium-228	0.182 ± 0.435 (0.964) C:68% T:79%	pCi/L		09/16/20 11:39	
Total Radium Calculation	Total Radium	0.182 ± 0.662 (1.57)	pCi/L		09/17/20 14:16	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: GWA-2 (08/26/20) **Lab ID: 92493131001** Collected: 08/26/20 16:20 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.558 ± 0.269 (0.357) C:80% T:NA**	pCi/L	09/14/20 08:57	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.19 ± 0.608 (1.09) C:64% T:82%**	pCi/L	09/16/20 14:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.75 ± 0.877 (1.45)**	pCi/L	09/17/20 11:28	7440-14-4	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: GWC-1R (08/27/2020) **Lab ID: 92493131002** Collected: 08/27/20 17:10 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.413 ± 0.227 (0.330) C:88% T:NA**	pCi/L	09/14/20 08:57	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.245 ± 0.575 (1.36) C:58% T:79%**	pCi/L	09/16/20 14:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.413 ± 0.802 (1.69)**	pCi/L	09/17/20 11:28	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: GWC-2R (08/28/2020) **Lab ID: 92493131003** Collected: 08/28/20 10:30 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.602 ± 0.209 (0.294) C:87% T:NA**	pCi/L	09/08/20 18:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.916 ± 0.502 (0.920) C:72% T:76%**	pCi/L	09/16/20 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.52 ± 0.711 (1.21)**	pCi/L	09/17/20 14:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: GWC-3R (08/28/2020) **Lab ID: 92493131004** Collected: 08/28/20 12:30 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:
Comments: • 1 1 L received with 500 ml in container.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0868 ± 0.458 (0.956) C:87% T:NA**	pCi/L	09/08/20 18:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.407 ± 0.544 (1.17) C:70% T:74%**	pCi/L	09/16/20 14:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.494 ± 1.00 (2.13)**	pCi/L	09/17/20 14:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: GWC-4R (08/28/2020) **Lab ID: 92493131005** Collected: 08/28/20 17:30 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.313 ± 0.131 (0.177) C:86% T:NA**	pCi/L	09/08/20 18:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0226 ± 0.447 (1.03) C:73% T:73%**	pCi/L	09/16/20 14:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.336 ± 0.578 (1.21)**	pCi/L	09/17/20 14:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: GWC-5R (08/27/2020) **Lab ID: 92493131006** Collected: 08/27/20 11:15 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.194 ± 0.154 (0.277) C:92% T:NA**	pCi/L	09/08/20 18:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.497 ± 0.490 (1.02) C:71% T:81%**	pCi/L	09/16/20 14:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.691 ± 0.644 (1.30)**	pCi/L	09/17/20 14:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: GWC-6R (08/27/2020) **Lab ID: 92493131007** Collected: 08/27/20 15:30 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.270 ± 0.123 (0.171) C:89% T:NA**	pCi/L	09/08/20 18:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.244 ± 0.471 (1.03) C:72% T:81%**	pCi/L	09/16/20 14:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.514 ± 0.594 (1.20)**	pCi/L	09/17/20 14:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: DUP-1 **Lab ID: 92493131008** Collected: 08/28/20 00:00 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.113 ± 0.267 (0.633) C:82% T:NA**	pCi/L	09/09/20 07:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.782 ± 0.526 (1.02) C:66% T:82%**	pCi/L	09/16/20 11:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.895 ± 0.793 (1.65)**	pCi/L	09/17/20 14:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Sample: EB-1 **Lab ID: 92493131009** Collected: 08/28/20 16:15 Received: 08/28/20 18:14 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.00430 ± 0.227 (0.602) C:91% T:NA**	pCi/L	09/09/20 07:37	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.182 ± 0.435 (0.964) C:68% T:79%**	pCi/L	09/16/20 11:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.182 ± 0.662 (1.57)**	pCi/L	09/17/20 14:16	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

QC Batch: 412347
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92493131001, 92493131002

METHOD BLANK: 1994502 Matrix: Water
Associated Lab Samples: 92493131001, 92493131002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.314 ± 0.487 (1.05) C:61% T:69%	pCi/L	09/16/20 14:42	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

QC Batch: 412358
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92493131001, 92493131002

METHOD BLANK: 1994517 Matrix: Water
Associated Lab Samples: 92493131001, 92493131002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0557 ± 0.119 (0.278) C:90% T:NA	pCi/L	09/14/20 08:58	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

QC Batch: 412653
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92493131003, 92493131004, 92493131005, 92493131006, 92493131007, 92493131008, 92493131009

METHOD BLANK: 1995813 Matrix: Water
Associated Lab Samples: 92493131003, 92493131004, 92493131005, 92493131006, 92493131007, 92493131008, 92493131009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0793 ± 0.359 (0.855) C:71% T:76%	pCi/L	09/16/20 11:15	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

QC Batch: 412359
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92493131003, 92493131004, 92493131005, 92493131006, 92493131007, 92493131008, 92493131009

METHOD BLANK: 1994519 Matrix: Water
Associated Lab Samples: 92493131003, 92493131004, 92493131005, 92493131006, 92493131007, 92493131008, 92493131009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0753 ± 0.0856 (0.159) C:96% T:NA	pCi/L	09/08/20 17:44	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES GYPSUM LF RADS
Pace Project No.: 92493131

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92493131001	**GWA-2 (08/26/20)**	EPA 9315	412358		
92493131002	**GWC-1R (08/27/2020)**	EPA 9315	412358		
92493131003	**GWC-2R (08/28/2020)**	EPA 9315	412359		
92493131004	**GWC-3R (08/28/2020)**	EPA 9315	412359		
92493131005	**GWC-4R (08/28/2020)**	EPA 9315	412359		
92493131006	**GWC-5R (08/27/2020)**	EPA 9315	412359		
92493131007	**GWC-6R (08/27/2020)**	EPA 9315	412359		
92493131008	**DUP-1**	EPA 9315	412359		
92493131009	**EB-1**	EPA 9315	412359		
92493131001	**GWA-2 (08/26/20)**	EPA 9320	412347		
92493131002	**GWC-1R (08/27/2020)**	EPA 9320	412347		
92493131003	**GWC-2R (08/28/2020)**	EPA 9320	412653		
92493131004	**GWC-3R (08/28/2020)**	EPA 9320	412653		
92493131005	**GWC-4R (08/28/2020)**	EPA 9320	412653		
92493131006	**GWC-5R (08/27/2020)**	EPA 9320	412653		
92493131007	**GWC-6R (08/27/2020)**	EPA 9320	412653		
92493131008	**DUP-1**	EPA 9320	412653		
92493131009	**EB-1**	EPA 9320	412653		
92493131001	**GWA-2 (08/26/20)**	Total Radium Calculation	414382		
92493131002	**GWC-1R (08/27/2020)**	Total Radium Calculation	414382		
92493131003	**GWC-2R (08/28/2020)**	Total Radium Calculation	414421		
92493131004	**GWC-3R (08/28/2020)**	Total Radium Calculation	414421		
92493131005	**GWC-4R (08/28/2020)**	Total Radium Calculation	414421		
92493131006	**GWC-5R (08/27/2020)**	Total Radium Calculation	414421		
92493131007	**GWC-6R (08/27/2020)**	Total Radium Calculation	414421		
92493131008	**DUP-1**	Total Radium Calculation	414421		
92493131009	**EB-1**	Total Radium Calculation	414421		

Pace Analytical

Sample Condition Upon Receipt

WO#: 92493131

92493131

Client Name: GA Power

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other

Tracking #: _____

Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used 214

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

Cooler Temperature 4.1

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 8/28/2009

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC:	☑Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix: W			
All containers needing preservation have been checked.	☐Yes	☐No	☐N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☑No	☐N/A
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☑No	
Samples checked for dechlorination:	☐Yes	☐No	☑N/A
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A
Trip Blank Present:	☐Yes	☐No	☑N/A
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A
Pace Trip Blank Lot # (if purchased): _____			

1.

2. collection time not listed on COC for EB4

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13. EB-1 metals pH adjusted from 7 to <2 EHN03

Initial when completed: LH Lot # of added preservative: 072720-2EIZ

14.

15.

16.

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: EB-1 collection time 1615 per labels

Project Manager Review: _____ **Date:** _____

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

Project #

WO# : 92493131

PM: KLH1 Due Date: 09/14/20

CLIENT: GA-GA Power

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Matrix	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved
	1		1				✓ 1			
	2		1				✓ 1			
	3		1				✓ 1			
	4		1				✓ 1			
	5		1				✓ 1			
	6		1				✓ 1			
	7		1				✓ 1			
	8		1				✓ 1			
	9		1				✓ 1			
	10									
	11									
	12									

Item#	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

Item#	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)
1					✓ 2			
2					✓ 2			
3					✓ 2			
4					✓ 2			
5					✓ 2			
6					✓ 2			
7					✓ 2			
8					✓ 2			
9					2			
10								
11								
12								

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lo[illegible]
EB-1	HNO3	7	8/28/20	1520	2.5ml [illegible]	

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification O[illegible]

Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical
www.pacelabs.com

Page : 1 Of 1

Section A
Required Client Information:
Company: Arcadis (GA Power)
Address: 2839 Paces Ferry Rd
Suite 900, Atlanta, GA 30339
Email:
Phone: Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum Landfill
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

Requested Analysis Filtered (Y/N)

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	300.0 - F	App IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	92493131
1	GWA-2 (08/26/2020) ph: 5.67	WT		8/26	1620				4			X							x	x	x		001
2	GWC-1R (08/27/2020) ph: 5.39	WT		8/27	1710				4			X							x	x	x		002
3	GWC-2R (08/28/2020) Ph: 5.45	WT		8/28	1030				4			X							x	x	x		003
4	GWC-3R (08/28/2020) Ph: 5.20	WT		8/28	1030				4			X							x	x	x		004
5	GWC-4R	WT																	x	x	x		005
6	GWC-5R (08/27/2020) Ph: 5.17	WT		8/27	1115														x	x	x		006
7	GWC-6R (08/27/2020) Ph: 5.77	WT		8/27	1530														x	x	x		007
8	DUP-1	WT		8/28	—														X	X	X		008
9	EB-1			8/26	(circled)														X	X	X		009
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
IV: Sb, As, Ba, Be, Cd, Cr, Co, Hg, Pb, Li, Mo, Se, Tl	Jake Swanson	8/28/20	1620	Becky Steever / Arcadis	8/28/20	1620	
	Becky Steever	8/28	1814	Pace	8/28/20	1814	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 8/28/20

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-In Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Arcadis/GAPower	Billing Information:
Address: 2839 Paces Ferry Rd	
Report To: Becky Steever	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: Yates Gypsum Landfill	State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: Email:	Site/Facility ID #: Yates Gypsum Landfill
Collected By (print):	Purchase Order #: Quote #:
Collected By (signature):	Turnaround Date Required:
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [ ] Yes [ ] No

DW PWS ID #: DW Location Code:

Immediately Packed on Ice: [ ] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	3020 - F	APP IV Metals	Radium
GWC-4R(08/28/2020)	WT	Grab	8/28	1730					X	X	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

924931

Ph: [redacted] 5.33 005

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2421491

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____ oC
Cooler 1 Therm Corr. Factor: _____ oC
Cooler 1 Corrected Temp: 3.3 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 8/29/20	Received by/Company: (Signature)	Date/Time: 8/29/20 1054
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____ of: _____

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	9/11/2020
Worklist:	55961
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1994517
MB concentration:	0.056
M/B Counting Uncertainty:	0.118
MB MDC:	0.278
MB Numerical Performance Indicator:	0.92
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS55961	LCSD55961
Count Date:	9/14/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.044	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.522	
Target Conc. (pCi/L, g, F):	4.609	
Uncertainty (Calculated):	0.055	
Result (pCi/L, g, F):	4.395	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.589	
Numerical Performance Indicator:	-0.71	
Percent Recovery:	95.35%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	92492413011	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92492413011DUP	
Sample Result (pCi/L, g, F):	0.357	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.211	
Sample Duplicate Result (pCi/L, g, F):	0.265	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.184	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.647	92492413011
Duplicate RPD:	29.70%	92492413011DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A
LAM 9/14/2020

LAM 9/14/2020

LAM 9/14/2020

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	LAL
Date:	9/11/2020
Worklist:	55961
Matrix:	DW

Method Blank Assessment	
MB Sample ID	1994517
MB concentration:	0.056
M/B Counting Uncertainty:	0.118
MB MDC:	0.278
MB Numerical Performance Indicator:	0.92
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS55961	LCSD55961
Count Date:	9/14/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.044	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.522	
Target Conc. (pCi/L, g, F):	4.609	
Uncertainty (Calculated):	0.055	
Result (pCi/L, g, F):	4.395	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.589	
Numerical Performance Indicator:	-0.71	
Percent Recovery:	95.35%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	92492413010	Enter Duplicate
Duplicate Sample I.D.	92492413010DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.313	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.192	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.186	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.181	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.939	92492413010
Duplicate RPD:	50.74%	92492413010DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A

9/14/2020

LAM 9/14/2020

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	9/8/2020
Worklist:	55962
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1994519
MB concentration:	0.075
M/B Counting Uncertainty:	0.085
MB MDC:	0.159
MB Numerical Performance Indicator:	1.74
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS55962	LCSD55962
Count Date:	9/9/2020	9/9/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.045	24.045
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.506
Target Conc. (pCi/L, g, F):	4.757	4.755
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.703	4.482
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.784	0.767
Numerical Performance Indicator:	-0.13	-0.69
Percent Recovery:	98.88%	94.27%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS55962	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD55962	
Sample Result (pCi/L, g, F):	4.703	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.784	
Sample Duplicate Result (pCi/L, g, F):	4.482	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.767	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.395	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.77%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 9/9/2020

LAL 9.9.20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	9/8/2020
Worklist:	55962
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1994519
MB concentration:	0.075
M/B Counting Uncertainty:	0.085
MB MDC:	0.159
MB Numerical Performance Indicator:	1.74
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS55962	LCSD55962
Count Date:	9/9/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.045	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.506	
Target Conc. (pCi/L, g, F):	4.757	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.703	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.784	
Numerical Performance Indicator:	-0.13	
Percent Recovery:	98.88%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	92491393007	Enter Duplicate
Duplicate Sample I.D.	92491393007DUP	sample IDs if
Sample Result (pCi/L, g, F):	0.053	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.088	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.094	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.086	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.651	92491393007
Duplicate RPD:	55.49%	92491393007DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A
LAM 9/9/2020

LAM 9/9/2020

LM 9.9.20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/10/2020
Worklist:	55956
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1994502
MB concentration:	0.314
M/B 2 Sigma CSU:	0.487
MB MDC:	1.054
MB Numerical Performance Indicator:	1.26
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS55956	LCSD55956
Count Date:	9/16/2020	9/16/2020
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	38.382	38.382
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.813	0.814
Target Conc. (pCi/L, g, F):	4.719	4.715
Uncertainty (Calculated):	0.231	0.231
Result (pCi/L, g, F):	5.086	5.348
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.251	1.293
Numerical Performance Indicator:	0.57	0.94
Percent Recovery:	107.78%	113.43%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS55956	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD55956	
Sample Result (pCi/L, g, F):	5.086	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.251	
Sample Duplicate Result (pCi/L, g, F):	5.348	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.293	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.285	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	5.11%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

9-17-20

9.17.20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	9/14/2020
Worklist:	56010
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1995813
MB concentration:	-0.079
M/B 2 Sigma CSU:	0.359
MB MDC:	0.855
MB Numerical Performance Indicator:	-0.43
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS56010	LCSD56010
Count Date:	9/16/2020	9/16/2020
Spike I.D.:	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL):	38.384	38.384
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.810	0.804
Target Conc. (pCi/L, g, F):	4.737	4.773
Uncertainty (Calculated):	0.232	0.234
Result (pCi/L, g, F):	5.219	5.008
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.198	1.173
Numerical Performance Indicator:	0.77	0.38
Percent Recovery:	110.18%	104.92%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS56010	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD56010	
Sample Result (pCi/L, g, F):	5.219	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.198	
Sample Duplicate Result (pCi/L, g, F):	5.008	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.173	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.247	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.89%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 10, 2020

Ms. Lauren Petty
Southern Co. Services
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES GYPSUM LF
Pace Project No.: 92493137

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92493137001	**GWA-2 (08/26/2020)**	Water	08/26/20 16:20	08/28/20 18:14
92493137002	**GWC-1R (08/27/2020)**	Water	08/27/20 17:10	08/28/20 18:14
92493137003	**GWC-2R (08/28/2020)**	Water	08/28/20 10:30	08/28/20 18:14
92493137004	**GWC-3R (08/28/2020)**	Water	08/28/20 12:30	08/28/20 18:14
92493137005	**GWC-4R (08/28/2020)**	Water	08/28/20 17:30	08/28/20 18:14
92493137006	**GWC-5R (08/27/2020)**	Water	08/27/20 11:15	08/28/20 18:14
92493137007	**GWC-6R (08/27/2020)**	Water	08/27/20 15:30	08/28/20 18:14
92493137008	**DUP-1**	Water	08/28/20 00:00	08/28/20 18:14
92493137009	**EB-1**	Water	08/28/20 16:15	08/28/20 18:14

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92493137001	**GWA-2 (08/26/2020)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92493137002	**GWC-1R (08/27/2020)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92493137003	**GWC-2R (08/28/2020)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92493137004	**GWC-3R (08/28/2020)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92493137005	**GWC-4R (08/28/2020)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92493137006	**GWC-5R (08/27/2020)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92493137007	**GWC-6R (08/27/2020)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92493137008	**DUP-1**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92493137009	**EB-1**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92493137001	**GWA-2 (08/26/2020)**					
	pH	5.67	Std. Units		09/10/20 09:27	
EPA 6020B	Antimony	0.00042J	mg/L	0.0030	09/02/20 16:08	B
EPA 6020B	Barium	0.044	mg/L	0.010	09/02/20 16:08	
EPA 6020B	Cobalt	0.20	mg/L	0.0050	09/02/20 16:08	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	09/02/20 16:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.068J	mg/L	0.10	09/01/20 16:13	
92493137002	**GWC-1R (08/27/2020)**					
	pH	5.39	Std. Units		09/10/20 09:27	
EPA 6020B	Arsenic	0.0011J	mg/L	0.0050	09/02/20 16:13	
EPA 6020B	Barium	0.072	mg/L	0.010	09/02/20 16:13	
EPA 6020B	Beryllium	0.00024J	mg/L	0.0030	09/02/20 16:13	
EPA 6020B	Cadmium	0.00012J	mg/L	0.0025	09/02/20 16:13	
EPA 6020B	Chromium	0.0013J	mg/L	0.010	09/02/20 16:13	
EPA 6020B	Cobalt	0.00081J	mg/L	0.0050	09/02/20 16:13	
EPA 6020B	Lead	0.000067J	mg/L	0.0050	09/02/20 16:13	
EPA 6020B	Lithium	0.0017J	mg/L	0.030	09/02/20 16:13	
EPA 6020B	Selenium	0.011	mg/L	0.010	09/02/20 16:13	
92493137003	**GWC-2R (08/28/2020)**					
	pH	5.45	Std. Units		09/10/20 09:27	
EPA 6020B	Barium	0.044	mg/L	0.010	09/02/20 16:19	
EPA 6020B	Beryllium	0.00020J	mg/L	0.0030	09/02/20 16:19	
EPA 6020B	Cadmium	0.00015J	mg/L	0.0025	09/02/20 16:19	
EPA 6020B	Chromium	0.00057J	mg/L	0.010	09/02/20 16:19	
EPA 6020B	Cobalt	0.0072	mg/L	0.0050	09/02/20 16:19	
EPA 6020B	Lead	0.000084J	mg/L	0.0050	09/02/20 16:19	
EPA 6020B	Lithium	0.0047J	mg/L	0.030	09/02/20 16:19	
EPA 6020B	Selenium	0.0037J	mg/L	0.010	09/02/20 16:19	
92493137004	**GWC-3R (08/28/2020)**					
	pH	5.20	Std. Units		09/10/20 09:27	
EPA 6020B	Barium	0.014	mg/L	0.010	09/02/20 16:36	
EPA 6020B	Beryllium	0.00050J	mg/L	0.0030	09/02/20 16:36	
EPA 6020B	Cadmium	0.00014J	mg/L	0.0025	09/02/20 16:36	
EPA 6020B	Chromium	0.00088J	mg/L	0.010	09/02/20 16:36	
EPA 6020B	Cobalt	0.0041J	mg/L	0.0050	09/02/20 16:36	
EPA 6020B	Lead	0.000054J	mg/L	0.0050	09/02/20 16:36	
EPA 6020B	Selenium	0.0045J	mg/L	0.010	09/02/20 16:36	
EPA 300.0 Rev 2.1 1993	Fluoride	0.097J	mg/L	0.10	09/01/20 17:20	
92493137005	**GWC-4R (08/28/2020)**					
	pH	5.38	Std. Units		09/10/20 09:27	
EPA 6020B	Barium	0.026	mg/L	0.010	09/02/20 16:42	
EPA 6020B	Cobalt	0.00049J	mg/L	0.0050	09/02/20 16:42	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	09/02/20 16:42	
EPA 6020B	Selenium	0.0031J	mg/L	0.010	09/02/20 16:42	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92493137006	**GWC-5R (08/27/2020)**					
	pH	5.17	Std. Units		09/10/20 09:27	
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	09/02/20 16:48	
EPA 6020B	Barium	0.013	mg/L	0.010	09/02/20 16:48	
EPA 6020B	Beryllium	0.0023J	mg/L	0.0030	09/02/20 16:48	
EPA 6020B	Cadmium	0.00091J	mg/L	0.0025	09/02/20 16:48	
EPA 6020B	Chromium	0.0022J	mg/L	0.010	09/02/20 16:48	
EPA 6020B	Lead	0.000049J	mg/L	0.0050	09/02/20 16:48	
EPA 6020B	Lithium	0.0013J	mg/L	0.030	09/02/20 16:48	
EPA 6020B	Selenium	0.021	mg/L	0.010	09/02/20 16:48	
EPA 300.0 Rev 2.1 1993	Fluoride	0.064J	mg/L	0.10	09/01/20 17:47	
92493137007	**GWC-6R (08/27/2020)**					
	pH	5.77	Std. Units		09/10/20 09:27	
EPA 6020B	Arsenic	0.0011J	mg/L	0.0050	09/02/20 16:54	
EPA 6020B	Barium	0.045	mg/L	0.010	09/02/20 16:54	
EPA 6020B	Chromium	0.0012J	mg/L	0.010	09/02/20 16:54	
EPA 6020B	Lithium	0.0083J	mg/L	0.030	09/02/20 16:54	
EPA 6020B	Selenium	0.0027J	mg/L	0.010	09/02/20 16:54	
92493137008	**DUP-1**					
EPA 6020B	Barium	0.014	mg/L	0.010	09/02/20 16:59	
EPA 6020B	Beryllium	0.00046J	mg/L	0.0030	09/02/20 16:59	
EPA 6020B	Cadmium	0.00014J	mg/L	0.0025	09/02/20 16:59	
EPA 6020B	Chromium	0.00092J	mg/L	0.010	09/02/20 16:59	
EPA 6020B	Cobalt	0.0039J	mg/L	0.0050	09/02/20 16:59	
EPA 6020B	Selenium	0.0043J	mg/L	0.010	09/02/20 16:59	
EPA 300.0 Rev 2.1 1993	Fluoride	0.067J	mg/L	0.10	09/01/20 18:41	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: GWA-2 (08/26/2020) **Lab ID: 92493137001** Collected: 08/26/20 16:20 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.67**	Std. Units			1		09/10/20 09:27		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00042J**	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 16:08	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 16:08	7440-38-2	
Barium	**0.044**	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 16:08	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 16:08	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 16:08	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 16:08	7440-47-3	
Cobalt	**0.20**	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 16:08	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 16:08	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 16:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 16:08	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 16:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 16:08	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:23	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.068J**	mg/L	0.10	0.050	1		09/01/20 16:13	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: GWC-1R (08/27/2020) **Lab ID: 92493137002** Collected: 08/27/20 17:10 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.39**	Std. Units			1		09/10/20 09:27		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 16:13	7440-36-0	
Arsenic	**0.0011J**	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 16:13	7440-38-2	
Barium	**0.072**	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 16:13	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 16:13	7440-41-7	
Cadmium	**0.00012J**	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 16:13	7440-43-9	
Chromium	**0.0013J**	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 16:13	7440-47-3	
Cobalt	**0.00081J**	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 16:13	7440-48-4	
Lead	**0.000067J**	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 16:13	7439-92-1	
Lithium	**0.0017J**	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 16:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 16:13	7439-98-7	
Selenium	**0.011**	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 16:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 16:13	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:37	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		09/01/20 16:26	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: GWC-2R (08/28/2020) **Lab ID: 92493137003** Collected: 08/28/20 10:30 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.45**	Std. Units			1		09/10/20 09:27		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 16:19	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 16:19	7440-38-2	
Barium	**0.044**	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 16:19	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 16:19	7440-41-7	
Cadmium	**0.00015J**	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 16:19	7440-43-9	
Chromium	**0.00057J**	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 16:19	7440-47-3	
Cobalt	**0.0072**	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 16:19	7440-48-4	
Lead	**0.000084J**	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 16:19	7439-92-1	
Lithium	**0.0047J**	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 16:19	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 16:19	7439-98-7	
Selenium	**0.0037J**	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 16:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 16:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:40	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		09/01/20 16:40	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: GWC-3R (08/28/2020) **Lab ID: 92493137004** Collected: 08/28/20 12:30 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.20**	Std. Units			1		09/10/20 09:27		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 16:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 16:36	7440-38-2	
Barium	**0.014**	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 16:36	7440-39-3	
Beryllium	**0.00050J**	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 16:36	7440-41-7	
Cadmium	**0.00014J**	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 16:36	7440-43-9	
Chromium	**0.00088J**	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 16:36	7440-47-3	
Cobalt	**0.0041J**	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 16:36	7440-48-4	
Lead	**0.000054J**	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 16:36	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 16:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 16:36	7439-98-7	
Selenium	**0.0045J**	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 16:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 16:36	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:42	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.097J**	mg/L	0.10	0.050	1		09/01/20 17:20	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: GWC-4R (08/28/2020) **Lab ID: 92493137005** Collected: 08/28/20 17:30 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.38**	Std. Units			1		09/10/20 09:27		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 16:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 16:42	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 16:42	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 16:42	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 16:42	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 16:42	7440-47-3	
Cobalt	**0.00049J**	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 16:42	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 16:42	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 16:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 16:42	7439-98-7	
Selenium	**0.0031J**	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 16:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 16:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:44	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		09/01/20 17:34	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: GWC-5R (08/27/2020) **Lab ID: 92493137006** Collected: 08/27/20 11:15 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.17**	Std. Units			1		09/10/20 09:27		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 16:48	7440-36-0	
Arsenic	**0.0016J**	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 16:48	7440-38-2	
Barium	**0.013**	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 16:48	7440-39-3	
Beryllium	**0.0023J**	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 16:48	7440-41-7	
Cadmium	**0.00091J**	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 16:48	7440-43-9	
Chromium	**0.0022J**	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 16:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 16:48	7440-48-4	
Lead	**0.000049J**	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 16:48	7439-92-1	
Lithium	**0.0013J**	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 16:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 16:48	7439-98-7	
Selenium	**0.021**	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 16:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 16:48	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:47	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.064J**	mg/L	0.10	0.050	1		09/01/20 17:47	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: GWC-6R (08/27/2020) **Lab ID: 92493137007** Collected: 08/27/20 15:30 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.77**	Std. Units			1		09/10/20 09:27		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 16:54	7440-36-0	
Arsenic	**0.0011J**	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 16:54	7440-38-2	
Barium	**0.045**	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 16:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 16:54	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 16:54	7440-43-9	
Chromium	**0.0012J**	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 16:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 16:54	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 16:54	7439-92-1	
Lithium	**0.0083J**	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 16:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 16:54	7439-98-7	
Selenium	**0.0027J**	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 16:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 16:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:49	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		09/01/20 18:28	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: DUP-1 **Lab ID: 92493137008** Collected: 08/28/20 00:00 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 16:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 16:59	7440-38-2	
Barium	**0.014**	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 16:59	7440-39-3	
Beryllium	**0.00046J**	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 16:59	7440-41-7	
Cadmium	**0.00014J**	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 16:59	7440-43-9	
Chromium	**0.00092J**	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 16:59	7440-47-3	
Cobalt	**0.0039J**	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 16:59	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 16:59	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 16:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 16:59	7439-98-7	
Selenium	**0.0043J**	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 16:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 16:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:51	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.067J**	mg/L	0.10	0.050	1		09/01/20 18:41	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Sample: EB-1 **Lab ID: 92493137009** Collected: 08/28/20 16:15 Received: 08/28/20 18:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/01/20 14:06	09/02/20 17:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/01/20 14:06	09/02/20 17:05	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	09/01/20 14:06	09/02/20 17:05	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/01/20 14:06	09/02/20 17:05	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/01/20 14:06	09/02/20 17:05	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/01/20 14:06	09/02/20 17:05	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/01/20 14:06	09/02/20 17:05	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/01/20 14:06	09/02/20 17:05	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/01/20 14:06	09/02/20 17:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/01/20 14:06	09/02/20 17:05	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/01/20 14:06	09/02/20 17:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/01/20 14:06	09/02/20 17:05	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/08/20 11:15	09/09/20 10:54	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		09/01/20 18:55	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92493137

QC Batch: 563754
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92493137001, 92493137002, 92493137003, 92493137004, 92493137005, 92493137006, 92493137007, 92493137008, 92493137009

METHOD BLANK: 2988660 Matrix: Water
Associated Lab Samples: 92493137001, 92493137002, 92493137003, 92493137004, 92493137005, 92493137006, 92493137007, 92493137008, 92493137009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00031J	0.0030	0.00028	09/02/20 15:28	
Arsenic	mg/L	ND	0.0050	0.00078	09/02/20 15:28	
Barium	mg/L	ND	0.010	0.00071	09/02/20 15:28	
Beryllium	mg/L	ND	0.0030	0.000046	09/02/20 15:28	
Cadmium	mg/L	ND	0.0025	0.00012	09/02/20 15:28	
Chromium	mg/L	ND	0.010	0.00055	09/02/20 15:28	
Cobalt	mg/L	ND	0.0050	0.00038	09/02/20 15:28	
Lead	mg/L	ND	0.0050	0.000036	09/02/20 15:28	
Lithium	mg/L	ND	0.030	0.00081	09/02/20 15:28	
Molybdenum	mg/L	ND	0.010	0.00069	09/02/20 15:28	
Selenium	mg/L	ND	0.010	0.0016	09/02/20 15:28	
Thallium	mg/L	ND	0.0010	0.00014	09/02/20 15:28	

LABORATORY CONTROL SAMPLE: 2988661

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2988662 2988663

Parameter	Units	92493129002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.097	0.099	97	98	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.097	0.099	97	99	75-125	2	20	
Barium	mg/L	0.021	0.1	0.1	0.12	0.12	95	98	75-125	3	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92493137

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2988662 2988663

Parameter	Units	92493129002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L	ND	0.1	0.1	0.089	0.093	89	93	75-125	5	20	
Cadmium	mg/L	ND	0.1	0.1	0.094	0.096	94	96	75-125	3	20	
Chromium	mg/L	0.00059J	0.1	0.1	0.099	0.10	99	100	75-125	1	20	
Cobalt	mg/L	0.0021J	0.1	0.1	0.097	0.099	94	97	75-125	2	20	
Lead	mg/L	0.000095J	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Lithium	mg/L	0.0047J	0.1	0.1	0.096	0.099	92	94	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.098	97	97	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92493137

QC Batch: 564593
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92493137001, 92493137002, 92493137003, 92493137004, 92493137005, 92493137006, 92493137007, 92493137008, 92493137009

METHOD BLANK: 2992563 Matrix: Water
Associated Lab Samples: 92493137001, 92493137002, 92493137003, 92493137004, 92493137005, 92493137006, 92493137007, 92493137008, 92493137009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	09/09/20 10:18	

LABORATORY CONTROL SAMPLE: 2992564

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2992565 2992566

Parameter	Units	92493137001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0023	95	94	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92493137

QC Batch: 563652
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92493137001, 92493137002, 92493137003, 92493137004, 92493137005, 92493137006, 92493137007, 92493137008, 92493137009

METHOD BLANK: 2988345 Matrix: Water
Associated Lab Samples: 92493137001, 92493137002, 92493137003, 92493137004, 92493137005, 92493137006, 92493137007, 92493137008, 92493137009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	09/01/20 13:04	

LABORATORY CONTROL SAMPLE: 2988346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.5	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2988347 2988348

Parameter	Units	92492918001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	103	103	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2988349 2988350

Parameter	Units	92493137003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	108	110	90-110	1	10	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES GYPSUM LF
Pace Project No.: 92493137

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES GYPSUM LF
Pace Project No.: 92493137

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92493137001	**GWA-2 (08/26/2020)**				
92493137002	**GWC-1R (08/27/2020)**				
92493137003	**GWC-2R (08/28/2020)**				
92493137004	**GWC-3R (08/28/2020)**				
92493137005	**GWC-4R (08/28/2020)**				
92493137006	**GWC-5R (08/27/2020)**				
92493137007	**GWC-6R (08/27/2020)**				
92493137001	**GWA-2 (08/26/2020)**	EPA 3005A	563754	EPA 6020B	563832
92493137002	**GWC-1R (08/27/2020)**	EPA 3005A	563754	EPA 6020B	563832
92493137003	**GWC-2R (08/28/2020)**	EPA 3005A	563754	EPA 6020B	563832
92493137004	**GWC-3R (08/28/2020)**	EPA 3005A	563754	EPA 6020B	563832
92493137005	**GWC-4R (08/28/2020)**	EPA 3005A	563754	EPA 6020B	563832
92493137006	**GWC-5R (08/27/2020)**	EPA 3005A	563754	EPA 6020B	563832
92493137007	**GWC-6R (08/27/2020)**	EPA 3005A	563754	EPA 6020B	563832
92493137008	**DUP-1**	EPA 3005A	563754	EPA 6020B	563832
92493137009	**EB-1**	EPA 3005A	563754	EPA 6020B	563832
92493137001	**GWA-2 (08/26/2020)**	EPA 7470A	564593	EPA 7470A	564990
92493137002	**GWC-1R (08/27/2020)**	EPA 7470A	564593	EPA 7470A	564990
92493137003	**GWC-2R (08/28/2020)**	EPA 7470A	564593	EPA 7470A	564990
92493137004	**GWC-3R (08/28/2020)**	EPA 7470A	564593	EPA 7470A	564990
92493137005	**GWC-4R (08/28/2020)**	EPA 7470A	564593	EPA 7470A	564990
92493137006	**GWC-5R (08/27/2020)**	EPA 7470A	564593	EPA 7470A	564990
92493137007	**GWC-6R (08/27/2020)**	EPA 7470A	564593	EPA 7470A	564990
92493137008	**DUP-1**	EPA 7470A	564593	EPA 7470A	564990
92493137009	**EB-1**	EPA 7470A	564593	EPA 7470A	564990
92493137001	**GWA-2 (08/26/2020)**	EPA 300.0 Rev 2.1 1993	563652		
92493137002	**GWC-1R (08/27/2020)**	EPA 300.0 Rev 2.1 1993	563652		
92493137003	**GWC-2R (08/28/2020)**	EPA 300.0 Rev 2.1 1993	563652		
92493137004	**GWC-3R (08/28/2020)**	EPA 300.0 Rev 2.1 1993	563652		
92493137005	**GWC-4R (08/28/2020)**	EPA 300.0 Rev 2.1 1993	563652		
92493137006	**GWC-5R (08/27/2020)**	EPA 300.0 Rev 2.1 1993	563652		
92493137007	**GWC-6R (08/27/2020)**	EPA 300.0 Rev 2.1 1993	563652		
92493137008	**DUP-1**	EPA 300.0 Rev 2.1 1993	563652		
92493137009	**EB-1**	EPA 300.0 Rev 2.1 1993	563652		

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

WO#: 92493137

92493137

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other

Tracking #: _____

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

Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used 2/4

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

Cooler Temperature 4.1

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 8/28/2024

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2. collection time not listed on COC for EB-1
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. EB-1 metals pH adjusted from 7 to <2 EHNO3
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed CH Lot # of added preservative 072720-2EIZ
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: EB-1 collection time 1615 per labels

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No: F-CAR-CS-043-Rev.00	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project # **WO# : 92493137**

PM: KLH1 Due Date: 09/14/20

CLIENT: GA-GA Power

Matrix	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 Kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)
	1		1				1	1																	2		1	
	2		1				1	1																	2			
	3		1				1	1																	2			
	4		1				1	1																	2			
	5		1				1	1																	2			
	6		1				1	1																	2			
	7		1				1	1																	2			
	8		1				1	1																	2			
	9		1				1	1																	2			
	10																											
	11																											
	12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lo
EB-1	HNO3	7	8/28/20	1520	2.5mL	0726

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Arcadis (GA Power)	Report To: Becky Steever	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates Gypsum Landfill	Pace Project Manager: kevin.herring@pacelabs.com,
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency: —
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): 300.0 - F	App IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	4249731J7
1	GWA-2 (08/26/2020) ph: 5.67	WT		8/26	1620				4			X							x	x	x			001
2	GWC-1R (08/27/2020) ph: 5.39	WT		8/27	1710				4			X							x	x	x			002
3	GWC-2R (08/28/2020) Ph: 5.45	WT		8/28	1030				4			X							x	x	x			003
4	GWC-3R (08/28/2020) Ph: 5.20	WT		8/28	1230				4			X							x	x	x			004
5	GWC-4R	WT																	x	x	x			005
6	GWC-5R (08/27/2020) Ph: 5.17	WT		8/27	1115														x	x	x			006
7	GWC-6R (08/27/2020) ph: 5.77	WT		8/27	1530														x	x	x			007
8	DUP-1	WT		8/28	—														X	X	X			008
9	EB-1			8/28	(1)														X	X	X			009
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
IV: Sb, As, Ba, Be, Cd, Cr, Co, Hg, Pb, Li, Mo, Se, Tl	Jake Swanson	8/28	1620	Pace	8/28/20	1620	
	Becky Steever	8/28	1814		8/28/20	1814	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: DATE Signed: 8/28/20

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-In Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Arcadis (GA Power)
Address: 2839 Paces Ferry Rd
Report To: Becky Steeves
Copy To:
Customer Project Name/Number: Yates Gypsum Landfill
Phone:
Email:
Collected By (print):
Collected By (signature):
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____

Billing Information:
Email To:
Site Collection Info/Address:
State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Site/Facility ID #: Yates Gypsum Landfill
Compliance Monitoring? [ ] Yes [ ] No
Purchase Order #:
Quote #:
DW PWS ID #:
DW Location Code:
Turnaround Date Required:
Immediately Packed on Ice: [ ] Yes [ ] No
Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: _____

Container Preservative Type **
Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses: 300.0 - F; APP IV Metals; X Rads

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Lab Sample # / Comments
GWC-4R(08/28/2020)	WT	Grab	8/28	1730					92493137 Ph: 5.38 005

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None
Packing Material Used:
Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A
Lab Tracking #: 2421491
Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____ oC
Cooler 1 Therm Corr. Factor: _____ oC
Cooler 1 Corrected Temp: 3.3 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	8/29/20		8/29/20 1054
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO
Page: _____ of: _____

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

October 08, 2020

Ms. Lauren Petty
Southern Co. Services
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES GYPSUM LF
Pace Project No.: 92497151

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 23, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

This report was revised 10/8/20 to correct a sample ID error.

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
Georgia DW Microbiology Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001
Virginia Certification #: 460204

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92497151001	**GWC-2R (09/22/2020)**	Water	09/22/20 13:25	09/23/20 17:40
92497151002	**GWC-4R (09/22/2020)**	Water	09/22/20 17:30	09/23/20 17:40
92497151003	**GWC-5R (09/23/2020)**	Water	09/23/20 10:05	09/23/20 17:40
92497151004	**GWC-6R (09/23/2020)**	Water	09/23/20 11:10	09/23/20 17:40
92497151005	**DUP-01 (09/23/2020)**	Water	09/23/20 00:00	09/23/20 17:40
92497151006	**EQUIPMENT BLANK (09/23/2020)**	Water	09/23/20 11:20	09/23/20 17:40
92497151007	**FIELD BLANK (09/22/2020)**	Water	09/22/20 11:30	09/23/20 17:40
92497151008	**GWA-2 (09/22/2020)**	Water	09/22/20 11:00	09/23/20 17:40
92497151009	**GWC-1R (09/22/2020)**	Water	09/22/20 13:20	09/23/20 17:40
92497151010	**GWC-3R (09/22/2020)**	Water	09/22/20 15:40	09/23/20 17:40

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92497151001	**GWC-2R (09/22/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151002	**GWC-4R (09/22/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151003	**GWC-5R (09/23/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151004	**GWC-6R (09/23/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151005	**DUP-01 (09/23/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151006	**EQUIPMENT BLANK (09/23/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151007	**FIELD BLANK (09/22/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151008	**GWA-2 (09/22/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151009	**GWC-1R (09/22/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92497151010	**GWC-3R (09/22/2020)**	EPA 6010D	DRB	1
		EPA 6020B	CW1	17
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	BRJ	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497151001	**GWC-2R (09/22/2020)**					
	pH	5.34	Std. Units		10/08/20 08:25	
EPA 6010D	Calcium	40.5	mg/L	1.0	09/30/20 20:11	
EPA 6020B	Antimony	0.0017J	mg/L	0.0030	10/01/20 10:27	
EPA 6020B	Barium	0.040	mg/L	0.010	10/01/20 10:27	
EPA 6020B	Beryllium	0.00021J	mg/L	0.0030	10/01/20 10:27	
EPA 6020B	Boron	0.046J	mg/L	0.10	10/01/20 10:27	
EPA 6020B	Cadmium	0.00016J	mg/L	0.0025	10/01/20 10:27	
EPA 6020B	Cobalt	0.0054	mg/L	0.0050	10/01/20 10:27	
EPA 6020B	Lead	0.000082J	mg/L	0.0050	10/01/20 10:27	
EPA 6020B	Lithium	0.0042J	mg/L	0.030	10/01/20 10:27	
EPA 6020B	Selenium	0.0056J	mg/L	0.010	10/01/20 10:27	
EPA 6020B	Zinc	0.0030J	mg/L	0.010	10/01/20 10:27	
SM 2450C-2011	Total Dissolved Solids	394	mg/L	20.0	09/25/20 18:01	
EPA 300.0 Rev 2.1 1993	Chloride	24.7	mg/L	1.0	09/29/20 06:22	
EPA 300.0 Rev 2.1 1993	Sulfate	216	mg/L	3.0	09/29/20 18:40	
92497151002	**GWC-4R (09/22/2020)**					
	pH	5.43	Std. Units		10/08/20 08:25	
EPA 6010D	Calcium	21.8	mg/L	1.0	09/30/20 20:16	
EPA 6020B	Antimony	0.00053J	mg/L	0.0030	10/01/20 10:33	
EPA 6020B	Barium	0.026	mg/L	0.010	10/01/20 10:33	
EPA 6020B	Beryllium	0.000058J	mg/L	0.0030	10/01/20 10:33	
EPA 6020B	Boron	1.0	mg/L	0.10	10/01/20 10:33	
EPA 6020B	Cobalt	0.00039J	mg/L	0.0050	10/01/20 10:33	
EPA 6020B	Lead	0.000041J	mg/L	0.0050	10/01/20 10:33	
EPA 6020B	Lithium	0.0013J	mg/L	0.030	10/01/20 10:33	
EPA 6020B	Nickel	0.00077J	mg/L	0.0050	10/01/20 10:33	
EPA 6020B	Selenium	0.0032J	mg/L	0.010	10/01/20 10:33	
SM 2450C-2011	Total Dissolved Solids	217	mg/L	10.0	09/25/20 18:02	
EPA 300.0 Rev 2.1 1993	Chloride	60.2	mg/L	1.0	09/29/20 06:37	
EPA 300.0 Rev 2.1 1993	Sulfate	72.1	mg/L	1.0	09/29/20 06:37	
92497151003	**GWC-5R (09/23/2020)**					
	pH	5.04	Std. Units		10/08/20 08:25	
EPA 6010D	Calcium	144	mg/L	1.0	09/30/20 20:20	
EPA 6020B	Antimony	0.00031J	mg/L	0.0030	10/01/20 10:39	
EPA 6020B	Arsenic	0.00092J	mg/L	0.0050	10/01/20 10:39	
EPA 6020B	Barium	0.012	mg/L	0.010	10/01/20 10:39	
EPA 6020B	Beryllium	0.0023J	mg/L	0.0030	10/01/20 10:39	
EPA 6020B	Boron	0.028J	mg/L	0.10	10/01/20 10:39	
EPA 6020B	Cadmium	0.00094J	mg/L	0.0025	10/01/20 10:39	
EPA 6020B	Chromium	0.0020J	mg/L	0.010	10/01/20 10:39	
EPA 6020B	Lead	0.00019J	mg/L	0.0050	10/01/20 10:39	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	10/01/20 10:39	
EPA 6020B	Nickel	0.0012J	mg/L	0.0050	10/01/20 10:39	
EPA 6020B	Selenium	0.026	mg/L	0.010	10/01/20 10:39	
EPA 6020B	Zinc	0.018	mg/L	0.010	10/01/20 10:39	
SM 2450C-2011	Total Dissolved Solids	1000	mg/L	100	09/25/20 18:04	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497151003	**GWC-5R (09/23/2020)**					
EPA 300.0 Rev 2.1 1993	Chloride	3.0	mg/L	1.0	09/29/20 06:51	
EPA 300.0 Rev 2.1 1993	Sulfate	992	mg/L	15.0	09/29/20 18:55	
92497151004	**GWC-6R (09/23/2020)**					
	pH	5.81	Std. Units		10/08/20 08:25	
EPA 6010D	Calcium	103	mg/L	1.0	09/30/20 20:24	
EPA 6020B	Barium	0.044	mg/L	0.010	10/01/20 10:44	
EPA 6020B	Boron	0.0055J	mg/L	0.10	10/01/20 10:44	
EPA 6020B	Chromium	0.0015J	mg/L	0.010	10/01/20 10:44	
EPA 6020B	Lithium	0.0023J	mg/L	0.030	10/01/20 10:44	
EPA 6020B	Nickel	0.0016J	mg/L	0.0050	10/01/20 10:44	
EPA 6020B	Selenium	0.0031J	mg/L	0.010	10/01/20 10:44	
SM 2450C-2011	Total Dissolved Solids	820	mg/L	50.0	09/25/20 18:04	
EPA 300.0 Rev 2.1 1993	Chloride	4.7	mg/L	1.0	09/29/20 07:05	
EPA 300.0 Rev 2.1 1993	Sulfate	518	mg/L	8.0	09/29/20 19:09	
92497151005	**DUP-01 (09/23/2020)**					
EPA 6010D	Calcium	152	mg/L	1.0	09/30/20 20:28	
EPA 6020B	Arsenic	0.00093J	mg/L	0.0050	10/01/20 11:12	
EPA 6020B	Barium	0.013	mg/L	0.010	10/01/20 11:12	
EPA 6020B	Beryllium	0.0021J	mg/L	0.0030	10/01/20 11:12	
EPA 6020B	Boron	0.021J	mg/L	0.10	10/01/20 11:12	
EPA 6020B	Cadmium	0.00085J	mg/L	0.0025	10/01/20 11:12	
EPA 6020B	Chromium	0.0018J	mg/L	0.010	10/01/20 11:12	
EPA 6020B	Lead	0.000038J	mg/L	0.0050	10/01/20 11:12	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	10/01/20 11:12	
EPA 6020B	Nickel	0.0012J	mg/L	0.0050	10/01/20 11:12	
EPA 6020B	Selenium	0.025	mg/L	0.010	10/01/20 11:12	
EPA 6020B	Zinc	0.016	mg/L	0.010	10/01/20 11:12	
SM 2450C-2011	Total Dissolved Solids	1350	mg/L	100	09/25/20 18:05	
EPA 300.0 Rev 2.1 1993	Chloride	2.9	mg/L	1.0	09/29/20 07:20	
EPA 300.0 Rev 2.1 1993	Sulfate	990	mg/L	14.0	09/29/20 19:23	
92497151008	**GWA-2 (09/22/2020)**					
	pH	5.78	Std. Units		10/08/20 08:25	
EPA 6010D	Calcium	31.0	mg/L	1.0	09/30/20 21:41	
EPA 6020B	Antimony	0.00044J	mg/L	0.0030	10/01/20 11:29	
EPA 6020B	Barium	0.045	mg/L	0.010	10/01/20 11:29	
EPA 6020B	Boron	0.0079J	mg/L	0.10	10/01/20 11:29	
EPA 6020B	Cobalt	0.16	mg/L	0.0050	10/01/20 11:29	
EPA 6020B	Copper	0.0041J	mg/L	0.0050	10/01/20 11:29	
EPA 6020B	Lead	0.00010J	mg/L	0.0050	10/01/20 11:29	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	10/01/20 11:29	
EPA 6020B	Nickel	0.027	mg/L	0.0050	10/01/20 11:29	
EPA 6020B	Zinc	0.033	mg/L	0.010	10/01/20 11:29	
SM 2450C-2011	Total Dissolved Solids	281	mg/L	10.0	09/25/20 18:03	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	09/29/20 09:30	
EPA 300.0 Rev 2.1 1993	Fluoride	0.058J	mg/L	0.10	09/29/20 09:30	
EPA 300.0 Rev 2.1 1993	Sulfate	145	mg/L	2.0	09/29/20 20:08	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92497151009	**GWC-1R (09/22/2020)**					
	pH	5.25	Std. Units		10/08/20 08:25	
EPA 6010D	Calcium	98.8	mg/L	1.0	09/30/20 21:46	
EPA 6020B	Barium	0.068	mg/L	0.010	10/01/20 11:35	
EPA 6020B	Beryllium	0.00021J	mg/L	0.0030	10/01/20 11:35	
EPA 6020B	Boron	0.025J	mg/L	0.10	10/01/20 11:35	
EPA 6020B	Cadmium	0.00016J	mg/L	0.0025	10/01/20 11:35	
EPA 6020B	Chromium	0.0012J	mg/L	0.010	10/01/20 11:35	
EPA 6020B	Cobalt	0.00080J	mg/L	0.0050	10/01/20 11:35	
EPA 6020B	Lithium	0.0015J	mg/L	0.030	10/01/20 11:35	
EPA 6020B	Nickel	0.0021J	mg/L	0.0050	10/01/20 11:35	
EPA 6020B	Selenium	0.012	mg/L	0.010	10/01/20 11:35	
EPA 6020B	Zinc	0.0029J	mg/L	0.010	10/01/20 11:35	
SM 2450C-2011	Total Dissolved Solids	675	mg/L	50.0	09/25/20 18:03	
EPA 300.0 Rev 2.1 1993	Chloride	5.5	mg/L	1.0	09/29/20 09:44	
EPA 300.0 Rev 2.1 1993	Sulfate	478	mg/L	7.0	09/29/20 20:22	
92497151010	**GWC-3R (09/22/2020)**					
	pH	5.11	Std. Units		10/08/20 08:25	
EPA 6010D	Calcium	6.2	mg/L	1.0	09/30/20 21:50	
EPA 6020B	Barium	0.014	mg/L	0.010	10/01/20 11:40	
EPA 6020B	Beryllium	0.00042J	mg/L	0.0030	10/01/20 11:40	
EPA 6020B	Boron	0.0066J	mg/L	0.10	10/01/20 11:40	
EPA 6020B	Cadmium	0.00013J	mg/L	0.0025	10/01/20 11:40	
EPA 6020B	Chromium	0.0011J	mg/L	0.010	10/01/20 11:40	
EPA 6020B	Cobalt	0.0021J	mg/L	0.0050	10/01/20 11:40	
EPA 6020B	Lead	0.000064J	mg/L	0.0050	10/01/20 11:40	
EPA 6020B	Selenium	0.0091J	mg/L	0.010	10/01/20 11:40	
EPA 6020B	Zinc	0.0036J	mg/L	0.010	10/01/20 11:40	
SM 2450C-2011	Total Dissolved Solids	110	mg/L	10.0	09/25/20 18:04	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	09/29/20 09:59	
EPA 300.0 Rev 2.1 1993	Sulfate	55.1	mg/L	1.0	09/29/20 09:59	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: GWC-2R (09/22/2020) **Lab ID: 92497151001** Collected: 09/22/20 13:25 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.34**	Std. Units			1		10/08/20 08:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**40.5**	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 20:11	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0017J**	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 10:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 10:27	7440-38-2	
Barium	**0.040**	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 10:27	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 10:27	7440-41-7	
Boron	**0.046J**	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 10:27	7440-42-8	
Cadmium	**0.00016J**	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 10:27	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 10:27	7440-47-3	
Cobalt	**0.0054**	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 10:27	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 10:27	7440-50-8	
Lead	**0.000082J**	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 10:27	7439-92-1	
Lithium	**0.0042J**	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 10:27	7439-93-2	
Nickel	ND	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 10:27	7440-02-0	
Selenium	**0.0056J**	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 10:27	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 10:27	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 10:27	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 10:27	7440-62-2	
Zinc	**0.0030J**	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 10:27	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:26	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**394**	mg/L	20.0	20.0	1		09/25/20 18:01		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**24.7**	mg/L	1.0	0.60	1		09/29/20 06:22	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 06:22	16984-48-8	
Sulfate	**216**	mg/L	3.0	1.5	3		09/29/20 18:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: GWC-4R (09/22/2020) **Lab ID: 92497151002** Collected: 09/22/20 17:30 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.43**	Std. Units			1		10/08/20 08:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**21.8**	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 20:16	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00053J**	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 10:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 10:33	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 10:33	7440-39-3	
Beryllium	**0.000058J**	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 10:33	7440-41-7	
Boron	**1.0**	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 10:33	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 10:33	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 10:33	7440-47-3	
Cobalt	**0.00039J**	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 10:33	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 10:33	7440-50-8	
Lead	**0.000041J**	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 10:33	7439-92-1	
Lithium	**0.0013J**	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 10:33	7439-93-2	
Nickel	**0.00077J**	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 10:33	7440-02-0	
Selenium	**0.0032J**	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 10:33	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 10:33	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 10:33	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 10:33	7440-62-2	
Zinc	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 10:33	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:34	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**217**	mg/L	10.0	10.0	1		09/25/20 18:02		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**60.2**	mg/L	1.0	0.60	1		09/29/20 06:37	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 06:37	16984-48-8	
Sulfate	**72.1**	mg/L	1.0	0.50	1		09/29/20 06:37	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: GWC-5R (09/23/2020) **Lab ID: 92497151003** Collected: 09/23/20 10:05 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.04**	Std. Units			1		10/08/20 08:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**144**	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 20:20	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00031J**	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 10:39	7440-36-0	
Arsenic	**0.00092J**	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 10:39	7440-38-2	
Barium	**0.012**	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 10:39	7440-39-3	
Beryllium	**0.0023J**	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 10:39	7440-41-7	
Boron	**0.028J**	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 10:39	7440-42-8	
Cadmium	**0.00094J**	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 10:39	7440-43-9	
Chromium	**0.0020J**	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 10:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 10:39	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 10:39	7440-50-8	
Lead	**0.00019J**	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 10:39	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 10:39	7439-93-2	
Nickel	**0.0012J**	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 10:39	7440-02-0	
Selenium	**0.026**	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 10:39	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 10:39	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 10:39	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 10:39	7440-62-2	
Zinc	**0.018**	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 10:39	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:36	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1000**	mg/L	100	100	1		09/25/20 18:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.0**	mg/L	1.0	0.60	1		09/29/20 06:51	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 06:51	16984-48-8	
Sulfate	**992**	mg/L	15.0	7.5	15		09/29/20 18:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: GWC-6R (09/23/2020) **Lab ID: 92497151004** Collected: 09/23/20 11:10 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.81**	Std. Units			1		10/08/20 08:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**103**	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 20:24	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 10:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 10:44	7440-38-2	
Barium	**0.044**	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 10:44	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 10:44	7440-41-7	
Boron	**0.0055J**	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 10:44	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 10:44	7440-43-9	
Chromium	**0.0015J**	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 10:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 10:44	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 10:44	7440-50-8	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 10:44	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 10:44	7439-93-2	
Nickel	**0.0016J**	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 10:44	7440-02-0	
Selenium	**0.0031J**	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 10:44	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 10:44	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 10:44	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 10:44	7440-62-2	
Zinc	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 10:44	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:38	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**820**	mg/L	50.0	50.0	1		09/25/20 18:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.7**	mg/L	1.0	0.60	1		09/29/20 07:05	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 07:05	16984-48-8	
Sulfate	**518**	mg/L	8.0	4.0	8		09/29/20 19:09	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: DUP-01 (09/23/2020) **Lab ID: 92497151005** Collected: 09/23/20 00:00 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**152**	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 20:28	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 11:12	7440-36-0	
Arsenic	**0.00093J**	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 11:12	7440-38-2	
Barium	**0.013**	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 11:12	7440-39-3	
Beryllium	**0.0021J**	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 11:12	7440-41-7	
Boron	**0.021J**	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 11:12	7440-42-8	
Cadmium	**0.00085J**	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 11:12	7440-43-9	
Chromium	**0.0018J**	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 11:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 11:12	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 11:12	7440-50-8	
Lead	**0.000038J**	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 11:12	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 11:12	7439-93-2	
Nickel	**0.0012J**	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 11:12	7440-02-0	
Selenium	**0.025**	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 11:12	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 11:12	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 11:12	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:12	7440-62-2	
Zinc	**0.016**	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:12	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:41	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**1350**	mg/L	100	100	1		09/25/20 18:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.9**	mg/L	1.0	0.60	1		09/29/20 07:20	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 07:20	16984-48-8	
Sulfate	**990**	mg/L	14.0	7.0	14		09/29/20 19:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: EQUIPMENT BLANK (09/23/2020) **Lab ID: 92497151006** Collected: 09/23/20 11:20 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 20:45	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 11:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 11:18	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 11:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 11:18	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 11:18	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 11:18	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 11:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 11:18	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 11:18	7440-50-8	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 11:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 11:18	7439-93-2	
Nickel	ND	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 11:18	7440-02-0	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 11:18	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 11:18	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 11:18	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:18	7440-62-2	
Zinc	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:18	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/25/20 18:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/29/20 07:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 07:34	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/29/20 07:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: FIELD BLANK (09/22/2020) **Lab ID: 92497151007** Collected: 09/22/20 11:30 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.070	1	09/28/20 15:08	09/30/20 20:50	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 11:23	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 11:23	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 11:23	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 11:23	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 11:23	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 11:23	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 11:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 11:23	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 11:23	7440-50-8	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 11:23	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 11:23	7439-93-2	
Nickel	ND	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 11:23	7440-02-0	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 11:23	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 11:23	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 11:23	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:23	7440-62-2	
Zinc	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:23	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/25/20 18:03		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/29/20 08:47	16887-00-6	M1,R1
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 08:47	16984-48-8	M1,R1
Sulfate	ND	mg/L	1.0	0.50	1		09/29/20 08:47	14808-79-8	M1,R1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: GWA-2 (09/22/2020) **Lab ID: 92497151008** Collected: 09/22/20 11:00 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.78**	Std. Units			1		10/08/20 08:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**31.0**	mg/L	1.0	0.070	1	09/28/20 15:51	09/30/20 21:41	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00044J**	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 11:29	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 11:29	7440-38-2	
Barium	**0.045**	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 11:29	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 11:29	7440-41-7	
Boron	**0.0079J**	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 11:29	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 11:29	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 11:29	7440-47-3	
Cobalt	**0.16**	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 11:29	7440-48-4	
Copper	**0.0041J**	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 11:29	7440-50-8	
Lead	**0.00010J**	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 11:29	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 11:29	7439-93-2	
Nickel	**0.027**	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 11:29	7440-02-0	
Selenium	ND	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 11:29	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 11:29	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 11:29	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:29	7440-62-2	
Zinc	**0.033**	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:29	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:48	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**281**	mg/L	10.0	10.0	1		09/25/20 18:03		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.2**	mg/L	1.0	0.60	1		09/29/20 09:30	16887-00-6	
Fluoride	**0.058J**	mg/L	0.10	0.050	1		09/29/20 09:30	16984-48-8	
Sulfate	**145**	mg/L	2.0	1.0	2		09/29/20 20:08	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: GWC-1R (09/22/2020) **Lab ID: 92497151009** Collected: 09/22/20 13:20 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.25**	Std. Units			1		10/08/20 08:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**98.8**	mg/L	1.0	0.070	1	09/28/20 15:51	09/30/20 21:46	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 11:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 11:35	7440-38-2	
Barium	**0.068**	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 11:35	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 11:35	7440-41-7	
Boron	**0.025J**	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 11:35	7440-42-8	
Cadmium	**0.00016J**	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 11:35	7440-43-9	
Chromium	**0.0012J**	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 11:35	7440-47-3	
Cobalt	**0.00080J**	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 11:35	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 11:35	7440-50-8	
Lead	ND	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 11:35	7439-92-1	
Lithium	**0.0015J**	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 11:35	7439-93-2	
Nickel	**0.0021J**	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 11:35	7440-02-0	
Selenium	**0.012**	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 11:35	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 11:35	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 11:35	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:35	7440-62-2	
Zinc	**0.0029J**	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:35	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:50	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**675**	mg/L	50.0	50.0	1		09/25/20 18:03		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.5**	mg/L	1.0	0.60	1		09/29/20 09:44	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 09:44	16984-48-8	
Sulfate	**478**	mg/L	7.0	3.5	7		09/29/20 20:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Sample: GWC-3R (09/22/2020) **Lab ID: 92497151010** Collected: 09/22/20 15:40 Received: 09/23/20 17:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
pH	**5.11**	Std. Units			1		10/08/20 08:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**6.2**	mg/L	1.0	0.070	1	09/28/20 15:51	09/30/20 21:50	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/29/20 18:39	10/01/20 11:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/29/20 18:39	10/01/20 11:40	7440-38-2	
Barium	**0.014**	mg/L	0.010	0.00071	1	09/29/20 18:39	10/01/20 11:40	7440-39-3	
Beryllium	**0.00042J**	mg/L	0.0030	0.000046	1	09/29/20 18:39	10/01/20 11:40	7440-41-7	
Boron	**0.0066J**	mg/L	0.10	0.0052	1	09/29/20 18:39	10/01/20 11:40	7440-42-8	
Cadmium	**0.00013J**	mg/L	0.0025	0.00012	1	09/29/20 18:39	10/01/20 11:40	7440-43-9	
Chromium	**0.0011J**	mg/L	0.010	0.00055	1	09/29/20 18:39	10/01/20 11:40	7440-47-3	
Cobalt	**0.0021J**	mg/L	0.0050	0.00038	1	09/29/20 18:39	10/01/20 11:40	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	09/29/20 18:39	10/01/20 11:40	7440-50-8	
Lead	**0.000064J**	mg/L	0.0050	0.000036	1	09/29/20 18:39	10/01/20 11:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/29/20 18:39	10/01/20 11:40	7439-93-2	
Nickel	ND	mg/L	0.0050	0.00069	1	09/29/20 18:39	10/01/20 11:40	7440-02-0	
Selenium	**0.0091J**	mg/L	0.010	0.0016	1	09/29/20 18:39	10/01/20 11:40	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	09/29/20 18:39	10/01/20 11:40	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	09/29/20 18:39	10/01/20 11:40	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:40	7440-62-2	
Zinc	**0.0036J**	mg/L	0.010	0.0022	1	09/29/20 18:39	10/01/20 11:40	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/28/20 09:03	09/29/20 11:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**110**	mg/L	10.0	10.0	1		09/25/20 18:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.2**	mg/L	1.0	0.60	1		09/29/20 09:59	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/29/20 09:59	16984-48-8	
Sulfate	**55.1**	mg/L	1.0	0.50	1		09/29/20 09:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92497151

QC Batch: 569429 | Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A | Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007

METHOD BLANK: 3017011 Matrix: Water
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	09/30/20 18:37	

LABORATORY CONTROL SAMPLE: 3017012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3017068 3017069

Parameter	Units	92497141008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	0.91J	1	1	1.9	2.0	102	106	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92497151

QC Batch: 569461
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497151008, 92497151009, 92497151010

METHOD BLANK: 3017167 Matrix: Water
Associated Lab Samples: 92497151008, 92497151009, 92497151010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	09/30/20 20:54	

LABORATORY CONTROL SAMPLE: 3017168

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.94J	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3017169 3017170

Parameter	Units	92497149001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1.8	1	1	2.8	2.8	94	95	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92497151

QC Batch: 569774
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007, 92497151008, 92497151009, 92497151010

METHOD BLANK: 3018372 Matrix: Water
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007, 92497151008, 92497151009, 92497151010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	10/01/20 09:53	
Arsenic	mg/L	ND	0.0050	0.00078	10/01/20 09:53	
Barium	mg/L	ND	0.010	0.00071	10/01/20 09:53	
Beryllium	mg/L	ND	0.0030	0.000046	10/01/20 09:53	
Boron	mg/L	ND	0.10	0.0052	10/01/20 09:53	
Cadmium	mg/L	ND	0.0025	0.00012	10/01/20 09:53	
Chromium	mg/L	ND	0.010	0.00055	10/01/20 09:53	
Cobalt	mg/L	ND	0.0050	0.00038	10/01/20 09:53	
Copper	mg/L	ND	0.0050	0.0017	10/01/20 09:53	
Lead	mg/L	ND	0.0050	0.000036	10/01/20 09:53	
Lithium	mg/L	ND	0.030	0.00081	10/01/20 09:53	
Nickel	mg/L	ND	0.0050	0.00069	10/01/20 09:53	
Selenium	mg/L	ND	0.010	0.0016	10/01/20 09:53	
Silver	mg/L	ND	0.0050	0.00036	10/01/20 09:53	
Thallium	mg/L	ND	0.0010	0.00014	10/01/20 09:53	
Vanadium	mg/L	ND	0.010	0.0022	10/01/20 09:53	
Zinc	mg/L	ND	0.010	0.0022	10/01/20 09:53	

LABORATORY CONTROL SAMPLE: 3018373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.093	93	80-120	
Boron	mg/L	1	0.91	91	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.092	92	80-120	
Cobalt	mg/L	0.1	0.092	92	80-120	
Copper	mg/L	0.1	0.093	93	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.092	92	80-120	
Nickel	mg/L	0.1	0.090	90	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.092	92	80-120	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92497151

LABORATORY CONTROL SAMPLE: 3018373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Zinc	mg/L	0.1	0.092	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3018374 3018375

Parameter	Units	92497149004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	0	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Barium	mg/L	0.0039J	0.1	0.1	0.10	0.10	99	100	75-125	1	20	
Beryllium	mg/L	0.000059J	0.1	0.1	0.090	0.091	90	91	75-125	1	20	
Boron	mg/L	0.0073J	1	1	0.88	0.90	87	89	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.095	0.095	94	94	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Copper	mg/L	ND	0.1	0.1	0.094	0.094	94	94	75-125	0	20	
Lead	mg/L	0.00015J	0.1	0.1	0.093	0.094	92	94	75-125	1	20	
Lithium	mg/L	0.013J	0.1	0.1	0.10	0.10	91	91	75-125	0	20	
Nickel	mg/L	ND	0.1	0.1	0.094	0.094	93	93	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.096	98	95	75-125	3	20	
Silver	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20	
Thallium	mg/L	0.00016J	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Vanadium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20	
Zinc	mg/L	ND	0.1	0.1	0.095	0.095	94	94	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92497151

QC Batch: 569300
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007, 92497151008, 92497151009, 92497151010

METHOD BLANK: 3016193 Matrix: Water
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007, 92497151008, 92497151009, 92497151010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	09/29/20 10:36	

LABORATORY CONTROL SAMPLE: 3016194

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3016195 3016196

Parameter	Units	92497141001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0026	104	104	75-125	0	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92497151

QC Batch: 569139
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007, 92497151008, 92497151009, 92497151010

METHOD BLANK: 3015723 Matrix: Water
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007, 92497151008, 92497151009, 92497151010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/25/20 17:57	

LABORATORY CONTROL SAMPLE: 3015724

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	411	103	84-108	

SAMPLE DUPLICATE: 3015725

Parameter	Units	92497336001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 3015726

Parameter	Units	92497151001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	394	400	2	10	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES GYPSUM LF
Pace Project No.: 92497151

QC Batch: 569512
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007, 92497151008, 92497151009, 92497151010

METHOD BLANK: 3017392 Matrix: Water
Associated Lab Samples: 92497151001, 92497151002, 92497151003, 92497151004, 92497151005, 92497151006, 92497151007, 92497151008, 92497151009, 92497151010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/29/20 01:37	
Fluoride	mg/L	ND	0.10	0.050	09/29/20 01:37	
Sulfate	mg/L	ND	1.0	0.50	09/29/20 01:37	

LABORATORY CONTROL SAMPLE: 3017393

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.5	107	90-110	
Fluoride	mg/L	2.5	2.7	110	90-110	
Sulfate	mg/L	50	52.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3017394 3017395

Parameter	Units	92497151006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	51.6	51.4	103	103	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	103	103	90-110	0	10	
Sulfate	mg/L	ND	50	50	50.5	50.3	101	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3017396 3017397

Parameter	Units	92497151007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	57.6	51.5	115	103	90-110	11	10	M1,R1
Fluoride	mg/L	ND	2.5	2.5	2.9	2.6	117	104	90-110	12	10	M1,R1
Sulfate	mg/L	ND	50	50	58.0	50.3	116	101	90-110	14	10	M1,R1

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES GYPSUM LF
Pace Project No.: 92497151

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497151001	**GWC-2R (09/22/2020)**				
92497151002	**GWC-4R (09/22/2020)**				
92497151003	**GWC-5R (09/23/2020)**				
92497151004	**GWC-6R (09/23/2020)**				
92497151008	**GWA-2 (09/22/2020)**				
92497151009	**GWC-1R (09/22/2020)**				
92497151010	**GWC-3R (09/22/2020)**				
92497151001	**GWC-2R (09/22/2020)**	EPA 3010A	569429	EPA 6010D	569491
92497151002	**GWC-4R (09/22/2020)**	EPA 3010A	569429	EPA 6010D	569491
92497151003	**GWC-5R (09/23/2020)**	EPA 3010A	569429	EPA 6010D	569491
92497151004	**GWC-6R (09/23/2020)**	EPA 3010A	569429	EPA 6010D	569491
92497151005	**DUP-01 (09/23/2020)**	EPA 3010A	569429	EPA 6010D	569491
92497151006	**EQUIPMENT BLANK (09/23/2020)**	EPA 3010A	569429	EPA 6010D	569491
92497151007	**FIELD BLANK (09/22/2020)**	EPA 3010A	569429	EPA 6010D	569491
92497151008	**GWA-2 (09/22/2020)**	EPA 3010A	569461	EPA 6010D	569503
92497151009	**GWC-1R (09/22/2020)**	EPA 3010A	569461	EPA 6010D	569503
92497151010	**GWC-3R (09/22/2020)**	EPA 3010A	569461	EPA 6010D	569503
92497151001	**GWC-2R (09/22/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151002	**GWC-4R (09/22/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151003	**GWC-5R (09/23/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151004	**GWC-6R (09/23/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151005	**DUP-01 (09/23/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151006	**EQUIPMENT BLANK (09/23/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151007	**FIELD BLANK (09/22/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151008	**GWA-2 (09/22/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151009	**GWC-1R (09/22/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151010	**GWC-3R (09/22/2020)**	EPA 3005A	569774	EPA 6020B	569814
92497151001	**GWC-2R (09/22/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151002	**GWC-4R (09/22/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151003	**GWC-5R (09/23/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151004	**GWC-6R (09/23/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151005	**DUP-01 (09/23/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151006	**EQUIPMENT BLANK (09/23/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151007	**FIELD BLANK (09/22/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151008	**GWA-2 (09/22/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151009	**GWC-1R (09/22/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151010	**GWC-3R (09/22/2020)**	EPA 7470A	569300	EPA 7470A	569457
92497151001	**GWC-2R (09/22/2020)**	SM 2450C-2011	569139		
92497151002	**GWC-4R (09/22/2020)**	SM 2450C-2011	569139		
92497151003	**GWC-5R (09/23/2020)**	SM 2450C-2011	569139		
92497151004	**GWC-6R (09/23/2020)**	SM 2450C-2011	569139		
92497151005	**DUP-01 (09/23/2020)**	SM 2450C-2011	569139		
92497151006	**EQUIPMENT BLANK (09/23/2020)**	SM 2450C-2011	569139		
92497151007	**FIELD BLANK (09/22/2020)**	SM 2450C-2011	569139		
92497151008	**GWA-2 (09/22/2020)**	SM 2450C-2011	569139		
92497151009	**GWC-1R (09/22/2020)**	SM 2450C-2011	569139		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES GYPSUM LF
Pace Project No.: 92497151

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92497151010	**GWC-3R (09/22/2020)**	SM 2450C-2011	569139		
92497151001	**GWC-2R (09/22/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151002	**GWC-4R (09/22/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151003	**GWC-5R (09/23/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151004	**GWC-6R (09/23/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151005	**DUP-01 (09/23/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151006	**EQUIPMENT BLANK (09/23/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151007	**FIELD BLANK (09/22/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151008	**GWA-2 (09/22/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151009	**GWC-1R (09/22/2020)**	EPA 300.0 Rev 2.1 1993	569512		
92497151010	**GWC-3R (09/22/2020)**	EPA 300.0 Rev 2.1 1993	569512		

Sample Condition Upon Rec

WO#: 92497151

Pace Analytical

Client Name: GA Power

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Oth 92497151

Tracking #: _____

Proj. Due Date:
Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used 230 Type of Ice: (Wet) Blue None ☐ Samples on ice; cooling process has begun

Cooler Temperature 3.4°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 9/23/20 CW

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: (SW) 9/24/20 W	☐Yes ☑No ☐N/A	12. GWC-BR is labeled GWC-1R & 9/22/20 1320 as collection date+time
All containers needing preservation have been checked	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation. exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☑Yes ☐No ☐N/A	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
~~Trip Blank Custody Seals Present~~	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** _____

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottle

Project #

WO# : 92497151

PM: KLH1 Due Date: 10/07/20

CLIENT: GA-GA Power

Matrix	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SPST-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)
	1																								2			
	2																								2			
	3																								2			
	4																								2			
	5																								2			
	6																								2			
	7																								2			
	8																								2			
	9																								2			
	10																											
	11																											
	12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification O

Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email:
Phone: (770)384-6526 Fax
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Sleever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test (Y/N)	Requested Analysis Filtered (Y/N): TDS	Anions	App I, II, III, IV & Hg	RAD 9315/9320	Residual Chlorine (Y/N)	
1	GWC-2R (09/22/2020)			9/22	1325				5	✓		✓							✓	✓	✓	✓		92497151
2	GWC-4R (09/22/2020)			9/22	1730				5	✓		✓							✓	✓	✓	✓		5.34=Ph
3	GWC-5R (09/23/2020)			9/23	1005				5	✓		✓							✓	✓	✓	✓		5.43=Ph
4	GWC-6R (09/23/2020)			9/23	1110				5	✓		✓							✓	✓	✓	✓		5.04=Ph
5	DUP-01 (09/23/2020)			9/23	-				5	✓		✓							✓	✓	✓	✓		5.81=Ph
6	~~FB 01 (09/22/2020)~~			9/22	1130				5	✓		✓							✓	✓	✓	✓		-
7	~~EB~~ 01 Equipment Blank (9/23/2020)			9/23	1120				5	✓		✓							✓	✓	✓	✓		JS
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS: NO MS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Jake Swanson	9/23/20	1511		9/23/2020	15:11	
	9/23/20	1740		9/23/20	1740	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 9/23/20

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Acworth, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Anions	App I, II, III, IV & Hg	RAD 9315/8320	Residual Chlorine (Y/N)	
	MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS																								9249/7151
1	DUP	WT																	x	x	x	x			
2	FIELD BLANK (092220)	WT				9/22/2020	1130		5	X		X							x	x	x	x			—
3	~~EQUIPMENT BLANK~~	WT																	x	x	x	x			
4	GWA-2 (092220)	WT	G			9/22/2020	1100		5	X		X							x	x	x	x			pH : 5.78
5	GWC-9R (092220)	WT	G			9/22/2020	1320		5	X		X							x	x	x	x			pH : 5.25
6	~~GWC-3R~~	WT																	x	x	x	x			~~pH : 5.11~~ (PA)
7	~~GWC-1R~~	WT																	x	x	x	x			
8	GWC-3R (092220)	WT	G			9/22/2020	1540		5	X		X							x	x	x	x			pH : 5.11 (PA)
9	~~GWC-4R~~	WT																	x	x	x	x			
10	GWC-2R	WT																	x	x	x	x			
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
NO MO		9/22/2020	1730		9/22/20	1730	
		9/23/20	1511		9/23/20	1511	
		9/23/20	1746	Charlie Hurtz	9/23/20	1746	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter Argyrakis
SIGNATURE of SAMPLER: DATE Signed: 09/22/2020

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

March 2021 Event

ARCADIS Design & Consultancy for natural and built assets

Georgia Power Co. – Plant Yates

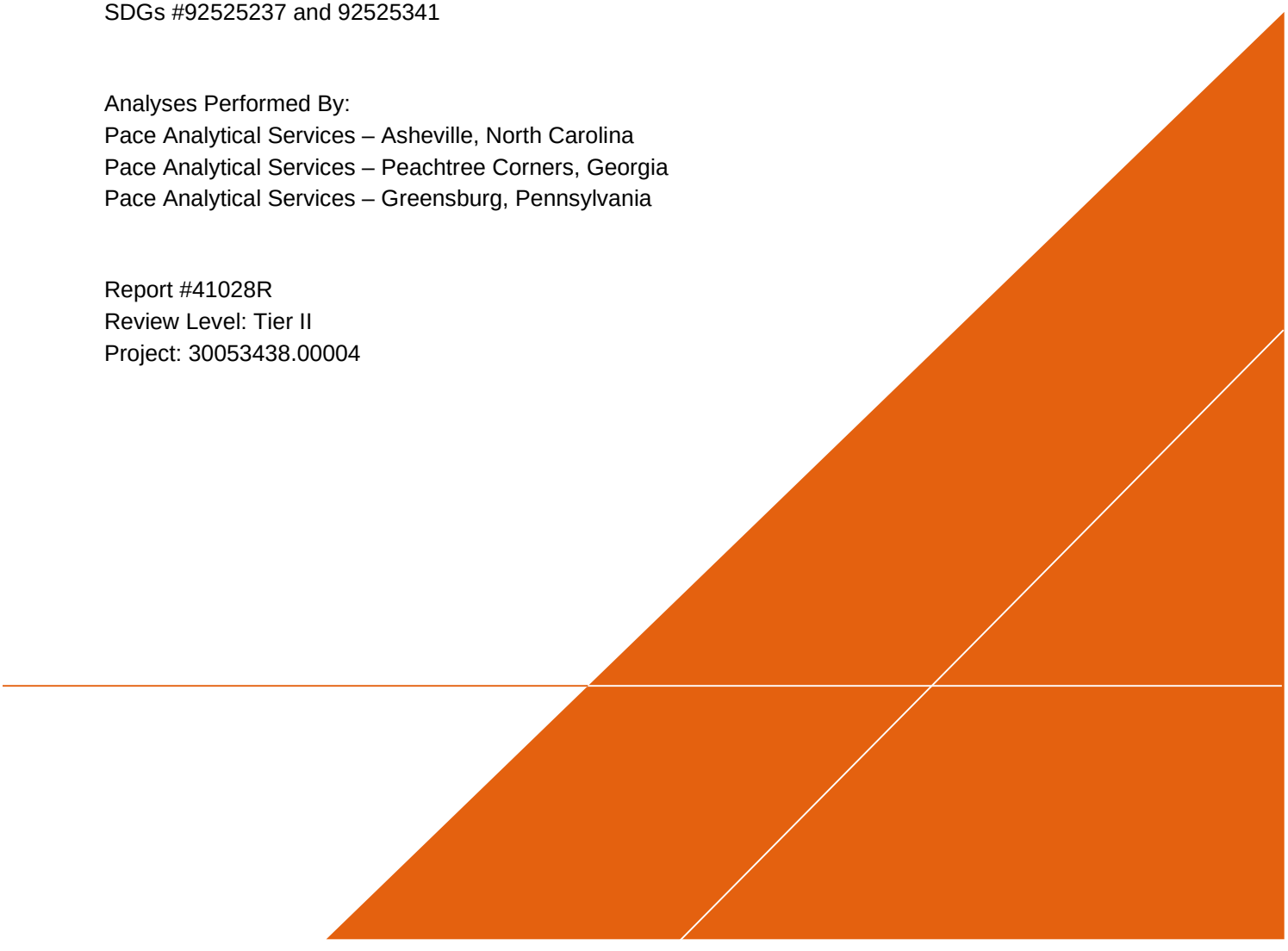
DATA REVIEW

Metals, Radium, and General Chemistry Analyses

SDGs #92525237 and 92525341

Analyses Performed By:
Pace Analytical Services – Asheville, North Carolina
Pace Analytical Services – Peachtree Corners, Georgia
Pace Analytical Services – Greensburg, Pennsylvania

Report #41028R
Review Level: Tier II
Project: 30053438.00004



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) # 92525237 and 92525341 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
92525237 92525341	DUP-01	92525237-1 92525341-1	Water	03/02/21		X	X	X
	GWC-5R	92525237-2 92525341-2	Water	03/02/21		X	X	X
	GWC-1R	92525237-3 92525341-3	Water	03/01/21		X	X	X
	GWC-3R	92525237-4 92525341-4	Water	03/02/21		X	X	X
	GWC-4R	92525237-5 92525341-5	Water	03/01/21		X	X	X
	GWC-2R	92525237-6 92525341-6	Water	03/01/21		X	X	X
	GWC-6R	92525237-8 92525341-8	Water	03/03/21	GWC-3R	X	X	X
	GWA-2	92525237-10 92525341-10	Water	03/02/21		X	X	X

Notes:

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 9315, and 9320; Standard Method (SM) SM4500-H+ B and SM2540C; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January2017).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

  J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).

- Quantitation (Q) Qualifiers

  E The reported value is estimated due to the presence of interference.

  N Spiked sample recovery is not within control limits.

  * Duplicate analysis is not within control limits.

- Validation Qualifiers

  J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

  UB Analyte considered non-detect at the listed value due to associated blank contamination.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. “R” values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

A site-specific MS/MSD was not included in the data package.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate

sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

A laboratory duplicate was not included in the data package.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWC-3R / DUP-01	Calcium	17.9	18.3	2.2%
	Zinc	0.0069 J	0.0049 J	AC
	Arsenic	0.0017 J	0.0019 J	AC
	Barium	0.015	0.016	AC
	Beryllium	0.00081	0.00088	AC
	Boron	0.0071 J	0.0070 J	AC
	Cadmium	0.00021 J	0.00025 J	AC
	Chromium	0.0010 J	0.0010 J	AC
	Cobalt	0.0086	0.0093	AC
	Lead	0.000096 J	0.00012 J	AC
	Lithium	0.00088 J	0.00093 J	AC
	Selenium	0.012	0.013	AC

Note:

AC = Acceptable

The RPD between the parent sample and field duplicate were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)					
Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)					
Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Field/Lab Duplicate (RPD)		X		X	
Reporting Limit Verification		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD performed on sample DUP-01 for the anions analysis exhibited recoveries and RPDs within the control limits.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

The laboratory duplicate performed on sample GWC-3R for TDS exhibited an RPD within the control limits.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWC-3R / DUP-01	TDS	167	167	0.0%
	Chloride	5.5	5.5	0.0%
	Fluoride	0.15	0.18	AC
	Sulfate	95.5	94.2	1.4%

Notes:

AC = Acceptable

The RPD between the parent sample and field duplicate sample were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: SM4500-H+ B, SM2540C, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R Percent recovery

RPD Relative percent difference

RADIOLOGICAL ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits (+/- 2 sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the minimum detectable concentration (MDC)?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$Normalized\ \ absolute\ difference_{\ MethodBlank} = \frac{|\ Sample\ -\ Blank\ |}{\sqrt{(U_{Sample}\ )^2 + (U_{Blank}\ )^2}}$$

Where:

U_{Sample} = uncertainty of the sample

U_{Blank} = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of < +/- 3 sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x_0 = measured concentration of the unspiked sample.

c = spike concentration added.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between +/-3 sigma. Warning limits have been established as +/- 2 sigma.

MS analysis was not performed using a sample from these SDGs.

3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

$$Z_{Dup} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

x_1, x_2 = two measured activity concentrations.

$u^2(x_1)$, $u^2(x_2)$ = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

A laboratory duplicate was not included in the data package

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

For all analyses in soil matrices, data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. For results greater than five times the MDC, a control limit of 35 percent for water matrices is applied to the RPD between the parent and field duplicate sample results. If the parent and field duplicate sample results are less than five times the MDC, for water matrices a control limit of two times the MDC is applied to the difference between the results.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWC-3R / DUP-01	Radium-226	0.310 +/- 0.205	0.0167 +/- 0.0825	AC
	Radium-228	0.819 +/- 0.438	0.968 +/- 0.412	
	Total Radium	1.13 +/- 0.643	0.968 +/- 0.495	

Notes:

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD

AC = Acceptable

The RPD between the parent sample and field duplicate sample were acceptable.

5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated

by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$ = combined standard uncertainty of the result squared.

$u^2(c)$ = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- DUP-01 – Radium 226
- GWC-5R – Radium 226, Radium 228 and Total Radium
- GWC-1R - Radium 226, Radium 228 and Total Radium
- GWC-3R - Radium 226, Radium 228 and Total Radium
- GWC-4R - Radium 226, Radium 228 and Total Radium
- GWC-2R – Radium 228
- GWC-6R – Radium 228 and Total Radium
- GWA-2 – Radium 226 and Total Radium

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR RADIOLOGICALS

RADIOLOGICALS: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Gas-Flow Proportional System					
Tier II Validation					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks	X				X
Carrier (Surrogate) %R		X		X	
Tracer (Surrogate) %R		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate (LCSD)		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Field/Lab Duplicate (RPD)		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Rachelle Borne

SIGNATURE: 

DATE: May 16, 2021 Revised May 20, 2021

PEER REVIEW: Jennifer Singer

DATE: May 18, 2021

CHAIN OF CUSTODY / DATA QUALIFIER SUMMARY TABLE

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

COC 5 GWP 06

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Alton, GA 30114
Email:
Phone: (770)384-6526 Fax
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IIIV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1		WT																						
2		WT																						
3	DUP-01	WT		3/2	—				5										X	X	X	X		
4	~~GWC-2~~	WT																	X	X	X	X		—
5	~~GWC-5R~~	WT																	X	X	X	X		
6	GWC-5R	WT		3/2	1320				5										X	X	X	X	PH	4.63
7	GWC-1R	WT		3/1	1610				5										X	X	X	X	PH	5.25
8	GWC-3R	WT		3/2	1125				5										X	X	X	X	PH	4.82
9	GWC-4R	WT		3/1	1215				5										X	X	X	X	PH	5.62
10	GWC-2R	WT		3/1	1340				5										X	X	X	X	PH	5.17
11																								
12																								

MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
		3/2/21	1510		3 2 21	1510					
		3 2 21	1829		3/2/21	1720	4.0	Y	IV	Y	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 3/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

COC 5

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Hinton, GA 30114
Email:
Phone: (770)384-6520 Fax
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): TDS	Cl, F, SO4	App III/III/V Metals	RAD 9315/8320	Residual Chlorine (Y/N)	
1		WT																	X	X	X	X		
2		WT																	X	X	X	X		
3	EB-01	WT		3/3	1020				5	✓		✓							X	X	X	X		—
4	~~GWC-2~~	WT																	~~X~~	~~X~~	~~X~~	~~X~~		—
5	GWC-6R	WT		3/3	0915				5	✓		✓							X	X	X	X		pH: 5.78
6	~~GWC-5R~~	WT																	X	X	X	X		
7	~~GWC-3R~~	WT																	X	X	X	X		
8	~~GWC-9R~~	WT																	X	X	X	X		
9	~~GWC-4R~~	WT																	X	X	X	X		
10	~~GWC-2R~~	WT																	X	X	X	X		
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	Charles Hunter	3/5/21	0900	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 3/4/21

TEMP in C | Received on ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

COC 5 Gyp OG

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Acworth, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Sleever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App I/II/III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	9252541
1		WT																							
2		WT																							
3	DUP-01	WT		3/2	—				5										X	X	X	X			
4	~~GWC-7~~	WT																	X	X	X	X			
5	~~GWC-6R~~	WT																	X	X	X	X			
6	GWC-5R	WT		3/2	1320				5										X	X	X	X		PH	4.63
7	GWC-1R	WT		3/1	1610				5										X	X	X	X		PH	5.25
8	GWC-3R	WT		3/2	1125				5										X	X	X	X		PH	4.82
9	GWC-4R	WT		3/1	1215				5										X	X	X	X		PH	5.62
10	GWC-2R	WT		3/1	1340				5										X	X	X	X		PH	5.17
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		3/2/21	1510		3.2.21	1510				
		3.2.21	1829		3/2/21	1730	4.0	Y	N	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 3/2/21

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92525237	No Qualifiers Added						
92525341	No Qualifiers Added						

Abbreviations:
mg/L = milligrams per liter

Qualifiers:
UB = not detected due to blank contamination
J/UJ = Estimated

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 26, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES
Pace Project No.: 92525341

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES
Pace Project No.: 92525341

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92525341

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525341001	**DUP-01**	Water	03/02/21 00:00	03/02/21 17:30
92525341002	**GWC-5R**	Water	03/02/21 13:20	03/02/21 17:30
92525341003	**GWC-1R**	Water	03/01/21 16:10	03/02/21 17:30
92525341004	**GWC-3R**	Water	03/02/21 11:25	03/02/21 17:30
92525341005	**GWC-4R**	Water	03/01/21 12:15	03/02/21 17:30
92525341006	**GWC-2R**	Water	03/01/21 13:40	03/02/21 17:30
92525346011	**GWC-6R**	Water	03/03/21 09:15	03/05/21 09:20
92525335010	**GWA-2**	Water	03/02/21 15:10	03/02/21 17:30

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525341

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92525341001	**DUP-01**	EPA 6010D	DRB	2
		EPA 6020B	CW1	16
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525341002	**GWC-5R**	EPA 6010D	DRB	2
		EPA 6020B	CW1	16
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525341003	**GWC-1R**	EPA 6010D	DRB	2
		EPA 6020B	CW1	16
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525341004	**GWC-3R**	EPA 6010D	DRB	2
		EPA 6020B	CW1	16
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525341005	**GWC-4R**	EPA 6010D	DRB	2
		EPA 6020B	CW1	16
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525341006	**GWC-2R**	EPA 6010D	DRB	2
		EPA 6020B	CW1	16
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525346011	**GWC-6R**	EPA 6010D	KH	2
		EPA 6020B	CW1	16
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335010	**GWA-2**	EPA 6010D	DRB	2
		EPA 6020B	CW1	16

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525341

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525341

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525341001	**DUP-01**					
EPA 6010D	Calcium	18.3	mg/L	1.0	03/09/21 03:34	
EPA 6010D	Zinc	0.0049J	mg/L	0.020	03/09/21 03:34	
EPA 6020B	Arsenic	0.0019J	mg/L	0.0050	03/05/21 18:27	
EPA 6020B	Barium	0.016	mg/L	0.0050	03/05/21 18:27	
EPA 6020B	Beryllium	0.00088	mg/L	0.00050	03/05/21 18:27	
EPA 6020B	Boron	0.0070J	mg/L	0.040	03/05/21 18:27	
EPA 6020B	Cadmium	0.00025J	mg/L	0.00050	03/05/21 18:27	
EPA 6020B	Chromium	0.0010J	mg/L	0.0050	03/05/21 18:27	
EPA 6020B	Cobalt	0.0093	mg/L	0.0050	03/05/21 18:27	
EPA 6020B	Lead	0.00012J	mg/L	0.0010	03/05/21 18:27	
EPA 6020B	Lithium	0.00093J	mg/L	0.030	03/05/21 18:27	
EPA 6020B	Selenium	0.013	mg/L	0.0050	03/05/21 18:27	
SM 2450C-2011	Total Dissolved Solids	167	mg/L	10.0	03/05/21 11:05	
EPA 300.0 Rev 2.1 1993	Chloride	5.5	mg/L	1.0	03/07/21 00:28	
EPA 300.0 Rev 2.1 1993	Fluoride	0.18	mg/L	0.10	03/07/21 00:28	M1
EPA 300.0 Rev 2.1 1993	Sulfate	94.2	mg/L	2.0	03/07/21 04:35	M1
92525341002	**GWC-5R**					
	Performed by	CUSTOMER			03/04/21 09:16	
	pH	4.63	Std. Units		03/04/21 09:16	
EPA 6010D	Calcium	145	mg/L	1.0	03/09/21 03:39	
EPA 6010D	Zinc	0.022	mg/L	0.020	03/09/21 03:39	
EPA 6020B	Arsenic	0.0024J	mg/L	0.0050	03/05/21 18:32	
EPA 6020B	Barium	0.011	mg/L	0.0050	03/05/21 18:32	
EPA 6020B	Beryllium	0.0037	mg/L	0.00050	03/05/21 18:32	
EPA 6020B	Boron	0.023J	mg/L	0.040	03/05/21 18:32	
EPA 6020B	Cadmium	0.0011	mg/L	0.00050	03/05/21 18:32	
EPA 6020B	Chromium	0.0021J	mg/L	0.0050	03/05/21 18:32	
EPA 6020B	Cobalt	0.00039J	mg/L	0.0050	03/05/21 18:32	
EPA 6020B	Lead	0.000054J	mg/L	0.0010	03/05/21 18:32	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	03/05/21 18:32	
EPA 6020B	Nickel	0.0014J	mg/L	0.0050	03/05/21 18:32	
EPA 6020B	Selenium	0.019	mg/L	0.0050	03/05/21 18:32	
SM 2450C-2011	Total Dissolved Solids	980	mg/L	100	03/05/21 11:05	
EPA 300.0 Rev 2.1 1993	Chloride	2.9	mg/L	1.0	03/07/21 01:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.094J	mg/L	0.10	03/07/21 01:11	
EPA 300.0 Rev 2.1 1993	Sulfate	906	mg/L	19.0	03/07/21 05:18	
92525341003	**GWC-1R**					
	Performed by	CUSTOMER			03/04/21 09:16	
	pH	5.25	Std. Units		03/04/21 09:16	
EPA 6010D	Calcium	117	mg/L	1.0	03/09/21 03:44	
EPA 6020B	Arsenic	0.0022J	mg/L	0.0050	03/05/21 18:38	
EPA 6020B	Barium	0.063	mg/L	0.0050	03/05/21 18:38	
EPA 6020B	Beryllium	0.00023J	mg/L	0.00050	03/05/21 18:38	
EPA 6020B	Boron	0.046	mg/L	0.040	03/05/21 18:38	
EPA 6020B	Cadmium	0.00013J	mg/L	0.00050	03/05/21 18:38	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525341

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525341003	**GWC-1R**					
EPA 6020B	Chromium	0.0012J	mg/L	0.0050	03/05/21 18:38	
EPA 6020B	Cobalt	0.00083J	mg/L	0.0050	03/05/21 18:38	
EPA 6020B	Lithium	0.0015J	mg/L	0.030	03/05/21 18:38	
EPA 6020B	Nickel	0.0024J	mg/L	0.0050	03/05/21 18:38	
EPA 6020B	Selenium	0.011	mg/L	0.0050	03/05/21 18:38	
SM 2450C-2011	Total Dissolved Solids	974	mg/L	20.0	03/04/21 10:19	
EPA 300.0 Rev 2.1 1993	Chloride	8.6	mg/L	1.0	03/07/21 01:26	
EPA 300.0 Rev 2.1 1993	Sulfate	525	mg/L	11.0	03/07/21 05:32	
92525341004	**GWC-3R**					
	Performed by	CUSTOMER			03/04/21 09:16	
	pH	4.82	Std. Units		03/04/21 09:16	
EPA 6010D	Calcium	17.9	mg/L	1.0	03/09/21 03:48	
EPA 6010D	Zinc	0.0069J	mg/L	0.020	03/09/21 03:48	
EPA 6020B	Arsenic	0.0017J	mg/L	0.0050	03/05/21 18:44	
EPA 6020B	Barium	0.015	mg/L	0.0050	03/05/21 18:44	
EPA 6020B	Beryllium	0.00081	mg/L	0.00050	03/05/21 18:44	
EPA 6020B	Boron	0.0071J	mg/L	0.040	03/05/21 18:44	
EPA 6020B	Cadmium	0.00021J	mg/L	0.00050	03/05/21 18:44	
EPA 6020B	Chromium	0.0010J	mg/L	0.0050	03/05/21 18:44	
EPA 6020B	Cobalt	0.0086	mg/L	0.0050	03/05/21 18:44	
EPA 6020B	Lead	0.000096J	mg/L	0.0010	03/05/21 18:44	
EPA 6020B	Lithium	0.00088J	mg/L	0.030	03/05/21 18:44	
EPA 6020B	Selenium	0.012	mg/L	0.0050	03/05/21 18:44	
SM 2450C-2011	Total Dissolved Solids	167	mg/L	10.0	03/05/21 11:05	
EPA 300.0 Rev 2.1 1993	Chloride	5.5	mg/L	1.0	03/07/21 01:40	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	03/07/21 01:40	
EPA 300.0 Rev 2.1 1993	Sulfate	95.5	mg/L	2.0	03/07/21 06:17	
92525341005	**GWC-4R**					
	Performed by	CUSTOMER			03/04/21 09:16	
	pH	5.62	Std. Units		03/04/21 09:16	
EPA 6010D	Calcium	69.5	mg/L	1.0	03/09/21 03:53	
EPA 6020B	Barium	0.035	mg/L	0.0050	03/05/21 18:49	
EPA 6020B	Beryllium	0.000060J	mg/L	0.00050	03/05/21 18:49	
EPA 6020B	Boron	5.1	mg/L	0.040	03/05/21 18:49	
EPA 6020B	Cobalt	0.0016J	mg/L	0.0050	03/05/21 18:49	
EPA 6020B	Nickel	0.0021J	mg/L	0.0050	03/05/21 18:49	
EPA 6020B	Selenium	0.0041J	mg/L	0.0050	03/05/21 18:49	
SM 2450C-2011	Total Dissolved Solids	666	mg/L	20.0	03/04/21 10:20	
EPA 300.0 Rev 2.1 1993	Chloride	194	mg/L	4.0	03/07/21 06:31	
EPA 300.0 Rev 2.1 1993	Sulfate	177	mg/L	4.0	03/07/21 06:31	
92525341006	**GWC-2R**					
	Performed by	CUSTOMER			03/04/21 09:16	
	pH	5.17	Std. Units		03/04/21 09:16	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525341

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525341006	**GWC-2R**					
EPA 6010D	Calcium	54.1	mg/L	1.0	03/09/21 03:58	
EPA 6020B	Arsenic	0.0011J	mg/L	0.0050	03/05/21 19:07	
EPA 6020B	Barium	0.043	mg/L	0.0050	03/05/21 19:07	
EPA 6020B	Beryllium	0.00032J	mg/L	0.00050	03/05/21 19:07	
EPA 6020B	Boron	0.087	mg/L	0.040	03/05/21 19:07	
EPA 6020B	Cadmium	0.00016J	mg/L	0.00050	03/05/21 19:07	
EPA 6020B	Cobalt	0.00074J	mg/L	0.0050	03/05/21 19:07	
EPA 6020B	Lead	0.000070J	mg/L	0.0010	03/05/21 19:07	
EPA 6020B	Lithium	0.0039J	mg/L	0.030	03/05/21 19:07	
EPA 6020B	Selenium	0.0043J	mg/L	0.0050	03/05/21 19:07	
SM 2450C-2011	Total Dissolved Solids	516	mg/L	10.0	03/04/21 10:20	
EPA 300.0 Rev 2.1 1993	Chloride	49.6	mg/L	1.0	03/07/21 02:09	
EPA 300.0 Rev 2.1 1993	Sulfate	244	mg/L	5.0	03/07/21 06:45	
92525346011	**GWC-6R**					
	Performed by	CUSTOMER			03/08/21 09:06	
	pH	5.78	Std. Units		03/08/21 09:06	
EPA 6010D	Calcium	105	mg/L	1.0	03/10/21 05:10	
EPA 6020B	Barium	0.043	mg/L	0.0050	03/11/21 16:24	
EPA 6020B	Chromium	0.0014J	mg/L	0.0050	03/11/21 16:24	
EPA 6020B	Lithium	0.0018J	mg/L	0.030	03/11/21 16:24	
EPA 6020B	Nickel	0.0016J	mg/L	0.0050	03/11/21 16:24	
EPA 6020B	Selenium	0.0020J	mg/L	0.0050	03/11/21 16:24	
SM 2450C-2011	Total Dissolved Solids	942	mg/L	20.0	03/06/21 12:29	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	03/14/21 12:52	
EPA 300.0 Rev 2.1 1993	Sulfate	476	mg/L	12.0	03/14/21 13:54	
92525335010	**GWA-2**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.42	Std. Units		03/08/21 09:07	
EPA 6010D	Zinc	0.031	mg/L	0.020	03/09/21 03:29	
EPA 6010D	Calcium	34.2	mg/L	1.0	03/09/21 03:29	
EPA 6020B	Barium	0.039	mg/L	0.0050	03/05/21 18:21	
EPA 6020B	Cobalt	0.21	mg/L	0.0050	03/05/21 18:21	
EPA 6020B	Copper	0.0027J	mg/L	0.0050	03/05/21 18:21	
EPA 6020B	Lithium	0.0033J	mg/L	0.030	03/05/21 18:21	
EPA 6020B	Nickel	0.034	mg/L	0.0050	03/05/21 18:21	
SM 2450C-2011	Total Dissolved Solids	296	mg/L	10.0	03/05/21 11:05	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	03/06/21 23:45	
EPA 300.0 Rev 2.1 1993	Fluoride	0.073J	mg/L	0.10	03/06/21 23:45	
EPA 300.0 Rev 2.1 1993	Sulfate	156	mg/L	3.0	03/07/21 04:19	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525341

Sample: DUP-01 **Lab ID: 92525341001** Collected: 03/02/21 00:00 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**18.3**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:34	7440-70-2	
Zinc	**0.0049J**	mg/L	0.020	0.0035	1	03/04/21 11:30	03/09/21 03:34	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:27	7440-36-0	
Arsenic	**0.0019J**	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:27	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:27	7440-39-3	
Beryllium	**0.00088**	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:27	7440-41-7	
Boron	**0.0070J**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:27	7440-42-8	
Cadmium	**0.00025J**	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:27	7440-43-9	
Chromium	**0.0010J**	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:27	7440-47-3	
Cobalt	**0.0093**	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:27	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	03/04/21 11:29	03/05/21 18:27	7440-50-8	
Lead	**0.00012J**	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:27	7439-92-1	
Lithium	**0.00093J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:27	7439-93-2	
Nickel	ND	mg/L	0.0050	0.00069	1	03/04/21 11:29	03/05/21 18:27	7440-02-0	
Selenium	**0.013**	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:27	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	03/04/21 11:29	03/05/21 18:27	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/04/21 11:29	03/05/21 18:27	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	03/04/21 11:29	03/05/21 18:27	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:23	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**167**	mg/L	10.0	10.0	1		03/05/21 11:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.5**	mg/L	1.0	0.60	1		03/07/21 00:28	16887-00-6	
Fluoride	**0.18**	mg/L	0.10	0.050	1		03/07/21 00:28	16984-48-8	M1
Sulfate	**94.2**	mg/L	2.0	1.0	2		03/07/21 04:35	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525341

Sample: GWC-5R **Lab ID: 92525341002** Collected: 03/02/21 13:20 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/04/21 09:16		
pH	**4.63**	Std. Units			1		03/04/21 09:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**145**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:39	7440-70-2	
Zinc	**0.022**	mg/L	0.020	0.0035	1	03/04/21 11:30	03/09/21 03:39	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:32	7440-36-0	
Arsenic	**0.0024J**	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:32	7440-38-2	
Barium	**0.011**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:32	7440-39-3	
Beryllium	**0.0037**	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:32	7440-41-7	
Boron	**0.023J**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:32	7440-42-8	
Cadmium	**0.0011**	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:32	7440-43-9	
Chromium	**0.0021J**	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:32	7440-47-3	
Cobalt	**0.00039J**	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:32	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	03/04/21 11:29	03/05/21 18:32	7440-50-8	
Lead	**0.000054J**	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:32	7439-92-1	
Lithium	**0.0016J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:32	7439-93-2	
Nickel	**0.0014J**	mg/L	0.0050	0.00069	1	03/04/21 11:29	03/05/21 18:32	7440-02-0	
Selenium	**0.019**	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:32	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	03/04/21 11:29	03/05/21 18:32	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/04/21 11:29	03/05/21 18:32	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	03/04/21 11:29	03/05/21 18:32	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**980**	mg/L	100	100	1		03/05/21 11:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.9**	mg/L	1.0	0.60	1		03/07/21 01:11	16887-00-6	
Fluoride	**0.094J**	mg/L	0.10	0.050	1		03/07/21 01:11	16984-48-8	
Sulfate	**906**	mg/L	19.0	9.5	19		03/07/21 05:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525341

Sample: GWC-1R **Lab ID: 92525341003** Collected: 03/01/21 16:10 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/04/21 09:16		
pH	**5.25**	Std. Units			1		03/04/21 09:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**117**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:44	7440-70-2	
Zinc	ND	mg/L	0.020	0.0035	1	03/04/21 11:30	03/09/21 03:44	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:38	7440-36-0	
Arsenic	**0.0022J**	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:38	7440-38-2	
Barium	**0.063**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:38	7440-39-3	
Beryllium	**0.00023J**	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:38	7440-41-7	
Boron	**0.046**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:38	7440-42-8	
Cadmium	**0.00013J**	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:38	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:38	7440-47-3	
Cobalt	**0.00083J**	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:38	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	03/04/21 11:29	03/05/21 18:38	7440-50-8	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:38	7439-92-1	
Lithium	**0.0015J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:38	7439-93-2	
Nickel	**0.0024J**	mg/L	0.0050	0.00069	1	03/04/21 11:29	03/05/21 18:38	7440-02-0	
Selenium	**0.011**	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:38	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	03/04/21 11:29	03/05/21 18:38	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/04/21 11:29	03/05/21 18:38	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	03/04/21 11:29	03/05/21 18:38	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**974**	mg/L	20.0	20.0	1		03/04/21 10:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.6**	mg/L	1.0	0.60	1		03/07/21 01:26	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/07/21 01:26	16984-48-8	
Sulfate	**525**	mg/L	11.0	5.5	11		03/07/21 05:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525341

Sample: GWC-3R **Lab ID: 92525341004** Collected: 03/02/21 11:25 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/04/21 09:16		
pH	**4.82**	Std. Units			1		03/04/21 09:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**17.9**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:48	7440-70-2	
Zinc	**0.0069J**	mg/L	0.020	0.0035	1	03/04/21 11:30	03/09/21 03:48	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:44	7440-36-0	
Arsenic	**0.0017J**	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:44	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:44	7440-39-3	
Beryllium	**0.00081**	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:44	7440-41-7	
Boron	**0.0071J**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:44	7440-42-8	
Cadmium	**0.00021J**	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:44	7440-43-9	
Chromium	**0.0010J**	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:44	7440-47-3	
Cobalt	**0.0086**	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:44	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	03/04/21 11:29	03/05/21 18:44	7440-50-8	
Lead	**0.000096J**	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:44	7439-92-1	
Lithium	**0.00088J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:44	7439-93-2	
Nickel	ND	mg/L	0.0050	0.00069	1	03/04/21 11:29	03/05/21 18:44	7440-02-0	
Selenium	**0.012**	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:44	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	03/04/21 11:29	03/05/21 18:44	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/04/21 11:29	03/05/21 18:44	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	03/04/21 11:29	03/05/21 18:44	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**167**	mg/L	10.0	10.0	1		03/05/21 11:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.5**	mg/L	1.0	0.60	1		03/07/21 01:40	16887-00-6	
Fluoride	**0.15**	mg/L	0.10	0.050	1		03/07/21 01:40	16984-48-8	
Sulfate	**95.5**	mg/L	2.0	1.0	2		03/07/21 06:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525341

Sample: GWC-4R **Lab ID: 92525341005** Collected: 03/01/21 12:15 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/04/21 09:16		
pH	**5.62**	Std. Units			1		03/04/21 09:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**69.5**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:53	7440-70-2	
Zinc	ND	mg/L	0.020	0.0035	1	03/04/21 11:30	03/09/21 03:53	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:49	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:49	7440-39-3	
Beryllium	**0.000060J**	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:49	7440-41-7	
Boron	**5.1**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:49	7440-47-3	
Cobalt	**0.0016J**	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:49	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	03/04/21 11:29	03/05/21 18:49	7440-50-8	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:49	7439-93-2	
Nickel	**0.0021J**	mg/L	0.0050	0.00069	1	03/04/21 11:29	03/05/21 18:49	7440-02-0	
Selenium	**0.0041J**	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:49	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	03/04/21 11:29	03/05/21 18:49	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/04/21 11:29	03/05/21 18:49	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	03/04/21 11:29	03/05/21 18:49	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**666**	mg/L	20.0	20.0	1		03/04/21 10:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**194**	mg/L	4.0	2.4	4		03/07/21 06:31	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/07/21 01:55	16984-48-8	
Sulfate	**177**	mg/L	4.0	2.0	4		03/07/21 06:31	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525341

Sample: GWC-2R **Lab ID: 92525341006** Collected: 03/01/21 13:40 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/04/21 09:16		
pH	**5.17**	Std. Units			1		03/04/21 09:16		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**54.1**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:58	7440-70-2	
Zinc	ND	mg/L	0.020	0.0035	1	03/04/21 11:30	03/09/21 03:58	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 19:07	7440-36-0	
Arsenic	**0.0011J**	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 19:07	7440-38-2	
Barium	**0.043**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 19:07	7440-39-3	
Beryllium	**0.00032J**	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 19:07	7440-41-7	
Boron	**0.087**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 19:07	7440-42-8	
Cadmium	**0.00016J**	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 19:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 19:07	7440-47-3	
Cobalt	**0.00074J**	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 19:07	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	03/04/21 11:29	03/05/21 19:07	7440-50-8	
Lead	**0.000070J**	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 19:07	7439-92-1	
Lithium	**0.0039J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 19:07	7439-93-2	
Nickel	ND	mg/L	0.0050	0.00069	1	03/04/21 11:29	03/05/21 19:07	7440-02-0	
Selenium	**0.0043J**	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 19:07	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	03/04/21 11:29	03/05/21 19:07	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/04/21 11:29	03/05/21 19:07	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	03/04/21 11:29	03/05/21 19:07	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:40	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**516**	mg/L	10.0	10.0	1		03/04/21 10:20		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**49.6**	mg/L	1.0	0.60	1		03/07/21 02:09	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/07/21 02:09	16984-48-8	
Sulfate	**244**	mg/L	5.0	2.5	5		03/07/21 06:45	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525341

Sample: GWC-6R **Lab ID: 92525346011** Collected: 03/03/21 09:15 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:06		
pH	**5.78**	Std. Units			1		03/08/21 09:06		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Zinc	ND	mg/L	0.020	0.0035	1	03/09/21 11:24	03/10/21 05:10	7440-66-6	
Calcium	**105**	mg/L	1.0	0.070	1	03/09/21 11:24	03/10/21 05:10	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/09/21 12:48	03/11/21 16:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/09/21 12:48	03/11/21 16:24	7440-38-2	
Barium	**0.043**	mg/L	0.0050	0.00071	1	03/09/21 12:48	03/11/21 16:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/09/21 12:48	03/11/21 16:24	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/09/21 12:48	03/11/21 16:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/09/21 12:48	03/11/21 16:24	7440-43-9	
Chromium	**0.0014J**	mg/L	0.0050	0.00055	1	03/09/21 12:48	03/11/21 16:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/09/21 12:48	03/11/21 16:24	7440-48-4	
Copper	ND	mg/L	0.0050	0.0017	1	03/09/21 12:48	03/11/21 16:24	7440-50-8	
Lead	ND	mg/L	0.0010	0.000036	1	03/09/21 12:48	03/11/21 16:24	7439-92-1	
Lithium	**0.0018J**	mg/L	0.030	0.00081	1	03/09/21 12:48	03/11/21 16:24	7439-93-2	
Nickel	**0.0016J**	mg/L	0.0050	0.00069	1	03/09/21 12:48	03/11/21 16:24	7440-02-0	
Selenium	**0.0020J**	mg/L	0.0050	0.0016	1	03/09/21 12:48	03/11/21 16:24	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	03/09/21 12:48	03/11/21 16:24	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/09/21 12:48	03/11/21 16:24	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	03/09/21 12:48	03/11/21 16:24	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:18	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**942**	mg/L	20.0	20.0	1		03/06/21 12:29		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.0**	mg/L	1.0	0.60	1		03/14/21 12:52	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 12:52	16984-48-8	
Sulfate	**476**	mg/L	12.0	6.0	12		03/14/21 13:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525341

Sample: GWA-2 **Lab ID: 92525335010** Collected: 03/02/21 15:10 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.42**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Zinc	**0.031**	mg/L	0.020	0.0035	1	03/04/21 11:30	03/09/21 03:29	7440-66-6	
Calcium	**34.2**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:29	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:21	7440-38-2	
Barium	**0.039**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:21	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:21	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:21	7440-47-3	
Cobalt	**0.21**	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:21	7440-48-4	
Copper	**0.0027J**	mg/L	0.0050	0.0017	1	03/04/21 11:29	03/05/21 18:21	7440-50-8	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:21	7439-92-1	
Lithium	**0.0033J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:21	7439-93-2	
Nickel	**0.034**	mg/L	0.0050	0.00069	1	03/04/21 11:29	03/05/21 18:21	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:21	7782-49-2	
Silver	ND	mg/L	0.0050	0.00036	1	03/04/21 11:29	03/05/21 18:21	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00014	1	03/04/21 11:29	03/05/21 18:21	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0022	1	03/04/21 11:29	03/05/21 18:21	7440-62-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**296**	mg/L	10.0	10.0	1		03/05/21 11:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.1**	mg/L	1.0	0.60	1		03/06/21 23:45	16887-00-6	
Fluoride	**0.073J**	mg/L	0.10	0.050	1		03/06/21 23:45	16984-48-8	
Sulfate	**156**	mg/L	3.0	1.5	3		03/07/21 04:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 604223
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341003, 92525341004, 92525341005, 92525341006

METHOD BLANK: 3183140 Matrix: Water
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341003, 92525341004, 92525341005, 92525341006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/09/21 01:57	
Zinc	mg/L	ND	0.020	0.0035	03/09/21 01:57	

LABORATORY CONTROL SAMPLE: 3183141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	
Zinc	mg/L	1	1.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183142 3183143

Parameter	Units	92525335001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	2.6	1	1	3.6	3.5	105	94	75-125	3	20	
Zinc	mg/L	ND	1	1	0.98	0.98	98	98	75-125	0	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 605191
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525346011

METHOD BLANK: 3188288 Matrix: Water
Associated Lab Samples: 92525346011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/10/21 03:52	
Zinc	mg/L	ND	0.020	0.0035	03/10/21 03:52	

LABORATORY CONTROL SAMPLE: 3188289

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.97J	97	80-120	
Zinc	mg/L	1	0.95	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3188290 3188291

Parameter	Units	92525346002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	30.9	1	1	32.1	31.3	120	44	75-125	2	20	
Zinc	mg/L	ND	1	1	0.98	0.95	98	95	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 604224
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341003, 92525341004, 92525341005, 92525341006

METHOD BLANK: 3183148 Matrix: Water
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341003, 92525341004, 92525341005, 92525341006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/05/21 16:31	
Arsenic	mg/L	ND	0.0050	0.00078	03/05/21 16:31	
Barium	mg/L	ND	0.0050	0.00071	03/05/21 16:31	
Beryllium	mg/L	ND	0.00050	0.000046	03/05/21 16:31	
Boron	mg/L	ND	0.040	0.0052	03/05/21 16:31	
Cadmium	mg/L	ND	0.00050	0.00012	03/05/21 16:31	
Chromium	mg/L	ND	0.0050	0.00055	03/05/21 16:31	
Cobalt	mg/L	ND	0.0050	0.00038	03/05/21 16:31	
Copper	mg/L	ND	0.0050	0.0017	03/05/21 16:31	
Lead	mg/L	ND	0.0010	0.000036	03/05/21 16:31	
Lithium	mg/L	ND	0.030	0.00081	03/05/21 16:31	
Nickel	mg/L	ND	0.0050	0.00069	03/05/21 16:31	
Selenium	mg/L	ND	0.0050	0.0016	03/05/21 16:31	
Silver	mg/L	ND	0.0050	0.00036	03/05/21 16:31	
Thallium	mg/L	ND	0.0010	0.00014	03/05/21 16:31	
Vanadium	mg/L	ND	0.010	0.0022	03/05/21 16:31	

LABORATORY CONTROL SAMPLE: 3183149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.91	91	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Copper	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Nickel	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Silver	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.098	98	80-120	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183150 3183151

Parameter	Units	92525335002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	105	106	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.096	0.093	96	93	75-125	3	20	
Barium	mg/L	0.014	0.1	0.1	0.11	0.11	96	99	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.093	95	93	75-125	2	20	
Boron	mg/L	0.0068J	1	1	0.96	0.96	96	96	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.098	99	98	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Copper	mg/L	ND	0.1	0.1	0.10	0.098	100	97	75-125	3	20	
Lead	mg/L	0.000051J	0.1	0.1	0.098	0.095	98	95	75-125	3	20	
Lithium	mg/L	0.0018J	0.1	0.1	0.10	0.097	98	95	75-125	3	20	
Nickel	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.092	94	92	75-125	2	20	
Silver	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.094	96	94	75-125	2	20	
Vanadium	mg/L	ND	0.1	0.1	0.10	0.099	100	99	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 605211
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525346011

METHOD BLANK: 3188368 Matrix: Water
Associated Lab Samples: 92525346011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00043J	0.0030	0.00028	03/11/21 14:28	
Arsenic	mg/L	ND	0.0050	0.00078	03/11/21 14:28	
Barium	mg/L	ND	0.0050	0.00071	03/11/21 14:28	
Beryllium	mg/L	ND	0.00050	0.000046	03/11/21 14:28	
Boron	mg/L	ND	0.040	0.0052	03/11/21 14:28	
Cadmium	mg/L	ND	0.00050	0.00012	03/11/21 14:28	
Chromium	mg/L	ND	0.0050	0.00055	03/11/21 14:28	
Cobalt	mg/L	ND	0.0050	0.00038	03/11/21 14:28	
Copper	mg/L	ND	0.0050	0.0017	03/11/21 14:28	
Lead	mg/L	ND	0.0010	0.000036	03/11/21 14:28	
Lithium	mg/L	ND	0.030	0.00081	03/11/21 14:28	
Nickel	mg/L	ND	0.0050	0.00069	03/11/21 14:28	
Selenium	mg/L	ND	0.0050	0.0016	03/11/21 14:28	
Silver	mg/L	ND	0.0050	0.00036	03/11/21 14:28	
Thallium	mg/L	ND	0.0010	0.00014	03/11/21 14:28	
Vanadium	mg/L	ND	0.010	0.0022	03/11/21 14:28	

LABORATORY CONTROL SAMPLE: 3188369

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.093	93	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Copper	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Nickel	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Silver	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	
Vanadium	mg/L	0.1	0.10	102	80-120	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3188370 3188371

Parameter	Units	92525662001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.012	0.1	0.1	0.11	0.11	97	101	75-125	4	20	
Arsenic	mg/L	0.13	0.1	0.1	0.23	0.23	92	93	75-125	0	20	
Barium	mg/L	0.12	0.1	0.1	0.26	0.27	138	146	75-125	3	20	M1
Beryllium	mg/L	ND	0.1	0.1	0.078	0.080	78	80	75-125	2	20	
Boron	mg/L	1.1	1	1	1.9	1.9	79	85	75-125	3	20	
Cadmium	mg/L	0.00021J	0.1	0.1	0.093	0.094	93	94	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.090	0.092	89	92	75-125	3	20	
Cobalt	mg/L	0.0030J	0.1	0.1	0.092	0.094	89	91	75-125	2	20	
Copper	mg/L	ND	0.1	0.1	0.086	0.088	85	88	75-125	3	20	
Lead	mg/L	0.000081J	0.1	0.1	0.088	0.091	87	91	75-125	4	20	
Lithium	mg/L	0.19	0.1	0.1	0.26	0.27	73	77	75-125	2	20	M1
Nickel	mg/L	0.010	0.1	0.1	0.096	0.098	86	87	75-125	1	20	
Selenium	mg/L	0.086	0.1	0.1	0.18	0.18	89	97	75-125	4	20	
Silver	mg/L	ND	0.1	0.1	0.085	0.088	85	88	75-125	3	20	
Thallium	mg/L	0.0029	0.1	0.1	0.091	0.094	88	91	75-125	3	20	
Vanadium	mg/L	0.21	0.1	0.1	0.29	0.29	80	86	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 604596 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341003, 92525341004, 92525341005, 92525341006

METHOD BLANK: 3185122 Matrix: Water
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341003, 92525341004, 92525341005, 92525341006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/08/21 13:02	

LABORATORY CONTROL SAMPLE: 3185123

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3185124 3185125

Parameter	Units	92524831001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0022	0.0021	87	81	75-125	7	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 604928
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525346011

METHOD BLANK: 3187260 Matrix: Water
Associated Lab Samples: 92525346011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/09/21 10:42	

LABORATORY CONTROL SAMPLE: 3187261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3187262 3187263

Parameter	Units	92525375013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0019	93	78	75-125	18	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 604206
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525341003, 92525341005, 92525341006

METHOD BLANK: 3183000 Matrix: Water
Associated Lab Samples: 92525341003, 92525341005, 92525341006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/04/21 10:17	

LABORATORY CONTROL SAMPLE: 3183001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3183002

Parameter	Units	92525485001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	84.0	85.0	1	10	

SAMPLE DUPLICATE: 3183003

Parameter	Units	92525335006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	23.0	41.0	56	10	D6

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 604527 Analysis Method: SM 2450C-2011
QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341004

METHOD BLANK: 3184654 Matrix: Water
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/05/21 11:03	

LABORATORY CONTROL SAMPLE: 3184655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	375	94	90-111	

SAMPLE DUPLICATE: 3184656

Parameter	Units	92525799001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2090	1960	6	10	

SAMPLE DUPLICATE: 3184657

Parameter	Units	92525341004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	167	152	9	10	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 604765
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525346011

METHOD BLANK: 3186310 Matrix: Water
Associated Lab Samples: 92525346011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/06/21 12:29	

LABORATORY CONTROL SAMPLE: 3186311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	371	93	90-111	

SAMPLE DUPLICATE: 3186312

Parameter	Units	92525346009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	217	220	1	10	

SAMPLE DUPLICATE: 3186313

Parameter	Units	92525824003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	45.0	61.0	30	10	D6

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 604544
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341003, 92525341004, 92525341005, 92525341006

METHOD BLANK: 3184710 Matrix: Water
Associated Lab Samples: 92525335010, 92525341001, 92525341002, 92525341003, 92525341004, 92525341005, 92525341006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/06/21 20:08	
Fluoride	mg/L	ND	0.10	0.050	03/06/21 20:08	
Sulfate	mg/L	ND	1.0	0.50	03/06/21 20:08	

LABORATORY CONTROL SAMPLE: 3184711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.3	97	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	48.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184712 3184713

Parameter	Units	92525335001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.3	50	50	53.4	53.9	98	99	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	104	105	90-110	1	10	
Sulfate	mg/L	2.3	50	50	51.8	52.4	99	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184714 3184715

Parameter	Units	92525341001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.5	50	50	54.6	54.8	98	98	90-110	0	10	
Fluoride	mg/L	0.18	2.5	2.5	3.3	3.3	124	125	90-110	1	10	M1
Sulfate	mg/L	94.2	50	50	135	135	81	82	90-110	0	10	M1

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525341

QC Batch: 606456
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92525346011

METHOD BLANK: 3195140 Matrix: Water
Associated Lab Samples: 92525346011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 20:29	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 20:29	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 20:29	

LABORATORY CONTROL SAMPLE: 3195141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.5	97	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195142 3195143

Parameter	Units	92525335019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	0.99J	50	50	52.8	52.3	104	103	90-110	1	10	
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.7	106	104	90-110	2	10	
Sulfate	mg/L	9.6	50	50	65.5	64.7	112	110	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195144 3195145

Parameter	Units	92525346005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.6	50	50	66.4	68.7	100	104	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	98	103	90-110	5	10	
Sulfate	mg/L	88.8	50	50	115	117	53	56	90-110	1	10	M1

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES
Pace Project No.: 92525341

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92525341

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525335010	GWA-2				
92525341002	GWC-5R				
92525341003	GWC-1R				
92525341004	GWC-3R				
92525341005	GWC-4R				
92525341006	GWC-2R				
92525346011	GWC-6R				
92525335010	GWA-2	EPA 3010A	604223	EPA 6010D	604309
92525341001	DUP-01	EPA 3010A	604223	EPA 6010D	604309
92525341002	GWC-5R	EPA 3010A	604223	EPA 6010D	604309
92525341003	GWC-1R	EPA 3010A	604223	EPA 6010D	604309
92525341004	GWC-3R	EPA 3010A	604223	EPA 6010D	604309
92525341005	GWC-4R	EPA 3010A	604223	EPA 6010D	604309
92525341006	GWC-2R	EPA 3010A	604223	EPA 6010D	604309
92525346011	GWC-6R	EPA 3010A	605191	EPA 6010D	605246
92525335010	GWA-2	EPA 3005A	604224	EPA 6020B	604329
92525341001	DUP-01	EPA 3005A	604224	EPA 6020B	604329
92525341002	GWC-5R	EPA 3005A	604224	EPA 6020B	604329
92525341003	GWC-1R	EPA 3005A	604224	EPA 6020B	604329
92525341004	GWC-3R	EPA 3005A	604224	EPA 6020B	604329
92525341005	GWC-4R	EPA 3005A	604224	EPA 6020B	604329
92525341006	GWC-2R	EPA 3005A	604224	EPA 6020B	604329
92525346011	GWC-6R	EPA 3005A	605211	EPA 6020B	605315
92525335010	GWA-2	EPA 7470A	604596	EPA 7470A	604882
92525341001	DUP-01	EPA 7470A	604596	EPA 7470A	604882
92525341002	GWC-5R	EPA 7470A	604596	EPA 7470A	604882
92525341003	GWC-1R	EPA 7470A	604596	EPA 7470A	604882
92525341004	GWC-3R	EPA 7470A	604596	EPA 7470A	604882
92525341005	GWC-4R	EPA 7470A	604596	EPA 7470A	604882
92525341006	GWC-2R	EPA 7470A	604596	EPA 7470A	604882
92525346011	GWC-6R	EPA 7470A	604928	EPA 7470A	605029
92525335010	GWA-2	SM 2450C-2011	604527		
92525341001	DUP-01	SM 2450C-2011	604527		
92525341002	GWC-5R	SM 2450C-2011	604527		
92525341003	GWC-1R	SM 2450C-2011	604206		
92525341004	GWC-3R	SM 2450C-2011	604527		
92525341005	GWC-4R	SM 2450C-2011	604206		
92525341006	GWC-2R	SM 2450C-2011	604206		
92525346011	GWC-6R	SM 2450C-2011	604765		
92525335010	GWA-2	EPA 300.0 Rev 2.1 1993	604544		
92525341001	DUP-01	EPA 300.0 Rev 2.1 1993	604544		
92525341002	GWC-5R	EPA 300.0 Rev 2.1 1993	604544		
92525341003	GWC-1R	EPA 300.0 Rev 2.1 1993	604544		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92525341

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525341004	**GWC-3R**	EPA 300.0 Rev 2.1 1993	604544		
92525341005	**GWC-4R**	EPA 300.0 Rev 2.1 1993	604544		
92525341006	**GWC-2R**	EPA 300.0 Rev 2.1 1993	604544		
92525346011	**GWC-6R**	EPA 300.0 Rev 2.1 1993	606456		

Pace Analytical	Sample Condition Upon Receipt(SCUR)	Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia power

Project #: WO# : 92525341

92525341

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other:____ ☑ Client

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: MT 3/31/21

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.0 **Correction Factor:** Add/Subtract (°C) ±0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

Projec

WO# : 92525341

PM: KLH1 Due Date: 03/16/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																									2				
2																									2				
3																									2				
4																									2				
5																									2				
6																									2				
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

COC 5 Gyp OG

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Acworth, GA 30114
Email:
Phone: (770)384-6526 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Sleever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App I/II/III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	9252541
1		WT																							
2		WT																							
3	DUP-01	WT		3/2	—				5										X	X	X	X			
4	~~GWC-7~~	WT																	X	X	X	X			
5	~~GWC-6R~~	WT																	X	X	X	X			
6	GWC-5R	WT		3/2	1320				5										X	X	X	X		PH	4.63
7	GWC-1R	WT		3/1	1610				5										X	X	X	X		PH	5.25
8	GWC-3R	WT		3/2	1125				5										X	X	X	X		PH	4.82
9	GWC-4R	WT		3/1	1215				5										X	X	X	X		PH	5.62
10	GWC-2R	WT		3/1	1340				5										X	X	X	X		PH	5.17
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		3/2/21	1510		3.2.21	1510				
		3.2.21	1829		3/2/21	1730	4.0	Y	N	Y
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 3/2/21

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

April 01, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES RADS
Pace Project No.: 92525237

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

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

Sincerely,

Tyler Forney for
Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES RADS
Pace Project No.: 92525237

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES RADS
Pace Project No.: 92525237

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525237001	**DUP-01**	Water	03/02/21 00:00	03/02/21 17:30
92525237002	**GWC-5R**	Water	03/02/21 13:20	03/02/21 17:30
92525237003	**GWC-1R**	Water	03/01/21 16:10	03/02/21 17:30
92525237004	**GWC-3R**	Water	03/02/21 11:25	03/02/21 17:30
92525237005	**GWC-4R**	Water	03/01/21 12:15	03/02/21 17:30
92525237006	**GWC-2R**	Water	03/01/21 13:40	03/02/21 17:30
92525237008	**GWC-6R**	Water	03/03/21 09:15	03/05/21 09:20
92525214010	**GWA-2**	Water	03/02/21 15:10	03/02/21 17:30

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92525237

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92525237001	**DUP-01**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525237002	**GWC-5R**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525237003	**GWC-1R**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525237004	**GWC-3R**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525237005	**GWC-4R**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525237006	**GWC-2R**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525237008	**GWC-6R**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214010	**GWA-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525237

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525237001	**DUP-01**					
EPA 9315	Radium-226	-0.0167 ± 0.0825 (0.238) C:80% T:NA	pCi/L		03/22/21 08:49	
EPA 9320	Radium-228	0.968 ± 0.412 (0.648) C:76% T:94%	pCi/L		03/18/21 16:20	
Total Radium Calculation	Total Radium	0.968 ± 0.495 (0.886)	pCi/L		03/26/21 14:37	
92525237002	**GWC-5R**					
EPA 9315	Radium-226	0.0976 ± 0.115 (0.240) C:88% T:NA	pCi/L		03/22/21 08:50	
EPA 9320	Radium-228	0.588 ± 0.327 (0.591) C:80% T:108%	pCi/L		03/18/21 16:20	
Total Radium Calculation	Total Radium	0.686 ± 0.442 (0.831)	pCi/L		03/26/21 14:37	
92525237003	**GWC-1R**					
EPA 9315	Radium-226	0.155 ± 0.119 (0.203) C:78% T:NA	pCi/L		03/22/21 08:57	
EPA 9320	Radium-228	0.811 ± 0.449 (0.826) C:79% T:88%	pCi/L		03/18/21 16:20	
Total Radium Calculation	Total Radium	0.966 ± 0.568 (1.03)	pCi/L		03/26/21 14:37	
92525237004	**GWC-3R**					
EPA 9315	Radium-226	0.310 ± 0.205 (0.381) C:78% T:NA	pCi/L		03/22/21 09:35	
EPA 9320	Radium-228	0.819 ± 0.438 (0.792) C:76% T:94%	pCi/L		03/18/21 16:20	
Total Radium Calculation	Total Radium	1.13 ± 0.643 (1.17)	pCi/L		03/26/21 14:37	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525237

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525237005	**GWC-4R**					
EPA 9315	Radium-226	0.0608 ± 0.120 (0.276) C:75% T:NA	pCi/L		03/22/21 08:56	
EPA 9320	Radium-228	0.288 ± 0.374 (0.797) C:79% T:86%	pCi/L		03/18/21 16:20	
Total Radium Calculation	Total Radium	0.349 ± 0.494 (1.07)	pCi/L		03/26/21 14:37	
92525237006	**GWC-2R**					
EPA 9315	Radium-226	0.382 ± 0.175 (0.217) C:82% T:NA	pCi/L		03/22/21 08:59	
EPA 9320	Radium-228	0.594 ± 0.367 (0.684) C:77% T:95%	pCi/L		03/18/21 16:20	
Total Radium Calculation	Total Radium	0.976 ± 0.542 (0.901)	pCi/L		03/26/21 14:37	
92525237008	**GWC-6R**					
EPA 9315	Radium-226	0.210 ± 0.132 (0.210) C:80% T:NA	pCi/L		03/22/21 08:31	
EPA 9320	Radium-228	0.511 ± 0.409 (0.812) C:78% T:82%	pCi/L		03/19/21 15:15	
Total Radium Calculation	Total Radium	0.721 ± 0.541 (1.02)	pCi/L		03/26/21 13:56	
92525214010	**GWA-2**					
EPA 9315	Radium-226	0.170 ± 0.157 (0.313) C:75% T:NA	pCi/L		03/22/21 08:47	
EPA 9320	Radium-228	0.778 ± 0.413 (0.738) C:76% T:81%	pCi/L		03/18/21 12:46	
Total Radium Calculation	Total Radium	0.948 ± 0.570 (1.05)	pCi/L		03/26/21 14:37	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

Sample: DUP-01 **Lab ID: 92525237001** Collected: 03/02/21 00:00 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0167 ± 0.0825 (0.238) C:80% T:NA**	pCi/L	03/22/21 08:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.968 ± 0.412 (0.648) C:76% T:94%**	pCi/L	03/18/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.968 ± 0.495 (0.886)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

Sample: GWC-5R **Lab ID: 92525237002** Collected: 03/02/21 13:20 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0976 ± 0.115 (0.240) C:88% T:NA**	pCi/L	03/22/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.588 ± 0.327 (0.591) C:80% T:108%**	pCi/L	03/18/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.686 ± 0.442 (0.831)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

Sample: GWC-1R **Lab ID: 92525237003** Collected: 03/01/21 16:10 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.155 ± 0.119 (0.203) C:78% T:NA**	pCi/L	03/22/21 08:57	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.811 ± 0.449 (0.826) C:79% T:88%**	pCi/L	03/18/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.966 ± 0.568 (1.03)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

Sample: GWC-3R **Lab ID: 92525237004** Collected: 03/02/21 11:25 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.310 ± 0.205 (0.381) C:78% T:NA**	pCi/L	03/22/21 09:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.819 ± 0.438 (0.792) C:76% T:94%**	pCi/L	03/18/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.13 ± 0.643 (1.17)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

Sample: GWC-4R **Lab ID: 92525237005** Collected: 03/01/21 12:15 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0608 ± 0.120 (0.276) C:75% T:NA**	pCi/L	03/22/21 08:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.288 ± 0.374 (0.797) C:79% T:86%**	pCi/L	03/18/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.349 ± 0.494 (1.07)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

Sample: GWC-2R **Lab ID: 92525237006** Collected: 03/01/21 13:40 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.382 ± 0.175 (0.217) C:82% T:NA**	pCi/L	03/22/21 08:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.594 ± 0.367 (0.684) C:77% T:95%**	pCi/L	03/18/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.976 ± 0.542 (0.901)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

Sample: GWC-6R **Lab ID: 92525237008** Collected: 03/03/21 09:15 Received: 03/05/21 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.210 ± 0.132 (0.210) C:80% T:NA**	pCi/L	03/22/21 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.511 ± 0.409 (0.812) C:78% T:82%**	pCi/L	03/19/21 15:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.721 ± 0.541 (1.02)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

Sample: GWA-2 **Lab ID: 92525214010** Collected: 03/02/21 15:10 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.170 ± 0.157 (0.313) C:75% T:NA**	pCi/L	03/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.778 ± 0.413 (0.738) C:76% T:81%**	pCi/L	03/18/21 12:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.948 ± 0.570 (1.05)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

QC Batch: 437953
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2114136 Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.856 ± 0.495 (0.916) C:71% T:73%	pCi/L	03/19/21 11:52	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

QC Batch: 437937
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2114109 Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0804 ± 0.198 (0.468) C:67% T:NA	pCi/L	03/16/21 08:04	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

QC Batch: 437643
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525214010, 92525237001, 92525237002, 92525237003, 92525237004, 92525237005, 92525237006

METHOD BLANK: 2112540 Matrix: Water
Associated Lab Samples: 92525214010, 92525237001, 92525237002, 92525237003, 92525237004, 92525237005, 92525237006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.387 ± 0.316 (0.633) C:83% T:90%	pCi/L	03/18/21 12:44	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

QC Batch: 437642
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525237008

METHOD BLANK: 2112539 Matrix: Water
Associated Lab Samples: 92525237008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.219 ± 0.271 (0.570) C:75% T:92%	pCi/L	03/19/21 15:12	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

QC Batch: 437601
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525237008

METHOD BLANK: 2112394 Matrix: Water
Associated Lab Samples: 92525237008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0425 ± 0.110 (0.264) C:81% T:NA	pCi/L	03/22/21 08:26	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

QC Batch: 437599
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples:

METHOD BLANK: 2112389 Matrix: Water

Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00470 ± 0.0712 (0.214) C:85% T:NA	pCi/L	03/15/21 09:18	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

QC Batch: 437641
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples:

METHOD BLANK: 2112538 Matrix: Water
Associated Lab Samples:

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.312 ± 0.330 (0.686) C:82% T:90%	pCi/L	03/15/21 16:07	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525237

QC Batch: 437602 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525214010, 92525237001, 92525237002, 92525237003, 92525237004, 92525237005, 92525237006

METHOD BLANK: 2112395 Matrix: Water
Associated Lab Samples: 92525214010, 92525237001, 92525237002, 92525237003, 92525237004, 92525237005, 92525237006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0514 ± 0.104 (0.242) C:82% T:NA	pCi/L	03/22/21 08:37	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES RADS
Pace Project No.: 92525237

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES RADS
Pace Project No.: 92525237

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525214010	**GWA-2**	EPA 9315	437602		
92525237001	**DUP-01**	EPA 9315	437602		
92525237002	**GWC-5R**	EPA 9315	437602		
92525237003	**GWC-1R**	EPA 9315	437602		
92525237004	**GWC-3R**	EPA 9315	437602		
92525237005	**GWC-4R**	EPA 9315	437602		
92525237006	**GWC-2R**	EPA 9315	437602		
92525237008	**GWC-6R**	EPA 9315	437601		
92525214010	**GWA-2**	EPA 9320	437643		
92525237001	**DUP-01**	EPA 9320	437643		
92525237002	**GWC-5R**	EPA 9320	437643		
92525237003	**GWC-1R**	EPA 9320	437643		
92525237004	**GWC-3R**	EPA 9320	437643		
92525237005	**GWC-4R**	EPA 9320	437643		
92525237006	**GWC-2R**	EPA 9320	437643		
92525237008	**GWC-6R**	EPA 9320	437642		
92525214010	**GWA-2**	Total Radium Calculation	440668		
92525237001	**DUP-01**	Total Radium Calculation	440668		
92525237002	**GWC-5R**	Total Radium Calculation	440668		
92525237003	**GWC-1R**	Total Radium Calculation	440668		
92525237004	**GWC-3R**	Total Radium Calculation	440668		
92525237005	**GWC-4R**	Total Radium Calculation	440668		
92525237006	**GWC-2R**	Total Radium Calculation	440668		
92525237008	**GWC-6R**	Total Radium Calculation	440647		

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia power

Project #: WO# : 92525237

92525237

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other: ☑ Client

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: MT 3/31/21

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Cooler Temp: 4.0 **Correction Factor:** Add/Subtract (°C) ±0 **Type of Ice:**

Cooler Temp Corrected (°C): 4.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ **Date:** _____

Project Manager SRF Review: _____ **Date:** _____

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

COC 5 GWP 06

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Alton, GA 30114
Email:
Phone: (770)384-6526 Fax
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IIIV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1		WT																						
2		WT																						
3	DUP-01	WT		3/2	—				5										X	X	X	X		
4	~~GWC-2~~	WT																	X	X	X	X		—
5	~~GWC-5R~~	WT																	X	X	X	X		
6	GWC-5R	WT		3/2	1320				5										X	X	X	X	PH	4.63
7	GWC-1R	WT		3/1	1610				5										X	X	X	X	PH	5.25
8	GWC-3R	WT		3/2	1125				5										X	X	X	X	PH	4.82
9	GWC-4R	WT		3/1	1215				5										X	X	X	X	PH	5.62
10	GWC-2R	WT		3/1	1340				5										X	X	X	X	PH	5.17
11																								
12																								

MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
		3/2/21	1510		3 2 21	1510					
		3 2 21	1829		3/2/21	1720	4.0	Y	IV	Y	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 3/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 1 Of 1

COC 5

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Hinton, GA 30114
Email:
Phone: (770)384-6520 Fax
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Gypsum LF
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N): TDS	Cl, F, SO4	App III/III/V Metals	RAD 9315/8320	Residual Chlorine (Y/N)	
1		WT																	X	X	X	X		
2		WT																	X	X	X	X		
3	EB-01	WT		3/3	1020				5	✓		✓							X	X	X	X		—
4	~~GWC-2~~	WT																	~~X~~	~~X~~	~~X~~	~~X~~		—
5	GWC-6R	WT		3/3	0915				5	✓		✓							X	X	X	X		pH: 5.78
6	~~GWC-5R~~	WT																	X	X	X	X		
7	~~GWC-3R~~	WT																	X	X	X	X		
8	~~GWC-9R~~	WT																	X	X	X	X		
9	~~GWC-4R~~	WT																	X	X	X	X		
10	~~GWC-2R~~	WT																	X	X	X	X		
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	Charles Hunter	3/5/21	0900	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER:
DATE Signed: 3/4/21

TEMP in C | Received on ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 3/10/2021
Worklist: 59153
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2112394
MB concentration:	0.043
M/B Counting Uncertainty:	0.110
MB MDC:	0.264
MB Numerical Performance Indicator:	0.76
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59153	LCSD59153
Count Date:	3/22/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.756	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	5.078	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.518	
Numerical Performance Indicator:	1.21	
Percent Recovery:	106.78%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	92525363011	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92525363011DUP	
Sample Result (pCi/L, g, F):	0.103	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.137	
Sample Duplicate Result (pCi/L, g, F):	0.053	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.101	
Are sample and/or duplicate results below RL?	See Below##	
Duplicate Numerical Performance Indicator:	0.675	92525363011
Duplicate RPD:	64.02%	92525363011DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

OK

Comments:

~~***Batch must be re-prepped due to unacceptable precision.~~ N/A LAM 3/22/21

CMM 3/22/21 3/22/21 CMM 3/22/21 LAM 3/22/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/10/2021
Worklist:	59153
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2112394
MB concentration:	0.043
M/B Counting Uncertainty:	0.110
MB MDC:	0.264
MB Numerical Performance Indicator:	0.76
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59153	LCSD59153
Count Date:	3/22/2021	3/22/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.506
Target Conc. (pCi/L, g, F):	4.756	4.749
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.078	4.939
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.518	0.508
Numerical Performance Indicator:	1.21	0.73
Percent Recovery:	106.78%	104.01%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS59153	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59153	
Sample Result (pCi/L, g, F):	5.078	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.518	
Sample Duplicate Result (pCi/L, g, F):	4.939	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.508	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.375	92525363011
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	2.62%	92525363011DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

CM 3/20/21

LAM 3/22/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 3/10/2021
Worklist: 59154
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2112395
MB concentration:	0.051
M/B Counting Uncertainty:	0.104
MB MDC:	0.242
MB Numerical Performance Indicator:	0.97
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59154	LCSD59154
Count Date:	3/22/2021	3/22/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039	24.039
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.505
Target Conc. (pCi/L, g, F):	4.759	4.756
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.732	4.926
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.549	0.502
Numerical Performance Indicator:	3.45	0.66
Percent Recovery:	120.45%	103.59%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS59154	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59154	
Sample Result (pCi/L, g, F):	5.732	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.549	
Sample Duplicate Result (pCi/L, g, F):	4.926	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.502	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	2.122	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	15.06%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

3/22/21
LAM 3/22/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 3/10/2021
Worklist: 59154
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2112395
MB concentration:	0.051
M/B Counting Uncertainty:	0.104
MB MDC:	0.242
MB Numerical Performance Indicator:	0.97
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS59154	LCSD59154
Count Date:	3/22/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.039	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.759	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	5.732	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.549	
Numerical Performance Indicator:	3.45	
Percent Recovery:	120.45%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	92525214001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	92525214001DUP	
Sample Result (pCi/L, g, F):	0.114	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.189	
Sample Duplicate Result (pCi/L, g, F):	0.134	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.113	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.180	92525214001
Duplicate RPD:	16.34%	92525214001DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 3/22/21

LAM 3/22/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: VAL
Date: 3/15/2021
Worklist: 59158
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2112539
MB concentration:	0.219
MB 2 Sigma CSU:	0.271
MB MDC:	0.570
MB Numerical Performance Indicator:	1.59
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59158	LCSD59158
Count Date:	3/19/2021	3/19/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.405	38.405
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.804	0.813
Target Conc. (pCi/L, g, F):	4.777	4.724
Uncertainty (Calculated):	0.234	0.231
Result (pCi/L, g, F):	3.857	3.041
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.900	0.755
Numerical Performance Indicator:	-1.94	-4.18
Percent Recovery:	80.76%	64.39%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS59158	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59158	
Sample Result (pCi/L, g, F):	3.857	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.900	
Sample Duplicate Result (pCi/L, g, F):	3.041	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.755	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.362	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	22.55%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

3/22/21

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/15/2021
Worklist:	59159
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2112540
MB concentration:	0.387
M/B 2 Sigma CSU:	0.316
MB MDC:	0.633
MB Numerical Performance Indicator:	2.40
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59159	LCSD59159
Count Date:	3/18/2021	3/18/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.419	38.419
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.810	0.801
Target Conc. (pCi/L, g, F):	4.741	4.794
Uncertainty (Calculated):	0.232	0.235
Result (pCi/L, g, F):	4.345	4.001
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.951	0.884
Numerical Performance Indicator:	-0.79	-1.70
Percent Recovery:	91.66%	83.47%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS59159	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59159	
Sample Result (pCi/L, g, F):	4.345	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.951	
Sample Duplicate Result (pCi/L, g, F):	4.001	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.884	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.519	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	9.34%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

3/19/2021

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/15/2021
Worklist:	59205
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2114136
MB concentration:	0.856
M/B 2 Sigma CSU:	0.495
MB MDC:	0.916
MB Numerical Performance Indicator:	3.39
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS59205	LCSD59205
Count Date:	3/19/2021	3/19/2021
Spike I.D.:	21-003	21-003
Decay Corrected Spike Concentration (pCi/mL):	38.407	38.407
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.819	0.806
Target Conc. (pCi/L, g, F):	4.689	4.764
Uncertainty (Calculated):	0.230	0.233
Result (pCi/L, g, F):	3.975	4.859
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.994	1.089
Numerical Performance Indicator:	-1.37	0.17
Percent Recovery:	84.78%	102.00%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS59205	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD59205	
Sample Result (pCi/L, g, F):	3.975	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.994	
Sample Duplicate Result (pCi/L, g, F):	4.859	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.089	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.175	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	18.44%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.

3/22/21

APPENDIX B

Field Sampling Reports

August 2020

August 2020 Daily Calibration Log

Project Plant Yates
Field Staff: Becky Steever/Jake Swanson

Instrument Calibration

Date: 8/26/20 Time: 1030

Parameter	Units	Standard	SmarTROLL SN 496336	SmarTROLL SN 685774
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	--	--
pH	S.U.	6.98	6.97	6.97
pH	S.U.	10.00	--	--
ORP	mV	217.0	213.0	213.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 511-5210
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Date: 8/27/20 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 463068	SmarTROLL SN 685774
DO	% saturation	100	100	100
Conductivity	us/cm	8000	80000	80000
pH	S.U.	4.00	--	--
pH	S.U.	6.98	6.97	6.98
pH	S.U.	10.00	--	--
ORP	mV	220.0	220.3	220.4

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 511-5210
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Date: 8/28/20 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 496336	SmarTROLL SN 685774
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	--	--
pH	S.U.	6.98	6.98	6.97
pH	S.U.	10.00	--	--
ORP	mV	224	223.3	220.2

Turbidity Standard	Units	LaMotte SN 1774-0212	LaMotte SN 1479-4011
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Notes:
DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts;
NTU - Nphelometric Turbidity Units; NC - Not calibrated

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	Former Gypsum Stack Landfill
Date:	8/26/2020
Sampler:	Jake Swanson
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
GWC-3R	8/26/2020	11:53:00	26.09	38.35	--
GWC-5R	8/26/2020	11:59:00	27.87	42.77	--
GWA-2	8/26/2020	12:04:00	34.8	52.13	--
GWC-6R	8/26/2020	12:09:00	33.69	51.87	--
GWC-1R	8/26/2020	12:17:00	21.58	36.41	--
GWC-4R	8/26/2020	12:23:00	15.34	30.2	--
GWC-2R	8/26/2020	12:29:00	27.64	44	--

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWA-2			**Date**	08/26/2020
Project Location	Gypsum Landfill		**Weather(°F)**				
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	42.1	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	36.19	**Total Depth (ft-bmp)**	52.13	**Water Column(ft)**	15.94	**Gallons in Well**	2.59
MP Elevation	805.62	**Pump Intake (ft-bmp)**	47	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:20	**Well Volumes Purged**	0.53	**Sample ID**	GWA-2(08/26/2020)	**Sampled by**	Jake Swanson
Purge Start	15:11	**Gallons Purged**	1.37	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:02						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
15:11:39	00:00	100	35.55	6.36	134.14	42.21	1.8	24	232.75
15:16:39	05:00	100	35.71	6.33	147.49	62.46	1.5	25.2	230.1
15:21:39	10:00	100	35.82	6.23	579.33	113.69	2.68	23.4	191.69
15:26:39	15:00	100	35.9	5.62	554.89	0	2.21	23.5	209.18
15:31:39	20:00	100	35.93	5.56	572.68	0	1.37	22.7	202.99
15:36:51	25:12	100	35.97	5.56	569.74	0.74	1.13	22.4	211.28
15:41:51	30:12	100	36.03	5.56	571.23	2.63	0.99	22.7	213.93
15:46:51	35:12	100	36.08	5.58	573	6.27	0.87	22.7	212.4
15:47:32	35:53	100	36.08	5.58	574.54	6.86	0.85	22.9	208.46
15:52:32	40:53	100	36.1	5.6	572.13	13.29	0.78	22.6	203.75
15:57:32	45:53	100	36.13	5.62	571.15	21.12	0.7	22.6	198.02
16:01:21	49:42	100	36.18	5.66	576.04	26.78	0.66	22.6	191.25
16:03:33	51:54	100	36.19	5.67	572.53	26.67	0.64	22.7	190.09

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
300.0-F	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time=NTU) 35.12= 0.68; 40.53=0.57; 45.53=0.73; 49.42=0.46; 51.54=0.61

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-1R			**Date**	08/27/2020
Project Location	Gypsum Landfill		**Weather(°F)**	90.9 degrees F and Partly Cloudy. The wind is blowing SE at 29.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	26.11	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	21.55	**Total Depth (ft-bmp)**	36.41	**Water Column(ft)**	14.86	**Gallons in Well**	2.41
MP Elevation	773.27	**Pump Intake (ft-bmp)**	31	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:10	**Well Volumes Purged**	0.44	**Sample ID**	GWC-1R	**Sampled by**	Jake Swanson
Purge Start	16:23	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	17:03						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
16:23:32	00:00	100	21.55	5.46	965.53	0.04	6.74	25.3	208.92
16:28:32	05:00	100	22.06	5.55	982.31	0	6.38	26.2	201.2
16:33:32	10:00	100	22.14	5.52	1.23	0	7.28	24.1	208.71
16:38:32	15:00	100	22.23	5.68	3.08	5.99	7.85	24.9	200.49
16:43:32	20:00	100	22.27	5.48	944.67	0	7.25	22.9	200.09
16:48:32	25:00	100	22.31	5.44	822.82	0	6.62	24.6	208.96
16:53:32	30:00	100	22.37	5.41	725.66	0	6.98	24.7	212.73
16:58:32	35:00	100	22.41	5.4	725.06	0	6.45	25.9	217.68
17:03:32	40:00	100	22.51	5.39	729.69	0	6.39	26	219.64

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
300.0-F	250 mL Plastic	1	None

Comments: LaMotte Turbidity turbidity readings (Time=NTU) 20:00=1.41; 25:00=1.37; 30:00=1.14; 35:00=2.14; 40:00=1.98

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-2R			**Date**	08/28/2020
Project Location	Gypsum Landfill		**Weather(°F)**	77.9 degrees F and Mostly Cloudy. There is no wind.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	33.7	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.71	**Total Depth (ft-bmp)**	44	**Water Column(ft)**	16.29	**Gallons in Well**	2.65
MP Elevation	769.76	**Pump Intake (ft-bmp)**	39	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:30	**Well Volumes Purged**	1.00	**Sample ID**	GWC-2R(08/28/2020)	**Sampled by**	Jake Swanson
Purge Start	08:45	**Gallons Purged**	2.64	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:25						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
08:45:44	00:00	100	27.71	5.92	712.97	62.12	5.44	24.5	178.31
08:50:44	05:00	100	27.75	5.79	676.42	9.64	3.97	24.5	164.26
08:55:44	10:00	100	27.73	5.58	639.37	10.45	3.26	24.6	172.55
09:00:44	15:00	100	27.76	5.62	533.89	11.35	2.89	24.4	178.94
09:05:44	20:00	100	27.78	5.7	486.25	13.1	2.57	24.1	179.37
09:10:44	25:00	100	27.79	5.59	622.2	8.07	2.64	23.8	179.61
09:15:44	30:00	100	27.8	5.45	562.2	7.81	2.69	23.7	178.92
09:20:44	35:00	100	27.81	5.45	247.8	4.06	2.7	23.8	179.32
09:25:44	40:00	100	27.81	5.46	126.15	1.95	2.76	23.8	180.7
09:30:44	45:00	100	27.81	5.46	107.16	12.12	2.79	23.8	186.06
09:35:44	50:00	100	27.81	5.45	85.47	3.51	2.92	23.7	184.34
09:40:44	55:00	100	27.81	5.48	0.26	6.29	2.89	23.9	177.81
09:45:44	00:00	100	27.81	5.39	622.31	7.09	2.91	23.6	174.1
09:50:44	05:00	100	27.81	5.5	175.15	18.9	3.05	23.6	167.27
09:55:44	10:00	100	27.81	5.49	609.57	6.71	3.87	24.2	150.72
10:00:44	15:00	100	27.81	5.65	601.21	3.03	4.28	24.3	140.48
10:05:44	20:00	100	27.81	5.47	625.35	4.16	2.86	24.1	148.42
10:10:44	25:00	100	27.8	5.47	627.85	6.14	2.82	24.1	150.88
10:15:44	30:00	100	27.8	5.47	622.11	2.74	2.79	24.3	159.54
10:20:44	35:00	100	27.78	5.5	623.14	2.45	2.76	24.3	136.23
10:25:44	40:00	100	27.78	5.45	626.28	2.82	2.7	24.6	153.15

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
300.0-F	250 mL Plastic	1	None

Comments: LaMotte confirmation reading below 5.0 NTU.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-3R			**Date**	08/28/2020
Project Location	Gypsum Landfill		**Weather(°F)**	81.0 degrees F and Cloudy. The wind is blowing S/SW at 12.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	28.05	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.14	**Total Depth (ft-bmp)**	38.35	**Water Column(ft)**	11.21	**Gallons in Well**	1.82
MP Elevation	775.25	**Pump Intake (ft-bmp)**	33	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:30	**Well Volumes Purged**	0.48	**Sample ID**	GWC-3R(08/28/2020)	**Sampled by**	Jake Swanson
Purge Start	11:52	**Gallons Purged**	0.87	**Replicate/ Code No.**	Dup-1	**Color**	Clear
Purge End	12:25						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
11:52:15	00:00	100	27.14	5.63	246.53	126.19	7.01	26.1	227.23
11:57:15	05:00	100	27.31	5.08	281.27	0.32	7.14	22.7	252.86
12:02:15	10:00	100	27.46	5.13	231.3	2.14	7.11	22.1	251.68
12:07:15	15:00	100	27.46	5.15	205.14	1.72	7.14	21.6	254.62
12:12:15	20:00	100	27.46	5.2	192.55	0.5	7.2	21.8	249.95
12:17:15	25:00	100	27.46	5.21	192.31	0.78	7.24	21.8	248.91
12:20:00	27:45	100	27.46	5.2	191.25	1.12	7.23	21.9	250.02
12:20:21	28:06	100	27.47	5.21	191.96	0.28	7.3	21.6	249.36
12:25:21	33:06	100	27.47	5.2	190.13	0.48	7.19	22	249.61

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
300.0-F	250 mL Plastic	1	None

Comments: LaMotte confirmation below 5.0 NTU

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-4R			**Date**	08/28/2020
Project Location	Gypsum Landfill		**Weather(°F)**	87.1 degrees F and Partly Cloudy. The wind is blowing W/SW at 20.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	19.9	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	15.4	**Total Depth (ft-bmp)**	30.2	**Water Column(ft)**	14.8	**Gallons in Well**	2.4
MP Elevation	757.48	**Pump Intake (ft-bmp)**	25	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:30	**Well Volumes Purged**		**Sample ID**	GWC-4R(08/28/2020)	**Sampled by**	Jake Swanson
Purge Start	14:38	**Gallons Purged**		**Replicate/ Code No.**		**Color**	Clear
Purge End	17:25						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:38:22	00:00	100	15.39	5.81	1254.07	0.08	2.52	24.3	171.28
14:43:22	05:00	100	15.46	5.74	1.91	366.81	7.41	25	211.59
14:48:22	10:00	100	15.51	5.63	1496.92	0	0.7	22.4	234.71
14:53:22	15:00	100	15.59	5.56	1528.91	0	0.91	23.7	206.12
14:58:22	20:00	100	15.72	5.57	1499.73	0	1.02	24.6	199.54
15:03:22	25:00	100	15.8	5.57	1483.72	0.33	0.73	26.6	197.99
15:08:22	30:00	100	15.8	5.56	1441.16	3.97	0.39	26.8	195
15:13:22	35:00	100	15.8	5.55	1412.21	10.3	0.32	26.2	195.09
15:18:22	40:00	100	15.8	5.55	1364.08	21.13	0.36	26.3	193.18
15:19:25	41:03	100	15.74	5.55	1353.91	20.39	0.37	26.2	193.55
15:20:21	41:59	100	15.68	5.55	1326.88	16.71	0.39	26.1	194.02
15:25:21	46:59	100	15.68	5.54	1268.29	28.34	0.42	25.7	196.83
15:30:21	51:59	100	15.68	5.53	1222.68	39.46	0.51	25.6	199.5
15:36:03	57:41	100	15.68	5.52	1175.54	46.67	0.6	25.4	202.73
15:41:03	02:41	100	15.68	5.51	1134.95	17.92	0.71	25.3	203.47
15:46:03	07:41	100	15.68	5.51	1109.61	26.75	0.8	25.2	204.97
15:51:03	12:41	100	15.68	5.51	1068.18	33	0.89	25.4	205.88
15:56:03	17:41	100	15.7	5.92	3.09	24.83	3.45	25.5	201.97
16:01:03	22:41	100	15.76	5.5	953.23	30.75	2.15	23.8	207.92
16:06:03	27:41	100	15.76	5.5	909.12	39.75	1.89	24	208.94
16:11:03	32:41	100	15.76	5.5	860.13	55.68	2.03	24.3	209.35
16:16:03	37:41	100	15.76	5.5	818.76	71.95	2.04	24	210.3
16:21:03	42:41	100	15.76	5.51	772.92	127.41	2.1	24	208.92
16:26:03	47:41	100	15.77	5.5	750.94	146.87	2.25	23.8	207.15
16:31:03	52:41	100	15.77	5.5	744.74	162.19	2.36	23.2	209.43
16:36:03	57:41	100	15.77	5.5	687.13	176.68	2.39	23.5	211.56
16:41:03	02:41	100	15.77	5.51	467.21	365.3	7.52	24.2	212.68
16:46:03	07:41	100	15.77	5.5	618.94	1.24	2.99	23.9	213.05
16:51:03	12:41	100	15.77	5.49	610.47	0	2.92	23.4	213.11
16:56:03	17:41	100	15.77	5.49	578.38	0	2.97	23.5	214.74
17:01:03	22:41	100	15.77	5.48	561.84	0.56	3.02	23.7	214.43
17:06:03	27:41	100	15.78	5.47	541.11	4.77	3.02	23.4	215.64
17:10:46	32:24	100	15.8	5.24	500.49	0	5.85	24.7	242.75
17:15:46	37:24	100	15.82	5.21	517.14	0	3.53	24.2	228.88
17:20:46	42:24	100	15.82	5.28	509.88	0	3.35	23.9	222.78
17:25:46	47:24	100	15.82	5.38	493.13	0	3.29	23.6	216.45

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
300.0-F	250 mL Plastic	1	None

Comments: LaMotte turbidity reading below 5.0 NTU.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-5R			**Date**	08/27/2020
Project Location	Gypsum Landfill		**Weather(°F)**	32.0 degrees F and Fog/Mist. There is no wind.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	32.47	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.87	**Total Depth (ft-bmp)**	42.77	**Water Column(ft)**	14.9	**Gallons in Well**	2.42
MP Elevation	782.45	**Pump Intake (ft-bmp)**	37	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:15	**Well Volumes Purged**	1.31	**Sample ID**	GWC-5R(08/27/2020)	**Sampled by**	Jake Swanson
Purge Start	09:07	**Gallons Purged**	3.17	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:10						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
09:07:10	00:00	100	27.87	6.29	1874.12	0	8.13	25	223.9
09:12:10	05:00	100	28.49	6.26	1918.98	27.62	7.68	24.9	223.16
09:17:10	10:00	100	28.61	5.32	2064.41	20.5	8.14	22	223.55
09:22:10	15:00	100	28.61	5.32	2087.21	6.89	7.98	22.3	222.25
09:27:10	20:00	100	28.61	5.22	2090.68	12.15	7.88	22.4	223.26
09:32:10	25:00	100	28.62	5.06	2098.3	2.08	7.94	22.1	223.73
09:37:10	30:00	100	28.62	5.11	2068.26	4.2	7.89	22.2	222.93
09:42:10	35:00	100	28.62	5.13	2047.54	9.41	7.84	22	218.86
09:47:10	40:00	100	28.64	5.15	2035.29	6.2	7.9	22.3	205.62
09:52:10	45:00	100	28.62	5.11	2018.05	1.7	7.83	22.6	194.21
09:57:10	50:00	100	28.61	5.09	2000.73	2.8	7.83	22.8	199.7
10:02:10	55:00	100	28.56	5.22	2001.04	3.63	7.84	23.1	193.95
10:07:10	00:00	100	28.54	5.66	1983.51	1.92	7.82	23.5	197.57
10:12:10	05:00	100	28.53	5.41	1984.01	2.09	7.78	24.1	198.16
10:17:10	10:00	100	28.51	5.36	1990.24	3.87	7.69	24.6	193.14
10:22:10	15:00	100	28.44	5.27	1974.08	5.59	7.72	24.7	194.49
10:27:10	20:00	100	28.41	5.78	1981.16	6.64	7.69	25	191.69
10:32:10	25:00	100	28.33	5.35	1971.92	16.11	7.57	25.6	196.06
10:37:10	30:00	100	28.3	5.74	1974.31	17.58	7.56	25.9	198.85
10:42:10	35:00	100	28.3	5.75	1944.89	23.44	7.44	26.9	196.22
10:47:10	40:00	100	28.28	5.35	1944.88	29.57	7.43	27.5	190
10:52:10	45:00	100	28.23	5.32	1937.67	44.41	7.33	28.1	190.04
10:57:10	50:00	100	28.21	5.17	1946.95	36.53	6.74	30.8	194.45
11:02:10	55:00	100	28.2	5.19	1951.06	50.42	6.68	31.3	193.5
11:07:10	00:00	100	28.2	5.17	1952.21	55.99	6.63	31.6	195.1

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
300.0-F	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time=NTU) 1:25:00=2.08; 1:30:00=3.02; 1:35:00=3.75; 1:40:00=3.54; 1:45:00=4.13; 1:50:00=3.17; 1:55:00=4.33

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-6R			**Date**	08/27/2020
Project Location	Gypsum Landfill		**Weather(°F)**	91.2 degrees F and Mostly Cloudy. The wind is blowing S at 29.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	41.6	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	33.62	**Total Depth (ft-bmp)**	51.87	**Water Column(ft)**	18.25	**Gallons in Well**	2.97
MP Elevation	788.98	**Pump Intake (ft-bmp)**	46	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:30	**Well Volumes Purged**	0.47	**Sample ID**	GWC-6R(08/27/2020)	**Sampled by**	Jake Swanson
Purge Start	14:31	**Gallons Purged**	1.38	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:23						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:31:44	00:00	100	33.62	6.8	1003.97	0.13	7.47	23.8	215.13
14:36:44	05:00	100	33.87	6.54	885.47	0.01	5.46	21.9	217.43
14:41:44	10:00	100	34.15	6.36	788.26	0	5.21	21	227.89
14:46:44	15:00	100	34.15	6.09	1137.79	0	5.25	20.8	226.05
14:48:36	16:52	100	34.12	6.07	0.82	0	7.68	22.2	222.88
14:51:49	20:05	100	34.14	6.21	1.69	0	8.34	24.3	220.15
15:03:02	31:18	100	34.19	6.02	108.34	0	5.93	22.5	239.59
15:08:02	36:18	100	34.21	5.78	1172.39	0	6.21	19.8	228.01
15:13:02	41:18	100	34.25	5.77	1179.76	0	5.33	20.1	232.18
15:18:02	46:18	100	34.25	5.77	1176.65	0	5.26	20.2	235.01
15:23:02	51:18	100	34.25	5.77	1181.5	0	5.26	20	236.81
15:24:02	52:18	100	34.25	5.77	1184.38	0	5.29	20	236.99

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
300.0-F	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time=NTU) 5:00=0.98; 10:00=1.87; 15:00=1.23 ;20:05=1.03; 31:18=0.76; 36:18=3.47; 41:18=2.03; 46:18=0.52; 51:18=0.73

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

September 2020

September 2020 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Jake Swanson/ Michael Guy/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 9/22/20 Time: 1030

Parameter	Units	Standard	SmarTROLL SN 611846	SmarTROLL SN 518534	SmarTROLL SN 513586	SmarTROLL SN 689918
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	--	--	--	--
pH	S.U.	6.98	7.02	7.02	7.02	7.02
pH	S.U.	10.00	--	--	--	--
ORP	mV	232.0	232.1	233.2	233.1	232.8

Turbidity Standard	Units	LaMotte SN 5961-3815	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

: 9/23/20 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 611846	SmarTROLL SN 518534	SmarTROLL SN 513586	SmarTROLL SN 689918
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	--	--	--	--
pH	S.U.	6.98	7.02	7.02	7.02	7.02
pH	S.U.	10.00	--	--	--	--
ORP	mV	233.0	233.2	229.9	234.2	232.80

Turbidity Standard	Units	LaMotte SN 5961-3815	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

September 2020 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Jake Swanson/ Michael Guy/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 9/24/20 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 611846	SmarTROLL SN 518534	SmarTROLL SN 513586	SmarTROLL SN 689918
DO	% saturation	100	100	99.9	99.9	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	--	--	--	--
pH	S.U.	7.00	7.02	7.00	7.00	7.00
pH	S.U.	10.00	--	--	--	--
ORP	mV	229	232.1	228.3	230.5	228.4

Turbidity Standard	Units	LaMotte SN 5961-3815	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

Date: 9/25/20 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 611846	SmarTROLL SN 518534	SmarTROLL SN 513586	SmarTROLL SN 689918
DO	% saturation	100	100	NA	100	NA
Conductivity	us/cm	8000	8000	NA	8000	NA
pH	S.U.	4.00	--	NA	--	NA
pH	S.U.	7.00	7.00	NA	7.00	NA
pH	S.U.	10.00	--	NA	--	NA
ORP	mV	228	226.0	NA	229.1	NA

Turbidity Standard	Units	LaMotte SN 5961-3815	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	NA	0.00	NA
10.0	NTU	10.00	NA	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	Gypsum Landfill
Date:	9/21/2020
Sampler:	Katie Pupkiewicz
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
GWC-3R	9/21/2020	10:14:00	27.04	38.35	--
GWC-5R	9/21/2020	10:18:00	28.25	42.77	--
GWA-2	9/21/2020	10:24:00	34.98	52.13	--
GWC-6R	9/21/2020	10:28:00	34.04	51.87	--
GWC-1R	9/21/2020	10:30:00	21.91	36.41	Ants present near well
GWC-4R	9/21/2020	10:33:00	15.56	30.2	--
GWC-2R	9/21/2020	10:37:00	27.96	44	--

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	GWA-2			**Date**	09/22/2020
Project Location	Gypsum Landfill		**Weather(°F)**	55.8 degrees F and Clear. The wind is blowing E at 25.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	42.1	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	34.95	**Total Depth (ft-bmp)**	52.13	**Water Column(ft)**	17.18	**Gallons in Well**	2.79
MP Elevation	805.62	**Pump Intake (ft-bmp)**	47.1	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:00	**Well Volumes Purged**	0.84	**Sample ID**	GWA-2	**Sampled by**	Peter Argyakis
Purge Start	10:02	**Gallons Purged**	2.34	**Replicate/ Code No.**	FB(092220)	**Color**	Clear

Purge End

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:02:06	00:00	250	34.95	5.71	120.77	0	3.21	17.8	198.9
10:07:06	05:00	250	35.4	5.68	240.61	0.4	1.99	17.7	192.29
10:12:06	10:00	250	35.93	5.64	148.37	0.33	0.85	17.6	178.34
10:17:06	15:00	150	36.5	5.62	68.75	0.39	1.22	17.4	181.9
10:22:06	20:00	150	36.56	5.66	466.83	0.32	1.46	17.6	136.76
10:27:06	25:00	150	36.58	5.62	465.16	0	1.51	17.7	127.98
10:32:06	30:00	150	36.58	5.72	466.23	0	1.4	17.7	120.57
10:36:02	33:56	150	36.58	5.73	468.81	0	1.23	17.9	114.33
10:41:02	38:56	150	36.58	5.76	469.66	0	0.84	17.9	108.48
10:46:02	43:56	150	36.58	5.76	469.74	0	0.73	17.8	105.03
10:51:02	48:56	150	36.58	5.78	469.55	0	0.67	17.8	102.57

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anions Suite	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments: Turbidity; 05:00 - 1.08, 10:00 - 0.70, 15:00 - 0.25, 20:00 - 0.22, 25:00 - 0.19, 30:00 - 0.20, 33:56 - 0.18, 38:56 - 0.13, 43:56 - 0.11, 48:56 - 0.11

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	GWC-1R			**Date**	09/22/2020
Project Location	Gypsum Landfill		**Weather(°F)**	68.9 degrees F and Clear. The wind is blowing NE at 20.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	26.11	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	22.38	**Total Depth (ft-bmp)**	36.41	**Water Column(ft)**	14.03	**Gallons in Well**	2.28
MP Elevation	773.27	**Pump Intake (ft-bmp)**	31	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:20	**Well Volumes Purged**	1.25	**Sample ID**	GWC-1R	**Sampled by**	Peter Argyakis
Purge Start	12:01	**Gallons Purged**	2.85	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:19						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:01:41	00:00	150	22.38	6.15	0.06	0.75	8.27	21.7	9.68
12:06:41	05:00	150	22.4	6.1	548.22	0	7.84	19.3	74.58
12:11:41	10:00	150	22.4	5.8	586.8	0	7.65	19.2	100.13
12:16:41	15:00	150	22.4	5.4	672.17	0.03	7.01	19.2	139.38
12:21:41	20:00	150	22.4	5.35	743.84	0.1	6.55	21.2	158.36
12:26:41	25:00	150	22.4	5.32	763.49	0.06	6.45	22.8	171.57
12:31:41	30:00	150	22.4	5.31	770.32	0.09	6.29	23.6	181.31
12:36:41	35:00	150	22.4	5.3	808.32	0.21	6.29	23.8	189.43
12:41:41	40:00	150	22.4	5.34	867.13	0.23	6.06	23.3	198.68
12:46:41	45:00	150	22.4	5.29	877.14	0.27	6.02	23.6	205.22
12:51:41	50:00	150	22.4	5.27	905.44	0.33	6.07	23.8	210.85
12:56:41	55:00	150	22.4	5.27	923.64	0.44	6.05	23.6	215.9
13:01:41	00:00	150	22.4	5.26	936.85	0.57	6.06	23.4	220.76
13:06:41	05:00	150	22.4	5.26	950.84	0.67	5.99	23.4	224.66
13:11:41	10:00	150	22.4	5.25	962.98	1.25	5.98	23.7	228.34

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments: LaMotte turbidity readings (time-NTU) 00:0- 0.39; 05:00 - 0.3; 10:00 - 0.29, 15:00 - 0.44; 20:00 - 0.13; 25:00 - 0.37; 30:00 - 0.03; 35:00 - 0.14; 40:00 - 0.28; 45:00 - 0.27; 50:00 - 0.22; 55:00 - 0.31; 60:00 - 0.40; 65:00 - 0.15; 70:00 - 0.18

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-2R			**Date**	09/22/2020
Project Location	Gypsum Landfill		**Weather(°F)**	64.8 degrees F and Clear. The wind is blowing E/SE at 29.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	33.7	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.95	**Total Depth (ft-bmp)**	44	**Water Column(ft)**	16.05	**Gallons in Well**	2.61
MP Elevation	769.76	**Pump Intake (ft-bmp)**	39	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:25	**Well Volumes Purged**	0.30	**Sample ID**	GWC-2R	**Sampled by**	Jake Swanson
Purge Start	12:52	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:12						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:52:35	00:00	150	27.95	5.76	700.6	1.38	5.3	19.7	216.09
12:57:35	05:00	150	28.13	5.55	640.75	1.49	4.62	19.2	214.56
13:02:35	10:00	150	28.14	5.4	616.71	1.23	4.41	18.9	214.78
13:07:35	15:00	150	28.14	5.36	615.07	1.29	4.42	18.6	222.67
13:12:35	20:00	150	28.15	5.34	616.11	1.26	4.41	18.7	219.2

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
300.0-F	250 mL Plastic	1	None

Comments: LaMotte turbidity reading below 5.0 NTU at time of sampling

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	GWC-3R			**Date**	09/22/2020
Project Location	Gypsum Landfill		**Weather(°F)**	68.9 degrees F and Clear. The wind is blowing NE at 12.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	28.05	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.4	**Total Depth (ft-bmp)**	38.35	**Water Column(ft)**	10.95	**Gallons in Well**	1.78
MP Elevation	775.25	**Pump Intake (ft-bmp)**	33	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:40	**Well Volumes Purged**	1.67	**Sample ID**	GWC-3R	**Sampled by**	Peter Argyakis
Purge Start	14:18	**Gallons Purged**	2.97	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:20						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:18:08	00:00	150	27.83	5.17	198.39	2.25	7.18	22.8	226.43
14:23:08	05:00	150	28.16	5.02	187.11	2.69	6.92	22.3	241.55
14:28:08	10:00	150	28.18	5.01	183.08	4.99	6.75	22.6	249.35
14:33:08	15:00	150	28.33	4.99	151	6.27	6.63	23.3	257.07
14:38:08	20:00	150	28.42	5	153.22	5.33	6.68	23.2	260.39
14:43:08	25:00	150	28.42	5	151.23	6.51	6.7	23.1	264.68
14:48:08	30:00	150	28.42	5	136.32	6.09	6.9	22.5	268.06
14:53:08	35:00	150	28.42	5.03	166.4	2.78	6.94	22.2	268.74
14:58:08	40:00	150	28.42	5.04	135.54	2.65	6.79	23.1	270.85
15:03:08	45:00	150	28.42	5.1	132.7	2.66	6.66	24.1	267.8
15:08:08	50:00	150	28.42	5.09	129.17	3.99	7.03	22.2	267.18
15:13:08	55:00	150	28.42	5.07	127.47	2.15	6.82	22.9	269.76
15:18:08	00:00	150	28.42	5.03	159.58	1.33	6.98	22.2	273.14
15:23:08	05:00	150	28.42	5.06	127.86	1.17	7.01	22	273.26
15:28:08	10:00	150	28.42	5.08	125.55	1.97	7	22.2	274.37
15:33:08	15:00	150	28.42	5.11	125.61	1.45	6.97	22.2	272.22

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3

Comments: LaMotte turbidity readings (time, NTU): 00:00 - 2.44, 05:00 - 2.10, 10:00 - 4.80, 15:00 - 6.02, 20:00 - 5.51, 25:00 - 5.54, 30:00 - 5.23, 35:00 - 4.20, 40:00 - 3.76, 45:00 - 4.05, 50:00 - 4.19, 55:00 - 1.83, 60:00 - 1.17, 65:00 - 0.84, 70:00 - 1.42, 75:00 - 1.27

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-4R			**Date**	09/22/2020
Project Location	Gypsum Landfill		**Weather(°F)**	69.6 degrees F and Clear. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	19.9	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	15.54	**Total Depth (ft-bmp)**	30.2	**Water Column(ft)**	14.66	**Gallons in Well**	2.38
MP Elevation	757.48	**Pump Intake (ft-bmp)**	25	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:40	**Well Volumes Purged**	2.04	**Sample ID**	GWC-4R	**Sampled by**	Jake Swanson
Purge Start	14:25	**Gallons Purged**	4.85	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:30						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:25:56	00:00	150	15.54	5.55	1099.71	3.22	1.99	22.1	219.28
14:30:56	05:00	150	15.89	5.54	1145.4	2.07	0.74	23.7	192.27
14:33:19	07:23	150	15.91	5.53	1195.94	2.46	0.44	23.4	185.86
14:38:19	12:23	150	15.92	5.53	1265.07	3.14	0.22	23.4	178.87
14:43:19	17:23	150	15.92	5.51	1280.54	2.64	0.16	23.3	180.97
14:48:19	22:23	150	15.93	5.5	1257.61	5.71	0.21	23	186.51
14:53:19	27:23	150	15.93	5.49	1212.65	5.85	0.28	21.5	188.55
14:58:19	32:23	150	15.93	5.48	1147.98	6.09	0.39	21.8	189.14
15:03:19	37:23	150	15.93	5.45	1098.64	5.74	0.5	22.2	190.97
15:08:19	42:23	150	15.93	5.42	1022.47	6.98	0.62	22.1	194.09
15:13:19	47:23	150	15.93	5.41	971.59	7.07	0.79	21.8	197.29
15:18:19	52:23	150	15.93	5.41	899.99	9.99	0.94	21.2	199.63
15:23:19	57:23	150	15.93	5.4	849.65	4.82	1.52	20.7	204.28
15:28:19	02:23	150	15.93	5.41	805.8	6.39	1.85	20.9	204.75
15:33:19	07:23	150	15.93	5.41	760.88	8.14	1.91	20.8	205.86
15:38:19	12:23	150	15.93	5.43	711.01	9.59	2.16	20.5	204.58
15:43:19	17:23	150	15.94	5.44	664.49	11.74	2.35	20.6	207.61
15:48:19	22:23	150	15.94	5.43	616.45	13.83	2.47	20.5	214.81
15:53:19	27:23	150	15.94	5.44	598.61	17.12	2.69	20.1	214.13
15:58:19	32:23	150	15.94	5.45	548.27	21.27	2.82	20.1	213.06
16:03:19	37:23	150	15.94	5.51	533.47	1.49	3.88	20.1	217.53
16:08:19	42:23	150	15.95	5.4	503.77	1.4	3.8	19.6	230.05
16:13:19	47:23	150	15.95	5.39	486.42	1.38	3.48	19.3	237.12
16:18:19	52:23	150	15.96	5.4	474.56	1.32	3.55	19.3	240.92
16:23:19	57:23	150	15.96	5.42	458.49	1.45	3.6	19.2	243.24
16:28:19	02:23	150	15.96	5.43	456.17	1.58	3.57	19.1	242.05

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
App 1,2,3,4,Mercury	250 mL Plastic	1	HNO3
Anions	250 mL Plastic	1	None

Comments: LaMotte turbidity reading at time of sampling below 5.0 NTU

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____

Condition of Well: _____

Well Completion: NA

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-5R			**Date**	09/23/2020
Project Location	Gypsum Landfill		**Weather(°F)**	63.3 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	32.47	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	29.23	**Total Depth (ft-bmp)**	42.77	**Water Column(ft)**	13.54	**Gallons in Well**	2.2
MP Elevation	782.45	**Pump Intake (ft-bmp)**	37	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:05	**Well Volumes Purged**	0.60	**Sample ID**	GWC-5R	**Sampled by**	Jake Swanson
Purge Start	09:31	**Gallons Purged**	1.32	**Replicate/ Code No.**	Dup - 01	**Color**	Clear
Purge End	09:56						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
09:31:19	00:00	200	29.21	5.28	2132.86	2.48	8.41	18.6	240.24
09:36:19	05:00	200	29.6	5	2194.71	1.4	7.98	18.5	235.68
09:41:19	10:00	200	29.69	4.99	2205.22	1.36	7.9	18.4	234.65
09:46:19	15:00	200	29.76	5.03	2073.26	1.4	7.85	18.5	232.37
09:51:19	20:00	200	29.9	5.04	2036.39	1.43	7.85	18.6	231.51
09:56:19	25:00	200	29.94	5.04	2010.41	1.45	7.92	18.5	230.26

Constituent Sampled	Container	Number	Preservative
Mercury,Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

Comments: LaMotte turbidity reading at time of sampling below 5.0 NTU

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-6R			**Date**	09/23/2020
Project Location	Gypsum Landfill		**Weather(°F)**	70.5 degrees F and Clear. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	41.6	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	34.01	**Total Depth (ft-bmp)**	51.87	**Water Column(ft)**	17.86	**Gallons in Well**	2.9
MP Elevation	788.98	**Pump Intake (ft-bmp)**	46	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:10	**Well Volumes Purged**	0.27	**Sample ID**	GWC-6R	**Sampled by**	Jake Swanson
Purge Start	10:52	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:07						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:52:03	00:00	200	34.01	6.41	1472.4	1.62	8.42	20.4	214.6
10:57:03	05:00	200	34.75	5.87	1334.49	1.52	6.16	18.4	219.13
11:02:03	10:00	200	34.76	5.81	1323.37	1.51	5.32	18.1	220.66
11:07:03	15:00	200	34.76	5.81	1328.67	1.47	5.21	18	217.46

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

Comments: LaMotte turbidity reading below 5.0 NTU at time of sampling

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Gauging Well Inspection

Project Location:	Gypsum Landfill				
Permit Number:					
Well ID:	GWC-1R				
Person Gauging:	Katie Pupkiewicz				
Date:	9/21/2020				
Time	10:30:00				
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection

Project Location:	Gypsum Landfill				
Permit Number:					
Well ID:	GWA-2				
Person Gauging:	Katie Pupkiewicz				
Date:	9/21/2020				
Time	10:24:00				
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWC-2R
Person Gauging:	Katie Pupkiewicz
Date:	9/21/2020
Time	10:37:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection

Project Location:	Gypsum Landfill				
Permit Number:					
Well ID:	GWC-3R				
Person Gauging:	Katie Pupkiewicz				
Date:	9/21/2020				
Time	10:14:00				
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection

Project Location:	Gypsum Landfill				
Permit Number:					
Well ID:	GWC-4R				
Person Gauging:	Katie Pupkiewicz				
Date:	9/21/2020				
Time	10:33:00				
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection

Project Location:	Gypsum Landfill				
Permit Number:					
Well ID:	GWC-5R				
Person Gauging:	Katie Pupkiewicz				
Date:	9/21/2020				
Time	10:18:00				
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☐	☑	☐
	b	Is the well pad sloped away from the protective casing?	☐	☑	☐
	c	Is the well pad in complete contact with the protective casing?	☐	☑	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☐	☑	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☐	☑	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection

Project Location:	Gypsum Landfill				
Permit Number:					
Well ID:	GWC-6R				
Person Gauging:	Katie Pupkiewicz				
Date:	9/21/2020				
Time	10:28:00				
			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

March 2021

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	Gypsum Landfill
Date:	3/1/2021
Sampler:	Jake Swanson
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
GWC-3R	3/1/2021	09:57:00	26.64	38.35	--
GWC-5R	3/1/2021	10:02:00	27.32	42.77	--
GWA-2	3/1/2021	10:07:00	35.74	52.13	--
GWC-6R	3/1/2021	10:14:00	33.67	51.87	--
GWC-1R	3/1/2021	10:20:00	24.39	36.41	--
GWC-4R	3/1/2021	10:32:00	14.66	30.20	--

March 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

Instrument Calibration

Date: 3/01/21 Time: 11:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
pH	S.U.	4.00	4.00	4.00	4.00	NA
pH	S.U.	7.00	7.00	7.00	7.00	NA
pH	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	235.4	235.4	235.4	235.4	NA

.

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

March 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

Instrument Calibration

Date: 3/02/21 Time: 10:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
pH	S.U.	4.00	4.00	4.00	4.00	NA
pH	S.U.	7.00	7.00	7.00	7.00	NA
pH	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

March 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

Instrument Calibration

Date: 3/03/21 Time: 07:45

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

Date: 3/03/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

March 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

Instrument Calibration

Date: 3/04/21 Time: 08:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

Date: 3/04/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
pH	S.U.	4.00	4.00	4.00	4.00	NA
pH	S.U.	7.00	7.00	7.00	7.00	NA
pH	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWA-2			**Date**	03/02/2021
Project Location	Gypsum Landfill		**Weather(°F)**	46.8 degrees F and Cloudy. The wind is blowing E at 11.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	42.1	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	35.72	**Total Depth (ft-bmp)**	52.13	**Water Column(ft)**	16.41	**Gallons in Well**	2.67
MP Elevation	805.62	**Pump Intake (ft-bmp)**	47	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:10	**Well Volumes Purged**	0.20	**Sample ID**	GWA-2	**Sampled by**	Jake Swanson
Purge Start	14:36	**Gallons Purged**	0.53	**Replicate/ Code No.**	FB-01	**Color**	Clear
Purge End	15:00						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:36:07	00:00	100	35.72	6.18	465.18	0	9.21	13.8	232.61
14:41:07	05:00	100	36.38	5.61	538.53	1.06	3.04	15.6	169.88
14:46:07	10:00	100	35.38	5.52	540.91	0.07	1.57	14.8	185.08
14:51:07	15:00	100	36.39	5.46	542.97	0	1.62	14.2	196.96
14:56:07	20:00	100	36.39	5.42	544.67	0	1.13	13.9	206.54

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (elapsed time=NTUU): : 10:00 = 0.32, 15:00 = 0.21, 20:00 = 0.11

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-1R			**Date**	03/01/2021
Project Location	Gypsum Landfill		**Weather(°F)**	61.9 degrees F and Cloudy. The wind is blowing W at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	26.11	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	20.43	**Total Depth (ft-bmp)**	36.41	**Water Column(ft)**	15.98	**Gallons in Well**	2.6
MP Elevation	773.27	**Pump Intake (ft-bmp)**	31	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:10	**Well Volumes Purged**	0.28	**Sample ID**	GWC-1R(03012021)	**Sampled by**	Jake Swanson
Purge Start	14:26	**Gallons Purged**	0.73	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:02						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:26:53	00:00	100	20.43	5.32	1010.43	4.04	7.45	18.2	227.97
14:31:53	05:00	75	21.09	5.32	712.45	0	8.8	18.6	230.54
14:36:53	10:00	75	21.03	5.31	281.99	0	8.73	18.7	224.12
14:41:53	15:00	75	20.99	5.32	249.93	0	8.69	18.9	221.71
14:46:53	20:00	75	20.99	5.28	275.55	0	8.65	18.7	233.25
14:51:53	25:00	75	21	5.26	1064.26	0	7.28	18.1	255.04
14:56:53	30:00	75	21	5.25	1078.94	0	6.92	18	266.45
15:01:53	35:00	75	21.01	5.25	1102.34	0	6.91	18.2	270.2

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (elapsed time= NTU): 25:00 = 0.18, 30:00 = 0.11, 35:00 = 0.19

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-2R			**Date**	03/01/2021
Project Location	Gypsum Landfill		**Weather(°F)**	61.2 degrees F and Cloudy. The wind is blowing W/SW at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	33.7	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.4	**Total Depth (ft-bmp)**	44	**Water Column(ft)**	16.6	**Gallons in Well**	2.7
MP Elevation	769.76	**Pump Intake (ft-bmp)**	38	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:40	**Well Volumes Purged**	0.20	**Sample ID**	GWC-2R(03012021)	**Sampled by**	Jake Swanson
Purge Start	13:08	**Gallons Purged**	0.53	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:30						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
13:08:10	00:00	100	27.4	5.4	658.3	0	5.87	17.6	206.66
13:13:10	05:00	100	27.55	5.31	669.92	0	3.92	17.6	235.3
13:18:10	10:00	100	27.55	5.22	756.95	0	4.39	17.5	248.53
13:23:10	15:00	100	27.55	5.18	772.2	0	4.64	17.5	261.47
13:28:10	20:00	100	27.55	5.17	773.99	0	4.63	17.5	269.67

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	HNO3

Comments: LaMotte turbidity reading (elapsed time = NTU): 5:00 = 0.44, 10:00 = 0.40, 15:00 = 0.32, 20:00 = 0.30

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-3R			**Date**	03/02/2021
Project Location	Gypsum Landfill		**Weather(°F)**	45.9 degrees F and Cloudy. The wind is blowing E/NE at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	28.05	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	26.63	**Total Depth (ft-bmp)**	38.35	**Water Column(ft)**	11.72	**Gallons in Well**	1.9
MP Elevation	775.25	**Pump Intake (ft-bmp)**	33	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:25	**Well Volumes Purged**	0.35	**Sample ID**	GWC-3R	**Sampled by**	Jake Swanson
Purge Start	10:53	**Gallons Purged**	0.67	**Replicate/ Code No.**	Dup-01	**Color**	Clear
Purge End	23:10						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:53:32	00:00	100	26.63	5.17	372.44	9.74	8.06	16.5	225.09
10:53:44	00:12	100	26.63	5.17	373.46	3.86	8.03	16.4	227.4
10:58:44	05:12	100	26.9	4.82	348.8	4.04	7.29	16.3	222.14
11:03:44	10:12	100	26.91	4.83	314.68	4.78	7.27	16	222.53
11:08:44	15:12	100	26.91	4.86	296.62	11.89	7.37	15.7	218.92
11:13:44	20:12	100	26.91	4.84	298.64	3.7	7.32	15.7	222.75
11:18:44	25:12	100	26.91	4.82	295.2	7.16	7.35	15.6	226.41

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	HNO3
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (elapsed time=NTU): 15:00 = 3.73 , 20:00 = 3.47, 25:00 = 3.42

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-4R			**Date**	03/01/2021
Project Location	Gypsum Landfill		**Weather(°F)**	Cloudy 70			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	19.9	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	14.66	**Total Depth (ft-bmp)**	30.2	**Water Column(ft)**	15.54	**Gallons in Well**	2.53
MP Elevation	757.48	**Pump Intake (ft-bmp)**	25	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:15	**Well Volumes Purged**	0.17	**Sample ID**	GWC-4R	**Sampled by**	Jake Swanson
Purge Start	11:45	**Gallons Purged**	0.43	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:05						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
11:45:04	00:00	100	14.66	5.62	1251.39	0	5.03	17.2	239.48
11:50:04	05:00	75	15.01	5.61	1239.38	0	2.8	17.7	229.26
11:55:04	10:00	75	14.95	5.61	1237.28	0	2.79	17.5	223.9
12:00:04	15:00	75	14.96	5.62	1232.27	0	2.62	17.3	223.19
12:05:04	20:00	75	14.96	5.62	1234.2	0	2.56	17.1	220.69

Constituent Sampled	Container	Number	Preservative
Dissolved Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (elapsed time, NTU): 5 min 0.47, 10 min 0.40, 15 min 0.41, 20 minutes 0.33

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-5R			**Date**	03/02/2021
Project Location	Gypsum Landfill		**Weather(°F)**	46.6 degrees F and Light Rain. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	32.47	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.37	**Total Depth (ft-bmp)**	42.77	**Water Column(ft)**	15.4	**Gallons in Well**	2.5
MP Elevation	782.45	**Pump Intake (ft-bmp)**	37	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:20	**Well Volumes Purged**	0.19	**Sample ID**	GWC-5R	**Sampled by**	Jake Swanson
Purge Start	12:54	**Gallons Purged**	0.48	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:15						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:54:05	00:00	100	27.37	4.75	1928.22	15.25	7.97	16	246.71
12:59:05	05:00	100	27.84	4.65	1942.63	1.49	8	15.7	253.09
13:04:05	10:00	100	27.84	4.64	1935	3.11	8.01	15.6	254.51
13:09:05	15:00	100	27.88	4.64	1915.8	3.45	7.89	15	257.63
13:12:05	18:00	100	27.88	4.63	1912.61	3.87	7.97	14	259.17

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (elapsed time=NTU): 5:00 = 3.12, 10:00 = 3.34, 15:00 = 3.01

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	GWC-6R			**Date**	03/03/2021
Project Location	Gypsum Landfill		**Weather(°F)**	43.2 degrees F and Cloudy. The wind is blowing N at 8.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	41.6	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	33.6	**Total Depth (ft-bmp)**	51.87	**Water Column(ft)**	18.27	**Gallons in Well**	2.97
MP Elevation	788.98	**Pump Intake (ft-bmp)**	46	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:15	**Well Volumes Purged**	0.27	**Sample ID**	GWC-6R	**Sampled by**	Jake Swanson
Purge Start	08:36	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:06						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
08:36:35	00:00	100	33.6	8.42	1304.59	0	9.49	12.6	235.15
08:41:35	05:00	100	33.8	6.43	1287.87	0	7.6	13.1	249.08
08:46:35	10:00	100	33.81	6.02	1292.95	0	6.48	12.8	244.03
08:51:35	15:00	100	33.82	5.9	1298.64	0	5.89	12.7	236.05
08:56:35	20:00	100	33.83	5.81	1302.04	0	5.63	12.6	235.88
09:01:35	25:00	100	33.83	5.79	1303.59	0	5.56	12.4	236.76
09:06:35	30:00	100	33.83	5.78	1303.52	0	5.58	12.6	235.74

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (elapsed time=NTU): 20:00=0.38, 25:00=0.33, 30:00=0.24

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWA-2
Person Gauging:	Jake Swanson
Date:	3/1/2021
Time:	10:07:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑	☐	☐
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWC-1R
Person Gauging:	Jake Swanson
Date:	3/1/2021
Time:	10:20:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWC-2R
Person Gauging:	Jake Swanson
Date:	3/1/2021
Time:	10:36:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☐	☐	☑
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☐	☑
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWC-3R
Person Gauging:	Jake Swanson
Date:	3/1/2021
Time:	09:57:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWC-4R
Person Gauging:	Jake Swanson
Date:	3/1/2021
Time:	10:32:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☐	☐	☑
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWC-5R
Person Gauging:	Jake Swanson
Date:	3/1/2021
Time:	10:02:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☑	☐	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑	☐	☐
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS Design & Consultancy for natural and built assets

Project Location:	Gypsum Landfill
Permit Number:	
Well ID:	GWC-6R
Person Gauging:	Jake Swanson
Date:	3/1/2021
Time:	10:14:00

			Yes	No	N/A
1	Location Identification:				
	a	Is the well visible and accessible?	☑	☐	☐
	b	Is the well properly identified with the correct well ID?	☐	☑	☐
	c	Is the well in a high traffic area and does the well require protection from traffic?	☐	☑	☐
	d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	☑	☐	☐
2	Protective Casing:				
	a	Is the protective casing free from apparent damage and able to be secured?	☑	☐	☐
	b	Is the casing free of degradation or deterioration?	☑	☐	☐
	c	Does the casing have a functioning weep hole?	☑	☐	☐
	d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	☑	☐	☐
3	Surface Pad				
	a	Is the well pad in good condition (not cracked or broken)?	☑	☐	☐
	b	Is the well pad sloped away from the protective casing?	☑	☐	☐
	c	Is the well pad in complete contact with the protective casing?	☑	☐	☐
	d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	☑	☐	☐
	e	Is the pad surface clean (not covered with sediment or debris)?	☑	☐	☐
4	Internal Casing				
	a	Does the cap prevent entry of foreign material into the well?	☑	☐	☐
	b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	☑	☐	☐
	c	Is the well properly vented for equilibration of air pressure?	☑	☐	☐
	d	Is the survey point clearly marked on the inner casing?	☑	☐	☐
	e	Is the depth of the well consistent with the original well log?	☑	☐	☐
	f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	☑	☐	☐
5	Sampling: Groundwater Wells Only:				
	a	Does well recharge adequately when purged?	☑	☐	☐
	b	If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility?	☑	☐	☐
	c	Does the well require redevelopment (low flow, turbid)?	☐	☑	☐
6	Based on your professional judgement, is the well construction / location:				
		appropriate to 1) achieve the objectives of the Groundwater Monitoring Program	☑	☐	☐
		and 2) comply with the applicable regulatory requirements?	☑	☐	☐
7	Corrective actions as needed, by date:				
	Well is not labeled on casing				
8	Date by when corrective actions are needed:				

APPENDIX C

Statistical Analysis Results

Appendix III Statistically Significant Increase Summary (September 2020)

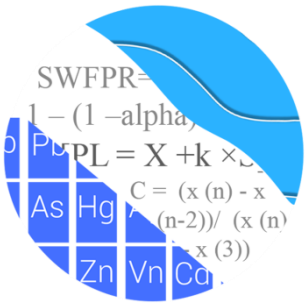
Appendix III Parameter	Monitoring Wells
Boron	GWC-4R
Calcium	GWC-1R, GWC-2R, GWC-5R, GWC-6R
Chloride	GWC-2R, GWC-4R
Sulfate	GWC-1R, GWC-2R, GWC-5R, GWC-6R
Total Dissolved Solids	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R

Appendix III Statistically Significant Increase Summary (March 2021)

Appendix III Parameter	Monitoring Wells
Boron	GWC-4R
Calcium	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R
Chloride	GWC-1R, GWC-2R, GWC-4R
Sulfate	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R
Total Dissolved Solids	GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R

September 2020 Event

GROUNDWATER STATS CONSULTING



February 23, 2021

Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant Yates CCR Landfill Gypsum Stack
Statistical Analysis September 2020 1st Semi-Annual Sample Event

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the September 2020 1st Semi-Annual Groundwater statistical analysis of groundwater data for Georgia Power Company's Plant Yates. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all wells is provided below.

- **Upgradient wells:**
  - **AP-1:** YGWA-47
  - **AP-2:** YGWA-1D, YGWA-1I, YGWA-2I, YGWA-3D, YGWA-3I, YGWA-14S and, YGWA-30I
  - **Gypsum Landfill:** GWA-2
  - **AMA-R6:** YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-21I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, and YGWA-5I

- **Downgradient wells:** GWC-1R, GWC-2R, GWC-3R, GWC-4R, GWC-5R, GWC-6R

Upgradient well data from wells across Plant Yates are utilized to construct interwell background limits for state Appendix I and II constituents as well as for Federal Appendix III and IV constituents. When intrawell prediction limits or trend tests are constructed, upgradient well GWA-2 (which is directly upgradient of the Landfill) is included for a point of reference. Note that in addition to the wells listed above, well GWA-1, which has not been sampled since 2004, provides historical upgradient data for a handful of Georgia EPD constituents. When interwell prediction limits are constructed, all upgradient well data are used to establish a statistical limit. However, since intrawell methods are used to analyze Georgia EPD parameters and each well uses its historical data to establish a limit, well GWA-1 is only plotted on time series graphs and box plots as reference data, and no formal statistics are included in this report.

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to Groundwater Stats Consulting. The analysis was prepared according to the recommended statistical methodology provided in the Fall 2017 by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting and primary author of the USEPA Unified Guidance.

The CCR and Georgia EPD programs consist of the constituents listed below. The terms "parameters" and "constituents" are used interchangeably.

- **CCR Appendix III:** boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **CCR Appendix IV:** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lithium, lead, mercury, molybdenum, selenium, and thallium
- **Georgia EPD:** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs with 100% nondetects follows this letter. Additionally, when Appendix IV constituents are not detected during a scheduled Scan event, no statistical analyses are required during the semi-annual sample event. During the annual Scan event conducted in August 2020, molybdenum was not detected and, therefore, was not required to be sampled during the September 2020 event. Since all units at Plant Yates utilize combined upgradient well data from individual units, in some cases upgradient wells at a given unit were not

sampled for all constituents if no detections were present at downgradient wells for that particular unit. The following constituents were not detected during their respective Scan event; therefore, upgradient wells at the units listed below were not sampled for that constituent:

- Yates AP-1: cadmium, mercury, selenium, and thallium
- Yates AP-2: mercury
- Yates AMA-R6: mercury

Time series plots for all well/constituent pairs are provided and are particularly useful for screening parameters detected in downgradient wells which require statistical analyses (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

For all constituents, a substitution of the most recent reporting limit is used for nondetect data. This generally gives the most conservative limit in each case and in the time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. In the case of cobalt, due to varying detection limits in individual wells, the most recent reporting limit of 0.005 mg/L was substituted across all wells. For zinc, the most recent reporting limit increased compared to historical data, and therefore, the historical reporting limit was substituted for nondetects to maintain more conservative limits for zinc with a reporting limit of 0.01 mg/L instead of 0.02 mg/L.

Based on the previous screenings, data at all wells for constituents detected in downgradient wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided in the previous screening to demonstrate that the selected statistical methods for the parameters listed above comply with the USEPA Unified Guidance and the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves were based on the following statistical methods:

Georgia EPD Constituents:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan (all parameters)
- # Constituents: 15 (Silver is nondetect in all wells)
- # Downgradient wells: 6

CCR Appendix III Constituents:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan – (fluoride and pH)
- Interwell Prediction Limits with 1-of-2 resample plan – (boron, calcium, chloride, sulfate, and TDS)
- # Constituents: 7
- # Downgradient wells: 6

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals, as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate associated with parametric limits is based on an annual 10% (5% per semi-annual event) as recommend by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling nondetects (USEPA, 2009).

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Screening Summaries – State and Federal

Georgia EPD Constituents – Conducted in August 2019

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells and parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, one outlier was identified. Although there were no cases of this present in the datasets, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Tukey's test method did not identify outliers for the highest measurements of zinc in wells GWA-2, GWC-3R and GWC-4R; however, these values were flagged in the database so that resulting statistical limits will be lower and able to identify if a subtle increase in concentrations occurs. A list of all flagged outliers is presented in the Outlier Summary (Appendix C).

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test, which tests for statistically significant increasing or decreasing trends, was used to evaluate data at all upgradient wells and downgradient wells with detections.

In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different from current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

Statistically significant decreasing trends were noted for a few constituents, and one statistically significant increasing trend was identified for barium in well GWC-6R. The data sets are still relatively small, and the magnitudes of these trends were low relative to the average concentrations. Therefore, no adjustments were required to any of the records except for barium in wells GWC-4R and GWC-5R. Earlier measurements for barium in these wells were considerably higher than currently reported measurements. In order to construct prediction limits that are lower and more conservative from a regulatory perspective, only the more recent portion of these records were used for the statistical limits. All background data will be re-evaluated during the next background update. A summary of these background data ranges follows this letter.

CCR Appendix III Constituents – Conducted in April 2019

Using the Tukey box plot method, one outlier was identified. The outlier identified by Tukey's method was not flagged in the database as it was similar to remaining

measurements within the same well and neighboring wells. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages will display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data.

The results of the trend analyses were included in the previous screening and showed a few statistically significant decreasing trends. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period is short; therefore, no adjustments were made to the data sets. However, when decreasing trends persist over a longer time frame for intrawell parameters in downgradient wells or interwell parameters in upgradient wells, some records may need to be truncated in order to maintain conservative limits

Evaluation of Georgia EPD Constituents – September 2020

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility.

In cases where downgradient average concentrations are higher than observed upgradient concentrations for a given constituent where intrawell analyses are recommended, the current assumption is that this is due to natural spatial variation rather than a result of practices at the landfill. Validation of this assumption requires a separate analysis or investigation that is beyond the scope of this data screening study. However, for this site, the pre-waste data support the assumption of natural variation rather than impacts of the landfill.

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed using all available data through August 2018, except for the cases mentioned above (Figure D). Compliance data are compared to these intrawell background limits during each subsequent semi-annual sampling event. Since there were no detections during the September 2020 sampling event above the reporting limit for arsenic, beryllium,

cadmium, chromium, copper, lead, mercury, thallium, and vanadium in any of the wells, no prediction limits were required. Additionally, no statistical analyses were included for well/constituent pairs with 100% nondetects, which includes silver for all well/constituent pairs.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If any resample falls within the statistical limit, the initial exceedance is considered to be a false positive result, and no further action is necessary. Statistical exceedances were identified in the following wells (Figure D):

- Nickel: GWA-2 (upgradient)
- Selenium: GWC-1R
- Zinc: GWA-2 (upgradient) and GWC-5R

Note that the exceedance in well GWC-5R for zinc resulted from the number of significant figures included in the limit. Additionally, note that the reported selenium observation 0.012 slightly exceeded its prediction limit of 0.01 and the reported measurement is well below the established Maximum Contaminant Level (MCL) of 0.05 mg/L.

When prediction limit exceedances occur in any of the downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. Upgradient well GWA-2 is the only well directly upgradient of the Plant Yates Gypsum Landfill, and therefore, was included in the trend analyses for these parameters. A summary and graphical presentation of the trend test results follows this letter (Figure E). The following statistically significant trend was noted:

Increasing:

- Zinc: GWC-5R

Evaluation of Appendix III Parameters – September 2020

For fluoride and pH, intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical data through February 2019 (Figure F). The most

recent sample from each downgradient well is compared to the background limit to determine whether there are exceedances over background. Because no exceedances were identified in downgradient wells, no further action was necessary.

For Appendix III parameters that are analyzed using interwell prediction limits (boron, calcium, chloride, sulfate, and TDS), background (upgradient) well data from all the Yates units were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data from each of the Yates units through September 2020 (Figure G). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are exceedances over background. Exceedances were noted for the following downgradient well/constituent pairs:

- Boron: GWC-4R
- Calcium: GWC-1R, GWC-2R, GWC-5R, and GWC-6R
- Chloride: GWC-2R and GWC-4R
- Sulfate: GWC-1R, GWC-2R, GWC-5R, and GWC-6R
- TDS: GWC-1R, GWC-2R, GWC-4R, GWC-5R, and GWC-6R

Data from downgradient well/constituent pairs found to exceed their respective prediction limit were further evaluated using the Sen's Slope/Mann Kendall trend test along with upgradient well GWA-2 for the same constituents (Figure H). There were no statistically significant trends in downgradient wells. Statistically significant increasing trends were identified for calcium and sulfate in upgradient well GWA-2, as shown in the trend test summary and graphical results following this letter . When trends are noted upgradient of the facility, it is an indication that groundwater concentrations are naturally changing over time.

Statistical Analysis of Appendix IV Parameters – September 2020

For analysis of Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that have 100% ND or trace values below the reporting limits do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis.

High values for cobalt at upgradient well GWA-2, 0.20 mg/L and 0.16 mg/L from the August and September 2020 sample events, were two orders of magnitude higher than the other values for that well and, therefore, were flagged as outliers in order to maintain limits that were conservative (lower) from a regulatory perspective. However, since two observations were reported at this level, if further studies beyond the scope of this analysis indicate that these values are representative of natural groundwater quality, the values will be unflagged and included in the statistical analyses. A summary of flagged outliers follows this report (Figure C).

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data from all the Yates units for Appendix IV constituents (Figure I). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. The background limits were then used when determining the groundwater protection standard (GWPS) under Georgia EPD Rule 391-3-4-.10(6)(a). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the September 2020 sample event for the state rule (Figure J). To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in accordance with the state requirements in each downgradient well (Figure K). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. For state confidence intervals, no exceedances were identified.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Yates CCR Landfill Gypsum Stack. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner
Groundwater Statistician

Date Ranges

Date: 11/23/2020 8:19 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Barium (mg/L)

GWC-4R background:3/28/2011-8/8/2018

GWC-5R background:8/14/2013-8/7/2018

State Parameter 100% Non-Detects

Analysis Run 11/23/2020 8:30 PM View: State Parameters
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Antimony (mg/L)
GWC-1R, GWC-3R, GWC-6R, YGWA-17S, YGWA-18S, YGWA-20S, YGWA-30I, YGWA-3I, YGWA-40, YGWA-5D, YGWA-5I

Arsenic (mg/L)
YGWA-14S, YGWA-20S

Beryllium (mg/L)
GWA-2, GWC-6R, YGWA-18I, YGWA-1D, YGWA-1I, YGWA-21I, YGWA-2I, YGWA-39, YGWA-3D, YGWA-4I, YGWA-5D, YGWA-5I

Cadmium (mg/L)
GWA-2, GWC-6R, YGWA-18I, YGWA-1I, YGWA-20S, YGWA-2I, YGWA-30I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D

Chromium (mg/L)
YGWA-14S, YGWA-21I, YGWA-39

Cobalt (mg/L)
YGWA-14S, YGWA-17S, YGWA-18I, YGWA-1D, YGWA-20S, YGWA-2I, YGWA-3D, YGWA-3I, YGWA-40, YGWA-5I

Lead (mg/L)
GWC-6R, YGWA-30I, YGWA-47, YGWA-4I

Mercury (mg/L)
YGWA-18I, YGWA-18S, YGWA-2I, YGWA-4I, YGWA-5D, YGWA-5I

Selenium (mg/L)
GWA-2, YGWA-18I, YGWA-18S, YGWA-1D, YGWA-1I, YGWA-20S, YGWA-2I, YGWA-30I, YGWA-3D, YGWA-3I, YGWA-5D

Silver (mg/L)
GWA-2, GWC-1R, GWC-2R, GWC-3R, GWC-4R, GWC-5R, GWC-6R

Thallium (mg/L)
GWC-1R, GWC-3R, GWC-4R, GWC-6R, YGWA-17S, YGWA-18I, YGWA-18S, YGWA-1D, YGWA-20S, YGWA-21I, YGWA-2I, YGWA-30I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, YGWA-5I

Appendix IV 100% Non-Detects

Analysis Run 11/23/2020 9:07 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Antimony (mg/L)
GWC-1R, GWC-3R, GWC-6R, YGWA-17S, YGWA-18S, YGWA-20S, YGWA-30I, YGWA-3I, YGWA-40, YGWA-5D, YGWA-5I

Arsenic (mg/L)
YGWA-14S, YGWA-20S

Beryllium (mg/L)
GWA-2, GWC-6R, YGWA-18I, YGWA-1D, YGWA-1I, YGWA-21I, YGWA-2I, YGWA-39, YGWA-3D, YGWA-4I, YGWA-5D, YGWA-5I

Cadmium (mg/L)
GWA-2, GWC-6R, YGWA-18I, YGWA-1I, YGWA-20S, YGWA-2I, YGWA-30I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D

Chromium (mg/L)
GWA-2, YGWA-14S, YGWA-21I, YGWA-39

Cobalt (mg/L)
GWC-6R, YGWA-14S, YGWA-17S, YGWA-18I, YGWA-1D, YGWA-20S, YGWA-2I, YGWA-3D, YGWA-3I, YGWA-40, YGWA-5I

Fluoride (mg/L)
YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-40, YGWA-4I, YGWA-5I

Lead (mg/L)
GWC-6R, YGWA-30I, YGWA-47, YGWA-4I

Lithium (mg/L)
YGWA-14S, YGWA-20S, YGWA-40

Mercury (mg/L)
YGWA-18I, YGWA-18S, YGWA-2I, YGWA-4I, YGWA-5D, YGWA-5I

Molybdenum (mg/L)
GWA-2, GWC-1R, GWC-2R, GWC-3R, GWC-4R, GWC-5R, GWC-6R, YGWA-14S, YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-30I, YGWA-40, YGWA-47, YGWA-4I, YGWA-5I

Selenium (mg/L)
GWA-2, YGWA-18I, YGWA-18S, YGWA-1D, YGWA-1I, YGWA-20S, YGWA-2I, YGWA-30I, YGWA-3D, YGWA-3I, YGWA-5D

Thallium (mg/L)
GWC-1R, GWC-3R, GWC-4R, GWC-6R, YGWA-17S, YGWA-18I, YGWA-18S, YGWA-1D, YGWA-20S, YGWA-21I, YGWA-2I, YGWA-30I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, YGWA-5I

State Parameters - Intrawell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:26 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Nickel (mg/L)	**GWA-2**	**0.021**	**n/a**	**9/22/2020**	**0.027**	**Yes**	**22**	**n/a**	**n/a**	**13.64**	**n/a**	**n/a**	**0.003707**	**NP Intra (normality) 1 of 2**
Selenium (mg/L)	**GWC-1R**	**0.01**	**n/a**	**9/22/2020**	**0.012**	**Yes**	**18**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Zinc (mg/L)	**GWA-2**	**0.009584**	**n/a**	**9/22/2020**	**0.033**	**Yes**	**23**	**0.004991**	**0.002**	**4.348**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	**GWC-5R**	**0.01798**	**n/a**	**9/23/2020**	**0.018**	**Yes**	**15**	**0.00738**	**0.004189**	**0**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**

State Parameters - Intrawell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:26 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-2	0.003	n/a	9/22/2020	0.00044J	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-2R	0.003	n/a	9/22/2020	0.0017J	No	23	n/a	n/a	100	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-4R	0.003	n/a	9/22/2020	0.00053J	No	23	n/a	n/a	95.65	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-5R	0.003	n/a	9/23/2020	0.00031J	No	18	n/a	n/a	100	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-2	0.07943	n/a	9/22/2020	0.045	No	27	0.05023	0.01305	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-1R	0.09203	n/a	9/22/2020	0.068	No	18	0.04614	0.01903	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-2R	0.13	n/a	9/22/2020	0.04	No	23	n/a	n/a	0	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-3R	0.1072	n/a	9/22/2020	0.014	No	18	0.1832	0.05976	0	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-4R	0.0778	n/a	9/22/2020	0.026	No	19	0.1732	0.04443	0	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-5R	0.06311	n/a	9/23/2020	0.012	No	14	0.03304	0.01162	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-6R	0.1025	n/a	9/23/2020	0.044	No	24	0.04776	0.02401	0	None	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWA-2	0.006994	n/a	3/17/2020	0.003J	No	27	0.003556	0.001537	40.74	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-1R	0.008717	n/a	9/22/2020	0.0008J	No	18	-6.613	0.7756	50	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-2R	0.04742	n/a	9/22/2020	0.0054	No	23	0.02477	0.009863	4.348	None	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-3R	0.005	n/a	9/22/2020	0.0021J	No	18	n/a	n/a	100	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-4R	0.007137	n/a	9/22/2020	0.00039J	No	23	0.002697	0.001934	34.78	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-5R	0.005	n/a	9/23/2020	0.005ND	No	18	n/a	n/a	100	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-6R	0.005	n/a	9/23/2020	0.005ND	No	24	n/a	n/a	95.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Nickel (mg/L)	**GWA-2**	**0.021**	**n/a**	**9/22/2020**	**0.027**	**Yes**	**22**	**n/a**	**n/a**	**13.64**	**n/a**	**n/a**	**0.003707**	**NP Intra (normality) 1 of 2**
Nickel (mg/L)	GWC-1R	0.01331	n/a	9/22/2020	0.0021J	No	13	-6.05	0.655	38.46	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-2R	0.01015	n/a	9/22/2020	0.005ND	No	18	0.003546	0.00274	44.44	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-3R	0.0054	n/a	9/22/2020	0.005ND	No	13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-4R	0.01	n/a	9/22/2020	0.00077J	No	18	n/a	n/a	77.78	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-5R	0.005956	n/a	9/23/2020	0.0012J	No	13	0.002281	0.00139	30.77	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-6R	0.005	n/a	9/23/2020	0.0016J	No	19	n/a	n/a	89.47	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Selenium (mg/L)	**GWC-1R**	**0.01**	**n/a**	**9/22/2020**	**0.012**	**Yes**	**18**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Selenium (mg/L)	GWC-2R	0.01	n/a	9/22/2020	0.0056J	No	23	n/a	n/a	69.57	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-3R	0.01	n/a	9/22/2020	0.0091J	No	18	n/a	n/a	61.11	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-4R	0.01548	n/a	9/22/2020	0.0032J	No	23	0.007285	0.003569	34.78	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-5R	0.04273	n/a	9/23/2020	0.026	No	18	0.1371	0.02884	5.556	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-6R	0.01	n/a	9/23/2020	0.0031J	No	24	n/a	n/a	70.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Zinc (mg/L)	**GWA-2**	**0.009584**	**n/a**	**9/22/2020**	**0.033**	**Yes**	**23**	**0.004991**	**0.002**	**4.348**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	GWC-1R	0.007102	n/a	9/22/2020	0.0029J	No	15	0.05264	0.0125	20	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-2R	0.01249	n/a	9/22/2020	0.003J	No	20	0.0653	0.01977	10	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-3R	0.01462	n/a	9/22/2020	0.0036J	No	14	0.00605	0.003313	7.143	None	No	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-4R	0.01	n/a	9/22/2020	0.01ND	No	19	n/a	n/a	63.16	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Zinc (mg/L)	**GWC-5R**	**0.01798**	**n/a**	**9/23/2020**	**0.018**	**Yes**	**15**	**0.00738**	**0.004189**	**0**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	GWC-6R	0.01	n/a	9/23/2020	0.01ND	No	21	n/a	n/a	33.33	n/a	n/a	0.003999	NP Intra (normality) 1 of 2

State Parameters Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:35 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Zinc (mg/L)	**GWC-5R**	**0.001708**	**131**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

State Parameters Trend Tests - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:35 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Nickel (mg/L)	GWA-2 (bg)	-0.00003012	-14	-124	No	27	11.11	n/a	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	176	No	34	100	n/a	n/a	0.01	NP
Selenium (mg/L)	GWC-1R	0	-68	-111	No	25	52	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-2 (bg)	0	3	131	No	28	10.71	n/a	n/a	0.01	NP
Zinc (mg/L)	**GWC-5R**	**0.001708**	**131**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Intrawell Prediction Limits - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:38 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GWA-2	0.2151	n/a	9/22/2020	0.058J	No	9	0.1174	0.03628	0	None	No	0.001254	Param Intra 1 of 2
Fluoride (mg/L)	GWC-1R	0.1	n/a	9/22/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-2R	0.1	n/a	9/22/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-3R	0.22	n/a	9/22/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-4R	0.15	n/a	9/22/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-5R	0.37	n/a	9/23/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-6R	0.28	n/a	9/23/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
pH (S.U.)	GWA-2	7.106	5.427	9/22/2020	5.78	No	21	6.266	0.401	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-1R	5.52	4.49	9/22/2020	5.25	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-2R	6.8	4.35	9/22/2020	5.34	No	16	n/a	n/a	0	n/a	n/a	0.01291	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-3R	5.28	4.31	9/22/2020	5.11	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-4R	6.245	4.827	9/22/2020	5.43	No	10	5.536	0.2783	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-5R	5.711	4.765	9/23/2020	5.04	No	9	5.238	0.1758	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-6R	6.687	5.169	9/23/2020	5.81	No	19	5.928	0.3559	0	None	No	0.0006268	Param Intra 1 of 2

Appendix III - Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 11/23/2020, 8:11 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-4R	0.16	n/a	9/22/2020	1	Yes	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-1R	37	n/a	9/22/2020	98.8	Yes	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2R	37	n/a	9/22/2020	40.5	Yes	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-5R	37	n/a	9/23/2020	144	Yes	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-6R	37	n/a	9/23/2020	103	Yes	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2R	7.9	n/a	9/22/2020	24.7	Yes	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-4R	7.9	n/a	9/22/2020	60.2	Yes	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-1R	160	n/a	9/22/2020	478	Yes	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-2R	160	n/a	9/22/2020	216	Yes	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-5R	160	n/a	9/23/2020	992	Yes	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-6R	160	n/a	9/23/2020	518	Yes	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
TDS (mg/L)	GWC-1R	216	n/a	9/22/2020	675	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-2R	216	n/a	9/22/2020	394	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-4R	216	n/a	9/22/2020	217	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-5R	216	n/a	9/23/2020	1000	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-6R	216	n/a	9/23/2020	820	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 11/23/2020, 8:11 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-1R	0.16	n/a	9/22/2020	0.025J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-2R	0.16	n/a	9/22/2020	0.046J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-3R	0.16	n/a	9/22/2020	0.0066J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	**GWC-4R**	**0.16**	**n/a**	**9/22/2020**	**1**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	GWC-5R	0.16	n/a	9/23/2020	0.028J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-6R	0.16	n/a	9/23/2020	0.0055J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GWC-1R**	**37**	**n/a**	**9/22/2020**	**98.8**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-2R**	**37**	**n/a**	**9/22/2020**	**40.5**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GWC-3R	37	n/a	9/22/2020	6.2	No	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-4R	37	n/a	9/22/2020	21.8	No	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GWC-5R**	**37**	**n/a**	**9/23/2020**	**144**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-6R**	**37**	**n/a**	**9/23/2020**	**103**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-1R	7.9	n/a	9/22/2020	5.5	No	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GWC-2R**	**7.9**	**n/a**	**9/22/2020**	**24.7**	**Yes**	**274**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-3R	7.9	n/a	9/22/2020	4.2	No	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GWC-4R**	**7.9**	**n/a**	**9/22/2020**	**60.2**	**Yes**	**274**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-5R	7.9	n/a	9/23/2020	3	No	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-6R	7.9	n/a	9/23/2020	4.7	No	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GWC-1R**	**160**	**n/a**	**9/22/2020**	**478**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-2R**	**160**	**n/a**	**9/22/2020**	**216**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GWC-3R	160	n/a	9/22/2020	55.1	No	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-4R	160	n/a	9/22/2020	72.1	No	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GWC-5R**	**160**	**n/a**	**9/23/2020**	**992**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-6R**	**160**	**n/a**	**9/23/2020**	**518**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GWC-1R**	**216**	**n/a**	**9/22/2020**	**675**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-2R**	**216**	**n/a**	**9/22/2020**	**394**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	GWC-3R	216	n/a	9/22/2020	110	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	**GWC-4R**	**216**	**n/a**	**9/22/2020**	**217**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-5R**	**216**	**n/a**	**9/23/2020**	**1000**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-6R**	**216**	**n/a**	**9/23/2020**	**820**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:51 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	**GWA-2 (bg)**	**4.326**	**50**	**43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GWA-2 (bg)**	**22.54**	**53**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:51 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GWA-2 (bg)	0	-1	-43	No	13	53.85	n/a	n/a	0.01	NP
Boron (mg/L)	GWC-4R	-0.02011	-8	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GWA-2 (bg)**	**4.326**	**50**	**43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-1R	-5.883	-18	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-2R	5.077	38	43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-5R	4.691	18	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-6R	15.99	20	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	0.1924	33	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-2R	1.318	25	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-4R	-2.088	-8	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GWA-2 (bg)**	**22.54**	**53**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GWC-1R	-49.07	-26	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-2R	17.81	20	43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-5R	-3.702	-2	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-6R	45.26	14	43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWA-2 (bg)	21.56	27	43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-1R	-69.17	-24	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-2R	52.15	32	43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-4R	-6.533	-9	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-5R	-53.58	-10	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-6R	81.82	18	43	No	13	0	n/a	n/a	0.01	NP

Upper Tolerance Limit Summary Table

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 12/1/2020, 12:41 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0047	n/a	n/a	280	n/a	n/a	86.43	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	328	n/a	n/a	77.13	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.071	n/a	n/a	328	n/a	n/a	3.354	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.003	n/a	n/a	312	n/a	n/a	83.01	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	313	n/a	n/a	96.17	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.01	n/a	n/a	280	n/a	n/a	77.14	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	326	n/a	n/a	69.63	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	306	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	327	n/a	n/a	68.5	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.005	n/a	n/a	282	n/a	n/a	85.82	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	307	n/a	n/a	28.34	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0005	n/a	n/a	251	n/a	n/a	92.43	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	272	n/a	n/a	59.56	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.01	n/a	n/a	311	n/a	n/a	91	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	281	n/a	n/a	96.44	n/a	n/a	NaN	NP Inter(NDs)

YATES LANDFILL GYPSUM STACK GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.0047	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.071	2
Beryllium, Total (mg/L)	0.004	0.003	0.004
Cadmium, Total (mg/L)	0.005	0.0025	0.005
Chromium, Total (mg/L)	0.1	0.01	0.1
Cobalt, Total (mg/L)		0.035	0.035
Combined Radium, Total (pCi/L)	5	6.9	6.9
Fluoride, Total (mg/L)	4	0.68	4
Lead, Total (mg/L)		0.005	0.005
Lithium, Total (mg/L)		0.03	0.03
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)		0.014	0.014
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Grey cell indicates Background Limit is higher than MCL*

**MCL = Maximum Contaminant Level*

**GWPS = Groundwater Protection Standard*

State Confidence Intervals Summary - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 12/2/2020, 9:05 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-2R	0.003	0.0017	0.006	No	16	0.002919	0.000325	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-4R	0.003	0.0014	0.006	No	16	0.002576	0.0009373	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-5R	0.003	0.00054	0.006	No	16	0.002678	0.0008805	87.5	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-1R	0.005	0.0009	0.01	No	16	0.003934	0.001913	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-2R	0.005	0.00075	0.01	No	16	0.004734	0.001062	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-3R	0.005	0.0016	0.01	No	16	0.004301	0.001518	81.25	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-4R	0.005	0.00059	0.01	No	16	0.004435	0.001544	87.5	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-5R	0.005	0.00091	0.01	No	16	0.002116	0.001751	25	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-6R	0.005	0.0007	0.01	No	16	0.002743	0.002092	43.75	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-1R	0.06018	0.03661	2	No	16	0.04928	0.01825	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2R	0.05363	0.04542	2	No	16	0.04953	0.006304	0	None	No	0.01	Param.
Barium (mg/L)	GWC-3R	0.03333	0.02107	2	No	16	0.0272	0.009421	0	None	No	0.01	Param.
Barium (mg/L)	GWC-4R	0.032	0.0157	2	No	16	0.02264	0.007834	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-5R	0.0347	0.014	2	No	16	0.02198	0.01037	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-6R	0.07258	0.04933	2	No	16	0.06096	0.01786	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-1R	0.003	0.000076	0.004	No	16	0.001199	0.001441	37.5	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-2R	0.003	0.00012	0.004	No	16	0.001748	0.001467	56.25	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-3R	0.00084	0.00026	0.004	No	16	0.0005944	0.0006732	6.25	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-4R	0.003	0.000058	0.004	No	16	0.002816	0.0007355	93.75	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-5R	0.001885	0.0005811	0.004	No	16	0.001384	0.001036	6.25	None	x^(1/3)	0.01	Param.
Cadmium (mg/L)	GWC-1R	0.0025	0.00016	0.005	No	16	0.002054	0.0009595	81.25	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-2R	0.0025	0.00015	0.005	No	16	0.001907	0.001061	75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-3R	0.0025	0.00014	0.005	No	16	0.001493	0.001181	56.25	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-4R	0.0025	0.0001	0.005	No	16	0.00235	0.0006	93.75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-5R	0.001123	0.0005183	0.005	No	16	0.0008556	0.0005334	6.25	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GWC-1R	0.01	0.0009	0.1	No	16	0.003294	0.004001	25	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2R	0.01	0.00059	0.1	No	16	0.007647	0.004209	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-3R	0.0017	0.0009	0.1	No	16	0.002819	0.003572	18.75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-4R	0.01	0.0007	0.1	No	16	0.007136	0.004391	68.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-5R	0.0024	0.0018	0.1	No	16	0.002637	0.001988	6.25	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-6R	0.0017	0.0012	0.1	No	16	0.002968	0.003496	18.75	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-1R	0.005	0.0006	0.035	No	16	0.002194	0.002053	31.25	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-2R	0.02235	0.01282	0.035	No	16	0.01759	0.007326	6.25	None	No	0.01	Param.
Cobalt (mg/L)	GWC-3R	0.01	0.0041	0.035	No	16	0.005237	0.002322	68.75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	GWC-4R	0.002103	0.0006031	0.035	No	16	0.002353	0.00231	18.75	Kaplan-Meier	x^(1/3)	0.01	Param.
Cobalt (mg/L)	GWC-5R	0.005	0.00044	0.035	No	16	0.004131	0.001869	81.25	Kaplan-Meier	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWC-1R	1.047	0.5017	6.9	No	12	0.7863	0.369	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2R	1.582	0.6153	6.9	No	12	1.099	0.616	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-3R	1.124	0.1796	6.9	No	12	0.7012	0.7531	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-4R	0.6758	0.2045	6.9	No	12	0.4401	0.3003	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-5R	0.9945	0.2318	6.9	No	12	0.6132	0.486	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-6R	1.235	0.4183	6.9	No	12	0.8532	0.6004	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GWC-1R	0.1	0.06	4	No	15	0.08733	0.02219	73.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-2R	0.58	0.05	4	No	15	0.1187	0.13	66.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-3R	0.22	0.04	4	No	15	0.1249	0.1333	46.67	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-4R	0.11	0.08	4	No	15	0.09867	0.02167	73.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-5R	0.35	0.035	4	No	15	0.1186	0.102	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-6R	0.28	0.07	4	No	15	0.1013	0.05489	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-1R	0.005	0.000067	0.005	No	16	0.004382	0.001688	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-2R	0.005	0.00007	0.005	No	16	0.003153	0.002462	62.5	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-3R	0.005	0.00008	0.005	No	16	0.003158	0.002456	62.5	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-4R	0.005	0.000041	0.005	No	16	0.00469	0.00124	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-5R	0.005	0.00007	0.005	No	16	0.003465	0.002351	68.75	None	No	0.01	NP (NDs)

State Confidence Intervals Summary - All Results (No Significant)

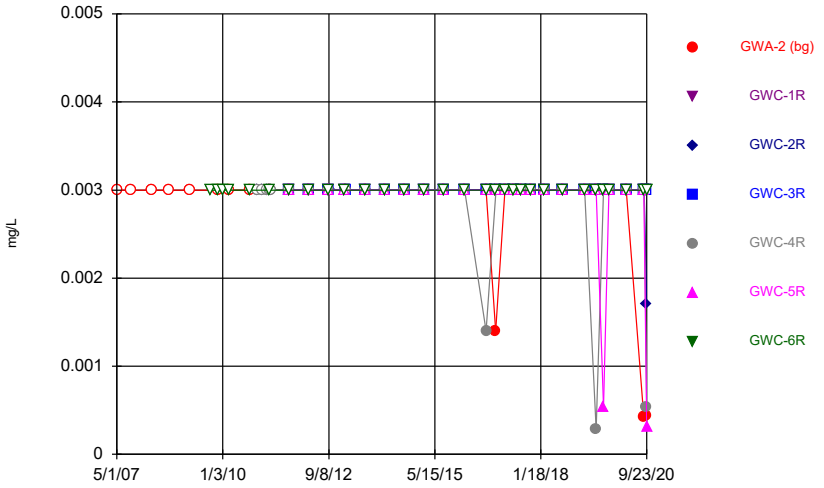
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 12/2/2020, 9:05 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GWC-1R	0.03	0.001	0.03	No	13	0.00808	0.0125	23.08	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-2R	0.03	0.0035	0.03	No	13	0.01003	0.0114	23.08	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-3R	0.03	0.0012	0.03	No	13	0.02778	0.007988	92.31	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-4R	0.03	0.0011	0.03	No	13	0.02113	0.01385	69.23	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-5R	0.03	0.0013	0.03	No	13	0.01901	0.01447	61.54	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-6R	0.03	0.002	0.03	No	13	0.01148	0.01297	30.77	None	No	0.01	NP (normality)
Mercury (mg/L)	GWC-1R	0.0005	0.000059	0.002	No	16	0.0004724	0.0001103	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-2R	0.0005	0.000071	0.002	No	16	0.0004732	0.0001073	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-3R	0.0005	0.00043	0.002	No	16	0.000438	0.0001571	81.25	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-4R	0.0005	0.000058	0.002	No	16	0.0004724	0.0001105	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-5R	0.0005	0.00006	0.002	No	16	0.0004725	0.00011	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-6R	0.0005	0.000067	0.002	No	16	0.0004424	0.0001577	87.5	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1R	0.006121	0.002273	0.05	No	16	0.00495	0.003318	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-2R	0.003921	0.002367	0.05	No	16	0.003144	0.001194	12.5	None	No	0.01	Param.
Selenium (mg/L)	GWC-3R	0.005918	0.002636	0.05	No	16	0.004712	0.002557	18.75	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-4R	0.0054	0.0029	0.05	No	16	0.0049	0.00295	6.25	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-5R	0.02728	0.01843	0.05	No	16	0.02286	0.006805	0	None	No	0.01	Param.
Selenium (mg/L)	GWC-6R	0.004315	0.002697	0.05	No	16	0.003506	0.001243	12.5	None	No	0.01	Param.
Thallium (mg/L)	GWC-2R	0.001	0.00007	0.002	No	16	0.0009419	0.0002325	93.75	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-5R	0.001	0.000053	0.002	No	16	0.0009408	0.0002368	93.75	None	No	0.01	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

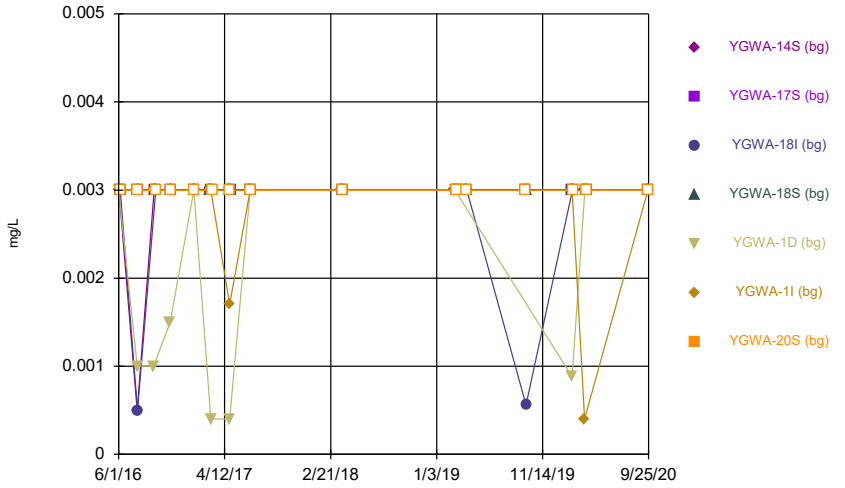
Time Series



Constituent: Antimony Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

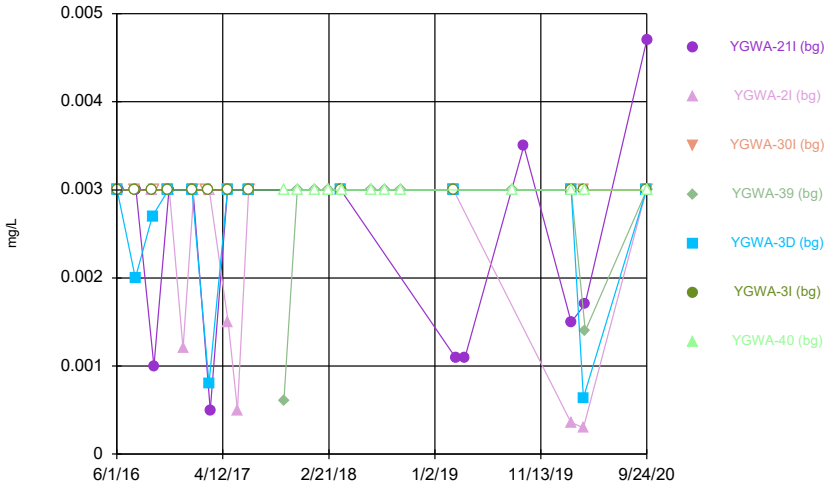
Time Series



Constituent: Antimony Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

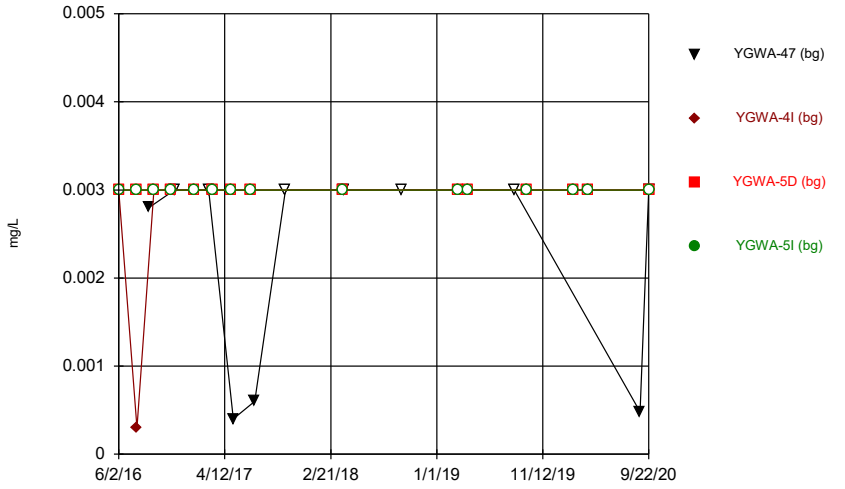
Time Series



Constituent: Antimony Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

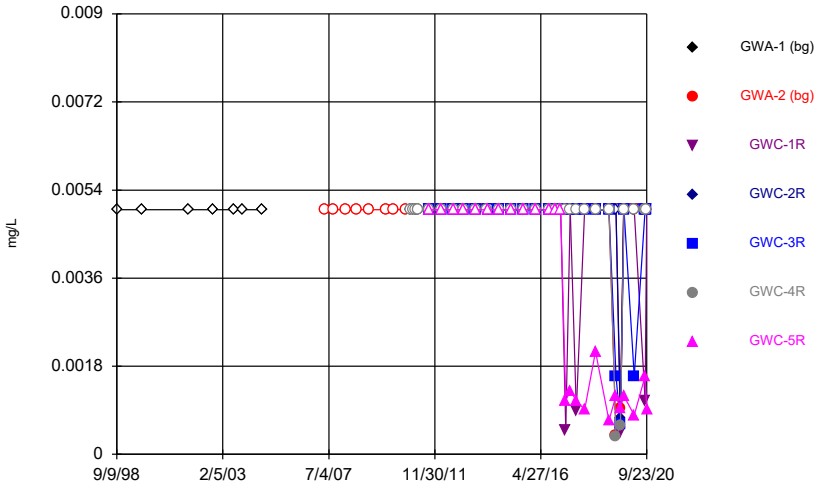
Time Series



Constituent: Antimony Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

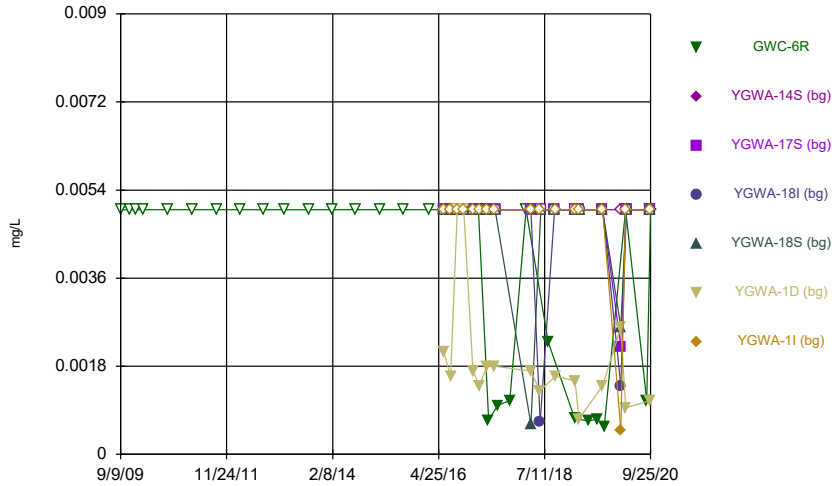
Time Series



Constituent: Arsenic Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

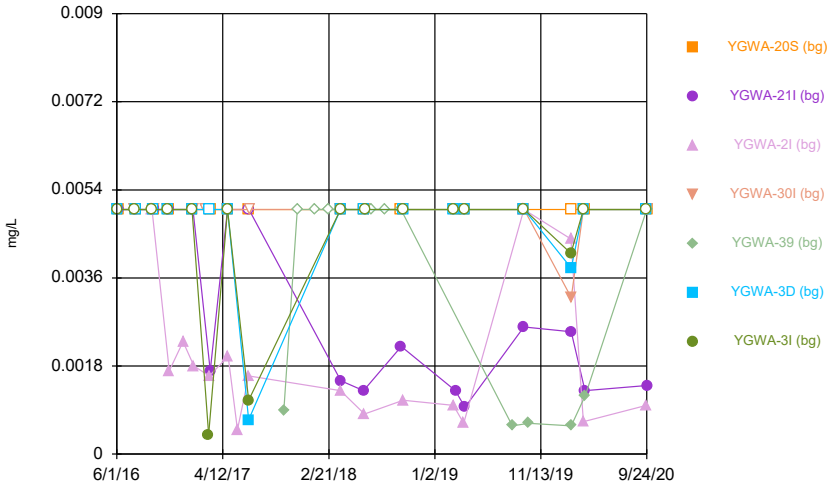
Time Series



Constituent: Arsenic Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

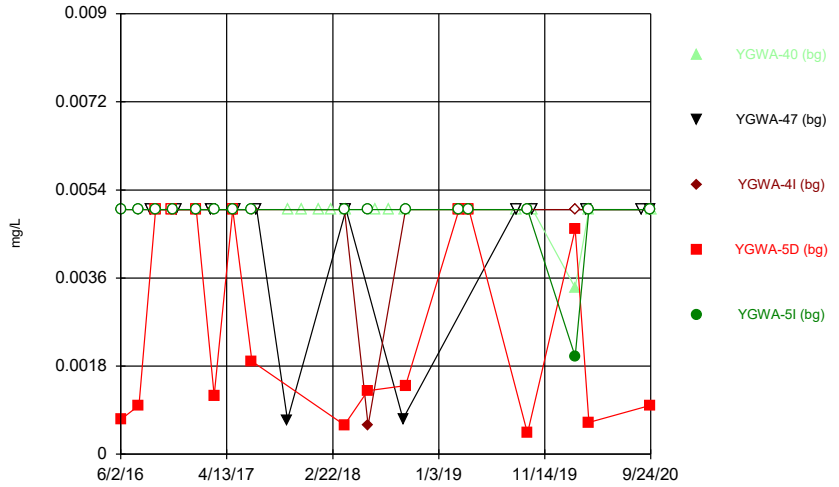
Time Series



Constituent: Arsenic Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

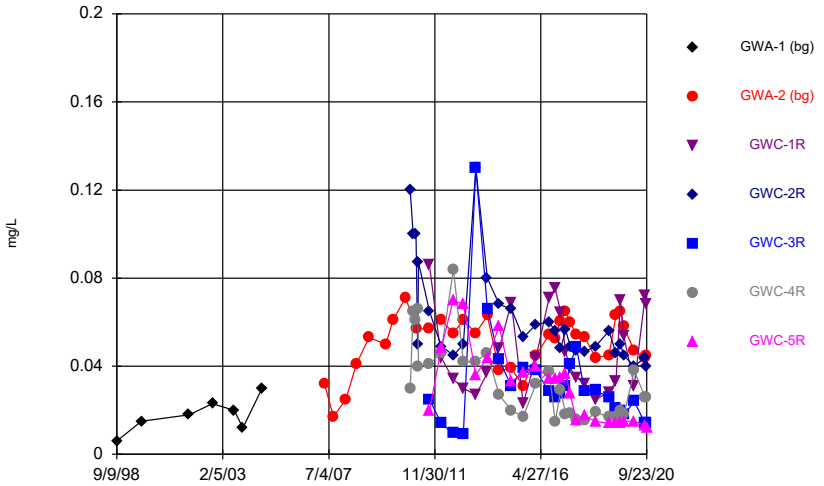
Time Series



Constituent: Arsenic Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



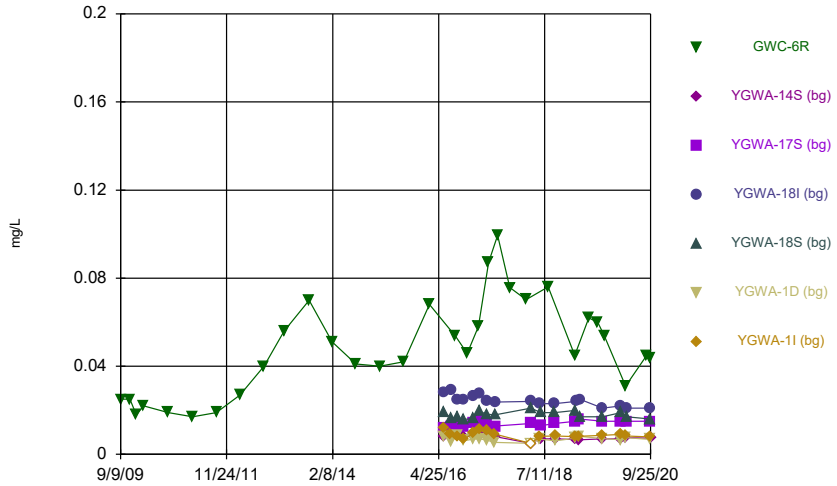
Constituent: Barium Analysis Run 12/2/2020 9:20 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



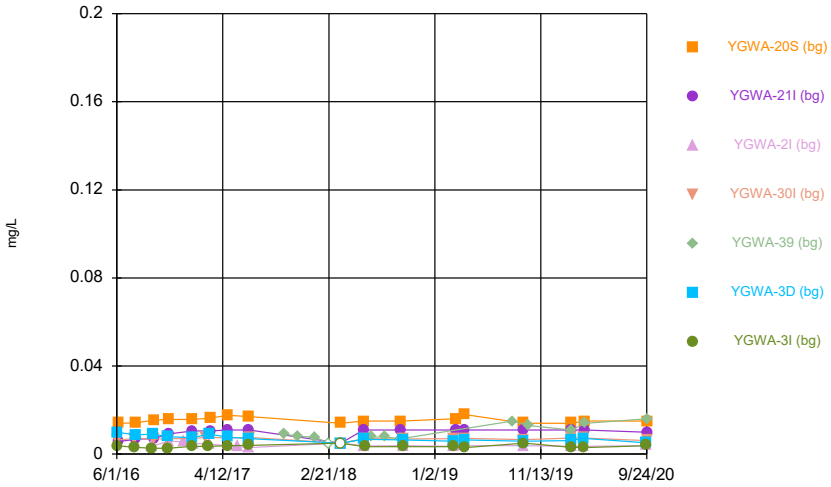
Constituent: Barium Analysis Run 12/2/2020 9:20 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



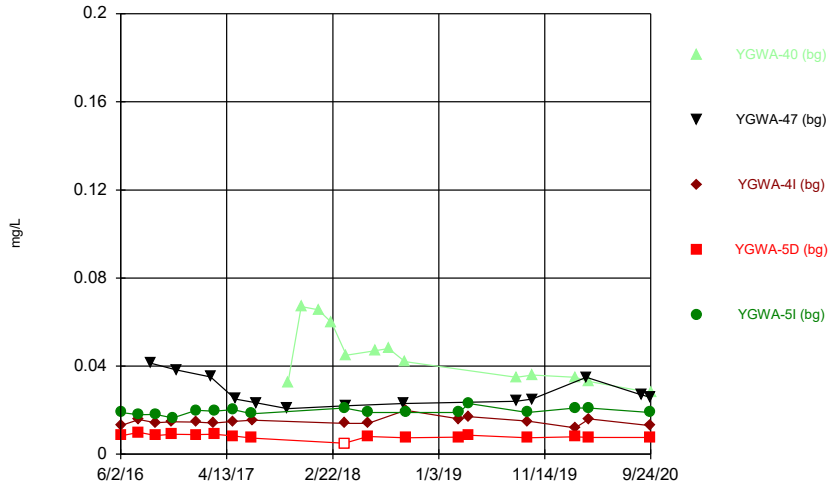
Constituent: Barium Analysis Run 12/2/2020 9:20 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

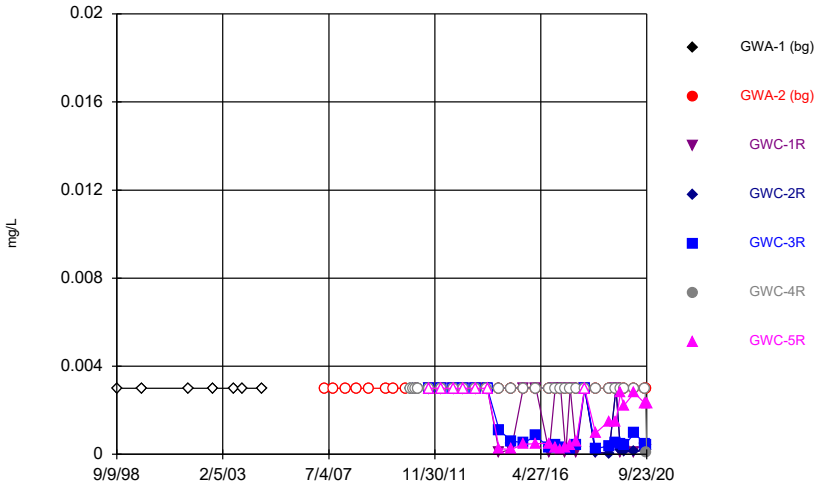


Constituent: Barium Analysis Run 12/2/2020 9:20 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

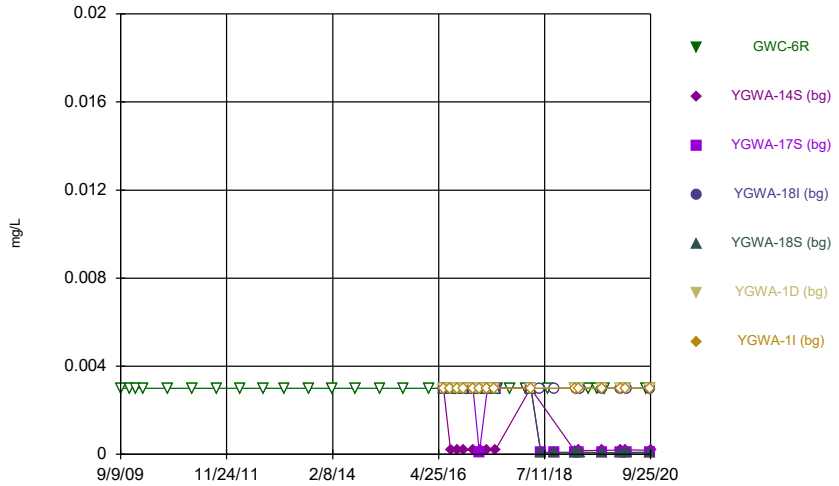
Time Series



Constituent: Beryllium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

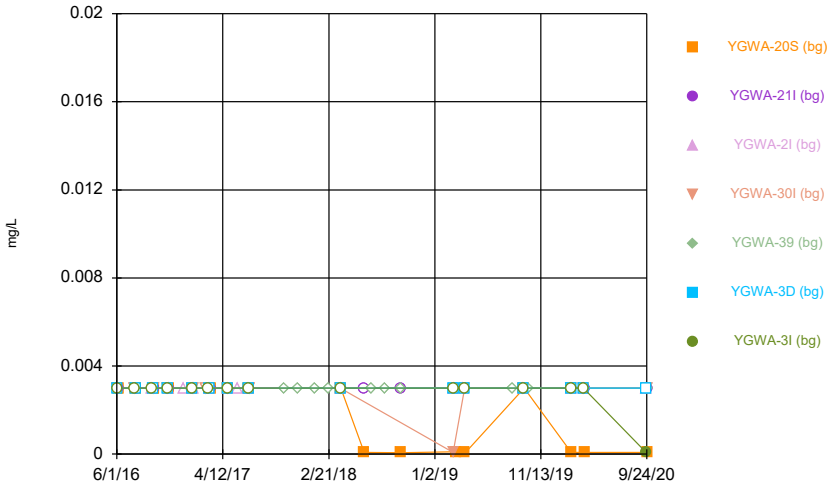
Time Series



Constituent: Beryllium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

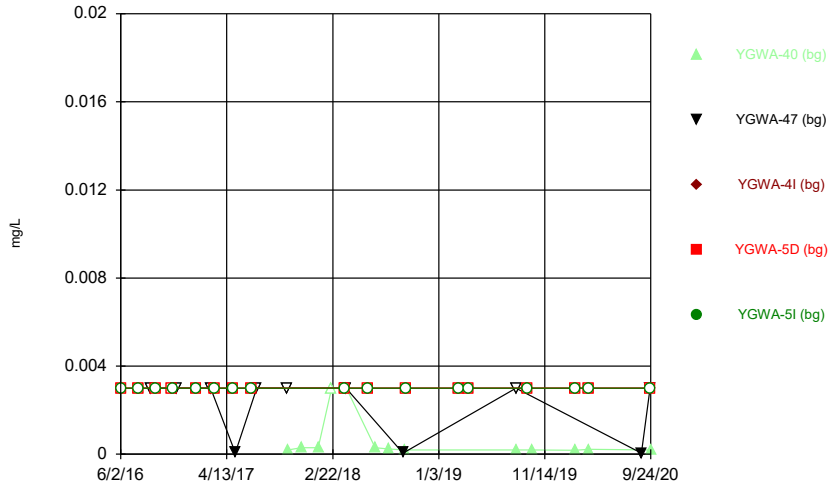
Time Series



Constituent: Beryllium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

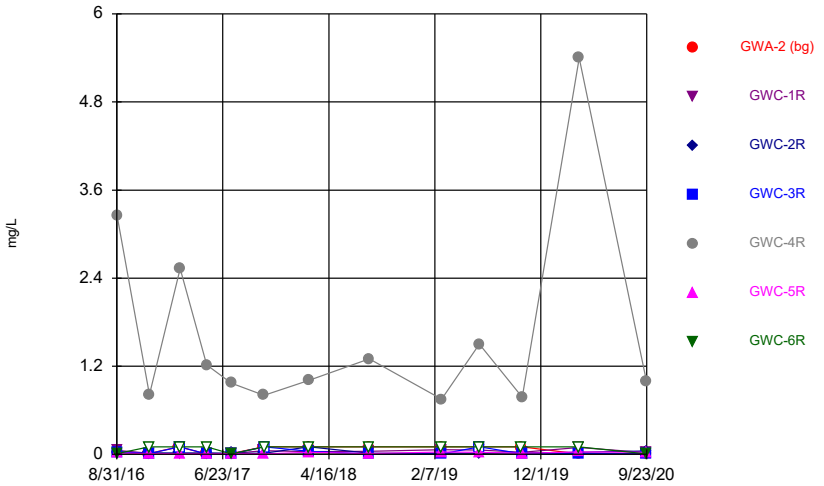
Time Series



Constituent: Beryllium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

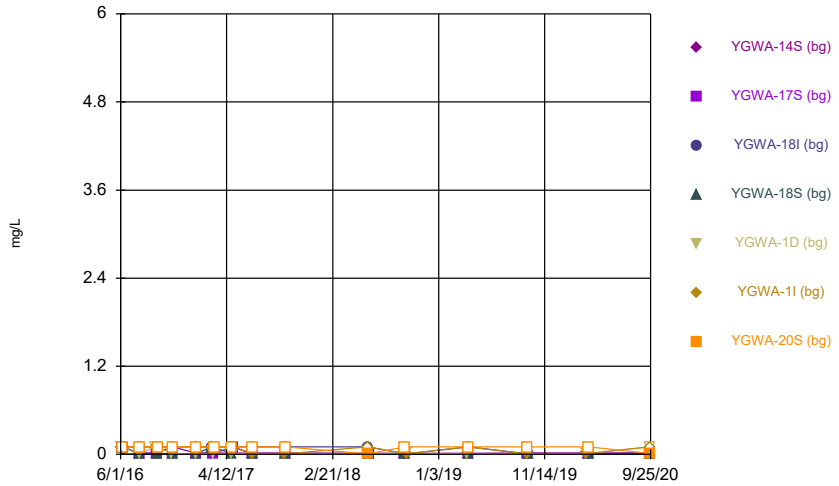
Time Series



Constituent: Boron Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

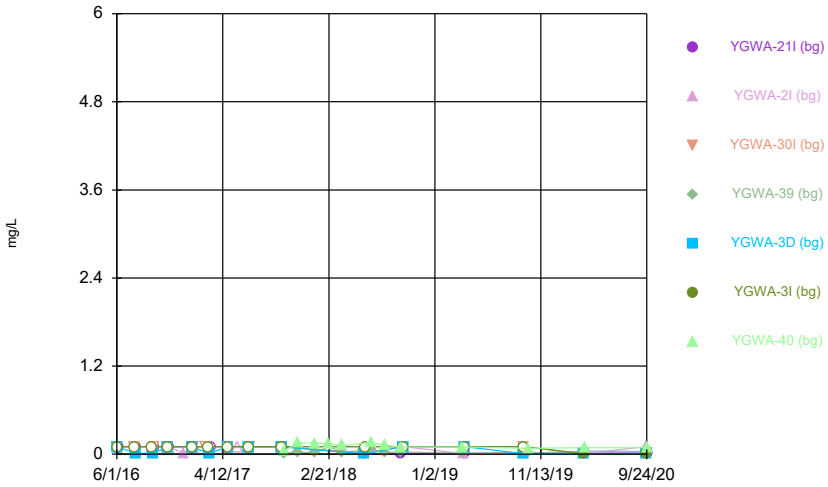
Time Series



Constituent: Boron Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

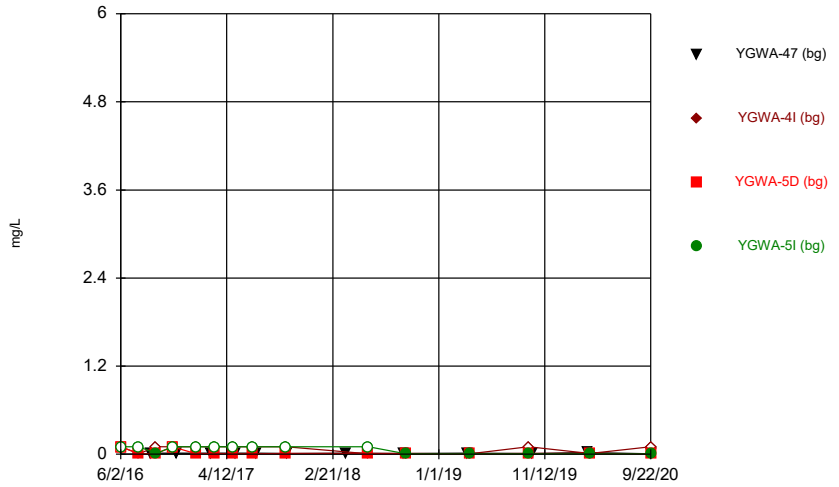
Time Series



Constituent: Boron Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

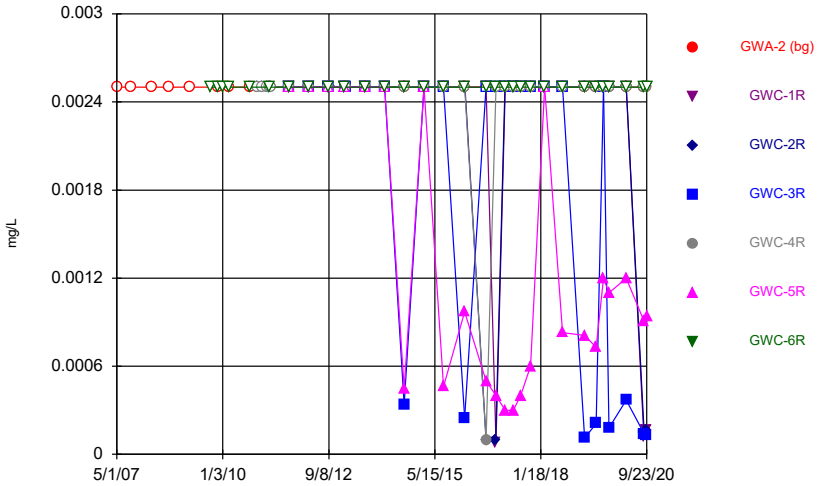
Time Series



Constituent: Boron Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

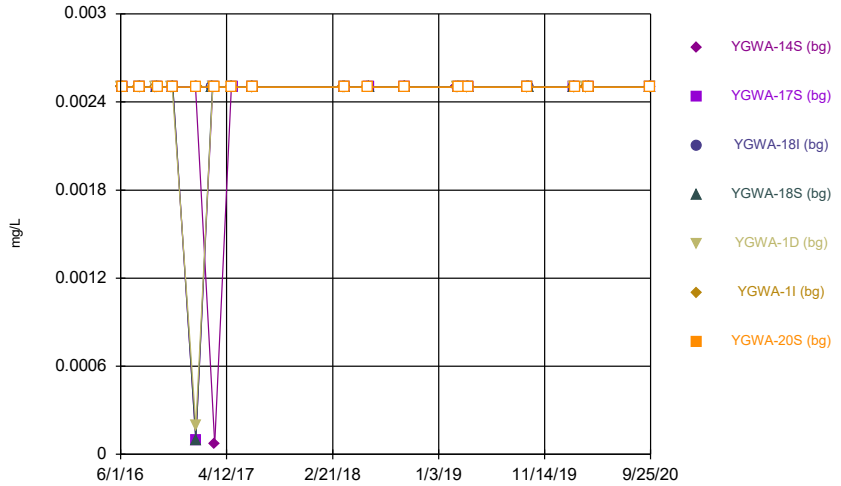
Time Series



Constituent: Cadmium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

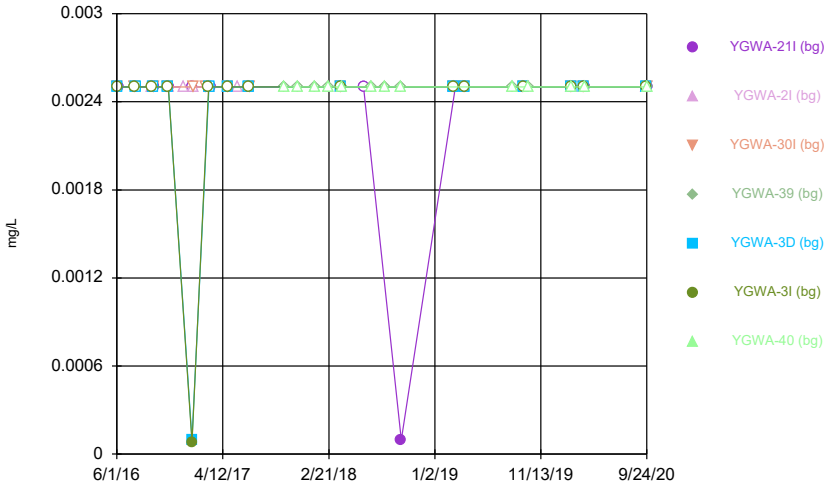
Time Series



Constituent: Cadmium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

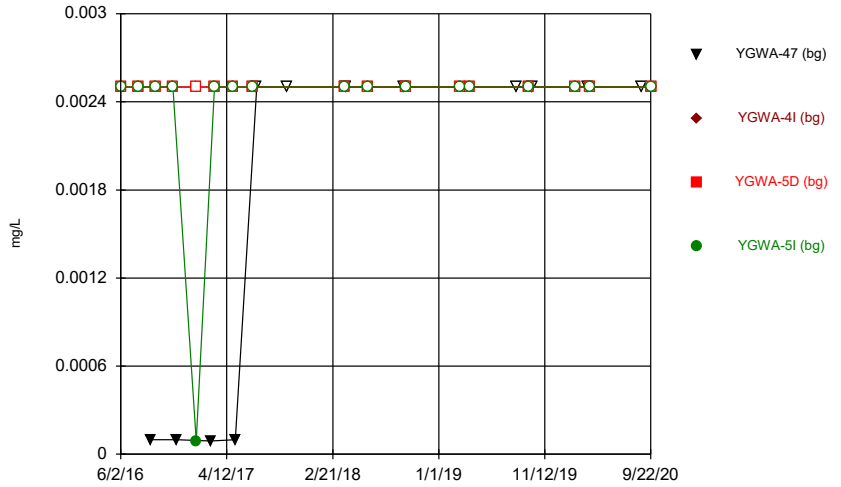
Time Series



Constituent: Cadmium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

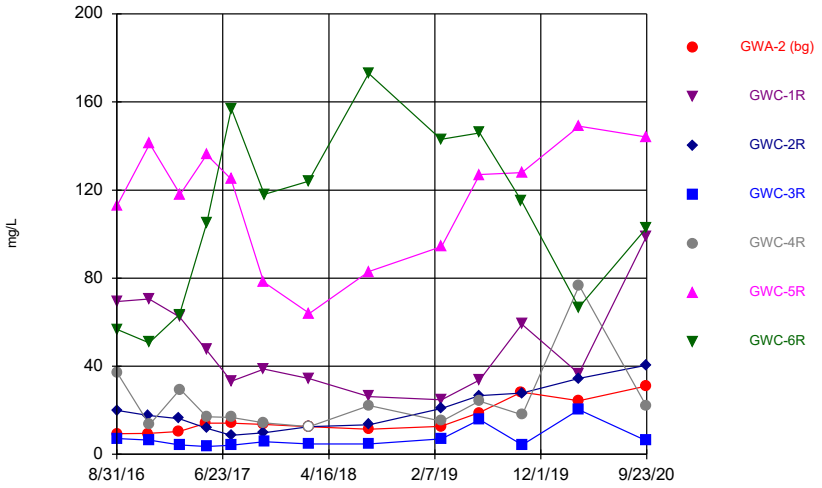
Time Series



Constituent: Cadmium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

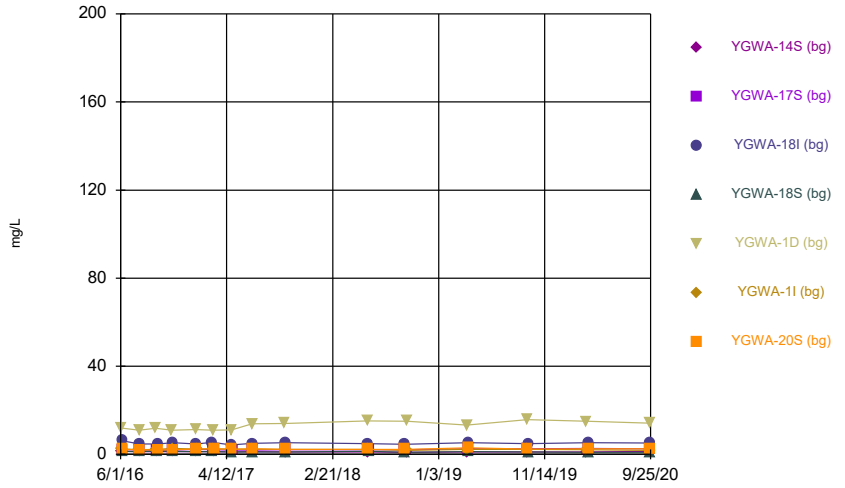
Time Series



Constituent: Calcium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

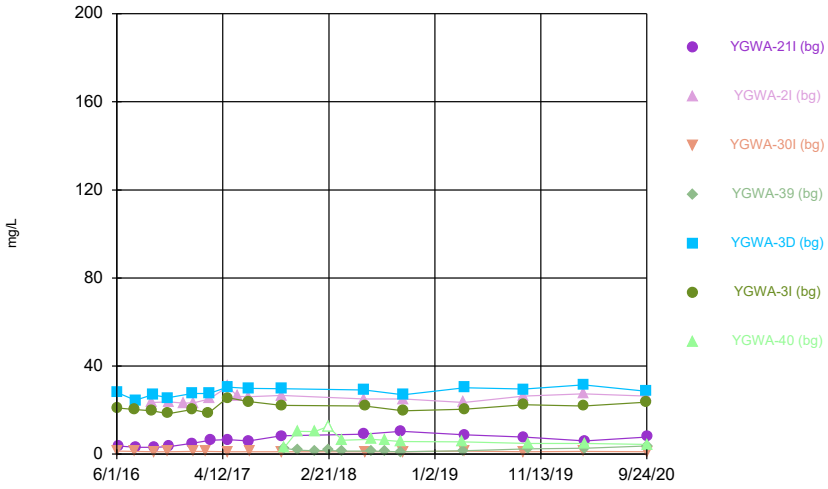
Time Series



Constituent: Calcium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

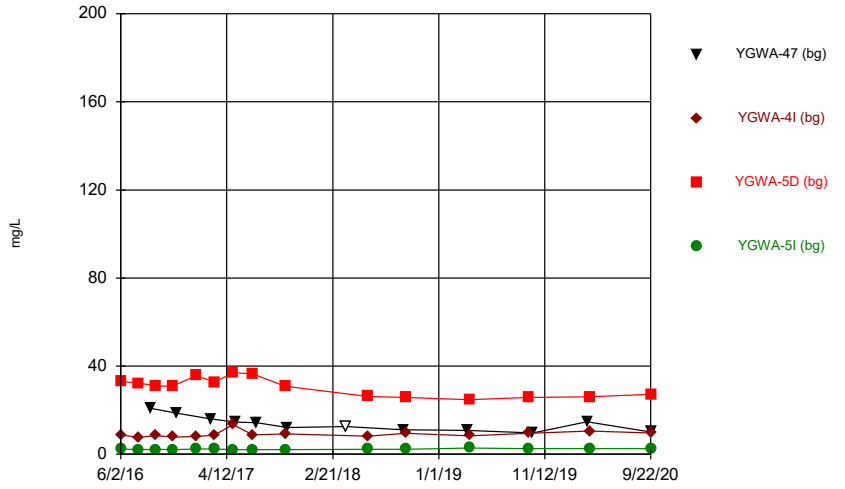
Time Series



Constituent: Calcium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

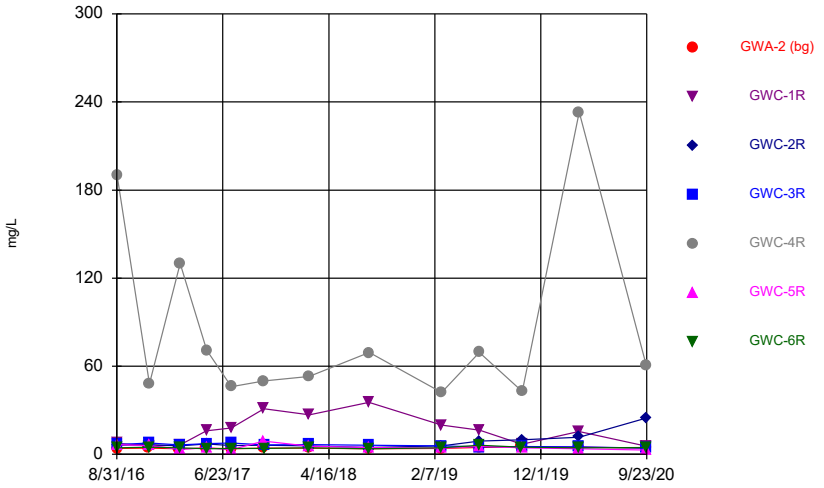
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Calcium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series

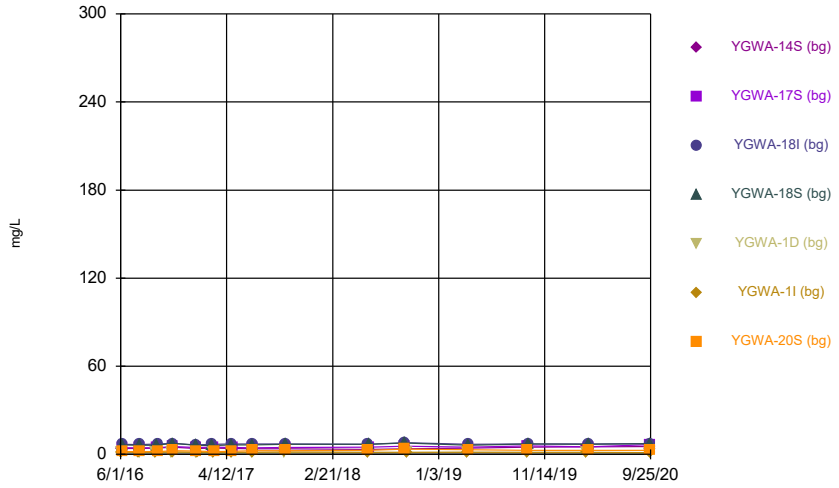


Constituent: Chloride Analysis Run 12/2/2020 9:20 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

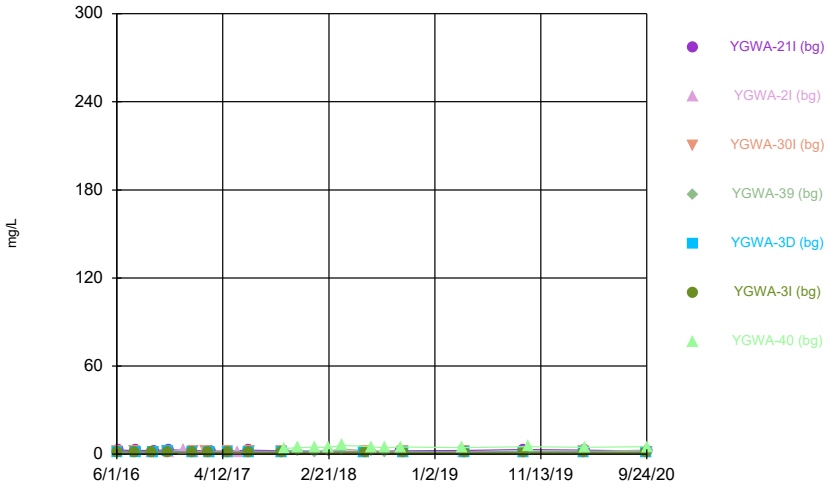


Constituent: Chloride Analysis Run 12/2/2020 9:20 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

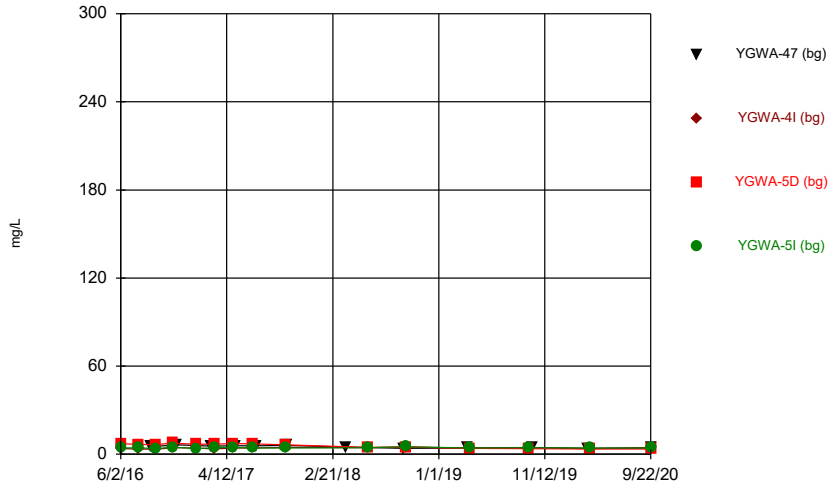


Constituent: Chloride Analysis Run 12/2/2020 9:20 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

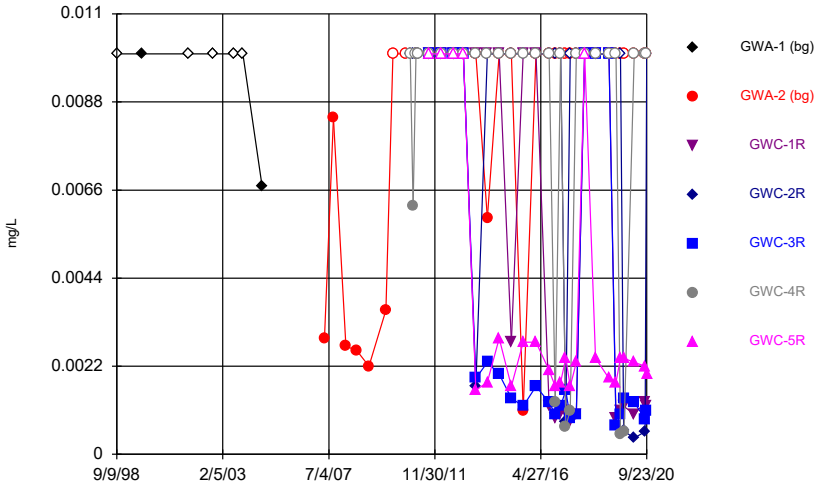


Constituent: Chloride Analysis Run 12/2/2020 9:20 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

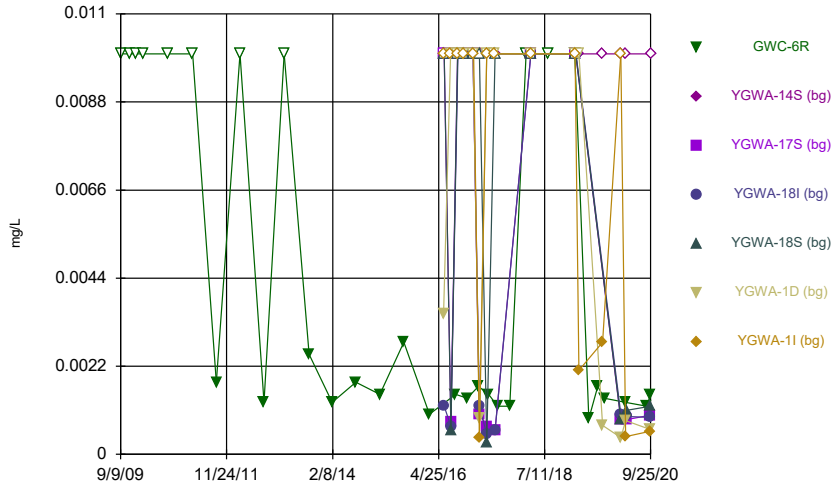
Time Series



Constituent: Chromium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

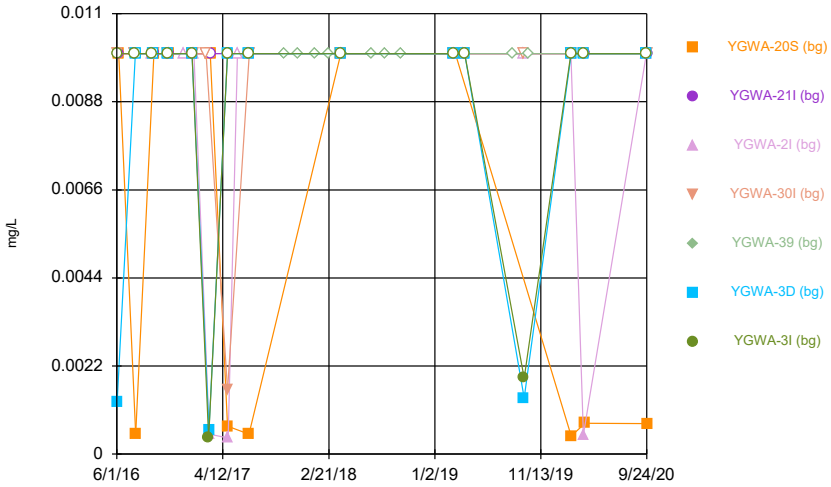
Time Series



Constituent: Chromium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

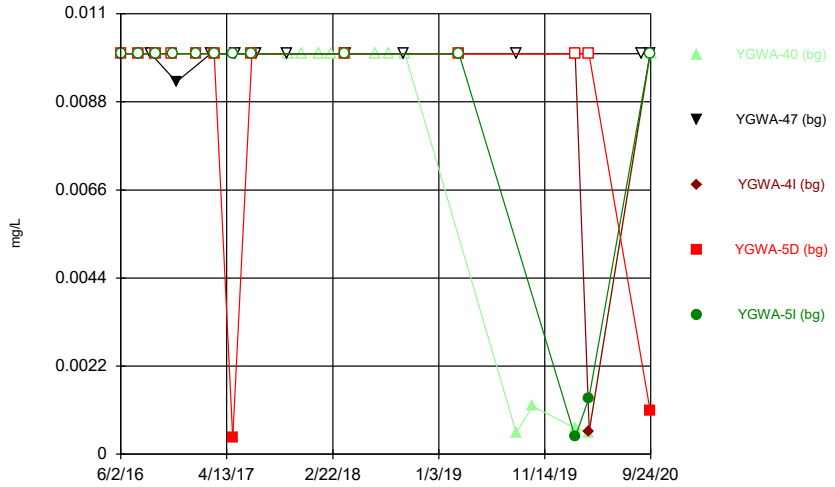
Time Series



Constituent: Chromium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

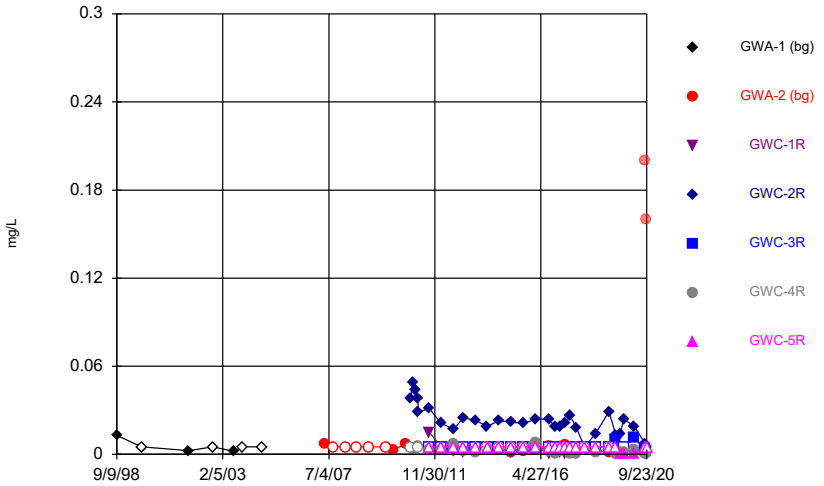
Time Series



Constituent: Chromium Analysis Run 12/2/2020 9:20 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

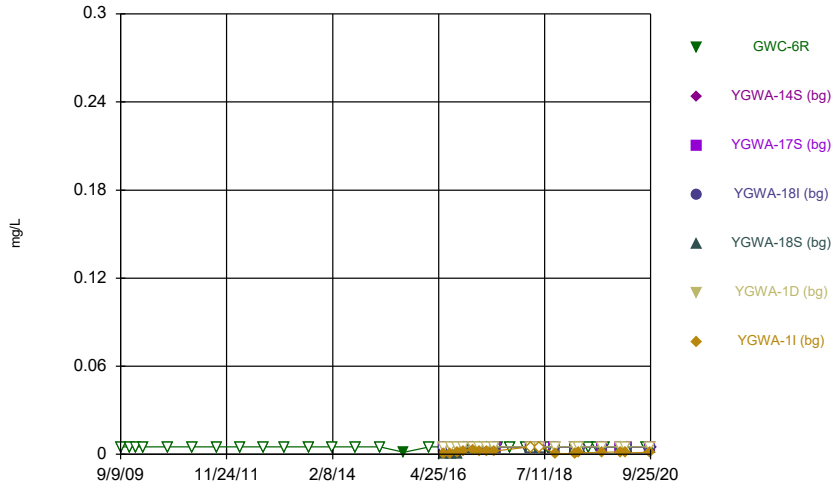
Time Series



Constituent: Cobalt Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

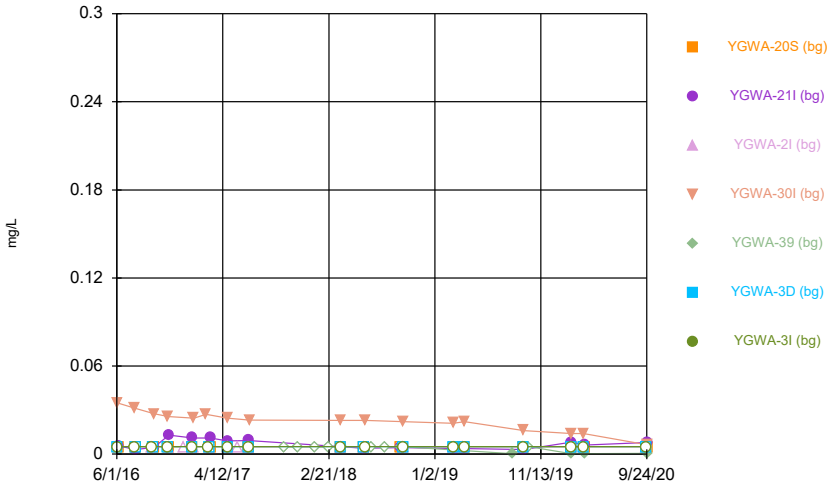
Time Series



Constituent: Cobalt Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

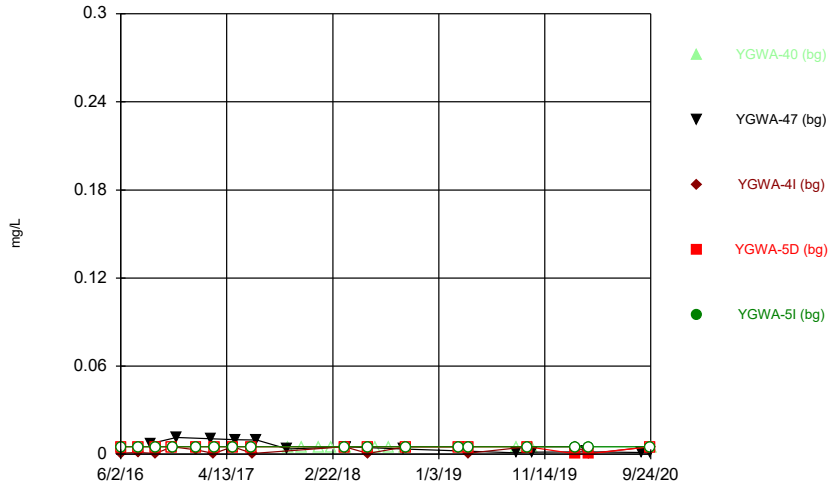
Time Series



Constituent: Cobalt Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

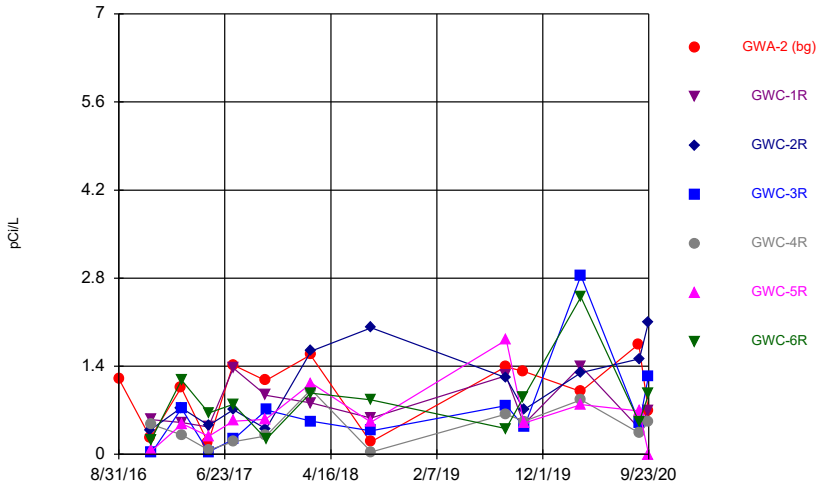
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

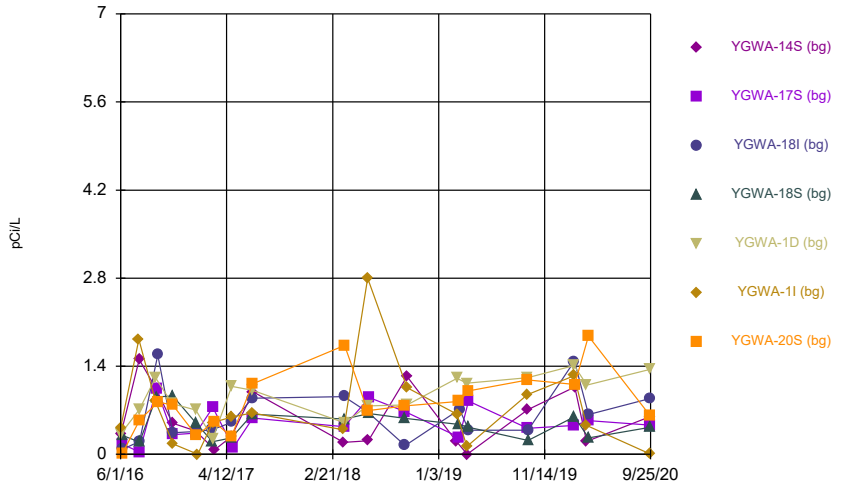
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

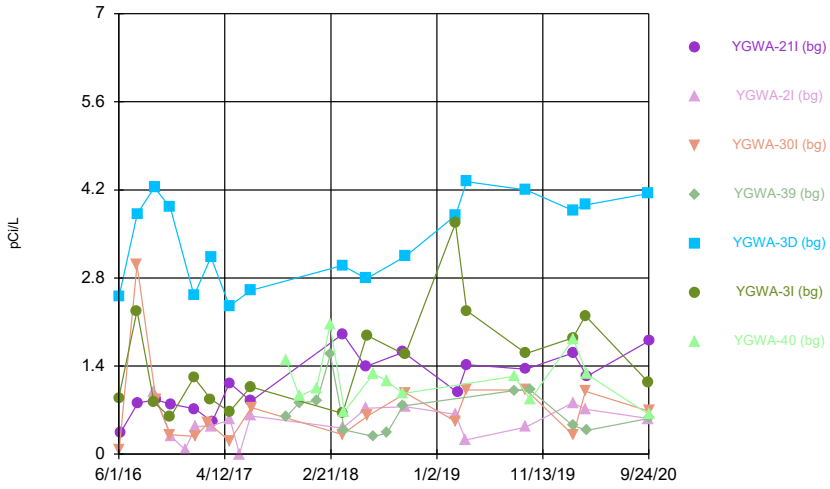
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

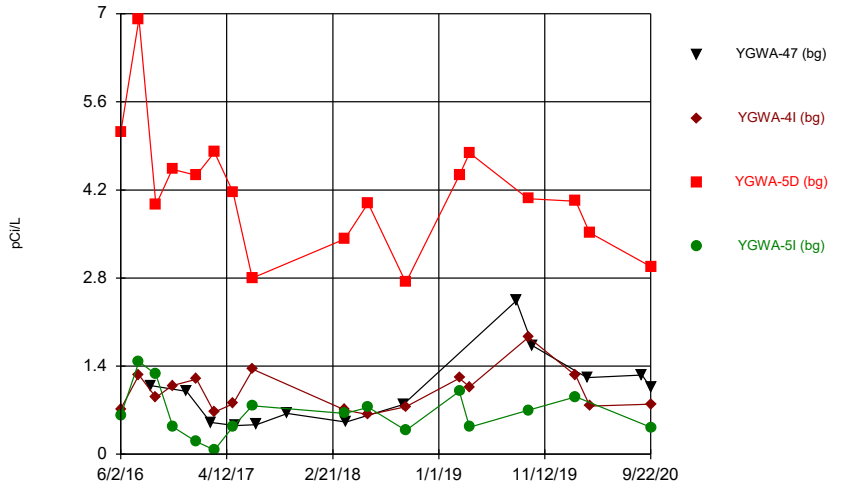
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

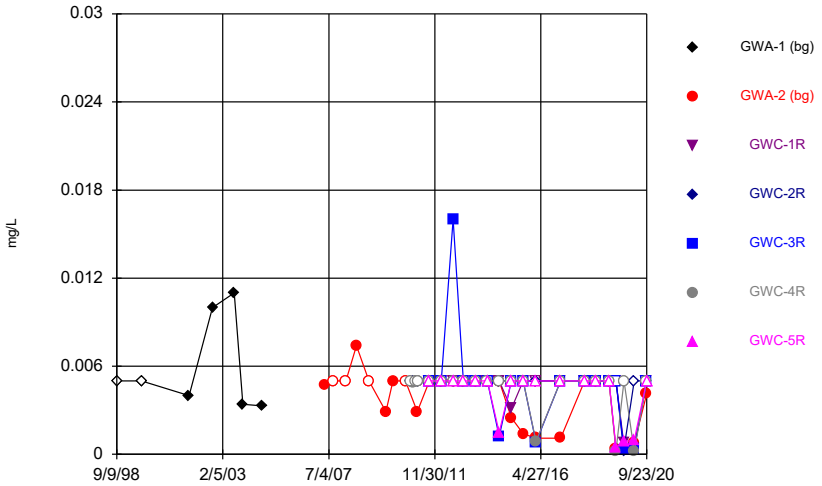
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

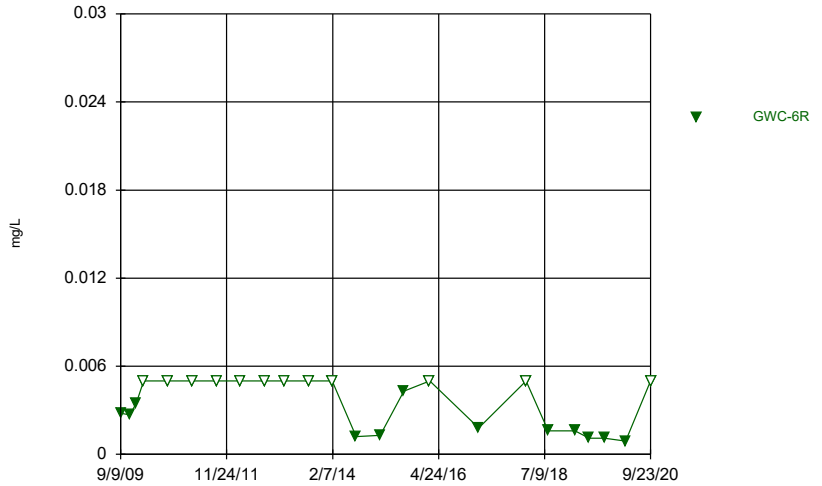
Time Series



Constituent: Copper Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

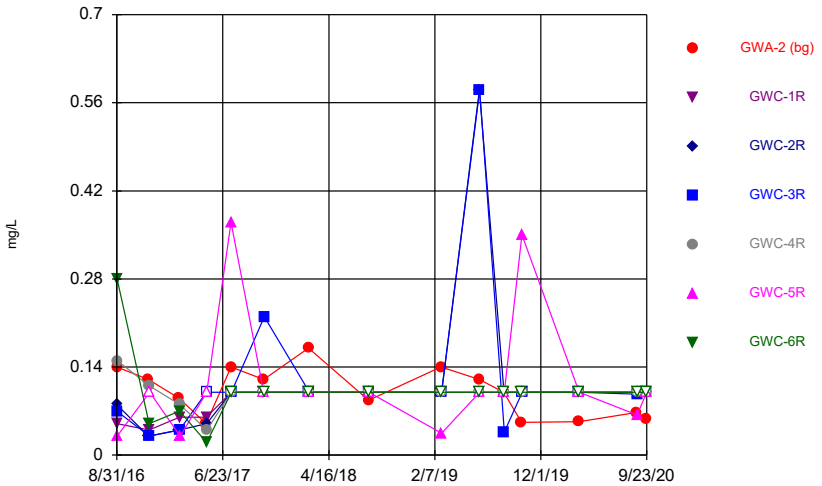
Time Series



Constituent: Copper Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

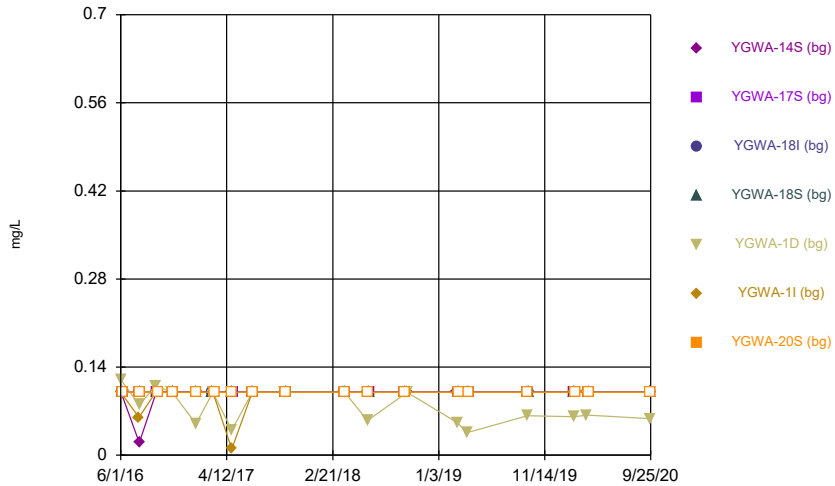
Time Series



Constituent: Fluoride Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

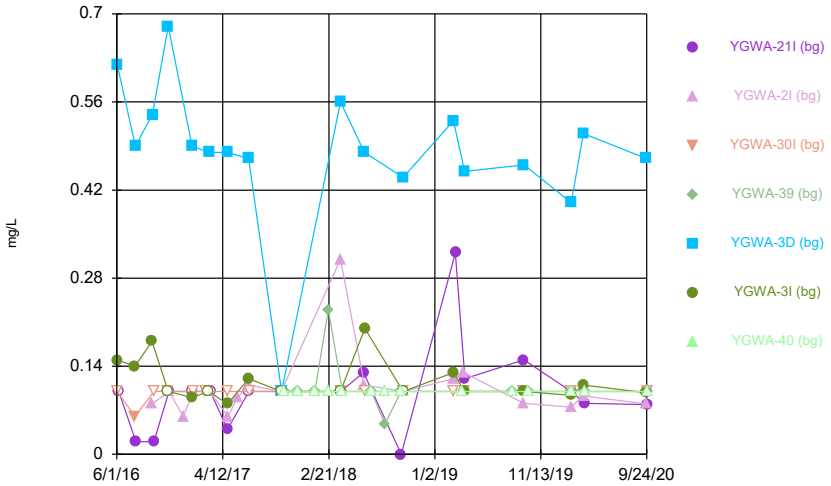
Time Series



Constituent: Fluoride Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

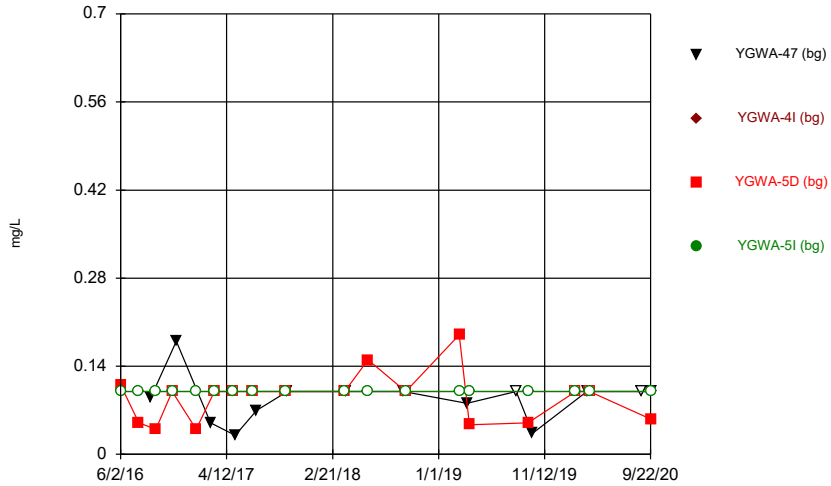
Time Series



Constituent: Fluoride Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

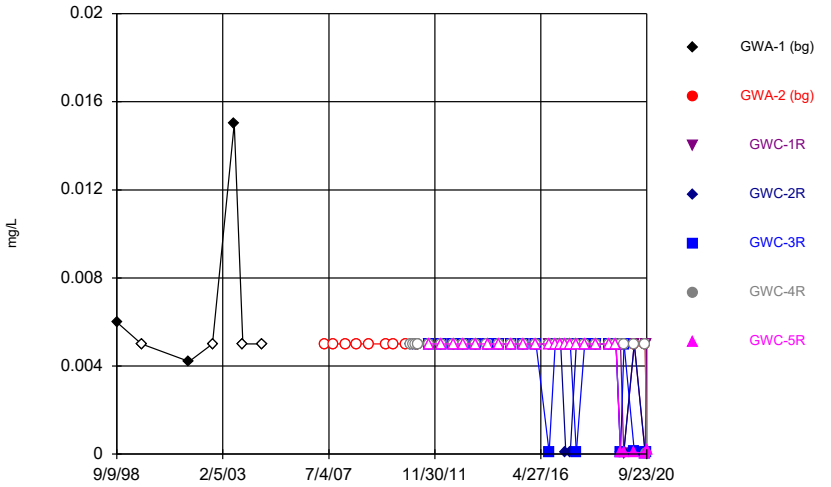
Time Series



Constituent: Fluoride Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

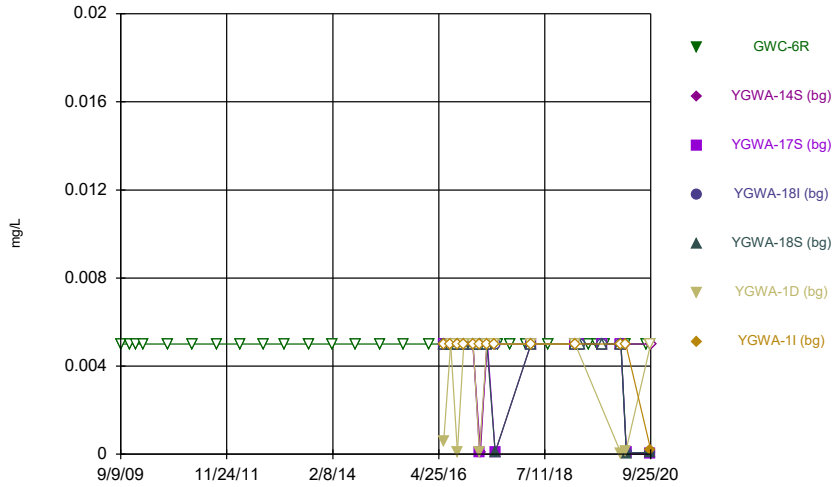
Time Series



Constituent: Lead Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

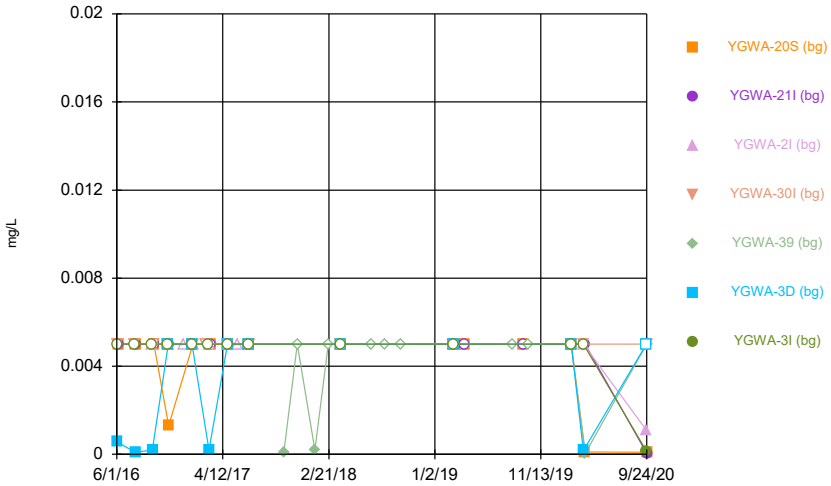
Time Series



Constituent: Lead Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

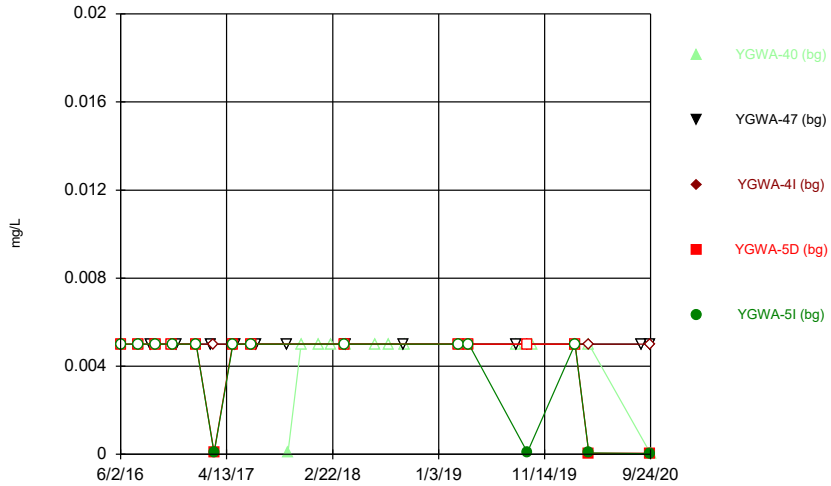
Time Series



Constituent: Lead Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

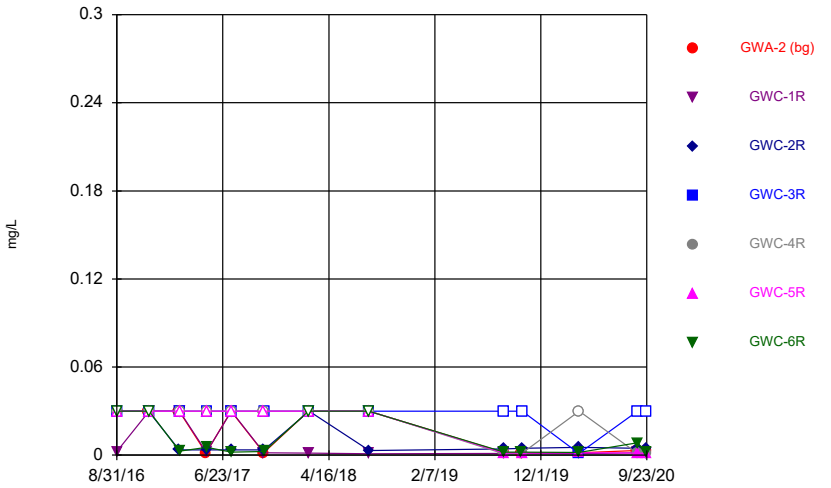
Time Series



Constituent: Lead Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

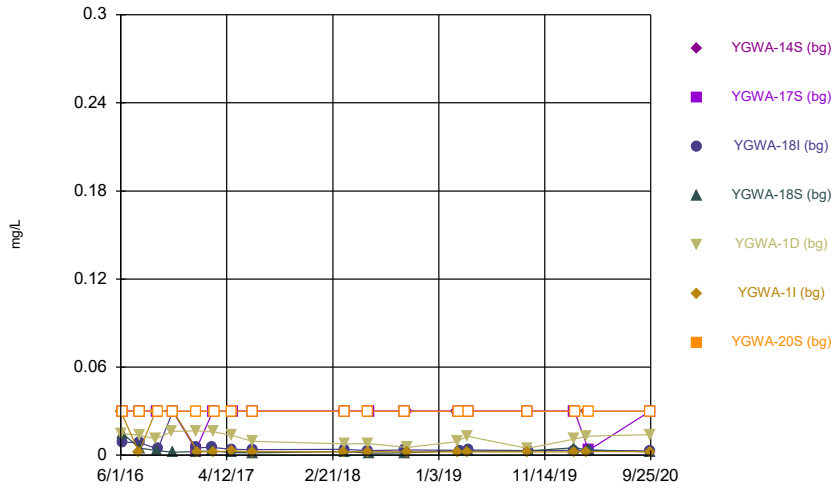
Time Series



Constituent: Lithium Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

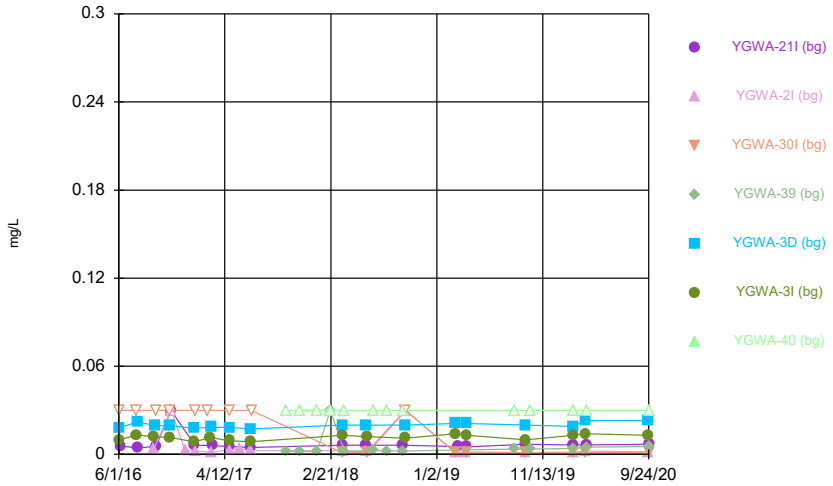
Time Series



Constituent: Lithium Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

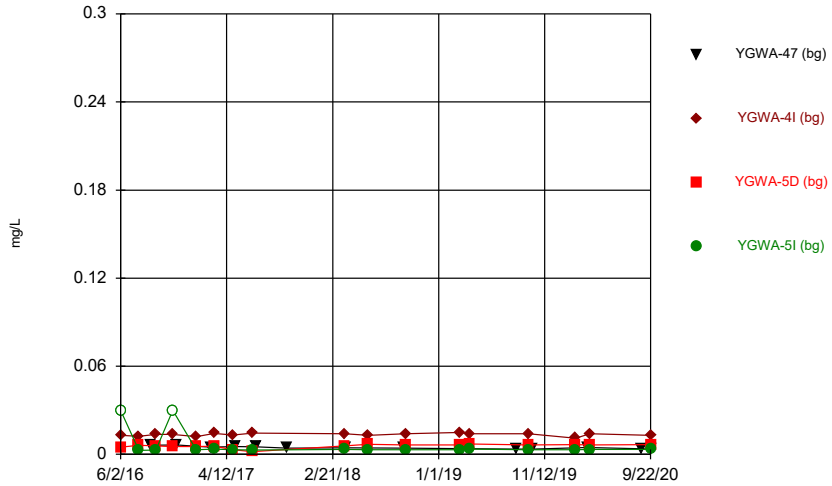
Time Series



Constituent: Lithium Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

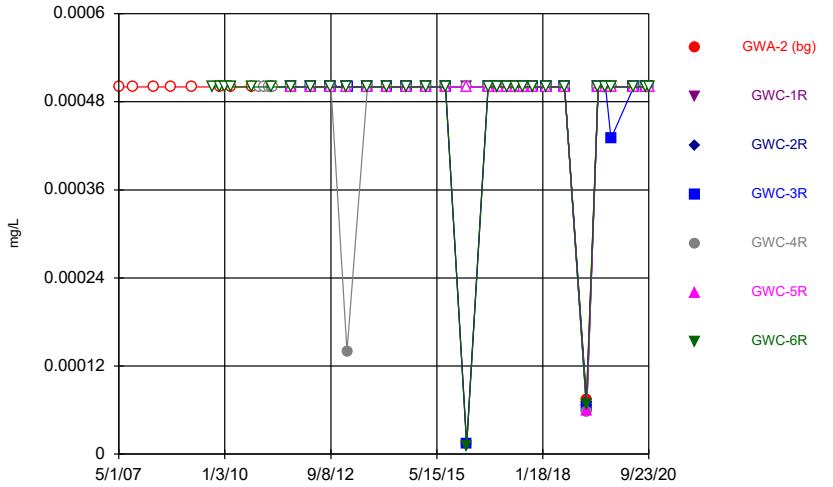
Time Series



Constituent: Lithium Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

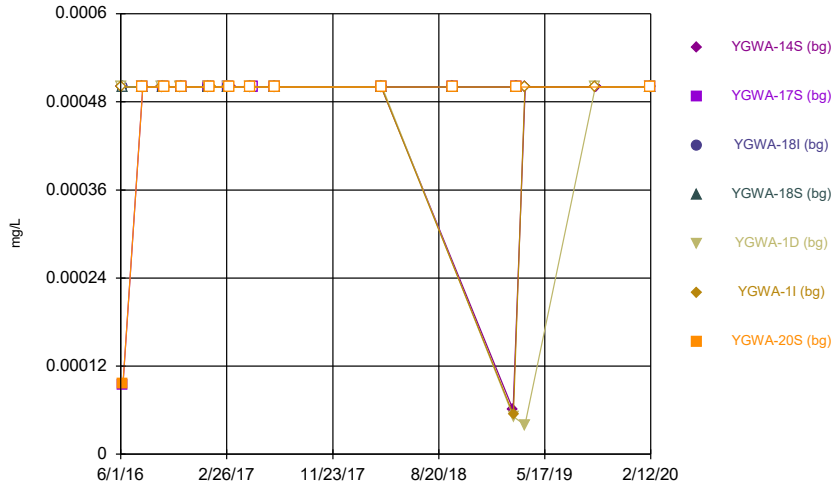
Time Series



Constituent: Mercury Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

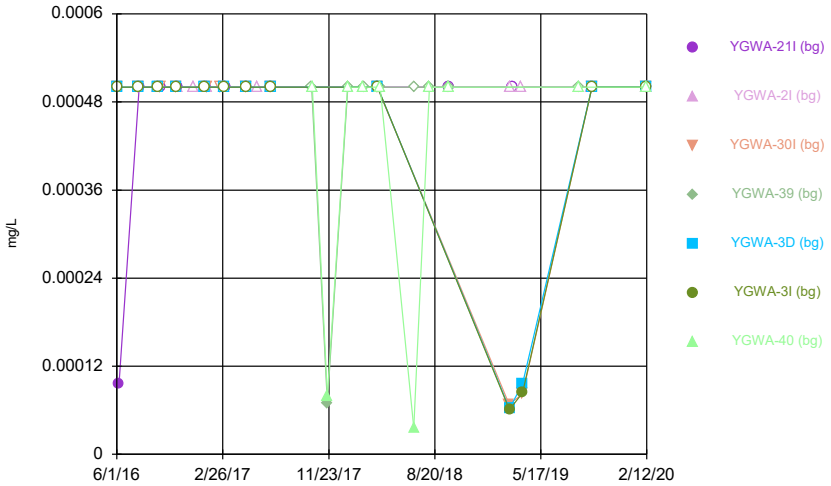
Time Series



Constituent: Mercury Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

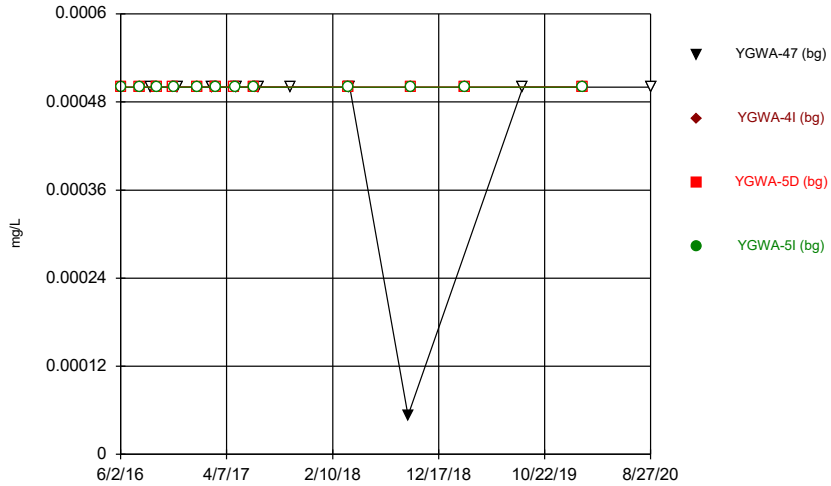
Time Series



Constituent: Mercury Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

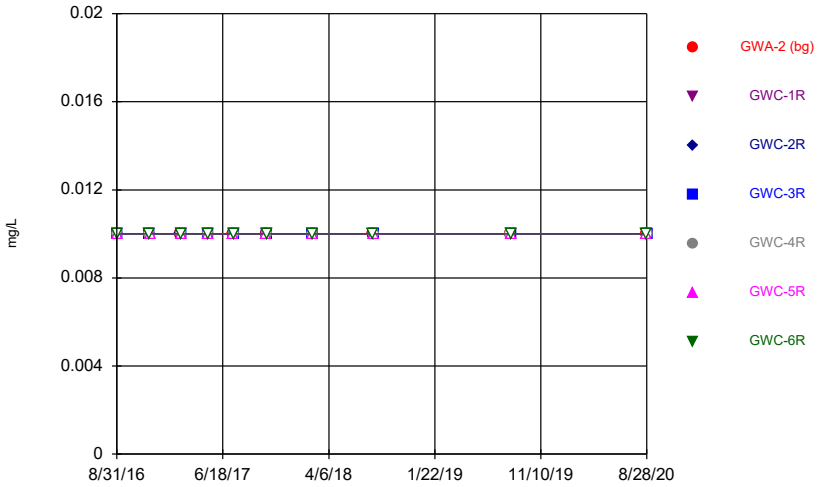
Time Series



Constituent: Mercury Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

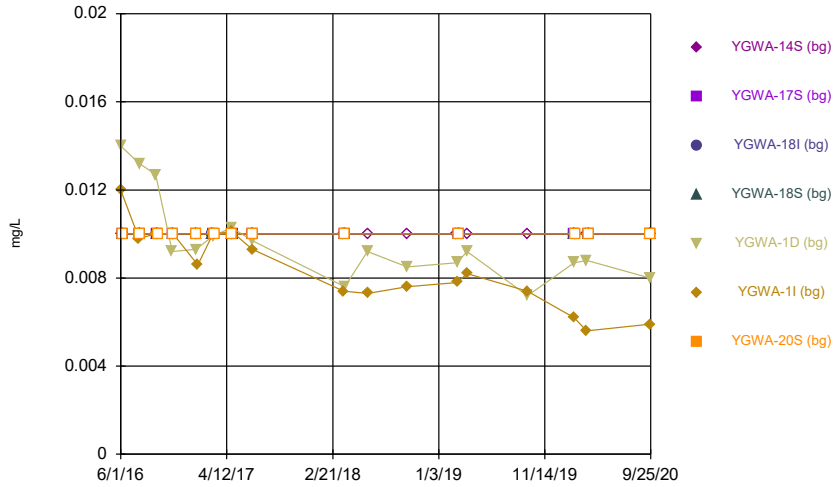
Time Series



Constituent: Molybdenum Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

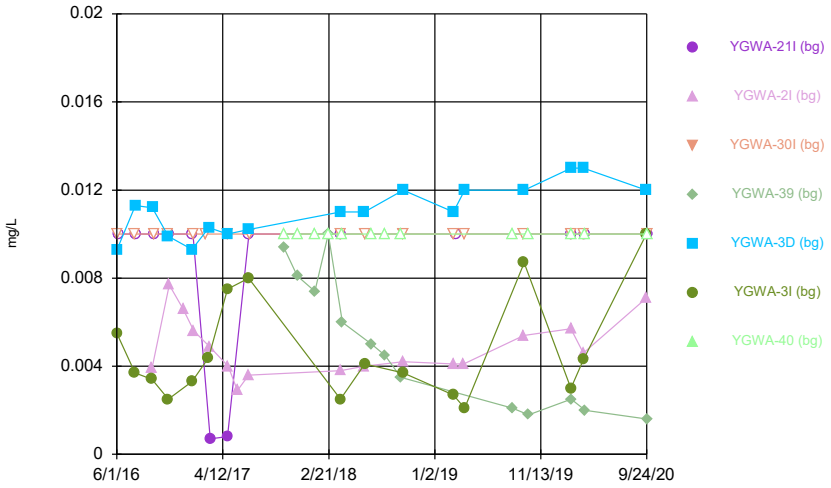
Time Series



Constituent: Molybdenum Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

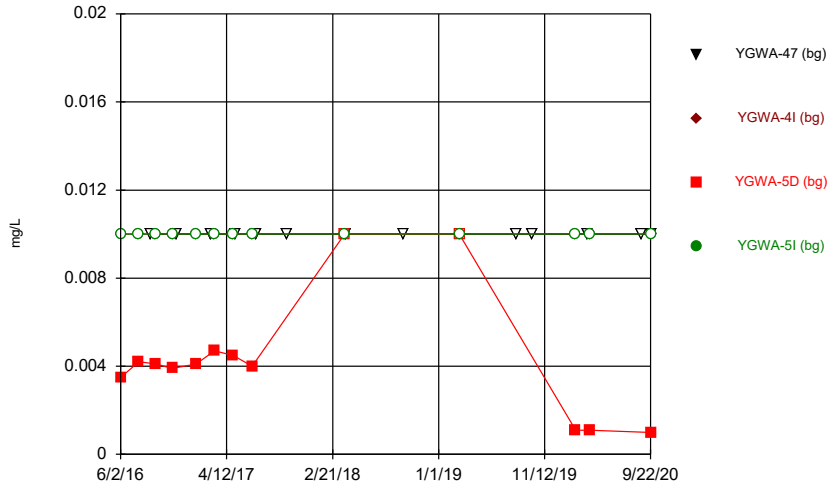
Time Series



Constituent: Molybdenum Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

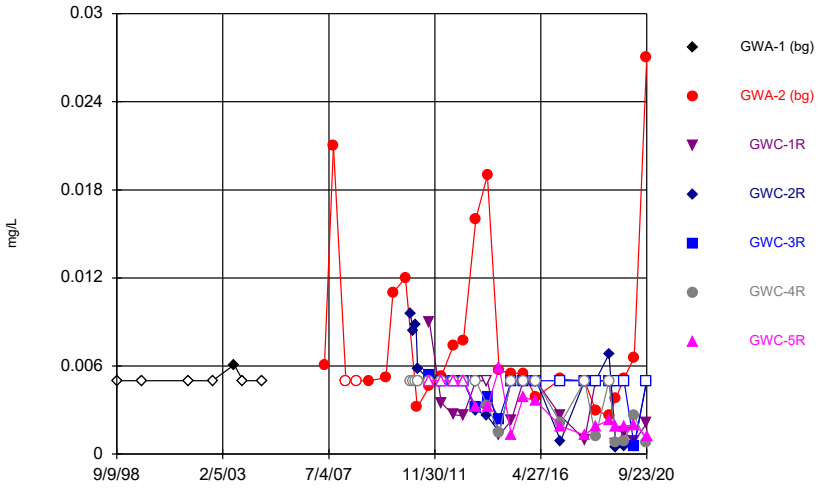
Time Series



Constituent: Molybdenum Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

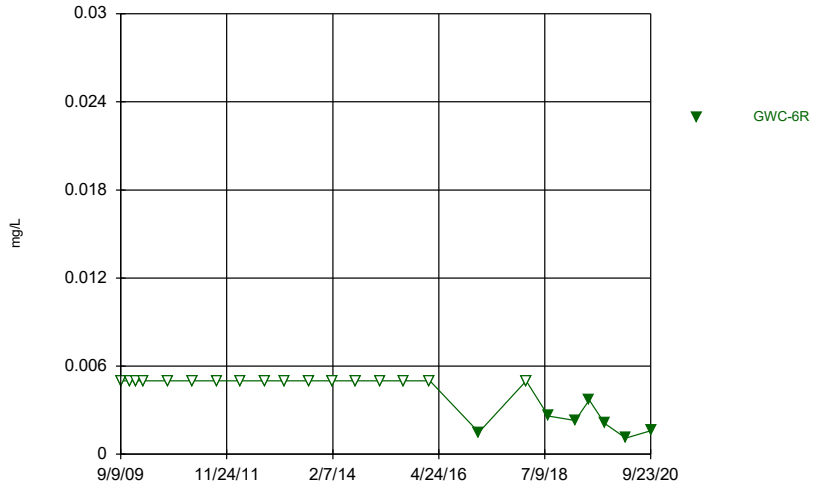
Time Series



Constituent: Nickel Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

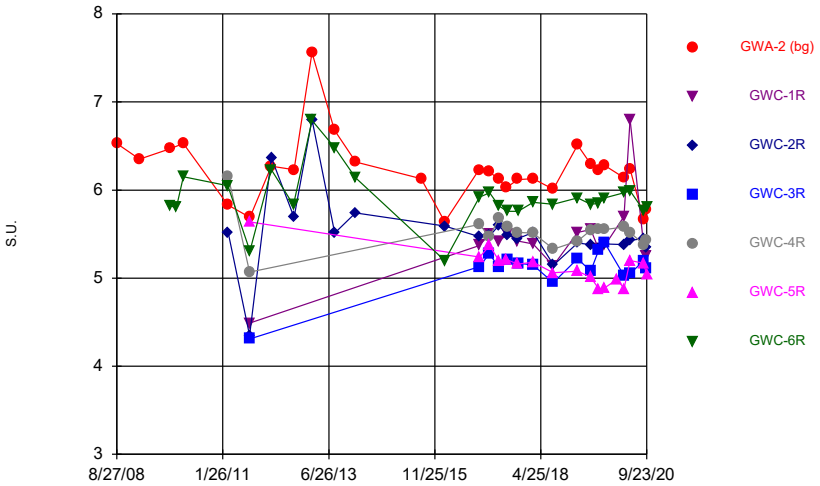
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Nickel Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series

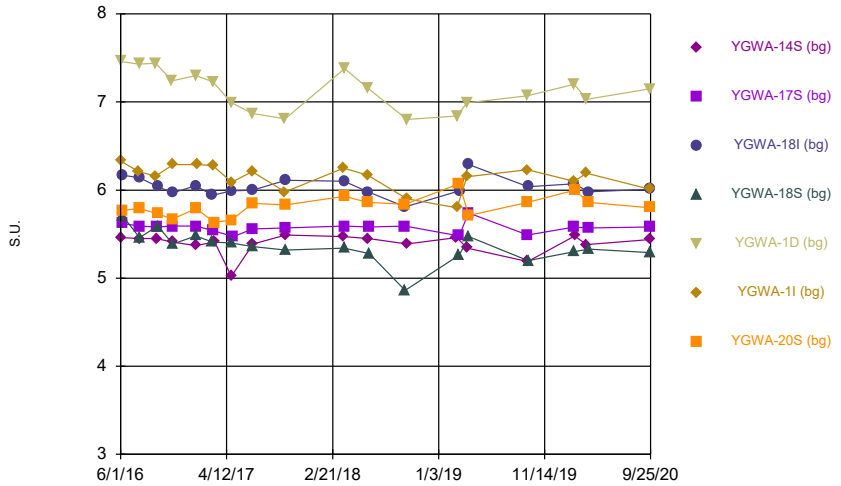


Constituent: pH Analysis Run 12/2/2020 9:21 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

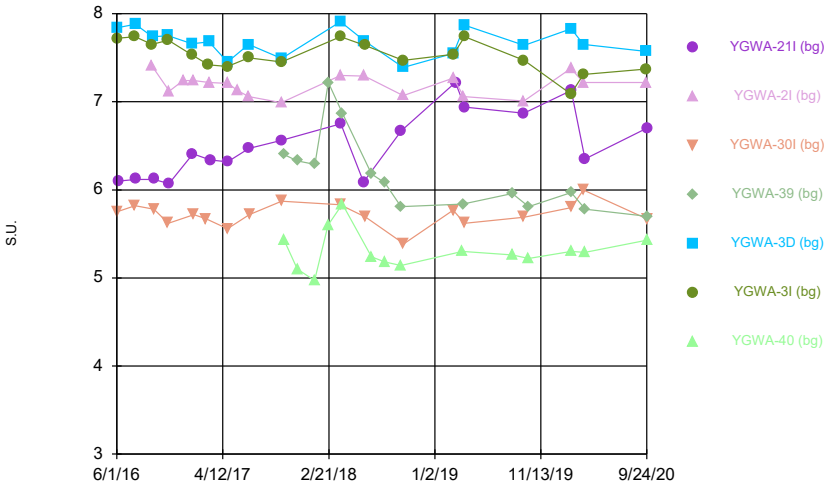


Constituent: pH Analysis Run 12/2/2020 9:21 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

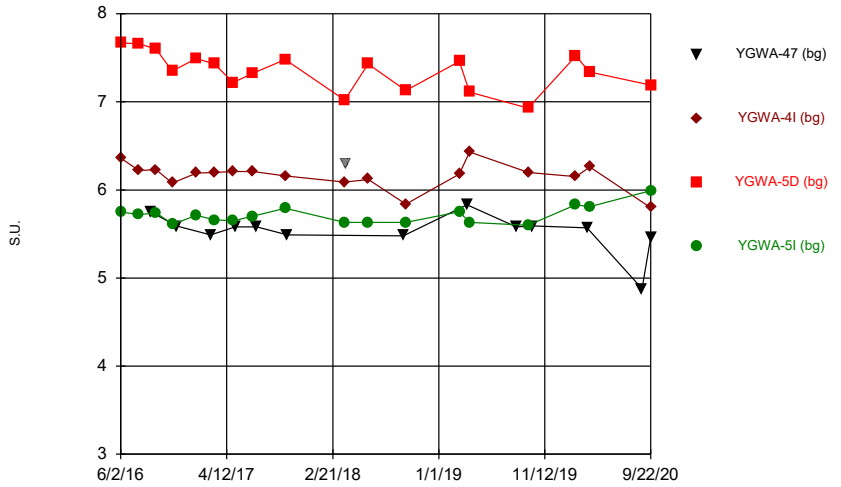


Constituent: pH Analysis Run 12/2/2020 9:21 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

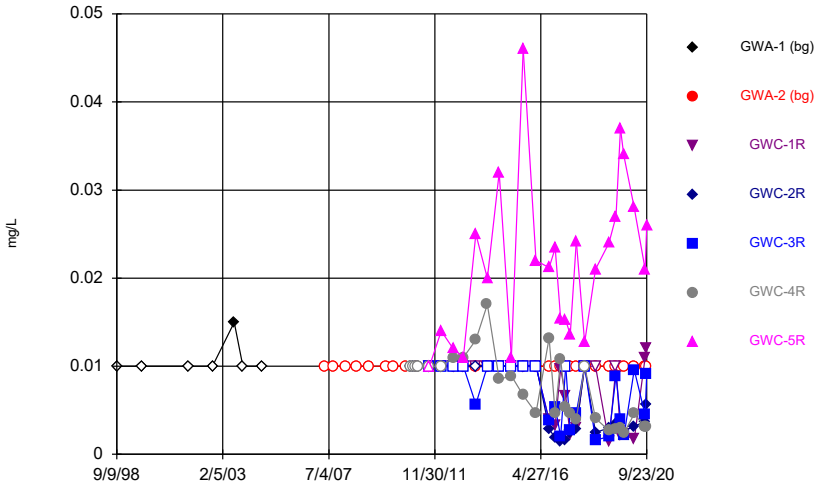


Constituent: pH Analysis Run 12/2/2020 9:21 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

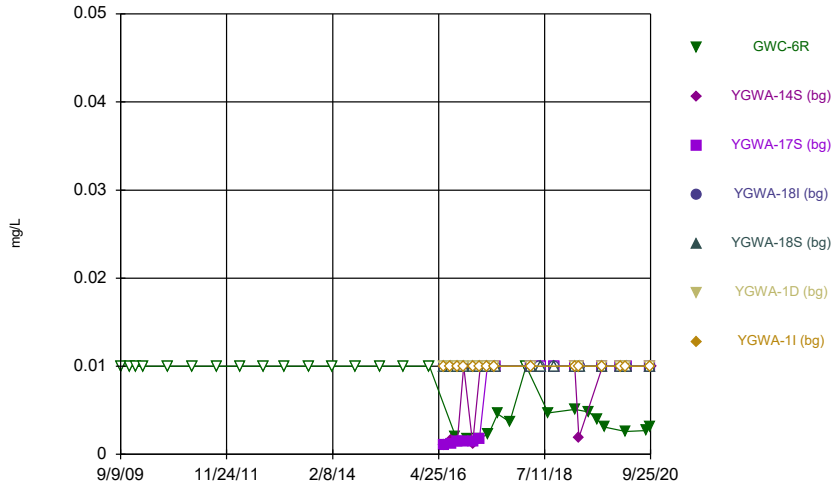
Time Series



Constituent: Selenium Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

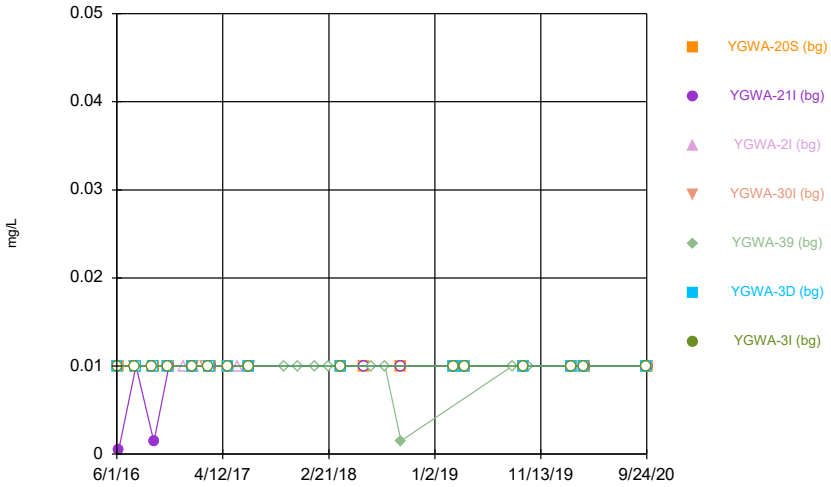
Time Series



Constituent: Selenium Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

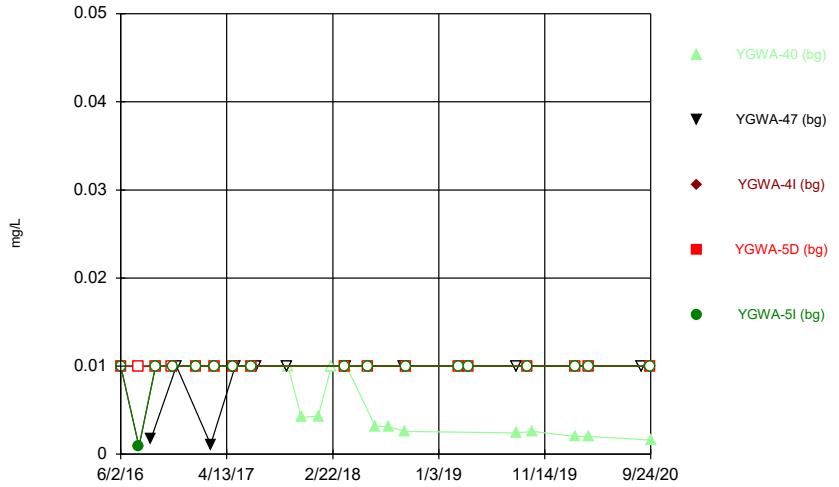
Time Series



Constituent: Selenium Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

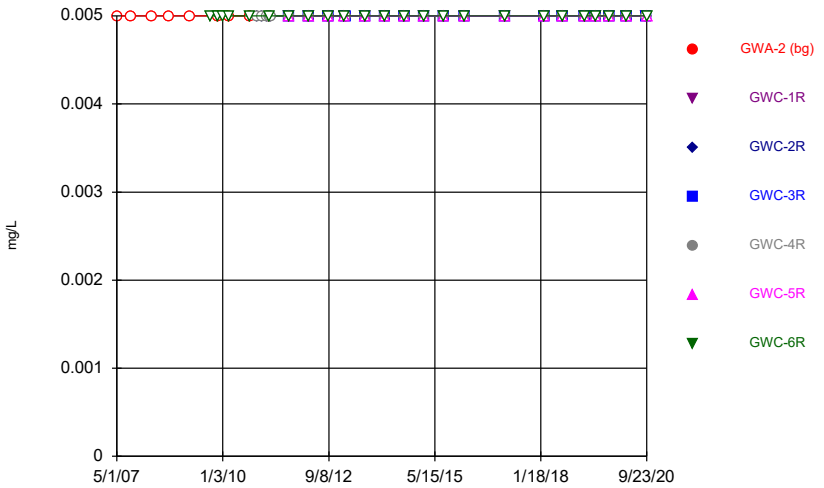
Time Series



Constituent: Selenium Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

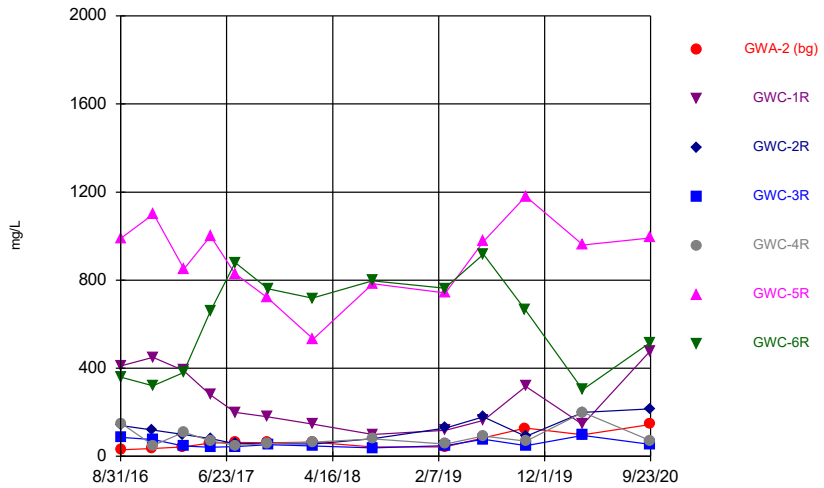
Time Series



Constituent: Silver Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

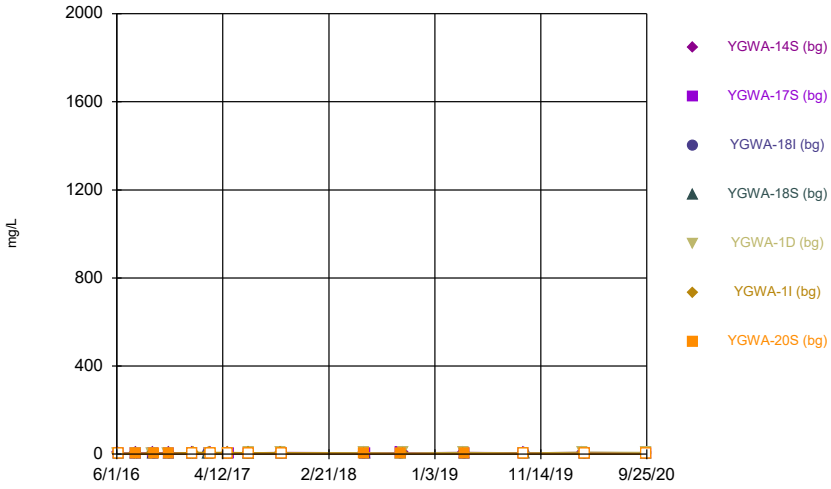
Time Series



Constituent: Sulfate Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

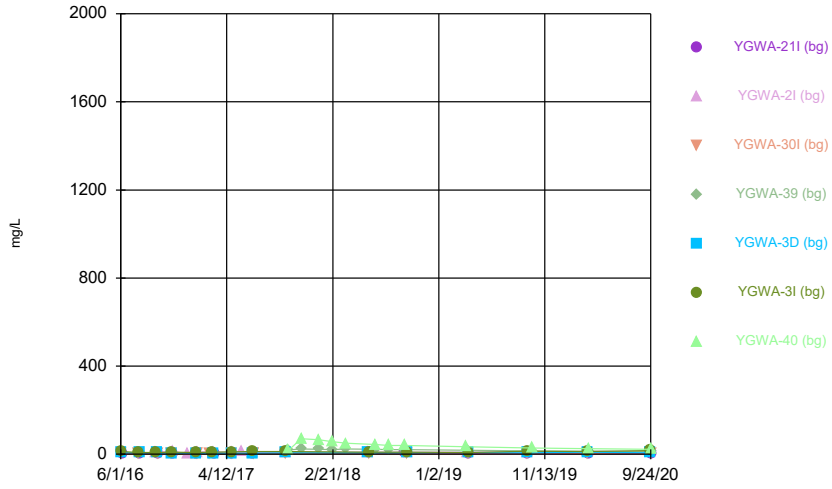
Time Series



Constituent: Sulfate Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

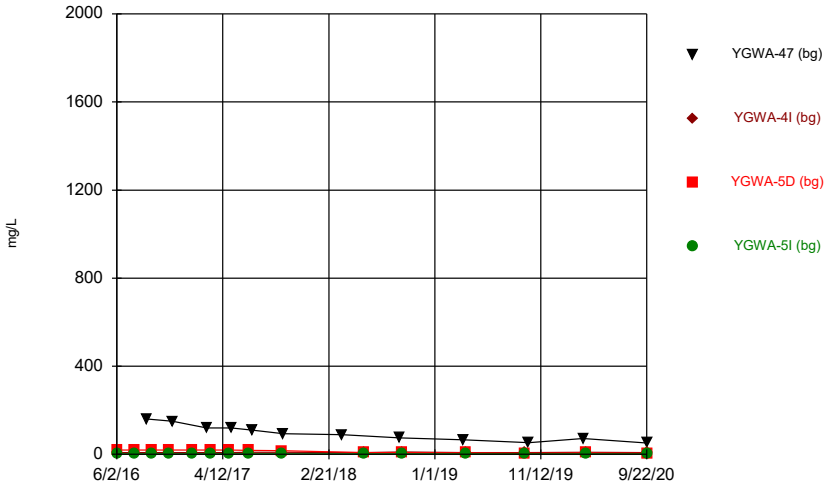
Time Series



Constituent: Sulfate Analysis Run 12/2/2020 9:21 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

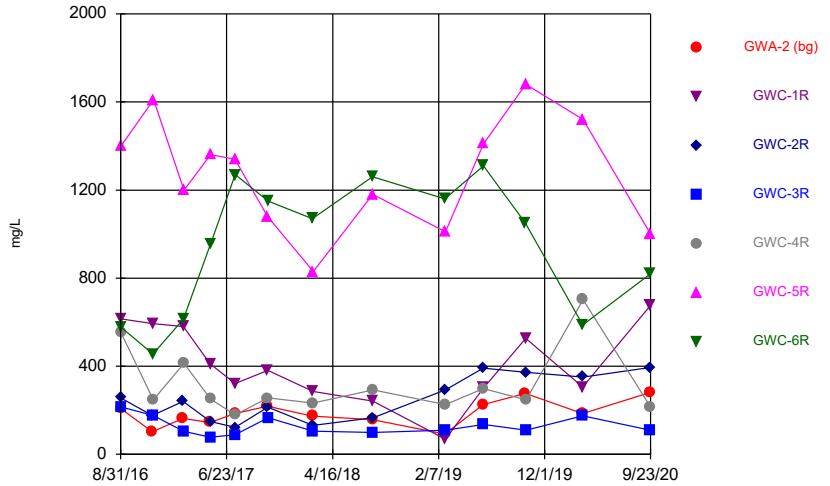


Constituent: Sulfate Analysis Run 12/2/2020 9:21 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series

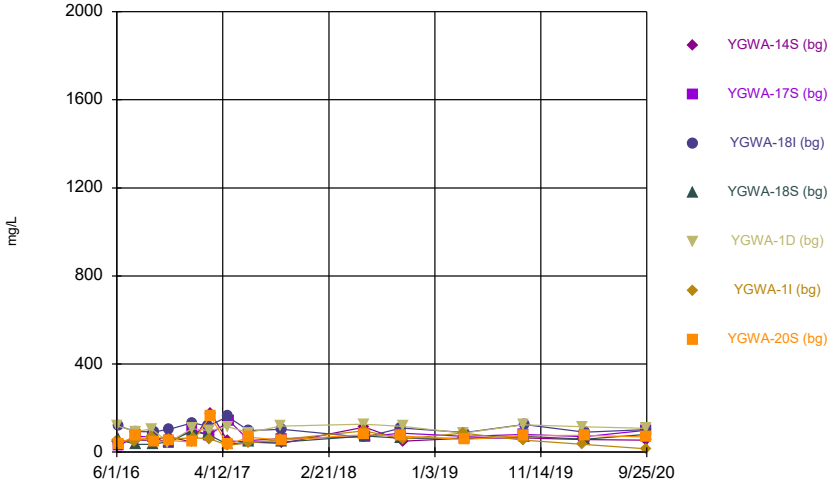


Constituent: TDS Analysis Run 12/2/2020 9:21 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



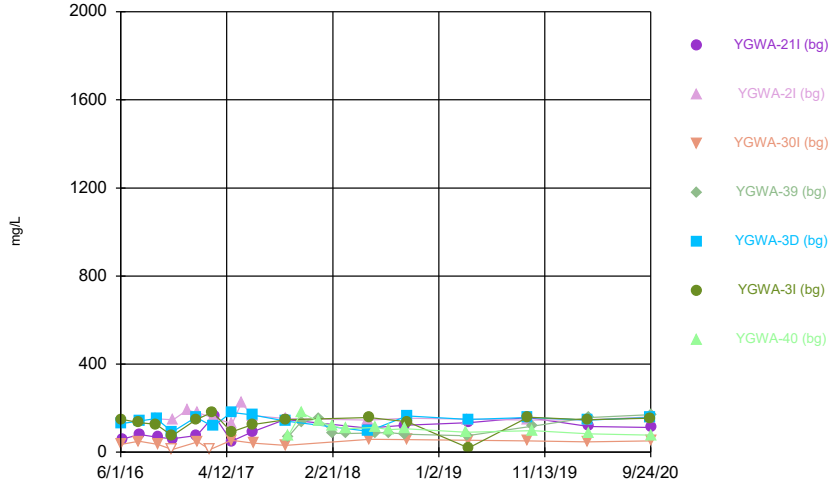
Constituent: TDS Analysis Run 12/2/2020 9:21 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

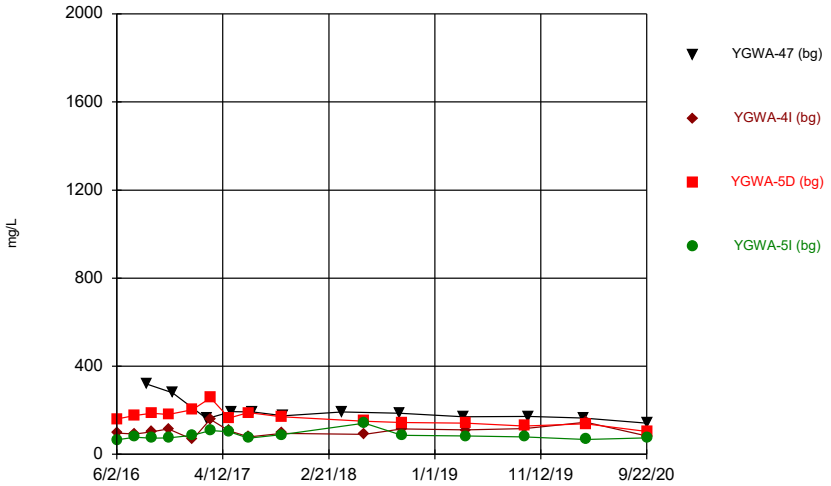


Constituent: TDS Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Time Series



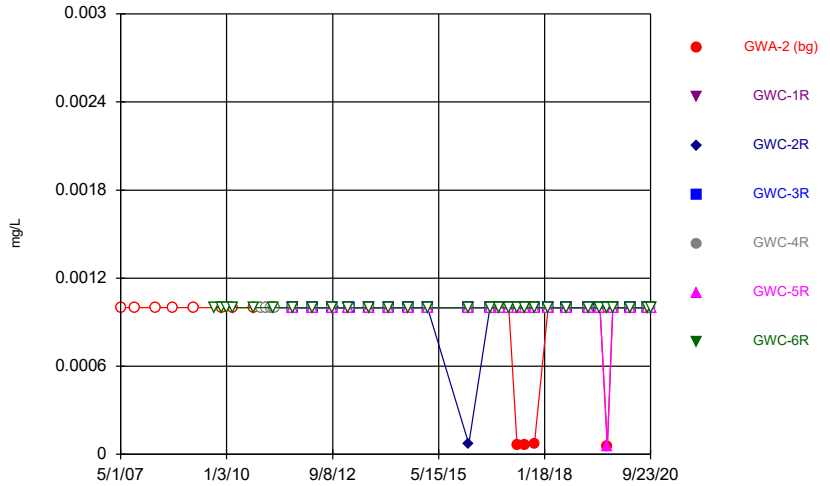
Constituent: TDS Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



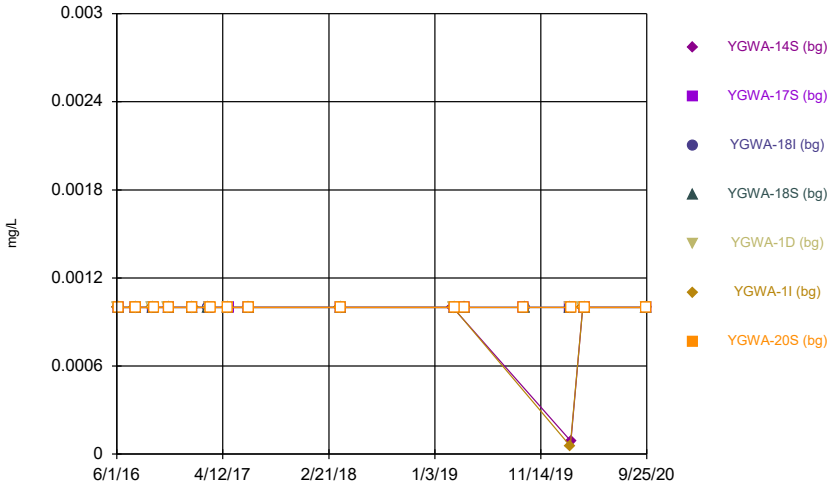
Constituent: Thallium Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



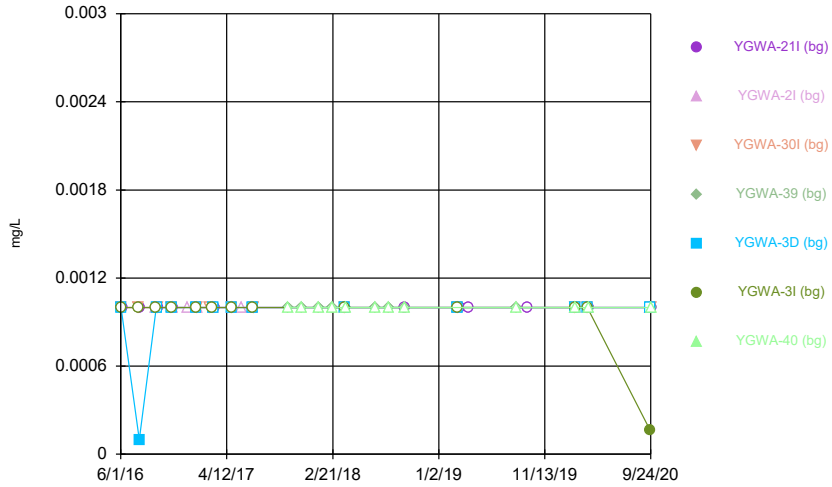
Constituent: Thallium Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

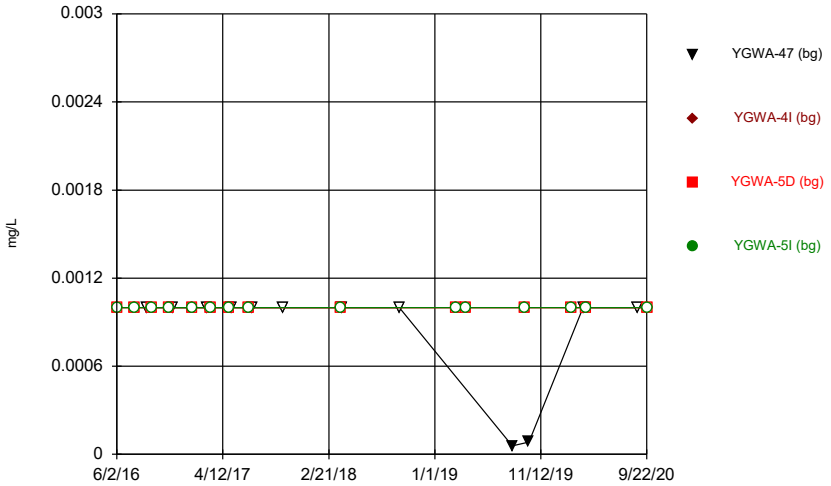


Constituent: Thallium Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

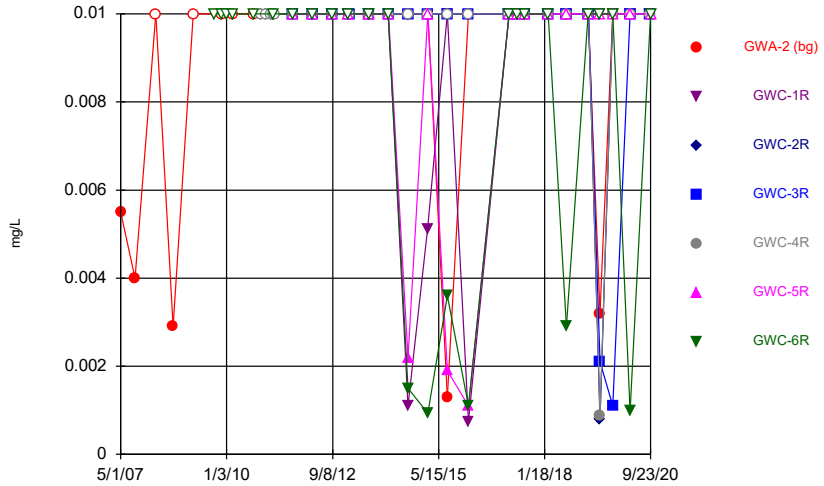
Time Series



Constituent: Thallium Analysis Run 12/2/2020 9:22 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

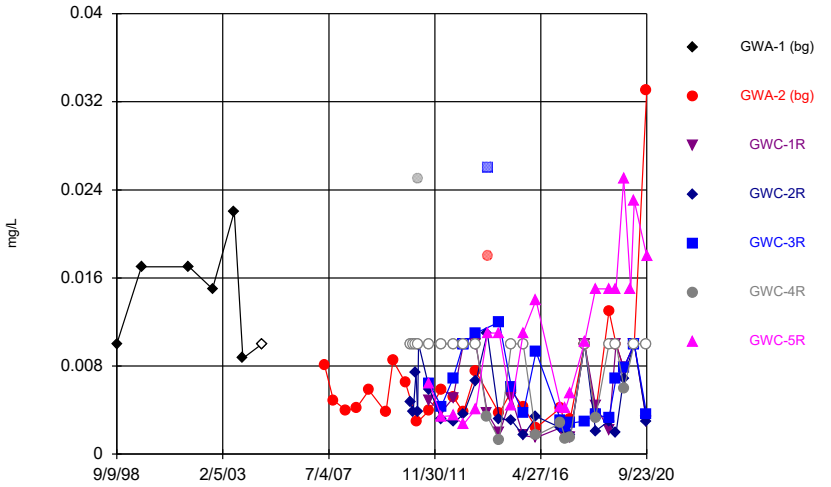
Time Series



Constituent: Vanadium Analysis Run 12/2/2020 9:22 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

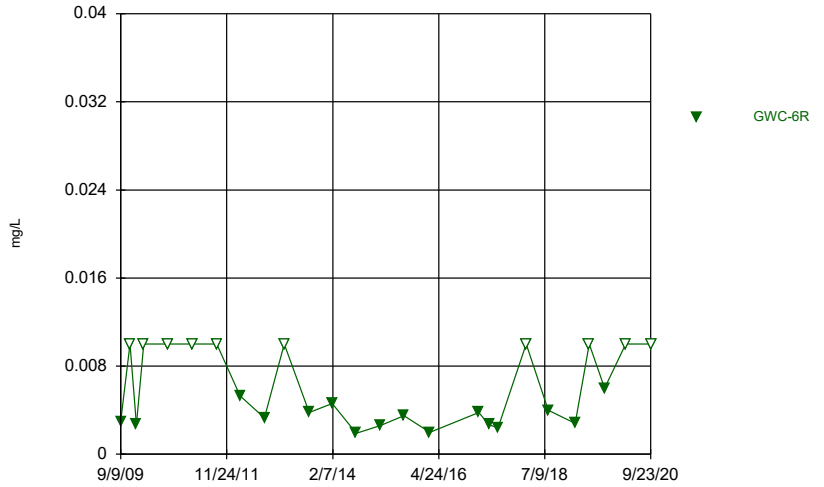
Time Series



Constituent: Zinc Analysis Run 12/2/2020 9:22 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 12/2/2020 9:22 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.003						
9/11/2007	<0.003						
3/20/2008	<0.003						
8/27/2008	<0.003						
3/3/2009	<0.003						
9/9/2009							<0.003
11/18/2009	<0.003						<0.003
1/5/2010							<0.003
3/3/2010	<0.003						<0.003
9/7/2010							<0.003
9/8/2010	<0.003						
11/22/2010			<0.003		<0.003		
1/4/2011			<0.003		<0.003		
2/17/2011			<0.003		<0.003		
3/10/2011	<0.003						<0.003
3/11/2011			<0.003		<0.003		
3/28/2011			<0.003		<0.003		
9/7/2011			<0.003	<0.003	<0.003	<0.003	
9/8/2011	<0.003	<0.003					<0.003
3/4/2012					<0.003		
3/5/2012	<0.003	<0.003		<0.003		<0.003	<0.003
3/6/2012			<0.003				
9/5/2012		<0.003		<0.003		<0.003	<0.003
9/10/2012	<0.003				<0.003		
9/11/2012			<0.003				
2/5/2013		<0.003				<0.003	<0.003
2/6/2013	<0.003		<0.003	<0.003	<0.003		
8/12/2013	<0.003						
8/13/2013		<0.003	<0.003	<0.003			<0.003
8/14/2013					<0.003	<0.003	
2/4/2014		<0.003	<0.003		<0.003		<0.003
2/5/2014	<0.003			<0.003		<0.003	
8/4/2014				<0.003	<0.003	<0.003	
8/5/2014	<0.003	<0.003	<0.003				<0.003
2/2/2015		<0.003	<0.003		<0.003		
2/3/2015				<0.003		<0.003	<0.003
2/4/2015	<0.003						
8/3/2015	<0.003			<0.003 (D)	<0.003 (D)	<0.003 (D)	
8/4/2015		<0.003 (D)	<0.003				<0.003
2/16/2016	<0.003	<0.003		<0.003	<0.003	<0.003	<0.003
2/17/2016			<0.003				
8/31/2016	<0.003	<0.003	<0.003	<0.003			
9/1/2016					0.0014 (J)	<0.003	<0.003
11/28/2016	0.0014 (J)		<0.003				
11/29/2016		<0.003					<0.003
11/30/2016				<0.003	<0.003		
12/1/2016						<0.003	
2/22/2017	<0.003		<0.003				
2/23/2017		<0.003		<0.003			<0.003
2/24/2017					<0.003	<0.003	
5/8/2017	<0.003						
5/9/2017		<0.003		<0.003			

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/10/2017			<0.003		<0.003	<0.003	<0.003
7/17/2017	<0.003					<0.003	
7/18/2017		<0.003	<0.003	<0.003	<0.003		<0.003
10/16/2017	<0.003					<0.003	
10/17/2017		<0.003	<0.003		<0.003		
10/18/2017				<0.003			<0.003
2/19/2018	<0.003						<0.003
2/20/2018			<0.003		<0.003		
2/21/2018		<0.003		<0.003		<0.003	
8/6/2018	<0.003						<0.003
8/7/2018		<0.003		<0.003		<0.003	
8/8/2018			<0.003		<0.003		
2/25/2019	<0.003						<0.003
2/26/2019		<0.003	<0.003	<0.003	<0.003	<0.003	
6/12/2019	<0.003		<0.003		0.00028 (J)		
6/13/2019		<0.003		<0.003		<0.003	<0.003
8/19/2019	<0.003				<0.003		
8/20/2019		<0.003	<0.003				<0.003
8/21/2019				<0.003		0.00054 (J)	
10/8/2019	<0.003						<0.003
10/9/2019		<0.003	<0.003			<0.003	
10/10/2019				<0.003	<0.003		
3/17/2020	<0.003	<0.003		<0.003			<0.003
3/18/2020			<0.003		<0.003	<0.003	
8/26/2020	0.00042 (J)						
8/27/2020		<0.003				<0.003	<0.003
8/28/2020			<0.003	<0.003	<0.003		
9/22/2020	0.00044 (J)	<0.003	0.0017 (J)	<0.003	0.00053 (J)		
9/23/2020						0.00031 (J)	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.003	<0.003	
6/2/2016	<0.003						
6/6/2016			<0.003	<0.003			
6/7/2016		<0.003					<0.003
7/25/2016						<0.003	
7/26/2016	0.0005 (J)				0.001 (J)		
7/27/2016		<0.003	0.0005 (J)	<0.003			<0.003
9/13/2016					0.001 (J)	<0.003	
9/15/2016	<0.003						
9/16/2016		<0.003		<0.003			
9/19/2016			<0.003				<0.003
11/1/2016					0.0015 (J)		
11/2/2016	<0.003						<0.003
11/3/2016		<0.003	<0.003	<0.003			
11/4/2016						<0.003	
1/10/2017	<0.003						
1/11/2017		<0.003	<0.003	<0.003	<0.003		
1/13/2017							<0.003
1/16/2017						<0.003	
3/1/2017			<0.003	<0.003			
3/2/2017		<0.003			0.0004 (J)	<0.003	
3/6/2017							<0.003
3/8/2017	<0.003						
4/26/2017	<0.003		<0.003	<0.003			<0.003
4/27/2017					0.0004 (J)	0.0017 (J)	
5/2/2017		<0.003					
6/27/2017					<0.003	<0.003	
6/28/2017			<0.003	<0.003			
6/29/2017		<0.003					<0.003
6/30/2017	<0.003						
3/27/2018	<0.003					<0.003	
3/28/2018		<0.003	<0.003	<0.003			
3/29/2018					<0.003		<0.003
2/26/2019	<0.003						
2/27/2019					<0.003	<0.003	
3/5/2019		<0.003		<0.003			<0.003
3/6/2019			<0.003				
4/2/2019		<0.003					
4/3/2019			<0.003	<0.003			<0.003
9/25/2019		<0.003					<0.003
9/26/2019			0.00056 (J)	<0.003			
2/10/2020					0.00088 (J)	<0.003	
2/11/2020		<0.003	<0.003	<0.003			
2/12/2020	<0.003						<0.003
3/18/2020	<0.003					0.0004 (J)	
3/19/2020					<0.003		
3/24/2020		<0.003	<0.003	<0.003			<0.003
9/23/2020		<0.003	<0.003	<0.003	<0.003	<0.003	
9/24/2020							<0.003
9/25/2020	<0.003						

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.003	
6/2/2016			<0.003		<0.003		
6/7/2016	<0.003						
7/25/2016			<0.003			<0.003	
7/26/2016					0.002 (J)		
7/28/2016	<0.003						
9/14/2016		<0.003				<0.003	
9/15/2016					0.0027 (J)		
9/19/2016	0.001 (J)		<0.003				
11/1/2016			<0.003		<0.003	<0.003	
11/3/2016	<0.003						
11/4/2016		<0.003					
12/15/2016		0.0012 (J)					
1/11/2017					<0.003	<0.003	
1/13/2017	<0.003						
1/16/2017		<0.003	<0.003				
2/21/2017			<0.003				
3/1/2017						<0.003	
3/2/2017					0.0008 (J)		
3/3/2017		<0.003					
3/6/2017	0.0005 (J)						
4/26/2017	<0.003		<0.003		<0.003	<0.003	
4/28/2017		0.0015 (J)					
5/26/2017		0.0005 (J)					
6/28/2017		<0.003			<0.003	<0.003	
6/29/2017	<0.003						
6/30/2017			<0.003				
10/11/2017				0.0006 (J)			
10/12/2017							<0.003
11/20/2017				<0.003			<0.003
1/10/2018							<0.003
1/11/2018				<0.003			
2/19/2018							<0.003
2/20/2018				<0.003			
3/27/2018			<0.003				
3/28/2018		<0.003			<0.003	<0.003	
3/29/2018	<0.003						
4/3/2018				<0.003			<0.003
6/28/2018				<0.003			<0.003
8/7/2018				<0.003			<0.003
9/24/2018				<0.003			<0.003
2/26/2019			<0.003				
2/27/2019		<0.003			<0.003	<0.003	
3/5/2019	0.0011 (J)						
4/2/2019	0.0011 (J)						
8/21/2019				<0.003			<0.003
9/24/2019	0.0035						
2/11/2020		0.00036 (J)				<0.003	
2/12/2020	0.0015 (J)		<0.003	<0.003	<0.003		<0.003
3/19/2020		0.0003 (J)	<0.003		0.00064 (J)	<0.003	
3/24/2020	0.0017 (J)						<0.003
3/25/2020				0.0014 (J)			

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/23/2020		<0.003			<0.003	<0.003	
9/24/2020	0.0047		<0.003	<0.003			<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.003	<0.003	<0.003
7/26/2016		0.0003 (J)	<0.003	<0.003
8/30/2016	0.0028 (J)			
9/14/2016		<0.003	<0.003	<0.003
11/2/2016		<0.003	<0.003	
11/4/2016				<0.003
11/14/2016	<0.003			
1/12/2017			<0.003	<0.003
1/13/2017		<0.003		
2/24/2017	<0.003			
3/6/2017		<0.003		
3/7/2017			<0.003	<0.003
5/1/2017		<0.003	<0.003	
5/2/2017				<0.003
5/8/2017	0.0004 (J)			
6/27/2017			<0.003	<0.003
6/29/2017		<0.003		
7/11/2017	0.0006 (J)			
10/10/2017	<0.003			
3/29/2018		<0.003	<0.003	<0.003
4/2/2018	<0.003			
9/19/2018	<0.003			
3/4/2019		<0.003	<0.003	<0.003
4/3/2019		<0.003	<0.003	<0.003
8/20/2019	<0.003			
9/24/2019			<0.003	<0.003
9/25/2019		<0.003		
2/12/2020		<0.003	<0.003	<0.003
3/24/2020			<0.003	<0.003
3/25/2020		<0.003		
8/27/2020	0.00048 (J)			
9/22/2020	<0.003	<0.003	<0.003	<0.003

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.005						
9/20/1999	<0.005						
9/12/2001	<0.005						
9/3/2002	<0.005						
7/29/2003	<0.005						
12/5/2003	<0.005						
9/22/2004	<0.005						
5/1/2007		<0.005					
9/11/2007		<0.005					
3/20/2008		<0.005					
8/27/2008		<0.005					
3/3/2009		<0.005					
11/18/2009		<0.005					
3/3/2010		<0.005					
9/8/2010		<0.005					
11/22/2010				<0.005		<0.005	
1/4/2011				<0.005		<0.005	
2/17/2011				<0.005		<0.005	
3/10/2011		<0.005					
3/11/2011				<0.005		<0.005	
3/28/2011				<0.005		<0.005	
9/7/2011				<0.005	<0.005	<0.005	<0.005
9/8/2011		<0.005	<0.005				
3/4/2012						<0.005	
3/5/2012		<0.005	<0.005		<0.005		<0.005
3/6/2012				<0.005			
9/5/2012			<0.005		<0.005		<0.005
9/10/2012		<0.005				<0.005	
9/11/2012				<0.005			
2/5/2013			<0.005				<0.005
2/6/2013		<0.005		<0.005	<0.005	<0.005	
8/12/2013		<0.005					
8/13/2013			<0.005	<0.005	<0.005		
8/14/2013						<0.005	<0.005
2/4/2014			<0.005	<0.005		<0.005	
2/5/2014		<0.005			<0.005		<0.005
8/4/2014					<0.005	<0.005	<0.005
8/5/2014		<0.005	<0.005	<0.005			
2/2/2015			<0.005	<0.005		<0.005	
2/3/2015					<0.005		<0.005
2/4/2015		<0.005					
8/3/2015		<0.005			<0.005 (D)	<0.005 (D)	<0.005 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		<0.005	<0.005		<0.005	<0.005	<0.005
2/17/2016				<0.005			
8/31/2016		<0.005	<0.005	<0.005	<0.005		
9/1/2016						<0.005	<0.005
11/28/2016		<0.005		<0.005			
11/29/2016			<0.005				
11/30/2016					<0.005	<0.005	
12/1/2016							<0.005
2/22/2017		<0.005		<0.005			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			<0.005		<0.005		
2/24/2017						<0.005	<0.005
5/8/2017		<0.005					
5/9/2017			0.0005 (J)		<0.005		
5/10/2017				<0.005		<0.005	0.0011 (J)
7/17/2017		<0.005					0.0013 (J)
7/18/2017			<0.005	<0.005	<0.005	<0.005	
10/16/2017		<0.005					0.0011 (J)
10/17/2017			0.0009 (J)	<0.005		<0.005	
10/18/2017					<0.005		
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		0.00091 (J)
8/6/2018		<0.005					
8/7/2018			<0.005		<0.005		0.0021 (J)
8/8/2018				<0.005		<0.005	
2/25/2019		<0.005					
2/26/2019			<0.005	<0.005	<0.005	<0.005	0.00069 (J)
6/12/2019		0.00038 (J)		<0.005		0.00037 (J)	
6/13/2019			<0.005		0.0016 (J)		0.0012 (J)
8/19/2019		0.00095 (J)				0.00059 (J)	
8/20/2019			0.00044 (J)	0.00075 (J)			
8/21/2019					0.00061 (J)		0.00094 (J)
10/8/2019		<0.005					
10/9/2019			<0.005	<0.005			0.0012 (J)
10/10/2019					<0.005	<0.005	
3/17/2020		<0.005	<0.005		0.0016 (J)		
3/18/2020				<0.005		<0.005	0.0008 (J)
8/26/2020		<0.005					
8/27/2020			0.0011 (J)				0.0016 (J)
8/28/2020				<0.005	<0.005	<0.005	
9/22/2020		<0.005	<0.005	<0.005	<0.005	<0.005	
9/23/2020							0.00092 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.005						
11/18/2009	<0.005						
1/5/2010	<0.005						
3/3/2010	<0.005						
9/7/2010	<0.005						
3/10/2011	<0.005						
9/8/2011	<0.005						
3/5/2012	<0.005						
9/5/2012	<0.005						
2/5/2013	<0.005						
8/13/2013	<0.005						
2/4/2014	<0.005						
8/5/2014	<0.005						
2/3/2015	<0.005						
8/4/2015	<0.005						
2/16/2016	<0.005						
6/1/2016						0.0021	<0.005
6/2/2016		<0.005					
6/6/2016				<0.005	<0.005		
6/7/2016			<0.005				
7/25/2016							<0.005
7/26/2016		<0.005				0.0016 (J)	
7/27/2016			<0.005	<0.005	<0.005		
9/1/2016	<0.005						
9/13/2016						<0.005	<0.005
9/15/2016		<0.005					
9/16/2016			<0.005		<0.005		
9/19/2016				<0.005			
11/1/2016						<0.005	
11/2/2016		<0.005					
11/3/2016			<0.005	<0.005	<0.005		
11/4/2016							<0.005
11/29/2016	<0.005						
1/10/2017		<0.005					
1/11/2017			<0.005	<0.005	<0.005	0.0017 (J)	
1/16/2017							<0.005
2/23/2017	<0.005						
3/1/2017				<0.005	<0.005		
3/2/2017			<0.005			0.0014 (J)	<0.005
3/8/2017		<0.005					
4/26/2017		<0.005		<0.005	<0.005		
4/27/2017						0.0018 (J)	<0.005
5/2/2017			<0.005				
5/10/2017	0.0007 (J)						
6/27/2017						0.0018 (J)	<0.005
6/28/2017				<0.005	<0.005		
6/29/2017			<0.005				
6/30/2017		<0.005					
7/18/2017	0.001 (J)						
10/18/2017	0.0011 (J)						
2/19/2018	<0.005						
3/27/2018		<0.005					<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.005	<0.005	0.00061 (J)		
3/29/2018						0.0017 (J)	
6/5/2018						0.0013 (J)	
6/6/2018							<0.005
6/7/2018				0.00066 (J)			
6/8/2018		<0.005					
6/11/2018			<0.005		<0.005		
8/6/2018	0.0023 (J)						
9/25/2018			<0.005	<0.005	<0.005		
10/1/2018		<0.005				0.0016 (J)	<0.005
2/25/2019	0.00073 (J)						
2/26/2019		<0.005					
2/27/2019						0.0015 (J)	<0.005
3/5/2019			<0.005		<0.005		
3/6/2019				<0.005			
3/28/2019						0.00072 (J)	<0.005
3/29/2019		<0.005					
4/2/2019			<0.005				
4/3/2019				<0.005	<0.005		
6/13/2019	0.00068 (J)						
8/20/2019	0.00072 (J)						
9/24/2019						0.0014 (J)	<0.005
9/25/2019		<0.005	<0.005				
9/26/2019				<0.005	<0.005		
10/8/2019	0.00056 (J)						
2/10/2020						0.0026 (J)	0.0005 (J)
2/11/2020			0.0022 (J)	0.0014 (J)	0.0026 (J)		
2/12/2020		<0.005					
3/17/2020	<0.005						
3/18/2020		<0.005					<0.005
3/19/2020						0.00095 (J)	
3/24/2020			<0.005	<0.005	<0.005		
8/27/2020	0.0011 (J)						
9/23/2020	<0.005		<0.005	<0.005	<0.005	0.0011 (J)	<0.005
9/25/2020		<0.005					

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.005
6/2/2016				<0.005		<0.005	
6/7/2016	<0.005	<0.005					
7/25/2016				<0.005			<0.005
7/26/2016						<0.005	
7/27/2016	<0.005						
7/28/2016		<0.005					
9/14/2016			<0.005				<0.005
9/15/2016						<0.005	
9/19/2016	<0.005	<0.005		<0.005			
11/1/2016				<0.005		<0.005	<0.005
11/2/2016	<0.005						
11/3/2016		<0.005					
11/4/2016			0.0017 (J)				
12/15/2016			0.0023 (J)				
1/11/2017						<0.005	<0.005
1/13/2017	<0.005	<0.005					
1/16/2017			0.0018 (J)	<0.005			
2/21/2017				<0.005			
3/1/2017							0.0004 (J)
3/2/2017						<0.005	
3/3/2017			0.0016 (J)				
3/6/2017	<0.005	0.0017 (J)					
4/26/2017	<0.005	<0.005		<0.005		<0.005	<0.005
4/28/2017			0.002 (J)				
5/26/2017			0.0005 (J)				
6/28/2017			0.0016 (J)			0.0007 (J)	0.0011 (J)
6/29/2017	<0.005	<0.005					
6/30/2017				<0.005			
10/11/2017					0.0009 (J)		
11/20/2017					<0.005		
1/11/2018					<0.005		
2/20/2018					<0.005		
3/27/2018				<0.005			
3/28/2018			0.0013 (J)			<0.005	<0.005
3/29/2018	<0.005	0.0015 (J)					
4/3/2018					<0.005		
6/5/2018		0.0013 (J)					
6/6/2018	<0.005						
6/7/2018			0.00082 (J)			<0.005	
6/8/2018							<0.005
6/11/2018				<0.005			
6/28/2018					<0.005		
8/7/2018					<0.005		
9/24/2018					<0.005		
9/25/2018	<0.005	0.0022 (J)					
10/1/2018			0.0011 (J)			<0.005	<0.005
10/2/2018				<0.005			
2/26/2019				<0.005			
2/27/2019			0.001 (J)			<0.005	<0.005
3/5/2019	<0.005	0.0013 (J)					
3/29/2019			0.00063 (J)				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
4/1/2019				<0.005		<0.005	<0.005
4/2/2019		0.00096 (J)					
4/3/2019	<0.005						
8/21/2019					0.00058 (J)		
9/24/2019		0.0026 (J)	<0.005				
9/25/2019	<0.005			<0.005		<0.005	<0.005
10/9/2019					0.00063 (J)		
2/11/2020			0.0044 (J)				0.0041 (J)
2/12/2020	<0.005	0.0025 (J)		0.0032 (J)	0.00058 (J)	0.0038 (J)	
3/19/2020			0.00066 (J)	<0.005		<0.005	<0.005
3/24/2020	<0.005	0.0013 (J)					
3/25/2020					0.0012 (J)		
9/23/2020			0.001 (J)			<0.005	<0.005
9/24/2020	<0.005	0.0014 (J)		<0.005	<0.005		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.005	0.00071 (J)	<0.005
7/26/2016			<0.005	0.001 (J)	<0.005
8/30/2016		<0.005			
9/14/2016			<0.005	<0.005	<0.005
11/2/2016			<0.005	<0.005	
11/4/2016					<0.005
11/14/2016		<0.005			
1/12/2017				<0.005	<0.005
1/13/2017			<0.005		
2/24/2017		<0.005			
3/6/2017			<0.005		
3/7/2017				0.0012 (J)	<0.005
5/1/2017			<0.005	<0.005	
5/2/2017					<0.005
5/8/2017		<0.005			
6/27/2017				0.0019 (J)	<0.005
6/29/2017			<0.005		
7/11/2017		<0.005			
10/10/2017		0.0007 (J)			
10/12/2017	<0.005				
11/20/2017	<0.005				
1/10/2018	<0.005				
2/19/2018	<0.005				
3/29/2018			<0.005	0.0006 (J)	<0.005
4/2/2018		<0.005			
4/3/2018	<0.005				
6/6/2018				0.0013 (J)	
6/7/2018			0.00059 (J)		<0.005
6/28/2018	<0.005				
8/7/2018	<0.005				
9/19/2018		0.00072 (J)			
9/24/2018	<0.005				
9/26/2018			<0.005	0.0014 (J)	<0.005
3/4/2019			<0.005	<0.005	<0.005
4/3/2019			<0.005	<0.005	<0.005
8/20/2019		<0.005			
8/21/2019	<0.005				
9/24/2019				0.00043 (J)	<0.005
9/25/2019			<0.005		
10/8/2019		<0.005			
10/9/2019	<0.005				
2/12/2020	0.0034 (J)		<0.005	0.0046 (J)	0.002 (J)
3/17/2020		<0.005			
3/24/2020	<0.005			0.00065 (J)	<0.005
3/25/2020			<0.005		
8/27/2020		<0.005			
9/22/2020		<0.005	<0.005	0.001 (J)	<0.005
9/24/2020	<0.005				

Time Series

Constituent: Barium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	0.006						
9/20/1999	0.015						
9/12/2001	0.018						
9/3/2002	0.023						
7/29/2003	0.02						
12/5/2003	0.012						
9/22/2004	0.03						
5/1/2007		0.032					
9/11/2007		0.017					
3/20/2008		0.025					
8/27/2008		0.041					
3/3/2009		0.053					
11/18/2009		0.05					
3/3/2010		0.061					
9/8/2010		0.071					
11/22/2010				0.12		0.03	
1/4/2011				0.1		0.065	
2/17/2011				0.1		0.061	
3/10/2011		0.057					
3/11/2011				0.05		0.066	
3/28/2011				0.087		0.04	
9/7/2011				0.065	0.025	0.041	0.02
9/8/2011		0.057	0.086				
3/4/2012						0.046	
3/5/2012		0.061	0.044		0.014		0.048
3/6/2012				0.049			
9/5/2012			0.034		0.0095		0.07
9/10/2012		0.055				0.084	
9/11/2012				0.045			
2/5/2013			0.03				0.068
2/6/2013		0.061		0.05	0.0094	0.042	
8/12/2013		0.055					
8/13/2013			0.027	0.13	0.13		
8/14/2013						0.042	0.036
2/4/2014			0.037	0.08		0.046	
2/5/2014		0.063			0.066		0.044
8/4/2014					0.043	0.027	0.058
8/5/2014		0.038	0.048	0.068			
2/2/2015			0.069	0.066		0.02	
2/3/2015					0.031		0.033
2/4/2015		0.039					
8/3/2015		0.031			0.039 (D)	0.017 (D)	0.037 (D)
8/4/2015			0.023 (D)	0.053			
2/16/2016		0.045	0.044		0.038	0.032	0.04
2/17/2016				0.059			
8/31/2016		0.0542	0.0711	0.0601	0.0286		
9/1/2016						0.0377	0.0345
11/28/2016		0.0529		0.0562			
11/29/2016			0.0754				
11/30/2016					0.0258	0.0148	
12/1/2016							0.0342
2/22/2017		0.0607		0.0481			

Time Series

Constituent: Barium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			0.0646		0.0278		
2/24/2017						0.029	0.0347
5/8/2017		0.065					
5/9/2017			0.0463		0.0308		
5/10/2017				0.0563		0.0182	0.0363
7/17/2017		0.06					0.0274
7/18/2017			0.039	0.049	0.0407	0.0187	
10/16/2017		0.0542					0.0151
10/17/2017			0.0349	0.047		0.0157	
10/18/2017					0.049		
2/19/2018		0.0533					
2/20/2018				0.0467		0.0151	
2/21/2018			0.0322		0.0285		0.0174
8/6/2018		0.044					
8/7/2018			0.025		0.029		0.015
8/8/2018				0.049		0.019	
2/25/2019		0.045					
2/26/2019			0.028	0.056	0.026	0.017	0.014
6/12/2019		0.063		0.046		0.017	
6/13/2019			0.033		0.021		0.014
8/19/2019		0.065				0.02	
8/20/2019			0.07	0.05			
8/21/2019					0.02		0.014
10/8/2019		0.058					
10/9/2019			0.054	0.045			0.015
10/10/2019					0.018	0.018	
3/17/2020		0.047	0.031		0.024		
3/18/2020				0.04		0.038	0.015
8/26/2020		0.044					
8/27/2020			0.072				0.013
8/28/2020				0.044	0.014	0.026	
9/22/2020		0.045	0.068	0.04	0.014	0.026	
9/23/2020							0.012

Time Series

Constituent: Barium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	0.025						
11/18/2009	0.025						
1/5/2010	0.018						
3/3/2010	0.022						
9/7/2010	0.019						
3/10/2011	0.017						
9/8/2011	0.019						
3/5/2012	0.027						
9/5/2012	0.04						
2/5/2013	0.056						
8/13/2013	0.07						
2/4/2014	0.051						
8/5/2014	0.041						
2/3/2015	0.04						
8/4/2015	0.042						
2/16/2016	0.068						
6/1/2016						0.008	0.012
6/2/2016		0.0081					
6/6/2016				0.028	0.019		
6/7/2016			0.012				
7/25/2016							0.0091 (J)
7/26/2016		0.0082 (J)				0.006 (J)	
7/27/2016			0.0126	0.0294	0.0167		
9/1/2016	0.0536						
9/13/2016						0.0084 (J)	0.008 (J)
9/15/2016		0.0087 (J)					
9/16/2016			0.0127		0.0168		
9/19/2016				0.0247			
11/1/2016						0.0062 (J)	
11/2/2016		0.0082 (J)					
11/3/2016			0.0128	0.0248	0.0159		
11/4/2016							0.0067 (J)
11/29/2016	0.0459						
1/10/2017		0.0086 (J)					
1/11/2017			0.0142	0.0266	0.0162	0.0069 (J)	
1/16/2017							0.0096 (J)
2/23/2017	0.0581						
3/1/2017				0.0275	0.0195		
3/2/2017			0.0155			0.0071 (J)	0.0112
3/8/2017		0.0088 (J)					
4/26/2017		0.0085 (J)		0.024	0.0182		
4/27/2017						0.0064 (J)	0.0106
5/2/2017			0.0138				
5/10/2017	0.0873						
6/27/2017						0.0054 (J)	0.0092 (J)
6/28/2017				0.0237	0.018		
6/29/2017			0.0128				
6/30/2017		0.0081 (J)					
7/18/2017	0.0994						
10/18/2017	0.0757						
2/19/2018	0.0703						
3/27/2018		<0.01					<0.01

Time Series

Constituent: Barium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			0.014	0.024	0.021		
3/29/2018						<0.01	
6/5/2018						0.0069 (J)	
6/6/2018							0.0082 (J)
6/7/2018				0.023			
6/8/2018		0.007 (J)					
6/11/2018			0.013		0.019		
8/6/2018	0.076						
9/25/2018			0.014	0.023	0.019		
10/1/2018		0.007 (J)				0.0062 (J)	0.0084 (J)
2/25/2019	0.045						
2/26/2019		0.0067 (J)					
2/27/2019						0.0074 (J)	0.008 (J)
3/5/2019			0.015		0.02		
3/6/2019				0.024			
3/28/2019						0.0082 (J)	0.0082 (J)
3/29/2019		0.0066 (J)					
4/2/2019			0.016				
4/3/2019				0.025	0.017		
6/13/2019	0.062						
8/20/2019	0.06						
9/24/2019						0.0072 (J)	0.0086 (J)
9/25/2019		0.0071 (J)	0.015				
9/26/2019				0.021	0.017		
10/8/2019	0.054						
2/10/2020						0.0066 (J)	0.0091 (J)
2/11/2020			0.015	0.022	0.019		
2/12/2020		0.007 (J)					
3/17/2020	0.031						
3/18/2020		0.0076 (J)					0.0084 (J)
3/19/2020						0.0076 (J)	
3/24/2020			0.015	0.021	0.017		
8/27/2020	0.045						
9/23/2020	0.044		0.015	0.021	0.016	0.0068 (J)	0.0079 (J)
9/25/2020		0.0073 (J)					

Time Series

Constituent: Barium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							0.0038
6/2/2016				0.0064		0.01	
6/7/2016	0.014	0.0058					
7/25/2016				0.0071 (J)			0.0031 (J)
7/26/2016						0.0088 (J)	
7/27/2016	0.0141						
7/28/2016		0.0068 (J)					
9/14/2016			0.0037 (J)				0.0027 (J)
9/15/2016						0.009 (J)	
9/19/2016	0.0155	0.0071 (J)		0.0069 (J)			
11/1/2016				0.007 (J)		0.0079 (J)	0.0027 (J)
11/2/2016	0.0157						
11/3/2016		0.0092 (J)					
11/4/2016			0.0059 (J)				
12/15/2016			0.0056 (J)				
1/11/2017						0.0075 (J)	0.0036 (J)
1/13/2017	0.0158	0.0105					
1/16/2017			0.0049 (J)	0.0071 (J)			
2/21/2017				0.0077 (J)			
3/1/2017							0.0036 (J)
3/2/2017						0.009 (J)	
3/3/2017			0.0046 (J)				
3/6/2017	0.0163	0.0105					
4/26/2017	0.0177	0.011		0.0074 (J)		0.0078 (J)	0.0038 (J)
4/28/2017			0.0039 (J)				
5/26/2017			0.0034 (J)				
6/28/2017			0.003 (J)			0.0071 (J)	0.004 (J)
6/29/2017	0.017	0.0109					
6/30/2017				0.0076 (J)			
10/11/2017					0.0092 (J)		
11/20/2017					0.0081 (J)		
1/11/2018					0.0077 (J)		
2/20/2018					<0.01		
3/27/2018				<0.01			
3/28/2018			<0.01			<0.01	<0.01
3/29/2018	0.014	<0.01					
4/3/2018					<0.01		
6/5/2018		0.011					
6/6/2018	0.015						
6/7/2018			0.0037 (J)			0.0068 (J)	
6/8/2018							0.0034 (J)
6/11/2018				0.007 (J)			
6/28/2018					0.0078 (J)		
8/7/2018					0.0078 (J)		
9/24/2018					0.0071 (J)		
9/25/2018	0.015	0.011					
10/1/2018			0.0038 (J)			0.0065 (J)	0.0034 (J)
10/2/2018				0.0069 (J)			
2/26/2019				0.007 (J)			
2/27/2019			0.0035 (J)			0.0059 (J)	0.0034 (J)
3/5/2019	0.016	0.011					
3/29/2019			0.0039 (J)				

Time Series

Constituent: Barium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
4/1/2019				0.0072 (J)		0.0064 (J)	0.003 (J)
4/2/2019		0.011					
4/3/2019	0.018						
8/21/2019					0.015		
9/24/2019		0.011	0.0038 (J)				
9/25/2019	0.014			0.0066 (J)		0.0059 (J)	0.005 (J)
10/9/2019					0.013		
2/11/2020			0.0036 (J)				0.0031 (J)
2/12/2020	0.014	0.011		0.0073 (J)	0.011	0.0062 (J)	
3/19/2020			0.0036 (J)	0.0074 (J)		0.0072 (J)	0.0029 (J)
3/24/2020	0.015	0.011					
3/25/2020					0.014		
9/23/2020			0.0039 (J)			0.0051 (J)	0.0039 (J)
9/24/2020	0.015	0.01		0.0062 (J)	0.016		

Time Series

Constituent: Barium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			0.013	0.0084	0.019
7/26/2016			0.0158	0.01	0.0179
8/30/2016		0.0413			
9/14/2016			0.0143	0.0085 (J)	0.0181
11/2/2016			0.0148	0.0091 (J)	
11/4/2016					0.0165
11/14/2016		0.0383			
1/12/2017				0.0089 (J)	0.0199
1/13/2017			0.0146		
2/24/2017		0.0351			
3/6/2017			0.0141		
3/7/2017				0.009 (J)	0.0196
5/1/2017			0.0149	0.0083 (J)	
5/2/2017					0.0202
5/8/2017		0.0251			
6/27/2017				0.0074 (J)	0.0184
6/29/2017			0.0154		
7/11/2017		0.0233			
10/10/2017		0.0207			
10/12/2017	0.0328				
11/20/2017	0.0671				
1/10/2018	0.0656				
2/19/2018	0.0598				
3/29/2018			0.014	<0.01	0.021
4/2/2018		0.022			
4/3/2018	0.045				
6/6/2018				0.008 (J)	
6/7/2018			0.014		0.019
6/28/2018	0.047				
8/7/2018	0.048				
9/19/2018		0.023			
9/24/2018	0.042				
9/26/2018			0.02	0.0075 (J)	0.019
3/4/2019			0.016	0.0077 (J)	0.019
4/3/2019			0.017	0.0087 (J)	0.023
8/20/2019		0.024			
8/21/2019	0.035				
9/24/2019				0.0075 (J)	0.019
9/25/2019			0.015		
10/8/2019		0.025			
10/9/2019	0.036				
2/12/2020	0.035		0.012	0.0079 (J)	0.021
3/17/2020		0.035			
3/24/2020	0.033			0.0076 (J)	0.021
3/25/2020			0.016		
8/27/2020		0.027			
9/22/2020		0.026	0.013	0.0076 (J)	0.019
9/24/2020	0.028				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.003						
9/20/1999	<0.003						
9/12/2001	<0.003						
9/3/2002	<0.003						
7/29/2003	<0.003						
12/5/2003	<0.003						
9/22/2004	<0.003						
5/1/2007		<0.003					
9/11/2007		<0.003					
3/20/2008		<0.003					
8/27/2008		<0.003					
3/3/2009		<0.003					
11/18/2009		<0.003					
3/3/2010		<0.003					
9/8/2010		<0.003					
11/22/2010				<0.003		<0.003	
1/4/2011				<0.003		<0.003	
2/17/2011				<0.003		<0.003	
3/10/2011		<0.003					
3/11/2011				<0.003		<0.003	
3/28/2011				<0.003		<0.003	
9/7/2011				<0.003	<0.003	<0.003	<0.003
9/8/2011		<0.003	<0.003				
3/4/2012						<0.003	
3/5/2012		<0.003	<0.003		<0.003		<0.003
3/6/2012				<0.003			
9/5/2012			<0.003		<0.003		<0.003
9/10/2012		<0.003				<0.003	
9/11/2012				<0.003			
2/5/2013			<0.003				<0.003
2/6/2013		<0.003		<0.003	<0.003	<0.003	
8/12/2013		<0.003					
8/13/2013			<0.003	<0.003	<0.003		
8/14/2013						<0.003	<0.003
2/4/2014			<0.003	<0.003		<0.003	
2/5/2014		<0.003			<0.003		<0.003
8/4/2014					0.0011 (J)	<0.003	0.00026 (J)
8/5/2014		<0.003	7.5E-05 (J)	<0.003			
2/2/2015			0.00023 (J)	<0.003		<0.003	
2/3/2015					0.00061 (J)		0.00023 (J)
2/4/2015		<0.003					
8/3/2015		<0.003			0.00051 (JD)	<0.003 (D)	0.00046 (JD)
8/4/2015			<0.003 (D)	<0.003			
2/16/2016		<0.003	<0.003		0.00084 (J)	<0.003	0.00048 (J)
2/17/2016				<0.003			
8/31/2016		<0.003	0.0001 (J)	<0.003	0.0003 (J)		
9/1/2016						<0.003	0.0005 (J)
11/28/2016		<0.003		<0.003			
11/29/2016			<0.003				
11/30/2016					0.0004 (J)	<0.003	
12/1/2016							0.0003 (J)
2/22/2017		<0.003		<0.003			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			<0.003		0.0003 (J)		
2/24/2017						<0.003	0.0002 (J)
5/8/2017		<0.003					
5/9/2017			8E-05 (J)		0.0002 (J)		
5/10/2017				<0.003		<0.003	0.0003 (J)
7/17/2017		<0.003					0.0004 (J)
7/18/2017			<0.003	<0.003	0.0002 (J)	<0.003	
10/16/2017		<0.003					0.0006 (J)
10/17/2017			0.0001 (J)	<0.003		<0.003	
10/18/2017					0.0004 (J)		
2/19/2018		<0.003					
2/20/2018				<0.003		<0.003	
2/21/2018			<0.003		<0.003		<0.003
8/6/2018		<0.003					
8/7/2018			7.4E-05 (J)		0.00026 (J)		0.00096 (J)
8/8/2018				7E-05 (J)		<0.003	
2/25/2019		<0.003					
2/26/2019			7.5E-05 (J)	5.3E-05 (J)	0.00038 (J)	<0.003	0.0015 (J)
6/12/2019		<0.003		<0.003		<0.003	
6/13/2019			<0.003		0.00051 (J)		0.0015 (J)
8/19/2019		<0.003				<0.003	
8/20/2019			0.0001 (J)	0.00017 (J)			
8/21/2019					0.00046 (J)		0.0028 (J)
10/8/2019		<0.003					
10/9/2019			0.00013 (J)	0.00014 (J)			0.0022 (J)
10/10/2019					0.00039 (J)	<0.003	
3/17/2020		<0.003	7.6E-05 (J)		0.00095 (J)		
3/18/2020				0.00012 (J)		<0.003	0.0028 (J)
8/26/2020		<0.003					
8/27/2020			0.00024 (J)				0.0023 (J)
8/28/2020				0.0002 (J)	0.0005 (J)	<0.003	
9/22/2020		<0.003	0.00021 (J)	0.00021 (J)	0.00042 (J)	5.8E-05 (J)	
9/23/2020							0.0023 (J)

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.003						
11/18/2009	<0.003						
1/5/2010	<0.003						
3/3/2010	<0.003						
9/7/2010	<0.003						
3/10/2011	<0.003						
9/8/2011	<0.003						
3/5/2012	<0.003						
9/5/2012	<0.003						
2/5/2013	<0.003						
8/13/2013	<0.003						
2/4/2014	<0.003						
8/5/2014	<0.003						
2/3/2015	<0.003						
8/4/2015	<0.003						
2/16/2016	<0.003						
6/1/2016						<0.003	<0.003
6/2/2016		<0.003					
6/6/2016				<0.003	<0.003		
6/7/2016			<0.003				
7/25/2016							<0.003
7/26/2016		0.0002 (J)				<0.003	
7/27/2016			<0.003	<0.003	<0.003		
9/1/2016	<0.003						
9/13/2016						<0.003	<0.003
9/15/2016		0.0002 (J)					
9/16/2016			<0.003		<0.003		
9/19/2016				<0.003			
11/1/2016						<0.003	
11/2/2016		0.0002 (J)					
11/3/2016			<0.003	<0.003	<0.003		
11/4/2016							<0.003
11/29/2016	<0.003						
1/10/2017		0.0002 (J)					
1/11/2017			<0.003	<0.003	<0.003	<0.003	
1/16/2017							<0.003
2/23/2017	<0.003						
3/1/2017				<0.003	<0.003		
3/2/2017			8E-05 (J)			<0.003	<0.003
3/8/2017		0.0002 (J)					
4/26/2017		0.0002 (J)		<0.003	<0.003		
4/27/2017						<0.003	<0.003
5/2/2017			<0.003				
5/10/2017	<0.003						
6/27/2017						<0.003	<0.003
6/28/2017				<0.003	<0.003		
6/29/2017			<0.003				
6/30/2017		0.0002 (J)					
7/18/2017	<0.003						
10/18/2017	<0.003						
2/19/2018	<0.003						
3/27/2018		<0.003					<0.003

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.003	<0.003	<0.003		
3/29/2018						<0.003	
6/7/2018				<0.003			
6/11/2018			9E-05 (J)		5.7E-05 (J)		
8/6/2018	<0.003						
9/25/2018			8.9E-05 (J)	<0.003	8.2E-05 (J)		
2/25/2019	<0.003						
2/26/2019		0.00016 (J)					
2/27/2019						<0.003	<0.003
3/5/2019			9.1E-05 (J)		7.9E-05 (J)		
3/6/2019				<0.003			
3/28/2019						<0.003	<0.003
3/29/2019		0.00017 (J)					
4/2/2019			9E-05 (J)				
4/3/2019				<0.003	7.5E-05 (J)		
6/13/2019	<0.003						
8/20/2019	<0.003						
9/24/2019						<0.003	<0.003
9/25/2019		0.00018 (J)	8.1E-05 (J)				
9/26/2019				<0.003	8.4E-05 (J)		
10/8/2019	<0.003						
2/10/2020						<0.003	<0.003
2/11/2020			7.8E-05 (J)	<0.003	7.6E-05 (J)		
2/12/2020		0.00019 (J)					
3/17/2020	<0.003						
3/18/2020		0.00021 (J)					<0.003
3/19/2020						<0.003	
3/24/2020			8E-05 (J)	<0.003	8.9E-05 (J)		
8/27/2020	<0.003						
9/23/2020	<0.003		8.1E-05 (J)	<0.003	8.8E-05 (J)	<0.003	<0.003
9/25/2020		0.00018 (J)					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.003
6/2/2016				<0.003		<0.003	
6/7/2016	<0.003	<0.003					
7/25/2016				<0.003			<0.003
7/26/2016						<0.003	
7/27/2016	<0.003						
7/28/2016		<0.003					
9/14/2016			<0.003				<0.003
9/15/2016						<0.003	
9/19/2016	<0.003	<0.003		<0.003			
11/1/2016				<0.003		<0.003	<0.003
11/2/2016	<0.003						
11/3/2016		<0.003					
11/4/2016			<0.003				
12/15/2016			<0.003				
1/11/2017						<0.003	<0.003
1/13/2017	<0.003	<0.003					
1/16/2017			<0.003	<0.003			
2/21/2017				<0.003			
3/1/2017							<0.003
3/2/2017						<0.003	
3/3/2017			<0.003				
3/6/2017	<0.003	<0.003					
4/26/2017	<0.003	<0.003		<0.003		<0.003	<0.003
4/28/2017			<0.003				
5/26/2017			<0.003				
6/28/2017			<0.003			<0.003	<0.003
6/29/2017	<0.003	<0.003					
6/30/2017				<0.003			
10/11/2017					<0.003		
11/20/2017					<0.003		
1/11/2018					<0.003		
2/20/2018					<0.003		
3/27/2018				<0.003			
3/28/2018			<0.003			<0.003	<0.003
3/29/2018	<0.003	<0.003					
4/3/2018					<0.003		
6/5/2018		<0.003					
6/6/2018	8E-05 (J)						
6/28/2018					<0.003		
8/7/2018					<0.003		
9/24/2018					<0.003		
9/25/2018	6.1E-05 (J)	<0.003					
2/26/2019				7.2E-05 (J)			
2/27/2019			<0.003			<0.003	<0.003
3/5/2019	0.00011 (J)	<0.003					
3/29/2019			<0.003				
4/1/2019				<0.003		<0.003	<0.003
4/2/2019		<0.003					
4/3/2019	6.4E-05 (J)						
8/21/2019					<0.003		
9/24/2019		<0.003	<0.003				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
9/25/2019	<0.003			<0.003		<0.003	<0.003
10/9/2019					<0.003		
2/11/2020			<0.003				<0.003
2/12/2020	7.8E-05 (J)	<0.003		<0.003	<0.003	<0.003	
3/19/2020			<0.003	<0.003		<0.003	<0.003
3/24/2020	7.6E-05 (J)	<0.003					
3/25/2020					<0.003		
9/23/2020			<0.003			<0.003	5.9E-05 (J)
9/24/2020	8.3E-05 (J)	<0.003		<0.003	<0.003		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.003	<0.003	<0.003
7/26/2016			<0.003	<0.003	<0.003
8/30/2016		<0.003			
9/14/2016			<0.003	<0.003	<0.003
11/2/2016			<0.003	<0.003	
11/4/2016					<0.003
11/14/2016		<0.003			
1/12/2017				<0.003	<0.003
1/13/2017			<0.003		
2/24/2017		<0.003			
3/6/2017			<0.003		
3/7/2017				<0.003	<0.003
5/1/2017			<0.003	<0.003	
5/2/2017					<0.003
5/8/2017		7E-05 (J)			
6/27/2017				<0.003	<0.003
6/29/2017			<0.003		
7/11/2017		<0.003			
10/10/2017		<0.003			
10/12/2017	0.0002 (J)				
11/20/2017	0.0003 (J)				
1/10/2018	0.0003 (J)				
2/19/2018	<0.003				
3/29/2018			<0.003	<0.003	<0.003
4/2/2018		<0.003			
4/3/2018	<0.003				
6/6/2018				<0.003	
6/7/2018			<0.003		<0.003
6/28/2018	0.00029 (J)				
8/7/2018	0.00024 (J)				
9/19/2018		5.7E-05 (J)			
9/24/2018	0.00019 (J)				
9/26/2018			<0.003	<0.003	<0.003
3/4/2019			<0.003	<0.003	<0.003
4/3/2019			<0.003	<0.003	<0.003
8/20/2019		<0.003			
8/21/2019	0.0002 (J)				
9/24/2019				<0.003	<0.003
9/25/2019			<0.003		
10/9/2019	0.0002 (J)				
2/12/2020	0.00018 (J)		<0.003	<0.003	<0.003
3/24/2020	0.00022 (J)			<0.003	<0.003
3/25/2020			<0.003		
8/27/2020		4.7E-05 (J)			
9/22/2020		<0.003	<0.003	<0.003	<0.003
9/24/2020	0.0002 (J)				

Time Series

Constituent: Boron (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	0.0315 (J)	0.0553 (J)	0.0305 (J)	0.0315 (J)			
9/1/2016					3.25	0.0191 (J)	0.0108 (J)
11/28/2016	0.0095 (J)		0.0206 (J)				
11/29/2016		0.0149 (J)					<0.1
11/30/2016				0.0089 (J)	0.813		
12/1/2016						0.0088 (J)	
2/22/2017	<0.1		0.0192 (J)				
2/23/2017		0.0082 (J)		<0.1			<0.1
2/24/2017					2.53	0.0067 (J)	
5/8/2017	0.0084 (J)						
5/9/2017		0.0097 (J)		0.0077 (J)			
5/10/2017			0.0179 (J)		1.22	0.0068 (J)	<0.1
7/17/2017	0.0092 (J)					0.0102 (J)	
7/18/2017		0.0123 (J)	0.0169 (J)	0.0073 (J)	0.97		0.0061 (J)
10/16/2017	<0.1					0.0066 (J)	
10/17/2017		0.0513	0.0168 (J)		0.804		
10/18/2017				<0.1			<0.1
2/19/2018	<0.1						<0.1
2/20/2018			<0.1		1.01		
2/21/2018		0.0378 (J)		0.0399 (J)		0.0268 (J)	
8/6/2018	<0.1						<0.1
8/7/2018		0.043		0.0049 (J)		0.012 (J)	
8/8/2018			0.017 (J)		1.3		
2/25/2019	<0.1						<0.1
2/26/2019		0.062	0.017 (J)	0.0053 (J)	0.75	0.033 (J)	
6/12/2019	<0.1		0.013 (J)		1.5		
6/13/2019		0.057		<0.1		0.03 (J)	<0.1
10/8/2019	<0.1						<0.1
10/9/2019		0.029 (J)	0.018 (J)			0.013 (J)	
10/10/2019				0.0061 (J)	0.78		
3/17/2020	0.0051 (J)	0.092 (J)		0.0099 (J)			<0.1
3/18/2020			0.026 (J)		5.4	0.034 (J)	
9/22/2020	0.0079 (J)	0.025 (J)	0.046 (J)	0.0066 (J)	1		
9/23/2020						0.028 (J)	0.0055 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.1	<0.1	
6/2/2016	<0.1						
6/6/2016			<0.1	<0.1			
6/7/2016		<0.1					<0.1
7/25/2016						<0.1	
7/26/2016	0.0177 (J)				0.0055 (J)		
7/27/2016		0.008 (J)	<0.1	0.0059 (J)			<0.1
9/13/2016					<0.1	<0.1	
9/15/2016	0.0214 (J)						
9/16/2016		0.0086 (J)		0.0079 (J)			
9/19/2016			<0.1				<0.1
11/1/2016					0.0086 (J)		
11/2/2016	<0.1						<0.1
11/3/2016		0.0077 (J)	<0.1	0.0082 (J)			
11/4/2016						<0.1	
1/10/2017	0.0198 (J)						
1/11/2017		0.0092 (J)	<0.1	0.0096 (J)	0.0074 (J)		
1/13/2017							<0.1
1/16/2017						<0.1	
3/1/2017			<0.1	<0.1			
3/2/2017		0.0095 (J)			0.008 (J)	<0.1	
3/6/2017							<0.1
3/8/2017	0.0189 (J)						
4/26/2017	0.0161 (J)		<0.1	0.0091 (J)			<0.1
4/27/2017					0.0066 (J)	<0.1	
5/2/2017		<0.1					
6/27/2017					0.0087 (J)	0.006 (J)	
6/28/2017			<0.1	0.0079 (J)			
6/29/2017		0.0074 (J)					<0.1
6/30/2017	0.0173 (J)						
10/3/2017					0.0072 (J)	0.0071 (J)	
10/4/2017		0.0077 (J)		0.009 (J)			<0.1
10/5/2017	0.0173 (J)		<0.1				
6/5/2018					0.0052 (J)		
6/6/2018						<0.1	0.0049 (J)
6/7/2018			<0.1				
6/8/2018	0.013 (J)						
6/11/2018		0.01 (J)		0.0093 (J)			
9/25/2018		0.0096 (J)	0.0046 (J)	0.007 (J)			<0.1
10/1/2018	0.015 (J)				0.021 (J)	0.0049 (J)	
3/28/2019					0.005 (J)	<0.1	
3/29/2019	0.014 (J)						
4/2/2019		0.0066 (J)					
4/3/2019			<0.1	0.0053 (J)			<0.1
9/24/2019					0.0064 (J)	0.0055 (J)	
9/25/2019	0.018 (J)	0.0081 (J)					<0.1
9/26/2019			0.0062 (J)	0.0072 (J)			
3/18/2020	0.02 (J)					0.0087 (J)	
3/19/2020					0.0085 (J)		
3/24/2020		0.0092 (J)	0.0054 (J)	0.01 (J)			<0.1
9/23/2020		0.0066 (J)	0.021 (J)	0.006 (J)	<0.1	<0.1	
9/24/2020							0.0094 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	0.02 (J)						

Time Series

Constituent: Boron (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.1	
6/2/2016			<0.1		<0.1		
6/7/2016	<0.1						
7/25/2016			<0.1			<0.1	
7/26/2016					0.0097 (J)		
7/28/2016	<0.1						
9/14/2016		<0.1				<0.1	
9/15/2016					0.0102 (J)		
9/19/2016	<0.1		<0.1				
11/1/2016			<0.1		<0.1	<0.1	
11/3/2016	<0.1						
11/4/2016		<0.1					
12/15/2016		0.0107 (J)					
1/11/2017					<0.1	<0.1	
1/13/2017	<0.1						
1/16/2017		<0.1	<0.1				
2/21/2017			<0.1				
3/1/2017						<0.1	
3/2/2017					0.0084 (J)		
3/3/2017		<0.1					
3/6/2017	<0.1						
4/26/2017	<0.1		<0.1		<0.1	<0.1	
4/28/2017		<0.1					
5/26/2017		<0.1					
6/28/2017		<0.1			<0.1	<0.1	
6/29/2017	<0.1						
6/30/2017			<0.1				
10/3/2017	<0.1	<0.1					
10/4/2017			<0.1		<0.1	<0.1	
10/11/2017				0.0135 (J)			
10/12/2017							0.0401
11/20/2017				0.0251 (J)			0.156
1/10/2018							0.15
1/11/2018				0.0255 (J)			
2/19/2018							0.146
2/20/2018				<0.1			
4/3/2018				0.033 (J)			0.12
6/5/2018	0.0092 (J)						
6/7/2018		<0.1			0.004 (J)		
6/8/2018						<0.1	
6/11/2018			0.014 (J)				
6/28/2018				0.053			0.16
8/7/2018				0.024 (J)			0.12
9/24/2018				0.028 (J)			0.099
9/25/2018	0.0054 (J)						
10/1/2018		<0.1			<0.1	<0.1	
10/2/2018			<0.1				
3/26/2019							0.096
3/27/2019				0.017 (J)			
3/29/2019		0.0065 (J)					
4/1/2019			<0.1		<0.1	<0.1	
4/2/2019	0.011 (J)						

Time Series

Constituent: Boron (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	0.018 (J)	0.0076 (J)					
9/25/2019			<0.1		0.0054 (J)	<0.1	
10/9/2019				0.017 (J)			0.079
3/19/2020		0.0073 (J)	0.0052 (J)		0.0073 (J)	0.0053 (J)	
3/24/2020	0.016 (J)						0.088 (J)
3/25/2020				0.043 (J)			
9/23/2020		<0.1			0.012 (J)	0.0073 (J)	
9/24/2020	0.013 (J)		0.0075 (J)	0.037 (J)			0.087 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.1	<0.1	<0.1
7/26/2016		0.0047 (J)	0.0052 (J)	<0.1
8/30/2016	0.0166 (J)			
9/14/2016		<0.1	0.0071 (J)	0.01 (J)
11/2/2016		<0.1	<0.1	
11/4/2016				<0.1
11/14/2016	0.0166 (J)			
1/12/2017			0.0076 (J)	<0.1
1/13/2017		<0.1		
2/24/2017	0.0145 (J)			
3/6/2017		<0.1		
3/7/2017			0.0089 (J)	<0.1
5/1/2017		<0.1	0.0061 (J)	
5/2/2017				<0.1
5/8/2017	0.0141 (J)			
6/27/2017			0.0079 (J)	<0.1
6/29/2017		<0.1		
7/11/2017	0.0131 (J)			
10/3/2017			0.0094 (J)	<0.1
10/5/2017		<0.1		
10/10/2017	0.0124 (J)			
4/2/2018	0.013 (J)			
6/6/2018			0.0098 (J)	
6/7/2018		0.0045 (J)		<0.1
9/19/2018	0.012 (J)			
9/26/2018		0.005 (J)	0.01 (J)	0.0057 (J)
3/27/2019	0.013 (J)			
4/3/2019		0.0055 (J)	0.0076 (J)	0.0044 (J)
9/24/2019			0.01 (J)	0.0049 (J)
9/25/2019		<0.1		
10/8/2019	0.012 (J)			
3/17/2020	0.023 (J)			
3/24/2020			0.011 (J)	0.0068 (J)
3/25/2020		0.011 (J)		
9/22/2020	0.0076 (J)	<0.1	0.0079 (J)	0.0053 (J)

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.0025						
9/11/2007	<0.0025						
3/20/2008	<0.0025						
8/27/2008	<0.0025						
3/3/2009	<0.0025						
9/9/2009							<0.0025
11/18/2009	<0.0025						<0.0025
1/5/2010							<0.0025
3/3/2010	<0.0025						<0.0025
9/7/2010							<0.0025
9/8/2010	<0.0025						
11/22/2010			<0.0025		<0.0025		
1/4/2011			<0.0025		<0.0025		
2/17/2011			<0.0025		<0.0025		
3/10/2011	<0.0025						<0.0025
3/11/2011			<0.0025		<0.0025		
3/28/2011			<0.0025		<0.0025		
9/7/2011			<0.0025	<0.0025	<0.0025	<0.0025	
9/8/2011	<0.0025	<0.0025					<0.0025
3/4/2012					<0.0025		
3/5/2012	<0.0025	<0.0025		<0.0025		<0.0025	<0.0025
3/6/2012			<0.0025				
9/5/2012		<0.0025		<0.0025		<0.0025	<0.0025
9/10/2012	<0.0025				<0.0025		
9/11/2012			<0.0025				
2/5/2013		<0.0025				<0.0025	<0.0025
2/6/2013	<0.0025		<0.0025	<0.0025	<0.0025		
8/12/2013	<0.0025						
8/13/2013		<0.0025	<0.0025	<0.0025			<0.0025
8/14/2013					<0.0025	<0.0025	
2/4/2014		<0.0025	<0.0025		<0.0025		<0.0025
2/5/2014	<0.0025			<0.0025		<0.0025	
8/4/2014				0.00034 (J)	<0.0025	0.00045 (J)	
8/5/2014	<0.0025	<0.0025	<0.0025				<0.0025
2/2/2015		<0.0025	<0.0025		<0.0025		
2/3/2015				<0.0025		<0.0025	<0.0025
2/4/2015	<0.0025						
8/3/2015	<0.0025			<0.0025 (D)	<0.0025 (D)	0.00046 (JD)	
8/4/2015		<0.0025 (D)	<0.0025				<0.0025
2/16/2016	<0.0025	<0.0025		0.00025 (J)	<0.0025	0.00097 (J)	<0.0025
2/17/2016			<0.0025				
8/31/2016	<0.0025	<0.0025	0.0001 (J)	<0.0025			
9/1/2016					0.0001 (J)	0.0005 (J)	<0.0025
11/28/2016	<0.0025		0.0001 (J)				
11/29/2016		8E-05 (J)					<0.0025
11/30/2016				<0.0025	<0.0025		
12/1/2016						0.0004 (J)	
2/22/2017	<0.0025		<0.0025				
2/23/2017		<0.0025		<0.0025			<0.0025
2/24/2017					<0.0025	0.0003 (J)	
5/8/2017	<0.0025						
5/9/2017		<0.0025		<0.0025			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/10/2017			<0.0025		<0.0025	0.0003 (J)	<0.0025
7/17/2017	<0.0025					0.0004 (J)	
7/18/2017		<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
10/16/2017	<0.0025					0.0006 (J)	
10/17/2017		<0.0025	<0.0025		<0.0025		
10/18/2017				<0.0025			<0.0025
2/19/2018	<0.0025						<0.0025
2/20/2018			<0.0025		<0.0025		
2/21/2018		<0.0025		<0.0025		<0.0025	
8/6/2018	<0.0025						<0.0025
8/7/2018		<0.0025		<0.0025		0.00083 (J)	
8/8/2018			<0.0025		<0.0025		
2/25/2019	<0.0025						<0.0025
2/26/2019		<0.0025	<0.0025	0.00011 (J)	<0.0025	0.00081 (J)	
6/12/2019	<0.0025		<0.0025		<0.0025		
6/13/2019		<0.0025		0.00021 (J)		0.00073 (J)	<0.0025
8/19/2019	<0.0025				<0.0025		
8/20/2019		<0.0025	<0.0025				<0.0025
8/21/2019				<0.0025		0.0012 (J)	
10/8/2019	<0.0025						<0.0025
10/9/2019		<0.0025	<0.0025			0.0011 (J)	
10/10/2019				0.00018 (J)	<0.0025		
3/17/2020	<0.0025	<0.0025		0.00037 (J)			<0.0025
3/18/2020			<0.0025		<0.0025	0.0012 (J)	
8/26/2020	<0.0025						
8/27/2020		0.00012 (J)				0.00091 (J)	<0.0025
8/28/2020			0.00015 (J)	0.00014 (J)	<0.0025		
9/22/2020	<0.0025	0.00016 (J)	0.00016 (J)	0.00013 (J)	<0.0025		
9/23/2020						0.00094 (J)	<0.0025

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.0025	<0.0025	
6/2/2016	<0.0025						
6/6/2016			<0.0025	<0.0025			
6/7/2016		<0.0025					<0.0025
7/25/2016						<0.0025	
7/26/2016	<0.0025				<0.0025		
7/27/2016		<0.0025	<0.0025	<0.0025			<0.0025
9/13/2016					<0.0025	<0.0025	
9/15/2016	<0.0025						
9/16/2016		<0.0025		<0.0025			
9/19/2016			<0.0025				<0.0025
11/1/2016					<0.0025		
11/2/2016	<0.0025						<0.0025
11/3/2016		<0.0025	<0.0025	<0.0025			
11/4/2016						<0.0025	
1/10/2017	<0.0025						
1/11/2017		0.0001 (J)	<0.0025	0.0001 (J)	0.0002 (J)		
1/13/2017							<0.0025
1/16/2017						<0.0025	
3/1/2017			<0.0025	<0.0025			
3/2/2017		<0.0025			<0.0025	<0.0025	
3/6/2017							<0.0025
3/8/2017	7E-05 (J)						
4/26/2017	<0.0025		<0.0025	<0.0025			<0.0025
4/27/2017					<0.0025	<0.0025	
5/2/2017		<0.0025					
6/27/2017					<0.0025	<0.0025	
6/28/2017			<0.0025	<0.0025			
6/29/2017		<0.0025					<0.0025
6/30/2017	<0.0025						
3/27/2018	<0.0025					<0.0025	
3/28/2018		<0.0025	<0.0025	<0.0025			
3/29/2018					<0.0025		<0.0025
6/6/2018							<0.0025
6/7/2018			<0.0025				
6/11/2018		<0.0025		<0.0025			
9/25/2018		<0.0025	<0.0025	<0.0025			<0.0025
2/26/2019	<0.0025						
2/27/2019					<0.0025	<0.0025	
3/5/2019		<0.0025		<0.0025			<0.0025
3/6/2019			<0.0025				
3/28/2019					<0.0025	<0.0025	
3/29/2019	<0.0025						
4/2/2019		<0.0025					
4/3/2019			<0.0025	<0.0025			<0.0025
9/24/2019					<0.0025	<0.0025	
9/25/2019	<0.0025	<0.0025					<0.0025
9/26/2019			<0.0025	<0.0025			
2/10/2020					<0.0025	<0.0025	
2/11/2020		<0.0025	<0.0025	<0.0025			
2/12/2020	<0.0025						<0.0025
3/18/2020	<0.0025					<0.0025	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
3/19/2020					<0.0025		
3/24/2020		<0.0025	<0.0025	<0.0025			<0.0025
9/23/2020		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
9/24/2020							<0.0025
9/25/2020	<0.0025						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.0025	
6/2/2016			<0.0025		<0.0025		
6/7/2016	<0.0025						
7/25/2016			<0.0025			<0.0025	
7/26/2016					<0.0025		
7/28/2016	<0.0025						
9/14/2016		<0.0025				<0.0025	
9/15/2016					<0.0025		
9/19/2016	<0.0025		<0.0025				
11/1/2016			<0.0025		<0.0025	<0.0025	
11/3/2016	<0.0025						
11/4/2016		<0.0025					
12/15/2016		<0.0025					
1/11/2017					0.0001 (J)	8E-05 (J)	
1/13/2017	<0.0025						
1/16/2017		<0.0025	<0.0025				
2/21/2017			<0.0025				
3/1/2017						<0.0025	
3/2/2017					<0.0025		
3/3/2017		<0.0025					
3/6/2017	<0.0025						
4/26/2017	<0.0025		<0.0025		<0.0025	<0.0025	
4/28/2017		<0.0025					
5/26/2017		<0.0025					
6/28/2017		<0.0025			<0.0025	<0.0025	
6/29/2017	<0.0025						
6/30/2017			<0.0025				
10/11/2017				<0.0025			
10/12/2017							<0.0025
11/20/2017				<0.0025			<0.0025
1/10/2018							<0.0025
1/11/2018				<0.0025			
2/19/2018							<0.0025
2/20/2018				<0.0025			
3/27/2018			<0.0025				
3/28/2018		<0.0025			<0.0025	<0.0025	
3/29/2018	<0.0025						
4/3/2018				<0.0025			<0.0025
6/5/2018	<0.0025						
6/28/2018				<0.0025			<0.0025
8/7/2018				<0.0025			<0.0025
9/24/2018				<0.0025			<0.0025
9/25/2018	9.6E-05 (J)						
2/26/2019			<0.0025				
2/27/2019		<0.0025			<0.0025	<0.0025	
3/5/2019	<0.0025						
3/29/2019		<0.0025					
4/1/2019			<0.0025		<0.0025	<0.0025	
4/2/2019	<0.0025						
8/21/2019				<0.0025			<0.0025
9/24/2019	<0.0025	<0.0025					
9/25/2019			<0.0025		<0.0025	<0.0025	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
10/9/2019				<0.0025			<0.0025
2/11/2020		<0.0025				<0.0025	
2/12/2020	<0.0025		<0.0025	<0.0025	<0.0025		<0.0025
3/19/2020		<0.0025	<0.0025		<0.0025	<0.0025	
3/24/2020	<0.0025						<0.0025
3/25/2020				<0.0025			
9/23/2020		<0.0025			<0.0025	<0.0025	
9/24/2020	<0.0025		<0.0025	<0.0025			<0.0025

Time Series

Constituent: Cadmium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.0025	<0.0025	<0.0025
7/26/2016		<0.0025	<0.0025	<0.0025
8/30/2016	0.0001 (J)			
9/14/2016		<0.0025	<0.0025	<0.0025
11/2/2016		<0.0025	<0.0025	
11/4/2016				<0.0025
11/14/2016	0.0001 (J)			
1/12/2017			<0.0025	9E-05 (J)
1/13/2017		<0.0025		
2/24/2017	9E-05 (J)			
3/6/2017		<0.0025		
3/7/2017			<0.0025	<0.0025
5/1/2017		<0.0025	<0.0025	
5/2/2017				<0.0025
5/8/2017	0.0001 (J)			
6/27/2017			<0.0025	<0.0025
6/29/2017		<0.0025		
7/11/2017	<0.0025			
10/10/2017	<0.0025			
3/29/2018		<0.0025	<0.0025	<0.0025
4/2/2018	<0.0025			
6/6/2018			<0.0025	
6/7/2018		<0.0025		<0.0025
9/19/2018	<0.0025			
9/26/2018		<0.0025	<0.0025	<0.0025
3/4/2019		<0.0025	<0.0025	<0.0025
4/3/2019		<0.0025	<0.0025	<0.0025
8/20/2019	<0.0025			
9/24/2019			<0.0025	<0.0025
9/25/2019		<0.0025		
10/8/2019	<0.0025			
2/12/2020		<0.0025	<0.0025	<0.0025
3/17/2020	<0.0025			
3/24/2020			<0.0025	<0.0025
3/25/2020		<0.0025		
8/27/2020	<0.0025			
9/22/2020		<0.0025	<0.0025	<0.0025

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	9.31	69.4	19.9	7.23			
9/1/2016					37.1	113	56.8
11/28/2016	9.47 (B)		17.7 (B)				
11/29/2016		70.6 (B)					50.7 (B)
11/30/2016				6.43 (B)	13.4 (B)		
12/1/2016						141 (B)	
2/22/2017	10.4		16.2				
2/23/2017		62.4		4.25			63.5
2/24/2017					29.5	118	
5/8/2017	14.2						
5/9/2017		47.4		3.56			
5/10/2017			11.8		17	136	105
7/17/2017	14.1					125	
7/18/2017		33.2	8.69	4.16	16.8		157
10/16/2017	13.6					78.2	
10/17/2017		38.7	9.77		14.3		
10/18/2017				5.67			118
2/19/2018	<25						124
2/20/2018			<25		<25		
2/21/2018		34.3		4.76		64	
8/6/2018	11.4 (J)						173
8/7/2018		26.2		4.7		83	
8/8/2018			13.4 (J)		22.1 (J)		
2/25/2019	12.7 (J)						143
2/26/2019		24.7 (J)	20.9 (J)	7.1	15.1 (J)	94.4	
6/12/2019	18.9		26.6		24.2		
6/13/2019		33.8		15.7		127	146
10/8/2019	28.3						115
10/9/2019		59.1	27.8			128	
10/10/2019				4.3	18		
3/17/2020	24.3	36.7		20.3			66.8
3/18/2020			34.5		76.6	149	
9/22/2020	31	98.8	40.5	6.2	21.8		
9/23/2020						144	103

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					12	2.5	
6/2/2016	1.3						
6/6/2016			6.2	1.4			
6/7/2016		2.2					2.3
7/25/2016						2.16	
7/26/2016	1.24				11		
7/27/2016		2	4.73	1.19			2.08
9/13/2016					11.8	2.21	
9/15/2016	1.17						
9/16/2016		1.97		1.5			
9/19/2016			4.76				1.97
11/1/2016					11		
11/2/2016	1.23						2.13
11/3/2016		1.99	5.25	1.31			
11/4/2016						2.67	
1/10/2017	1.24						
1/11/2017		2.28	4.74	1.25	11.2		
1/13/2017							2.45
1/16/2017						2.45	
3/1/2017			5.37	1.26			
3/2/2017		2.15			11	2.57	
3/6/2017							2.48
3/8/2017	1.21						
4/26/2017	1.14		4.28	1.05			2.3
4/27/2017					11.1	2.38	
5/2/2017		1.95					
6/27/2017					13.8	2.36	
6/28/2017			4.95	1.06			
6/29/2017		2.02					2.54
6/30/2017	1.24						
10/3/2017					14	2.21	
10/4/2017		2.03		1.1			2.25
10/5/2017	1.11		5.28				
6/5/2018					15.2 (J)		
6/6/2018						2.3	2.3
6/7/2018			4.8				
6/8/2018	1.1						
6/11/2018		2.1		1.4			
9/25/2018		2.1	4.6	1			2.3
10/1/2018	0.99				15.1	1.8	
3/28/2019					13.3 (J)	2.2	
3/29/2019	1.1						
4/2/2019		2.5					
4/3/2019			5.3	1.2			2.9
9/24/2019					15.8	2.3	
9/25/2019	1.1	2.6					2.4
9/26/2019			4.9	1.1			
3/18/2020	1.1					2.1	
3/19/2020					15		
3/24/2020		2.7	5.3	1			2.6
9/23/2020		2.6	5.2	0.91 (J)	14.1	1.8	
9/24/2020							2.6

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	1.3						

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						21	
6/2/2016			1.3		28		
6/7/2016	3.7						
7/25/2016			1.17			20.3	
7/26/2016					24.5		
7/28/2016	3.15						
9/14/2016		23.5				19.7	
9/15/2016					27		
9/19/2016	3.17		1.05				
11/1/2016			1.14		25.6	18.4	
11/3/2016	3.4						
11/4/2016		23.7					
12/15/2016		23.1					
1/11/2017					27.5	20.3	
1/13/2017	4.98						
1/16/2017		23.3	1.23				
2/21/2017			1.25				
3/1/2017						18.6	
3/2/2017					27.5		
3/3/2017		25.1					
3/6/2017	6.28						
4/26/2017	6.65		1.03		30.4	25.6	
4/28/2017		30.7					
5/26/2017		26.2					
6/28/2017		26.1			29.8	23.9	
6/29/2017	6.04						
6/30/2017			1.13				
10/3/2017	8.28	26.7					
10/4/2017			1.09		29.7	22.1	
10/11/2017				2.74			
10/12/2017							2.9
11/20/2017				1.81			10.4
1/10/2018							10.2
1/11/2018				1.54			
2/19/2018							<25
2/20/2018				1.71			
4/3/2018				1.4			6.3
6/5/2018	9.1						
6/7/2018		25			29.1		
6/8/2018						21.9 (J)	
6/11/2018			1.1				
6/28/2018				1.4			6.7
8/7/2018				1.2			6.3
9/24/2018				1.1			5.7
9/25/2018	10.4 (J)						
10/1/2018		25			26.9	19.7	
10/2/2018			1.1				
3/26/2019							5.6
3/27/2019				1.5			
3/29/2019		23.5 (J)					
4/1/2019			1.3		30.1	20.4 (J)	
4/2/2019	8.8						

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	7.7	26.4					
9/25/2019			1.1		29.5	22.4	
10/9/2019				2.4			4.9
3/19/2020		27.4	1.2		31.5	21.9	
3/24/2020	6						4.8
3/25/2020				2.7			
9/23/2020		26.3			28.6	23.6	
9/24/2020	7.8		1.1	3.7			4.4

Time Series

Constituent: Calcium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		8.8	33	2.4
7/26/2016		7.69	32.3	2.12
8/30/2016	20.9			
9/14/2016		8.49	31	2.18
11/2/2016		7.83	30.9	
11/4/2016				2.17 (J)
11/14/2016	18.6			
1/12/2017			35.7	2.37
1/13/2017		8.08		
2/24/2017	16.1			
3/6/2017		8.64		
3/7/2017			32.7	2.34
5/1/2017		13.4	37	
5/2/2017				2.17
5/8/2017	14.6			
6/27/2017			36.5	2.13
6/29/2017		8.81		
7/11/2017	14.3			
10/3/2017			30.9	2.15
10/5/2017		9.29		
10/10/2017	12.1			
4/2/2018	<25			
6/6/2018			26.2	
6/7/2018		8.2		2.3
9/19/2018	11.1 (J)			
9/26/2018		9.5 (J)	25.8	2.3
3/27/2019	10.8 (J)			
4/3/2019		8.4	24.7 (J)	2.8
9/24/2019			25.8	2.5
9/25/2019		9.5		
10/8/2019	9.7			
3/17/2020	14.8			
3/24/2020			26.1	2.5
3/25/2020		10.5		
9/22/2020	10.1	9.6	27.2	2.6

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	4	7.6	6.3	6.7			
9/1/2016					190	6.6	4.4
11/28/2016	4.2		6.7				
11/29/2016		5.8					4.8
11/30/2016				7.8	48		
12/1/2016						6	
2/22/2017	3.7		5.7				
2/23/2017		6.2		6.5			4.4
2/24/2017					130	3.4	
5/8/2017	4.2						
5/9/2017		16		7.2			
5/10/2017			7.1		71	4.5	3.9
7/17/2017	3.8					3.2	
7/18/2017		18	6	7.7	46		4
10/16/2017	4.2					9	
10/17/2017		31	6.1		50		
10/18/2017				6.5			4.1
2/19/2018	4.3						4.4
2/20/2018			5.8		53.1		
2/21/2018		27		6.7		5.6	
8/6/2018	3.8						3.9
8/7/2018		35.4		6.3		4.7	
8/8/2018			4.7		69.3		
2/25/2019	4.1						4.4
2/26/2019		20	5.7	5.7	42.2	4.2	
6/12/2019	4.7		9.1		69.5		
6/13/2019		16.4		5		5.5	6.2
10/8/2019	5.1						4.9
10/9/2019		6.9	9.8			4.5	
10/10/2019				5.3	42.8		
3/17/2020	4.8	15.5		5.2			4.4
3/18/2020			11.7		233	3.8	
9/22/2020	4.2	5.5	24.7	4.2	60.2		
9/23/2020						3	4.7

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					1.3	1.6	
6/2/2016	4.1						
6/6/2016			6.8	6.4			
6/7/2016		4.5					1.9
7/25/2016						1.4	
7/26/2016	4				1.2		
7/27/2016		4.5	6.7	6.2			1.9
9/13/2016					1.1	1.3	
9/15/2016	4.2						
9/16/2016		4.5		6.1			
9/19/2016			7				1.9
11/1/2016					1.3		
11/2/2016	4.9						2.6
11/3/2016		5.4	7.5	7.4			
11/4/2016						1.6	
1/10/2017	4.1						
1/11/2017		4.7	6.5	6.1	1.1		
1/13/2017							2.3
1/16/2017						1.4	
3/1/2017			6.9	6			
3/2/2017		4.8			1	1.3	
3/6/2017							1.9
3/8/2017	4.2						
4/26/2017	4.1		7	6.5			2
4/27/2017					1	1.3	
5/2/2017		4.6					
6/27/2017					1.1	1.4	
6/28/2017			7	6.4			
6/29/2017		4.5					2.6
6/30/2017	3.7						
10/3/2017					1.1	1.7	
10/4/2017		4.7		6.8			2.6
10/5/2017	3.8		7				
6/5/2018					1.1		
6/6/2018						1.4	2.7
6/7/2018			6.8				
6/8/2018	3.4						
6/11/2018		4.9		6.8			
9/25/2018		5.6	7.9	7.8			3.6
10/1/2018	3.8				1.1	1.4	
3/28/2019					1.4	1.5	
3/29/2019	4.2						
4/2/2019		4.8					
4/3/2019			6.9	6.3			3.1
9/24/2019					1.1	1.3	
9/25/2019	4.8	5.7					2.8
9/26/2019			7	7.1			
3/18/2020	5.2					1.4	
3/19/2020					1.1		
3/24/2020		5	7	6.8			2.7
9/23/2020		6.6	7.2	7.2	0.99 (J)	1.2	
9/24/2020							2.7

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	5.3						

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						1.3	
6/2/2016			1.9		1.4		
6/7/2016	2.8						
7/25/2016			1.7			1.3	
7/26/2016					1.6		
7/28/2016	2.6						
9/14/2016		1.1				1.3	
9/15/2016					1.5		
9/19/2016	2.4		1.6				
11/1/2016			1.8		1.7	1.4	
11/3/2016	2.9						
11/4/2016		1.4					
12/15/2016		2.9					
1/11/2017					1.2	1.1	
1/13/2017	2.5						
1/16/2017		0.98	1.7				
2/21/2017			1.7				
3/1/2017						1.1	
3/2/2017					1.2		
3/3/2017		1.1					
3/6/2017	2.1						
4/26/2017	2.1		1.7		1.2	1.1	
4/28/2017		0.91					
5/26/2017		0.93					
6/28/2017		1			1.3	1.2	
6/29/2017	2.8						
6/30/2017			1.8				
10/3/2017	2.2	1.2					
10/4/2017			1.8		1.5	1.2	
10/11/2017				2.4			
10/12/2017							3.8
11/20/2017				1.8			4.4
1/10/2018							4.6
1/11/2018				1.6			
2/19/2018							4.6
2/20/2018				2			
4/3/2018				3.3			5.9
6/5/2018	1.7						
6/7/2018		1			1.2		
6/8/2018						1.2	
6/11/2018			2				
6/28/2018				2.1			5
8/7/2018				1.2			4.3
9/24/2018				1.3			4.9
9/25/2018	2.2						
10/1/2018		1.1			1.5	1.2	
10/2/2018			1.8				
3/26/2019							4.4
3/27/2019				1.4			
3/29/2019		1.2					
4/1/2019			1.7		1.2	1.1	
4/2/2019	2.5						

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	3.1	0.95 (J)					
9/25/2019			1.6		1.1	1.1	
10/9/2019				2.1			5.1
3/19/2020		0.97 (J)	1.8		1.2	1.1	
3/24/2020	2.8						4.7
3/25/2020				1.9			
9/23/2020		0.88 (J)			1.1	1	
9/24/2020	2		1.5	2.7			5

Time Series

Constituent: Chloride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		3.7	7.2	4.3
7/26/2016		3.6	6.6	4.4
8/30/2016	5.2			
9/14/2016		3.4	6.6	3.8
11/2/2016		4.5	7.6	
11/4/2016				4.8
11/14/2016	6.4			
1/12/2017			6.8	3.8
1/13/2017		4.2		
2/24/2017	5.5			
3/6/2017		3.6		
3/7/2017			6.8	4.5
5/1/2017		4.3	7.2	
5/2/2017				4.6
5/8/2017	5.8			
6/27/2017			7	4.3
6/29/2017		4.2		
7/11/2017	5.8			
10/3/2017			6.5	4.2
10/5/2017		4.7		
10/10/2017	5.9			
4/2/2018	4.8			
6/6/2018			4.7	
6/7/2018		4.4		4.5
9/19/2018	4			
9/26/2018		4.8	4.8	5.1
3/27/2019	4.3			
4/3/2019		4.3	4	4.2
9/24/2019			3.7	4.5
9/25/2019		4.5		
10/8/2019	4.4			
3/17/2020	4.1			
3/24/2020			3.5	4.3
3/25/2020		3.9		
9/22/2020	4.2	4.5	3.6	4.2

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.01						
9/20/1999	0.01						
9/12/2001	<0.01						
9/3/2002	<0.01						
7/29/2003	<0.01						
12/5/2003	<0.01						
9/22/2004	0.0067						
5/1/2007		0.0029					
9/11/2007		0.0084					
3/20/2008		0.0027					
8/27/2008		0.0026					
3/3/2009		0.0022					
11/18/2009		0.0036					
3/3/2010		<0.01					
9/8/2010		<0.01					
11/22/2010				<0.01		<0.01	
1/4/2011				<0.01		0.0062	
2/17/2011				<0.01		<0.01	
3/10/2011		<0.01					
3/11/2011				<0.01		<0.01	
3/28/2011				<0.01		<0.01	
9/7/2011				<0.01	<0.01	<0.01	<0.01
9/8/2011		<0.01	<0.01				
3/4/2012						<0.01	
3/5/2012		<0.01	<0.01		<0.01		<0.01
3/6/2012				<0.01			
9/5/2012			<0.01		<0.01		<0.01
9/10/2012		<0.01				<0.01	
9/11/2012				<0.01			
2/5/2013			<0.01				<0.01
2/6/2013		<0.01		<0.01	<0.01	<0.01	
8/12/2013		<0.01					
8/13/2013			<0.01	0.0017	0.0019		
8/14/2013						<0.01	0.0016
2/4/2014			<0.01	<0.01		<0.01	
2/5/2014		0.0059			0.0023		0.0018
8/4/2014					0.002	<0.01	0.0029
8/5/2014		<0.01	<0.01	<0.01			
2/2/2015			0.0028	<0.01		<0.01	
2/3/2015					0.0014		0.0017
2/4/2015		<0.01					
8/3/2015		0.0011 (J)			0.0012 (JD)	<0.01 (D)	0.0028 (D)
8/4/2015			<0.01 (D)	<0.01			
2/16/2016		<0.01	<0.01		0.0017	<0.01	0.0028
2/17/2016				<0.01			
8/31/2016		<0.01	0.0012 (J)	<0.01	0.0013 (J)		
9/1/2016						<0.01	0.0021 (J)
11/28/2016		<0.01		<0.01			
11/29/2016			0.0009 (J)				
11/30/2016					0.001 (J)	0.0013 (J)	
12/1/2016							0.0017 (J)
2/22/2017		<0.01		<0.01			

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			0.001 (J)		0.0012 (J)		
2/24/2017						<0.01	0.0018 (J)
5/8/2017		<0.01					
5/9/2017			0.0011 (J)		0.0016 (J)		
5/10/2017				0.0008 (J)		0.0007 (J)	0.0024 (J)
7/17/2017		<0.01					0.0017 (J)
7/18/2017			0.0008 (J)	<0.01	0.0009 (J)	0.0011 (J)	
10/16/2017		<0.01					0.0023 (J)
10/17/2017			0.001 (J)	<0.01		<0.01	
10/18/2017					0.001 (J)		
2/19/2018		<0.01					
2/20/2018				<0.01		<0.01	
2/21/2018			<0.01		<0.01		<0.01
8/6/2018		<0.01					
8/7/2018			<0.01		<0.01		0.0024 (J)
8/8/2018				<0.01		<0.01	
2/25/2019		<0.01					
2/26/2019			<0.01	<0.01	<0.01	<0.01	0.0019 (J)
6/12/2019		<0.01		<0.01		<0.01	
6/13/2019			0.0009 (J)		0.00073 (J)		0.0018 (J)
8/19/2019		<0.01				0.00051 (J)	
8/20/2019			0.0011 (J)	<0.01			
8/21/2019					0.001 (J)		0.0024 (J)
10/8/2019		<0.01					
10/9/2019			0.0012 (J)	0.00059 (J)			0.0024 (J)
10/10/2019					0.0014 (J)	0.00057 (J)	
3/17/2020		<0.01	0.001 (J)		0.0013 (J)		
3/18/2020				0.0004 (J)		<0.01	0.0023 (J)
8/26/2020		<0.01					
8/27/2020			0.0013 (J)				0.0022 (J)
8/28/2020				0.00057 (J)	0.00088 (J)	<0.01	
9/22/2020		<0.01	0.0012 (J)	<0.01	0.0011 (J)	<0.01	
9/23/2020							0.002 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.01						
11/18/2009	<0.01						
1/5/2010	<0.01						
3/3/2010	<0.01						
9/7/2010	<0.01						
3/10/2011	<0.01						
9/8/2011	0.0018						
3/5/2012	<0.01						
9/5/2012	0.0013						
2/5/2013	<0.01						
8/13/2013	0.0025						
2/4/2014	0.0013						
8/5/2014	0.0018						
2/3/2015	0.0015						
8/4/2015	0.0028						
2/16/2016	0.001 (J)						
6/1/2016						0.0035	<0.01
6/2/2016		<0.01					
6/6/2016				0.0012 (J)	<0.01		
6/7/2016			<0.01				
7/25/2016							<0.01
7/26/2016		<0.01				<0.01	
7/27/2016			0.0008 (J)	0.0007 (J)	0.0006 (J)		
9/1/2016	0.0015 (J)						
9/13/2016						<0.01	<0.01
9/15/2016		<0.01					
9/16/2016			<0.01		<0.01		
9/19/2016				<0.01			
11/1/2016						<0.01	
11/2/2016		<0.01					
11/3/2016			<0.01	<0.01	<0.01		
11/4/2016							<0.01
11/29/2016	0.0014 (J)						
1/10/2017		<0.01					
1/11/2017			<0.01	<0.01	<0.01	<0.01	
1/16/2017							<0.01
2/23/2017	0.0017 (J)						
3/1/2017				0.0012 (J)	<0.01		
3/2/2017			0.001 (J)			0.0009 (J)	0.0004 (J)
3/8/2017		<0.01					
4/26/2017		<0.01		0.0005 (J)	0.0003 (J)		
4/27/2017						<0.01	<0.01
5/2/2017			0.0007 (J)				
5/10/2017	0.0015 (J)						
6/27/2017						<0.01	<0.01
6/28/2017				0.0006 (J)	<0.01		
6/29/2017			0.0006 (J)				
6/30/2017		<0.01					
7/18/2017	0.0012 (J)						
10/18/2017	0.0012 (J)						
2/19/2018	<0.01						
3/27/2018		<0.01					<0.01

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.01	<0.01	<0.01		
3/29/2018						<0.01	
8/6/2018	<0.01						
2/25/2019	<0.01						
2/26/2019		<0.01					
2/27/2019						<0.01	<0.01
3/5/2019			<0.01		<0.01		
3/6/2019				<0.01			
3/28/2019						<0.01	0.0021 (J)
3/29/2019		<0.01					
6/13/2019	0.00089 (J)						
8/20/2019	0.0017 (J)						
9/24/2019						0.00072 (J)	0.0028 (J)
9/25/2019		<0.01					
10/8/2019	0.0014 (J)						
2/10/2020						0.00042 (J)	<0.01
2/11/2020			0.00087 (J)	0.001 (J)	0.00088 (J)		
2/12/2020		<0.01					
3/17/2020	0.0013 (J)						
3/18/2020		<0.01					0.00044 (J)
3/19/2020						0.00084 (J)	
3/24/2020			0.00087 (J)	0.00095 (J)	0.0011 (J)		
8/27/2020	0.0012 (J)						
9/23/2020	0.0015 (J)		0.00098 (J)	0.00092 (J)	0.0012 (J)	0.00062 (J)	0.00058 (J)
9/25/2020		<0.01					

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.01
6/2/2016				<0.01		0.0013 (J)	
6/7/2016	<0.01	<0.01					
7/25/2016				<0.01			<0.01
7/26/2016						<0.01	
7/27/2016	0.0005 (J)						
7/28/2016		<0.01					
9/14/2016			<0.01				<0.01
9/15/2016						<0.01	
9/19/2016	<0.01	<0.01		<0.01			
11/1/2016				<0.01		<0.01	<0.01
11/2/2016	<0.01						
11/3/2016		<0.01					
11/4/2016			<0.01				
12/15/2016			<0.01				
1/11/2017						<0.01	<0.01
1/13/2017	<0.01	<0.01					
1/16/2017			<0.01	<0.01			
2/21/2017				<0.01			
3/1/2017							0.0004 (J)
3/2/2017						0.0006 (J)	
3/3/2017			0.0005 (J)				
3/6/2017	<0.01	<0.01					
4/26/2017	0.0007 (J)	<0.01		0.0016 (J)		<0.01	<0.01
4/28/2017			0.0004 (J)				
5/26/2017			<0.01				
6/28/2017			<0.01			<0.01	<0.01
6/29/2017	0.0005 (J)	<0.01					
6/30/2017				<0.01			
10/11/2017					<0.01		
11/20/2017					<0.01		
1/11/2018					<0.01		
2/20/2018					<0.01		
3/27/2018				<0.01			
3/28/2018			<0.01			<0.01	<0.01
3/29/2018	<0.01	<0.01					
4/3/2018					<0.01		
6/28/2018					<0.01		
8/7/2018					<0.01		
9/24/2018					<0.01		
2/26/2019				<0.01			
2/27/2019			<0.01			<0.01	<0.01
3/5/2019	<0.01	<0.01					
3/29/2019			<0.01				
4/1/2019				<0.01		<0.01	<0.01
8/21/2019					<0.01		
9/24/2019			<0.01				
9/25/2019				<0.01		0.0014 (J)	0.0019 (J)
10/9/2019					<0.01		
2/11/2020			<0.01				<0.01
2/12/2020	0.00045 (J)	<0.01		<0.01	<0.01	<0.01	
3/19/2020			0.00048 (J)	<0.01		<0.01	<0.01

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
3/24/2020	0.00077 (J)	<0.01					
3/25/2020					<0.01		
9/23/2020			<0.01			<0.01	<0.01
9/24/2020	0.00076 (J)	<0.01		<0.01	<0.01		

Time Series

Constituent: Chromium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.01	<0.01	<0.01
7/26/2016			<0.01	<0.01	<0.01
8/30/2016		<0.01			
9/14/2016			<0.01	<0.01	<0.01
11/2/2016			<0.01	<0.01	
11/4/2016					<0.01
11/14/2016		0.0093 (J)			
1/12/2017				<0.01	<0.01
1/13/2017			<0.01		
2/24/2017		<0.01			
3/6/2017			<0.01		
3/7/2017				<0.01	<0.01
5/1/2017			<0.01	0.0004 (J)	
5/2/2017					<0.01
5/8/2017		<0.01			
6/27/2017				<0.01	<0.01
6/29/2017			<0.01		
7/11/2017		<0.01			
10/10/2017		<0.01			
10/12/2017	<0.01				
11/20/2017	<0.01				
1/10/2018	<0.01				
2/19/2018	<0.01				
3/29/2018			<0.01	<0.01	<0.01
4/2/2018		<0.01			
4/3/2018	<0.01				
6/28/2018	<0.01				
8/7/2018	<0.01				
9/19/2018		<0.01			
9/24/2018	<0.01				
3/4/2019			<0.01	<0.01	<0.01
8/20/2019		<0.01			
8/21/2019	0.00053 (J)				
10/9/2019	0.0012 (J)				
2/12/2020	0.00065 (J)		<0.01	<0.01	0.00043 (J)
3/24/2020	0.00055 (J)			<0.01	0.0014 (J)
3/25/2020			0.00058 (J)		
8/27/2020		<0.01			
9/22/2020		<0.01	<0.01	0.0011 (J)	<0.01
9/24/2020	<0.01				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	0.013						
9/20/1999	<0.005						
9/12/2001	0.0024						
9/3/2002	<0.005						
7/29/2003	0.002						
12/5/2003	<0.005						
9/22/2004	<0.005						
5/1/2007		0.0067					
9/11/2007		<0.005					
3/20/2008		<0.005					
8/27/2008		<0.005					
3/3/2009		<0.005					
11/18/2009		<0.005					
3/3/2010		0.0027					
9/8/2010		0.007					
11/22/2010				0.038		<0.005	
1/4/2011				0.049		0.0036	
2/17/2011				0.044		0.0035	
3/10/2011		<0.005					
3/11/2011				0.038		0.0053	
3/28/2011				0.029		<0.005	
9/7/2011				0.031	<0.005	0.0033	<0.005
9/8/2011		<0.005	0.015				
3/4/2012						0.0032	
3/5/2012		0.0032	<0.005		<0.005		<0.005
3/6/2012				0.021			
9/5/2012			0.0018		<0.005		<0.005
9/10/2012		<0.005				0.0067	
9/11/2012				0.017			
2/5/2013			0.0013				<0.005
2/6/2013		<0.005		0.025	<0.005	0.0024	
8/12/2013		0.0045					
8/13/2013			<0.005	0.023	<0.005		
8/14/2013						0.0014	<0.005
2/4/2014			<0.005	0.019		<0.005	
2/5/2014		<0.005			<0.005		<0.005
8/4/2014					<0.005	<0.005	<0.005
8/5/2014		0.0027	<0.005	0.023			
2/2/2015			0.0015	0.022		<0.005	
2/3/2015					<0.005		<0.005
2/4/2015		0.0016					
8/3/2015		0.002			<0.005 (D)	<0.005 (D)	<0.005 (D)
8/4/2015			<0.005 (D)	0.021			
2/16/2016		0.0027	<0.005		<0.005	0.0082	<0.005
2/17/2016				0.024			
8/31/2016		0.0053 (J)	0.0006 (J)	0.0239	<0.005		
9/1/2016						0.0023 (J)	<0.005
11/28/2016		0.0036 (J)		0.0189			
11/29/2016			<0.005				
11/30/2016					<0.005	0.0008 (J)	
12/1/2016							<0.005
2/22/2017		0.0049 (J)		0.0184			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			0.0009 (J)		<0.005		
2/24/2017						0.0025 (J)	<0.005
5/8/2017		0.0059 (J)					
5/9/2017			0.0008 (J)		<0.005		
5/10/2017				0.0213		<0.005	<0.005
7/17/2017		0.0046 (J)					<0.005
7/18/2017			0.0032 (J)	0.0261	<0.005	0.0005 (J)	
10/16/2017		0.0034 (J)					<0.005
10/17/2017			0.0007 (J)	0.0182		0.0006 (J)	
10/18/2017					<0.005		
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		<0.005
8/6/2018		0.003 (J)					
8/7/2018			<0.005		<0.005		<0.005
8/8/2018				0.014		0.001 (J)	
2/25/2019		0.001 (J)					
2/26/2019			<0.005	0.029	<0.005	<0.005	<0.005
6/12/2019		0.003 (J)		0.013		0.00078 (J)	
6/13/2019			0.00033 (J)		0.01		<0.005
8/19/2019		0.0035 (J)				0.001 (J)	
8/20/2019			0.00079 (J)	0.014			
8/21/2019					0.0016 (J)		0.00034 (J)
10/8/2019		0.0039 (J)					
10/9/2019			0.00064 (J)	0.024			0.00031 (J)
10/10/2019					<0.005	0.00099 (J)	
3/17/2020		0.003 (J)	0.00054 (J)		0.011		
3/18/2020				0.019		0.0031 (J)	0.00044 (J)
8/26/2020		0.2 (o)					
8/27/2020			0.00081 (J)				<0.005
8/28/2020				0.0072	0.0041 (J)	0.00049 (J)	
9/22/2020		0.16 (o)	0.0008 (J)	0.0054	0.0021 (J)	0.00039 (J)	
9/23/2020							<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.005						
11/18/2009	<0.005						
1/5/2010	<0.005						
3/3/2010	<0.005						
9/7/2010	<0.005						
3/10/2011	<0.005						
9/8/2011	<0.005						
3/5/2012	<0.005						
9/5/2012	<0.005						
2/5/2013	<0.005						
8/13/2013	<0.005						
2/4/2014	<0.005						
8/5/2014	<0.005						
2/3/2015	<0.005						
8/4/2015	0.0014						
2/16/2016	<0.005						
6/1/2016						<0.005	0.00082 (J)
6/2/2016		<0.005					
6/6/2016				<0.005	0.00061 (J)		
6/7/2016			<0.005				
7/25/2016							0.0008 (J)
7/26/2016		<0.005				<0.005	
7/27/2016			<0.005	<0.005	0.0004 (J)		
9/1/2016	<0.005						
9/13/2016						<0.005	0.0009 (J)
9/15/2016		<0.005					
9/16/2016			<0.005		0.0008 (J)		
9/19/2016				<0.005			
11/1/2016						<0.005	
11/2/2016		<0.005					
11/3/2016			<0.005	<0.005	<0.005		
11/4/2016							0.0025 (J)
11/29/2016	<0.005						
1/10/2017		<0.005					
1/11/2017			<0.005	<0.005	<0.005	<0.005	
1/16/2017							0.0027 (J)
2/23/2017	<0.005						
3/1/2017				<0.005	<0.005		
3/2/2017			<0.005			<0.005	0.0022 (J)
3/8/2017		<0.005					
4/26/2017		<0.005		<0.005	<0.005		
4/27/2017						<0.005	0.0018 (J)
5/2/2017			<0.005				
5/10/2017	<0.005						
6/27/2017						<0.005	0.0023 (J)
6/28/2017				<0.005	<0.005		
6/29/2017			<0.005				
6/30/2017		<0.005					
7/18/2017	<0.005						
10/18/2017	<0.005						
2/19/2018	<0.005						
3/27/2018		<0.005					<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.005	<0.005	<0.005		
3/29/2018						<0.005	
6/5/2018						<0.005	
6/6/2018							<0.005
6/7/2018				<0.005			
6/8/2018		<0.005					
6/11/2018			<0.005		<0.005		
8/6/2018	<0.005						
9/25/2018			<0.005	<0.005	<0.005		
10/1/2018		<0.005				<0.005	0.00059 (J)
2/25/2019	<0.005						
2/26/2019		<0.005					
2/27/2019						<0.005	0.00064 (J)
3/5/2019			<0.005		<0.005		
3/6/2019				<0.005			
3/28/2019						<0.005	0.00091 (J)
3/29/2019		<0.005					
4/2/2019			<0.005				
4/3/2019				<0.005	<0.005		
6/13/2019	<0.005						
8/20/2019	<0.005						
9/24/2019						<0.005	0.0013 (J)
9/25/2019		<0.005	<0.005				
9/26/2019				<0.005	<0.005		
10/8/2019	<0.005						
2/10/2020						<0.005	0.0016 (J)
2/11/2020			<0.005	<0.005	<0.005		
2/12/2020		<0.005					
3/17/2020	<0.005						
3/18/2020		<0.005					0.00087 (J)
3/19/2020						<0.005	
3/24/2020			<0.005	<0.005	<0.005		
8/27/2020	<0.005						
9/23/2020	<0.005		<0.005	<0.005	<0.005	<0.005	0.0013 (J)
9/25/2020		<0.005					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.005
6/2/2016				0.035		<0.005	
6/7/2016	<0.005	0.0056					
7/25/2016				0.0312			<0.005
7/26/2016						<0.005	
7/27/2016	<0.005						
7/28/2016		0.0032 (J)					
9/14/2016			<0.005				<0.005
9/15/2016						<0.005	
9/19/2016	<0.005	0.0047 (J)		0.0275			
11/1/2016				0.0255		<0.005	<0.005
11/2/2016	<0.005						
11/3/2016		0.013					
11/4/2016			<0.005				
12/15/2016			<0.005				
1/11/2017						<0.005	<0.005
1/13/2017	<0.005	0.011					
1/16/2017			<0.005	0.0245			
2/21/2017				0.0272			
3/1/2017							<0.005
3/2/2017						<0.005	
3/3/2017			<0.005				
3/6/2017	<0.005	0.011					
4/26/2017	<0.005	0.009 (J)		0.0244		<0.005	<0.005
4/28/2017			<0.005				
5/26/2017			<0.005				
6/28/2017			<0.005			<0.005	<0.005
6/29/2017	<0.005	0.0093 (J)					
6/30/2017				0.0233			
10/11/2017					<0.005		
11/20/2017					<0.005		
1/11/2018					<0.005		
2/20/2018					<0.005		
3/27/2018				0.023			
3/28/2018			<0.005			<0.005	<0.005
3/29/2018	<0.005	<0.005					
4/3/2018					<0.005		
6/5/2018		0.0041 (J)					
6/6/2018	<0.005						
6/7/2018			<0.005			<0.005	
6/8/2018							<0.005
6/11/2018				0.023			
6/28/2018					<0.005		
8/7/2018					<0.005		
9/24/2018					<0.005		
9/25/2018	<0.005	0.0044 (J)					
10/1/2018			<0.005			<0.005	<0.005
10/2/2018				0.022			
2/26/2019				0.021			
2/27/2019			<0.005			<0.005	<0.005
3/5/2019	<0.005	0.0039 (J)					
3/29/2019			<0.005				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
4/1/2019				0.022		<0.005	<0.005
4/2/2019		0.0039 (J)					
4/3/2019	<0.005						
8/21/2019					0.00034 (J)		
9/24/2019		0.0032 (J)	<0.005				
9/25/2019	<0.005			0.016		<0.005	<0.005
10/9/2019					<0.005		
2/11/2020			<0.005				<0.005
2/12/2020	<0.005	0.0081		0.014	0.00034 (J)	<0.005	
3/19/2020			<0.005	0.014		<0.005	<0.005
3/24/2020	<0.005	0.0061					
3/25/2020					0.00034 (J)		
9/23/2020			<0.005			<0.005	<0.005
9/24/2020	<0.005	0.0079		0.0064	0.00053 (J)		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			0.00082 (J)	<0.005	<0.005
7/26/2016			0.0012 (J)	<0.005	<0.005
8/30/2016		0.0073 (J)			
9/14/2016			0.0006 (J)	<0.005	<0.005
11/2/2016			<0.005	<0.005	
11/4/2016					<0.005
11/14/2016		0.0115			
1/12/2017				<0.005	<0.005
1/13/2017			0.0029 (J)		
2/24/2017		0.0106			
3/6/2017			0.0006 (J)		
3/7/2017				<0.005	<0.005
5/1/2017			<0.005	<0.005	
5/2/2017					<0.005
5/8/2017		0.0099 (J)			
6/27/2017				<0.005	<0.005
6/29/2017			0.0005 (J)		
7/11/2017		0.0096 (J)			
10/10/2017		0.0036 (J)			
10/12/2017	<0.005				
11/20/2017	<0.005				
1/10/2018	<0.005				
2/19/2018	<0.005				
3/29/2018			<0.005	<0.005	<0.005
4/2/2018		<0.005			
4/3/2018	<0.005				
6/6/2018				<0.005	
6/7/2018			0.00058 (J)		<0.005
6/28/2018	<0.005				
8/7/2018	<0.005				
9/19/2018		0.0036 (J)			
9/24/2018	<0.005				
9/26/2018			<0.005	<0.005	<0.005
3/4/2019			<0.005	<0.005	<0.005
4/3/2019			0.00083 (J)	<0.005	<0.005
8/20/2019		0.00092 (J)			
8/21/2019	<0.005				
9/24/2019				<0.005	<0.005
9/25/2019			<0.005		
10/8/2019		0.0014 (J)			
10/9/2019	<0.005				
2/12/2020	<0.005		<0.005	0.00037 (J)	<0.005
3/17/2020		0.0017 (J)			
3/24/2020	<0.005			0.00035 (J)	<0.005
3/25/2020			0.00056 (J)		
8/27/2020		0.0011 (J)			
9/22/2020		0.00097 (J)	<0.005	<0.005	<0.005
9/24/2020	<0.005				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	1.2						
11/28/2016	0.264 (U)		0.387 (U)				
11/29/2016		0.551 (U)					0.232 (U)
11/30/2016				0.0236 (U)	0.477 (U)		
12/1/2016						0.0588 (U)	
2/22/2017	1.06 (U)		0.739 (U)				
2/23/2017		0.504 (U)		0.728 (U)			1.18 (U)
2/24/2017					0.305 (U)	0.487 (U)	
5/8/2017	0.187 (U)						
5/9/2017		0.434 (U)		0.0367 (U)			
5/10/2017			0.458 (U)		0.0659 (U)	0.289 (U)	0.658 (U)
7/17/2017	1.42					0.528 (U)	
7/18/2017		1.37	0.708 (U)	0.237 (U)	0.199 (U)		0.797 (U)
10/16/2017	1.17					0.558 (U)	
10/17/2017		0.937 (U)	0.402 (U)		0.294 (U)		
10/18/2017				0.706 (U)			0.239 (U)
2/19/2018	1.58 (D)						0.973 (D)
2/20/2018			1.64 (D)		1.03 (UD)		
2/21/2018		0.817 (UD)		0.526 (UD)		1.13 (UD)	
8/6/2018	0.196 (U)						0.866 (U)
8/7/2018		0.578 (U)		0.376 (U)		0.51 (U)	
8/8/2018			2.01		0.0378 (U)		
8/19/2019	1.39				0.637 (U)		
8/20/2019		1.25 (U)	1.22				0.409 (U)
8/21/2019				0.774 (U)		1.82	
10/8/2019	1.32 (U)						0.91 (U)
10/9/2019		0.482 (U)	0.71 (U)			0.498 (U)	
10/10/2019				0.433 (U)	0.525 (U)		
3/17/2020	1 (U)	1.4		2.84			2.5
3/18/2020			1.3		0.866 (U)	0.788 (U)	
8/26/2020	1.75 (U)						
8/27/2020		0.413 (U)				0.691 (U)	0.514 (U)
8/28/2020			1.52 (U)	0.494 (U)	0.336 (U)		
9/22/2020	0.688 (U)	0.7 (U)	2.09	1.24 (U)	0.509 (U)		
9/23/2020						0 (U)	0.96 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					0.321 (U)	0.42	
6/2/2016	0.329 (U)						
6/6/2016			0.0804 (U)	0.301 (U)			
6/7/2016		0.158 (U)					0.0191 (U)
7/25/2016						1.83	
7/26/2016	1.51				0.707 (U)		
7/27/2016		0.0354 (U)	0.206 (U)	0.196 (U)			0.541 (U)
9/13/2016					1.22	0.841	
9/15/2016	1.04 (U)						
9/16/2016		1.04		0.915 (U)			
9/19/2016			1.58				0.826 (U)
11/1/2016					0.805 (U)		
11/2/2016	0.496 (U)						0.791 (U)
11/3/2016		0.314 (U)	0.342 (U)	0.928 (U)			
11/4/2016						0.166 (U)	
1/10/2017	0.376 (U)						
1/11/2017		0.34 (U)	0.365 (U)	0.502 (U)	0.705 (U)		
1/13/2017							0.296 (U)
1/16/2017						0	
3/1/2017			0.395 (U)	0.202 (U)			
3/2/2017		0.746 (U)			0.251 (U)	0.504 (U)	
3/6/2017							0.518 (U)
3/8/2017	0.0745 (U)						
4/26/2017	0.282 (U)		0.507 (U)	0.264 (U)			0.282 (U)
4/27/2017					1.08	0.593 (U)	
5/2/2017		0.111 (U)					
6/27/2017					1.02 (U)	0.657 (U)	
6/28/2017			0.892	0.636 (U)			
6/29/2017		0.576 (U)					1.12
6/30/2017	0.994						
3/27/2018	0.189 (U)					0.39 (U)	
3/28/2018		0.438 (U)	0.92 (U)	0.56 (U)			
3/29/2018					0.503 (U)		1.73
6/5/2018					0.771 (U)		
6/6/2018						2.8	0.694 (U)
6/7/2018			0.668 (U)				
6/8/2018	0.218 (U)						
6/11/2018		0.901 (U)		0.649 (U)			
9/25/2018		0.68 (U)	0.141 (U)	0.574 (U)			0.772 (U)
10/1/2018	1.24				0.783 (U)	1.06 (U)	
2/26/2019	0.202 (U)						
2/27/2019					1.21 (U)	0.637 (U)	
3/5/2019		0.272 (U)		0.474 (U)			0.84 (U)
3/6/2019			0.714 (U)				
3/28/2019					1.13 (U)	0.125 (U)	
3/29/2019	0 (U)						
4/2/2019		0.847 (U)					
4/3/2019			0.385 (U)	0.429 (U)			1.01
9/24/2019					1.22 (U)	0.949 (U)	
9/25/2019	0.707 (U)	0.412 (U)					1.18 (U)
9/26/2019			0.386 (U)	0.222 (U)			
2/10/2020					1.41	1.25 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
2/11/2020		0.461 (U)	1.48	0.597 (U)			
2/12/2020	1.07 (U)						1.11 (U)
3/18/2020	0.207 (U)					0.458 (U)	
3/19/2020					1.1		
3/24/2020		0.534 (U)	0.632 (U)	0.262 (U)			1.88
9/23/2020		0.466 (U)	0.887 (U)	0.43 (U)	1.35 (U)	0.00884 (U)	
9/24/2020							0.611 (U)
9/25/2020	0.603 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						0.896	
6/2/2016			0.0652 (U)		2.51		
6/7/2016	0.347						
7/25/2016			3.01			2.28	
7/26/2016					3.82		
7/28/2016	0.815 (U)						
9/14/2016		0.98 (U)				0.821 (U)	
9/15/2016					4.24		
9/19/2016	0.862 (U)		0.871 (U)				
11/1/2016			0.307 (U)		3.92	0.585 (U)	
11/3/2016	0.797 (U)						
11/4/2016		0.277 (U)					
12/15/2016		0.071 (U)					
1/11/2017					2.52	1.22	
1/13/2017	0.72 (U)						
1/16/2017		0.44 (U)	0.284 (U)				
2/21/2017			0.503 (U)				
3/1/2017						0.877 (U)	
3/2/2017					3.13		
3/3/2017		0.448 (U)					
3/6/2017	0.518 (U)						
4/26/2017	1.13 (U)		0.204 (U)		2.35	0.672 (U)	
4/28/2017		0.548 (U)					
5/26/2017		0 (U)					
6/28/2017		0.608 (U)			2.6	1.07 (U)	
6/29/2017	0.841 (U)						
6/30/2017			0.738 (U)				
10/11/2017				0.586 (U)			
10/12/2017							1.49
11/20/2017				0.816 (U)			0.918 (U)
1/10/2018							1.05
1/11/2018				0.841 (U)			
2/19/2018							2.05
2/20/2018				1.58			
3/27/2018			0.31 (U)				
3/28/2018		0.412 (U)			3	0.65 (U)	
3/29/2018	1.91						
4/3/2018				0.385 (U)			0.68 (U)
6/5/2018	1.39						
6/7/2018		0.73 (U)			2.79		
6/8/2018						1.89	
6/11/2018			0.608 (U)				
6/28/2018				0.283 (U)			1.28
8/7/2018				0.332 (U)			1.16
9/24/2018				0.767 (U)			0.965 (U)
9/25/2018	1.62						
10/1/2018		0.756 (U)			3.14	1.58	
10/2/2018			0.97 (U)				
2/26/2019			0.524 (U)				
2/27/2019		0.635 (U)			3.79	3.67	
3/5/2019	0.985 (U)						
3/29/2019		0.224 (U)					

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
4/1/2019			1.02 (U)		4.33	2.28	
4/2/2019	1.42						
8/21/2019				1.01 (U)			1.24 (U)
9/24/2019	1.35	0.429 (U)					
9/25/2019			1.02 (U)		4.2	1.6	
10/8/2019				1.02 (U)			0.866 (U)
2/11/2020		0.817 (U)			3.87	1.85	
2/12/2020	1.61		0.301 (U)	0.45 (U)			1.83
3/19/2020		0.715 (U)	1		3.96	2.2	
3/24/2020	1.24 (U)						1.27 (U)
3/25/2020				0.377 (U)			
9/23/2020		0.565 (U)			4.14	1.14 (U)	
9/24/2020	1.8		0.684 (U)	0.568 (U)			0.634 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		0.721	5.11	0.614
7/26/2016		1.26	6.92	1.47
8/30/2016	1.09			
9/14/2016		0.901 (U)	3.96	1.27
11/2/2016		1.09 (U)	4.53	
11/4/2016				0.434 (U)
12/15/2016	1 (U)			
1/12/2017			4.43	0.202 (U)
1/13/2017		1.19		
2/24/2017	0.504 (U)			
3/6/2017		0.669 (U)		
3/7/2017			4.8	0.0674 (U)
5/1/2017		0.803 (U)	4.16	
5/2/2017				0.444 (U)
5/8/2017	0.455 (U)			
6/27/2017			2.8	0.77 (U)
6/29/2017		1.35		
7/11/2017	0.471 (U)			
10/10/2017	0.649 (U)			
3/29/2018		0.703 (U)	3.42	0.648 (U)
4/2/2018	0.512 (U)			
6/6/2018			3.99	
6/7/2018		0.628 (U)		0.745 (U)
9/19/2018	0.789 (U)			
9/26/2018		0.756 (U)	2.73	0.377 (U)
3/4/2019		1.21 (U)	4.43	1 (U)
4/3/2019		1.07 (U)	4.79	0.43 (U)
8/20/2019	2.44			
9/24/2019			4.06	0.699 (U)
9/25/2019		1.86		
10/8/2019	1.72			
2/12/2020		1.25	4.02	0.913 (U)
3/17/2020	1.22 (U)			
3/24/2020			3.52	
3/25/2020		0.766 (U)		
8/27/2020	1.26 (U)			
9/22/2020	1.06 (U)	0.795 (U)	2.98	0.428 (U)

Time Series

Constituent: Copper (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.005						
9/20/1999	<0.005						
9/12/2001	0.004						
9/3/2002	0.01						
7/29/2003	0.011						
12/5/2003	0.0034						
9/22/2004	0.0033						
5/1/2007		0.0047					
9/11/2007		<0.005					
3/20/2008		<0.005					
8/27/2008		0.0074					
3/3/2009		<0.005					
11/18/2009		0.0029					
3/3/2010		0.005					
9/8/2010		<0.005					
11/22/2010				<0.005		<0.005	
1/4/2011				<0.005		0.0049	
2/17/2011				<0.005		<0.005	
3/10/2011		0.0029					
3/11/2011				<0.005		<0.005	
3/28/2011				<0.005		<0.005	
9/7/2011				<0.005	<0.005	<0.005	<0.005
9/8/2011		<0.005	<0.005				
3/4/2012						<0.005	
3/5/2012		<0.005	<0.005		<0.005		<0.005
3/6/2012				<0.005			
9/5/2012			<0.005		0.016		<0.005
9/10/2012		<0.005				<0.005	
9/11/2012				<0.005			
2/5/2013			<0.005				<0.005
2/6/2013		<0.005		<0.005	<0.005	<0.005	
8/12/2013		<0.005					
8/13/2013			<0.005	<0.005	<0.005		
8/14/2013						<0.005	<0.005
2/4/2014			<0.005	<0.005		<0.005	
2/5/2014		<0.005			<0.005		<0.005
8/4/2014					0.0012 (J)	<0.005	0.0015 (J)
8/5/2014		0.005	<0.005	<0.005			
2/2/2015			0.0031 (J)	<0.005		<0.005	
2/3/2015					<0.005		<0.005
2/4/2015		0.0025 (J)					
8/3/2015		0.0014 (J)			<0.005 (D)	<0.005 (D)	<0.005 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		0.0011 (J)	<0.005		0.00082 (J)	0.00088 (J)	<0.005
2/17/2016				<0.005			
2/22/2017		0.0011 (J)		<0.005			
2/23/2017			<0.005		<0.005		
2/24/2017						<0.005	<0.005
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		<0.005
8/6/2018		<0.005					

Time Series

Constituent: Copper (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
8/7/2018			<0.005		<0.005		<0.005
8/8/2018				<0.005		<0.005	
2/25/2019		<0.005					
2/26/2019			<0.005	<0.005	<0.005	<0.005	<0.005
6/12/2019		0.00034 (J)		<0.005		0.00025 (J)	
6/13/2019			<0.005		<0.005		0.00049 (J)
10/8/2019		0.00041 (J)					
10/9/2019			0.00079 (J)	0.00024 (J)			0.00087 (J)
10/10/2019					0.00033 (J)	<0.005	
3/17/2020		0.00078 (J)	0.0004 (J)		0.00039 (J)		
3/18/2020				<0.005		0.00021 (J)	0.00097 (J)
9/22/2020		0.0041 (J)	<0.005	<0.005	<0.005	<0.005	
9/23/2020							<0.005

Time Series

Constituent: Copper (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R
9/9/2009	0.0028
11/18/2009	0.0027
1/5/2010	0.0035
3/3/2010	<0.005
9/7/2010	<0.005
3/10/2011	<0.005
9/8/2011	<0.005
3/5/2012	<0.005
9/5/2012	<0.005
2/5/2013	<0.005
8/13/2013	<0.005
2/4/2014	<0.005
8/5/2014	0.0012 (J)
2/3/2015	0.0013 (J)
8/4/2015	0.0043 (J)
2/16/2016	<0.005
2/23/2017	0.0018 (J)
2/19/2018	<0.005
8/6/2018	0.0016 (J)
2/25/2019	0.0016 (J)
6/13/2019	0.0011 (J)
10/8/2019	0.0011 (J)
3/17/2020	0.00091 (J)
9/23/2020	<0.005

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	0.14 (J)	0.05 (J)	0.08 (J)	0.07 (J)			
9/1/2016					0.15 (J)	0.03 (J)	0.28 (J)
11/28/2016	0.12 (J)		0.03 (J)				
11/29/2016		0.04 (J)					0.05 (J)
11/30/2016				0.03 (J)	0.11 (J)		
12/1/2016						<0.1	
2/22/2017	0.09 (J)		0.04 (J)				
2/23/2017		0.06 (J)		0.04 (J)			0.07 (J)
2/24/2017					0.08 (J)	0.03 (J)	
5/8/2017	0.05 (J)						
5/9/2017		0.06 (J)		<0.1			
5/10/2017			0.05 (J)		0.04 (J)	<0.1	0.02 (J)
7/17/2017	0.14 (J)					0.37	
7/18/2017		<0.1	<0.1	<0.1	<0.1		<0.1
10/16/2017	0.12 (J)					<0.1	
10/17/2017		<0.1	<0.1		<0.1		
10/18/2017				0.22 (J)			<0.1
2/19/2018	0.17						<0.1
2/20/2018			<0.1		<0.1		
2/21/2018		<0.1		<0.1		<0.1	
8/6/2018	0.087 (J)						<0.1
8/7/2018		<0.1		<0.1		<0.1	
8/8/2018			<0.1		<0.1		
2/25/2019	0.14 (J)						<0.1
2/26/2019		<0.1	<0.1	<0.1	<0.1	0.035 (J)	
6/12/2019	0.12 (J)		0.58		<0.1		
6/13/2019		<0.1		0.58		<0.1	<0.1
8/19/2019	<0.1				<0.1		
8/20/2019		<0.1	<0.1				<0.1
8/21/2019				0.037 (J)		<0.1	
10/8/2019	0.052 (J)						<0.1
10/9/2019		<0.1	<0.1			0.35	
10/10/2019				<0.1	<0.1		
3/17/2020	0.053 (J)	<0.1		0.1 (J)			<0.1
3/18/2020			<0.1		<0.1	<0.1	
8/26/2020	0.068 (J)						
8/27/2020		<0.1				0.064 (J)	<0.1
8/28/2020			<0.1	0.097 (J)	<0.1		
9/22/2020	0.058 (J)	<0.1	<0.1	<0.1	<0.1		
9/23/2020						<0.1	<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					0.12 (J)	<0.1	
6/2/2016	<0.1						
6/6/2016			<0.1	<0.1			
6/7/2016		<0.1					<0.1
7/25/2016						0.06 (J)	
7/26/2016	0.02 (J)				0.08 (J)		
7/27/2016		<0.1	<0.1	<0.1			<0.1
9/13/2016					0.11 (J)	<0.1	
9/15/2016	<0.1						
9/16/2016		<0.1		<0.1			
9/19/2016			<0.1				<0.1
11/1/2016					<0.1		
11/2/2016	<0.1						<0.1
11/3/2016		<0.1	<0.1	<0.1			
11/4/2016						<0.1	
1/10/2017	<0.1						
1/11/2017		<0.1	<0.1	<0.1	0.05 (J)		
1/13/2017							<0.1
1/16/2017						<0.1	
3/1/2017			<0.1	<0.1			
3/2/2017		<0.1			<0.1	<0.1	
3/6/2017							<0.1
3/8/2017	<0.1						
4/26/2017	<0.1		<0.1	<0.1			<0.1
4/27/2017					0.04 (J)	0.01 (J)	
5/2/2017		<0.1					
6/27/2017					<0.1	<0.1	
6/28/2017			<0.1	<0.1			
6/29/2017		<0.1					<0.1
6/30/2017	<0.1						
10/3/2017					<0.1	<0.1	
10/4/2017		<0.1		<0.1			<0.1
10/5/2017	<0.1		<0.1				
3/27/2018	<0.1					<0.1	
3/28/2018		<0.1	<0.1	<0.1			
3/29/2018					<0.1		<0.1
6/5/2018					0.055 (J)		
6/6/2018						<0.1	<0.1
6/7/2018			<0.1				
6/8/2018	<0.1						
6/11/2018		<0.1		<0.1			
9/25/2018		<0.1	<0.1	<0.1			<0.1
10/1/2018	<0.1				<0.1	<0.1	
2/26/2019	<0.1						
2/27/2019					0.052 (J)	<0.1	
3/5/2019		<0.1		<0.1			<0.1
3/6/2019			<0.1				
3/28/2019					0.036 (J)	<0.1	
3/29/2019	<0.1						
4/2/2019		<0.1					
4/3/2019			<0.1	<0.1			<0.1
9/24/2019					0.063 (J)	<0.1	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2019	<0.1	<0.1					<0.1
9/26/2019			<0.1	<0.1			
2/10/2020					0.061 (J)	<0.1	
2/11/2020		<0.1	<0.1	<0.1			
2/12/2020	<0.1						<0.1
3/18/2020	<0.1					<0.1	
3/19/2020					0.064 (J)		
3/24/2020		<0.1	<0.1	<0.1			<0.1
9/23/2020		<0.1	<0.1	<0.1	0.058 (J)	<0.1	
9/24/2020							<0.1
9/25/2020	<0.1						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						0.15 (J)	
6/2/2016			<0.1		0.62		
6/7/2016	<0.1						
7/25/2016			0.06 (J)			0.14 (J)	
7/26/2016					0.49		
7/28/2016	0.02 (J)						
9/14/2016		0.08 (J)				0.18 (J)	
9/15/2016					0.54		
9/19/2016	0.02 (J)		<0.1				
11/1/2016			<0.1		0.68	<0.1	
11/3/2016	<0.1						
11/4/2016		<0.1					
12/15/2016		0.06 (J)					
1/11/2017					0.49	0.09 (J)	
1/13/2017	<0.1						
1/16/2017		0.1 (J)	<0.1				
2/21/2017			<0.1				
3/1/2017						<0.1	
3/2/2017					0.48		
3/3/2017		<0.1					
3/6/2017	<0.1						
4/26/2017	0.04 (J)		<0.1		0.48	0.08 (J)	
4/28/2017		0.06 (J)					
5/26/2017		0.09 (J)					
6/28/2017		0.11 (J)			0.47	0.12 (J)	
6/29/2017	<0.1						
6/30/2017			<0.1				
10/3/2017	<0.1	<0.1					
10/4/2017			<0.1		<0.1	<0.1	
10/11/2017				<0.1			
10/12/2017							<0.1
11/20/2017				<0.1			<0.1
1/10/2018							<0.1
1/11/2018				<0.1			
2/19/2018							<0.1
2/20/2018				0.23			
3/27/2018			<0.1				
3/28/2018		0.31			0.56	<0.1	
3/29/2018	<0.1						
4/3/2018				<0.1			<0.1
6/5/2018	0.13 (J)						
6/7/2018		0.11 (J)			0.48		
6/8/2018						0.2 (J)	
6/11/2018			<0.1				
6/28/2018				<0.1			<0.1
8/7/2018				0.048 (J)			<0.1
9/24/2018				<0.1			<0.1
9/25/2018	0 (J)						
10/1/2018		<0.1			0.44	<0.1	
10/2/2018			<0.1				
2/26/2019			<0.1				
2/27/2019		0.12 (J)			0.53	0.13 (J)	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
3/5/2019	0.32						
3/26/2019							<0.1
3/27/2019				<0.1			
3/29/2019		0.13 (J)					
4/1/2019			<0.1		0.45	0.1 (J)	
4/2/2019	0.12 (J)						
8/21/2019				<0.1			<0.1
9/24/2019	0.15 (J)	0.081 (J)					
9/25/2019			<0.1		0.46	0.1 (J)	
10/9/2019				<0.1			<0.1
2/11/2020		0.075 (J)				0.094 (J)	
2/12/2020	0.1 (J)		<0.1	<0.1	0.4		<0.1
3/19/2020		0.093 (J)	<0.1		0.51	0.11 (J)	
3/24/2020	0.081 (J)						<0.1
3/25/2020				<0.1			
9/23/2020		0.08 (J)			0.47	0.098 (J)	
9/24/2020	0.079 (J)		<0.1	<0.1			<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.1	0.11 (J)	<0.1
7/26/2016		<0.1	0.05 (J)	<0.1
8/30/2016	0.09 (J)			
9/14/2016		<0.1	0.04 (J)	<0.1
11/2/2016		<0.1	<0.1	
11/4/2016				<0.1
11/14/2016	0.18 (J)			
1/12/2017			0.04 (J)	<0.1
1/13/2017		<0.1		
2/24/2017	0.05 (J)			
3/6/2017		<0.1		
3/7/2017			<0.1	<0.1
5/1/2017		<0.1	<0.1	
5/2/2017				<0.1
5/8/2017	0.03 (J)			
6/27/2017			<0.1	<0.1
6/29/2017		<0.1		
7/11/2017	0.07 (J)			
10/3/2017			<0.1	<0.1
10/5/2017		<0.1		
10/10/2017	<0.1			
3/29/2018		<0.1	<0.1	<0.1
4/2/2018	<0.1			
6/6/2018			0.15 (J)	
6/7/2018		<0.1		<0.1
9/19/2018	<0.1			
9/26/2018		<0.1	<0.1	<0.1
3/4/2019		<0.1	0.19 (J)	<0.1
3/27/2019	0.081 (J)			
4/3/2019		<0.1	0.047 (J)	<0.1
8/20/2019	<0.1			
9/24/2019			0.05 (J)	<0.1
9/25/2019		<0.1		
10/8/2019	0.034 (J)			
2/12/2020		<0.1	<0.1	<0.1
3/17/2020	<0.1			
3/24/2020			<0.1	<0.1
3/25/2020		<0.1		
8/27/2020	<0.1			
9/22/2020	<0.1	<0.1	0.056 (J)	<0.1

Time Series

Constituent: Lead (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	0.006						
9/20/1999	<0.005						
9/12/2001	0.0042						
9/3/2002	<0.005						
7/29/2003	0.015						
12/5/2003	<0.005						
9/22/2004	<0.005						
5/1/2007		<0.005					
9/11/2007		<0.005					
3/20/2008		<0.005					
8/27/2008		<0.005					
3/3/2009		<0.005					
11/18/2009		<0.005					
3/3/2010		<0.005					
9/8/2010		<0.005					
11/22/2010				<0.005		<0.005	
1/4/2011				<0.005		<0.005	
2/17/2011				<0.005		<0.005	
3/10/2011		<0.005					
3/11/2011				<0.005		<0.005	
3/28/2011				<0.005		<0.005	
9/7/2011				<0.005	<0.005	<0.005	<0.005
9/8/2011		<0.005	<0.005				
3/4/2012						<0.005	
3/5/2012		<0.005	<0.005		<0.005		<0.005
3/6/2012				<0.005			
9/5/2012			<0.005		<0.005		<0.005
9/10/2012		<0.005				<0.005	
9/11/2012				<0.005			
2/5/2013			<0.005				<0.005
2/6/2013		<0.005		<0.005	<0.005	<0.005	
8/12/2013		<0.005					
8/13/2013			<0.005	<0.005	<0.005		
8/14/2013						<0.005	<0.005
2/4/2014			<0.005	<0.005		<0.005	
2/5/2014		<0.005			<0.005		<0.005
8/4/2014					<0.005	<0.005	<0.005
8/5/2014		<0.005	<0.005	<0.005			
2/2/2015			<0.005	<0.005		<0.005	
2/3/2015					<0.005		<0.005
2/4/2015		<0.005					
8/3/2015		<0.005			<0.005 (D)	<0.005 (D)	<0.005 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		<0.005	<0.005		<0.005	<0.005	<0.005
2/17/2016				<0.005			
8/31/2016		<0.005	<0.005	<0.005	0.0001 (J)		
9/1/2016						<0.005	<0.005
11/28/2016		<0.005		<0.005			
11/29/2016			<0.005				
11/30/2016					<0.005	<0.005	
12/1/2016							<0.005
2/22/2017		<0.005		<0.005			

Time Series

Constituent: Lead (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			<0.005		<0.005		
2/24/2017						<0.005	<0.005
5/8/2017		<0.005					
5/9/2017			<0.005		<0.005		
5/10/2017				0.0001 (J)		<0.005	<0.005
7/17/2017		<0.005					<0.005
7/18/2017			<0.005	7E-05 (J)	<0.005	<0.005	
10/16/2017		<0.005					<0.005
10/17/2017			<0.005	<0.005		<0.005	
10/18/2017					8E-05 (J)		
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		<0.005
8/6/2018		<0.005					
8/7/2018			<0.005		<0.005		<0.005
8/8/2018				<0.005		<0.005	
2/25/2019		<0.005					
2/26/2019			<0.005	<0.005	<0.005	<0.005	<0.005
6/12/2019		<0.005		<0.005		<0.005	
6/13/2019			<0.005		<0.005		<0.005
8/19/2019		<0.005				<0.005	
8/20/2019			<0.005	6.1E-05 (J)			
8/21/2019					8.2E-05 (J)		7E-05 (J)
10/8/2019		<0.005					
10/9/2019			5.2E-05 (J)	5.7E-05 (J)			5.9E-05 (J)
10/10/2019					<0.005	<0.005	
3/17/2020		<0.005	<0.005		0.00015 (J)		
3/18/2020				<0.005		<0.005	7.9E-05 (J)
8/26/2020		<0.005					
8/27/2020			6.7E-05 (J)				4.9E-05 (J)
8/28/2020				8.4E-05 (J)	5.4E-05 (J)	<0.005	
9/22/2020		0.0001 (J)	<0.005	8.2E-05 (J)	6.4E-05 (J)	4.1E-05 (J)	
9/23/2020							0.00019 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.005						
11/18/2009	<0.005						
1/5/2010	<0.005						
3/3/2010	<0.005						
9/7/2010	<0.005						
3/10/2011	<0.005						
9/8/2011	<0.005						
3/5/2012	<0.005						
9/5/2012	<0.005						
2/5/2013	<0.005						
8/13/2013	<0.005						
2/4/2014	<0.005						
8/5/2014	<0.005						
2/3/2015	<0.005						
8/4/2015	<0.005						
2/16/2016	<0.005						
6/1/2016						0.00056 (J)	<0.005
6/2/2016		<0.005					
6/6/2016				<0.005	<0.005		
6/7/2016			<0.005				
7/25/2016							<0.005
7/26/2016		<0.005				<0.005	
7/27/2016			<0.005	<0.005	<0.005		
9/1/2016	<0.005						
9/13/2016						0.0001 (J)	<0.005
9/15/2016		<0.005					
9/16/2016			<0.005		<0.005		
9/19/2016				<0.005			
11/1/2016						<0.005	
11/2/2016		<0.005					
11/3/2016			<0.005	<0.005	<0.005		
11/4/2016							<0.005
11/29/2016	<0.005						
1/10/2017		<0.005					
1/11/2017			<0.005	<0.005	<0.005	<0.005	
1/16/2017							<0.005
2/23/2017	<0.005						
3/1/2017				<0.005	<0.005		
3/2/2017			8E-05 (J)			0.0001 (J)	<0.005
3/8/2017		0.0001 (J)					
4/26/2017		<0.005		<0.005	<0.005		
4/27/2017						<0.005	<0.005
5/2/2017			<0.005				
5/10/2017	<0.005						
6/27/2017						<0.005	<0.005
6/28/2017				<0.005	0.0001 (J)		
6/29/2017			8E-05 (J)				
6/30/2017		<0.005					
7/18/2017	<0.005						
10/18/2017	<0.005						
2/19/2018	<0.005						
3/27/2018		<0.005					<0.005

Time Series

Constituent: Lead (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.005	<0.005	<0.005		
3/29/2018						<0.005	
8/6/2018	<0.005						
2/25/2019	<0.005						
2/26/2019		<0.005					
2/27/2019						<0.005	<0.005
3/5/2019			<0.005		<0.005		
3/6/2019				<0.005			
4/2/2019			<0.005				
4/3/2019				<0.005	<0.005		
6/13/2019	<0.005						
8/20/2019	<0.005						
9/25/2019			<0.005				
9/26/2019				<0.005	<0.005		
10/8/2019	<0.005						
2/10/2020						4.9E-05 (J)	<0.005
2/11/2020			<0.005	<0.005	<0.005		
2/12/2020		<0.005					
3/17/2020	<0.005						
3/18/2020		<0.005					<0.005
3/19/2020						0.00012 (J)	
3/24/2020			6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)		
8/27/2020	<0.005						
9/23/2020	<0.005		4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)	<0.005	0.00021 (J)
9/25/2020		<0.005					

Time Series

Constituent: Lead (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.005
6/2/2016				<0.005		0.00056 (J)	
6/7/2016	<0.005	<0.005					
7/25/2016				<0.005			<0.005
7/26/2016						0.0001 (J)	
7/27/2016	<0.005						
7/28/2016		<0.005					
9/14/2016			<0.005				<0.005
9/15/2016						0.0002 (J)	
9/19/2016	<0.005	<0.005		<0.005			
11/1/2016				<0.005		<0.005	<0.005
11/2/2016	0.0013 (J)						
11/3/2016		<0.005					
11/4/2016			<0.005				
12/15/2016			<0.005				
1/11/2017						<0.005	<0.005
1/13/2017	<0.005	<0.005					
1/16/2017			<0.005	<0.005			
2/21/2017				<0.005			
3/1/2017							<0.005
3/2/2017						0.0002 (J)	
3/3/2017			<0.005				
3/6/2017	<0.005	<0.005					
4/26/2017	<0.005	<0.005		<0.005		<0.005	<0.005
4/28/2017			<0.005				
5/26/2017			<0.005				
6/28/2017			<0.005			<0.005	<0.005
6/29/2017	<0.005	<0.005					
6/30/2017				<0.005			
10/11/2017					0.0001 (J)		
11/20/2017					<0.005		
1/11/2018					0.0002 (J)		
2/20/2018					<0.005		
3/27/2018				<0.005			
3/28/2018			<0.005			<0.005	<0.005
3/29/2018	<0.005	<0.005					
4/3/2018					<0.005		
6/28/2018					<0.005		
8/7/2018					<0.005		
9/24/2018					<0.005		
2/26/2019				<0.005			
2/27/2019			<0.005			<0.005	<0.005
3/5/2019	<0.005	<0.005					
4/2/2019		<0.005					
4/3/2019	<0.005						
8/21/2019					<0.005		
9/24/2019		<0.005					
9/25/2019	<0.005						
10/9/2019					<0.005		
2/11/2020			<0.005				<0.005
2/12/2020	<0.005	<0.005		<0.005	<0.005	<0.005	
3/19/2020			<0.005	<0.005		0.00017 (J)	<0.005

Time Series

Constituent: Lead (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
3/24/2020	0.00011 (J)	<0.005					
3/25/2020					5.1E-05 (J)		
9/23/2020			0.0011 (J)			<0.005	0.00015 (J)
9/24/2020	9.2E-05 (J)	4.6E-05 (J)		<0.005	<0.005		

Time Series

Constituent: Lead (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.005	<0.005	<0.005
7/26/2016			<0.005	<0.005	<0.005
8/30/2016		<0.005			
9/14/2016			<0.005	<0.005	<0.005
11/2/2016			<0.005	<0.005	
11/4/2016					<0.005
11/14/2016		<0.005			
1/12/2017				<0.005	<0.005
1/13/2017			<0.005		
2/24/2017		<0.005			
3/6/2017			<0.005		
3/7/2017				0.0001 (J)	7E-05 (J)
5/1/2017			<0.005	<0.005	
5/2/2017					<0.005
5/8/2017		<0.005			
6/27/2017				<0.005	<0.005
6/29/2017			<0.005		
7/11/2017		<0.005			
10/10/2017		<0.005			
10/12/2017	9E-05 (J)				
11/20/2017	<0.005				
1/10/2018	<0.005				
2/19/2018	<0.005				
3/29/2018			<0.005	<0.005	<0.005
4/2/2018		<0.005			
4/3/2018	<0.005				
6/28/2018	<0.005				
8/7/2018	<0.005				
9/19/2018		<0.005			
9/24/2018	<0.005				
3/4/2019			<0.005	<0.005	<0.005
4/3/2019			<0.005	<0.005	<0.005
8/20/2019		<0.005			
8/21/2019	<0.005				
9/24/2019				<0.005	9E-05 (J)
9/25/2019			<0.005		
10/9/2019	<0.005				
2/12/2020	<0.005		<0.005	<0.005	<0.005
3/24/2020	<0.005			5.4E-05 (J)	6.8E-05 (J)
3/25/2020			<0.005		
8/27/2020		<0.005			
9/22/2020		<0.005	<0.005	4.5E-05 (J)	4.2E-05 (J)
9/24/2020	3.8E-05 (J)				

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	<0.03	0.0024 (J)	<0.03	<0.03			
9/1/2016					<0.03	<0.03	<0.03
11/28/2016	<0.03		<0.03				
11/29/2016		<0.03					<0.03
11/30/2016				<0.03	<0.03		
12/1/2016						<0.03	
2/22/2017	<0.03		0.0036 (J)				
2/23/2017		<0.03		<0.03			0.0028 (J)
2/24/2017					<0.03	<0.03	
5/8/2017	0.0014 (J)						
5/9/2017		0.002 (J)		<0.03			
5/10/2017			0.0035 (J)		<0.03	<0.03	0.0054 (J)
7/17/2017	<0.03					<0.03	
7/18/2017		<0.03	0.0035 (J)	<0.03	<0.03		0.002 (J)
10/16/2017	0.0016 (J)					<0.03	
10/17/2017		0.0016 (J)	0.0035 (J)		<0.03		
10/18/2017				<0.03			0.0026 (J)
2/19/2018	<0.03						<0.03
2/20/2018			<0.03		<0.03		
2/21/2018		0.0014 (J)		<0.03		<0.03	
8/6/2018	<0.03						<0.03
8/7/2018		0.001 (J)		<0.03		<0.03	
8/8/2018			0.0031 (J)		<0.03		
8/19/2019	0.0019 (J)				0.00094 (J)		
8/20/2019		0.0012 (J)	0.0043 (J)				0.002 (J)
8/21/2019				<0.03		0.0015 (J)	
10/8/2019	0.0015 (J)						0.0021 (J)
10/9/2019		0.0013 (J)	0.0047 (J)			0.0014 (J)	
10/10/2019				<0.03	0.0013 (J)		
3/17/2020	0.0017 (J)	0.00094 (J)		0.0012 (J)			0.0018 (J)
3/18/2020			0.0053 (J)		<0.03	0.0017 (J)	
8/26/2020	0.0032 (J)						
8/27/2020		0.0017 (J)				0.0013 (J)	0.0083 (J)
8/28/2020			0.0047 (J)	<0.03	0.0011 (J)		
9/22/2020	0.0029 (J)	0.0015 (J)	0.0042 (J)	<0.03	0.0013 (J)		
9/23/2020						0.0012 (J)	0.0023 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					0.015	<0.03	
6/2/2016	<0.03						
6/6/2016			0.0088	0.015			
6/7/2016		<0.03					<0.03
7/25/2016						0.002 (J)	
7/26/2016	<0.03				0.0135 (J)		
7/27/2016		<0.03	0.0087 (J)	0.0049 (J)			<0.03
9/13/2016					0.0112 (J)	<0.03	
9/15/2016	<0.03						
9/16/2016		<0.03		0.0031 (J)			
9/19/2016			0.0043 (J)				<0.03
11/1/2016					0.0163 (J)		
11/2/2016	<0.03						<0.03
11/3/2016		<0.03	<0.03	0.0021 (J)			
11/4/2016						<0.03	
1/10/2017	<0.03						
1/11/2017		0.0035 (J)	0.0052 (J)	0.0025 (J)	0.0166 (J)		
1/13/2017							<0.03
1/16/2017						0.0023 (J)	
3/1/2017			0.0053 (J)	0.0029 (J)			
3/2/2017		<0.03			0.0159 (J)	0.0025 (J)	
3/6/2017							<0.03
3/8/2017	<0.03						
4/26/2017	<0.03		0.0041 (J)	0.0019 (J)			<0.03
4/27/2017					0.0137 (J)	0.0027 (J)	
5/2/2017		<0.03					
6/27/2017					0.0094 (J)	0.0024 (J)	
6/28/2017			0.0039 (J)	0.0016 (J)			
6/29/2017		<0.03					<0.03
6/30/2017	<0.03						
3/27/2018	<0.03					0.0023 (J)	
3/28/2018		<0.03	0.0041 (J)	0.0024 (J)			
3/29/2018					0.0078 (J)		<0.03
6/5/2018					0.0079 (J)		
6/6/2018						0.0024 (J)	<0.03
6/7/2018			0.0032 (J)				
6/8/2018	<0.03						
6/11/2018		<0.03		0.0014 (J)			
9/25/2018		<0.03	0.0036 (J)	0.0016 (J)			<0.03
10/1/2018	<0.03				0.0053 (J)	0.0023 (J)	
2/26/2019	<0.03						
2/27/2019					0.0093 (J)	0.0023 (J)	
3/5/2019		<0.03		0.0031 (J)			<0.03
3/6/2019			0.0033 (J)				
3/28/2019					0.013 (J)	0.0022 (J)	
3/29/2019	<0.03						
4/2/2019		<0.03					
4/3/2019			0.0035 (J)	0.0028 (J)			<0.03
9/24/2019					0.0046 (J)	0.0023 (J)	
9/25/2019	<0.03	<0.03					<0.03
9/26/2019			0.0032 (J)	0.0029 (J)			
2/10/2020					0.011 (J)	0.0023 (J)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
2/11/2020		<0.03	0.0033 (J)	0.005 (J)			
2/12/2020	<0.03						<0.03
3/18/2020	<0.03					0.0024 (J)	
3/19/2020					0.013 (J)		
3/24/2020		0.0034 (J)	0.0033 (J)	0.0035 (J)			<0.03
9/23/2020		<0.03	0.003 (J)	0.0022 (J)	0.014 (J)	0.0024 (J)	
9/24/2020							<0.03
9/25/2020	<0.03						

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						0.01	
6/2/2016			<0.03		0.018		
6/7/2016	0.0055						
7/25/2016			<0.03			0.0132 (J)	
7/26/2016					0.0221 (J)		
7/28/2016	0.0045 (J)						
9/14/2016		0.004 (J)				0.012 (J)	
9/15/2016					0.0197 (J)		
9/19/2016	0.0054 (J)		<0.03				
11/1/2016			<0.03		0.0194 (J)	0.0115 (J)	
11/3/2016	<0.03						
11/4/2016		<0.03					
12/15/2016		0.0026 (J)					
1/11/2017					0.0177 (J)	0.0085 (J)	
1/13/2017	0.0062 (J)						
1/16/2017		0.0023 (J)	<0.03				
2/21/2017			<0.03				
3/1/2017						0.0114 (J)	
3/2/2017					0.0185 (J)		
3/3/2017		0.0013 (J)					
3/6/2017	0.0059 (J)						
4/26/2017	0.0054 (J)		<0.03		0.0183 (J)	0.0092 (J)	
4/28/2017		0.0031 (J)					
5/26/2017		0.0038 (J)					
6/28/2017		0.0026 (J)			0.0173 (J)	0.0085 (J)	
6/29/2017	0.0047 (J)						
6/30/2017			<0.03				
10/11/2017				0.0018 (J)			
10/12/2017							<0.03
11/20/2017				0.0018 (J)			<0.03
1/10/2018							<0.03
1/11/2018				0.0019 (J)			
2/19/2018							<0.03
2/20/2018				<0.03			
3/27/2018			0.0011 (J)				
3/28/2018		0.0025 (J)			0.02 (J)	0.013 (J)	
3/29/2018	0.0062 (J)						
4/3/2018				0.0022 (J)			<0.03
6/5/2018	0.0061 (J)						
6/7/2018		0.0017 (J)			0.02 (J)		
6/8/2018						0.012 (J)	
6/11/2018			0.0012 (J)				
6/28/2018				0.0026 (J)			<0.03
8/7/2018				0.0024 (J)			<0.03
9/24/2018				0.0022 (J)			<0.03
9/25/2018	0.0062 (J)						
10/1/2018		<0.03			0.02 (J)	0.011 (J)	
10/2/2018			<0.03				
2/26/2019			0.0011 (J)				
2/27/2019		0.0011 (J)			0.021 (J)	0.014 (J)	
3/5/2019	0.0053 (J)						
3/29/2019		0.0016 (J)					

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
4/1/2019			0.001 (J)		0.021 (J)	0.013 (J)	
4/2/2019	0.0051 (J)						
8/21/2019				0.0035 (J)			<0.03
9/24/2019	0.0068 (J)	0.0011 (J)					
9/25/2019			0.0011 (J)		0.02 (J)	0.01 (J)	
10/9/2019				0.0036 (J)			<0.03
2/11/2020		0.0012 (J)				0.013 (J)	
2/12/2020	0.0065 (J)		0.0013 (J)	0.0041 (J)	0.019 (J)		<0.03
3/19/2020		0.0022 (J)	0.0012 (J)		0.023 (J)	0.014 (J)	
3/24/2020	0.0064 (J)						<0.03
3/25/2020				0.0049 (J)			
9/23/2020		0.0016 (J)			0.023 (J)	0.013 (J)	
9/24/2020	0.0069 (J)		0.0011 (J)	0.0054 (J)			<0.03

Time Series

Constituent: Lithium (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		0.013	0.0049 (J)	<0.03
7/26/2016		0.0123 (J)	0.0063 (J)	0.0027 (J)
8/30/2016	0.0061 (J)			
9/14/2016		0.0137 (J)	0.0058 (J)	0.0029 (J)
11/2/2016		0.0136 (J)	0.0053 (J)	
11/4/2016				<0.03
11/14/2016	0.0064 (J)			
1/12/2017			0.0054 (J)	0.0032 (J)
1/13/2017		0.0121 (J)		
2/24/2017	0.0049 (J)			
3/6/2017		0.0143 (J)		
3/7/2017			0.0056 (J)	0.0035 (J)
5/1/2017		0.0132 (J)	0.0031 (J)	
5/2/2017				0.0031 (J)
5/8/2017	0.0053 (J)			
6/27/2017			0.0018 (J)	0.0029 (J)
6/29/2017		0.0145 (J)		
7/11/2017	0.0051 (J)			
10/10/2017	0.0043 (J)			
3/29/2018		0.014 (J)	0.0058 (J)	0.0034 (J)
4/2/2018	0.0045 (J)			
6/6/2018			0.0068 (J)	
6/7/2018		0.013 (J)		0.0032 (J)
9/19/2018	0.0043 (J)			
9/26/2018		0.014 (J)	0.0065 (J)	0.0032 (J)
3/4/2019		0.015 (J)	0.0065 (J)	0.0032 (J)
4/3/2019		0.014 (J)	0.007 (J)	0.0035 (J)
8/20/2019	0.0036 (J)			
9/24/2019			0.0065 (J)	0.0031 (J)
9/25/2019		0.014 (J)		
10/8/2019	0.0036 (J)			
2/12/2020		0.011 (J)	0.0066 (J)	0.0032 (J)
3/17/2020	0.0046 (J)			
3/24/2020			0.0064 (J)	0.0033 (J)
3/25/2020		0.014 (J)		
8/27/2020	0.0039 (J)			
9/22/2020	0.0036 (J)	0.013 (J)	0.0066 (J)	0.0034 (J)

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.0005						
9/11/2007	<0.0005						
3/20/2008	<0.0005						
8/27/2008	<0.0005						
3/3/2009	<0.0005						
9/9/2009							<0.0005
11/18/2009	<0.0005						<0.0005
1/5/2010							<0.0005
3/3/2010	<0.0005						<0.0005
9/7/2010							<0.0005
9/8/2010	<0.0005						
11/22/2010			<0.0005		<0.0005		
1/4/2011			<0.0005		<0.0005		
2/17/2011			<0.0005		<0.0005		
3/10/2011	<0.0005						<0.0005
3/11/2011			<0.0005		<0.0005		
3/28/2011			<0.0005		<0.0005		
9/7/2011			<0.0005	<0.0005	<0.0005	<0.0005	
9/8/2011	<0.0005	<0.0005					<0.0005
3/4/2012					<0.0005		
3/5/2012	<0.0005	<0.0005		<0.0005		<0.0005	<0.0005
3/6/2012			<0.0005				
9/5/2012		<0.0005		<0.0005		<0.0005	<0.0005
9/10/2012	<0.0005				<0.0005		
9/11/2012			<0.0005				
2/5/2013		<0.0005				<0.0005	<0.0005
2/6/2013	<0.0005		<0.0005	<0.0005	0.00014		
8/12/2013	<0.0005						
8/13/2013		<0.0005	<0.0005	<0.0005			<0.0005
8/14/2013					<0.0005	<0.0005	
2/4/2014		<0.0005	<0.0005		<0.0005		<0.0005
2/5/2014	<0.0005			<0.0005		<0.0005	
8/4/2014				<0.0005	<0.0005	<0.0005	
8/5/2014	<0.0005	<0.0005	<0.0005				<0.0005
2/2/2015		<0.0005	<0.0005		<0.0005		
2/3/2015				<0.0005		<0.0005	<0.0005
2/4/2015	<0.0005						
8/3/2015	<0.0005			<0.0005 (D)	<0.0005 (D)	<0.0005 (D)	
8/4/2015		<0.0005 (D)	<0.0005				<0.0005
2/16/2016	1.36E-05 (J)	<0.0005		1.34E-05 (J)	<0.0005	<0.0005	1.13E-05 (J)
2/17/2016			<0.0005				
8/31/2016	<0.0005	<0.0005	<0.0005	<0.0005			
9/1/2016					<0.0005	<0.0005	<0.0005
11/28/2016	<0.0005		<0.0005				
11/29/2016		<0.0005					<0.0005
11/30/2016				<0.0005	<0.0005		
12/1/2016						<0.0005	
2/22/2017	<0.0005		<0.0005				
2/23/2017		<0.0005		<0.0005			<0.0005
2/24/2017					<0.0005	<0.0005	
5/8/2017	<0.0005						
5/9/2017		<0.0005		<0.0005			

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/10/2017			<0.0005		<0.0005	<0.0005	<0.0005
7/17/2017	<0.0005					<0.0005	
7/18/2017		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
10/16/2017	<0.0005					<0.0005	
10/17/2017		<0.0005	<0.0005		<0.0005		
10/18/2017				<0.0005			<0.0005
2/19/2018	<0.0005						<0.0005
2/20/2018			<0.0005		<0.0005		
2/21/2018		<0.0005		<0.0005		<0.0005	
8/6/2018	<0.0005						<0.0005
8/7/2018		<0.0005		<0.0005		<0.0005	
8/8/2018			<0.0005		<0.0005		
2/25/2019	7.4E-05 (J)						6.7E-05 (J)
2/26/2019		5.9E-05 (J)	7.1E-05 (J)	6.4E-05 (J)	5.8E-05 (J)	6E-05 (J)	
6/12/2019	<0.0005		<0.0005		<0.0005		
6/13/2019		<0.0005		<0.0005		<0.0005	<0.0005
8/19/2019	<0.0005				<0.0005		
8/20/2019		<0.0005	<0.0005				<0.0005
8/21/2019				<0.0005		<0.0005	
10/8/2019	<0.0005						<0.0005
10/9/2019		<0.0005	<0.0005			<0.0005	
10/10/2019				0.00043 (J)	<0.0005		
5/6/2020	<0.0005	<0.0005					<0.0005
5/7/2020			<0.0005	<0.0005	<0.0005	<0.0005	
8/26/2020	<0.0005						
8/27/2020		<0.0005				<0.0005	<0.0005
8/28/2020			<0.0005	<0.0005	<0.0005		
9/22/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		
9/23/2020						<0.0005	<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.0005	<0.0005	
6/2/2016	<0.0005						
6/6/2016			<0.0005	<0.0005			
6/7/2016		9.5E-05 (J)					9.6E-05 (J)
7/25/2016						<0.0005	
7/26/2016	<0.0005				<0.0005		
7/27/2016		<0.0005	<0.0005	<0.0005			<0.0005
9/13/2016					<0.0005	<0.0005	
9/15/2016	<0.0005						
9/16/2016		<0.0005		<0.0005			
9/19/2016			<0.0005				<0.0005
11/1/2016					<0.0005		
11/2/2016	<0.0005						<0.0005
11/3/2016		<0.0005	<0.0005	<0.0005			
11/4/2016						<0.0005	
1/10/2017	<0.0005						
1/11/2017		<0.0005	<0.0005	<0.0005	<0.0005		
1/13/2017							<0.0005
1/16/2017						<0.0005	
3/1/2017			<0.0005	<0.0005			
3/2/2017		<0.0005			<0.0005	<0.0005	
3/6/2017							<0.0005
3/8/2017	<0.0005						
4/26/2017	<0.0005		<0.0005	<0.0005			<0.0005
4/27/2017					<0.0005	<0.0005	
5/2/2017		<0.0005					
6/27/2017					<0.0005	<0.0005	
6/28/2017			<0.0005	<0.0005			
6/29/2017		<0.0005					<0.0005
6/30/2017	<0.0005						
3/27/2018	<0.0005					<0.0005	
3/28/2018		<0.0005	<0.0005	<0.0005			
3/29/2018					<0.0005		<0.0005
9/25/2018		<0.0005	<0.0005	<0.0005			<0.0005
2/26/2019	6.1E-05 (J)						
2/27/2019					5.1E-05 (J)	5.4E-05 (J)	
3/5/2019		<0.0005		<0.0005			<0.0005
3/6/2019			<0.0005				
3/28/2019					4E-05 (J)	<0.0005	
3/29/2019	<0.0005						
9/24/2019					<0.0005	<0.0005	
9/25/2019	<0.0005						
2/10/2020					<0.0005	<0.0005	
2/11/2020		<0.0005	<0.0005	<0.0005			
2/12/2020	<0.0005						<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.0005	
6/2/2016			<0.0005		<0.0005		
6/7/2016	9.6E-05 (J)						
7/25/2016			<0.0005			<0.0005	
7/26/2016					<0.0005		
7/28/2016	<0.0005						
9/14/2016		<0.0005				<0.0005	
9/15/2016					<0.0005		
9/19/2016	<0.0005		<0.0005				
11/1/2016			<0.0005		<0.0005	<0.0005	
11/3/2016	<0.0005						
11/4/2016		<0.0005					
12/15/2016		<0.0005					
1/11/2017					<0.0005	<0.0005	
1/13/2017	<0.0005						
1/16/2017		<0.0005	<0.0005				
2/21/2017			<0.0005				
3/1/2017						<0.0005	
3/2/2017					<0.0005		
3/3/2017		<0.0005					
3/6/2017	<0.0005						
4/26/2017	<0.0005		<0.0005		<0.0005	<0.0005	
4/28/2017		<0.0005					
5/26/2017		<0.0005					
6/28/2017		<0.0005			<0.0005	<0.0005	
6/29/2017	<0.0005						
6/30/2017			<0.0005				
10/11/2017				<0.0005			
10/12/2017							<0.0005
11/20/2017				7E-05 (J)			8E-05 (J)
1/10/2018							<0.0005
1/11/2018				<0.0005			
2/19/2018							<0.0005
2/20/2018				<0.0005			
3/27/2018			<0.0005				
3/28/2018		<0.0005			<0.0005	<0.0005	
3/29/2018	<0.0005						
4/3/2018				<0.0005			<0.0005
6/28/2018				<0.0005			3.6E-05 (J)
8/7/2018				<0.0005			<0.0005
9/24/2018				<0.0005			<0.0005
9/25/2018	<0.0005						
2/26/2019			6.8E-05 (J)				
2/27/2019		<0.0005			6.2E-05 (J)	6.1E-05 (J)	
3/5/2019	<0.0005						
3/29/2019		<0.0005					
4/1/2019			8.2E-05 (J)		9.6E-05 (J)	8.4E-05 (J)	
8/21/2019				<0.0005			<0.0005
9/24/2019		<0.0005					
9/25/2019			<0.0005		<0.0005	<0.0005	
2/11/2020		<0.0005				<0.0005	
2/12/2020	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.0005	<0.0005	<0.0005
7/26/2016		<0.0005	<0.0005	<0.0005
8/30/2016	<0.0005			
9/14/2016		<0.0005	<0.0005	<0.0005
11/2/2016		<0.0005	<0.0005	
11/4/2016				<0.0005
11/14/2016	<0.0005			
1/12/2017			<0.0005	<0.0005
1/13/2017		<0.0005		
2/24/2017	<0.0005			
3/6/2017		<0.0005		
3/7/2017			<0.0005	<0.0005
5/1/2017		<0.0005	<0.0005	
5/2/2017				<0.0005
5/8/2017	<0.0005			
6/27/2017			<0.0005	<0.0005
6/29/2017		<0.0005		
7/11/2017	<0.0005			
10/10/2017	<0.0005			
3/29/2018		<0.0005	<0.0005	<0.0005
4/2/2018	<0.0005			
9/19/2018	5.3E-05 (J)			
9/26/2018		<0.0005	<0.0005	<0.0005
3/4/2019		<0.0005	<0.0005	<0.0005
8/20/2019	<0.0005			
2/12/2020		<0.0005	<0.0005	<0.0005
8/27/2020	<0.0005			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	<0.01	<0.01	<0.01	<0.01			
9/1/2016					<0.01	<0.01	<0.01
11/28/2016	<0.01		<0.01				
11/29/2016		<0.01					<0.01
11/30/2016				<0.01	<0.01		
12/1/2016						<0.01	
2/22/2017	<0.01		<0.01				
2/23/2017		<0.01		<0.01			<0.01
2/24/2017					<0.01	<0.01	
5/8/2017	<0.01						
5/9/2017		<0.01		<0.01			
5/10/2017			<0.01		<0.01	<0.01	<0.01
7/17/2017	<0.01					<0.01	
7/18/2017		<0.01	<0.01	<0.01	<0.01		<0.01
10/16/2017	<0.01					<0.01	
10/17/2017		<0.01	<0.01		<0.01		
10/18/2017				<0.01			<0.01
2/19/2018	<0.01						<0.01
2/20/2018			<0.01		<0.01		
2/21/2018		<0.01		<0.01		<0.01	
8/6/2018	<0.01						<0.01
8/7/2018		<0.01		<0.01		<0.01	
8/8/2018			<0.01		<0.01		
8/19/2019	<0.01				<0.01		
8/20/2019		<0.01	<0.01				<0.01
8/21/2019				<0.01		<0.01	
8/26/2020	<0.01						
8/27/2020		<0.01				<0.01	<0.01
8/28/2020			<0.01	<0.01	<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					0.014 (J)	0.012 (J)	
6/2/2016	<0.01						
6/6/2016			<0.01	<0.01			
6/7/2016		<0.01					<0.01
7/25/2016						0.0098 (J)	
7/26/2016	<0.01				0.0132		
7/27/2016		<0.01	<0.01	<0.01			<0.01
9/13/2016					0.0127	0.01 (J)	
9/15/2016	<0.01						
9/16/2016		<0.01		<0.01			
9/19/2016			<0.01				<0.01
11/1/2016					0.0092 (J)		
11/2/2016	<0.01						<0.01
11/3/2016		<0.01	<0.01	<0.01			
11/4/2016						0.01	
1/10/2017	<0.01						
1/11/2017		<0.01	<0.01	<0.01	0.0093 (J)		
1/13/2017							<0.01
1/16/2017						0.0086 (J)	
3/1/2017			<0.01	<0.01			
3/2/2017		<0.01			0.0099 (J)	0.01	
3/6/2017							<0.01
3/8/2017	<0.01						
4/26/2017	<0.01		<0.01	<0.01			<0.01
4/27/2017					0.0103	0.0101	
5/2/2017		<0.01					
6/27/2017					0.0097 (J)	0.0093 (J)	
6/28/2017			<0.01	<0.01			
6/29/2017		<0.01					<0.01
6/30/2017	<0.01						
3/27/2018	<0.01					0.0074 (J)	
3/28/2018		<0.01	<0.01	<0.01			
3/29/2018					0.0076 (J)		<0.01
6/5/2018					0.0092 (J)		
6/6/2018						0.0073 (J)	
6/8/2018	<0.01						
10/1/2018	<0.01				0.0085 (J)	0.0076 (J)	
2/26/2019	<0.01						
2/27/2019					0.0087 (J)	0.0078 (J)	
3/5/2019		<0.01		<0.01			<0.01
3/6/2019			<0.01				
3/28/2019					0.0092 (J)	0.0082 (J)	
3/29/2019	<0.01						
9/24/2019					0.0072 (J)	0.0074 (J)	
9/25/2019	<0.01						
2/10/2020					0.0087 (J)	0.0062 (J)	
2/11/2020		<0.01	<0.01	<0.01			
2/12/2020	<0.01						<0.01
3/18/2020	<0.01					0.0056 (J)	
3/19/2020					0.0088 (J)		
3/24/2020		<0.01	<0.01	<0.01			<0.01
9/23/2020		<0.01	<0.01	<0.01	0.008 (J)	0.0059 (J)	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/24/2020							<0.01
9/25/2020	<0.01						

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						0.0055 (J)	
6/2/2016			<0.01		0.0093 (J)		
6/7/2016	<0.01						
7/25/2016			<0.01			0.0037 (J)	
7/26/2016					0.0113		
7/28/2016	<0.01						
9/14/2016		0.0039 (J)				0.0034 (J)	
9/15/2016					0.0112		
9/19/2016	<0.01		<0.01				
11/1/2016			<0.01		0.0099 (J)	0.0025 (J)	
11/3/2016	<0.01						
11/4/2016		0.0077 (J)					
12/15/2016		0.0066 (J)					
1/11/2017					0.0093 (J)	0.0033 (J)	
1/13/2017	<0.01						
1/16/2017		0.0056 (J)	<0.01				
2/21/2017			<0.01				
3/1/2017						0.0044 (J)	
3/2/2017					0.0103		
3/3/2017		0.0049 (J)					
3/6/2017	0.0007 (J)						
4/26/2017	0.0008 (J)		<0.01		0.01	0.0075 (J)	
4/28/2017		0.004 (J)					
5/26/2017		0.0029 (J)					
6/28/2017		0.0036 (J)			0.0102	0.008 (J)	
6/29/2017	<0.01						
6/30/2017			<0.01				
10/11/2017				0.0094 (J)			
10/12/2017							<0.01
11/20/2017				0.0081 (J)			<0.01
1/10/2018							<0.01
1/11/2018				0.0074 (J)			
2/19/2018							<0.01
2/20/2018				<0.01			
3/27/2018			<0.01				
3/28/2018		0.0038 (J)			0.011	0.0025 (J)	
3/29/2018	<0.01						
4/3/2018				0.006 (J)			<0.01
6/7/2018		0.004 (J)			0.011		
6/8/2018						0.0041 (J)	
6/11/2018			<0.01				
6/28/2018				0.005 (J)			<0.01
8/7/2018				0.0045 (J)			<0.01
9/24/2018				0.0035 (J)			<0.01
10/1/2018		0.0042 (J)			0.012	0.0037 (J)	
10/2/2018			<0.01				
2/26/2019			<0.01				
2/27/2019		0.0041 (J)			0.011	0.0027 (J)	
3/5/2019	<0.01						
3/29/2019		0.0041 (J)					
4/1/2019			<0.01		0.012	0.0021 (J)	
8/21/2019				0.0021 (J)			<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019		0.0054 (J)					
9/25/2019			<0.01		0.012	0.0087 (J)	
10/9/2019				0.0018 (J)			<0.01
2/11/2020		0.0057 (J)				0.003 (J)	
2/12/2020	<0.01		<0.01	0.0025 (J)	0.013		<0.01
3/19/2020		0.0046 (J)	<0.01		0.013	0.0043 (J)	
3/24/2020	<0.01						<0.01
3/25/2020				0.002 (J)			
9/23/2020		0.0071 (J)			0.012	0.01	
9/24/2020	<0.01		<0.01	0.0016 (J)			<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.01	0.0035 (J)	<0.01
7/26/2016		<0.01	0.0042 (J)	<0.01
8/30/2016	<0.01			
9/14/2016		<0.01	0.0041 (J)	<0.01
11/2/2016		<0.01	0.0039 (J)	
11/4/2016				<0.01
11/14/2016	<0.01			
1/12/2017			0.0041 (J)	<0.01
1/13/2017		<0.01		
2/24/2017	<0.01			
3/6/2017		<0.01		
3/7/2017			0.0047 (J)	<0.01
5/1/2017		<0.01	0.0045 (J)	
5/2/2017				<0.01
5/8/2017	<0.01			
6/27/2017			0.004 (J)	<0.01
6/29/2017		<0.01		
7/11/2017	<0.01			
10/10/2017	<0.01			
3/29/2018		<0.01	<0.01	<0.01
4/2/2018	<0.01			
9/19/2018	<0.01			
3/4/2019		<0.01	<0.01	<0.01
8/20/2019	<0.01			
10/8/2019	<0.01			
2/12/2020		<0.01	0.0011 (J)	<0.01
3/17/2020	<0.01			
3/24/2020			0.0011 (J)	<0.01
3/25/2020		<0.01		
8/27/2020	<0.01			
9/22/2020	<0.01	<0.01	0.00099 (J)	<0.01

Time Series

Constituent: Nickel (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.005						
9/20/1999	<0.005						
9/12/2001	<0.005						
9/3/2002	<0.005						
7/29/2003	0.0061						
12/5/2003	<0.005						
9/22/2004	<0.005						
5/1/2007		0.0061					
9/11/2007		0.021					
3/20/2008		<0.005					
8/27/2008		<0.005					
3/3/2009		0.005					
11/18/2009		0.0052					
3/3/2010		0.011					
9/8/2010		0.012					
11/22/2010				0.0096		<0.005	
1/4/2011				0.0084		<0.005	
2/17/2011				0.0088		<0.005	
3/10/2011		0.0032					
3/11/2011				0.0058		<0.005	
3/28/2011				0.0058		<0.005	
9/7/2011				0.005	0.0054	<0.005	<0.005
9/8/2011		0.0046	0.009				
3/4/2012						<0.005	
3/5/2012		0.0053	0.0035		<0.005		<0.005
3/6/2012				<0.005			
9/5/2012			0.0027		<0.005		<0.005
9/10/2012		0.0074				<0.005	
9/11/2012				<0.005			
2/5/2013			0.0026				<0.005
2/6/2013		0.0077		<0.005	<0.005	<0.005	
8/12/2013		0.016					
8/13/2013			<0.005	0.003	0.0032		
8/14/2013						<0.005	0.0032
2/4/2014			<0.005	0.0026		0.0033	
2/5/2014		0.019			0.0039		0.0032
8/4/2014					0.0024 (J)	0.0015 (J)	0.0059
8/5/2014		0.0057	0.0013 (J)	0.0015 (J)			
2/2/2015			0.0023 (J)	<0.005		<0.005	
2/3/2015					<0.005		0.0013 (J)
2/4/2015		0.0055					
8/3/2015		0.0055			<0.005 (D)	<0.005 (D)	0.0039 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		0.0039	<0.005		<0.005	<0.005	0.0036
2/17/2016				<0.005			
2/22/2017		0.0051 (J)		0.0009 (J)			
2/23/2017			0.0026 (J)		<0.005		
2/24/2017						0.0021 (J)	0.0019 (J)
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			0.001 (J)		<0.005		0.0013 (J)
8/6/2018		0.003 (J)					

Time Series

Constituent: Nickel (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
8/7/2018			<0.005		<0.005		0.0019 (J)
8/8/2018				<0.005		0.0012 (J)	
2/25/2019		0.0026 (J)					
2/26/2019			<0.005	0.0068 (J)	<0.005	<0.005	0.0023 (J)
6/12/2019		0.0038 (J)		0.00043 (J)		0.00082 (J)	
6/13/2019			0.00072 (J)		<0.005		0.0019 (J)
10/8/2019		0.0051 (J)					
10/9/2019			0.0015 (J)	0.00058 (J)			0.0019 (J)
10/10/2019					<0.005	0.00084 (J)	
3/17/2020		0.0066	0.00087 (J)		0.00056 (J)		
3/18/2020				0.00063 (J)		0.0026 (J)	0.002 (J)
9/22/2020		0.027	0.0021 (J)	<0.005	<0.005	0.00077 (J)	
9/23/2020							0.0012 (J)

Time Series

Constituent: Nickel (mg/L) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R
9/9/2009	<0.005
11/18/2009	<0.005
1/5/2010	<0.005
3/3/2010	<0.005
9/7/2010	<0.005
3/10/2011	<0.005
9/8/2011	<0.005
3/5/2012	<0.005
9/5/2012	<0.005
2/5/2013	<0.005
8/13/2013	<0.005
2/4/2014	<0.005
8/5/2014	<0.005
2/3/2015	<0.005
8/4/2015	<0.005
2/16/2016	<0.005
2/23/2017	0.0015 (J)
2/19/2018	<0.005
8/6/2018	0.0026 (J)
2/25/2019	0.0023 (J)
6/13/2019	0.0037 (J)
10/8/2019	0.0021 (J)
3/17/2020	0.0011 (J)
9/23/2020	0.0016 (J)

Time Series

Constituent: pH (S.U.) Analysis Run 12/2/2020 9:22 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/27/2008	6.53						
3/3/2009	6.35						
11/18/2009	6.47						5.82
1/5/2010							5.8
3/3/2010	6.53						6.15
3/10/2011	5.83						6.05
3/11/2011			5.52		6.16		
9/7/2011			4.35	4.31	5.07	5.64	
9/8/2011	5.69	4.49					5.31
3/5/2012	6.27						6.23
3/6/2012			6.37				
9/5/2012							5.83
9/10/2012	6.23						
9/11/2012			5.69				
2/5/2013							6.79
2/6/2013	7.56		6.8				
8/12/2013	6.68						
8/13/2013			5.51				6.48
2/4/2014			5.74				6.14
2/5/2014	6.32						
8/3/2015	6.13 (D)						
2/16/2016	5.64						5.2
2/17/2016			5.59				
11/28/2016	6.23		5.47				
11/29/2016		5.37					5.92
11/30/2016				5.13	5.61		
12/1/2016						5.24	
2/22/2017	6.21		5.48				
2/23/2017		5.5		5.28			5.97
2/24/2017					5.47	5.37	
5/8/2017	6.12						
5/9/2017		5.41		5.12			
5/10/2017			5.6		5.68	5.2	5.82
7/17/2017	6.03					5.21	
7/18/2017		5.5	5.49	5.21	5.59		5.76
10/16/2017	6.12					5.16	
10/17/2017		5.42	5.45		5.52		
10/18/2017				5.17			5.76
2/19/2018	6.13						5.86
2/20/2018			5.52		5.51		
2/21/2018		5.39		5.15		5.18	
8/6/2018	6.01						5.84
8/7/2018		5.14		4.95		5.06	
8/8/2018			5.15		5.33		
2/25/2019	6.51						5.91
2/26/2019		5.52	5.4	5.22	5.42	5.08	
6/12/2019	6.3		5.38		5.54		
6/13/2019		5.55		5.08		5.01	5.84
8/19/2019	6.23				5.56		
8/20/2019		5.33	5.33				5.85
8/21/2019				5.32		4.88	
10/8/2019	6.28						5.91

Time Series

Constituent: pH (S.U.) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
10/9/2019		5.37	5.39			4.89	
10/10/2019				5.4	5.55		
1/21/2020						4.99	
3/17/2020	6.14	5.7		5.03			5.97
3/18/2020			5.38		5.58	4.88	
5/6/2020	6.24	6.8					5.99
5/7/2020			5.43	5.05	5.52	5.2	
8/26/2020	5.67						
8/27/2020		5.39				5.17	5.77
8/28/2020			5.45	5.2	5.38		
9/22/2020	5.78	5.25	5.34	5.11	5.43		
9/23/2020						5.04	5.81

Time Series

Constituent: pH (S.U.) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					7.46	6.33	
6/2/2016	5.46						
6/6/2016			6.17	5.71			
6/7/2016		5.62					5.77
7/25/2016						6.21	
7/26/2016	5.45				7.43		
7/27/2016		5.59	6.14	5.46			5.79
9/13/2016					7.44	6.16	
9/15/2016	5.45						
9/16/2016		5.58					
9/19/2016			6.04	5.59			5.73
11/1/2016					7.24		
11/2/2016	5.41						5.67
11/3/2016		5.59	5.97	5.39			
11/4/2016						6.29	
1/10/2017	5.37						
1/11/2017		5.59	6.05	5.48	7.3		
1/13/2017							5.79
1/16/2017						6.29	
3/1/2017			5.94	5.41			
3/2/2017		5.54			7.23	6.28	
3/6/2017							5.63
3/8/2017	5.41						
4/26/2017	5.02		5.99	5.4			5.66
4/27/2017					6.99	6.09	
5/2/2017		5.47					
6/27/2017					6.87	6.21	
6/28/2017			6	5.36			
6/29/2017		5.56					5.85
6/30/2017	5.39						
10/3/2017					6.81	5.98	
10/4/2017		5.57		5.32			5.83
10/5/2017	5.49		6.11				
3/27/2018	5.47					6.25	
3/28/2018		5.59	6.1	5.34			
3/29/2018					7.38		5.93
6/5/2018					7.16		
6/6/2018						6.17	5.86
6/7/2018			5.98				
6/8/2018	5.45						
6/11/2018		5.58		5.28			
9/25/2018		5.59	5.81	4.86			5.84
10/1/2018	5.39				6.8	5.9	
2/26/2019	5.46						
2/27/2019					6.84	5.8	
3/5/2019		5.48		5.26			6.07
3/6/2019			5.99				
3/28/2019					6.99	6.15	
3/29/2019	5.34						
4/2/2019		5.74					
4/3/2019			6.29	5.47			5.71
9/24/2019					7.07	6.23	

Time Series

Constituent: pH (S.U.) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2019	5.19	5.49					5.86
9/26/2019			6.04	5.2			
2/10/2020					7.2	6.1	
2/11/2020		5.58	6.07	5.3			
2/12/2020	5.48						6
3/18/2020	5.38					6.19	
3/19/2020					7.03		
3/24/2020		5.57	5.98	5.33			5.86
9/23/2020		5.58	6.01	5.29	7.15	6.01	
9/24/2020							5.8
9/25/2020	5.44						

Time Series

Constituent: pH (S.U.) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						7.72	
6/2/2016			5.75		7.84		
6/7/2016	6.1						
7/25/2016			5.82			7.74	
7/26/2016					7.88		
7/28/2016	6.12						
9/13/2016		7.41					
9/14/2016						7.65	
9/15/2016					7.74		
9/19/2016	6.12		5.78 (D)				
11/1/2016			5.62		7.75	7.7	
11/3/2016	6.07						
11/4/2016		7.12					
12/15/2016		7.24					
1/11/2017					7.66	7.53	
1/13/2017	6.41						
1/16/2017		7.24	5.72				
2/21/2017			5.67				
3/1/2017						7.42	
3/2/2017					7.68		
3/3/2017		7.22					
3/6/2017	6.34						
4/26/2017	6.32		5.56		7.45	7.4	
4/28/2017		7.21					
5/26/2017		7.13					
6/28/2017		7.06			7.65	7.5	
6/29/2017	6.47						
6/30/2017			5.72				
10/3/2017	6.56	6.99					
10/4/2017			5.87		7.49	7.45	
10/11/2017				6.4			
10/12/2017							5.43
11/20/2017				6.33			5.1
1/10/2018							4.97
1/11/2018				6.29			
2/19/2018							5.6
2/20/2018				7.22			
3/27/2018			5.83				
3/28/2018		7.3			7.91	7.74	
3/29/2018	6.75						
4/3/2018				6.87			5.84
6/5/2018	6.09						
6/7/2018		7.29			7.69		
6/8/2018						7.64	
6/11/2018			5.69				
6/28/2018				6.18			5.24
8/7/2018				6.08			5.18
9/24/2018				5.81			5.14
9/25/2018	6.67						
10/1/2018		7.07			7.39	7.47	
10/2/2018			5.39				
2/26/2019			5.77				

Time Series

Constituent: pH (S.U.) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
2/27/2019		7.27			7.55	7.54	
3/5/2019	7.22						
3/26/2019							5.3
3/27/2019				5.84			
3/29/2019		7.06					
4/1/2019			5.62		7.87	7.74	
4/2/2019	6.94						
8/21/2019				5.96			5.26
9/24/2019	6.87	7.01					
9/25/2019			5.69		7.64	7.47	
10/9/2019				5.81			5.22
2/11/2020		7.38				7.09	
2/12/2020	7.13		5.8	5.97	7.83		5.3
3/19/2020		7.22	6		7.65	7.31	
3/24/2020	6.35						5.29
3/25/2020				5.78			
9/23/2020		7.22			7.57	7.37	
9/24/2020	6.7		5.67	5.7			5.43

Time Series

Constituent: pH (S.U.) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		6.36	7.67	5.75
7/26/2016		6.22	7.66	5.72
8/30/2016	5.75			
9/14/2016		6.23	7.6	5.74
11/2/2016		6.08	7.35	
11/4/2016				5.61
11/14/2016	5.59			
1/12/2017			7.49	5.71
1/13/2017		6.19		
2/24/2017	5.49			
3/6/2017		6.2		
3/7/2017			7.43	5.66
5/1/2017		6.21	7.22	
5/2/2017				5.65
5/8/2017	5.58			
6/27/2017			7.32	5.7
6/29/2017		6.21		
7/11/2017	5.58			
10/3/2017			7.48	5.79
10/5/2017		6.16		
10/10/2017	5.49			
3/29/2018		6.09	7.02	5.63
4/2/2018	6.3 (O)			
6/6/2018			7.43	
6/7/2018		6.12		5.63
9/19/2018	5.48			
9/26/2018		5.84	7.13	5.63
3/4/2019		6.18	7.46	5.75
3/27/2019	5.83			
4/3/2019		6.43	7.11	5.63
8/20/2019	5.58			
9/24/2019			6.93	5.6
9/25/2019		6.2		
10/8/2019	5.59			
2/12/2020		6.15	7.52	5.83
3/17/2020	5.57			
3/24/2020			7.34	5.81
3/25/2020		6.26		
8/27/2020	4.88			
9/22/2020	5.46	5.8	7.19	5.99

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.01						
9/20/1999	<0.01						
9/12/2001	<0.01						
9/3/2002	<0.01						
7/29/2003	0.015						
12/5/2003	<0.01						
9/22/2004	<0.01						
5/1/2007		<0.01					
9/11/2007		<0.01					
3/20/2008		<0.01					
8/27/2008		<0.01					
3/3/2009		<0.01					
11/18/2009		<0.01					
3/3/2010		<0.01					
9/8/2010		<0.01					
11/22/2010				<0.01		<0.01	
1/4/2011				<0.01		<0.01	
2/17/2011				<0.01		<0.01	
3/10/2011		<0.01					
3/11/2011				<0.01		<0.01	
3/28/2011				<0.01		<0.01	
9/7/2011				<0.01	<0.01	<0.01	<0.01
9/8/2011		<0.01	<0.01				
3/4/2012						<0.01	
3/5/2012		<0.01	<0.01		<0.01		0.014
3/6/2012				<0.01			
9/5/2012			<0.01		<0.01		0.012
9/10/2012		<0.01				0.011	
9/11/2012				<0.01			
2/5/2013			<0.01				0.011
2/6/2013		<0.01		<0.01	<0.01	0.011	
8/12/2013		<0.01					
8/13/2013			<0.01	<0.01	0.0057		
8/14/2013						0.013	0.025
2/4/2014			<0.01	<0.01		0.017	
2/5/2014		<0.01			<0.01		0.02
8/4/2014					<0.01	0.0085	0.032
8/5/2014		<0.01	<0.01	<0.01			
2/2/2015			<0.01	<0.01		0.0089	
2/3/2015					<0.01		0.011
2/4/2015		<0.01					
8/3/2015		<0.01			<0.01 (D)	0.0067 (D)	0.046 (D)
8/4/2015			<0.01 (D)	<0.01			
2/16/2016		<0.01	<0.01		<0.01	0.0047 (J)	0.022
2/17/2016				<0.01			
8/31/2016		<0.01	0.0039 (J)	0.0029 (J)	0.0038 (J)		
9/1/2016						0.0132	0.0212
11/28/2016		<0.01		0.0019 (J)			
11/29/2016			0.0033 (J)				
11/30/2016					0.0054 (J)	0.0046 (J)	
12/1/2016							0.0234
2/22/2017		<0.01		0.0015 (J)			

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			0.0097 (J)		0.002 (J)		
2/24/2017						0.0108	0.0154
5/8/2017		<0.01					
5/9/2017			0.0066 (J)		<0.01		
5/10/2017				0.0016 (J)		0.0054 (J)	0.0152
7/17/2017		<0.01					0.0136
7/18/2017			0.0021 (J)	0.0024 (J)	0.0027 (J)	0.0047 (J)	
10/16/2017		<0.01					0.0242
10/17/2017			0.003 (J)	0.0028 (J)		0.004 (J)	
10/18/2017					0.0047 (J)		
2/19/2018		<0.01					
2/20/2018				<0.01		<0.01	
2/21/2018			<0.01		<0.01		0.0127
8/6/2018		<0.01					
8/7/2018			<0.01		0.0016 (J)		0.021
8/8/2018				0.0025 (J)		0.0041 (J)	
2/25/2019		<0.01					
2/26/2019			0.0014 (J)	0.003 (J)	0.002 (J)	0.0027 (J)	0.024
6/12/2019		<0.01		0.0034 (J)		0.0029 (J)	
6/13/2019			<0.01		0.0089 (J)		0.027
8/19/2019		<0.01				0.003 (J)	
8/20/2019			0.0022 (J)	0.0032 (J)			
8/21/2019					0.004 (J)		0.037
10/8/2019		<0.01					
10/9/2019			0.0023 (J)	0.0026 (J)			0.034
10/10/2019					0.0021 (J)	0.0024 (J)	
3/17/2020		<0.01	0.0017 (J)		0.0096 (J)		
3/18/2020				0.0032 (J)		0.0046 (J)	0.028
8/26/2020		<0.01					
8/27/2020			0.011				0.021
8/28/2020				0.0037 (J)	0.0045 (J)	0.0031 (J)	
9/22/2020		<0.01	0.012	0.0056 (J)	0.0091 (J)	0.0032 (J)	
9/23/2020							0.026

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.01						
11/18/2009	<0.01						
1/5/2010	<0.01						
3/3/2010	<0.01						
9/7/2010	<0.01						
3/10/2011	<0.01						
9/8/2011	<0.01						
3/5/2012	<0.01						
9/5/2012	<0.01						
2/5/2013	<0.01						
8/13/2013	<0.01						
2/4/2014	<0.01						
8/5/2014	<0.01						
2/3/2015	<0.01						
8/4/2015	<0.01						
2/16/2016	<0.01						
6/1/2016						<0.01	<0.01
6/2/2016		0.0011 (J)					
6/6/2016				<0.01	<0.01		
6/7/2016			0.001 (J)				
7/25/2016							<0.01
7/26/2016		0.0016 (J)				<0.01	
7/27/2016			0.0012 (J)	<0.01	<0.01		
9/1/2016	0.002 (J)						
9/13/2016						<0.01	<0.01
9/15/2016		0.0014 (J)					
9/16/2016			0.0015 (J)		<0.01		
9/19/2016				<0.01			
11/1/2016						<0.01	
11/2/2016		<0.01					
11/3/2016			0.0015 (J)	<0.01	<0.01		
11/4/2016							<0.01
11/29/2016	0.0017 (J)						
1/10/2017		0.0012 (J)					
1/11/2017			0.0014 (J)	<0.01	<0.01	<0.01	
1/16/2017							<0.01
2/23/2017	0.0018 (J)						
3/1/2017				<0.01	<0.01		
3/2/2017			0.0017 (J)			<0.01	<0.01
3/8/2017		<0.01					
4/26/2017		<0.01		<0.01	<0.01		
4/27/2017						<0.01	<0.01
5/2/2017			<0.01				
5/10/2017	0.0023 (J)						
6/27/2017						<0.01	<0.01
6/28/2017				<0.01	<0.01		
6/29/2017			<0.01				
6/30/2017		<0.01					
7/18/2017	0.0046 (J)						
10/18/2017	0.0037 (J)						
2/19/2018	<0.01						
3/27/2018		<0.01					<0.01

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.01	<0.01	<0.01		
3/29/2018						<0.01	
6/7/2018				<0.01			
6/11/2018			<0.01		<0.01		
8/6/2018	0.0047 (J)						
9/25/2018			<0.01	<0.01	<0.01		
2/25/2019	0.0051 (J)						
2/26/2019		<0.01					
2/27/2019						<0.01	<0.01
3/5/2019			<0.01		<0.01		
3/6/2019				<0.01			
3/28/2019						<0.01	<0.01
3/29/2019		0.0019 (J)					
4/2/2019			<0.01				
4/3/2019				<0.01	<0.01		
6/13/2019	0.0048 (J)						
8/20/2019	0.0039 (J)						
9/24/2019						<0.01	<0.01
9/25/2019		<0.01	<0.01				
9/26/2019				<0.01	<0.01		
10/8/2019	0.0031 (J)						
2/10/2020						<0.01	<0.01
2/11/2020			<0.01	<0.01	<0.01		
2/12/2020		<0.01					
3/17/2020	0.0026 (J)						
3/18/2020		<0.01					<0.01
3/19/2020						<0.01	
3/24/2020			<0.01	<0.01	<0.01		
8/27/2020	0.0027 (J)						
9/23/2020	0.0031 (J)		<0.01	<0.01	<0.01	<0.01	<0.01
9/25/2020		<0.01					

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.01
6/2/2016				<0.01		<0.01	
6/7/2016	<0.01	0.00048 (J)					
7/25/2016				<0.01			<0.01
7/26/2016						<0.01	
7/27/2016	<0.01						
7/28/2016		<0.01					
9/14/2016			<0.01				<0.01
9/15/2016						<0.01	
9/19/2016	<0.01	0.0014 (J)		<0.01			
11/1/2016				<0.01		<0.01	<0.01
11/2/2016	<0.01						
11/3/2016		<0.01					
11/4/2016			<0.01				
12/15/2016			<0.01				
1/11/2017						<0.01	<0.01
1/13/2017	<0.01	<0.01					
1/16/2017			<0.01	<0.01			
2/21/2017				<0.01			
3/1/2017							<0.01
3/2/2017						<0.01	
3/3/2017			<0.01				
3/6/2017	<0.01	<0.01					
4/26/2017	<0.01	<0.01		<0.01		<0.01	<0.01
4/28/2017			<0.01				
5/26/2017			<0.01				
6/28/2017			<0.01			<0.01	<0.01
6/29/2017	<0.01	<0.01					
6/30/2017				<0.01			
10/11/2017					<0.01		
11/20/2017					<0.01		
1/11/2018					<0.01		
2/20/2018					<0.01		
3/27/2018				<0.01			
3/28/2018			<0.01			<0.01	<0.01
3/29/2018	<0.01	<0.01					
4/3/2018					<0.01		
6/5/2018		<0.01					
6/6/2018	<0.01						
6/28/2018					<0.01		
8/7/2018					<0.01		
9/24/2018					0.0015 (J)		
9/25/2018	<0.01	<0.01					
2/26/2019				<0.01			
2/27/2019			<0.01			<0.01	<0.01
3/5/2019	<0.01	<0.01					
3/29/2019			<0.01				
4/1/2019				<0.01		<0.01	<0.01
4/2/2019		<0.01					
4/3/2019	<0.01						
8/21/2019					<0.01		
9/24/2019		<0.01	<0.01				

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
9/25/2019	<0.01			<0.01		<0.01	<0.01
10/9/2019					<0.01		
2/11/2020			<0.01				<0.01
2/12/2020	<0.01	<0.01		<0.01	<0.01	<0.01	
3/19/2020			<0.01	<0.01		<0.01	<0.01
3/24/2020	<0.01	<0.01					
3/25/2020					<0.01		
9/23/2020			<0.01			<0.01	<0.01
9/24/2020	<0.01	<0.01		<0.01	<0.01		

Time Series

Constituent: Selenium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.01	<0.01	<0.01
7/26/2016			0.0009 (J)	<0.01	0.0009 (J)
8/30/2016		0.0017 (J)			
9/14/2016			<0.01	<0.01	<0.01
11/2/2016			<0.01	<0.01	
11/4/2016					<0.01
11/14/2016		<0.01			
1/12/2017				<0.01	<0.01
1/13/2017			<0.01		
2/24/2017		0.0011 (J)			
3/6/2017			<0.01		
3/7/2017				<0.01	<0.01
5/1/2017			<0.01	<0.01	
5/2/2017					<0.01
5/8/2017		<0.01			
6/27/2017				<0.01	<0.01
6/29/2017			<0.01		
7/11/2017		<0.01			
10/10/2017		<0.01			
10/12/2017	<0.01				
11/20/2017	0.0042 (J)				
1/10/2018	0.0043 (J)				
2/19/2018	<0.01				
3/29/2018			<0.01	<0.01	<0.01
4/2/2018		<0.01			
4/3/2018	<0.01				
6/6/2018				<0.01	
6/7/2018			<0.01		<0.01
6/28/2018	0.0032 (J)				
8/7/2018	0.0031 (J)				
9/19/2018		<0.01			
9/24/2018	0.0026 (J)				
9/26/2018			<0.01	<0.01	<0.01
3/4/2019			<0.01	<0.01	<0.01
4/3/2019			<0.01	<0.01	<0.01
8/20/2019		<0.01			
8/21/2019	0.0024 (J)				
9/24/2019				<0.01	<0.01
9/25/2019			<0.01		
10/9/2019	0.0026 (J)				
2/12/2020	0.002 (J)		<0.01	<0.01	<0.01
3/24/2020	0.002 (J)			<0.01	<0.01
3/25/2020			<0.01		
8/27/2020		<0.01			
9/22/2020			<0.01	<0.01	<0.01
9/24/2020	0.0016 (J)				

Time Series

Constituent: Silver (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.005						
9/11/2007	<0.005						
3/20/2008	<0.005						
8/27/2008	<0.005						
3/3/2009	<0.005						
9/9/2009							<0.005
11/18/2009	<0.005						<0.005
1/5/2010							<0.005
3/3/2010	<0.005						<0.005
9/7/2010							<0.005
9/8/2010	<0.005						
11/22/2010			<0.005		<0.005		
1/4/2011			<0.005		<0.005		
2/17/2011			<0.005		<0.005		
3/10/2011	<0.005						<0.005
3/11/2011			<0.005		<0.005		
3/28/2011			<0.005		<0.005		
9/7/2011			<0.005	<0.005	<0.005	<0.005	
9/8/2011	<0.005	<0.005					<0.005
3/4/2012					<0.005		
3/5/2012	<0.005	<0.005		<0.005		<0.005	<0.005
3/6/2012			<0.005				
9/5/2012		<0.005		<0.005		<0.005	<0.005
9/10/2012	<0.005				<0.005		
9/11/2012			<0.005				
2/5/2013		<0.005				<0.005	<0.005
2/6/2013	<0.005		<0.005	<0.005	<0.005		
8/12/2013	<0.005						
8/13/2013		<0.005	<0.005	<0.005			<0.005
8/14/2013					<0.005	<0.005	
2/4/2014		<0.005	<0.005		<0.005		<0.005
2/5/2014	<0.005			<0.005		<0.005	
8/4/2014				<0.005	<0.005	<0.005	
8/5/2014	<0.005	<0.005	<0.005				<0.005
2/2/2015		<0.005	<0.005		<0.005		
2/3/2015				<0.005		<0.005	<0.005
2/4/2015	<0.005						
8/3/2015	<0.005			<0.005 (D)	<0.005 (D)	<0.005 (D)	
8/4/2015		<0.005 (D)	<0.005				<0.005
2/16/2016	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005
2/17/2016			<0.005				
2/22/2017	<0.005		<0.005				
2/23/2017		<0.005		<0.005			<0.005
2/24/2017					<0.005	<0.005	
2/19/2018	<0.005						<0.005
2/20/2018			<0.005		<0.005		
2/21/2018		<0.005		<0.005		<0.005	
8/6/2018	<0.005						<0.005
8/7/2018		<0.005		<0.005		<0.005	
8/8/2018			<0.005		<0.005		
2/25/2019	<0.005						<0.005
2/26/2019		<0.005	<0.005	<0.005	<0.005	<0.005	

Time Series

Constituent: Silver (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
6/12/2019	<0.005		<0.005		<0.005		
6/13/2019		<0.005		<0.005		<0.005	<0.005
10/8/2019	<0.005						<0.005
10/9/2019		<0.005	<0.005			<0.005	
10/10/2019				<0.005	<0.005		
3/17/2020	<0.005	<0.005		<0.005			<0.005
3/18/2020			<0.005		<0.005	<0.005	
9/22/2020	<0.005	<0.005	<0.005	<0.005	<0.005		
9/23/2020						<0.005	<0.005

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	29	410	140	87			
9/1/2016					150	990	360
11/28/2016	36		120				
11/29/2016		450					320
11/30/2016				76	50		
12/1/2016						1100	
2/22/2017	43		100				
2/23/2017		390		47			380
2/24/2017					110	850	
5/8/2017	60						
5/9/2017		280		41			
5/10/2017			80		70	1000	660
7/17/2017	63					830	
7/18/2017		200	57	44	50		880
10/16/2017	62					720	
10/17/2017		180	59		58		
10/18/2017				53			760
2/19/2018	64.6						718
2/20/2018			55.9		64.6		
2/21/2018		146		46.7		533	
8/6/2018	42.1						797
8/7/2018		100		38.8		784	
8/8/2018			81.1		79.5		
2/25/2019	42.1						763
2/26/2019		118	129	49.3	55.8	742	
6/12/2019	83.4		180		92.8		
6/13/2019		163		77.1		976	918
10/8/2019	128						664
10/9/2019		318	91.2			1180	
10/10/2019				48	68.7		
3/17/2020	98.6	145		95.2			303
3/18/2020			200		199	960	
9/22/2020	145	478	216	55.1	72.1		
9/23/2020						992	518

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					5	4.2	
6/2/2016	6.6						
6/6/2016			1.2	1.8			
6/7/2016		4.4					<1
7/25/2016						3.7	
7/26/2016	6.1				5.4		
7/27/2016		4.7	1.7	1.9			0.08 (J)
9/13/2016					2.9	5.2	
9/15/2016	6.1						
9/16/2016		4.8		1.7			
9/19/2016			1.8				0.08 (J)
11/1/2016					3.9		
11/2/2016	6.3						0.1 (J)
11/3/2016		5.3	0.69 (J)	1.9			
11/4/2016						5	
1/10/2017	5.9						
1/11/2017		5.2	<1	1.7	3.7		
1/13/2017							<1
1/16/2017						7.9	
3/1/2017			1.8	<1			
3/2/2017		5			4.6	7.4	
3/6/2017							<1
3/8/2017	7						
4/26/2017	7		1.6	1.9			<1
4/27/2017					5.2	7.4	
5/2/2017		5					
6/27/2017					5.9	6.4	
6/28/2017			<1	<1			
6/29/2017		5.2					<1
6/30/2017	6.5						
10/3/2017					6.6	5.9	
10/4/2017		5.3		1.7			<1
10/5/2017	7.9		1.6				
6/5/2018					6.4		
6/6/2018						4.4	0.049 (J)
6/7/2018			0.68 (J)				
6/8/2018	6.4						
6/11/2018		5.2		0.95 (J)			
9/25/2018		6.1	1	1.5			0.13 (J)
10/1/2018	6.8				5.6	4	
3/28/2019					8	4.3	
3/29/2019	7.3						
4/2/2019		5.1					
4/3/2019			0.82 (J)	1.3			0.12 (J)
9/24/2019					5.3	4.3	
9/25/2019	6.6	5.5					<1
9/26/2019			0.64 (J)	1			
3/18/2020	8.1					5.3	
3/19/2020					10		
3/24/2020		5.4	<1	0.99 (J)			<1
9/23/2020		5.1	0.53 (J)	1.1	8.1	3.4	
9/24/2020							<1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	6.1						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						12	
6/2/2016			1.3		5.8		
6/7/2016	5.2						
7/25/2016			1.2			8.4	
7/26/2016					6.7		
7/28/2016	5.1						
9/14/2016		9.4				8.6	
9/15/2016					6		
9/19/2016	4.8		1.2				
11/1/2016			1.3		4.9	8.9	
11/3/2016	5						
11/4/2016		13					
12/15/2016		1.8					
1/11/2017					4.5	8.6	
1/13/2017	4.3						
1/16/2017		11	<1				
2/21/2017			1.4				
3/1/2017						9.3	
3/2/2017					4.4		
3/3/2017		8.8					
3/6/2017	4.5						
4/26/2017	4.9		1.4		5.1	11	
4/28/2017		10					
5/26/2017		12					
6/28/2017		11			5.4	12	
6/29/2017	5.5						
6/30/2017			<1				
10/3/2017	5.8	7.9					
10/4/2017			1.4		6.2	12	
10/11/2017				20			
10/12/2017							17
11/20/2017				24			71
1/10/2018							66
1/11/2018				23			
2/19/2018							57.2
2/20/2018				20.6			
4/3/2018				24.5			49.4
6/5/2018	6.1						
6/7/2018		8.8			6.7		
6/8/2018						9.6	
6/11/2018			1.1				
6/28/2018				22			43.8
8/7/2018				20.7			40.5
9/24/2018				21.2			39.7
9/25/2018	7						
10/1/2018		9.1			7.1	9.1	
10/2/2018			1				
3/26/2019							34.3
3/27/2019				17.7			
3/29/2019		9					
4/1/2019			0.96 (J)		7.2	8.5	
4/2/2019	3.8						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	1	9.1					
9/25/2019			0.81 (J)		7	13.8	
10/9/2019				15			27.9
3/19/2020		12.4	1.6		9	12.9	
3/24/2020	3						25.2
3/25/2020				14.3			
9/23/2020		11.8			6.9	16.8	
9/24/2020	3.6		0.69 (J)	11.7			22.9

Time Series

Constituent: Sulfate (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		8	20	1.9
7/26/2016		7.7	20	1.8
8/30/2016	160			
9/14/2016		7.5	19	1.8
11/2/2016		8.2	20	
11/4/2016				2
11/14/2016	150			
1/12/2017			19	1.9
1/13/2017		8.1		
2/24/2017	120			
3/6/2017		8		
3/7/2017			20	2.1
5/1/2017		8.4	20	
5/2/2017				2
5/8/2017	120			
6/27/2017			18	2.1
6/29/2017		9.2		
7/11/2017	110			
10/3/2017			16	2.3
10/5/2017		9.6		
10/10/2017	93			
4/2/2018	88.8			
6/6/2018			8.3	
6/7/2018		8.5		2
9/19/2018	75			
9/26/2018		10.2	7.9	2.3
3/27/2019	65.9			
4/3/2019		8.5	7	2.1
9/24/2019			5.5	2.4
9/25/2019		8.5		
10/8/2019	52.3			
3/17/2020	71.6			
3/24/2020			5.9	2.1
3/25/2020		8.8		
9/22/2020	51.5	8.2	5.5	2.1

Time Series

Constituent: TDS (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	209	616	257	216			
9/1/2016					553	1400	578
11/28/2016	102		177				
11/29/2016		594					455
11/30/2016				177 (B)	247 (B)		
12/1/2016						1610 (B)	
2/22/2017	164		240				
2/23/2017		581		105			614
2/24/2017					414	1200	
5/8/2017	145						
5/9/2017		410		77			
5/10/2017			149		251	1360	955
7/17/2017	185					1340	
7/18/2017		322	122	89	179		1270
10/16/2017	218					1080	
10/17/2017		381	214		256		
10/18/2017				166			1150
2/19/2018	173						1070
2/20/2018			131		233		
2/21/2018		285		105		830	
8/6/2018	158						1260
8/7/2018		242		99		1180	
8/8/2018			166		292		
2/25/2019	92						1160
2/26/2019		69	293	109	226	1010	
6/12/2019	226		391		298		
6/13/2019		301		136		1410	1310
10/8/2019	276						1050
10/9/2019		526	372			1680	
10/10/2019				109	247		
3/17/2020	185	306		175			588
3/18/2020			351		703	1520	
9/22/2020	281	675	394	110	217		
9/23/2020						1000	820

Time Series

Constituent: TDS (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					120	54	
6/2/2016	46						
6/6/2016			120	58			
6/7/2016		28					38
7/25/2016						48	
7/26/2016	54				94		
7/27/2016		74	94	35			74
9/13/2016					105	67	
9/15/2016	54						
9/16/2016		67		35			
9/19/2016			92				45
11/1/2016					44		
11/2/2016	71						53
11/3/2016		41	104	48			
11/4/2016						60	
1/10/2017	45						
1/11/2017		104	133	95	107		
1/13/2017							46
1/16/2017						65	
3/1/2017			119	79			
3/2/2017		77			98	61	
3/6/2017							164
3/8/2017	178						
4/26/2017	52		162	36			34
4/27/2017					116	31	
5/2/2017		142					
6/27/2017					89	42	
6/28/2017			98	45			
6/29/2017		53					68
6/30/2017	45						
10/3/2017					119	58	
10/4/2017		61		45			54
10/5/2017	40		104				
6/5/2018					127		
6/6/2018						96	79
6/7/2018			68				
6/8/2018	114						
6/11/2018		70		74			
9/25/2018		86	109	63			73
10/1/2018	50				117	60	
3/28/2019					87	87	
3/29/2019	63						
4/2/2019		72					
4/3/2019			89	63			57
9/24/2019					124	54	
9/25/2019	64	81					75
9/26/2019			126	72			
3/18/2020	57					35	
3/19/2020					116		
3/24/2020		71	91	59			76
9/23/2020		99	103	81	108	15	
9/24/2020							69

Time Series

Constituent: TDS (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	54						

Time Series

Constituent: TDS (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						150	
6/2/2016			36		130		
6/7/2016	60						
7/25/2016			50			135	
7/26/2016					141		
7/28/2016	81						
9/14/2016		152				127	
9/15/2016					153		
9/19/2016	68		35				
11/1/2016			<25		92	75	
11/3/2016	61						
11/4/2016		148					
12/15/2016		191					
1/11/2017					159	148	
1/13/2017	76						
1/16/2017		180	47				
2/21/2017			<25				
3/1/2017						182	
3/2/2017					117		
3/3/2017		156					
3/6/2017	167						
4/26/2017	50		55		181	92	
4/28/2017		130					
5/26/2017		223					
6/28/2017		166			169	126	
6/29/2017	94						
6/30/2017			42				
10/3/2017	149	153					
10/4/2017			31		141	147	
10/11/2017				68			
10/12/2017							74
11/20/2017				139			179
1/10/2018							140
1/11/2018				153			
2/19/2018							119
2/20/2018				87			
4/3/2018				85			106
6/5/2018	109						
6/7/2018		146			95		
6/8/2018						158	
6/11/2018			59				
6/28/2018				88			112
8/7/2018				89			103
9/24/2018				82			107
9/25/2018	122						
10/1/2018		155			165	138	
10/2/2018			57				
3/26/2019							90
3/27/2019				75			
3/29/2019		150					
4/1/2019			54		149	19 (J)	
4/2/2019	134						

Time Series

Constituent: TDS (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	157	146					
9/25/2019			51		157	159	
10/9/2019				119			98
3/19/2020		148	47		146	148	
3/24/2020	117						84
3/25/2020				158			
9/23/2020		161			157	155	
9/24/2020	113		51	170			77

Time Series

Constituent: TDS (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		96	160	66
7/26/2016		92	177	78
8/30/2016	319			
9/14/2016		102	187	73
11/2/2016		115	181	
11/4/2016				75
11/14/2016	280			
1/12/2017			202	86
1/13/2017		67		
2/24/2017	162			
3/6/2017		159		
3/7/2017			257	108
5/1/2017		107	165	
5/2/2017				103
5/8/2017	194			
6/27/2017			189	73
6/29/2017		79		
7/11/2017	193			
10/3/2017			170	89
10/5/2017		95		
10/10/2017	175			
4/2/2018	192			
6/6/2018			151	
6/7/2018		90		142
9/19/2018	186			
9/26/2018		116	144	86
3/27/2019	170			
4/3/2019		111	142	83
9/24/2019			129	79
9/25/2019		117		
10/8/2019	172			
3/17/2020	165			
3/24/2020			139	68
3/25/2020		146		
9/22/2020	141	83	104	75

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.001						
9/11/2007	<0.001						
3/20/2008	<0.001						
8/27/2008	<0.001						
3/3/2009	<0.001						
9/9/2009							<0.001
11/18/2009	<0.001						<0.001
1/5/2010							<0.001
3/3/2010	<0.001						<0.001
9/7/2010							<0.001
9/8/2010	<0.001						
11/22/2010			<0.001		<0.001		
1/4/2011			<0.001		<0.001		
2/17/2011			<0.001		<0.001		
3/10/2011	<0.001						<0.001
3/11/2011			<0.001		<0.001		
3/28/2011			<0.001		<0.001		
9/7/2011			<0.001	<0.001	<0.001	<0.001	
9/8/2011	<0.001	<0.001					<0.001
3/4/2012					<0.001		
3/5/2012	<0.001	<0.001		<0.001		<0.001	<0.001
3/6/2012			<0.001				
9/5/2012		<0.001		<0.001		<0.001	<0.001
9/10/2012	<0.001				<0.001		
9/11/2012			<0.001				
2/5/2013		<0.001				<0.001	<0.001
2/6/2013	<0.001		<0.001	<0.001	<0.001		
8/12/2013	<0.001						
8/13/2013		<0.001	<0.001	<0.001			<0.001
8/14/2013					<0.001	<0.001	
2/4/2014		<0.001	<0.001		<0.001		<0.001
2/5/2014	<0.001			<0.001		<0.001	
8/4/2014				<0.001	<0.001	<0.001	
8/5/2014	<0.001	<0.001					<0.001
2/2/2015		<0.001	<0.001		<0.001		
2/3/2015				<0.001		<0.001	<0.001
2/4/2015	<0.001						
2/16/2016	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001
2/17/2016			7E-05 (J)				
8/31/2016	<0.001	<0.001	<0.001	<0.001			
9/1/2016					<0.001	<0.001	<0.001
11/28/2016	<0.001		<0.001				
11/29/2016		<0.001					<0.001
11/30/2016				<0.001	<0.001		
12/1/2016						<0.001	
2/22/2017	<0.001		<0.001				
2/23/2017		<0.001		<0.001			<0.001
2/24/2017					<0.001	<0.001	
5/8/2017	6E-05 (J)						
5/9/2017		<0.001		<0.001			
5/10/2017			<0.001		<0.001	<0.001	<0.001
7/17/2017	6E-05 (J)					<0.001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
7/18/2017		<0.001	<0.001	<0.001	<0.001		<0.001
10/16/2017	7E-05 (J)					<0.001	
10/17/2017		<0.001	<0.001		<0.001		
10/18/2017				<0.001			<0.001
2/19/2018	<0.001						<0.001
2/20/2018			<0.001		<0.001		
2/21/2018		<0.001		<0.001		<0.001	
8/6/2018	<0.001						<0.001
8/7/2018		<0.001		<0.001		<0.001	
8/8/2018			<0.001		<0.001		
2/25/2019	<0.001						<0.001
2/26/2019		<0.001	<0.001	<0.001	<0.001	<0.001	
6/12/2019	<0.001		<0.001		<0.001		
6/13/2019		<0.001		<0.001		<0.001	<0.001
8/19/2019	5.5E-05 (J)				<0.001		
8/20/2019		<0.001	<0.001				<0.001
8/21/2019				<0.001		5.3E-05 (J)	
10/8/2019	<0.001						<0.001
10/9/2019		<0.001	<0.001			<0.001	
10/10/2019				<0.001	<0.001		
3/17/2020	<0.001	<0.001		<0.001			<0.001
3/18/2020			<0.001		<0.001	<0.001	
8/26/2020	<0.001						
8/27/2020		<0.001				<0.001	<0.001
8/28/2020			<0.001	<0.001	<0.001		
9/22/2020	<0.001	<0.001	<0.001	<0.001	<0.001		
9/23/2020						<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.001	<0.001	
6/2/2016	<0.001						
6/6/2016			<0.001	<0.001			
6/7/2016		<0.001					<0.001
7/25/2016						<0.001	
7/26/2016	<0.001				<0.001		
7/27/2016		<0.001	<0.001	<0.001			<0.001
9/13/2016					<0.001	<0.001	
9/15/2016	<0.001						
9/16/2016		<0.001		<0.001			
9/19/2016			<0.001				<0.001
11/1/2016					<0.001		
11/2/2016	<0.001						<0.001
11/3/2016		<0.001	<0.001	<0.001			
11/4/2016						<0.001	
1/10/2017	<0.001						
1/11/2017		<0.001	<0.001	<0.001	<0.001		
1/13/2017							<0.001
1/16/2017						<0.001	
3/1/2017			<0.001	<0.001			
3/2/2017		<0.001			<0.001	<0.001	
3/6/2017							<0.001
3/8/2017	<0.001						
4/26/2017	<0.001		<0.001	<0.001			<0.001
4/27/2017					<0.001	<0.001	
5/2/2017		<0.001					
6/27/2017					<0.001	<0.001	
6/28/2017			<0.001	<0.001			
6/29/2017		<0.001					<0.001
6/30/2017	<0.001						
3/27/2018	<0.001					<0.001	
3/28/2018		<0.001	<0.001	<0.001			
3/29/2018					<0.001		<0.001
2/26/2019	<0.001						
2/27/2019					<0.001	<0.001	
3/5/2019		<0.001		<0.001			<0.001
3/6/2019			<0.001				
4/2/2019		<0.001					
4/3/2019			<0.001	<0.001			<0.001
9/25/2019		<0.001					<0.001
9/26/2019			<0.001	<0.001			
2/10/2020					<0.001	5.5E-05 (J)	
2/11/2020		<0.001	<0.001	<0.001			
2/12/2020	8.9E-05 (J)						<0.001
3/18/2020	<0.001					<0.001	
3/19/2020					<0.001		
3/24/2020		<0.001	<0.001	<0.001			<0.001
9/23/2020		<0.001	<0.001	<0.001	<0.001	<0.001	
9/24/2020							<0.001
9/25/2020	<0.001						

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.001	
6/2/2016			<0.001		<0.001		
6/7/2016	<0.001						
7/25/2016			<0.001			<0.001	
7/26/2016					0.0001 (J)		
7/28/2016	<0.001						
9/14/2016		<0.001				<0.001	
9/15/2016					<0.001		
9/19/2016	<0.001		<0.001				
11/1/2016			<0.001		<0.001	<0.001	
11/3/2016	<0.001						
11/4/2016		<0.001					
12/15/2016		<0.001					
1/11/2017					<0.001	<0.001	
1/13/2017	<0.001						
1/16/2017		<0.001	<0.001				
2/21/2017			<0.001				
3/1/2017						<0.001	
3/2/2017					<0.001		
3/3/2017		<0.001					
3/6/2017	<0.001						
4/26/2017	<0.001		<0.001		<0.001	<0.001	
4/28/2017		<0.001					
5/26/2017		<0.001					
6/28/2017		<0.001			<0.001	<0.001	
6/29/2017	<0.001						
6/30/2017			<0.001				
10/11/2017				<0.001			
10/12/2017							<0.001
11/20/2017				<0.001			<0.001
1/10/2018							<0.001
1/11/2018				<0.001			
2/19/2018							<0.001
2/20/2018				<0.001			
3/27/2018			<0.001				
3/28/2018		<0.001			<0.001	<0.001	
3/29/2018	<0.001						
4/3/2018				<0.001			<0.001
6/28/2018				<0.001			<0.001
8/7/2018				<0.001			<0.001
9/24/2018				<0.001			<0.001
9/25/2018	<0.001						
2/26/2019			<0.001				
2/27/2019		<0.001			<0.001	<0.001	
3/5/2019	<0.001						
4/2/2019	<0.001						
8/21/2019				<0.001			<0.001
9/24/2019	<0.001						
2/11/2020		<0.001				<0.001	
2/12/2020	<0.001		<0.001	<0.001	<0.001		<0.001
3/19/2020		<0.001	<0.001		<0.001	<0.001	
3/24/2020	<0.001						<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
3/25/2020				<0.001			
9/23/2020		<0.001			<0.001	0.00016 (J)	
9/24/2020	<0.001		<0.001	<0.001			<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.001	<0.001	<0.001
7/26/2016		<0.001	<0.001	<0.001
8/30/2016	<0.001			
9/14/2016		<0.001	<0.001	<0.001
11/2/2016		<0.001	<0.001	
11/4/2016				<0.001
11/14/2016	<0.001			
1/12/2017			<0.001	<0.001
1/13/2017		<0.001		
2/24/2017	<0.001			
3/6/2017		<0.001		
3/7/2017			<0.001	<0.001
5/1/2017		<0.001	<0.001	
5/2/2017				<0.001
5/8/2017	<0.001			
6/27/2017			<0.001	<0.001
6/29/2017		<0.001		
7/11/2017	<0.001			
10/10/2017	<0.001			
3/29/2018		<0.001	<0.001	<0.001
4/2/2018	<0.001			
9/19/2018	<0.001			
3/4/2019		<0.001	<0.001	<0.001
4/3/2019		<0.001	<0.001	<0.001
8/20/2019	5.8E-05 (J)			
9/24/2019			<0.001	<0.001
9/25/2019		<0.001		
10/8/2019	8.4E-05 (J)			
2/12/2020		<0.001	<0.001	<0.001
3/17/2020	<0.001			
3/24/2020			<0.001	<0.001
3/25/2020		<0.001		
8/27/2020	<0.001			
9/22/2020		<0.001	<0.001	<0.001

Time Series

Constituent: Vanadium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	0.0055						
9/11/2007	0.004						
3/20/2008	<0.01						
8/27/2008	0.0029						
3/3/2009	<0.01						
9/9/2009							<0.01
11/18/2009	<0.01						<0.01
1/5/2010							<0.01
3/3/2010	<0.01						<0.01
9/7/2010							<0.01
9/8/2010	<0.01						
11/22/2010			<0.01		<0.01		
1/4/2011			<0.01		<0.01		
2/17/2011			<0.01		<0.01		
3/10/2011	<0.01						<0.01
3/11/2011			<0.01		<0.01		
3/28/2011			<0.01		<0.01		
9/7/2011			<0.01	<0.01	<0.01	<0.01	
9/8/2011	<0.01	<0.01					<0.01
3/4/2012					<0.01		
3/5/2012	<0.01	<0.01		<0.01		<0.01	<0.01
3/6/2012			<0.01				
9/5/2012		<0.01		<0.01		<0.01	<0.01
9/10/2012	<0.01				<0.01		
9/11/2012			<0.01				
2/5/2013		<0.01				<0.01	<0.01
2/6/2013	<0.01		<0.01	<0.01	<0.01		
8/12/2013	<0.01						
8/13/2013		<0.01	<0.01	<0.01			<0.01
8/14/2013					<0.01	<0.01	
2/4/2014		<0.01	<0.01		<0.01		<0.01
2/5/2014	<0.01			<0.01		<0.01	
8/4/2014				<0.01	<0.01	0.0022 (J)	
8/5/2014	<0.01	0.0011 (J)	<0.01				0.0015 (J)
2/2/2015		0.0051	<0.01		<0.01		
2/3/2015				<0.01		<0.01	0.00093 (J)
2/4/2015	<0.01						
8/3/2015	0.0013 (J)			<0.01 (D)	<0.01 (D)	0.0019 (JD)	
8/4/2015		<0.01 (D)	<0.01				0.0036 (J)
2/16/2016	<0.01	0.00075 (J)		<0.01	<0.01	0.0011 (J)	0.0011 (J)
2/17/2016			<0.01				
2/22/2017	<0.01		<0.01				
2/23/2017		<0.01		<0.01			<0.01
2/24/2017					<0.01	<0.01	
5/8/2017	<0.01						
5/9/2017		<0.01		<0.01			
5/10/2017			<0.01		<0.01	<0.01	<0.01
7/17/2017	<0.01					<0.01	
7/18/2017		<0.01	<0.01	<0.01	<0.01		<0.01
2/19/2018	<0.01						<0.01
2/20/2018			<0.01		<0.01		
2/21/2018		<0.01		<0.01		<0.01	

Time Series

Constituent: Vanadium (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/6/2018	<0.01						0.0029 (J)
8/7/2018		<0.01		<0.01		<0.01	
8/8/2018			<0.01		<0.01		
2/25/2019	<0.01						<0.01
2/26/2019		<0.01	<0.01	<0.01	<0.01	<0.01	
6/12/2019	0.0032 (J)		0.00079 (J)		0.00088 (J)		
6/13/2019		<0.01		0.0021 (J)		<0.01	<0.01
10/8/2019	<0.01						<0.01
10/9/2019		<0.01	<0.01			<0.01	
10/10/2019				0.0011 (J)	<0.01		
3/17/2020	<0.01	<0.01		<0.01			0.00098 (J)
3/18/2020			<0.01		<0.01	<0.01	
9/22/2020	<0.01	<0.01	<0.01	<0.01	<0.01		
9/23/2020						<0.01	<0.01

Time Series

Constituent: Zinc (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	0.01						
9/20/1999	0.017						
9/12/2001	0.017						
9/3/2002	0.015						
7/29/2003	0.022						
12/5/2003	0.0087						
9/22/2004	<0.01						
5/1/2007		0.0081					
9/11/2007		0.0049					
3/20/2008		0.004					
8/27/2008		0.0042					
3/3/2009		0.0058					
11/18/2009		0.0038					
3/3/2010		0.0085					
9/8/2010		0.0065					
11/22/2010				0.0047		<0.01	
1/4/2011				0.0038		<0.01	
2/17/2011				0.0074		<0.01	
3/10/2011		0.0029					
3/11/2011				0.0038		0.025 (o)	
3/28/2011				<0.01		<0.01	
9/7/2011				0.0059	0.0064	<0.01	0.0064
9/8/2011		0.004	0.0048				
3/4/2012						<0.01	
3/5/2012		0.0059	0.0038		0.0043		0.0034
3/6/2012				0.0032			
9/5/2012			0.0051		0.0069		0.0035
9/10/2012		0.0052				<0.01	
9/11/2012				0.0029			
2/5/2013			<0.01				0.0027
2/6/2013		0.0038		0.0036	<0.01	<0.01	
8/12/2013		0.0075					
8/13/2013			<0.01	0.0066	0.011		
8/14/2013						<0.01	0.0041
2/4/2014			0.0037	0.011		0.0034	
2/5/2014		0.018 (o)			0.026 (o)		0.011
8/4/2014					0.012	0.0013 (J)	0.011
8/5/2014		0.0037	0.0019 (J)	0.0032			
2/2/2015			0.0051	0.0031		<0.01	
2/3/2015					0.0061		0.0044
2/4/2015		0.0057					
8/3/2015		0.0043			0.0037 (D)	<0.01 (D)	0.011 (D)
8/4/2015			0.0017 (JD)	0.0017 (J)			
2/16/2016		0.0024 (J)	0.0015 (J)		0.0093	0.0017 (J)	0.014
2/17/2016				0.0034			
2/22/2017		0.0042 (J)		0.0024 (J)			
2/23/2017			0.0024 (J)		0.0031 (J)		
2/24/2017						0.0028 (J)	0.0043 (J)
5/8/2017		0.0025 (J)					
5/9/2017			0.0016 (J)		0.0025 (J)		
5/10/2017				0.0022 (J)		0.0014 (J)	0.0042 (J)
7/17/2017		0.0032 (J)					0.0055 (J)

Time Series

Constituent: Zinc (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
7/18/2017			0.0015 (J)	0.0017 (J)	0.0028 (J)	0.0015 (J)	
2/19/2018		<0.01					
2/20/2018				<0.01		<0.01	
2/21/2018			<0.01		0.003 (J)		0.0102
8/6/2018		0.0037 (J)					
8/7/2018			0.0044 (J)		0.0036 (J)		0.015
8/8/2018				0.0021 (J)		0.0033 (J)	
2/25/2019		0.013					
2/26/2019			0.0022 (J)	0.003 (J)	0.0033 (J)	<0.01	0.015
6/12/2019		<0.01		0.0019 (J)		<0.01	
6/13/2019			<0.01		0.0069 (J)		0.015
10/8/2019		0.0078 (J)					
10/9/2019			0.0078 (J)	0.0069 (J)			0.025
10/10/2019					0.0079 (J)	0.006 (J)	
1/21/2020							0.015
3/17/2020		<0.01	<0.01		<0.01		
3/18/2020				<0.01		<0.01	0.023
9/22/2020		0.033	0.0029 (J)	0.003 (J)	0.0036 (J)	<0.01	
9/23/2020							0.018

Time Series

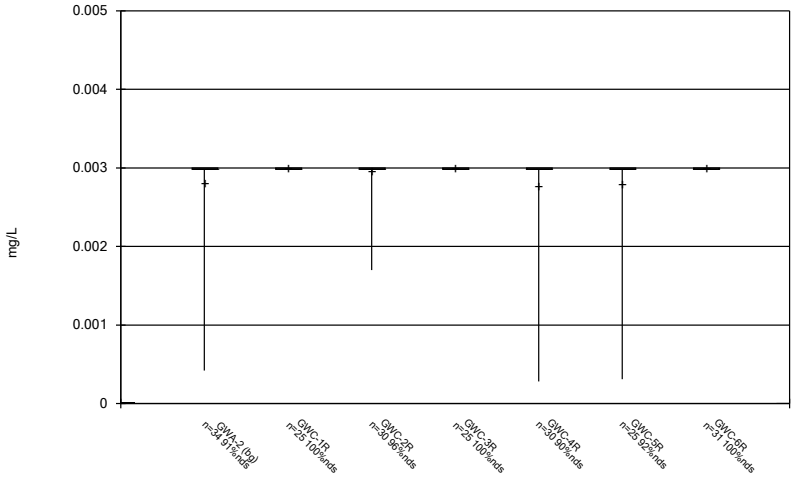
Constituent: Zinc (mg/L) Analysis Run 12/2/2020 9:23 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R
9/9/2009	0.003
11/18/2009	<0.01
1/5/2010	0.0027
3/3/2010	<0.01
9/7/2010	<0.01
3/10/2011	<0.01
9/8/2011	<0.01
3/5/2012	0.0053
9/5/2012	0.0033
2/5/2013	<0.01
8/13/2013	0.0038
2/4/2014	0.0046
8/5/2014	0.0019 (J)
2/3/2015	0.0026
8/4/2015	0.0035
2/16/2016	0.002 (J)
2/23/2017	0.0038 (J)
5/10/2017	0.0027 (J)
7/18/2017	0.0024 (J)
2/19/2018	<0.01
8/6/2018	0.004 (J)
2/25/2019	0.0028 (J)
6/13/2019	<0.01
10/8/2019	0.006 (J)
3/17/2020	<0.01
9/23/2020	<0.01

FIGURE B.

Box & Whiskers Plot

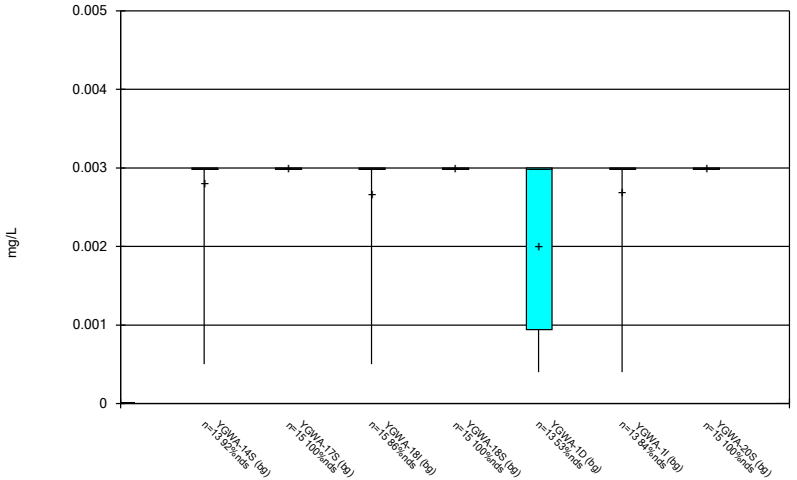


Constituent: Antimony Analysis Run 12/2/2020 9:26 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

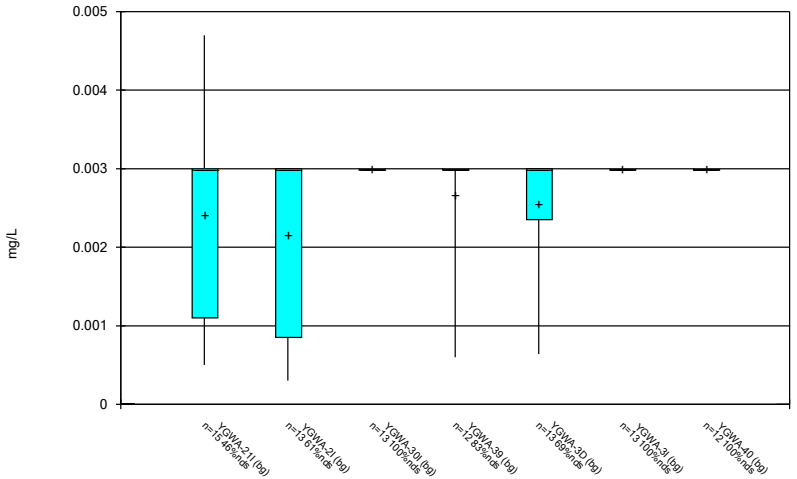


Constituent: Antimony Analysis Run 12/2/2020 9:26 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

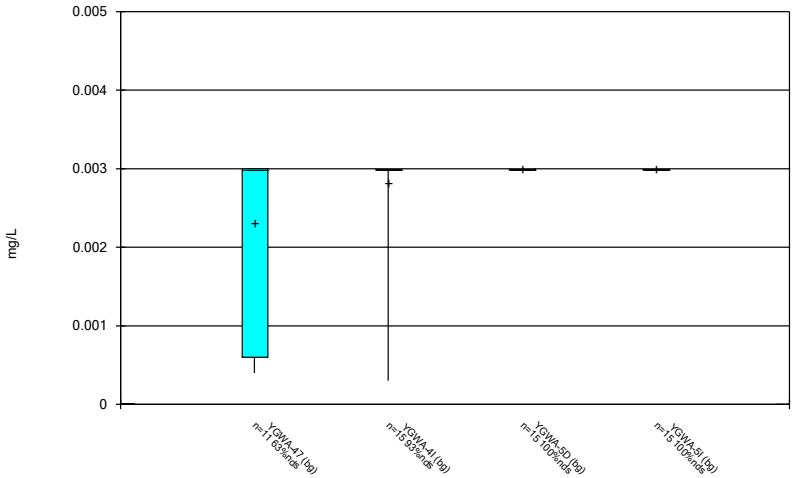


Constituent: Antimony Analysis Run 12/2/2020 9:26 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

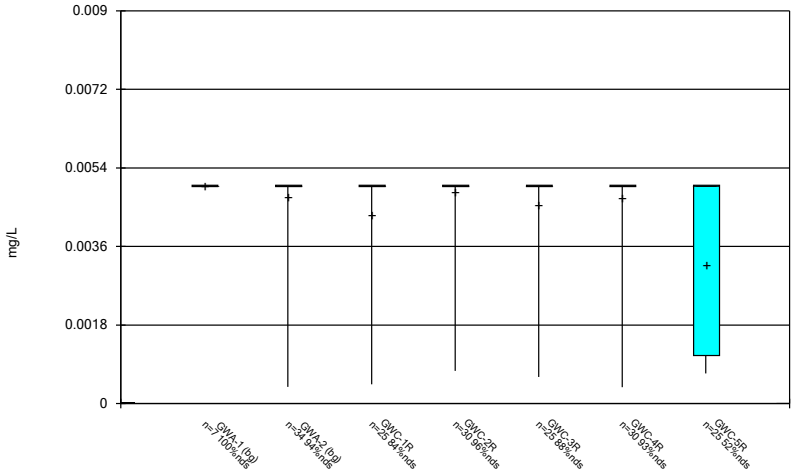
Box & Whiskers Plot



Constituent: Antimony Analysis Run 12/2/2020 9:26 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

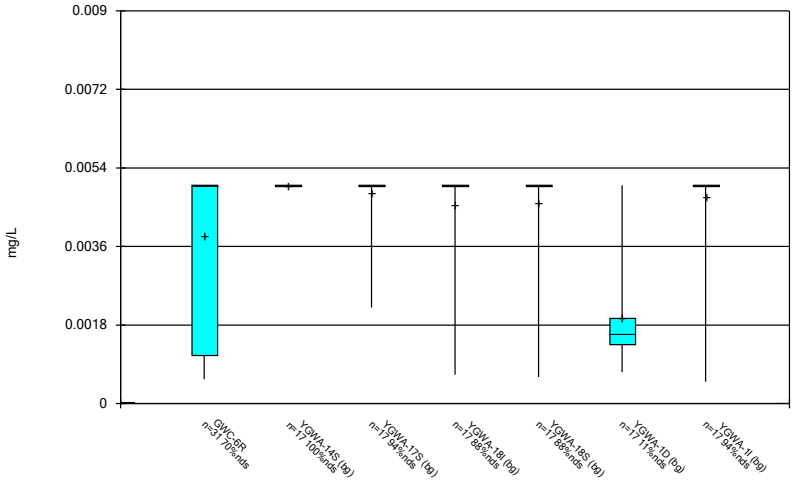


Constituent: Arsenic Analysis Run 12/2/2020 9:26 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

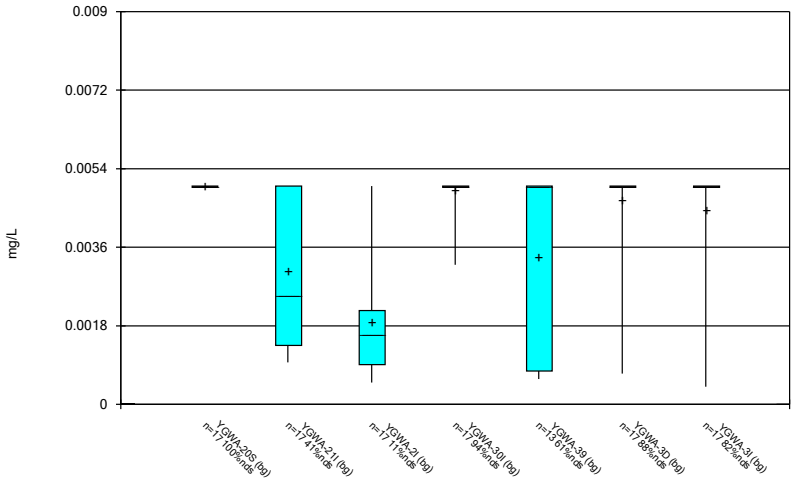


Constituent: Arsenic Analysis Run 12/2/2020 9:26 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

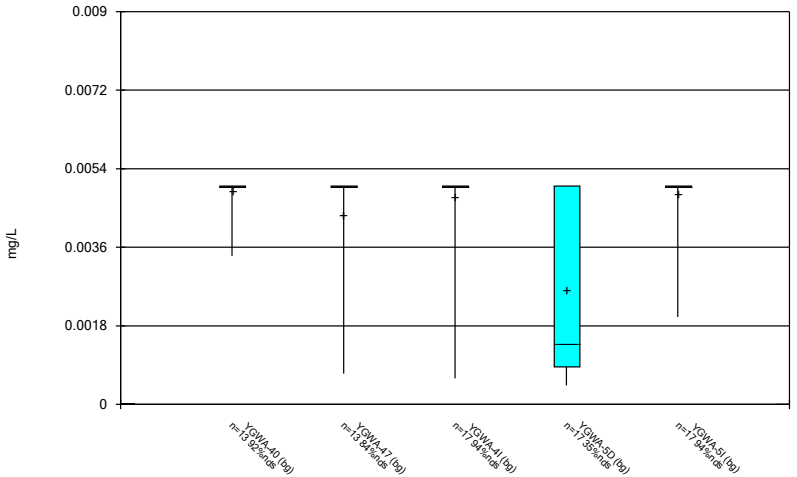


Constituent: Arsenic Analysis Run 12/2/2020 9:26 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

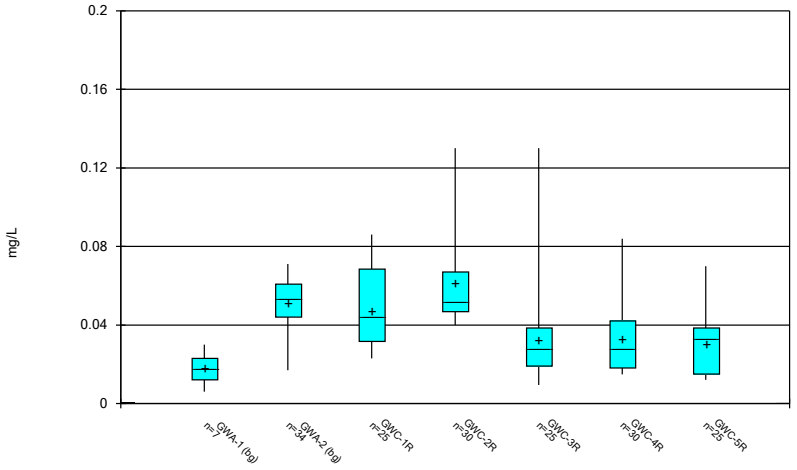
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

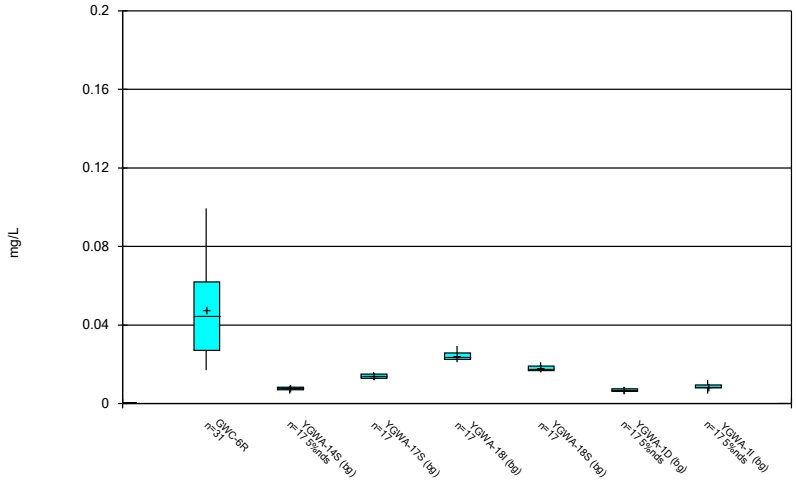


Constituent: Barium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

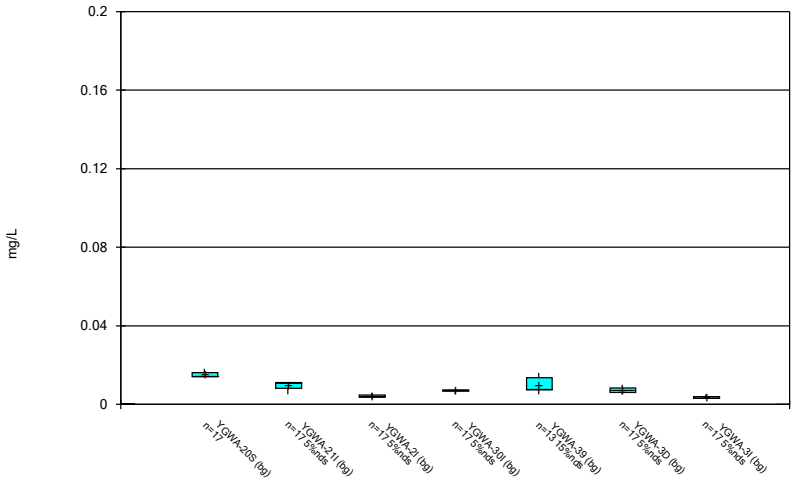


Constituent: Barium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

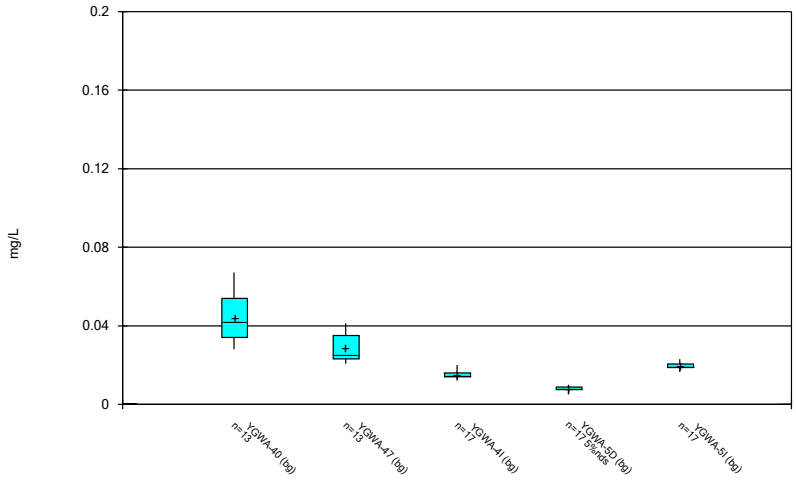


Constituent: Barium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

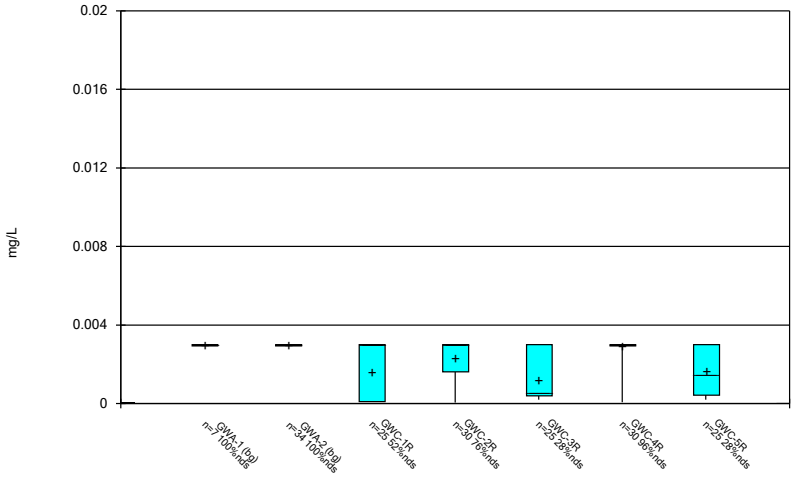


Constituent: Barium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

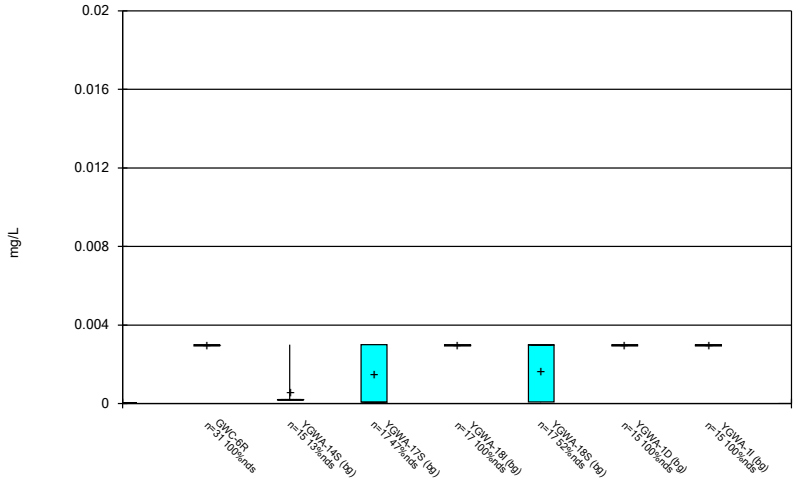


Constituent: Beryllium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

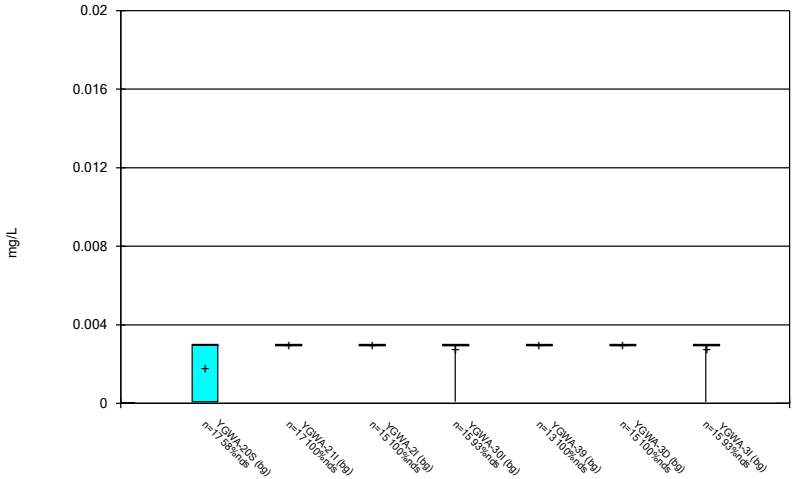


Constituent: Beryllium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

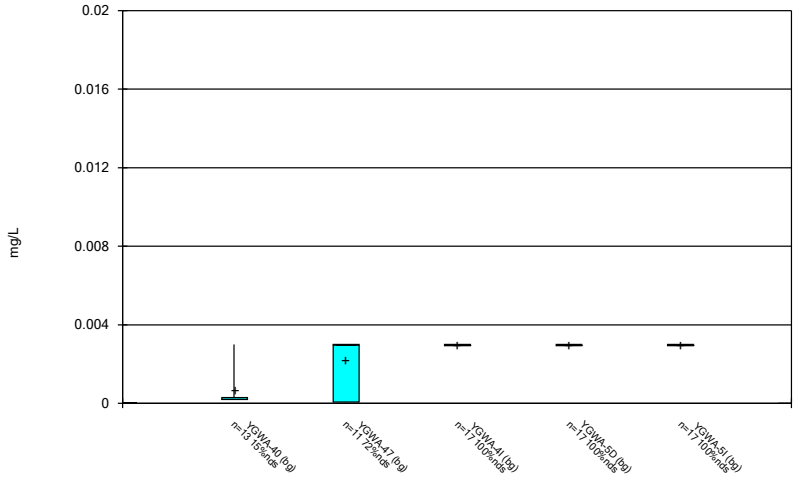


Constituent: Beryllium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

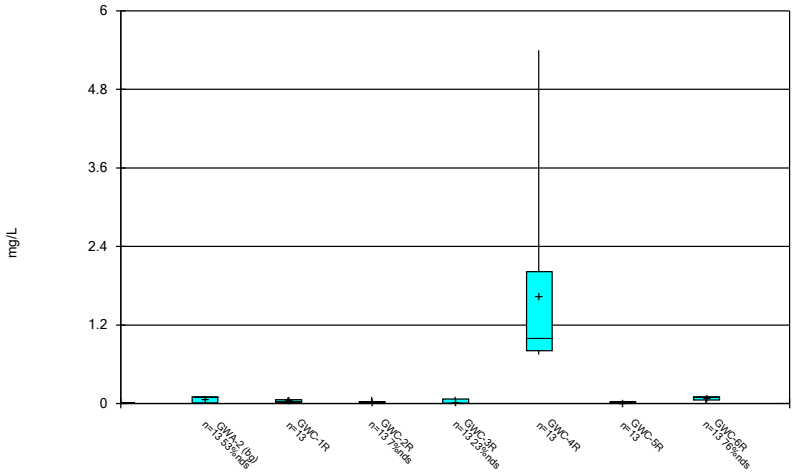
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

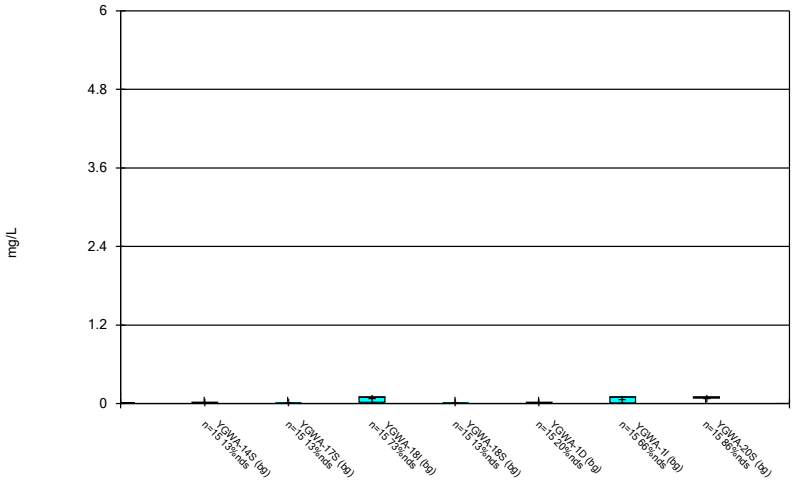


Constituent: Boron Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

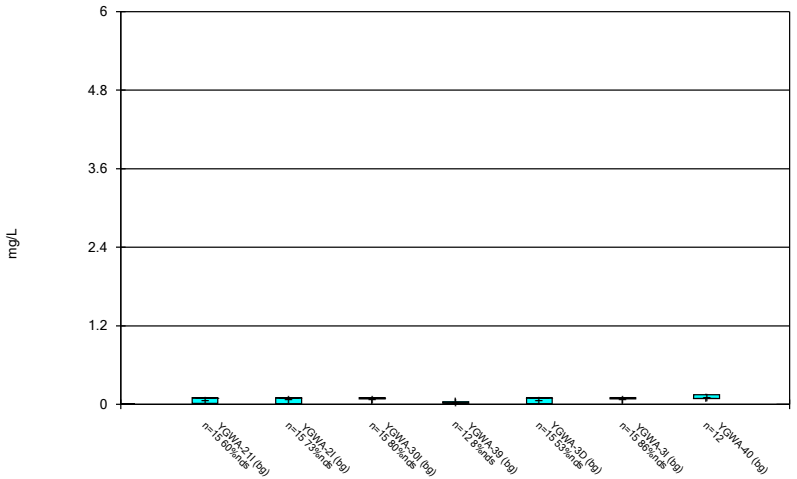


Constituent: Boron Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

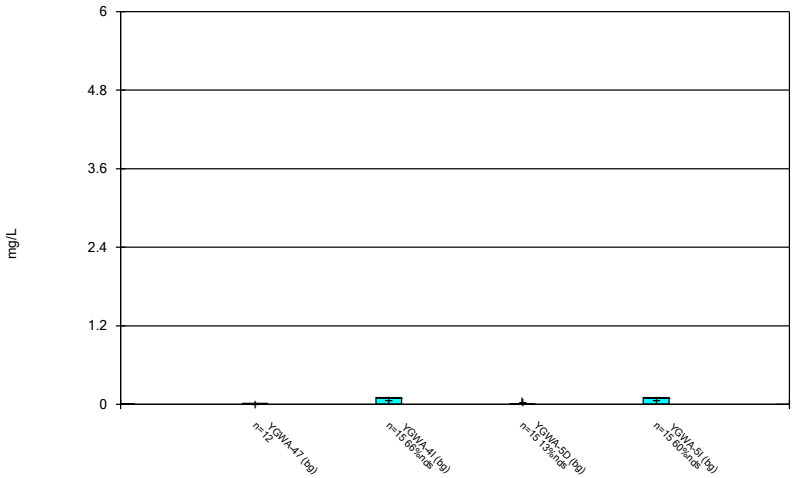


Constituent: Boron Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

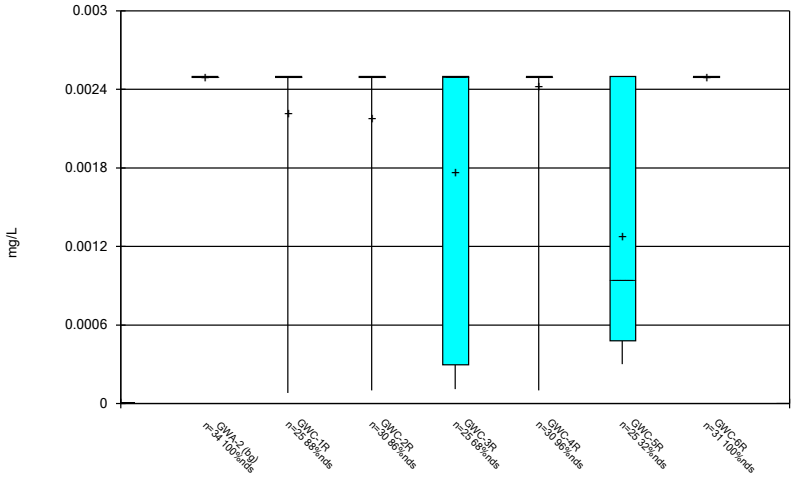
Box & Whiskers Plot



Constituent: Boron Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

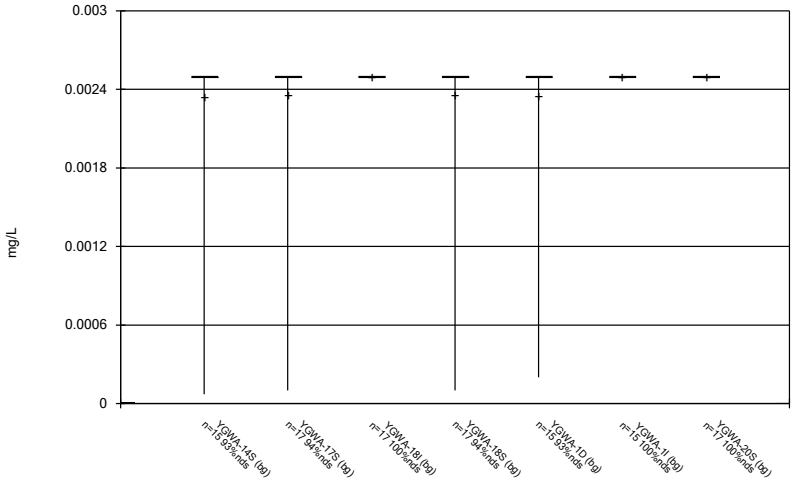


Constituent: Cadmium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

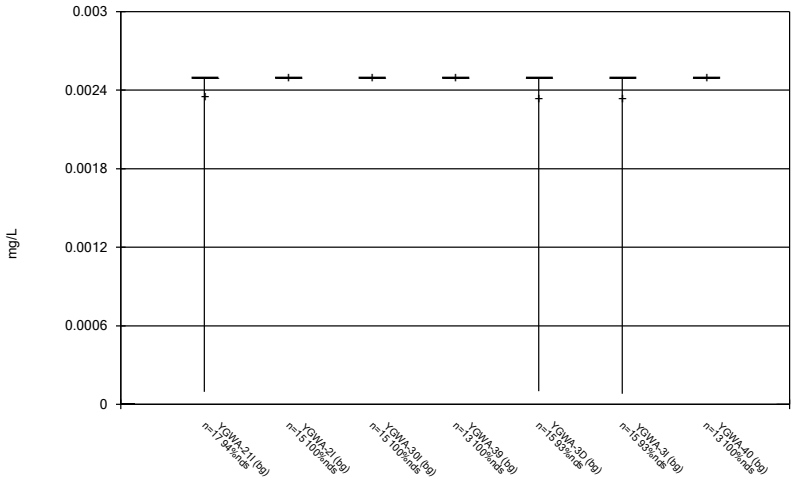


Constituent: Cadmium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

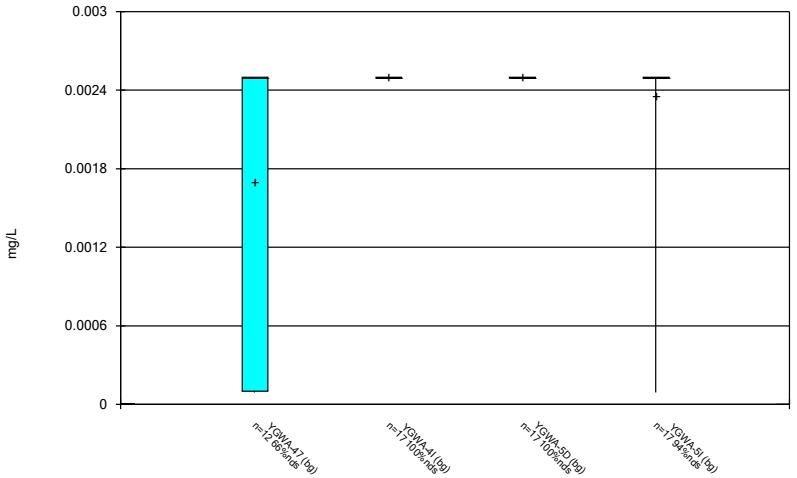


Constituent: Cadmium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

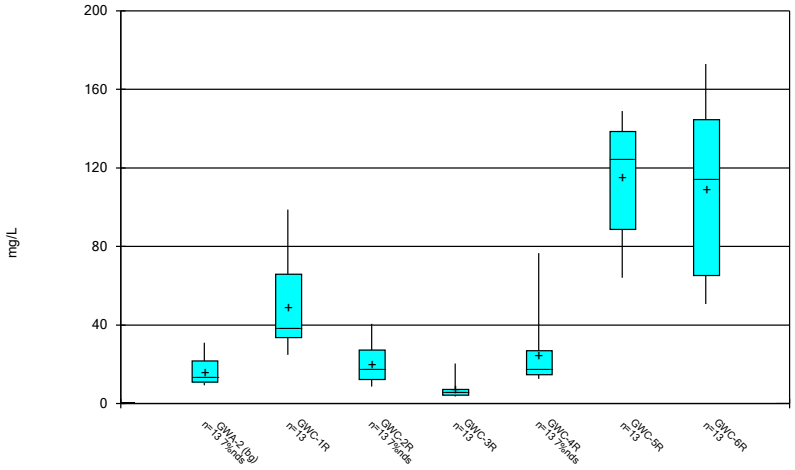
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

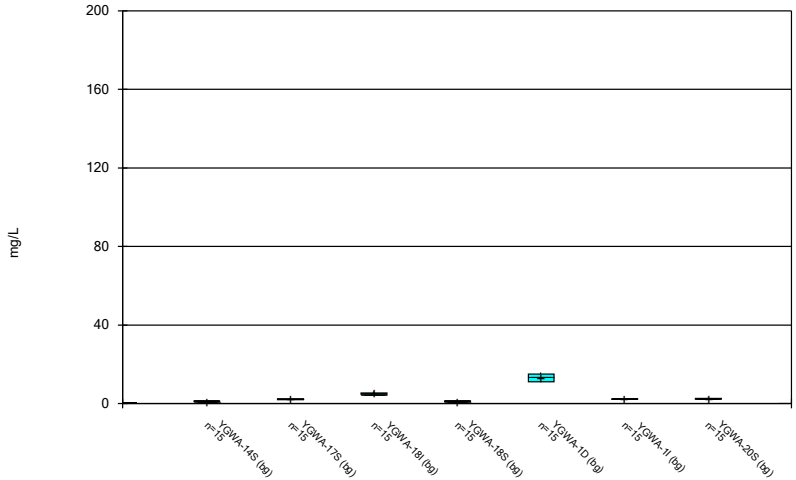


Constituent: Calcium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

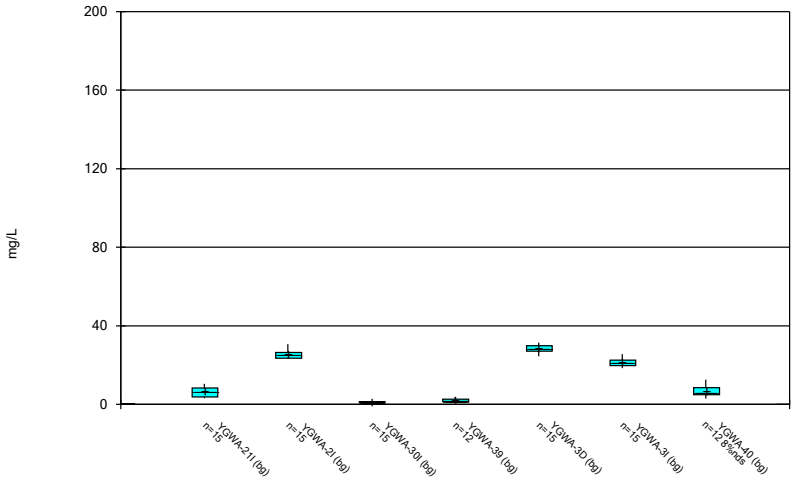


Constituent: Calcium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

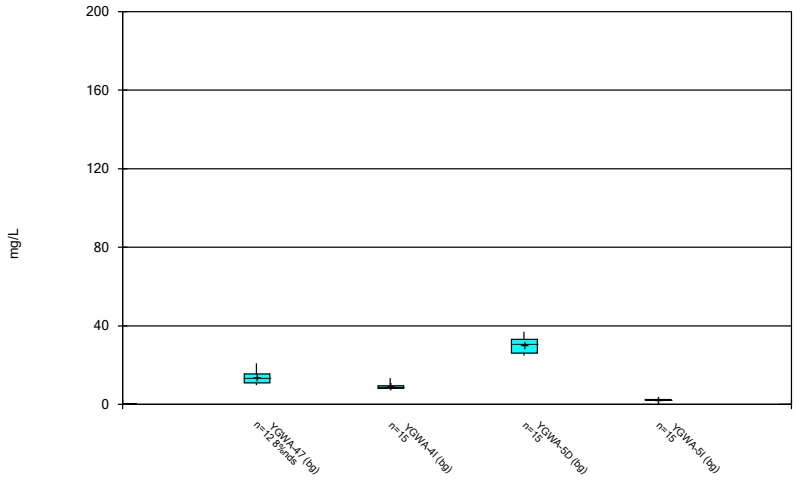


Constituent: Calcium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

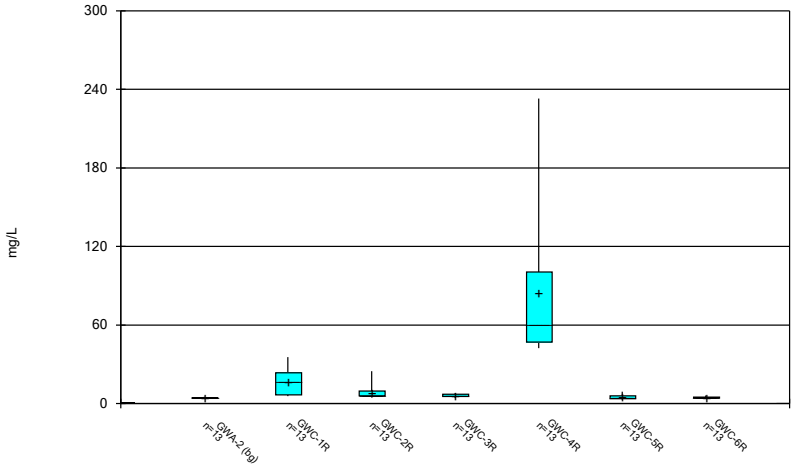
Box & Whiskers Plot



Constituent: Calcium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

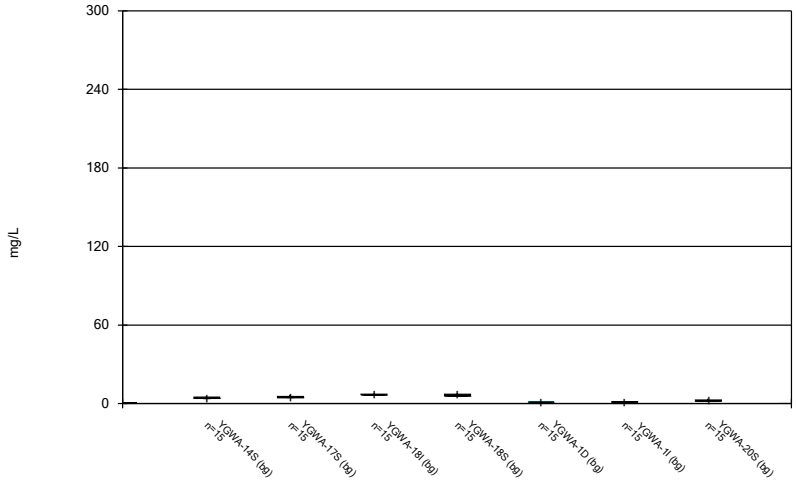


Constituent: Chloride Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

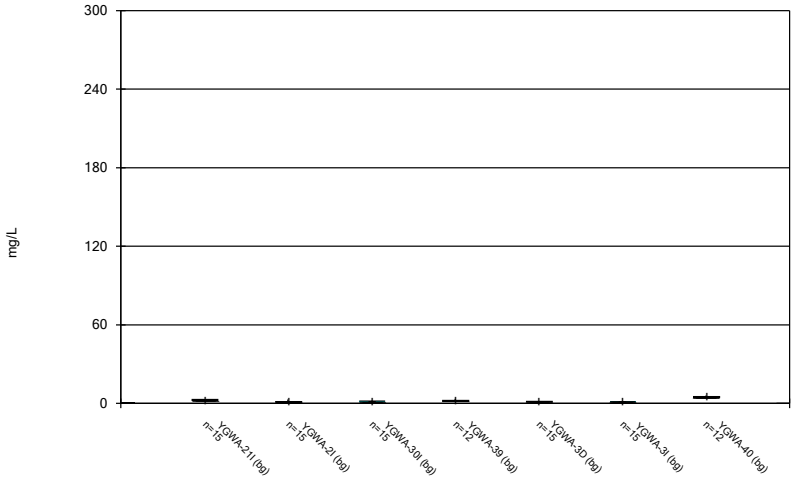


Constituent: Chloride Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

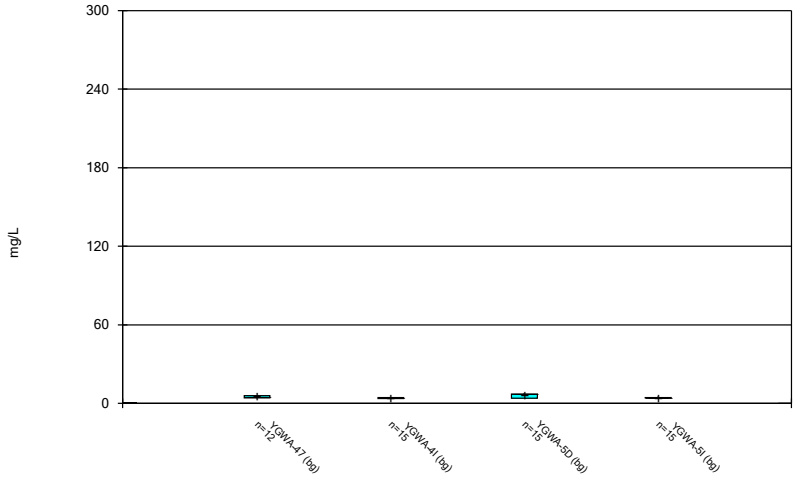


Constituent: Chloride Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

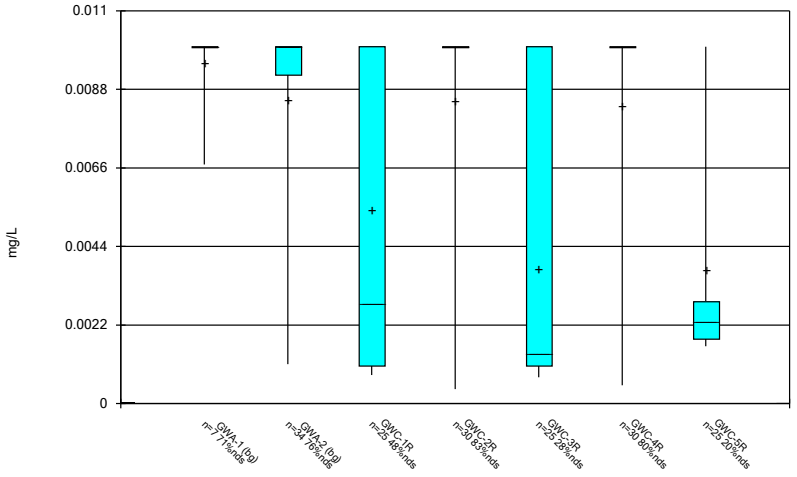
Box & Whiskers Plot



Constituent: Chloride Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

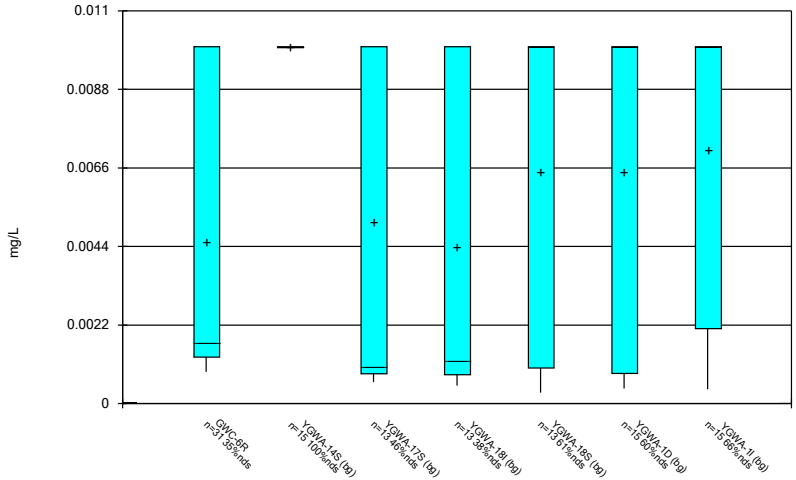


Constituent: Chromium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

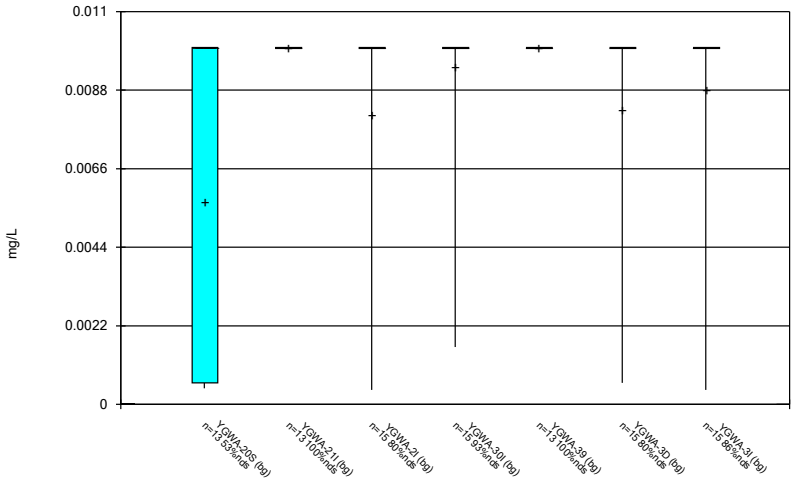


Constituent: Chromium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

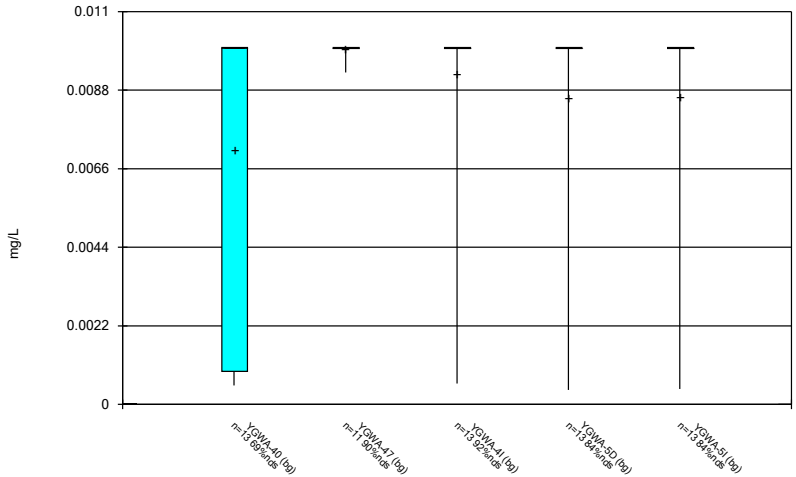


Constituent: Chromium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

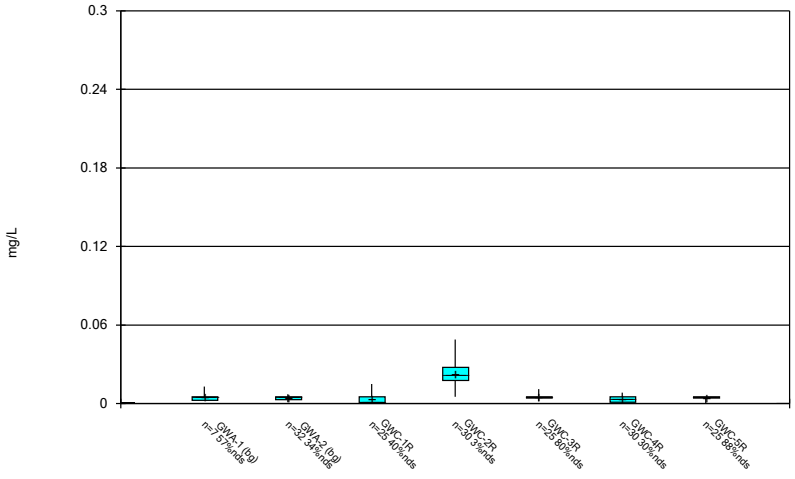
Box & Whiskers Plot



Constituent: Chromium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

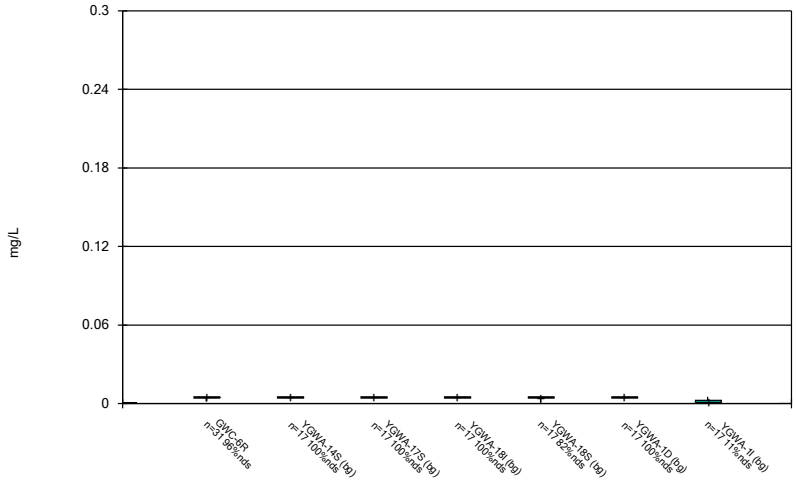


Constituent: Cobalt Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

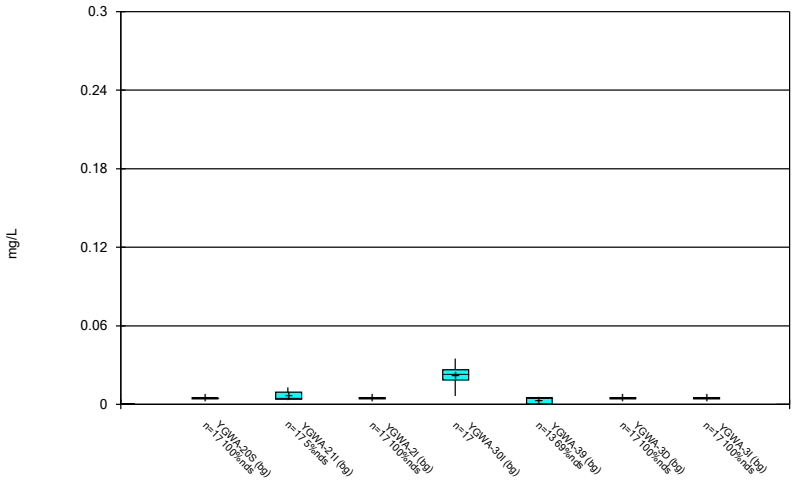


Constituent: Cobalt Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

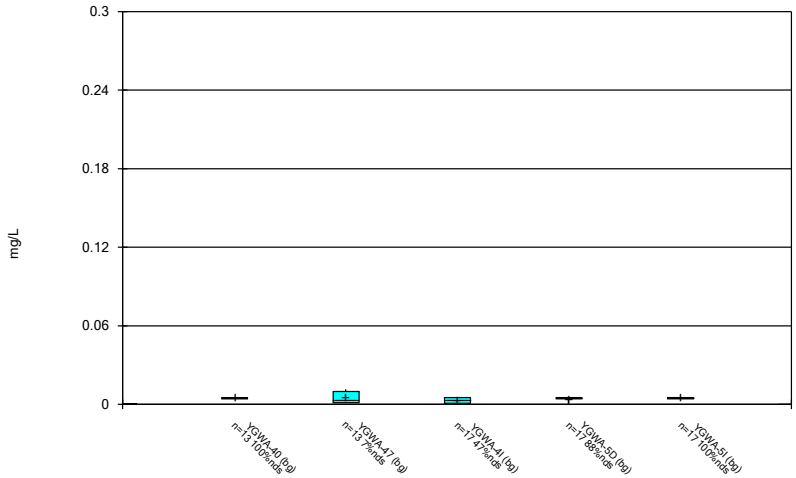


Constituent: Cobalt Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

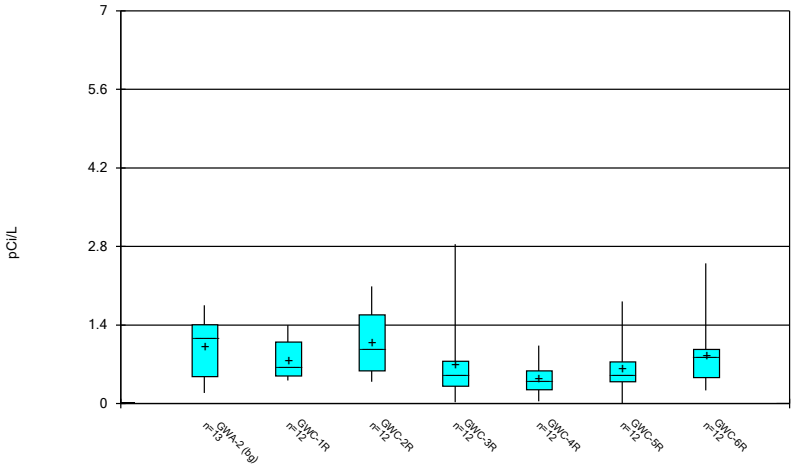
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

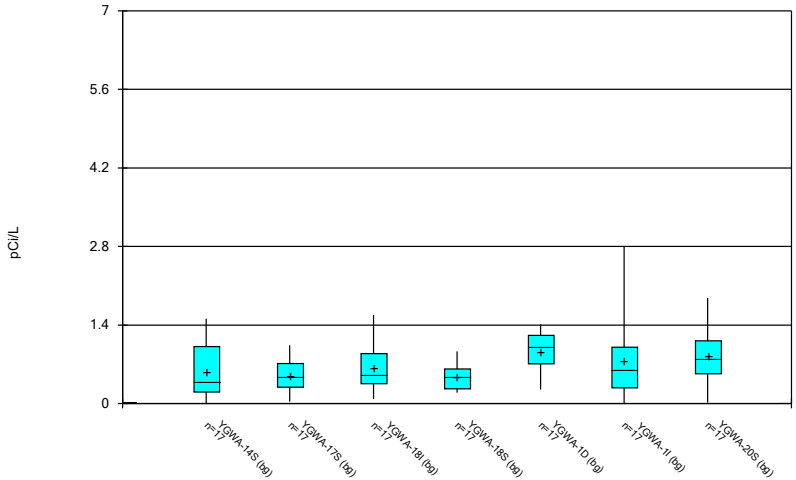
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:27 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

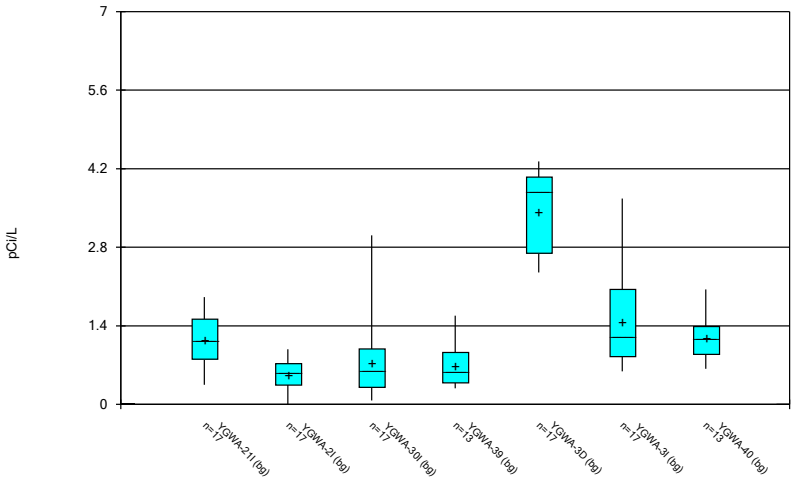
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:27 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

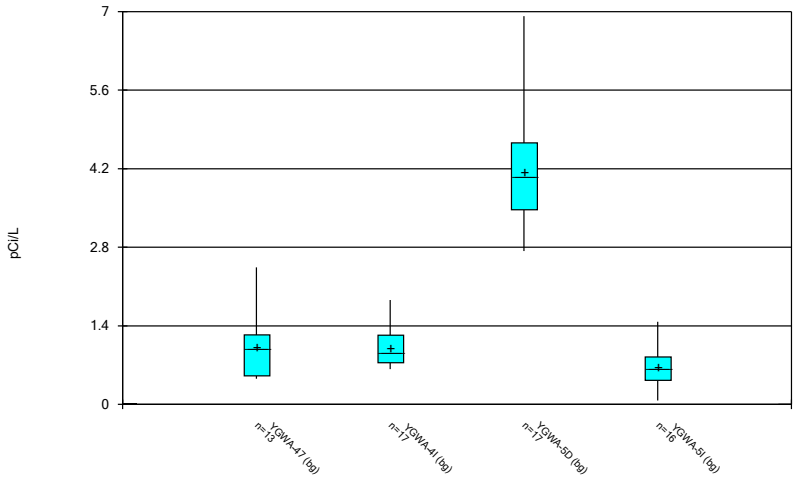
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:27 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

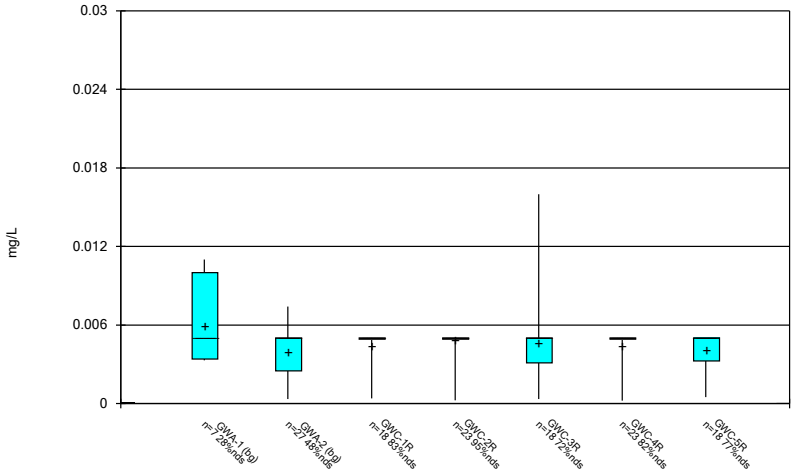
Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:27 AM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

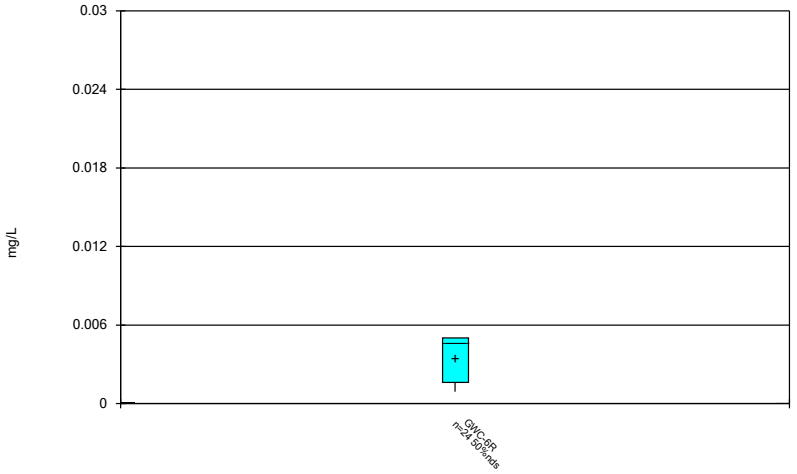


Constituent: Copper Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

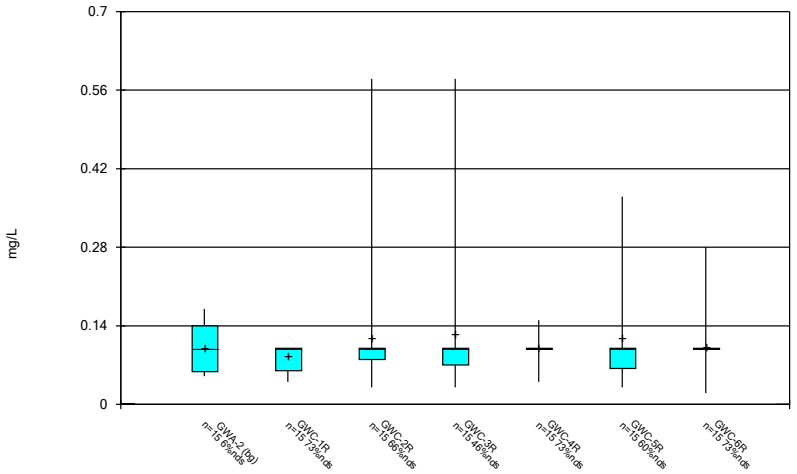


Constituent: Copper Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

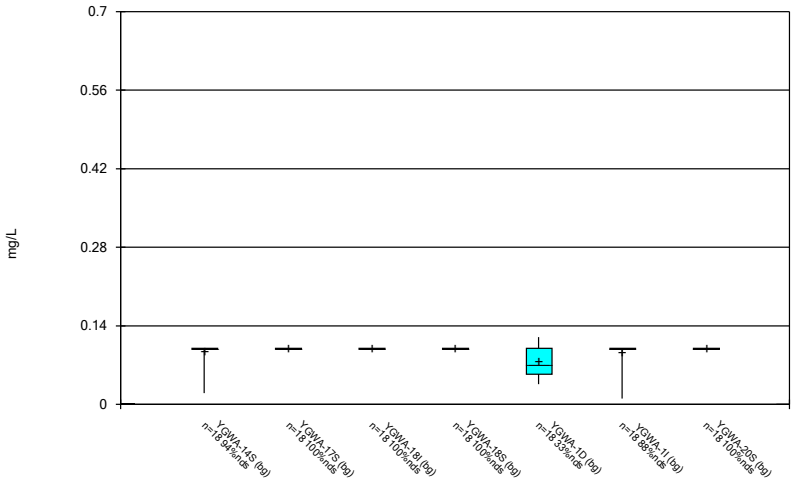


Constituent: Fluoride Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

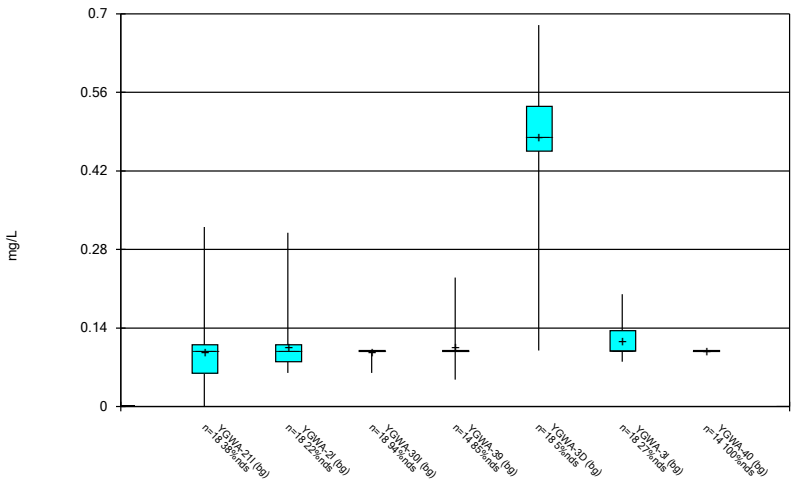
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

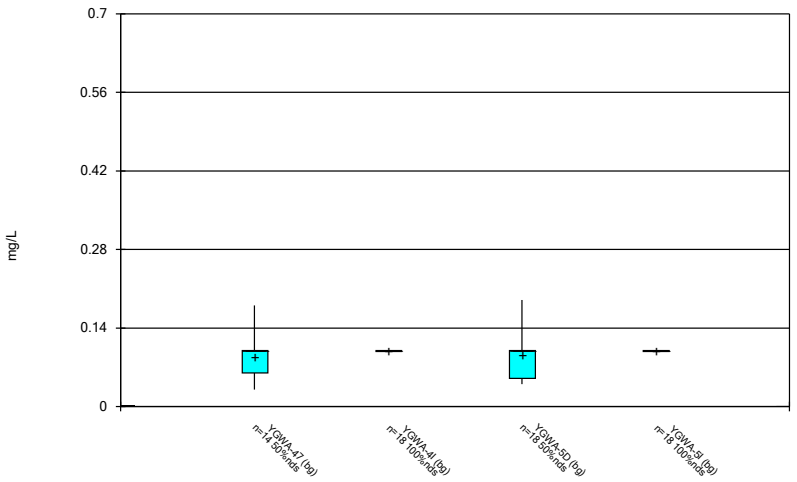


Constituent: Fluoride Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

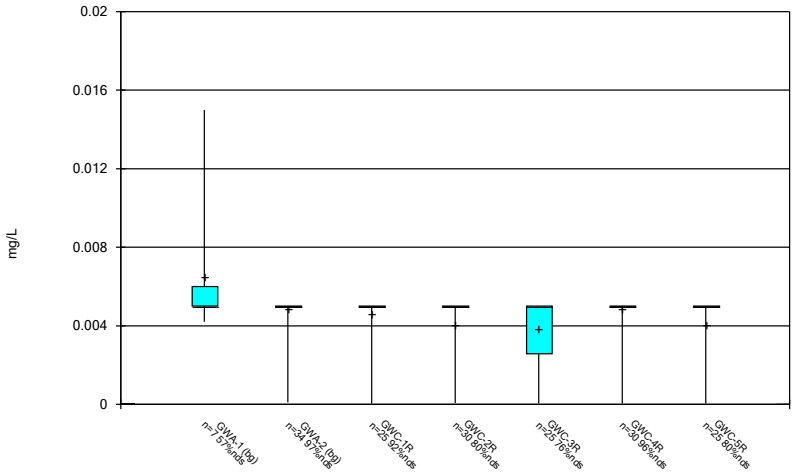


Constituent: Fluoride Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

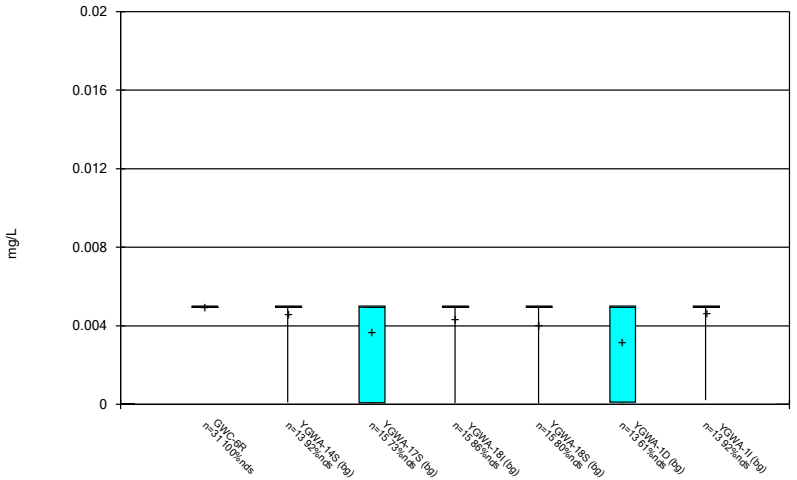


Constituent: Lead Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

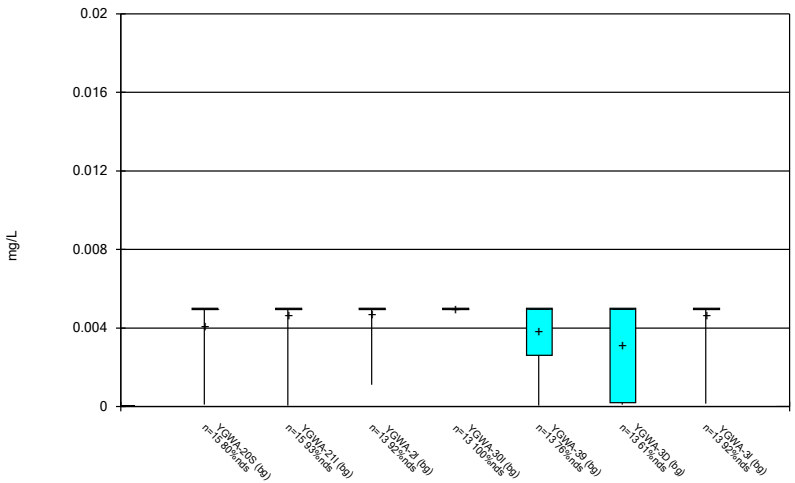
Box & Whiskers Plot



Constituent: Lead Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

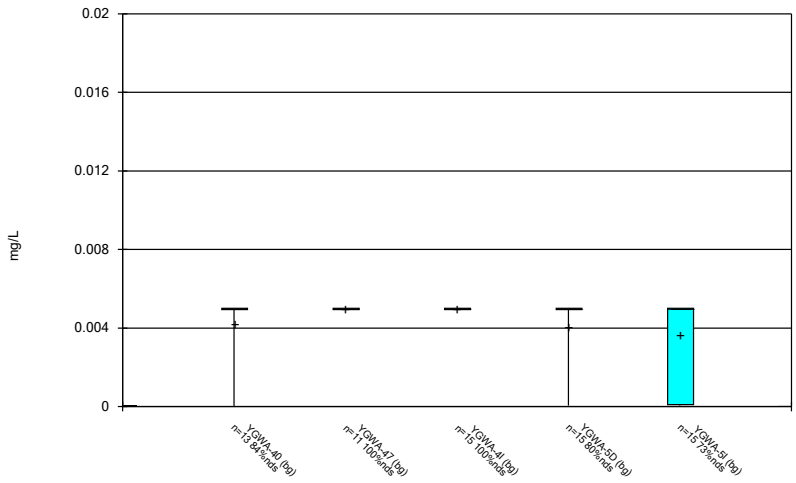


Constituent: Lead Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

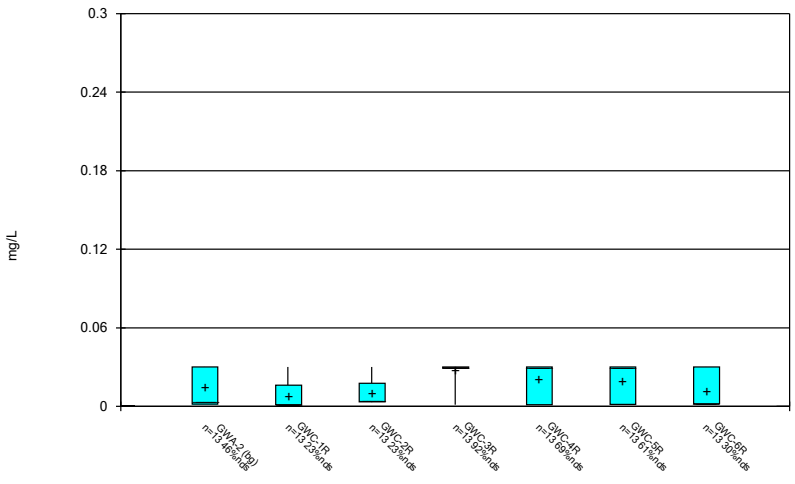


Constituent: Lead Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

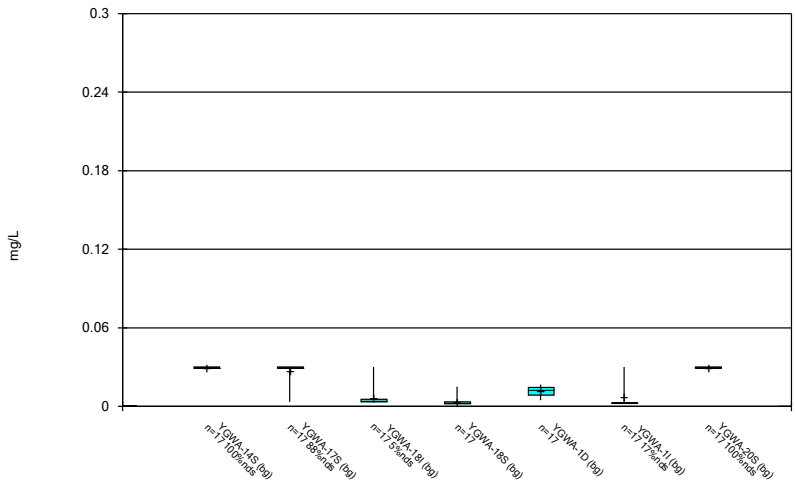


Constituent: Lithium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

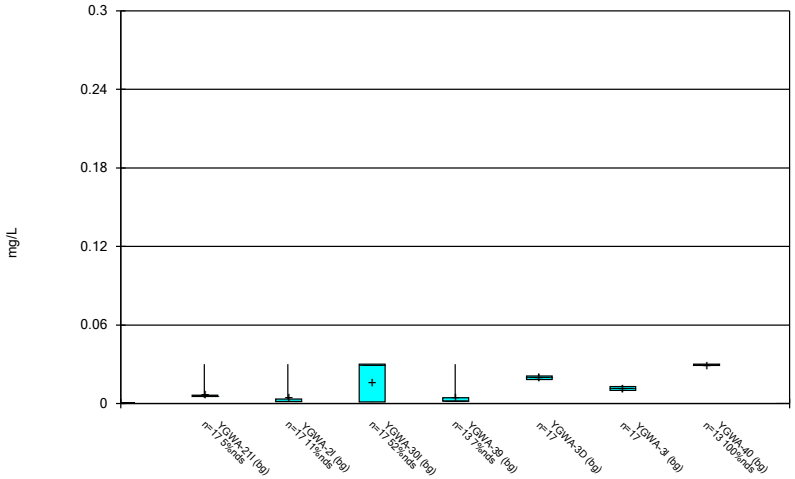
Box & Whiskers Plot



Constituent: Lithium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

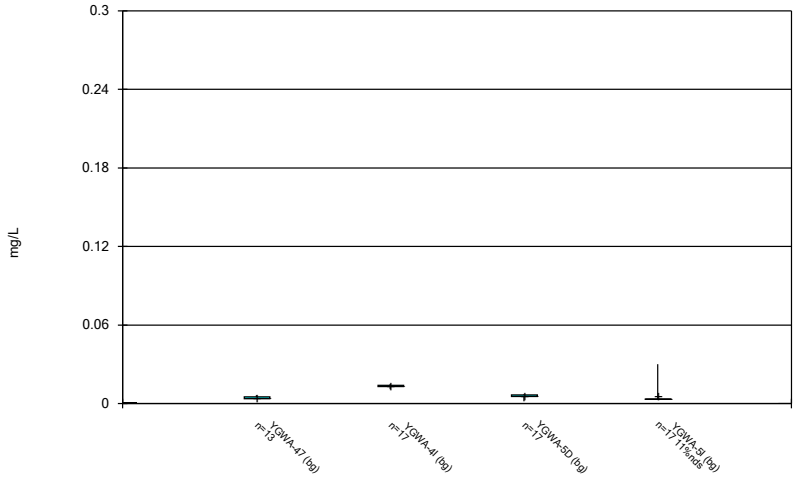


Constituent: Lithium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

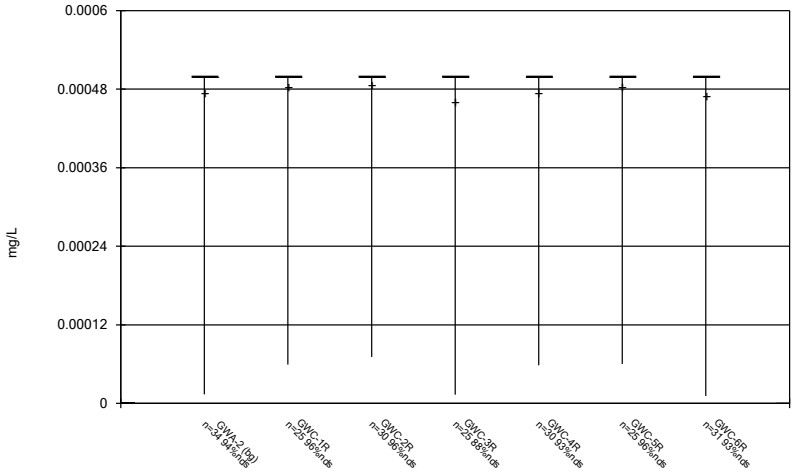


Constituent: Lithium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

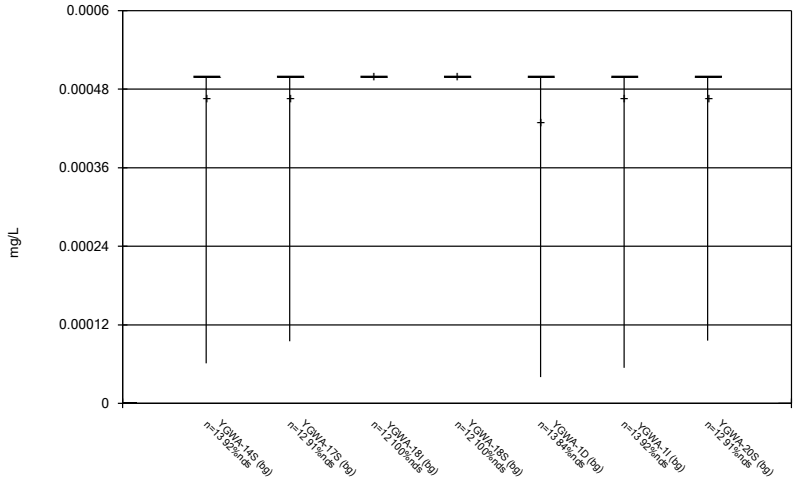


Constituent: Mercury Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

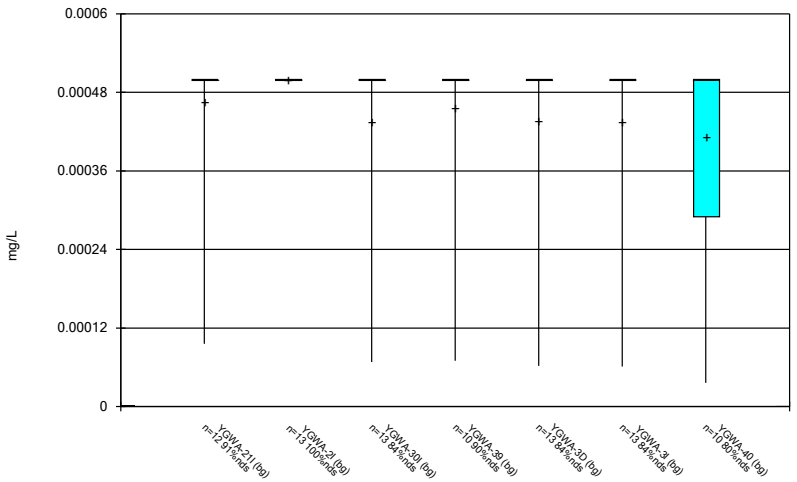
Box & Whiskers Plot



Constituent: Mercury Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

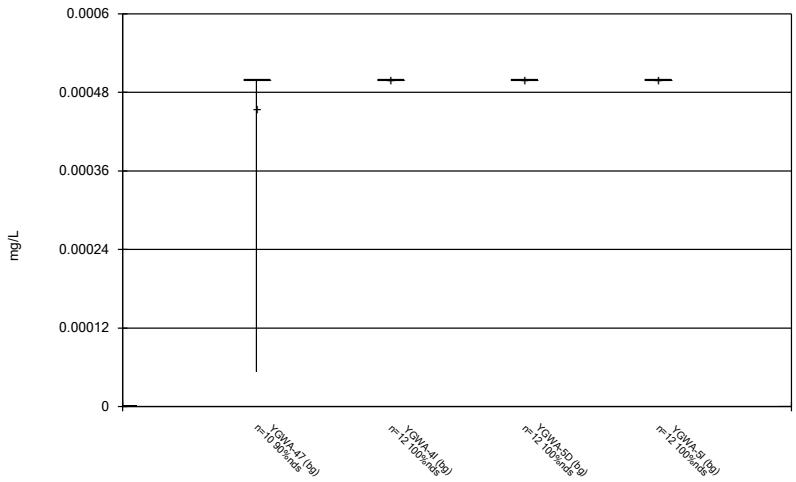


Constituent: Mercury Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

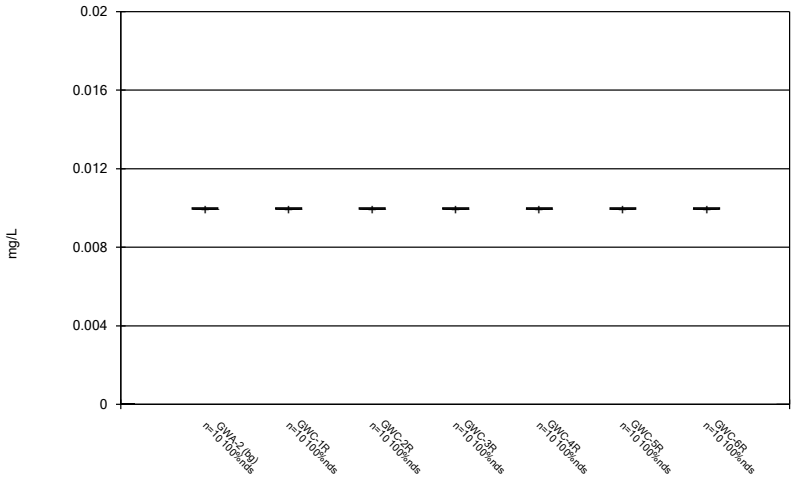


Constituent: Mercury Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

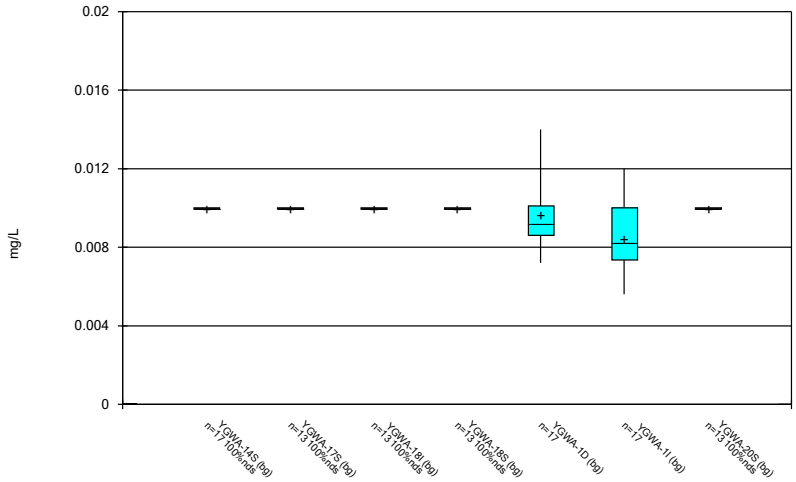


Constituent: Molybdenum Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

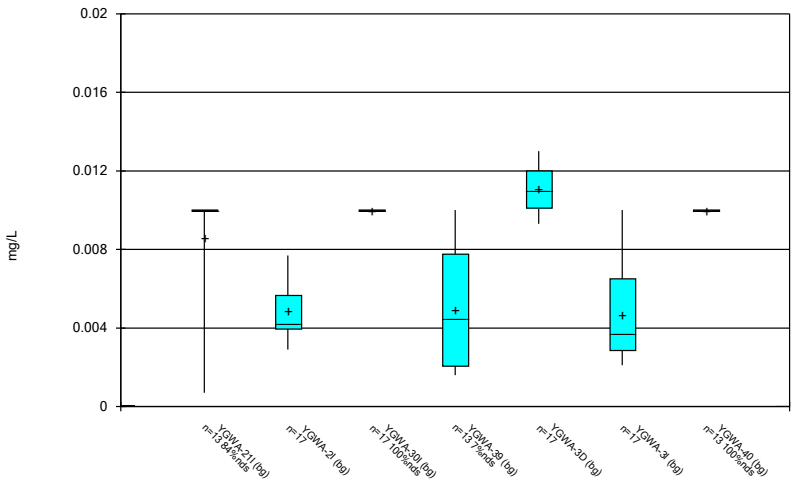
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

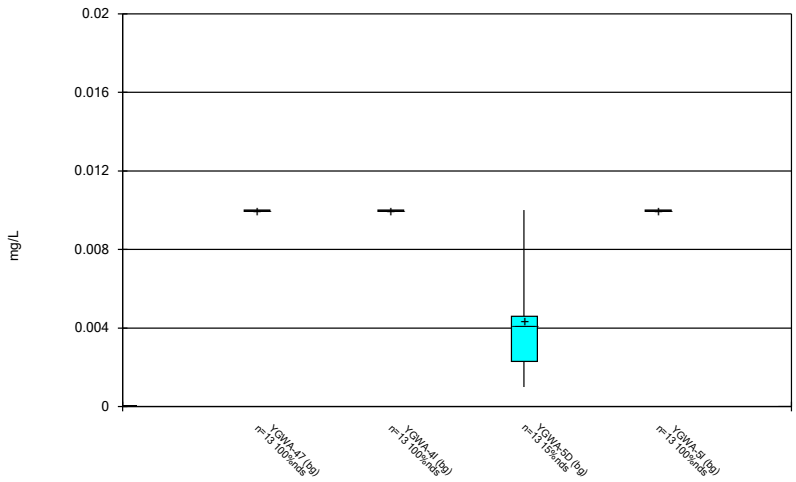


Constituent: Molybdenum Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

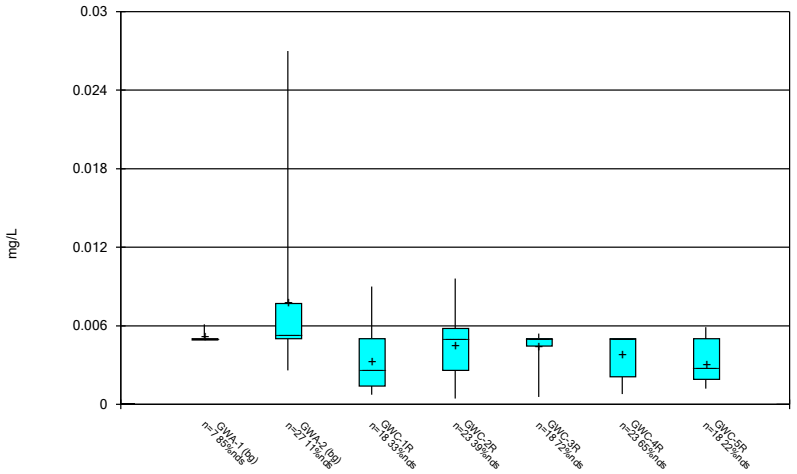


Constituent: Molybdenum Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

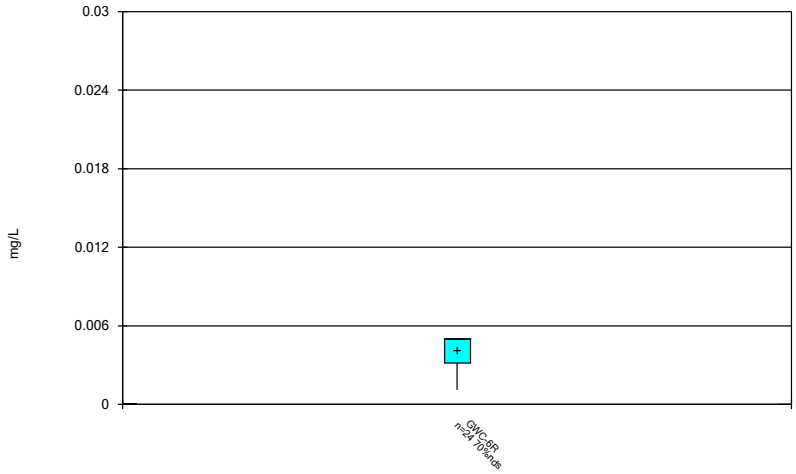


Constituent: Nickel Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

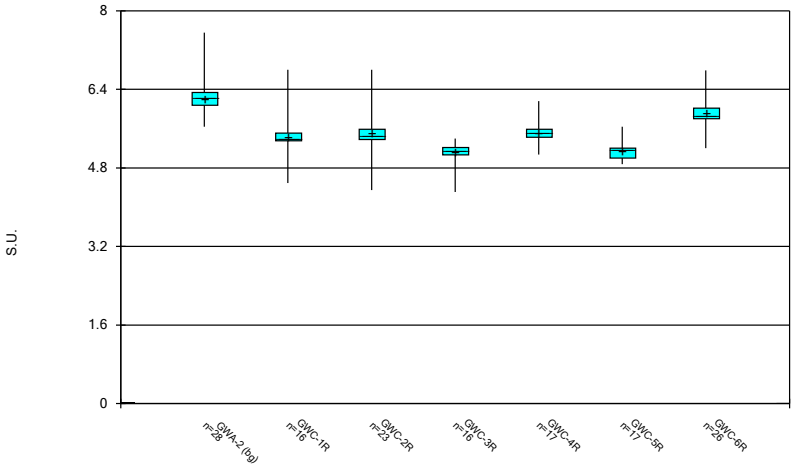


Constituent: Nickel Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

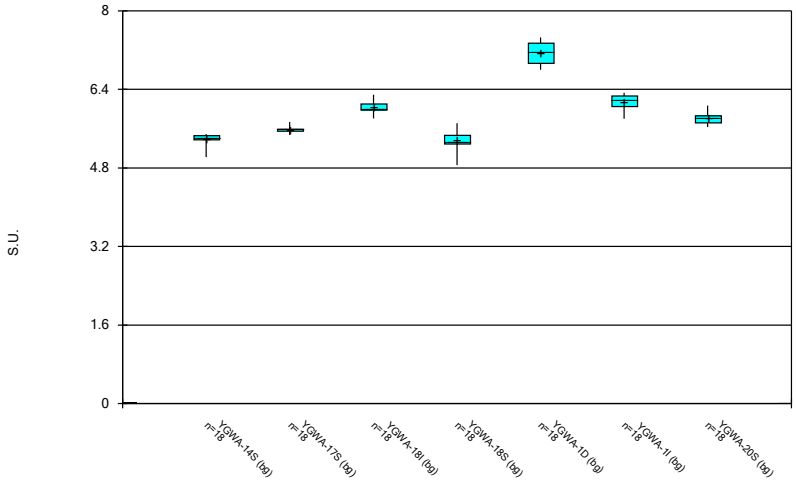


Constituent: pH Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

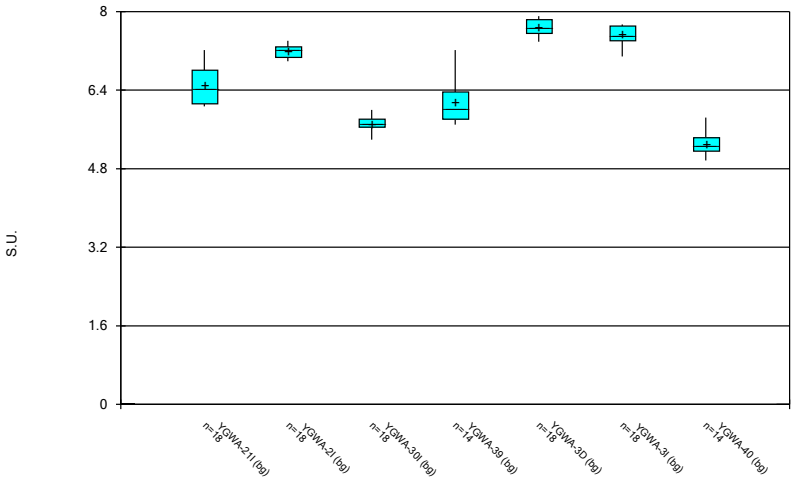


Constituent: pH Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

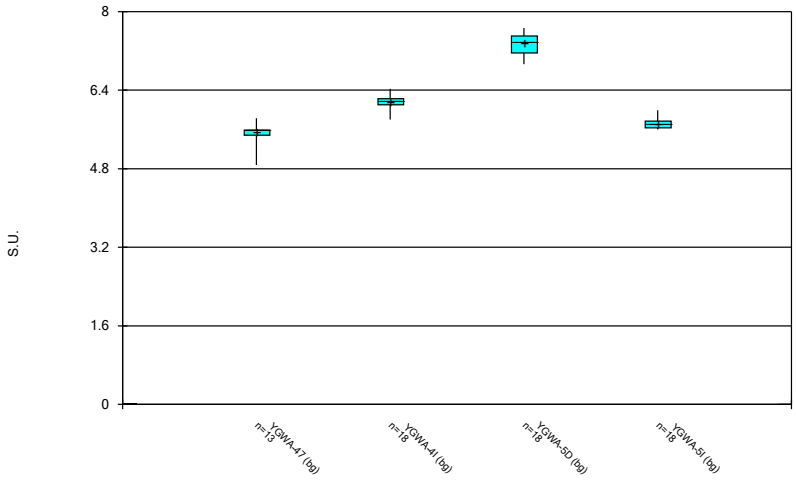


Constituent: pH Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

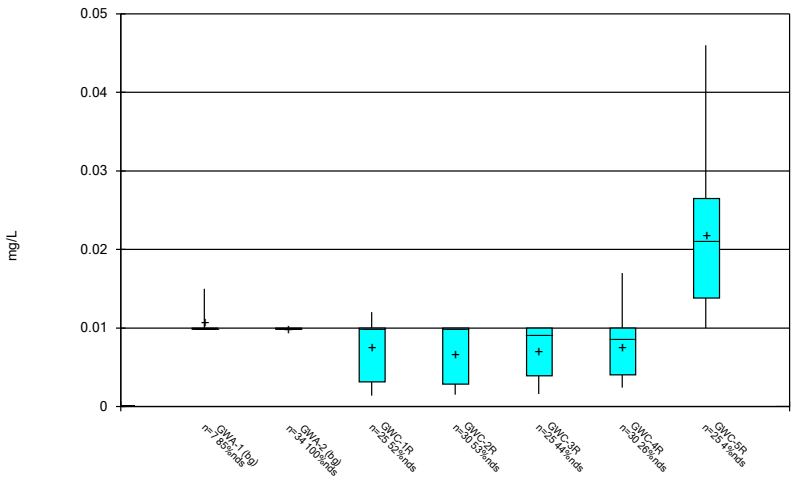
Box & Whiskers Plot



Constituent: pH Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

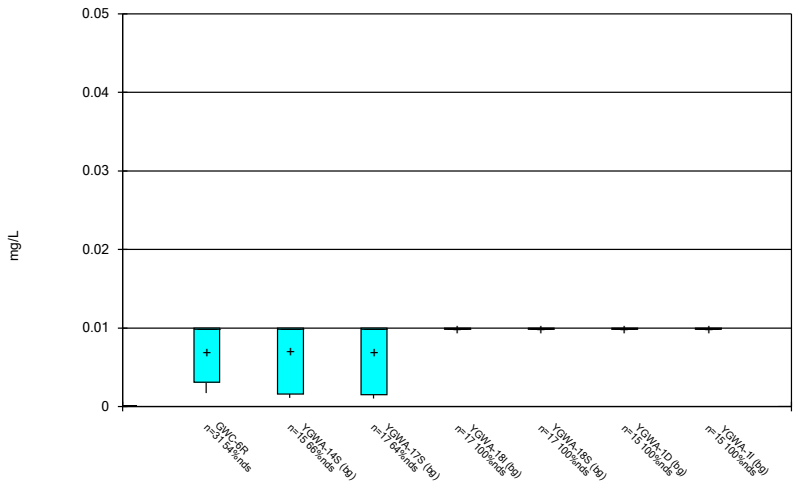


Constituent: Selenium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

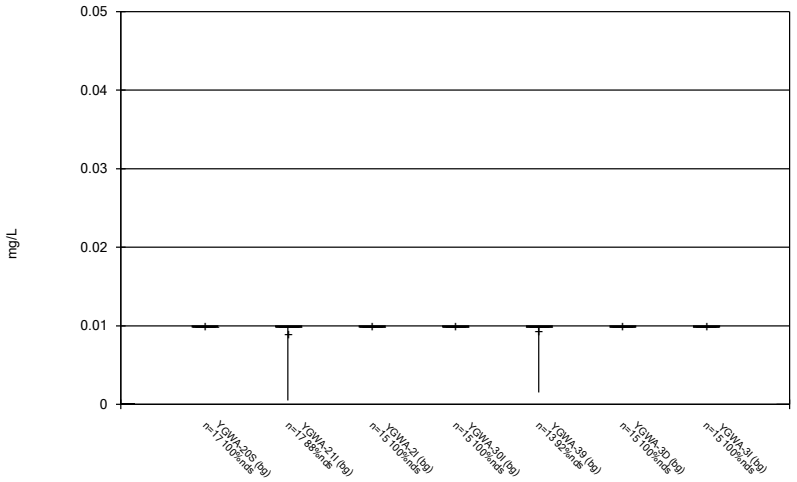


Constituent: Selenium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

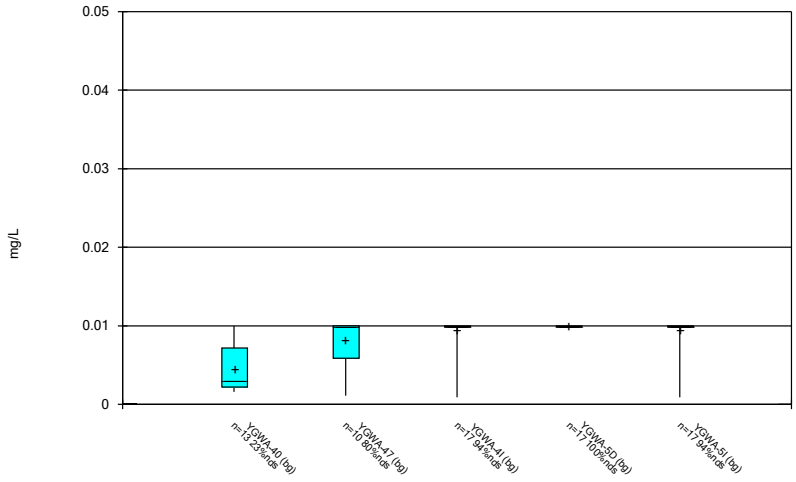


Constituent: Selenium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

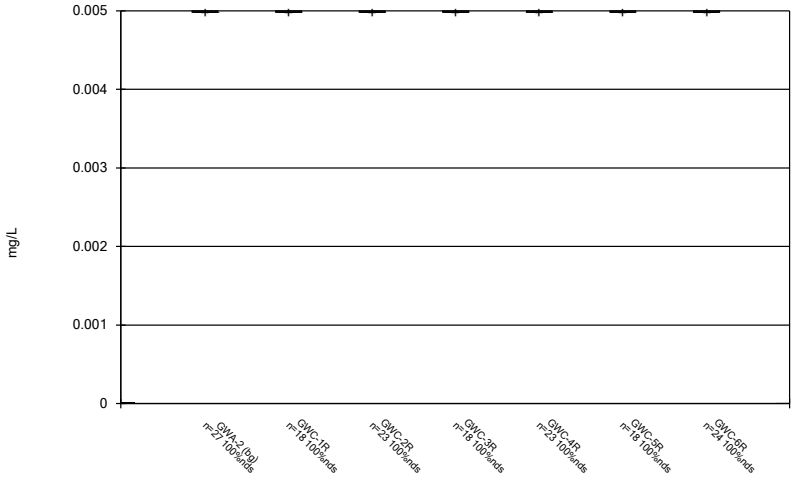


Constituent: Selenium Analysis Run 12/2/2020 9:27 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

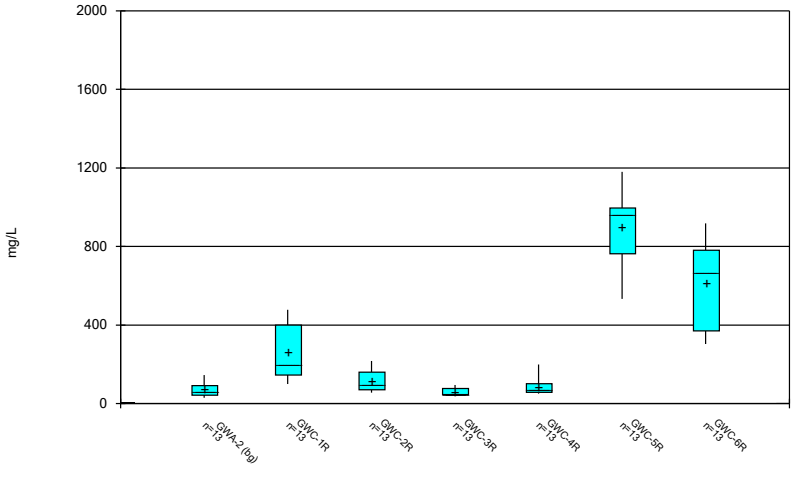


Constituent: Silver Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

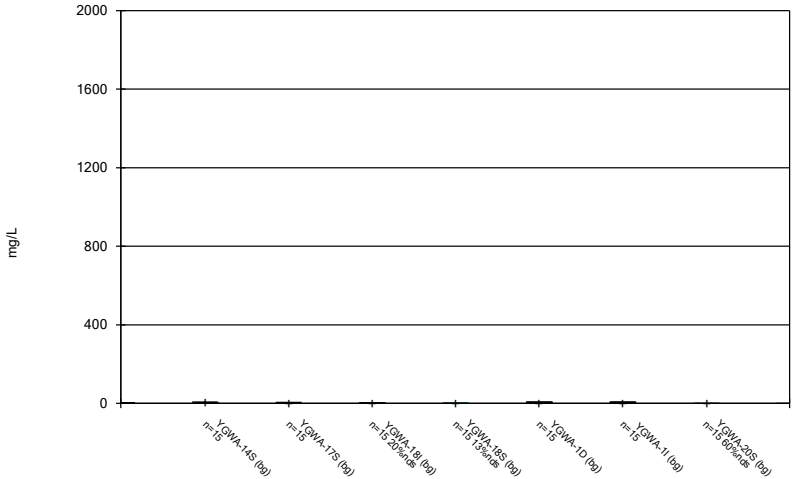


Constituent: Sulfate Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

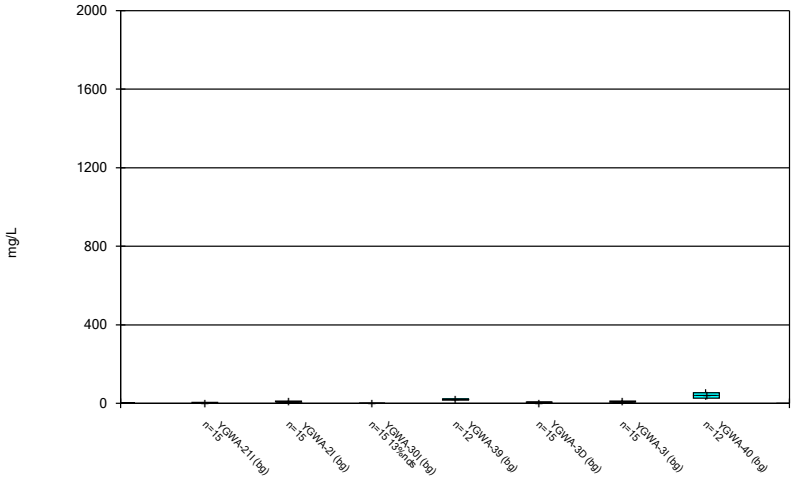


Constituent: Sulfate Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

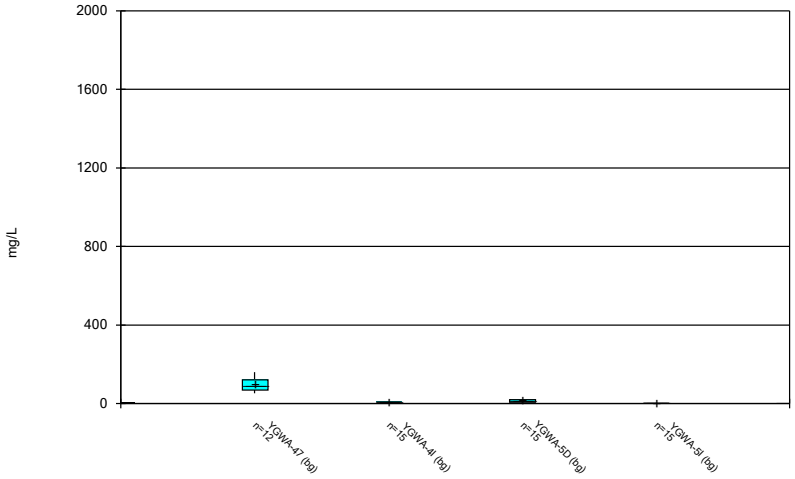
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

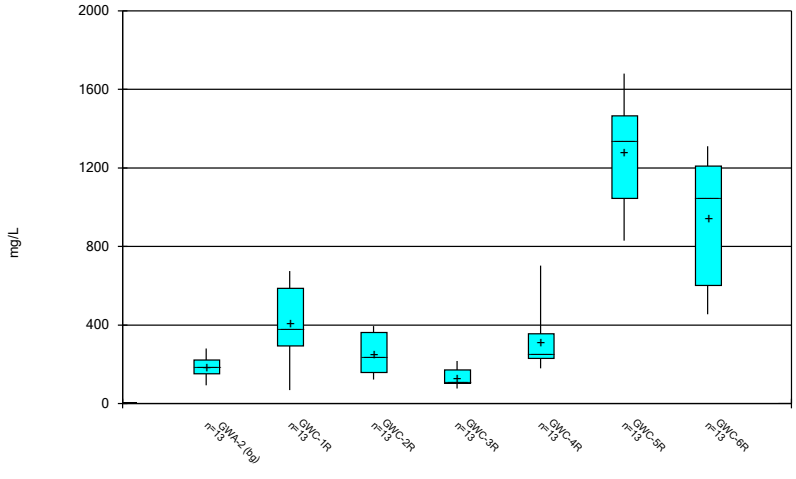
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

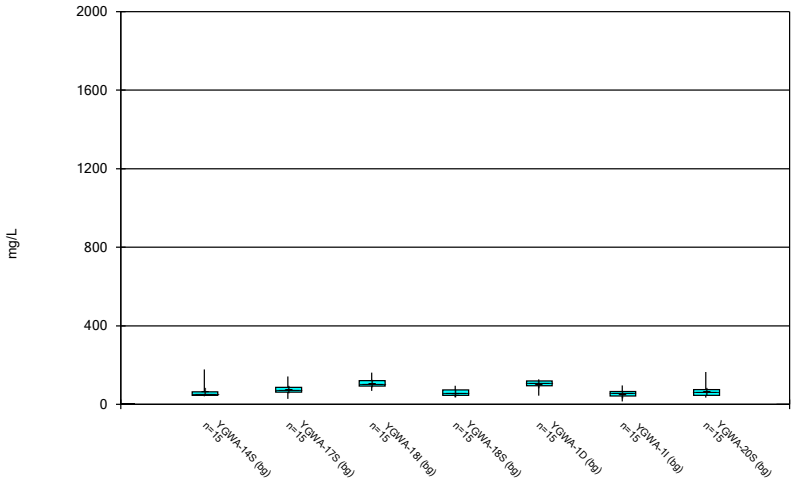
Box & Whiskers Plot



Constituent: TDS Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

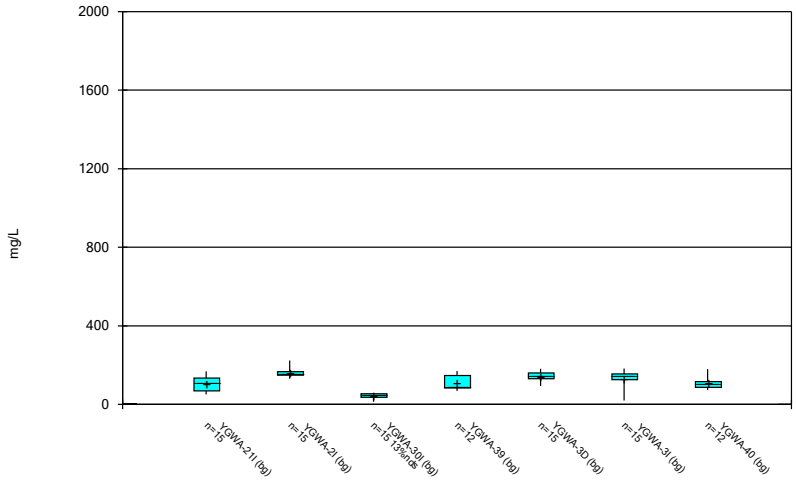
Box & Whiskers Plot



Constituent: TDS Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

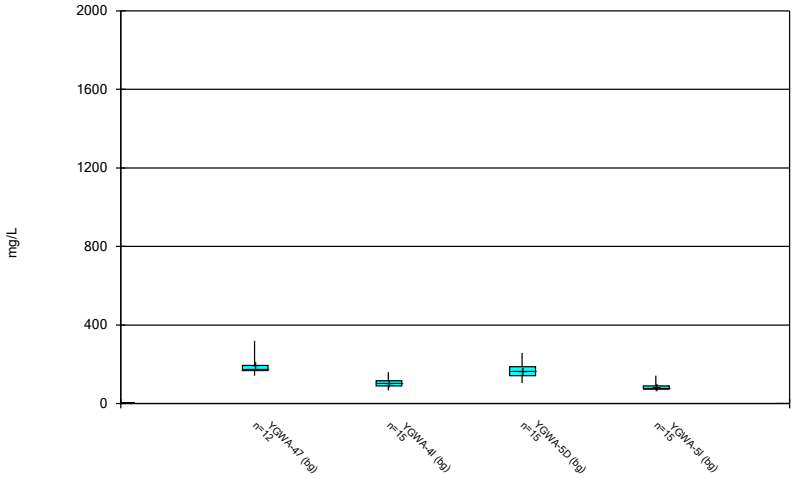


Constituent: TDS Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

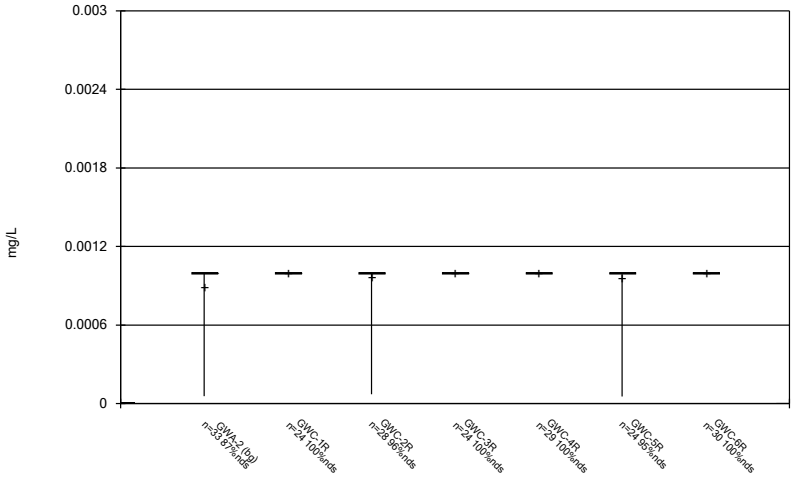


Constituent: TDS Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

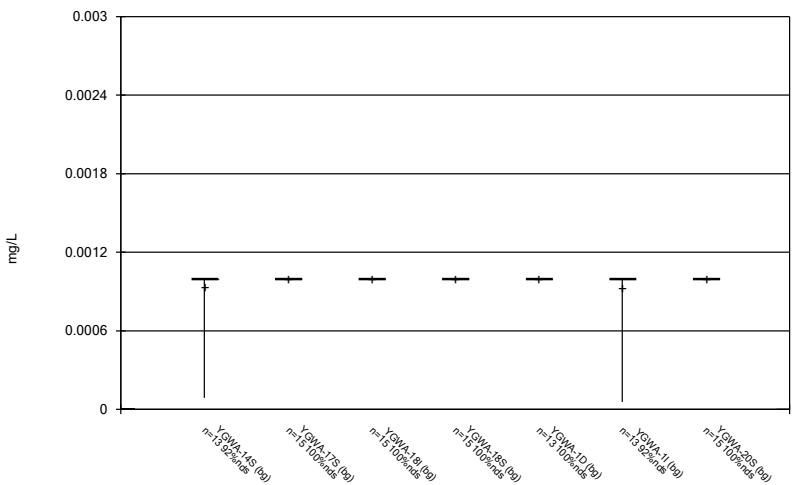


Constituent: Thallium Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

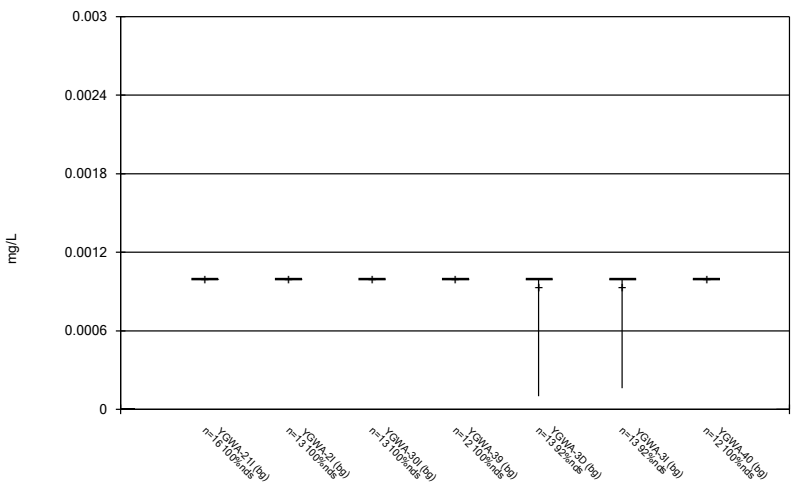


Constituent: Thallium Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

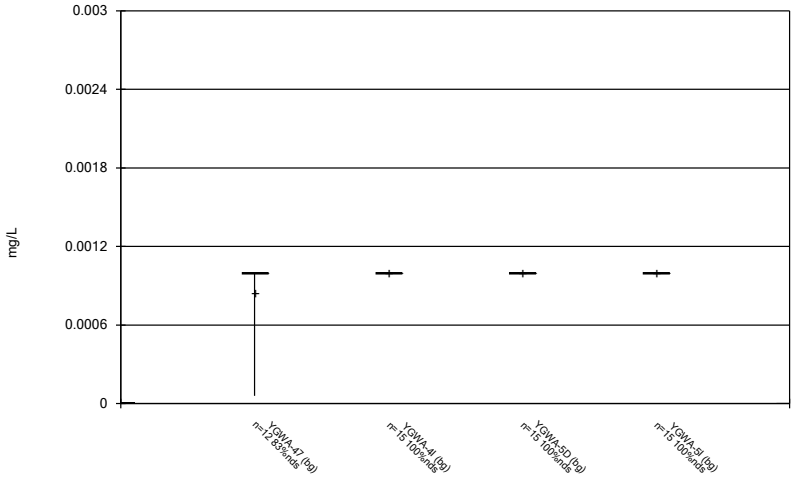
Box & Whiskers Plot



Constituent: Thallium Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

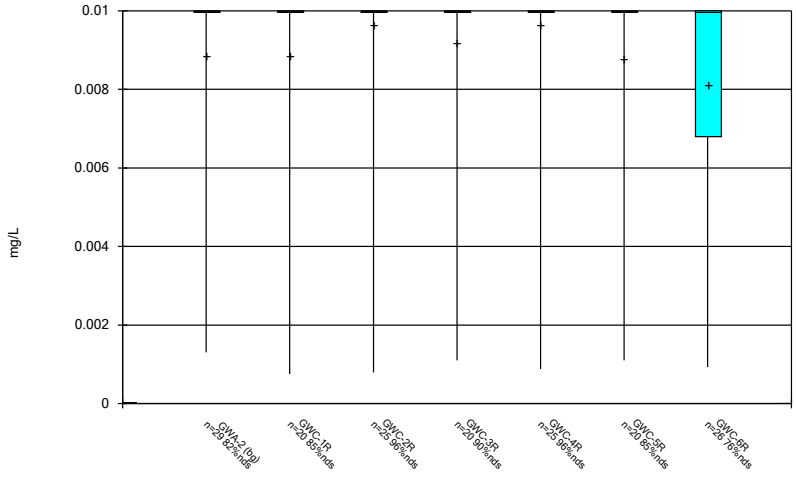


Constituent: Thallium Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

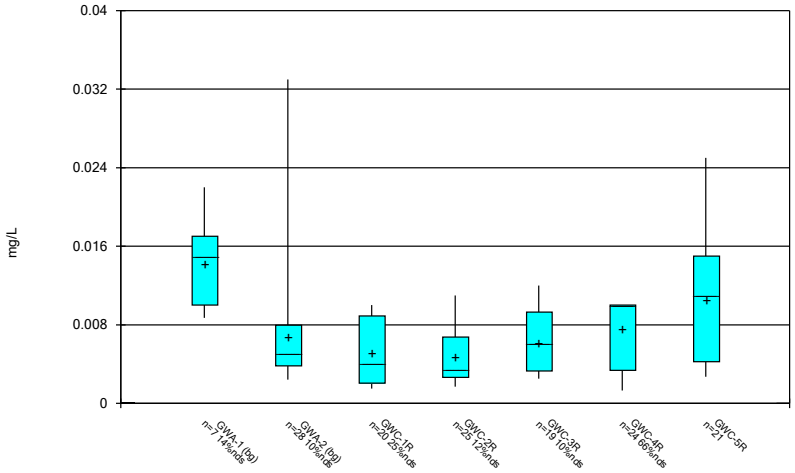


Constituent: Vanadium Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot

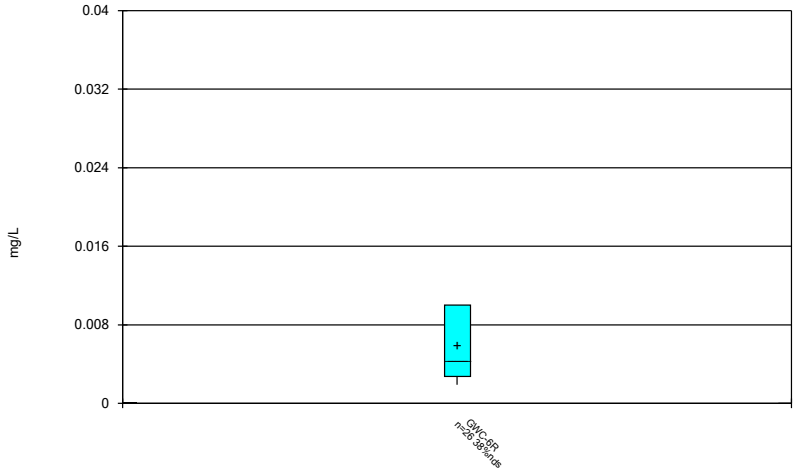


Constituent: Zinc Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Zinc Analysis Run 12/2/2020 9:28 AM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

FIGURE C.

Outlier Summary

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 11/23/2020, 8:59 PM

	GWA-2 Cobalt (mg/L)	YGWA-47 pH (S.U.)	GWA-2 Zinc (mg/L)	GWC-3R Zinc (mg/L)	GWC-4R Zinc (mg/L)
3/11/2011					0.025 (o)
2/5/2014			0.018 (o)	0.026 (o)	
4/2/2018		6.3 (O)			
8/26/2020	0.2 (o)				
9/22/2020	0.16 (o)				

FIGURE D.

State Parameters - Intrawell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:26 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Nickel (mg/L)	**GWA-2**	**0.021**	**n/a**	**9/22/2020**	**0.027**	**Yes**	**22**	**n/a**	**n/a**	**13.64**	**n/a**	**n/a**	**0.003707**	**NP Intra (normality) 1 of 2**
Selenium (mg/L)	**GWC-1R**	**0.01**	**n/a**	**9/22/2020**	**0.012**	**Yes**	**18**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Zinc (mg/L)	**GWA-2**	**0.009584**	**n/a**	**9/22/2020**	**0.033**	**Yes**	**23**	**0.004991**	**0.002**	**4.348**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	**GWC-5R**	**0.01798**	**n/a**	**9/23/2020**	**0.018**	**Yes**	**15**	**0.00738**	**0.004189**	**0**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**

State Parameters - Intrawell Prediction Limits - All Results

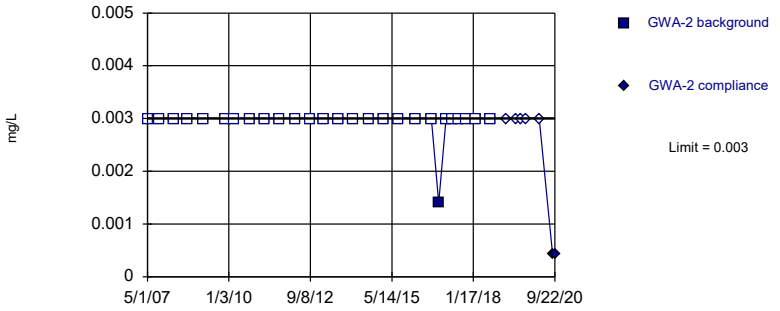
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:26 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWA-2	0.003	n/a	9/22/2020	0.00044J	No	27	n/a	n/a	96.3	n/a	n/a	0.002502	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-2R	0.003	n/a	9/22/2020	0.0017J	No	23	n/a	n/a	100	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-4R	0.003	n/a	9/22/2020	0.00053J	No	23	n/a	n/a	95.65	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Antimony (mg/L)	GWC-5R	0.003	n/a	9/23/2020	0.00031J	No	18	n/a	n/a	100	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Barium (mg/L)	GWA-2	0.07943	n/a	9/22/2020	0.045	No	27	0.05023	0.01305	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-1R	0.09203	n/a	9/22/2020	0.068	No	18	0.04614	0.01903	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-2R	0.13	n/a	9/22/2020	0.04	No	23	n/a	n/a	0	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-3R	0.1072	n/a	9/22/2020	0.014	No	18	0.1832	0.05976	0	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-4R	0.0778	n/a	9/22/2020	0.026	No	19	0.1732	0.04443	0	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-5R	0.06311	n/a	9/23/2020	0.012	No	14	0.03304	0.01162	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-6R	0.1025	n/a	9/23/2020	0.044	No	24	0.04776	0.02401	0	None	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWA-2	0.006994	n/a	3/17/2020	0.003J	No	27	0.003556	0.001537	40.74	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-1R	0.008717	n/a	9/22/2020	0.0008J	No	18	-6.613	0.7756	50	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-2R	0.04742	n/a	9/22/2020	0.0054	No	23	0.02477	0.009863	4.348	None	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-3R	0.005	n/a	9/22/2020	0.0021J	No	18	n/a	n/a	100	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-4R	0.007137	n/a	9/22/2020	0.00039J	No	23	0.002697	0.001934	34.78	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-5R	0.005	n/a	9/23/2020	0.005ND	No	18	n/a	n/a	100	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-6R	0.005	n/a	9/23/2020	0.005ND	No	24	n/a	n/a	95.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Nickel (mg/L)	**GWA-2**	**0.021**	**n/a**	**9/22/2020**	**0.027**	**Yes**	**22**	**n/a**	**n/a**	**13.64**	**n/a**	**n/a**	**0.003707**	**NP Intra (normality) 1 of 2**
Nickel (mg/L)	GWC-1R	0.01331	n/a	9/22/2020	0.0021J	No	13	-6.05	0.655	38.46	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-2R	0.01015	n/a	9/22/2020	0.005ND	No	18	0.003546	0.00274	44.44	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-3R	0.0054	n/a	9/22/2020	0.005ND	No	13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-4R	0.01	n/a	9/22/2020	0.00077J	No	18	n/a	n/a	77.78	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-5R	0.005956	n/a	9/23/2020	0.0012J	No	13	0.002281	0.00139	30.77	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-6R	0.005	n/a	9/23/2020	0.0016J	No	19	n/a	n/a	89.47	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Selenium (mg/L)	**GWC-1R**	**0.01**	**n/a**	**9/22/2020**	**0.012**	**Yes**	**18**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Selenium (mg/L)	GWC-2R	0.01	n/a	9/22/2020	0.0056J	No	23	n/a	n/a	69.57	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-3R	0.01	n/a	9/22/2020	0.0091J	No	18	n/a	n/a	61.11	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Selenium (mg/L)	GWC-4R	0.01548	n/a	9/22/2020	0.0032J	No	23	0.007285	0.003569	34.78	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-5R	0.04273	n/a	9/23/2020	0.026	No	18	0.1371	0.02884	5.556	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-6R	0.01	n/a	9/23/2020	0.0031J	No	24	n/a	n/a	70.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Zinc (mg/L)	**GWA-2**	**0.009584**	**n/a**	**9/22/2020**	**0.033**	**Yes**	**23**	**0.004991**	**0.002**	**4.348**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	GWC-1R	0.007102	n/a	9/22/2020	0.0029J	No	15	0.05264	0.0125	20	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-2R	0.01249	n/a	9/22/2020	0.003J	No	20	0.0653	0.01977	10	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-3R	0.01462	n/a	9/22/2020	0.0036J	No	14	0.00605	0.003313	7.143	None	No	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-4R	0.01	n/a	9/22/2020	0.01ND	No	19	n/a	n/a	63.16	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Zinc (mg/L)	**GWC-5R**	**0.01798**	**n/a**	**9/23/2020**	**0.018**	**Yes**	**15**	**0.00738**	**0.004189**	**0**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	GWC-6R	0.01	n/a	9/23/2020	0.01ND	No	21	n/a	n/a	33.33	n/a	n/a	0.003999	NP Intra (normality) 1 of 2

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



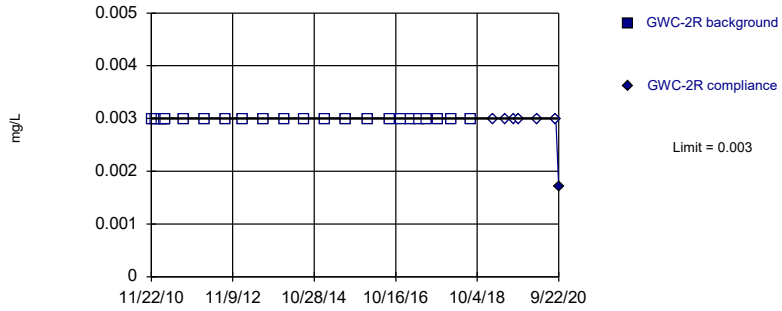
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 96.3% NDs. Well-constituent pair annual alpha = 0.004998. Individual comparison alpha = 0.002502 (1 of 2).

Constituent: Antimony Analysis Run 2/12/2021 10:12 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



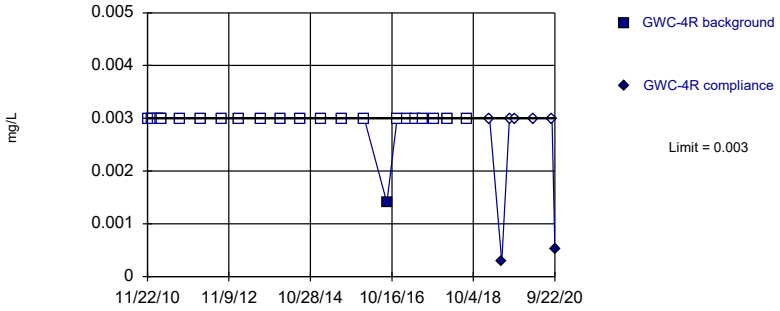
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 23) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Antimony Analysis Run 2/12/2021 10:12 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



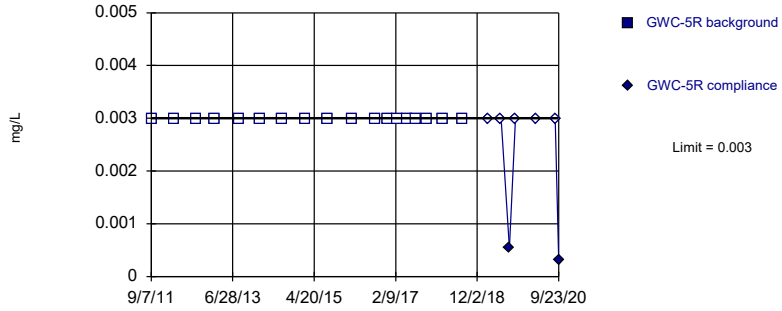
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 95.65% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Antimony Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



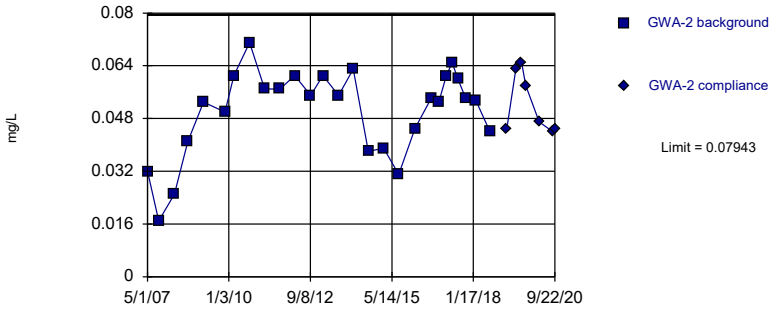
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Antimony Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.05023, Std. Dev.=0.01305, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.924, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell

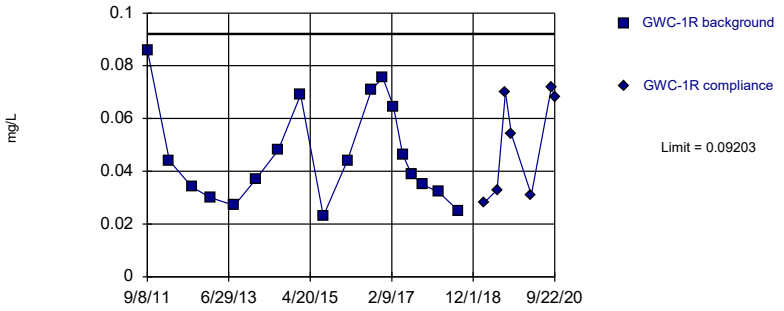
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.04614, Std. Dev.=0.01903, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9026, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell

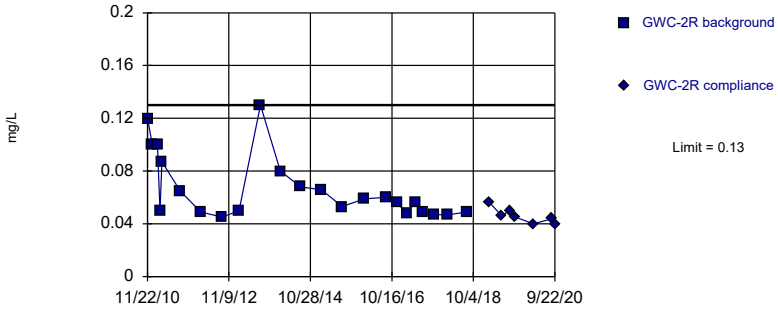
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. 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 23 background values. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Barium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell

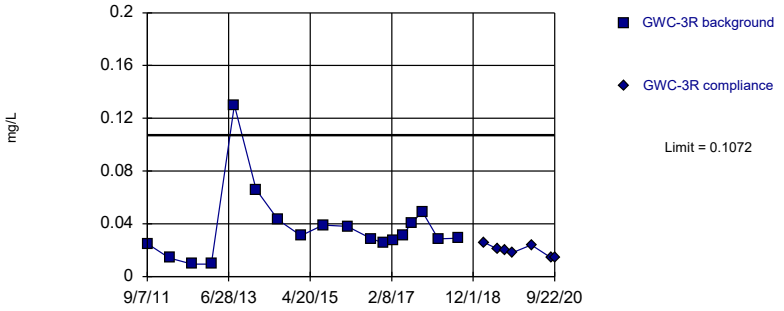
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1832, Std. Dev.=0.05976, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8697, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell

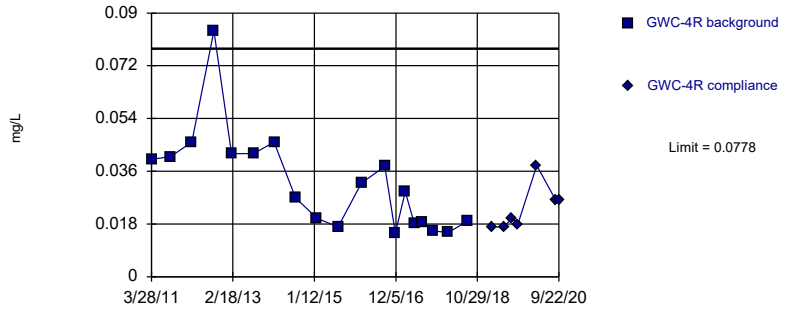
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1732, Std. Dev.=0.04443, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8913, critical = 0.863. Kappa = 2.381 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell

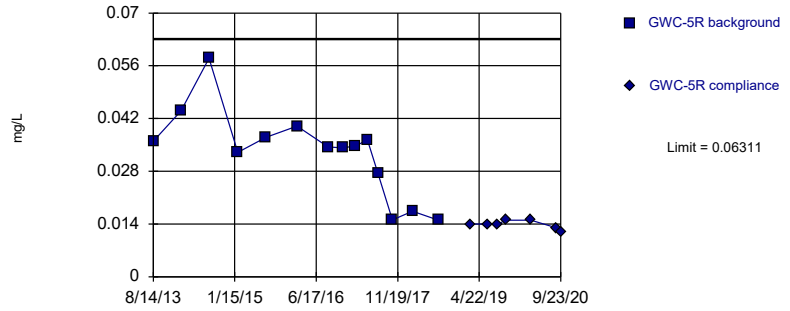
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.03304, Std. Dev.=0.01162, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.911, critical = 0.825. Kappa = 2.587 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell

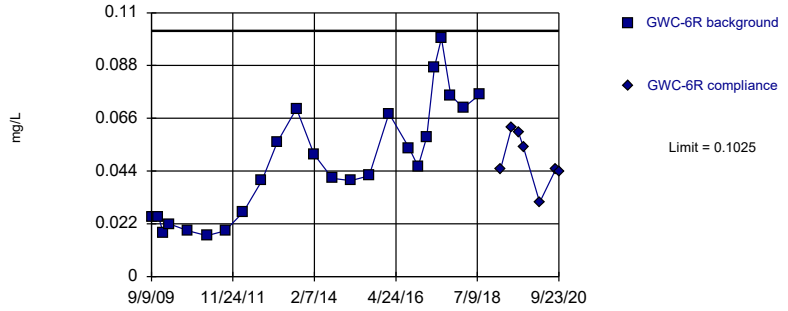
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.04776, Std. Dev.=0.02401, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9379, critical = 0.884. Kappa = 2.278 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

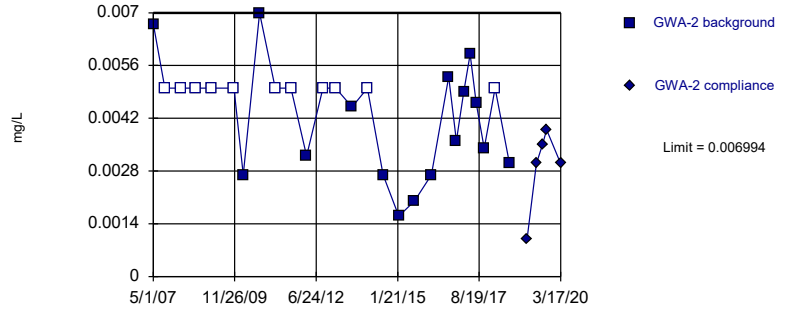
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.003556, Std. Dev.=0.001537, n=27, 40.74% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9046, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Cobalt Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell

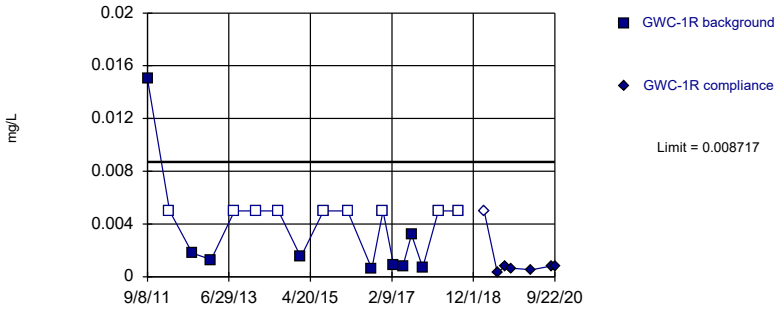
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.613, Std. Dev.=0.7756, n=18, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8602, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

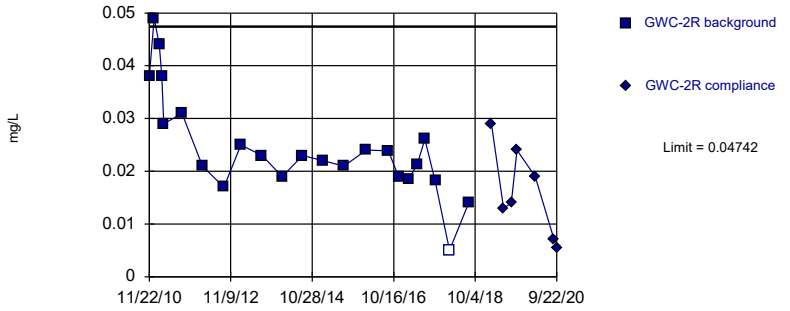
Constituent: Cobalt Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02477, Std. Dev.=0.009863, n=23, 4.348% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9174, critical = 0.881. Kappa = 2.296 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

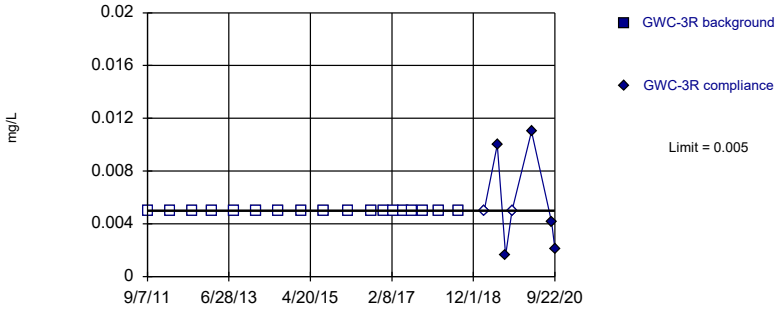
Constituent: Cobalt Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

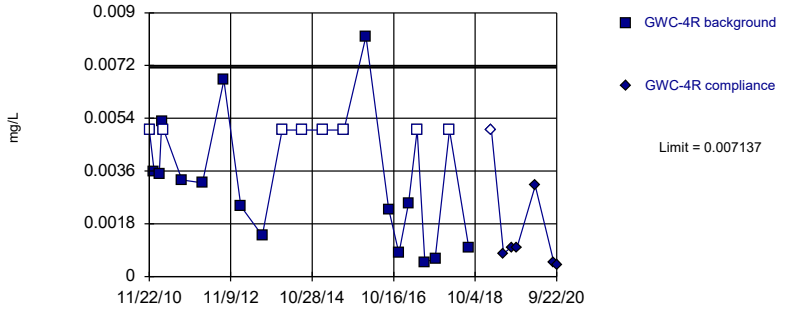
Constituent: Cobalt Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002697, Std. Dev.=0.001934, n=23, 34.78% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9311, critical = 0.881. Kappa = 2.296 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

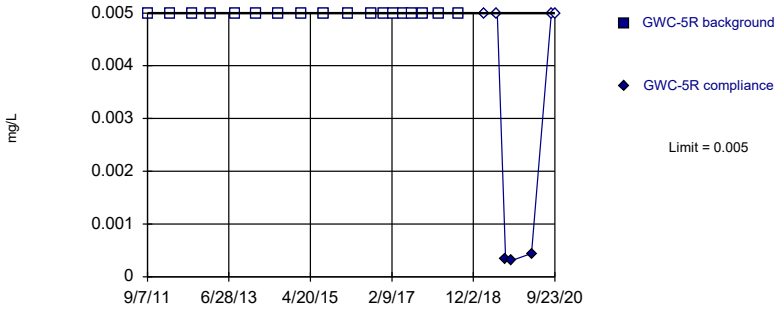
Constituent: Cobalt Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

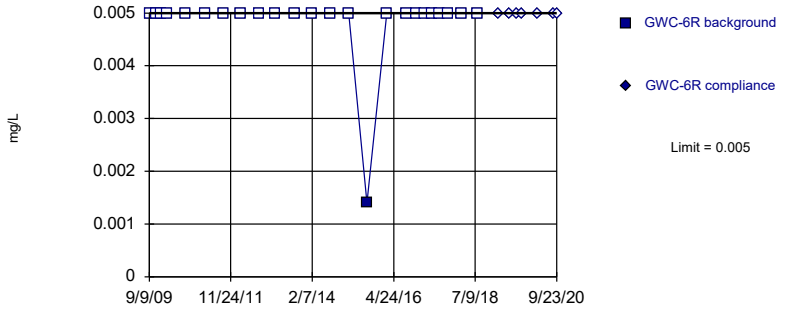
Constituent: Cobalt Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 95.83% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

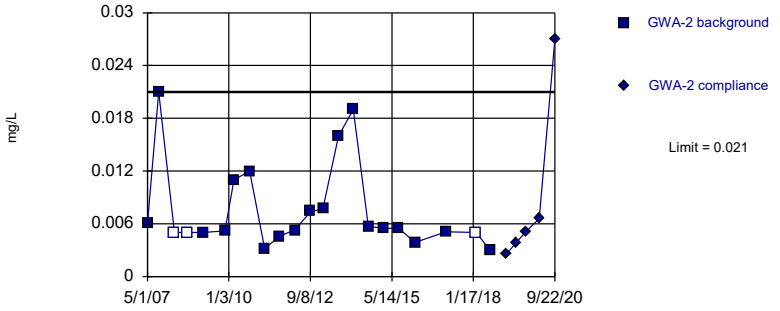
Constituent: Cobalt Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. 13.64% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

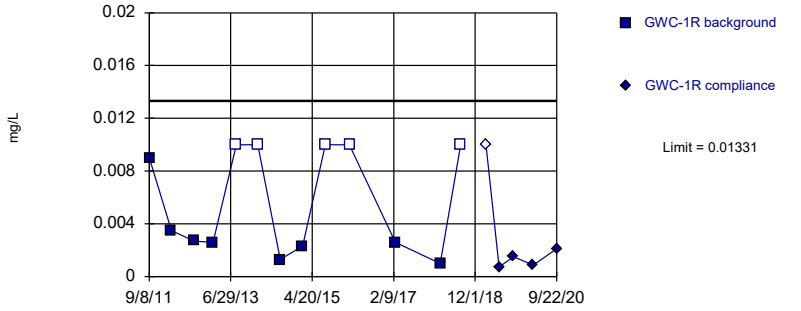
Constituent: Nickel Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.05, Std. Dev.=0.655, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8323, critical = 0.814. Kappa = 2.643 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

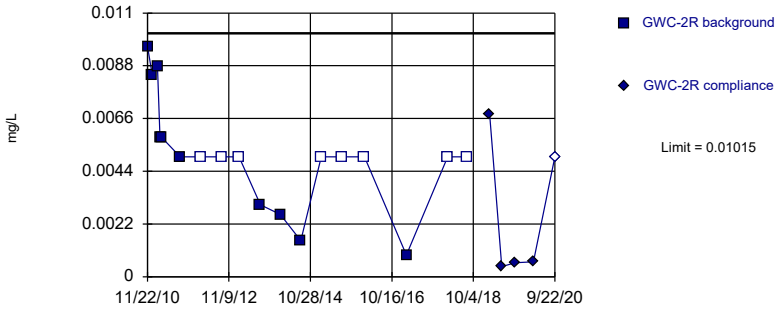
Constituent: Nickel Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.003546, Std. Dev.=0.00274, n=18, 44.44% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8887, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

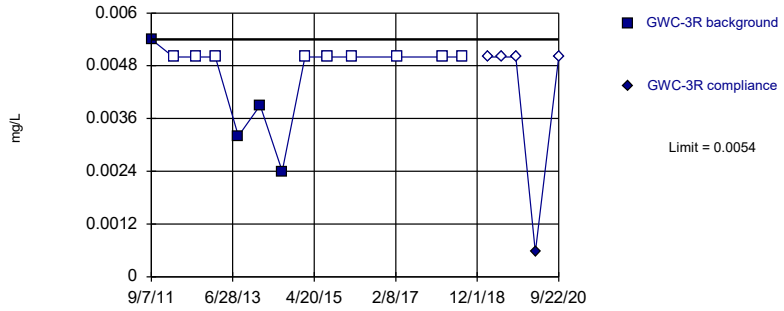
Constituent: Nickel Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

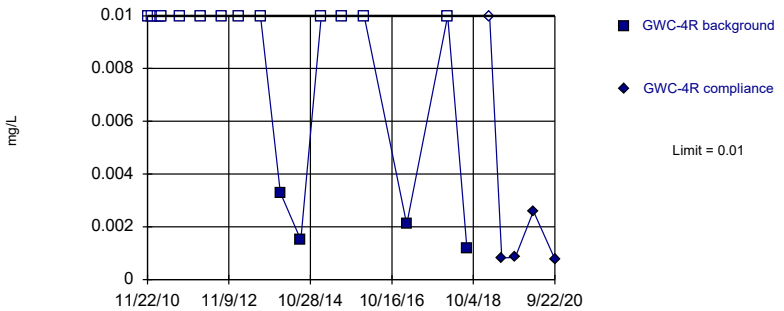
Constituent: Nickel Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

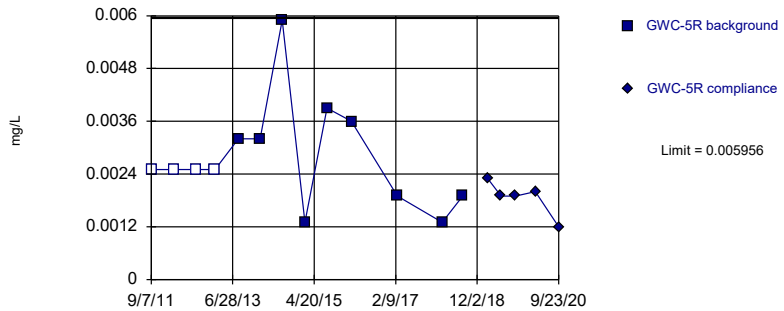
Constituent: Nickel Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002281, Std. Dev.=0.00139, n=13, 30.77% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8933, critical = 0.814. Kappa = 2.643 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

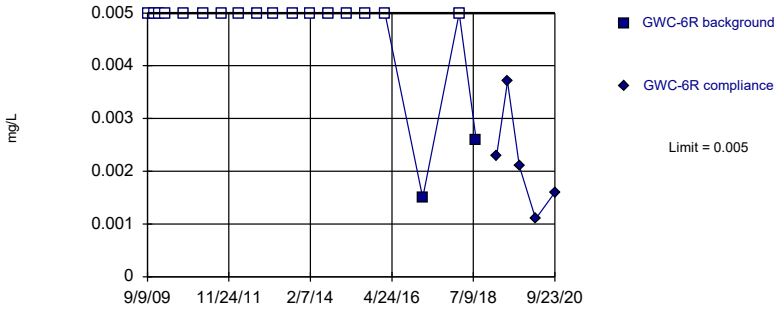
Constituent: Nickel Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

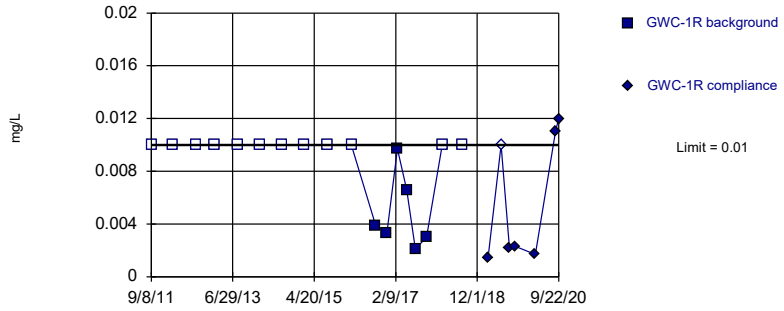
Constituent: Nickel Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

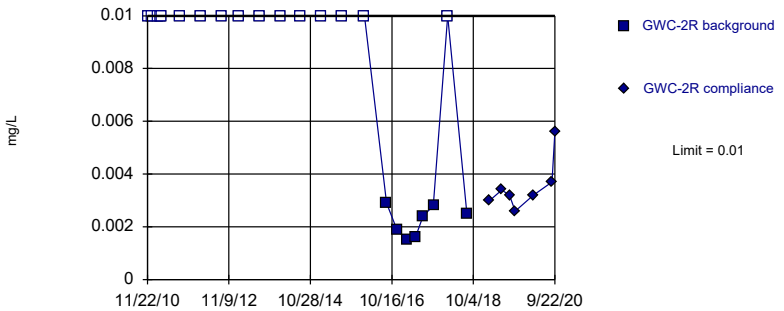
Constituent: Selenium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 69.57% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

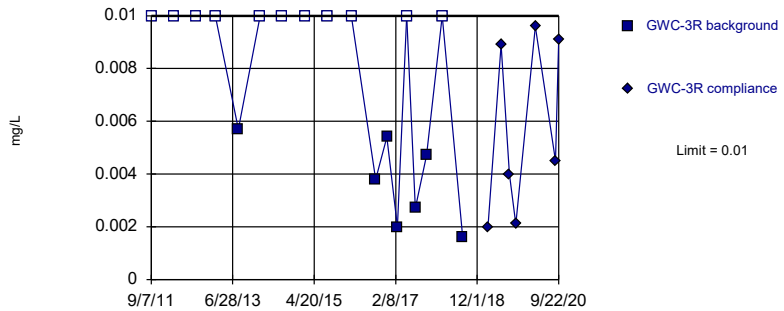
Constituent: Selenium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 61.11% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

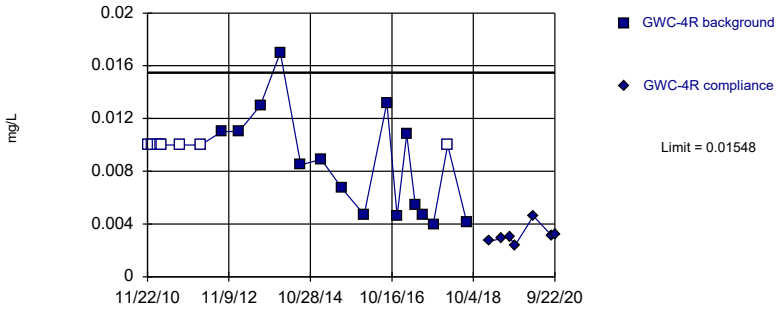
Constituent: Selenium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.007285, Std. Dev.=0.003569, n=23, 34.78% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9085, critical = 0.881. Kappa = 2.296 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

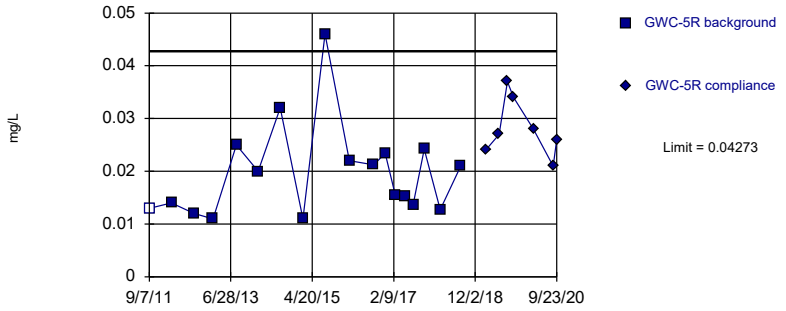
Constituent: Selenium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1371, Std. Dev.=0.02884, n=18, 5.556% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8922, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

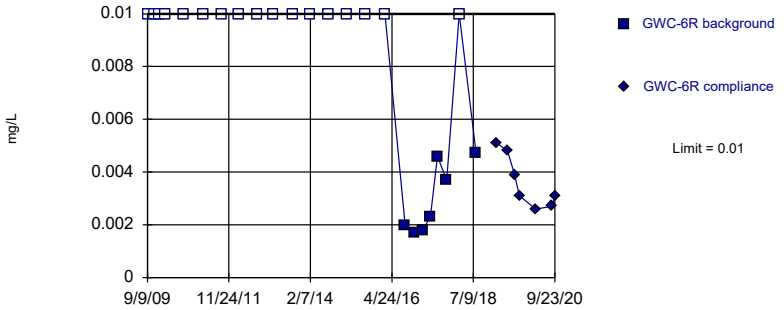
Constituent: Selenium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 70.83% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

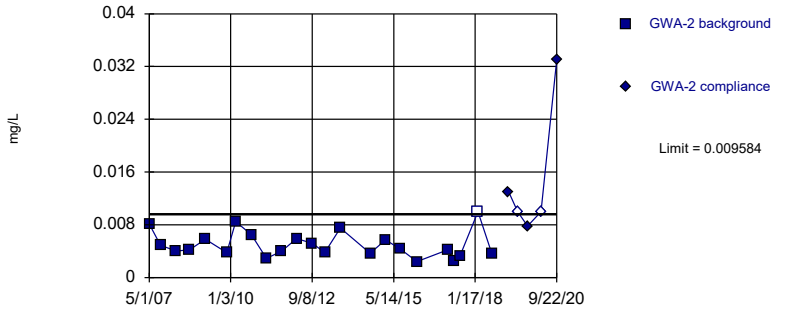
Constituent: Selenium Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.004991, Std. Dev.=0.002, n=23, 4.348% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9103, critical = 0.881. Kappa = 2.296 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

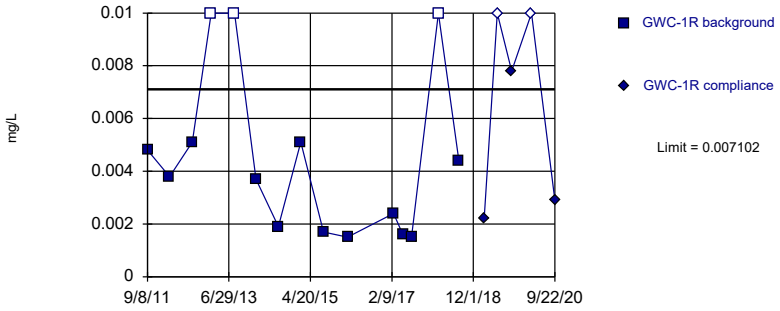
Constituent: Zinc Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05264, Std. Dev.=0.0125, n=15, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8675, critical = 0.835. Kappa = 2.53 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

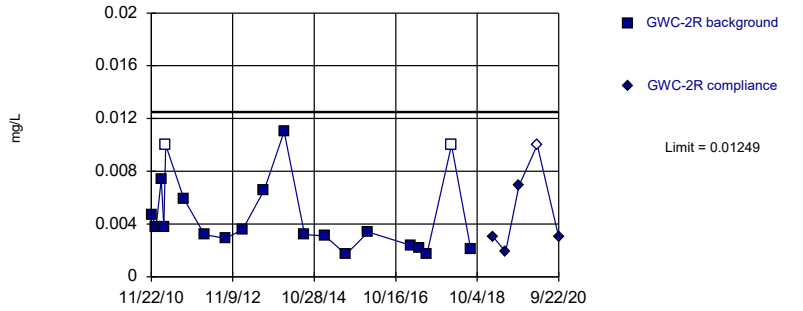
Constituent: Zinc Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.0653, Std. Dev.=0.01977, n=20, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8938, critical = 0.868. Kappa = 2.35 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

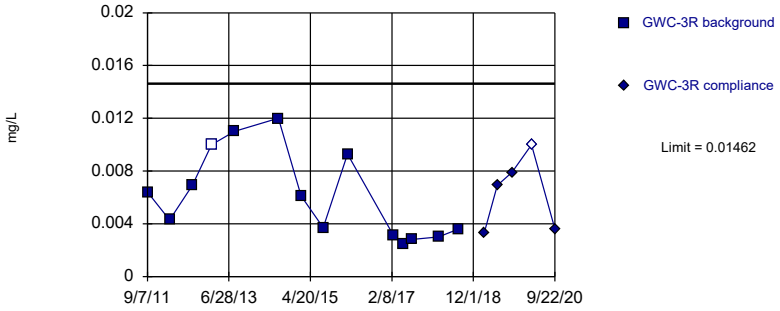
Constituent: Zinc Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00605, Std. Dev.=0.003313, n=14, 7.143% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8788, critical = 0.825. Kappa = 2.587 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

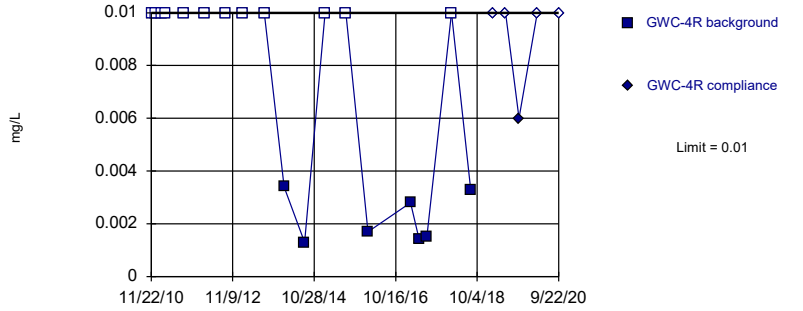
Constituent: Zinc Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



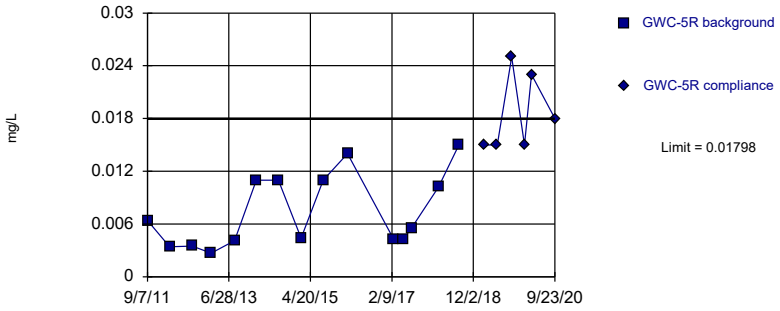
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 63.16% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

Constituent: Zinc Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00738, Std. Dev.=0.004189, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8595, critical = 0.835. Kappa = 2.53 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

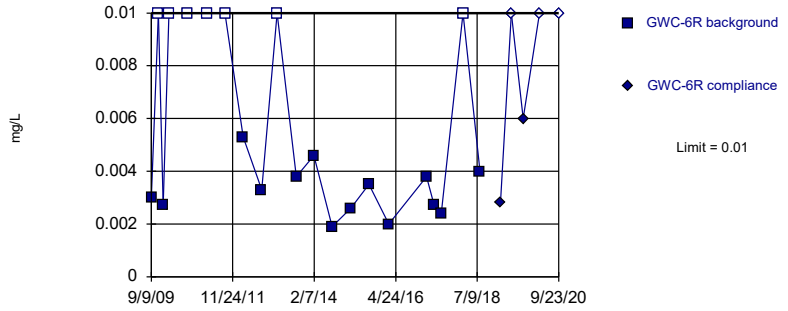
Constituent: Zinc Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Zinc Analysis Run 2/12/2021 10:13 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	<0.003	
9/11/2007	<0.003	
3/20/2008	<0.003	
8/27/2008	<0.003	
3/3/2009	<0.003	
11/18/2009	<0.003	
3/3/2010	<0.003	
9/8/2010	<0.003	
3/10/2011	<0.003	
9/8/2011	<0.003	
3/5/2012	<0.003	
9/10/2012	<0.003	
2/6/2013	<0.003	
8/12/2013	<0.003	
2/5/2014	<0.003	
8/5/2014	<0.003	
2/4/2015	<0.003	
8/3/2015	<0.003	
2/16/2016	<0.003	
8/31/2016	<0.003	
11/28/2016	0.0014 (J)	
2/22/2017	<0.003	
5/8/2017	<0.003	
7/17/2017	<0.003	
10/16/2017	<0.003	
2/19/2018	<0.003	
8/6/2018	<0.003	
2/25/2019		<0.003
6/12/2019		<0.003
8/19/2019		<0.003
10/8/2019		<0.003
3/17/2020		<0.003
8/26/2020		0.00042 (J)
9/22/2020		0.00044 (J)

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.003	
1/4/2011	<0.003	
2/17/2011	<0.003	
3/11/2011	<0.003	
3/28/2011	<0.003	
9/7/2011	<0.003	
3/6/2012	<0.003	
9/11/2012	<0.003	
2/6/2013	<0.003	
8/13/2013	<0.003	
2/4/2014	<0.003	
8/5/2014	<0.003	
2/2/2015	<0.003	
8/4/2015	<0.003	
2/17/2016	<0.003	
8/31/2016	<0.003	
11/28/2016	<0.003	
2/22/2017	<0.003	
5/10/2017	<0.003	
7/18/2017	<0.003	
10/17/2017	<0.003	
2/20/2018	<0.003	
8/8/2018	<0.003	
2/26/2019		<0.003
6/12/2019		<0.003
8/20/2019		<0.003
10/9/2019		<0.003
3/18/2020		<0.003
8/28/2020		<0.003
9/22/2020		0.0017 (J)

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.003	
1/4/2011	<0.003	
2/17/2011	<0.003	
3/11/2011	<0.003	
3/28/2011	<0.003	
9/7/2011	<0.003	
3/4/2012	<0.003	
9/10/2012	<0.003	
2/6/2013	<0.003	
8/14/2013	<0.003	
2/4/2014	<0.003	
8/4/2014	<0.003	
2/2/2015	<0.003	
8/3/2015	<0.003 (D)	
2/16/2016	<0.003	
9/1/2016	0.0014 (J)	
11/30/2016	<0.003	
2/24/2017	<0.003	
5/10/2017	<0.003	
7/18/2017	<0.003	
10/17/2017	<0.003	
2/20/2018	<0.003	
8/8/2018	<0.003	
2/26/2019		<0.003
6/12/2019		0.00028 (J)
8/19/2019		<0.003
10/10/2019		<0.003
3/18/2020		<0.003
8/28/2020		<0.003
9/22/2020		0.00053 (J)

Prediction Limit

Constituent: Antimony (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.003	
3/5/2012	<0.003	
9/5/2012	<0.003	
2/5/2013	<0.003	
8/14/2013	<0.003	
2/5/2014	<0.003	
8/4/2014	<0.003	
2/3/2015	<0.003	
8/3/2015	<0.003 (D)	
2/16/2016	<0.003	
9/1/2016	<0.003	
12/1/2016	<0.003	
2/24/2017	<0.003	
5/10/2017	<0.003	
7/17/2017	<0.003	
10/16/2017	<0.003	
2/21/2018	<0.003	
8/7/2018	<0.003	
2/26/2019		<0.003
6/13/2019		<0.003
8/21/2019		0.00054 (J)
10/9/2019		<0.003
3/18/2020		<0.003
8/27/2020		<0.003
9/23/2020		0.00031 (J)

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	0.032	
9/11/2007	0.017	
3/20/2008	0.025	
8/27/2008	0.041	
3/3/2009	0.053	
11/18/2009	0.05	
3/3/2010	0.061	
9/8/2010	0.071	
3/10/2011	0.057	
9/8/2011	0.057	
3/5/2012	0.061	
9/10/2012	0.055	
2/6/2013	0.061	
8/12/2013	0.055	
2/5/2014	0.063	
8/5/2014	0.038	
2/4/2015	0.039	
8/3/2015	0.031	
2/16/2016	0.045	
8/31/2016	0.0542	
11/28/2016	0.0529	
2/22/2017	0.0607	
5/8/2017	0.065	
7/17/2017	0.06	
10/16/2017	0.0542	
2/19/2018	0.0533	
8/6/2018	0.044	
2/25/2019		0.045
6/12/2019		0.063
8/19/2019		0.065
10/8/2019		0.058
3/17/2020		0.047
8/26/2020		0.044
9/22/2020		0.045

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	0.086	
3/5/2012	0.044	
9/5/2012	0.034	
2/5/2013	0.03	
8/13/2013	0.027	
2/4/2014	0.037	
8/5/2014	0.048	
2/2/2015	0.069	
8/4/2015	0.023 (D)	
2/16/2016	0.044	
8/31/2016	0.0711	
11/29/2016	0.0754	
2/23/2017	0.0646	
5/9/2017	0.0463	
7/18/2017	0.039	
10/17/2017	0.0349	
2/21/2018	0.0322	
8/7/2018	0.025	
2/26/2019		0.028
6/13/2019		0.033
8/20/2019		0.07
10/9/2019		0.054
3/17/2020		0.031
8/27/2020		0.072
9/22/2020		0.068

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	0.12	
1/4/2011	0.1	
2/17/2011	0.1	
3/11/2011	0.05	
3/28/2011	0.087	
9/7/2011	0.065	
3/6/2012	0.049	
9/11/2012	0.045	
2/6/2013	0.05	
8/13/2013	0.13	
2/4/2014	0.08	
8/5/2014	0.068	
2/2/2015	0.066	
8/4/2015	0.053	
2/17/2016	0.059	
8/31/2016	0.0601	
11/28/2016	0.0562	
2/22/2017	0.0481	
5/10/2017	0.0563	
7/18/2017	0.049	
10/17/2017	0.047	
2/20/2018	0.0467	
8/8/2018	0.049	
2/26/2019		0.056
6/12/2019		0.046
8/20/2019		0.05
10/9/2019		0.045
3/18/2020		0.04
8/28/2020		0.044
9/22/2020		0.04

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	0.025	
3/5/2012	0.014	
9/5/2012	0.0095	
2/6/2013	0.0094	
8/13/2013	0.13	
2/5/2014	0.066	
8/4/2014	0.043	
2/3/2015	0.031	
8/3/2015	0.039 (D)	
2/16/2016	0.038	
8/31/2016	0.0286	
11/30/2016	0.0258	
2/23/2017	0.0278	
5/9/2017	0.0308	
7/18/2017	0.0407	
10/18/2017	0.049	
2/21/2018	0.0285	
8/7/2018	0.029	
2/26/2019		0.026
6/13/2019		0.021
8/21/2019		0.02
10/10/2019		0.018
3/17/2020		0.024
8/28/2020		0.014
9/22/2020		0.014

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	0.03	
1/4/2011	0.065	
2/17/2011	0.061	
3/11/2011	0.066	
3/28/2011	0.04	
9/7/2011	0.041	
3/4/2012	0.046	
9/10/2012	0.084	
2/6/2013	0.042	
8/14/2013	0.042	
2/4/2014	0.046	
8/4/2014	0.027	
2/2/2015	0.02	
8/3/2015	0.017 (D)	
2/16/2016	0.032	
9/1/2016	0.0377	
11/30/2016	0.0148	
2/24/2017	0.029	
5/10/2017	0.0182	
7/18/2017	0.0187	
10/17/2017	0.0157	
2/20/2018	0.0151	
8/8/2018	0.019	
2/26/2019		0.017
6/12/2019		0.017
8/19/2019		0.02
10/10/2019		0.018
3/18/2020		0.038
8/28/2020		0.026
9/22/2020		0.026

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	0.02	
3/5/2012	0.048	
9/5/2012	0.07	
2/5/2013	0.068	
8/14/2013	0.036	
2/5/2014	0.044	
8/4/2014	0.058	
2/3/2015	0.033	
8/3/2015	0.037 (D)	
2/16/2016	0.04	
9/1/2016	0.0345	
12/1/2016	0.0342	
2/24/2017	0.0347	
5/10/2017	0.0363	
7/17/2017	0.0274	
10/16/2017	0.0151	
2/21/2018	0.0174	
8/7/2018	0.015	
2/26/2019		0.014
6/13/2019		0.014
8/21/2019		0.014
10/9/2019		0.015
3/18/2020		0.015
8/27/2020		0.013
9/23/2020		0.012

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	0.025	
11/18/2009	0.025	
1/5/2010	0.018	
3/3/2010	0.022	
9/7/2010	0.019	
3/10/2011	0.017	
9/8/2011	0.019	
3/5/2012	0.027	
9/5/2012	0.04	
2/5/2013	0.056	
8/13/2013	0.07	
2/4/2014	0.051	
8/5/2014	0.041	
2/3/2015	0.04	
8/4/2015	0.042	
2/16/2016	0.068	
9/1/2016	0.0536	
11/29/2016	0.0459	
2/23/2017	0.0581	
5/10/2017	0.0873	
7/18/2017	0.0994	
10/18/2017	0.0757	
2/19/2018	0.0703	
8/6/2018	0.076	
2/25/2019		0.045
6/13/2019		0.062
8/20/2019		0.06
10/8/2019		0.054
3/17/2020		0.031
8/27/2020		0.045
9/23/2020		0.044

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	0.0067	
9/11/2007	<0.005	
3/20/2008	<0.005	
8/27/2008	<0.005	
3/3/2009	<0.005	
11/18/2009	<0.005	
3/3/2010	0.0027	
9/8/2010	0.007	
3/10/2011	<0.005	
9/8/2011	<0.005	
3/5/2012	0.0032	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/12/2013	0.0045	
2/5/2014	<0.005	
8/5/2014	0.0027	
2/4/2015	0.0016	
8/3/2015	0.002	
2/16/2016	0.0027	
8/31/2016	0.0053 (J)	
11/28/2016	0.0036 (J)	
2/22/2017	0.0049 (J)	
5/8/2017	0.0059 (J)	
7/17/2017	0.0046 (J)	
10/16/2017	0.0034 (J)	
2/19/2018	<0.005	
8/6/2018	0.003 (J)	
2/25/2019		0.001 (J)
6/12/2019		0.003 (J)
8/19/2019		0.0035 (J)
10/8/2019		0.0039 (J)
3/17/2020		0.003 (J)
8/26/2020		0.2 (o)
9/22/2020		0.16 (o)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	0.015	
3/5/2012	<0.005	
9/5/2012	0.0018	
2/5/2013	0.0013	
8/13/2013	<0.005	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/2/2015	0.0015	
8/4/2015	<0.005 (D)	
2/16/2016	<0.005	
8/31/2016	0.0006 (J)	
11/29/2016	<0.005	
2/23/2017	0.0009 (J)	
5/9/2017	0.0008 (J)	
7/18/2017	0.0032 (J)	
10/17/2017	0.0007 (J)	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019		<0.005
6/13/2019		0.00033 (J)
8/20/2019		0.00079 (J)
10/9/2019		0.00064 (J)
3/17/2020		0.00054 (J)
8/27/2020		0.00081 (J)
9/22/2020		0.0008 (J)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	0.038	
1/4/2011	0.049	
2/17/2011	0.044	
3/11/2011	0.038	
3/28/2011	0.029	
9/7/2011	0.031	
3/6/2012	0.021	
9/11/2012	0.017	
2/6/2013	0.025	
8/13/2013	0.023	
2/4/2014	0.019	
8/5/2014	0.023	
2/2/2015	0.022	
8/4/2015	0.021	
2/17/2016	0.024	
8/31/2016	0.0239	
11/28/2016	0.0189	
2/22/2017	0.0184	
5/10/2017	0.0213	
7/18/2017	0.0261	
10/17/2017	0.0182	
2/20/2018	<0.005	
8/8/2018	0.014	
2/26/2019		0.029
6/12/2019		0.013
8/20/2019		0.014
10/9/2019		0.024
3/18/2020		0.019
8/28/2020		0.0072
9/22/2020		0.0054

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.005	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	<0.005	
2/5/2014	<0.005	
8/4/2014	<0.005	
2/3/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
8/31/2016	<0.005	
11/30/2016	<0.005	
2/23/2017	<0.005	
5/9/2017	<0.005	
7/18/2017	<0.005	
10/18/2017	<0.005	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019		<0.005
6/13/2019		0.01
8/21/2019		0.0016 (J)
10/10/2019		<0.005
3/17/2020		0.011
8/28/2020		0.0041 (J)
9/22/2020		0.0021 (J)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.005	
1/4/2011	0.0036	
2/17/2011	0.0035	
3/11/2011	0.0053	
3/28/2011	<0.005	
9/7/2011	0.0033	
3/4/2012	0.0032	
9/10/2012	0.0067	
2/6/2013	0.0024	
8/14/2013	0.0014	
2/4/2014	<0.005	
8/4/2014	<0.005	
2/2/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	0.0082	
9/1/2016	0.0023 (J)	
11/30/2016	0.0008 (J)	
2/24/2017	0.0025 (J)	
5/10/2017	<0.005	
7/18/2017	0.0005 (J)	
10/17/2017	0.0006 (J)	
2/20/2018	<0.005	
8/8/2018	0.001 (J)	
2/26/2019		<0.005
6/12/2019		0.00078 (J)
8/19/2019		0.001 (J)
10/10/2019		0.00099 (J)
3/18/2020		0.0031 (J)
8/28/2020		0.00049 (J)
9/22/2020		0.00039 (J)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.005	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/5/2013	<0.005	
8/14/2013	<0.005	
2/5/2014	<0.005	
8/4/2014	<0.005	
2/3/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
9/1/2016	<0.005	
12/1/2016	<0.005	
2/24/2017	<0.005	
5/10/2017	<0.005	
7/17/2017	<0.005	
10/16/2017	<0.005	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019		<0.005
6/13/2019		<0.005
8/21/2019		0.00034 (J)
10/9/2019		0.00031 (J)
3/18/2020		0.00044 (J)
8/27/2020		<0.005
9/23/2020		<0.005

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	<0.005	
11/18/2009	<0.005	
1/5/2010	<0.005	
3/3/2010	<0.005	
9/7/2010	<0.005	
3/10/2011	<0.005	
9/8/2011	<0.005	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/5/2013	<0.005	
8/13/2013	<0.005	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/3/2015	<0.005	
8/4/2015	0.0014	
2/16/2016	<0.005	
9/1/2016	<0.005	
11/29/2016	<0.005	
2/23/2017	<0.005	
5/10/2017	<0.005	
7/18/2017	<0.005	
10/18/2017	<0.005	
2/19/2018	<0.005	
8/6/2018	<0.005	
2/25/2019		<0.005
6/13/2019		<0.005
8/20/2019		<0.005
10/8/2019		<0.005
3/17/2020		<0.005
8/27/2020		<0.005
9/23/2020		<0.005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	0.0061	
9/11/2007	0.021	
3/20/2008	<0.005	
8/27/2008	<0.005	
3/3/2009	0.005	
11/18/2009	0.0052	
3/3/2010	0.011	
9/8/2010	0.012	
3/10/2011	0.0032	
9/8/2011	0.0046	
3/5/2012	0.0053	
9/10/2012	0.0074	
2/6/2013	0.0077	
8/12/2013	0.016	
2/5/2014	0.019	
8/5/2014	0.0057	
2/4/2015	0.0055	
8/3/2015	0.0055	
2/16/2016	0.0039	
2/22/2017	0.0051 (J)	
2/19/2018	<0.005	
8/6/2018	0.003 (J)	
2/25/2019		0.0026 (J)
6/12/2019		0.0038 (J)
10/8/2019		0.0051 (J)
3/17/2020		0.0066
9/22/2020		0.027

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	0.009	
3/5/2012	0.0035	
9/5/2012	0.0027	
2/5/2013	0.0026	
8/13/2013	<0.01	
2/4/2014	<0.01	
8/5/2014	0.0013 (J)	
2/2/2015	0.0023 (J)	
8/4/2015	<0.01 (D)	
2/16/2016	<0.01	
2/23/2017	0.0026 (J)	
2/21/2018	0.001 (J)	
8/7/2018	<0.01	
2/26/2019		<0.01
6/13/2019		0.00072 (J)
10/9/2019		0.0015 (J)
3/17/2020		0.00087 (J)
9/22/2020		0.0021 (J)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	0.0096	
1/4/2011	0.0084	
2/17/2011	0.0088	
3/11/2011	0.0058	
3/28/2011	0.0058	
9/7/2011	0.005	
3/6/2012	<0.005	
9/11/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	0.003	
2/4/2014	0.0026	
8/5/2014	0.0015 (J)	
2/2/2015	<0.005	
8/4/2015	<0.005	
2/17/2016	<0.005	
2/22/2017	0.0009 (J)	
2/20/2018	<0.005	
8/8/2018	<0.005	
2/26/2019		0.0068 (J)
6/12/2019		0.00043 (J)
10/9/2019		0.00058 (J)
3/18/2020		0.00063 (J)
9/22/2020		<0.005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	0.0054	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	0.0032	
2/5/2014	0.0039	
8/4/2014	0.0024 (J)	
2/3/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
2/23/2017	<0.005	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019		<0.005
6/13/2019		<0.005
10/10/2019		<0.005
3/17/2020		0.00056 (J)
9/22/2020		<0.005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.01	
1/4/2011	<0.01	
2/17/2011	<0.01	
3/11/2011	<0.01	
3/28/2011	<0.01	
9/7/2011	<0.01	
3/4/2012	<0.01	
9/10/2012	<0.01	
2/6/2013	<0.01	
8/14/2013	<0.01	
2/4/2014	0.0033	
8/4/2014	0.0015 (J)	
2/2/2015	<0.01	
8/3/2015	<0.01 (D)	
2/16/2016	<0.01	
2/24/2017	0.0021 (J)	
2/20/2018	<0.01	
8/8/2018	0.0012 (J)	
2/26/2019		<0.01
6/12/2019		0.00082 (J)
10/10/2019		0.00084 (J)
3/18/2020		0.0026 (J)
9/22/2020		0.00077 (J)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.0025	
3/5/2012	<0.0025	
9/5/2012	<0.0025	
2/5/2013	<0.0025	
8/14/2013	0.0032	
2/5/2014	0.0032	
8/4/2014	0.0059	
2/3/2015	0.0013 (J)	
8/3/2015	0.0039 (D)	
2/16/2016	0.0036	
2/24/2017	0.0019 (J)	
2/21/2018	0.0013 (J)	
8/7/2018	0.0019 (J)	
2/26/2019		0.0023 (J)
6/13/2019		0.0019 (J)
10/9/2019		0.0019 (J)
3/18/2020		0.002 (J)
9/23/2020		0.0012 (J)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	<0.005	
11/18/2009	<0.005	
1/5/2010	<0.005	
3/3/2010	<0.005	
9/7/2010	<0.005	
3/10/2011	<0.005	
9/8/2011	<0.005	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/5/2013	<0.005	
8/13/2013	<0.005	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/3/2015	<0.005	
8/4/2015	<0.005	
2/16/2016	<0.005	
2/23/2017	0.0015 (J)	
2/19/2018	<0.005	
8/6/2018	0.0026 (J)	
2/25/2019		0.0023 (J)
6/13/2019		0.0037 (J)
10/8/2019		0.0021 (J)
3/17/2020		0.0011 (J)
9/23/2020		0.0016 (J)

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	<0.01	
3/5/2012	<0.01	
9/5/2012	<0.01	
2/5/2013	<0.01	
8/13/2013	<0.01	
2/4/2014	<0.01	
8/5/2014	<0.01	
2/2/2015	<0.01	
8/4/2015	<0.01 (D)	
2/16/2016	<0.01	
8/31/2016	0.0039 (J)	
11/29/2016	0.0033 (J)	
2/23/2017	0.0097 (J)	
5/9/2017	0.0066 (J)	
7/18/2017	0.0021 (J)	
10/17/2017	0.003 (J)	
2/21/2018	<0.01	
8/7/2018	<0.01	
2/26/2019		0.0014 (J)
6/13/2019		<0.01
8/20/2019		0.0022 (J)
10/9/2019		0.0023 (J)
3/17/2020		0.0017 (J)
8/27/2020		0.011
9/22/2020		0.012

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.01	
1/4/2011	<0.01	
2/17/2011	<0.01	
3/11/2011	<0.01	
3/28/2011	<0.01	
9/7/2011	<0.01	
3/6/2012	<0.01	
9/11/2012	<0.01	
2/6/2013	<0.01	
8/13/2013	<0.01	
2/4/2014	<0.01	
8/5/2014	<0.01	
2/2/2015	<0.01	
8/4/2015	<0.01	
2/17/2016	<0.01	
8/31/2016	0.0029 (J)	
11/28/2016	0.0019 (J)	
2/22/2017	0.0015 (J)	
5/10/2017	0.0016 (J)	
7/18/2017	0.0024 (J)	
10/17/2017	0.0028 (J)	
2/20/2018	<0.01	
8/8/2018	0.0025 (J)	
2/26/2019		0.003 (J)
6/12/2019		0.0034 (J)
8/20/2019		0.0032 (J)
10/9/2019		0.0026 (J)
3/18/2020		0.0032 (J)
8/28/2020		0.0037 (J)
9/22/2020		0.0056 (J)

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.01	
3/5/2012	<0.01	
9/5/2012	<0.01	
2/6/2013	<0.01	
8/13/2013	0.0057	
2/5/2014	<0.01	
8/4/2014	<0.01	
2/3/2015	<0.01	
8/3/2015	<0.01 (D)	
2/16/2016	<0.01	
8/31/2016	0.0038 (J)	
11/30/2016	0.0054 (J)	
2/23/2017	0.002 (J)	
5/9/2017	<0.01	
7/18/2017	0.0027 (J)	
10/18/2017	0.0047 (J)	
2/21/2018	<0.01	
8/7/2018	0.0016 (J)	
2/26/2019		0.002 (J)
6/13/2019		0.0089 (J)
8/21/2019		0.004 (J)
10/10/2019		0.0021 (J)
3/17/2020		0.0096 (J)
8/28/2020		0.0045 (J)
9/22/2020		0.0091 (J)

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.01	
1/4/2011	<0.01	
2/17/2011	<0.01	
3/11/2011	<0.01	
3/28/2011	<0.01	
9/7/2011	<0.01	
3/4/2012	<0.01	
9/10/2012	0.011	
2/6/2013	0.011	
8/14/2013	0.013	
2/4/2014	0.017	
8/4/2014	0.0085	
2/2/2015	0.0089	
8/3/2015	0.0067 (D)	
2/16/2016	0.0047 (J)	
9/1/2016	0.0132	
11/30/2016	0.0046 (J)	
2/24/2017	0.0108	
5/10/2017	0.0054 (J)	
7/18/2017	0.0047 (J)	
10/17/2017	0.004 (J)	
2/20/2018	<0.01	
8/8/2018	0.0041 (J)	
2/26/2019		0.0027 (J)
6/12/2019		0.0029 (J)
8/19/2019		0.003 (J)
10/10/2019		0.0024 (J)
3/18/2020		0.0046 (J)
8/28/2020		0.0031 (J)
9/22/2020		0.0032 (J)

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.013	
3/5/2012	0.014	
9/5/2012	0.012	
2/5/2013	0.011	
8/14/2013	0.025	
2/5/2014	0.02	
8/4/2014	0.032	
2/3/2015	0.011	
8/3/2015	0.046 (D)	
2/16/2016	0.022	
9/1/2016	0.0212	
12/1/2016	0.0234	
2/24/2017	0.0154	
5/10/2017	0.0152	
7/17/2017	0.0136	
10/16/2017	0.0242	
2/21/2018	0.0127	
8/7/2018	0.021	
2/26/2019		0.024
6/13/2019		0.027
8/21/2019		0.037
10/9/2019		0.034
3/18/2020		0.028
8/27/2020		0.021
9/23/2020		0.026

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	<0.01	
11/18/2009	<0.01	
1/5/2010	<0.01	
3/3/2010	<0.01	
9/7/2010	<0.01	
3/10/2011	<0.01	
9/8/2011	<0.01	
3/5/2012	<0.01	
9/5/2012	<0.01	
2/5/2013	<0.01	
8/13/2013	<0.01	
2/4/2014	<0.01	
8/5/2014	<0.01	
2/3/2015	<0.01	
8/4/2015	<0.01	
2/16/2016	<0.01	
9/1/2016	0.002 (J)	
11/29/2016	0.0017 (J)	
2/23/2017	0.0018 (J)	
5/10/2017	0.0023 (J)	
7/18/2017	0.0046 (J)	
10/18/2017	0.0037 (J)	
2/19/2018	<0.01	
8/6/2018	0.0047 (J)	
2/25/2019		0.0051 (J)
6/13/2019		0.0048 (J)
8/20/2019		0.0039 (J)
10/8/2019		0.0031 (J)
3/17/2020		0.0026 (J)
8/27/2020		0.0027 (J)
9/23/2020		0.0031 (J)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	0.0081	
9/11/2007	0.0049	
3/20/2008	0.004	
8/27/2008	0.0042	
3/3/2009	0.0058	
11/18/2009	0.0038	
3/3/2010	0.0085	
9/8/2010	0.0065	
3/10/2011	0.0029	
9/8/2011	0.004	
3/5/2012	0.0059	
9/10/2012	0.0052	
2/6/2013	0.0038	
8/12/2013	0.0075	
2/5/2014	0.018 (o)	
8/5/2014	0.0037	
2/4/2015	0.0057	
8/3/2015	0.0043	
2/16/2016	0.0024 (J)	
2/22/2017	0.0042 (J)	
5/8/2017	0.0025 (J)	
7/17/2017	0.0032 (J)	
2/19/2018	<0.01	
8/6/2018	0.0037 (J)	
2/25/2019		0.013
6/12/2019		<0.01
10/8/2019		0.0078 (J)
3/17/2020		<0.01
9/22/2020		0.033

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	0.0048	
3/5/2012	0.0038	
9/5/2012	0.0051	
2/5/2013	<0.01	
8/13/2013	<0.01	
2/4/2014	0.0037	
8/5/2014	0.0019 (J)	
2/2/2015	0.0051	
8/4/2015	0.0017 (JD)	
2/16/2016	0.0015 (J)	
2/23/2017	0.0024 (J)	
5/9/2017	0.0016 (J)	
7/18/2017	0.0015 (J)	
2/21/2018	<0.01	
8/7/2018	0.0044 (J)	
2/26/2019		0.0022 (J)
6/13/2019		<0.01
10/9/2019		0.0078 (J)
3/17/2020		<0.01
9/22/2020		0.0029 (J)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	0.0047	
1/4/2011	0.0038	
2/17/2011	0.0074	
3/11/2011	0.0038	
3/28/2011	<0.01	
9/7/2011	0.0059	
3/6/2012	0.0032	
9/11/2012	0.0029	
2/6/2013	0.0036	
8/13/2013	0.0066	
2/4/2014	0.011	
8/5/2014	0.0032	
2/2/2015	0.0031	
8/4/2015	0.0017 (J)	
2/17/2016	0.0034	
2/22/2017	0.0024 (J)	
5/10/2017	0.0022 (J)	
7/18/2017	0.0017 (J)	
2/20/2018	<0.01	
8/8/2018	0.0021 (J)	
2/26/2019		0.003 (J)
6/12/2019		0.0019 (J)
10/9/2019		0.0069 (J)
3/18/2020		<0.01
9/22/2020		0.003 (J)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	0.0064	
3/5/2012	0.0043	
9/5/2012	0.0069	
2/6/2013	<0.01	
8/13/2013	0.011	
2/5/2014	0.026 (o)	
8/4/2014	0.012	
2/3/2015	0.0061	
8/3/2015	0.0037 (D)	
2/16/2016	0.0093	
2/23/2017	0.0031 (J)	
5/9/2017	0.0025 (J)	
7/18/2017	0.0028 (J)	
2/21/2018	0.003 (J)	
8/7/2018	0.0036 (J)	
2/26/2019		0.0033 (J)
6/13/2019		0.0069 (J)
10/10/2019		0.0079 (J)
3/17/2020		<0.01
9/22/2020		0.0036 (J)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.01	
1/4/2011	<0.01	
2/17/2011	<0.01	
3/11/2011	0.025 (o)	
3/28/2011	<0.01	
9/7/2011	<0.01	
3/4/2012	<0.01	
9/10/2012	<0.01	
2/6/2013	<0.01	
8/14/2013	<0.01	
2/4/2014	0.0034	
8/4/2014	0.0013 (J)	
2/2/2015	<0.01	
8/3/2015	<0.01 (D)	
2/16/2016	0.0017 (J)	
2/24/2017	0.0028 (J)	
5/10/2017	0.0014 (J)	
7/18/2017	0.0015 (J)	
2/20/2018	<0.01	
8/8/2018	0.0033 (J)	
2/26/2019		<0.01
6/12/2019		<0.01
10/10/2019		0.006 (J)
3/18/2020		<0.01
9/22/2020		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	0.0064	
3/5/2012	0.0034	
9/5/2012	0.0035	
2/5/2013	0.0027	
8/14/2013	0.0041	
2/5/2014	0.011	
8/4/2014	0.011	
2/3/2015	0.0044	
8/3/2015	0.011 (D)	
2/16/2016	0.014	
2/24/2017	0.0043 (J)	
5/10/2017	0.0042 (J)	
7/17/2017	0.0055 (J)	
2/21/2018	0.0102	
8/7/2018	0.015	
2/26/2019		0.015
6/13/2019		0.015
10/9/2019		0.025
1/21/2020		0.015
3/18/2020		0.023
9/23/2020		0.018

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 2/12/2021 10:26 AM View: State Parameters - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	0.003	
11/18/2009	<0.01	
1/5/2010	0.0027	
3/3/2010	<0.01	
9/7/2010	<0.01	
3/10/2011	<0.01	
9/8/2011	<0.01	
3/5/2012	0.0053	
9/5/2012	0.0033	
2/5/2013	<0.01	
8/13/2013	0.0038	
2/4/2014	0.0046	
8/5/2014	0.0019 (J)	
2/3/2015	0.0026	
8/4/2015	0.0035	
2/16/2016	0.002 (J)	
2/23/2017	0.0038 (J)	
5/10/2017	0.0027 (J)	
7/18/2017	0.0024 (J)	
2/19/2018	<0.01	
8/6/2018	0.004 (J)	
2/25/2019		0.0028 (J)
6/13/2019		<0.01
10/8/2019		0.006 (J)
3/17/2020		<0.01
9/23/2020		<0.01

FIGURE E.

State Parameters Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:35 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Zinc (mg/L)	**GWC-5R**	**0.001708**	**131**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

State Parameters Trend Tests - All Results

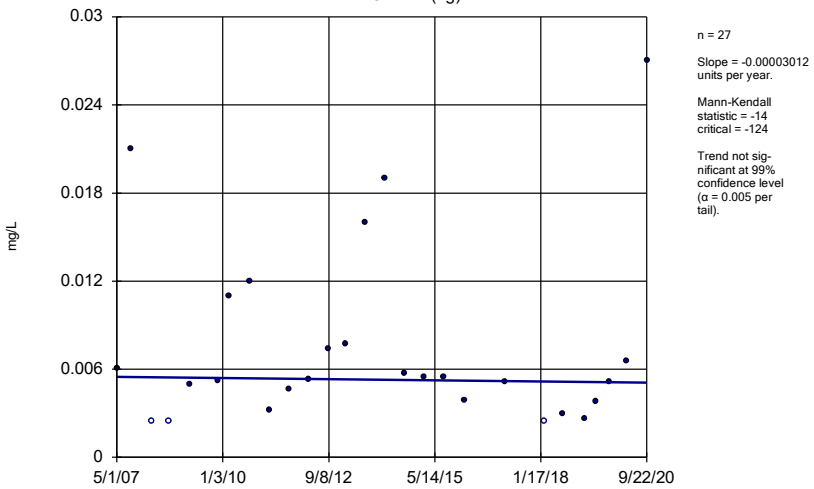
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:35 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Nickel (mg/L)	GWA-2 (bg)	-0.00003012	-14	-124	No	27	11.11	n/a	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	176	No	34	100	n/a	n/a	0.01	NP
Selenium (mg/L)	GWC-1R	0	-68	-111	No	25	52	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-2 (bg)	0	3	131	No	28	10.71	n/a	n/a	0.01	NP
Zinc (mg/L)	**GWC-5R**	**0.001708**	**131**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 27

Slope = -0.00003012 units per year.

Mann-Kendall statistic = -14
critical = -124

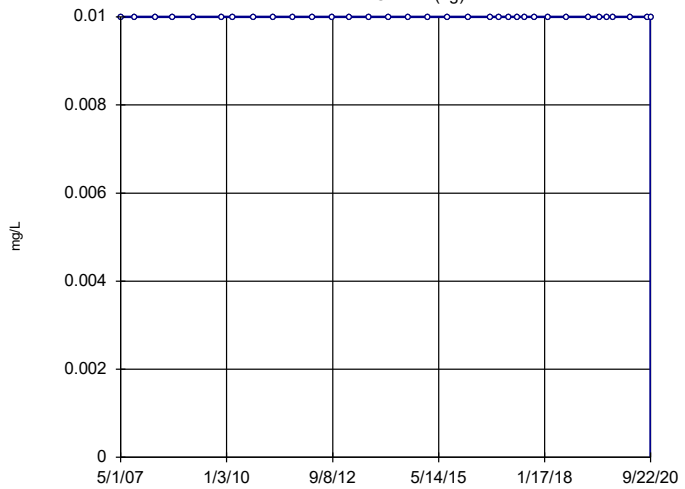
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 2/12/2021 10:34 AM View: State Parameters - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 34

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 176

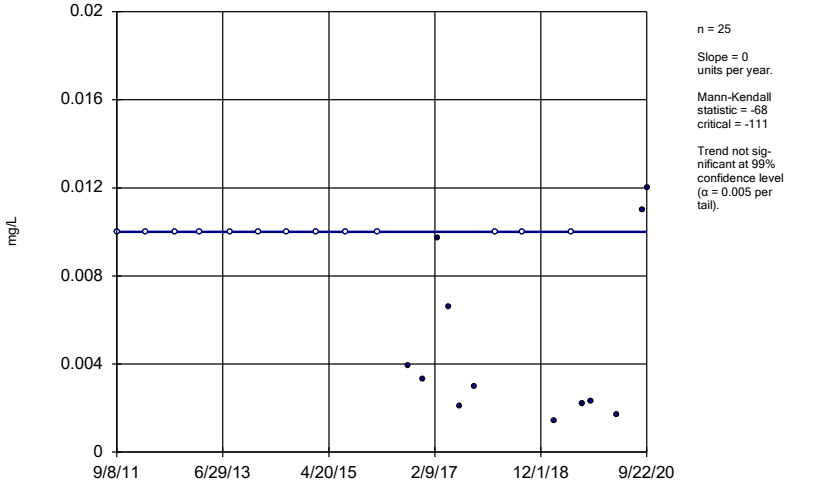
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 2/12/2021 10:34 AM View: State Parameters - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-1R



n = 25

Slope = 0 units per year.

Mann-Kendall statistic = -68
critical = -111

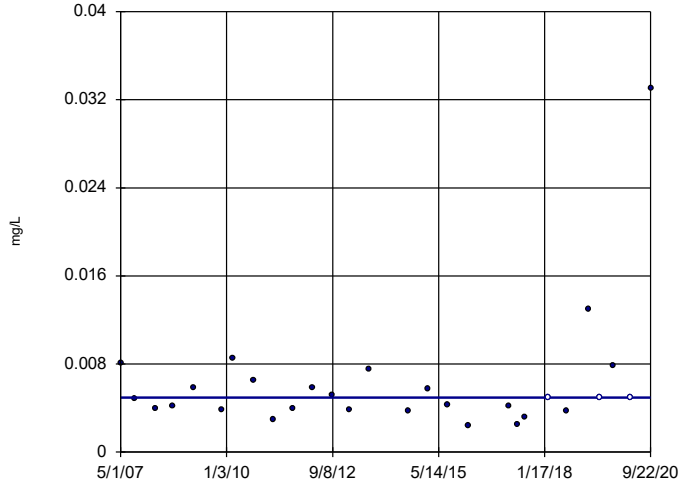
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 2/12/2021 10:34 AM View: State Parameters - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 28

Slope = 0 units per year.

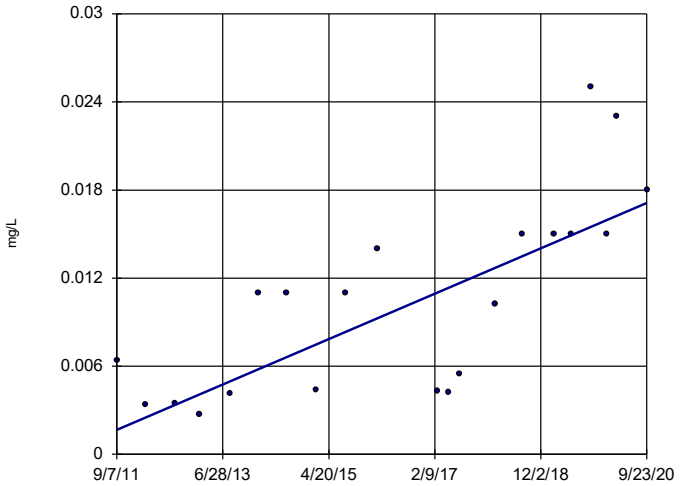
Mann-Kendall statistic = 3
critical = 131

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 2/12/2021 10:34 AM View: State Parameters - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-5R



n = 21

Slope = 0.001708 units per year.

Mann-Kendall statistic = 131 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 2/12/2021 10:34 AM View: State Parameters - Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

FIGURE F.

Appendix III - Intrawell Prediction Limits - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:38 AM

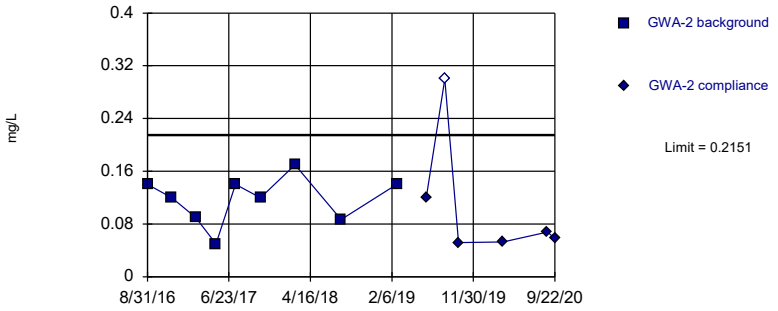
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GWA-2	0.2151	n/a	9/22/2020	0.058J	No	9	0.1174	0.03628	0	None	No	0.001254	Param Intra 1 of 2
Fluoride (mg/L)	GWC-1R	0.1	n/a	9/22/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-2R	0.1	n/a	9/22/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-3R	0.22	n/a	9/22/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-4R	0.15	n/a	9/22/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-5R	0.37	n/a	9/23/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-6R	0.28	n/a	9/23/2020	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
pH (S.U.)	GWA-2	7.106	5.427	9/22/2020	5.78	No	21	6.266	0.401	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-1R	5.52	4.49	9/22/2020	5.25	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-2R	6.8	4.35	9/22/2020	5.34	No	16	n/a	n/a	0	n/a	n/a	0.01291	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-3R	5.28	4.31	9/22/2020	5.11	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-4R	6.245	4.827	9/22/2020	5.43	No	10	5.536	0.2783	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-5R	5.711	4.765	9/23/2020	5.04	No	9	5.238	0.1758	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	GWC-6R	6.687	5.169	9/23/2020	5.81	No	19	5.928	0.3559	0	None	No	0.0006268	Param Intra 1 of 2

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1174, Std. Dev.=0.03628, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9425, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

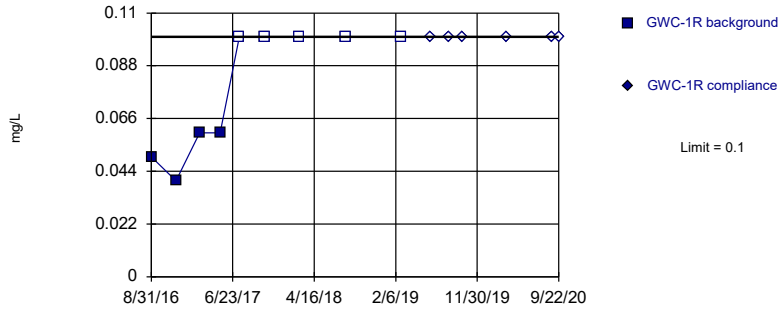
Constituent: Fluoride Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

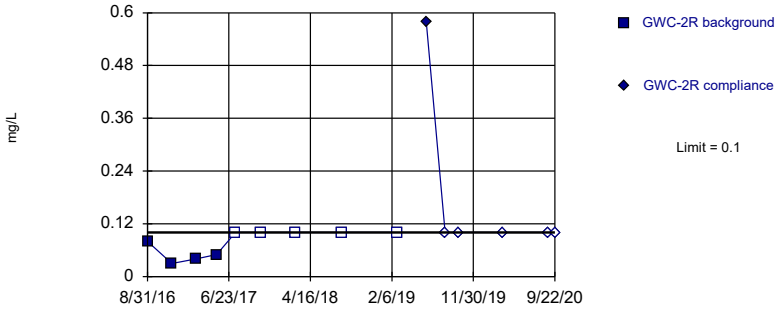
Constituent: Fluoride Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

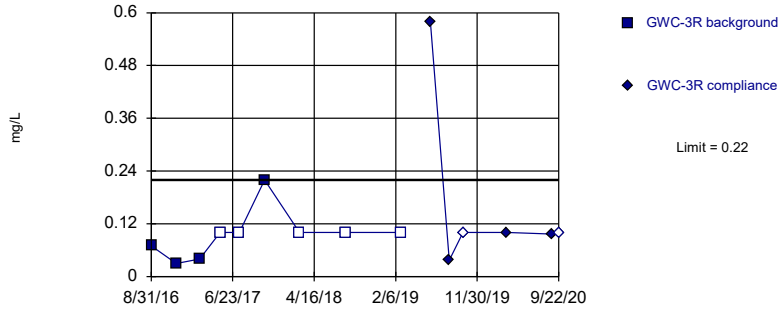
Constituent: Fluoride Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

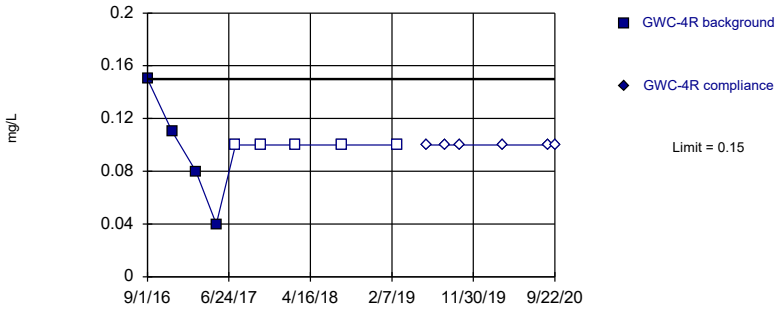
Constituent: Fluoride Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

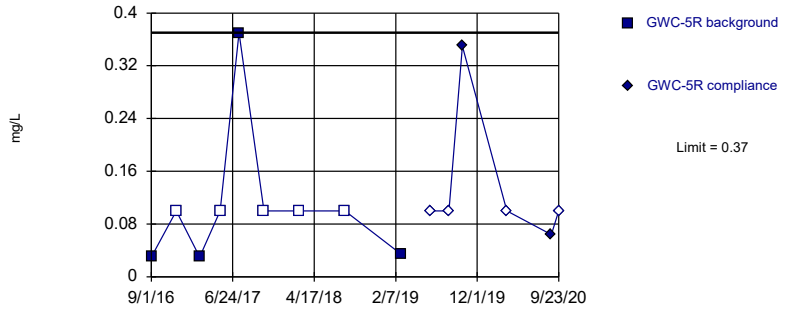
Constituent: Fluoride Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

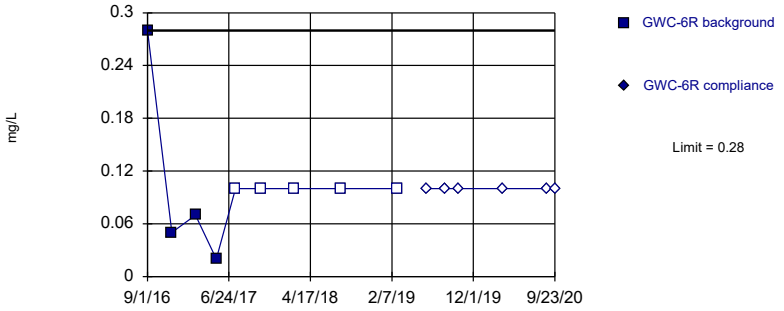
Constituent: Fluoride Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

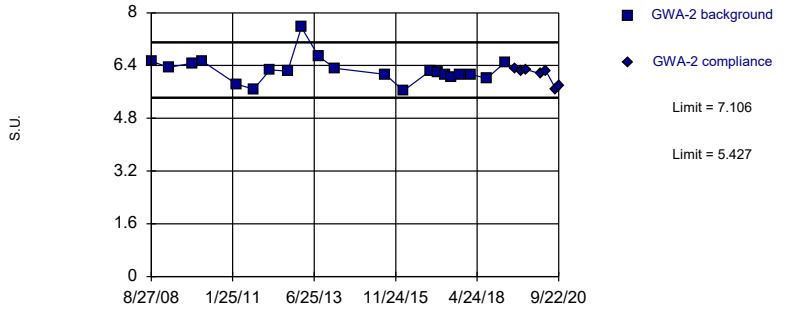
Constituent: Fluoride Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



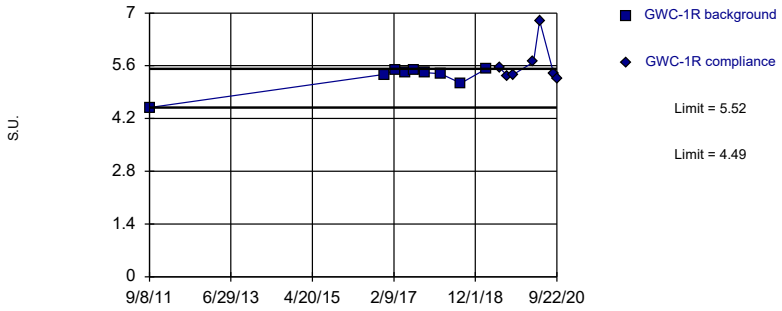
Background Data Summary: Mean=6.266, Std. Dev.=0.401, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8754, critical = 0.873. Kappa = 2.094 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limits

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. Limits are highest and lowest of 9 background values. Well-constituent pair annual alpha = 0.07172. Individual comparison alpha = 0.03619 (1 of 2).

Constituent: pH Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell

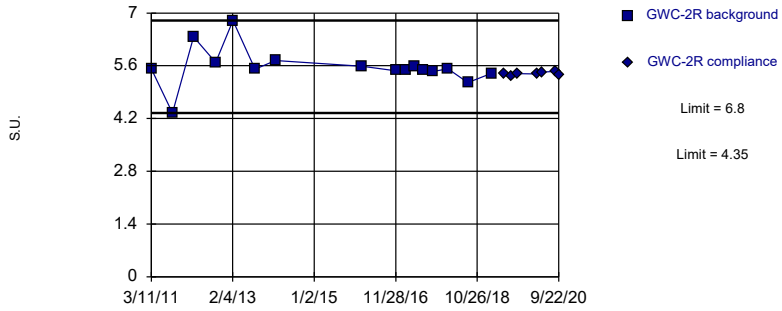
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limits

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. Limits are highest and lowest of 16 background values. Well-constituent pair annual alpha = 0.02574. Individual comparison alpha = 0.01291 (1 of 2).

Constituent: pH Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell

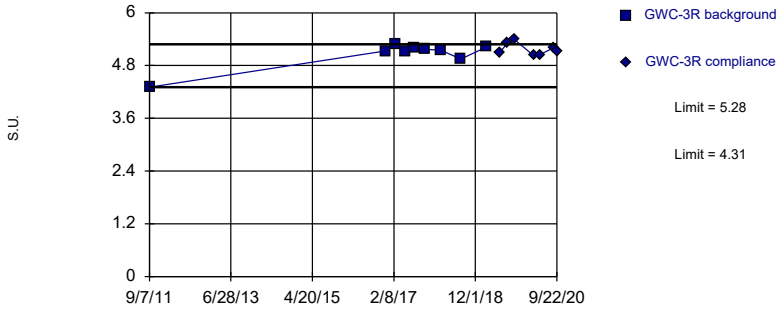
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limits

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. Limits are highest and lowest of 9 background values. Well-constituent pair annual alpha = 0.07172. Individual comparison alpha = 0.03619 (1 of 2).

Constituent: pH Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell

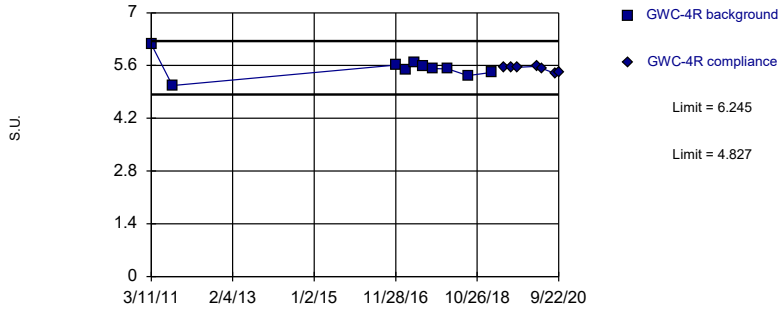
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.536, Std. Dev.=0.2783, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9104, critical = 0.781. Kappa = 2.549 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

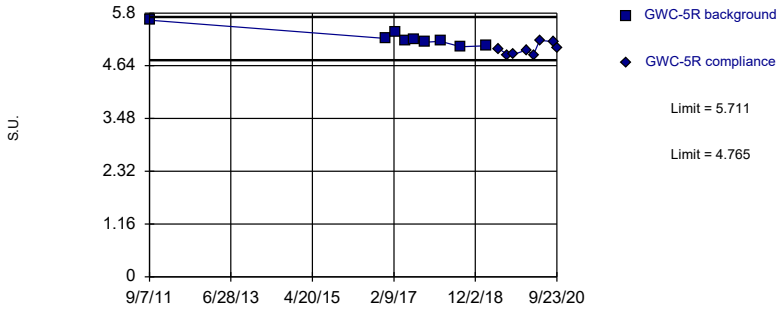
Constituent: pH Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.238, Std. Dev.=0.1758, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8341, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

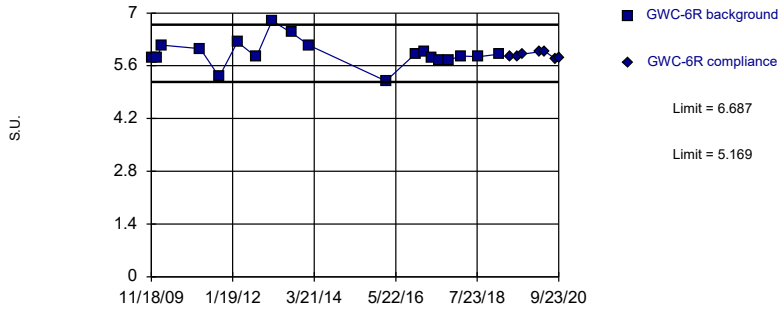
Constituent: pH Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.928, Std. Dev.=0.3559, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9219, critical = 0.863. Kappa = 2.132 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 2/12/2021 10:37 AM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
8/31/2016	0.14 (J)	
11/28/2016	0.12 (J)	
2/22/2017	0.09 (J)	
5/8/2017	0.05 (J)	
7/17/2017	0.14 (J)	
10/16/2017	0.12 (J)	
2/19/2018	0.17	
8/6/2018	0.087 (J)	
2/25/2019	0.14 (J)	
6/12/2019		0.12 (J)
8/19/2019		<0.3
10/8/2019		0.052 (J)
3/17/2020		0.053 (J)
8/26/2020		0.068 (J)
9/22/2020		0.058 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
8/31/2016	0.05 (J)	
11/29/2016	0.04 (J)	
2/23/2017	0.06 (J)	
5/9/2017	0.06 (J)	
7/18/2017	<0.1	
10/17/2017	<0.1	
2/21/2018	<0.1	
8/7/2018	<0.1	
2/26/2019	<0.1	
6/13/2019		<0.1
8/20/2019		<0.1
10/9/2019		<0.1
3/17/2020		<0.1
8/27/2020		<0.1
9/22/2020		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
8/31/2016	0.08 (J)	
11/28/2016	0.03 (J)	
2/22/2017	0.04 (J)	
5/10/2017	0.05 (J)	
7/18/2017	<0.1	
10/17/2017	<0.1	
2/20/2018	<0.1	
8/8/2018	<0.1	
2/26/2019	<0.1	
6/12/2019		0.58
8/20/2019		<0.1
10/9/2019		<0.1
3/18/2020		<0.1
8/28/2020		<0.1
9/22/2020		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
8/31/2016	0.07 (J)	
11/30/2016	0.03 (J)	
2/23/2017	0.04 (J)	
5/9/2017	<0.1	
7/18/2017	<0.1	
10/18/2017	0.22 (J)	
2/21/2018	<0.1	
8/7/2018	<0.1	
2/26/2019	<0.1	
6/13/2019		0.58
8/21/2019		0.037 (J)
10/10/2019		<0.1
3/17/2020		0.1 (J)
8/28/2020		0.097 (J)
9/22/2020		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
9/1/2016	0.15 (J)	
11/30/2016	0.11 (J)	
2/24/2017	0.08 (J)	
5/10/2017	0.04 (J)	
7/18/2017	<0.1	
10/17/2017	<0.1	
2/20/2018	<0.1	
8/8/2018	<0.1	
2/26/2019	<0.1	
6/12/2019		<0.1
8/19/2019		<0.1
10/10/2019		<0.1
3/18/2020		<0.1
8/28/2020		<0.1
9/22/2020		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/1/2016	0.03 (J)	
12/1/2016	<0.1	
2/24/2017	0.03 (J)	
5/10/2017	<0.1	
7/17/2017	0.37	
10/16/2017	<0.1	
2/21/2018	<0.1	
8/7/2018	<0.1	
2/26/2019	0.035 (J)	
6/13/2019		<0.1
8/21/2019		<0.1
10/9/2019		0.35
3/18/2020		<0.1
8/27/2020		0.064 (J)
9/23/2020		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/1/2016	0.28 (J)	
11/29/2016	0.05 (J)	
2/23/2017	0.07 (J)	
5/10/2017	0.02 (J)	
7/18/2017	<0.1	
10/18/2017	<0.1	
2/19/2018	<0.1	
8/6/2018	<0.1	
2/25/2019	<0.1	
6/13/2019		<0.1
8/20/2019		<0.1
10/8/2019		<0.1
3/17/2020		<0.1
8/27/2020		<0.1
9/23/2020		<0.1

Prediction Limit

Constituent: pH (S.U.) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
8/27/2008	6.53	
3/3/2009	6.35	
11/18/2009	6.47	
3/3/2010	6.53	
3/10/2011	5.83	
9/8/2011	5.69	
3/5/2012	6.27	
9/10/2012	6.23	
2/6/2013	7.56	
8/12/2013	6.68	
2/5/2014	6.32	
8/3/2015	6.13 (D)	
2/16/2016	5.64	
11/28/2016	6.23	
2/22/2017	6.21	
5/8/2017	6.12	
7/17/2017	6.03	
10/16/2017	6.12	
2/19/2018	6.13	
8/6/2018	6.01	
2/25/2019	6.51	
6/12/2019		6.3
8/19/2019		6.23
10/8/2019		6.28
3/17/2020		6.14
5/6/2020		6.24
8/26/2020		5.67
9/22/2020		5.78

Prediction Limit

Constituent: pH (S.U.) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	4.49	
11/29/2016	5.37	
2/23/2017	5.5	
5/9/2017	5.41	
7/18/2017	5.5	
10/17/2017	5.42	
2/21/2018	5.39	
8/7/2018	5.14	
2/26/2019	5.52	
6/13/2019		5.55
8/20/2019		5.33
10/9/2019		5.37
3/17/2020		5.7
5/6/2020		6.8
8/27/2020		5.39
9/22/2020		5.25

Prediction Limit

Constituent: pH (S.U.) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
3/11/2011	5.52	
9/7/2011	4.35	
3/6/2012	6.37	
9/11/2012	5.69	
2/6/2013	6.8	
8/13/2013	5.51	
2/4/2014	5.74	
2/17/2016	5.59	
11/28/2016	5.47	
2/22/2017	5.48	
5/10/2017	5.6	
7/18/2017	5.49	
10/17/2017	5.45	
2/20/2018	5.52	
8/8/2018	5.15	
2/26/2019	5.4	
6/12/2019		5.38
8/20/2019		5.33
10/9/2019		5.39
3/18/2020		5.38
5/7/2020		5.43
8/28/2020		5.45
9/22/2020		5.34

Prediction Limit

Constituent: pH (S.U.) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	4.31	
11/30/2016	5.13	
2/23/2017	5.28	
5/9/2017	5.12	
7/18/2017	5.21	
10/18/2017	5.17	
2/21/2018	5.15	
8/7/2018	4.95	
2/26/2019	5.22	
6/13/2019		5.08
8/21/2019		5.32
10/10/2019		5.4
3/17/2020		5.03
5/7/2020		5.05
8/28/2020		5.2
9/22/2020		5.11

Prediction Limit

Constituent: pH (S.U.) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
3/11/2011	6.16	
9/7/2011	5.07	
11/30/2016	5.61	
2/24/2017	5.47	
5/10/2017	5.68	
7/18/2017	5.59	
10/17/2017	5.52	
2/20/2018	5.51	
8/8/2018	5.33	
2/26/2019	5.42	
6/12/2019		5.54
8/19/2019		5.56
10/10/2019		5.55
3/18/2020		5.58
5/7/2020		5.52
8/28/2020		5.38
9/22/2020		5.43

Prediction Limit

Constituent: pH (S.U.) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	5.64	
12/1/2016	5.24	
2/24/2017	5.37	
5/10/2017	5.2	
7/17/2017	5.21	
10/16/2017	5.16	
2/21/2018	5.18	
8/7/2018	5.06	
2/26/2019	5.08	
6/13/2019		5.01
8/21/2019		4.88
10/9/2019		4.89
1/21/2020		4.99
3/18/2020		4.88
5/7/2020		5.2
8/27/2020		5.17
9/23/2020		5.04

Prediction Limit

Constituent: pH (S.U.) Analysis Run 2/12/2021 10:38 AM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
11/18/2009	5.82	
1/5/2010	5.8	
3/3/2010	6.15	
3/10/2011	6.05	
9/8/2011	5.31	
3/5/2012	6.23	
9/5/2012	5.83	
2/5/2013	6.79	
8/13/2013	6.48	
2/4/2014	6.14	
2/16/2016	5.2	
11/29/2016	5.92	
2/23/2017	5.97	
5/10/2017	5.82	
7/18/2017	5.76	
10/18/2017	5.76	
2/19/2018	5.86	
8/6/2018	5.84	
2/25/2019	5.91	
6/13/2019		5.84
8/20/2019		5.85
10/8/2019		5.91
3/17/2020		5.97
5/6/2020		5.99
8/27/2020		5.77
9/23/2020		5.81

FIGURE G.

Appendix III - Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 11/23/2020, 8:11 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-4R	0.16	n/a	9/22/2020	1	Yes	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-1R	37	n/a	9/22/2020	98.8	Yes	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2R	37	n/a	9/22/2020	40.5	Yes	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-5R	37	n/a	9/23/2020	144	Yes	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-6R	37	n/a	9/23/2020	103	Yes	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2R	7.9	n/a	9/22/2020	24.7	Yes	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-4R	7.9	n/a	9/22/2020	60.2	Yes	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-1R	160	n/a	9/22/2020	478	Yes	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-2R	160	n/a	9/22/2020	216	Yes	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-5R	160	n/a	9/23/2020	992	Yes	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-6R	160	n/a	9/23/2020	518	Yes	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
TDS (mg/L)	GWC-1R	216	n/a	9/22/2020	675	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-2R	216	n/a	9/22/2020	394	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-4R	216	n/a	9/22/2020	217	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-5R	216	n/a	9/23/2020	1000	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-6R	216	n/a	9/23/2020	820	Yes	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 11/23/2020, 8:11 PM

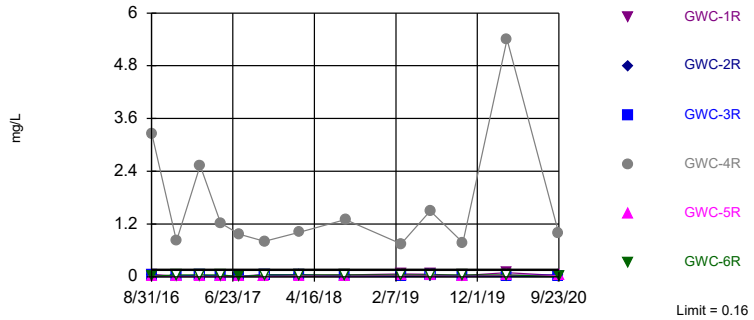
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-1R	0.16	n/a	9/22/2020	0.025J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-2R	0.16	n/a	9/22/2020	0.046J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-3R	0.16	n/a	9/22/2020	0.0066J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	**GWC-4R**	**0.16**	**n/a**	**9/22/2020**	**1**	**Yes**	**274**	**n/a**	**n/a**	**45.62**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	GWC-5R	0.16	n/a	9/23/2020	0.028J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-6R	0.16	n/a	9/23/2020	0.0055J	No	274	n/a	n/a	45.62	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GWC-1R**	**37**	**n/a**	**9/22/2020**	**98.8**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-2R**	**37**	**n/a**	**9/22/2020**	**40.5**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GWC-3R	37	n/a	9/22/2020	6.2	No	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-4R	37	n/a	9/22/2020	21.8	No	274	n/a	n/a	1.095	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GWC-5R**	**37**	**n/a**	**9/23/2020**	**144**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-6R**	**37**	**n/a**	**9/23/2020**	**103**	**Yes**	**274**	**n/a**	**n/a**	**1.095**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-1R	7.9	n/a	9/22/2020	5.5	No	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GWC-2R**	**7.9**	**n/a**	**9/22/2020**	**24.7**	**Yes**	**274**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-3R	7.9	n/a	9/22/2020	4.2	No	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	**GWC-4R**	**7.9**	**n/a**	**9/22/2020**	**60.2**	**Yes**	**274**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-5R	7.9	n/a	9/23/2020	3	No	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-6R	7.9	n/a	9/23/2020	4.7	No	274	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GWC-1R**	**160**	**n/a**	**9/22/2020**	**478**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-2R**	**160**	**n/a**	**9/22/2020**	**216**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GWC-3R	160	n/a	9/22/2020	55.1	No	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-4R	160	n/a	9/22/2020	72.1	No	274	n/a	n/a	5.839	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GWC-5R**	**160**	**n/a**	**9/23/2020**	**992**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-6R**	**160**	**n/a**	**9/23/2020**	**518**	**Yes**	**274**	**n/a**	**n/a**	**5.839**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GWC-1R**	**216**	**n/a**	**9/22/2020**	**675**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-2R**	**216**	**n/a**	**9/22/2020**	**394**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	GWC-3R	216	n/a	9/22/2020	110	No	274	10.05	2.547	0.7299	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	**GWC-4R**	**216**	**n/a**	**9/22/2020**	**217**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-5R**	**216**	**n/a**	**9/23/2020**	**1000**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-6R**	**216**	**n/a**	**9/23/2020**	**820**	**Yes**	**274**	**10.05**	**2.547**	**0.7299**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GWC-4R

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 274 background values. 45.62% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 6 points to limit.

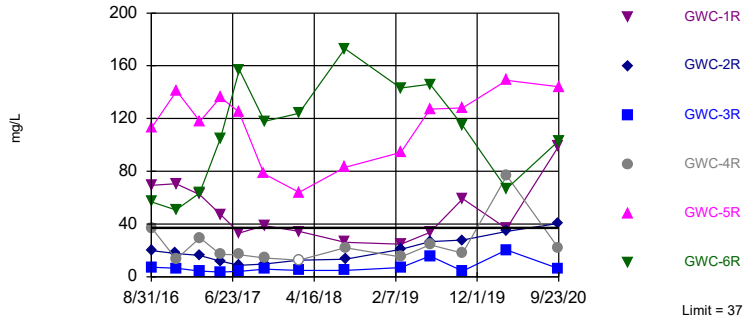
Constituent: Boron Analysis Run 11/23/2020 8:10 PM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GWC-1R, GWC-2R, GWC-5R, GWC-6R

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 274 background values. 1.095% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 6 points to limit.

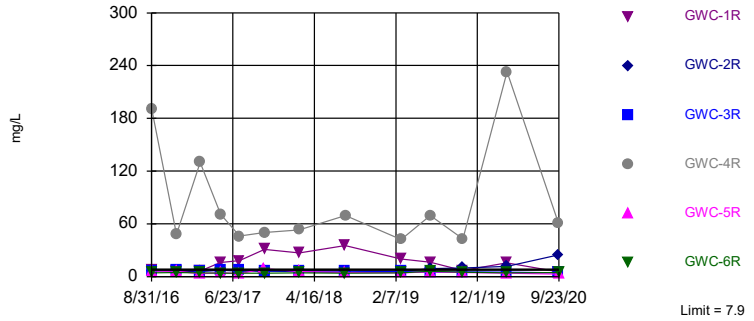
Constituent: Calcium Analysis Run 11/23/2020 8:10 PM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Exceeds Limit: GWC-2R, GWC-4R

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 274 background values. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 6 points to limit.

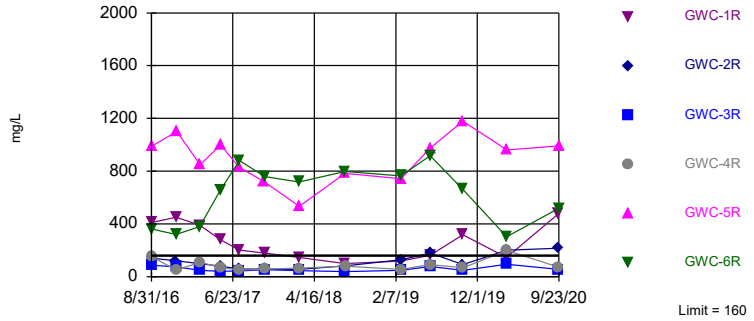
Constituent: Chloride Analysis Run 11/23/2020 8:10 PM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Exceeds Limit: GWC-1R, GWC-2R, GWC-5R, GWC-6R

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 274 background values. 5.839% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 6 points to limit.

Constituent: Sulfate Analysis Run 11/23/2020 8:10 PM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/1/2016	<0.04	<0.04	<0.04						
6/2/2016				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
6/6/2016									
6/7/2016									
7/25/2016	<0.04		<0.04	<0.04					
7/26/2016		0.0055 (J)			0.0177 (J)	<0.04	0.0052 (J)	0.0047 (J)	0.0097 (J)
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016		<0.04	<0.04						
9/14/2016	<0.04					0.01 (J)	0.0071 (J)	<0.04	
9/15/2016					0.0214 (J)				0.0102 (J)
9/16/2016									
9/19/2016				<0.04					
11/1/2016	<0.04	0.0086 (J)		<0.04					<0.04
11/2/2016					<0.04		<0.04	<0.04	
11/3/2016									
11/4/2016			<0.04			<0.04			
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017					0.0198 (J)				
1/11/2017	<0.04	0.0074 (J)							<0.04
1/12/2017						<0.04	0.0076 (J)		
1/13/2017								<0.04	
1/16/2017			<0.04	<0.04					
2/21/2017				<0.04					
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017	<0.04								
3/2/2017		0.008 (J)	<0.04						0.0084 (J)
3/3/2017									
3/6/2017								<0.04	
3/7/2017						<0.04	0.0089 (J)		
3/8/2017					0.0189 (J)				
4/26/2017	<0.04			<0.04	0.0161 (J)				<0.04
4/27/2017		0.0066 (J)	<0.04						
4/28/2017									
5/1/2017							0.0061 (J)	<0.04	
5/2/2017						<0.04			
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		0.0087 (J)	0.006 (J)			<0.04	0.0079 (J)		
6/28/2017	<0.04								<0.04

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/29/2017								<0.04	
6/30/2017				<0.04	0.0173 (J)				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017		0.0072 (J)	0.0071 (J)			<0.04	0.0094 (J)		
10/4/2017	<0.04			<0.04					<0.04
10/5/2017					0.0173 (J)			<0.04	
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018		0.0052 (J)							
6/6/2018			<0.04				0.0098 (J)		
6/7/2018						<0.04		0.0045 (J)	0.004 (J)
6/8/2018	<0.04				0.013 (J)				
6/11/2018				0.014 (J)					
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						0.0057 (J)	0.01 (J)	0.005 (J)	
10/1/2018	<0.04	0.021 (J)	0.0049 (J)		0.015 (J)				<0.04
10/2/2018				<0.04					
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019		0.005 (J)	<0.04						
3/29/2019					0.014 (J)				
4/1/2019	<0.04			<0.04					<0.04
4/2/2019									
4/3/2019						0.0044 (J)	0.0076 (J)	0.0055 (J)	
6/12/2019									
6/13/2019									
9/24/2019		0.0064 (J)	0.0055 (J)			0.0049 (J)	0.01 (J)		
9/25/2019	<0.04			<0.04	0.018 (J)			<0.04	0.0054 (J)
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			0.0087 (J)		0.02 (J)				
3/19/2020	0.0053 (J)	0.0085 (J)		0.0052 (J)					0.0073 (J)
3/24/2020						0.0068 (J)	0.011 (J)		
3/25/2020								0.011 (J)	
9/22/2020						0.0053 (J)	0.0079 (J)	<0.04	
9/23/2020	0.0073 (J)	<0.04	<0.04						0.012 (J)
9/24/2020				0.0075 (J)					
9/25/2020					0.02 (J)				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/1/2016									
6/2/2016									
6/6/2016	<0.04	<0.04							
6/7/2016			<0.04	<0.04	<0.04				
7/25/2016									
7/26/2016									
7/27/2016	0.0059 (J)	<0.04	0.008 (J)	<0.04					
7/28/2016					<0.04				
8/30/2016						0.0166 (J)			
8/31/2016							0.0315 (J)	0.0315 (J)	0.0553 (J)
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	0.0079 (J)		0.0086 (J)						
9/19/2016		<0.04		<0.04	<0.04				
11/1/2016									
11/2/2016				<0.04					
11/3/2016	0.0082 (J)	<0.04	0.0077 (J)		<0.04				
11/4/2016									
11/14/2016						0.0166 (J)			
11/28/2016								0.0095 (J)	
11/29/2016									0.0149 (J)
11/30/2016							0.0089 (J)		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	0.0096 (J)	<0.04	0.0092 (J)						
1/12/2017									
1/13/2017				<0.04	<0.04				
1/16/2017									
2/21/2017									
2/22/2017								<0.04	
2/23/2017							<0.04		0.0082 (J)
2/24/2017						0.0145 (J)			
3/1/2017	<0.04	<0.04							
3/2/2017			0.0095 (J)						
3/3/2017									
3/6/2017				<0.04	<0.04				
3/7/2017									
3/8/2017									
4/26/2017	0.0091 (J)	<0.04		<0.04	<0.04				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			<0.04						
5/8/2017						0.0141 (J)		0.0084 (J)	
5/9/2017							0.0077 (J)		0.0097 (J)
5/10/2017									
5/26/2017									
6/27/2017									
6/28/2017	0.0079 (J)	<0.04							

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/29/2017			0.0074 (J)	<0.04	<0.04				
6/30/2017									
7/11/2017						0.0131 (J)			
7/17/2017								0.0092 (J)	
7/18/2017							0.0073 (J)		0.0123 (J)
10/3/2017					<0.04				
10/4/2017	0.009 (J)		0.0077 (J)	<0.04					
10/5/2017		<0.04							
10/10/2017						0.0124 (J)			
10/11/2017									
10/12/2017									
10/16/2017								<0.04	
10/17/2017									0.0513
10/18/2017							<0.04		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018								<0.04	
2/20/2018									
2/21/2018							0.0399 (J)		0.0378 (J)
4/2/2018						0.013 (J)			
4/3/2018									
6/5/2018					0.0092 (J)				
6/6/2018				0.0049 (J)					
6/7/2018		<0.04							
6/8/2018									
6/11/2018	0.0093 (J)		0.01 (J)						
6/28/2018									
8/6/2018								<0.04	
8/7/2018							0.0049 (J)		0.043
8/8/2018									
9/19/2018						0.012 (J)			
9/24/2018									
9/25/2018	0.007 (J)	0.0046 (J)	0.0096 (J)	<0.04	0.0054 (J)				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019								<0.04	
2/26/2019							0.0053 (J)		0.062
3/26/2019									
3/27/2019						0.013 (J)			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			0.0066 (J)		0.011 (J)				
4/3/2019	0.0053 (J)	<0.04		<0.04					
6/12/2019								<0.04	
6/13/2019							<0.04		0.057
9/24/2019					0.018 (J)				
9/25/2019			0.0081 (J)	<0.04					
9/26/2019	0.0072 (J)	0.0062 (J)							
10/8/2019						0.012 (J)		<0.04	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
10/9/2019									0.029 (J)
10/10/2019							0.0061 (J)		
3/17/2020						0.023 (J)	0.0099 (J)	0.0051 (J)	0.092 (J)
3/18/2020									
3/19/2020									
3/24/2020	0.01 (J)	0.0054 (J)	0.0092 (J)	<0.04	0.016 (J)				
3/25/2020									
9/22/2020						0.0076 (J)	0.0066 (J)	0.0079 (J)	0.025 (J)
9/23/2020	0.006 (J)	0.021 (J)	0.0066 (J)						
9/24/2020				0.0094 (J)	0.013 (J)				
9/25/2020									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016							
6/2/2016							
6/6/2016							
6/7/2016							
7/25/2016							
7/26/2016							
7/27/2016							
7/28/2016							
8/30/2016							
8/31/2016	0.0305 (J)						
9/1/2016		0.0191 (J)	0.0108 (J)	3.25			
9/13/2016							
9/14/2016					<0.04		
9/15/2016							
9/16/2016							
9/19/2016							
11/1/2016							
11/2/2016							
11/3/2016							
11/4/2016					<0.04		
11/14/2016							
11/28/2016	0.0206 (J)						
11/29/2016			<0.04				
11/30/2016				0.813			
12/1/2016		0.0088 (J)					
12/15/2016					0.0107 (J)		
1/10/2017							
1/11/2017							
1/12/2017							
1/13/2017							
1/16/2017					<0.04		
2/21/2017							
2/22/2017	0.0192 (J)						
2/23/2017			<0.04				
2/24/2017		0.0067 (J)		2.53			
3/1/2017							
3/2/2017							
3/3/2017					<0.04		
3/6/2017							
3/7/2017							
3/8/2017							
4/26/2017							
4/27/2017							
4/28/2017					<0.04		
5/1/2017							
5/2/2017							
5/8/2017							
5/9/2017							
5/10/2017	0.0179 (J)	0.0068 (J)	<0.04	1.22			
5/26/2017					<0.04		
6/27/2017							
6/28/2017					<0.04		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017							
6/30/2017							
7/11/2017							
7/17/2017		0.0102 (J)					
7/18/2017	0.0169 (J)		0.0061 (J)	0.97			
10/3/2017					<0.04		
10/4/2017							
10/5/2017							
10/10/2017							
10/11/2017						0.0135 (J)	
10/12/2017							0.0401
10/16/2017		0.0066 (J)					
10/17/2017	0.0168 (J)			0.804			
10/18/2017			<0.04				
11/20/2017						0.0251 (J)	0.156
1/10/2018							0.15
1/11/2018						0.0255 (J)	
2/19/2018			<0.04				0.146
2/20/2018	<0.04			1.01		<0.04	
2/21/2018		0.0268 (J)					
4/2/2018							
4/3/2018						0.033 (J)	0.12
6/5/2018							
6/6/2018							
6/7/2018					<0.04		
6/8/2018							
6/11/2018							
6/28/2018						0.053	0.16
8/6/2018			<0.04				
8/7/2018		0.012 (J)				0.024 (J)	0.12
8/8/2018	0.017 (J)			1.3			
9/19/2018							
9/24/2018						0.028 (J)	0.099
9/25/2018							
9/26/2018							
10/1/2018					<0.04		
10/2/2018							
2/25/2019			<0.04				
2/26/2019	0.017 (J)	0.033 (J)		0.75			
3/26/2019							0.096
3/27/2019						0.017 (J)	
3/28/2019							
3/29/2019					0.0065 (J)		
4/1/2019							
4/2/2019							
4/3/2019							
6/12/2019	0.013 (J)			1.5			
6/13/2019		0.03 (J)	<0.04				
9/24/2019					0.0076 (J)		
9/25/2019							
9/26/2019							
10/8/2019			<0.04				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	0.018 (J)	0.013 (J)				0.017 (J)	0.079
10/10/2019				0.78			
3/17/2020			<0.04				
3/18/2020	0.026 (J)	0.034 (J)		5.4			
3/19/2020					0.0073 (J)		
3/24/2020							0.088 (J)
3/25/2020						0.043 (J)	
9/22/2020	0.046 (J)			1			
9/23/2020		0.028 (J)	0.0055 (J)		<0.04		
9/24/2020						0.037 (J)	0.087 (J)
9/25/2020							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/1/2016	21	12	2.5						
6/2/2016				1.3	1.3	2.4	33	8.8	28
6/6/2016									
6/7/2016									
7/25/2016	20.3		2.16	1.17					
7/26/2016		11			1.24	2.12	32.3	7.69	24.5
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016		11.8	2.21						
9/14/2016	19.7					2.18	31	8.49	
9/15/2016					1.17				27
9/16/2016									
9/19/2016				1.05					
11/1/2016	18.4	11		1.14					25.6
11/2/2016					1.23		30.9	7.83	
11/3/2016									
11/4/2016			2.67			2.17 (J)			
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017					1.24				
1/11/2017	20.3	11.2							27.5
1/12/2017						2.37	35.7		
1/13/2017								8.08	
1/16/2017			2.45	1.23					
2/21/2017				1.25					
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017	18.6								
3/2/2017		11	2.57						27.5
3/3/2017									
3/6/2017								8.64	
3/7/2017						2.34	32.7		
3/8/2017					1.21				
4/26/2017	25.6			1.03	1.14				30.4
4/27/2017		11.1	2.38						
4/28/2017									
5/1/2017							37	13.4	
5/2/2017						2.17			
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		13.8	2.36			2.13	36.5		
6/28/2017	23.9								29.8

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/29/2017								8.81	
6/30/2017				1.13	1.24				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017		14	2.21			2.15	30.9		
10/4/2017	22.1			1.09					29.7
10/5/2017					1.11			9.29	
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018		15.2 (J)							
6/6/2018			2.3				26.2		
6/7/2018						2.3		8.2	29.1
6/8/2018	21.9 (J)				1.1				
6/11/2018				1.1					
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						2.3	25.8	9.5 (J)	
10/1/2018	19.7	15.1	1.8		0.99				26.9
10/2/2018				1.1					
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019		13.3 (J)	2.2						
3/29/2019					1.1				
4/1/2019	20.4 (J)			1.3					30.1
4/2/2019									
4/3/2019						2.8	24.7 (J)	8.4	
6/12/2019									
6/13/2019									
9/24/2019		15.8	2.3			2.5	25.8		
9/25/2019	22.4			1.1	1.1			9.5	29.5
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			2.1		1.1				
3/19/2020	21.9	15		1.2					31.5
3/24/2020						2.5	26.1		
3/25/2020								10.5	
9/22/2020						2.6	27.2	9.6	
9/23/2020	23.6	14.1	1.8						28.6
9/24/2020				1.1					
9/25/2020					1.3				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/1/2016									
6/2/2016									
6/6/2016	1.4	6.2							
6/7/2016			2.2	2.3	3.7				
7/25/2016									
7/26/2016									
7/27/2016	1.19	4.73	2	2.08					
7/28/2016					3.15				
8/30/2016						20.9			
8/31/2016							7.23	9.31	69.4
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	1.5		1.97						
9/19/2016		4.76		1.97	3.17				
11/1/2016									
11/2/2016				2.13					
11/3/2016	1.31	5.25	1.99		3.4				
11/4/2016									
11/14/2016						18.6			
11/28/2016								9.47 (B)	
11/29/2016									70.6 (B)
11/30/2016							6.43 (B)		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	1.25	4.74	2.28						
1/12/2017									
1/13/2017				2.45	4.98				
1/16/2017									
2/21/2017									
2/22/2017								10.4	
2/23/2017							4.25		62.4
2/24/2017						16.1			
3/1/2017	1.26	5.37							
3/2/2017			2.15						
3/3/2017									
3/6/2017				2.48	6.28				
3/7/2017									
3/8/2017									
4/26/2017	1.05	4.28		2.3	6.65				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			1.95						
5/8/2017						14.6		14.2	
5/9/2017							3.56		47.4
5/10/2017									
5/26/2017									
6/27/2017									
6/28/2017	1.06	4.95							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/29/2017			2.02	2.54	6.04				
6/30/2017									
7/11/2017						14.3			
7/17/2017								14.1	
7/18/2017							4.16		33.2
10/3/2017					8.28				
10/4/2017	1.1		2.03	2.25					
10/5/2017		5.28							
10/10/2017						12.1			
10/11/2017									
10/12/2017									
10/16/2017								13.6	
10/17/2017									38.7
10/18/2017							5.67		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018								<25	
2/20/2018									
2/21/2018							4.76		34.3
4/2/2018						<25			
4/3/2018									
6/5/2018					9.1				
6/6/2018				2.3					
6/7/2018		4.8							
6/8/2018									
6/11/2018	1.4		2.1						
6/28/2018									
8/6/2018								11.4 (J)	
8/7/2018							4.7		26.2
8/8/2018									
9/19/2018						11.1 (J)			
9/24/2018									
9/25/2018	1	4.6	2.1	2.3	10.4 (J)				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019								12.7 (J)	
2/26/2019							7.1		24.7 (J)
3/26/2019									
3/27/2019						10.8 (J)			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			2.5		8.8				
4/3/2019	1.2	5.3		2.9					
6/12/2019								18.9	
6/13/2019							15.7		33.8
9/24/2019					7.7				
9/25/2019			2.6	2.4					
9/26/2019	1.1	4.9							
10/8/2019						9.7		28.3	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
10/9/2019									59.1
10/10/2019							4.3		
3/17/2020						14.8	20.3	24.3	36.7
3/18/2020									
3/19/2020									
3/24/2020	1	5.3	2.7	2.6	6				
3/25/2020									
9/22/2020						10.1	6.2	31	98.8
9/23/2020	0.91 (J)	5.2	2.6						
9/24/2020				2.6	7.8				
9/25/2020									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016							
6/2/2016							
6/6/2016							
6/7/2016							
7/25/2016							
7/26/2016							
7/27/2016							
7/28/2016							
8/30/2016							
8/31/2016	19.9						
9/1/2016		113	56.8	37.1			
9/13/2016							
9/14/2016					23.5		
9/15/2016							
9/16/2016							
9/19/2016							
11/1/2016							
11/2/2016							
11/3/2016							
11/4/2016					23.7		
11/14/2016							
11/28/2016	17.7 (B)						
11/29/2016			50.7 (B)				
11/30/2016				13.4 (B)			
12/1/2016		141 (B)					
12/15/2016					23.1		
1/10/2017							
1/11/2017							
1/12/2017							
1/13/2017							
1/16/2017					23.3		
2/21/2017							
2/22/2017	16.2						
2/23/2017			63.5				
2/24/2017		118		29.5			
3/1/2017							
3/2/2017							
3/3/2017					25.1		
3/6/2017							
3/7/2017							
3/8/2017							
4/26/2017							
4/27/2017							
4/28/2017					30.7		
5/1/2017							
5/2/2017							
5/8/2017							
5/9/2017							
5/10/2017	11.8	136	105	17			
5/26/2017					26.2		
6/27/2017							
6/28/2017					26.1		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017							
6/30/2017							
7/11/2017							
7/17/2017		125					
7/18/2017	8.69		157	16.8			
10/3/2017					26.7		
10/4/2017							
10/5/2017							
10/10/2017							
10/11/2017						2.74	
10/12/2017							2.9
10/16/2017		78.2					
10/17/2017	9.77			14.3			
10/18/2017			118				
11/20/2017						1.81	10.4
1/10/2018							10.2
1/11/2018						1.54	
2/19/2018			124				<25
2/20/2018	<25			<25		1.71	
2/21/2018		64					
4/2/2018							
4/3/2018						1.4	6.3
6/5/2018							
6/6/2018							
6/7/2018					25		
6/8/2018							
6/11/2018							
6/28/2018						1.4	6.7
8/6/2018			173				
8/7/2018		83				1.2	6.3
8/8/2018	13.4 (J)			22.1 (J)			
9/19/2018							
9/24/2018						1.1	5.7
9/25/2018							
9/26/2018							
10/1/2018					25		
10/2/2018							
2/25/2019			143				
2/26/2019	20.9 (J)	94.4		15.1 (J)			
3/26/2019							5.6
3/27/2019						1.5	
3/28/2019							
3/29/2019					23.5 (J)		
4/1/2019							
4/2/2019							
4/3/2019							
6/12/2019	26.6			24.2			
6/13/2019		127	146				
9/24/2019					26.4		
9/25/2019							
9/26/2019							
10/8/2019			115				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	27.8	128				2.4	4.9
10/10/2019				18			
3/17/2020			66.8				
3/18/2020	34.5	149		76.6			
3/19/2020					27.4		
3/24/2020							4.8
3/25/2020						2.7	
9/22/2020	40.5			21.8			
9/23/2020		144	103		26.3		
9/24/2020						3.7	4.4
9/25/2020							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/1/2016	1.3	1.3	1.6						
6/2/2016				1.9	4.1	4.3	7.2	3.7	1.4
6/6/2016									
6/7/2016									
7/25/2016	1.3		1.4	1.7					
7/26/2016		1.2			4	4.4	6.6	3.6	1.6
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016		1.1	1.3						
9/14/2016	1.3					3.8	6.6	3.4	
9/15/2016					4.2				1.5
9/16/2016									
9/19/2016				1.6					
11/1/2016	1.4	1.3		1.8					1.7
11/2/2016					4.9		7.6	4.5	
11/3/2016									
11/4/2016			1.6			4.8			
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017					4.1				
1/11/2017	1.1	1.1							1.2
1/12/2017						3.8	6.8		
1/13/2017								4.2	
1/16/2017			1.4	1.7					
2/21/2017				1.7					
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017	1.1								
3/2/2017		1	1.3						1.2
3/3/2017									
3/6/2017								3.6	
3/7/2017						4.5	6.8		
3/8/2017					4.2				
4/26/2017	1.1			1.7	4.1				1.2
4/27/2017		1	1.3						
4/28/2017									
5/1/2017							7.2	4.3	
5/2/2017						4.6			
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		1.1	1.4			4.3	7		
6/28/2017	1.2								1.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/29/2017								4.2	
6/30/2017				1.8	3.7				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017		1.1	1.7			4.2	6.5		
10/4/2017	1.2			1.8					1.5
10/5/2017					3.8			4.7	
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018		1.1							
6/6/2018			1.4				4.7		
6/7/2018						4.5		4.4	1.2
6/8/2018	1.2				3.4				
6/11/2018				2					
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						5.1	4.8	4.8	
10/1/2018	1.2	1.1	1.4		3.8				1.5
10/2/2018				1.8					
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019		1.4	1.5						
3/29/2019					4.2				
4/1/2019	1.1			1.7					1.2
4/2/2019									
4/3/2019						4.2	4	4.3	
6/12/2019									
6/13/2019									
9/24/2019		1.1	1.3			4.5	3.7		
9/25/2019	1.1			1.6	4.8			4.5	1.1
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			1.4		5.2				
3/19/2020	1.1	1.1		1.8					1.2
3/24/2020						4.3	3.5		
3/25/2020								3.9	
9/22/2020						4.2	3.6	4.5	
9/23/2020	1	0.99 (J)	1.2						1.1
9/24/2020				1.5					
9/25/2020					5.3				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/1/2016									
6/2/2016									
6/6/2016	6.4	6.8							
6/7/2016			4.5	1.9	2.8				
7/25/2016									
7/26/2016									
7/27/2016	6.2	6.7	4.5	1.9					
7/28/2016					2.6				
8/30/2016						5.2			
8/31/2016							6.7	4	7.6
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	6.1		4.5						
9/19/2016		7		1.9	2.4				
11/1/2016									
11/2/2016				2.6					
11/3/2016	7.4	7.5	5.4		2.9				
11/4/2016									
11/14/2016						6.4			
11/28/2016								4.2	
11/29/2016									5.8
11/30/2016							7.8		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	6.1	6.5	4.7						
1/12/2017									
1/13/2017				2.3	2.5				
1/16/2017									
2/21/2017									
2/22/2017								3.7	
2/23/2017							6.5		6.2
2/24/2017						5.5			
3/1/2017	6	6.9							
3/2/2017			4.8						
3/3/2017									
3/6/2017				1.9	2.1				
3/7/2017									
3/8/2017									
4/26/2017	6.5	7		2	2.1				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			4.6						
5/8/2017						5.8		4.2	
5/9/2017							7.2		16
5/10/2017									
5/26/2017									
6/27/2017									
6/28/2017	6.4	7							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/29/2017			4.5	2.6	2.8				
6/30/2017									
7/11/2017						5.8			
7/17/2017								3.8	
7/18/2017							7.7		18
10/3/2017					2.2				
10/4/2017	6.8		4.7	2.6					
10/5/2017		7							
10/10/2017						5.9			
10/11/2017									
10/12/2017									
10/16/2017								4.2	
10/17/2017									31
10/18/2017							6.5		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018								4.3	
2/20/2018									
2/21/2018							6.7		27
4/2/2018						4.8			
4/3/2018									
6/5/2018					1.7				
6/6/2018				2.7					
6/7/2018		6.8							
6/8/2018									
6/11/2018	6.8		4.9						
6/28/2018									
8/6/2018								3.8	
8/7/2018							6.3		35.4
8/8/2018									
9/19/2018						4			
9/24/2018									
9/25/2018	7.8	7.9	5.6	3.6	2.2				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019								4.1	
2/26/2019							5.7		20
3/26/2019									
3/27/2019						4.3			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			4.8		2.5				
4/3/2019	6.3	6.9		3.1					
6/12/2019								4.7	
6/13/2019							5		16.4
9/24/2019					3.1				
9/25/2019			5.7	2.8					
9/26/2019	7.1	7							
10/8/2019						4.4		5.1	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
10/9/2019									6.9
10/10/2019							5.3		
3/17/2020						4.1	5.2	4.8	15.5
3/18/2020									
3/19/2020									
3/24/2020	6.8	7	5	2.7	2.8				
3/25/2020									
9/22/2020						4.2	4.2	4.2	5.5
9/23/2020	7.2	7.2	6.6						
9/24/2020				2.7	2				
9/25/2020									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016							
6/2/2016							
6/6/2016							
6/7/2016							
7/25/2016							
7/26/2016							
7/27/2016							
7/28/2016							
8/30/2016							
8/31/2016	6.3						
9/1/2016		6.6	4.4	190			
9/13/2016							
9/14/2016					1.1		
9/15/2016							
9/16/2016							
9/19/2016							
11/1/2016							
11/2/2016							
11/3/2016							
11/4/2016					1.4		
11/14/2016							
11/28/2016	6.7						
11/29/2016			4.8				
11/30/2016				48			
12/1/2016		6					
12/15/2016					2.9		
1/10/2017							
1/11/2017							
1/12/2017							
1/13/2017							
1/16/2017					0.98		
2/21/2017							
2/22/2017	5.7						
2/23/2017			4.4				
2/24/2017		3.4		130			
3/1/2017							
3/2/2017							
3/3/2017					1.1		
3/6/2017							
3/7/2017							
3/8/2017							
4/26/2017							
4/27/2017							
4/28/2017					0.91		
5/1/2017							
5/2/2017							
5/8/2017							
5/9/2017							
5/10/2017	7.1	4.5	3.9	71			
5/26/2017					0.93		
6/27/2017							
6/28/2017					1		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017							
6/30/2017							
7/11/2017							
7/17/2017		3.2					
7/18/2017	6		4	46			
10/3/2017					1.2		
10/4/2017							
10/5/2017							
10/10/2017							
10/11/2017						2.4	
10/12/2017							3.8
10/16/2017		9					
10/17/2017	6.1			50			
10/18/2017			4.1				
11/20/2017						1.8	4.4
1/10/2018							4.6
1/11/2018						1.6	
2/19/2018			4.4				4.6
2/20/2018	5.8			53.1		2	
2/21/2018		5.6					
4/2/2018							
4/3/2018						3.3	5.9
6/5/2018							
6/6/2018							
6/7/2018					1		
6/8/2018							
6/11/2018							
6/28/2018						2.1	5
8/6/2018			3.9				
8/7/2018		4.7				1.2	4.3
8/8/2018	4.7			69.3			
9/19/2018							
9/24/2018						1.3	4.9
9/25/2018							
9/26/2018							
10/1/2018					1.1		
10/2/2018							
2/25/2019			4.4				
2/26/2019	5.7	4.2		42.2			
3/26/2019							4.4
3/27/2019						1.4	
3/28/2019							
3/29/2019					1.2		
4/1/2019							
4/2/2019							
4/3/2019							
6/12/2019	9.1			69.5			
6/13/2019		5.5	6.2				
9/24/2019					0.95 (J)		
9/25/2019							
9/26/2019							
10/8/2019			4.9				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	9.8	4.5				2.1	5.1
10/10/2019				42.8			
3/17/2020			4.4				
3/18/2020	11.7	3.8		233			
3/19/2020					0.97 (J)		
3/24/2020							4.7
3/25/2020						1.9	
9/22/2020	24.7			60.2			
9/23/2020		3	4.7		0.88 (J)		
9/24/2020						2.7	5
9/25/2020							

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/1/2016	12	5	4.2						
6/2/2016				1.3	6.6	1.9	20	8	5.8
6/6/2016									
6/7/2016									
7/25/2016	8.4		3.7	1.2					
7/26/2016		5.4			6.1	1.8	20	7.7	6.7
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016		2.9	5.2						
9/14/2016	8.6					1.8	19	7.5	
9/15/2016					6.1				6
9/16/2016									
9/19/2016				1.2					
11/1/2016	8.9	3.9		1.3					4.9
11/2/2016					6.3		20	8.2	
11/3/2016									
11/4/2016			5			2			
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017					5.9				
1/11/2017	8.6	3.7							4.5
1/12/2017						1.9	19		
1/13/2017								8.1	
1/16/2017			7.9	<1					
2/21/2017				1.4					
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017	9.3								
3/2/2017		4.6	7.4						4.4
3/3/2017									
3/6/2017								8	
3/7/2017						2.1	20		
3/8/2017					7				
4/26/2017	11			1.4	7				5.1
4/27/2017		5.2	7.4						
4/28/2017									
5/1/2017							20	8.4	
5/2/2017						2			
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		5.9	6.4			2.1	18		
6/28/2017	12								5.4

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/29/2017								9.2	
6/30/2017				<1	6.5				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017		6.6	5.9			2.3	16		
10/4/2017	12			1.4					6.2
10/5/2017					7.9			9.6	
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018		6.4							
6/6/2018			4.4				8.3		
6/7/2018						2		8.5	6.7
6/8/2018	9.6				6.4				
6/11/2018				1.1					
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						2.3	7.9	10.2	
10/1/2018	9.1	5.6	4		6.8				7.1
10/2/2018				1					
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019		8	4.3						
3/29/2019					7.3				
4/1/2019	8.5			0.96 (J)					7.2
4/2/2019									
4/3/2019						2.1	7	8.5	
6/12/2019									
6/13/2019									
9/24/2019		5.3	4.3			2.4	5.5		
9/25/2019	13.8			0.81 (J)	6.6			8.5	7
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			5.3		8.1				
3/19/2020	12.9	10		1.6					9
3/24/2020						2.1	5.9		
3/25/2020								8.8	
9/22/2020						2.1	5.5	8.2	
9/23/2020	16.8	8.1	3.4						6.9
9/24/2020				0.69 (J)					
9/25/2020					6.1				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/1/2016									
6/2/2016									
6/6/2016	1.8	1.2							
6/7/2016			4.4	<1	5.2				
7/25/2016									
7/26/2016									
7/27/2016	1.9	1.7	4.7	0.08 (J)					
7/28/2016					5.1				
8/30/2016						160			
8/31/2016							87	29	410
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	1.7		4.8						
9/19/2016		1.8		0.08 (J)	4.8				
11/1/2016									
11/2/2016				0.1 (J)					
11/3/2016	1.9	0.69 (J)	5.3		5				
11/4/2016									
11/14/2016						150			
11/28/2016								36	
11/29/2016									450
11/30/2016							76		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	1.7	<1	5.2						
1/12/2017									
1/13/2017				<1	4.3				
1/16/2017									
2/21/2017									
2/22/2017								43	
2/23/2017							47		390
2/24/2017						120			
3/1/2017	<1	1.8							
3/2/2017			5						
3/3/2017									
3/6/2017				<1	4.5				
3/7/2017									
3/8/2017									
4/26/2017	1.9	1.6		<1	4.9				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			5						
5/8/2017						120		60	
5/9/2017							41		280
5/10/2017									
5/26/2017									
6/27/2017									
6/28/2017	<1	<1							

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/29/2017			5.2	<1	5.5				
6/30/2017									
7/11/2017						110			
7/17/2017								63	
7/18/2017							44		200
10/3/2017					5.8				
10/4/2017	1.7		5.3	<1					
10/5/2017		1.6							
10/10/2017						93			
10/11/2017									
10/12/2017									
10/16/2017								62	
10/17/2017									180
10/18/2017							53		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018								64.6	
2/20/2018									
2/21/2018							46.7		146
4/2/2018						88.8			
4/3/2018									
6/5/2018					6.1				
6/6/2018				0.049 (J)					
6/7/2018		0.68 (J)							
6/8/2018									
6/11/2018	0.95 (J)		5.2						
6/28/2018									
8/6/2018								42.1	
8/7/2018							38.8		100
8/8/2018									
9/19/2018						75			
9/24/2018									
9/25/2018	1.5	1	6.1	0.13 (J)	7				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019								42.1	
2/26/2019							49.3		118
3/26/2019									
3/27/2019						65.9			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			5.1		3.8				
4/3/2019	1.3	0.82 (J)		0.12 (J)					
6/12/2019								83.4	
6/13/2019							77.1		163
9/24/2019					1				
9/25/2019			5.5	<1					
9/26/2019	1	0.64 (J)							
10/8/2019						52.3		128	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
10/9/2019									318
10/10/2019							48		
3/17/2020						71.6	95.2	98.6	145
3/18/2020									
3/19/2020									
3/24/2020	0.99 (J)	<1	5.4	<1	3				
3/25/2020									
9/22/2020						51.5	55.1	145	478
9/23/2020	1.1	0.53 (J)	5.1						
9/24/2020				<1	3.6				
9/25/2020									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016							
6/2/2016							
6/6/2016							
6/7/2016							
7/25/2016							
7/26/2016							
7/27/2016							
7/28/2016							
8/30/2016							
8/31/2016	140						
9/1/2016		990	360	150			
9/13/2016							
9/14/2016					9.4		
9/15/2016							
9/16/2016							
9/19/2016							
11/1/2016							
11/2/2016							
11/3/2016							
11/4/2016					13		
11/14/2016							
11/28/2016	120						
11/29/2016			320				
11/30/2016				50			
12/1/2016		1100					
12/15/2016					1.8		
1/10/2017							
1/11/2017							
1/12/2017							
1/13/2017							
1/16/2017					11		
2/21/2017							
2/22/2017	100						
2/23/2017			380				
2/24/2017		850		110			
3/1/2017							
3/2/2017							
3/3/2017					8.8		
3/6/2017							
3/7/2017							
3/8/2017							
4/26/2017							
4/27/2017							
4/28/2017					10		
5/1/2017							
5/2/2017							
5/8/2017							
5/9/2017							
5/10/2017	80	1000	660	70			
5/26/2017					12		
6/27/2017							
6/28/2017					11		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017							
6/30/2017							
7/11/2017							
7/17/2017		830					
7/18/2017	57		880	50			
10/3/2017					7.9		
10/4/2017							
10/5/2017							
10/10/2017							
10/11/2017						20	
10/12/2017							17
10/16/2017		720					
10/17/2017	59			58			
10/18/2017			760				
11/20/2017						24	71
1/10/2018							66
1/11/2018						23	
2/19/2018			718				57.2
2/20/2018	55.9			64.6		20.6	
2/21/2018		533					
4/2/2018							
4/3/2018						24.5	49.4
6/5/2018							
6/6/2018							
6/7/2018					8.8		
6/8/2018							
6/11/2018							
6/28/2018						22	43.8
8/6/2018			797				
8/7/2018		784				20.7	40.5
8/8/2018	81.1			79.5			
9/19/2018							
9/24/2018						21.2	39.7
9/25/2018							
9/26/2018							
10/1/2018					9.1		
10/2/2018							
2/25/2019			763				
2/26/2019	129	742		55.8			
3/26/2019							34.3
3/27/2019						17.7	
3/28/2019							
3/29/2019					9		
4/1/2019							
4/2/2019							
4/3/2019							
6/12/2019	180			92.8			
6/13/2019		976	918				
9/24/2019					9.1		
9/25/2019							
9/26/2019							
10/8/2019			664				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

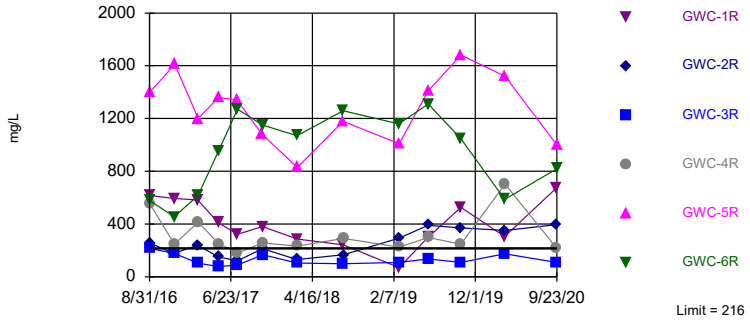
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	91.2	1180				15	27.9
10/10/2019				68.7			
3/17/2020			303				
3/18/2020	200	960		199			
3/19/2020					12.4		
3/24/2020							25.2
3/25/2020						14.3	
9/22/2020	216			72.1			
9/23/2020		992	518		11.8		
9/24/2020						11.7	22.9
9/25/2020							

Exceeds Limit: GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=10.05, Std. Dev.=2.547, n=274, 0.7299% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.86, critical = 14.07. Kappa = 1.823 (c=7, w=6, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 6 points to limit.

Constituent: TDS Analysis Run 11/23/2020 8:10 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/1/2016	150	120	54						
6/2/2016				36	46	66	160	96	130
6/6/2016									
6/7/2016									
7/25/2016	135		48	50					
7/26/2016		94			54	78	177	92	141
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016		105	67						
9/14/2016	127					73	187	102	
9/15/2016					54				153
9/16/2016									
9/19/2016				35					
11/1/2016	75	44		<25					92
11/2/2016					71		181	115	
11/3/2016									
11/4/2016			60			75			
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017					45				
1/11/2017	148	107							159
1/12/2017						86	202		
1/13/2017								67	
1/16/2017			65	47					
2/21/2017				<25					
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017	182								
3/2/2017		98	61						117
3/3/2017									
3/6/2017								159	
3/7/2017						108	257		
3/8/2017					178				
4/26/2017	92			55	52				181
4/27/2017		116	31						
4/28/2017									
5/1/2017							165	107	
5/2/2017						103			
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		89	42			73	189		
6/28/2017	126								169

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
6/29/2017								79	
6/30/2017				42	45				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017		119	58			89	170		
10/4/2017	147			31					141
10/5/2017					40			95	
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018		127							
6/6/2018			96				151		
6/7/2018						142		90	95
6/8/2018	158				114				
6/11/2018				59					
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						86	144	116	
10/1/2018	138	117	60		50				165
10/2/2018				57					
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019		87	87						
3/29/2019					63				
4/1/2019	19 (J)			54					149
4/2/2019									
4/3/2019						83	142	111	
6/12/2019									
6/13/2019									
9/24/2019		124	54			79	129		
9/25/2019	159			51	64			117	157
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-14S (bg)	YGWA-5I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020			35		57				
3/19/2020	148	116		47					146
3/24/2020						68	139		
3/25/2020								146	
9/22/2020						75	104	83	
9/23/2020	155	108	15						157
9/24/2020				51					
9/25/2020					54				

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/1/2016									
6/2/2016									
6/6/2016	58	120							
6/7/2016			28	38	60				
7/25/2016									
7/26/2016									
7/27/2016	35	94	74	74					
7/28/2016					81				
8/30/2016						319			
8/31/2016							216	209	616
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	35		67						
9/19/2016		92		45	68				
11/1/2016									
11/2/2016				53					
11/3/2016	48	104	41		61				
11/4/2016									
11/14/2016						280			
11/28/2016								102	
11/29/2016									594
11/30/2016							177 (B)		
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	95	133	104						
1/12/2017									
1/13/2017				46	76				
1/16/2017									
2/21/2017									
2/22/2017								164	
2/23/2017							105		581
2/24/2017						162			
3/1/2017	79	119							
3/2/2017			77						
3/3/2017									
3/6/2017				164	167				
3/7/2017									
3/8/2017									
4/26/2017	36	162		34	50				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017			142						
5/8/2017						194		145	
5/9/2017							77		410
5/10/2017									
5/26/2017									
6/27/2017									
6/28/2017	45	98							

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
6/29/2017			53	68	94				
6/30/2017									
7/11/2017						193			
7/17/2017								185	
7/18/2017							89		322
10/3/2017					149				
10/4/2017	45		61	54					
10/5/2017		104							
10/10/2017						175			
10/11/2017									
10/12/2017									
10/16/2017								218	
10/17/2017									381
10/18/2017							166		
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018								173	
2/20/2018									
2/21/2018							105		285
4/2/2018						192			
4/3/2018									
6/5/2018					109				
6/6/2018				79					
6/7/2018		68							
6/8/2018									
6/11/2018	74		70						
6/28/2018									
8/6/2018								158	
8/7/2018							99		242
8/8/2018									
9/19/2018						186			
9/24/2018									
9/25/2018	63	109	86	73	122				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019								92	
2/26/2019							109		69
3/26/2019									
3/27/2019						170			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			72		134				
4/3/2019	63	89		57					
6/12/2019								226	
6/13/2019							136		301
9/24/2019					157				
9/25/2019			81	75					
9/26/2019	72	126							
10/8/2019						172		276	

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-47 (bg)	GWC-3R	GWA-2 (bg)	GWC-1R
10/9/2019									526
10/10/2019							109		
3/17/2020						165	175	185	306
3/18/2020									
3/19/2020									
3/24/2020	59	91	71	76	117				
3/25/2020									
9/22/2020						141	110	281	675
9/23/2020	81	103	99						
9/24/2020				69	113				
9/25/2020									

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016							
6/2/2016							
6/6/2016							
6/7/2016							
7/25/2016							
7/26/2016							
7/27/2016							
7/28/2016							
8/30/2016							
8/31/2016	257						
9/1/2016		1400	578	553			
9/13/2016							
9/14/2016					152		
9/15/2016							
9/16/2016							
9/19/2016							
11/1/2016							
11/2/2016							
11/3/2016							
11/4/2016					148		
11/14/2016							
11/28/2016	177						
11/29/2016			455				
11/30/2016				247 (B)			
12/1/2016		1610 (B)					
12/15/2016					191		
1/10/2017							
1/11/2017							
1/12/2017							
1/13/2017							
1/16/2017					180		
2/21/2017							
2/22/2017	240						
2/23/2017			614				
2/24/2017		1200		414			
3/1/2017							
3/2/2017							
3/3/2017					156		
3/6/2017							
3/7/2017							
3/8/2017							
4/26/2017							
4/27/2017							
4/28/2017					130		
5/1/2017							
5/2/2017							
5/8/2017							
5/9/2017							
5/10/2017	149	1360	955	251			
5/26/2017					223		
6/27/2017							
6/28/2017					166		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017							
6/30/2017							
7/11/2017							
7/17/2017		1340					
7/18/2017	122		1270	179			
10/3/2017					153		
10/4/2017							
10/5/2017							
10/10/2017							
10/11/2017						68	
10/12/2017							74
10/16/2017		1080					
10/17/2017	214			256			
10/18/2017			1150				
11/20/2017						139	179
1/10/2018							140
1/11/2018						153	
2/19/2018			1070				119
2/20/2018	131			233		87	
2/21/2018		830					
4/2/2018							
4/3/2018						85	106
6/5/2018							
6/6/2018							
6/7/2018					146		
6/8/2018							
6/11/2018							
6/28/2018						88	112
8/6/2018			1260				
8/7/2018		1180				89	103
8/8/2018	166			292			
9/19/2018							
9/24/2018						82	107
9/25/2018							
9/26/2018							
10/1/2018					155		
10/2/2018							
2/25/2019			1160				
2/26/2019	293	1010		226			
3/26/2019							90
3/27/2019						75	
3/28/2019							
3/29/2019					150		
4/1/2019							
4/2/2019							
4/3/2019							
6/12/2019	391			298			
6/13/2019		1410	1310				
9/24/2019					146		
9/25/2019							
9/26/2019							
10/8/2019			1050				

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/23/2020 8:11 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-5R	GWC-6R	GWC-4R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019	372	1680				119	98
10/10/2019				247			
3/17/2020			588				
3/18/2020	351	1520		703			
3/19/2020					148		
3/24/2020							84
3/25/2020						158	
9/22/2020	394			217			
9/23/2020		1000	820		161		
9/24/2020						170	77
9/25/2020							

FIGURE H.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:51 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Calcium (mg/L)	**GWA-2 (bg)**	**4.326**	**50**	**43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GWA-2 (bg)**	**22.54**	**53**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

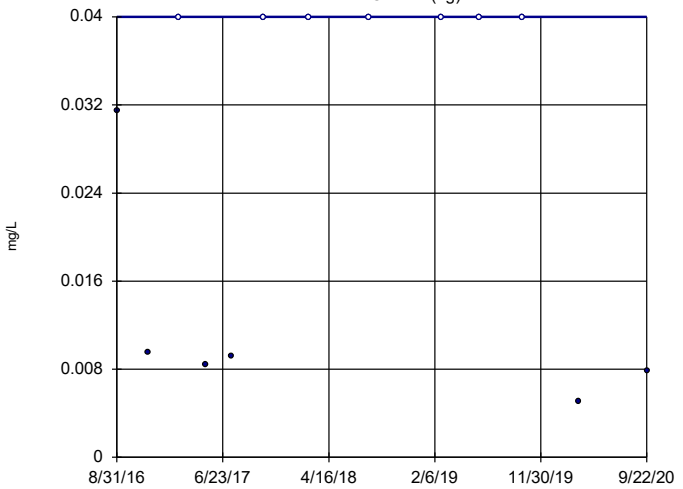
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 2/12/2021, 10:51 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GWA-2 (bg)	0	-1	-43	No	13	53.85	n/a	n/a	0.01	NP
Boron (mg/L)	GWC-4R	-0.02011	-8	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GWA-2 (bg)**	**4.326**	**50**	**43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-1R	-5.883	-18	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-2R	5.077	38	43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-5R	4.691	18	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-6R	15.99	20	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	0.1924	33	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-2R	1.318	25	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-4R	-2.088	-8	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GWA-2 (bg)**	**22.54**	**53**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GWC-1R	-49.07	-26	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-2R	17.81	20	43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-5R	-3.702	-2	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-6R	45.26	14	43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWA-2 (bg)	21.56	27	43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-1R	-69.17	-24	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-2R	52.15	32	43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-4R	-6.533	-9	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-5R	-53.58	-10	-43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-6R	81.82	18	43	No	13	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -43

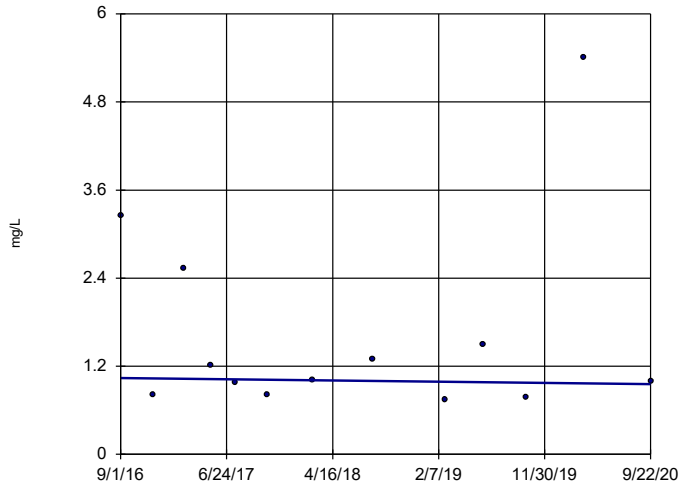
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-4R



n = 13

Slope = -0.02011 units per year.

Mann-Kendall statistic = -8
critical = -43

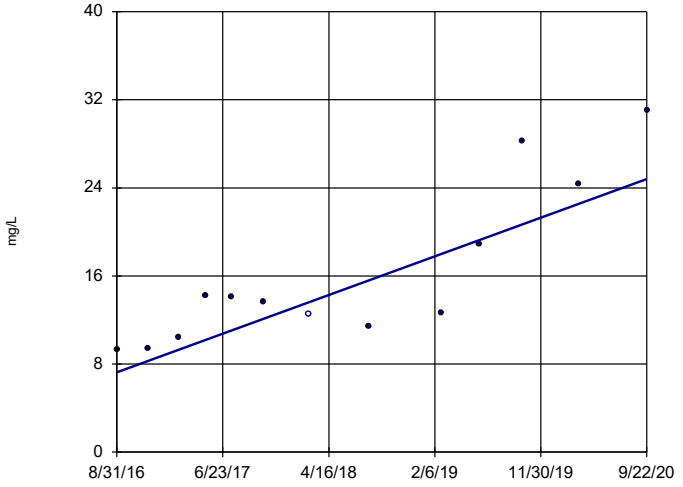
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 4.326 units per year.

Mann-Kendall statistic = 50
critical = 43

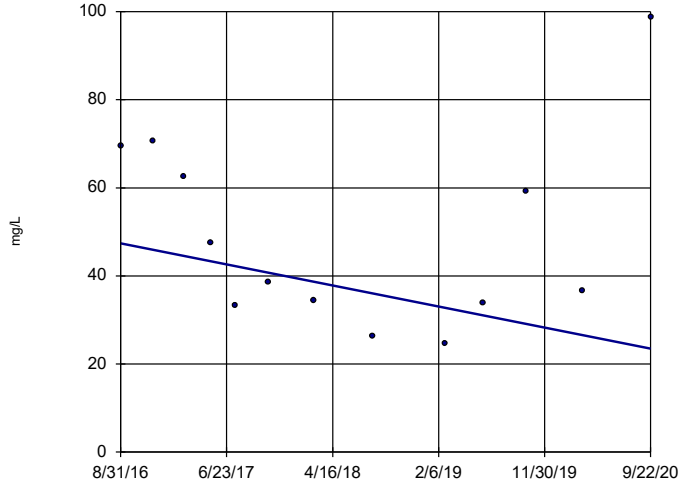
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-1R



n = 13

Slope = -5.883 units per year.

Mann-Kendall statistic = -18
critical = -43

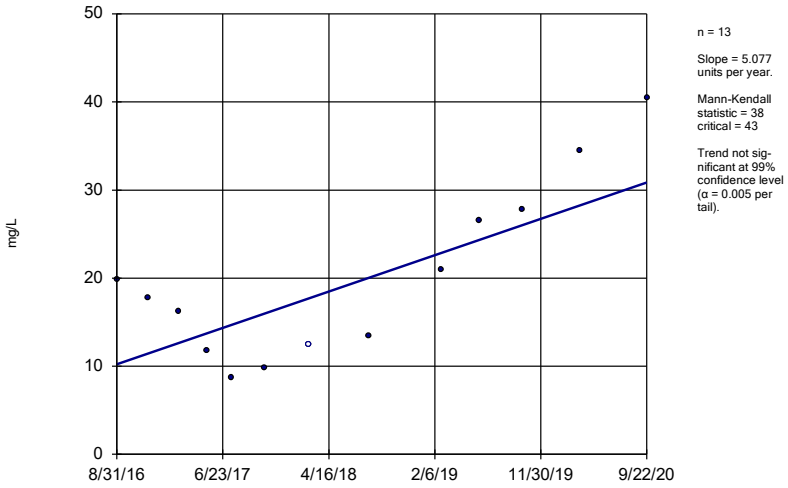
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-2R



n = 13

Slope = 5.077 units per year.

Mann-Kendall statistic = 38 critical = 43

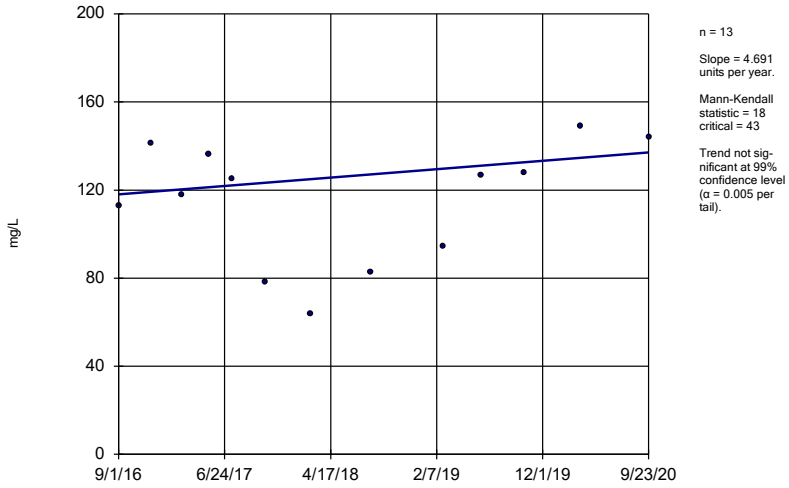
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-5R



n = 13

Slope = 4.691 units per year.

Mann-Kendall statistic = 18 critical = 43

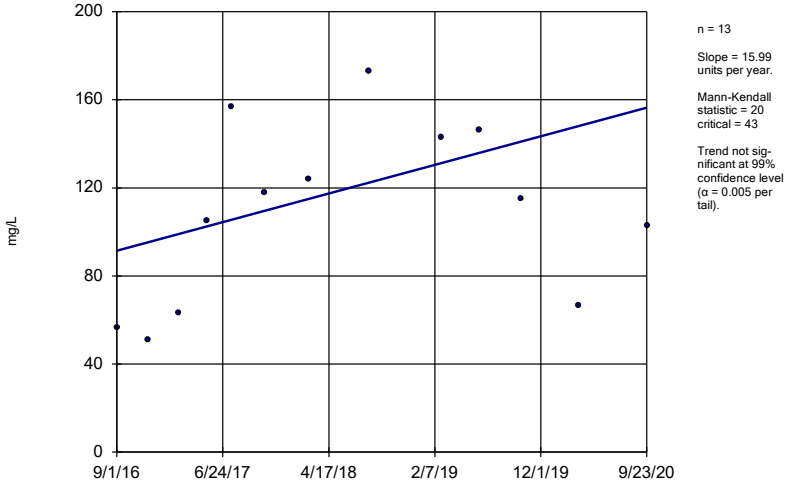
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-6R



n = 13

Slope = 15.99 units per year.

Mann-Kendall statistic = 20 critical = 43

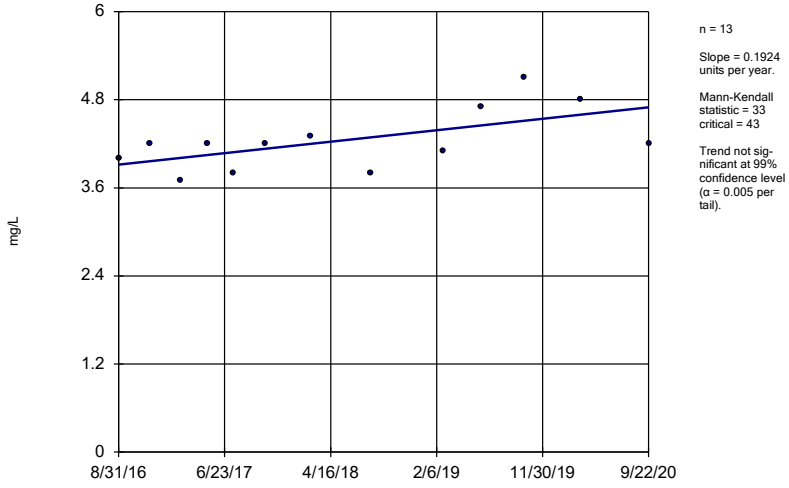
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 0.1924 units per year.

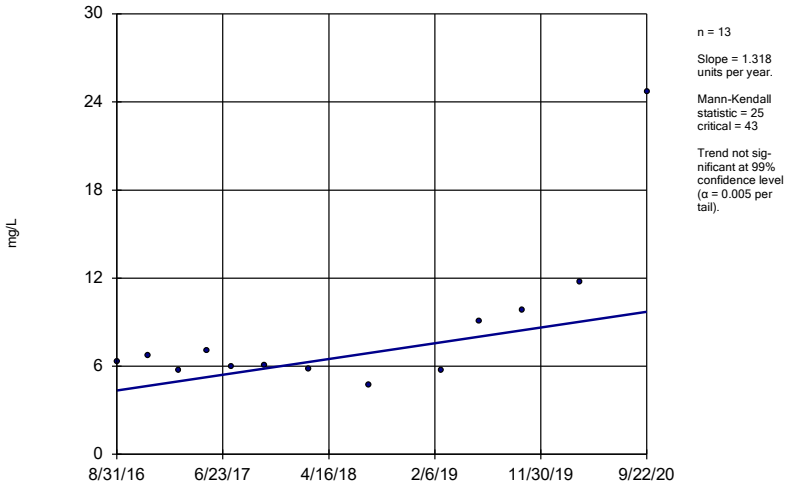
Mann-Kendall statistic = 33 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-2R



n = 13

Slope = 1.318 units per year.

Mann-Kendall statistic = 25 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

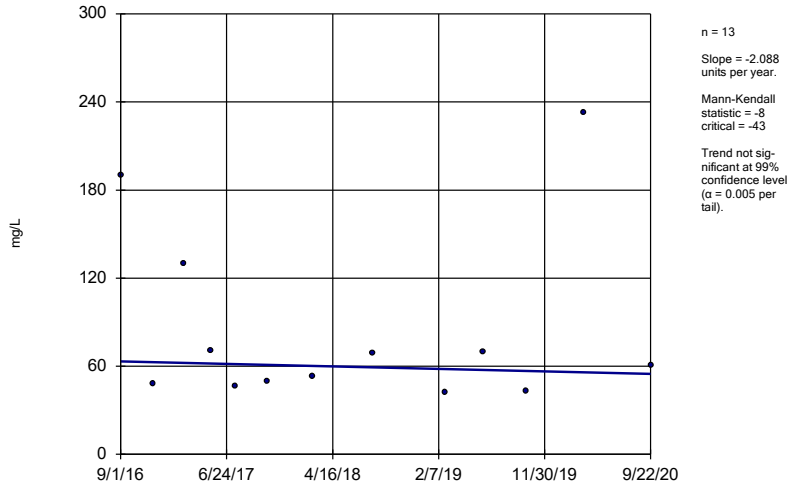
Constituent: Chloride Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-4R



n = 13

Slope = -2.088 units per year.

Mann-Kendall statistic = -8 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

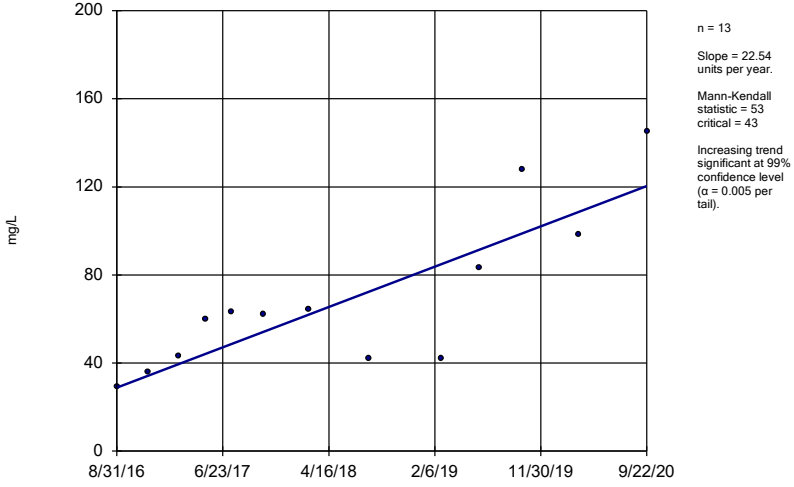
Constituent: Chloride Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 22.54 units per year.

Mann-Kendall statistic = 53 critical = 43

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

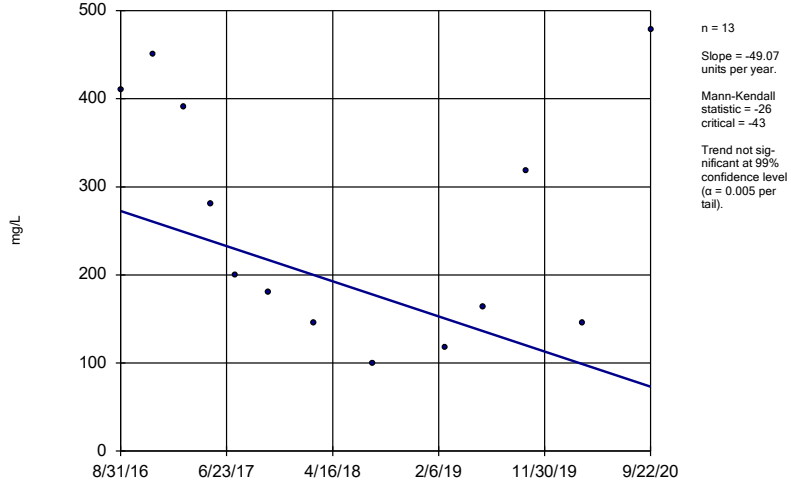
Constituent: Sulfate Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-1R



n = 13

Slope = -49.07 units per year.

Mann-Kendall statistic = -26 critical = -43

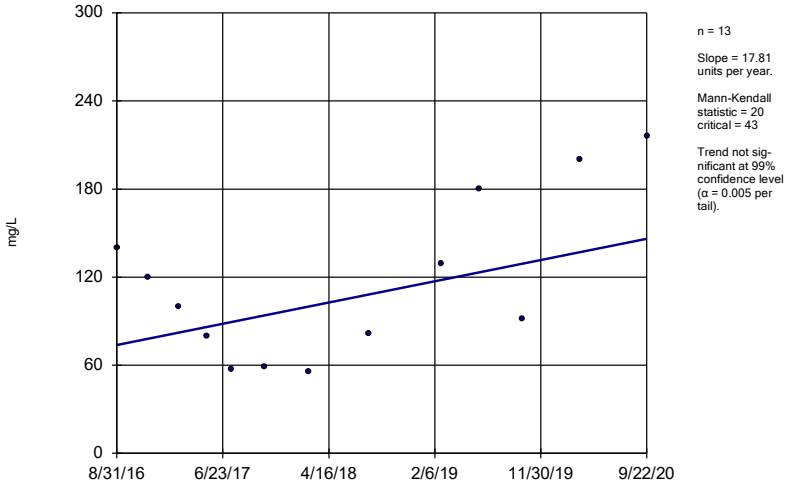
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-2R



n = 13

Slope = 17.81 units per year.

Mann-Kendall statistic = 20 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

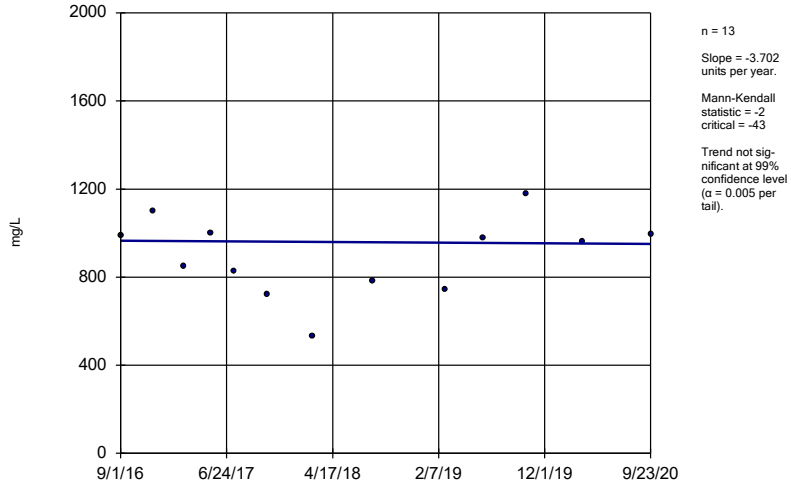
Constituent: Sulfate Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-5R



n = 13

Slope = -3.702 units per year.

Mann-Kendall statistic = -2 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

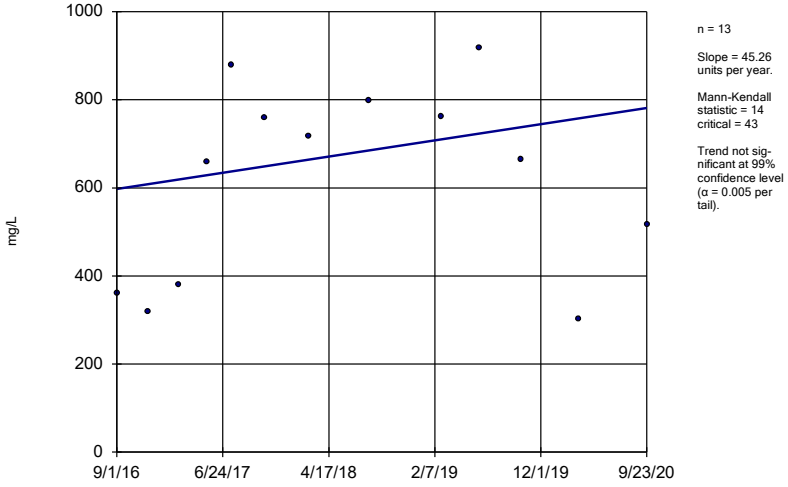
Constituent: Sulfate Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-6R



n = 13

Slope = 45.26 units per year.

Mann-Kendall statistic = 14 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

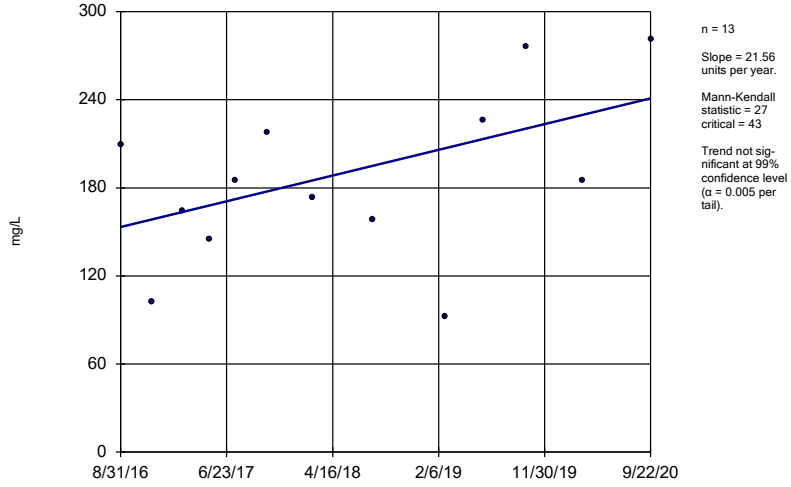
Constituent: Sulfate Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 13

Slope = 21.56 units per year.

Mann-Kendall statistic = 27 critical = 43

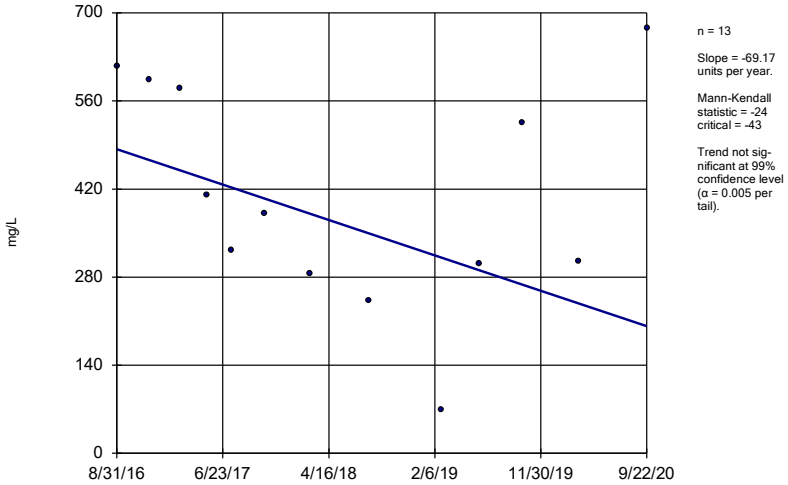
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-1R



n = 13

Slope = -69.17 units per year.

Mann-Kendall statistic = -24 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

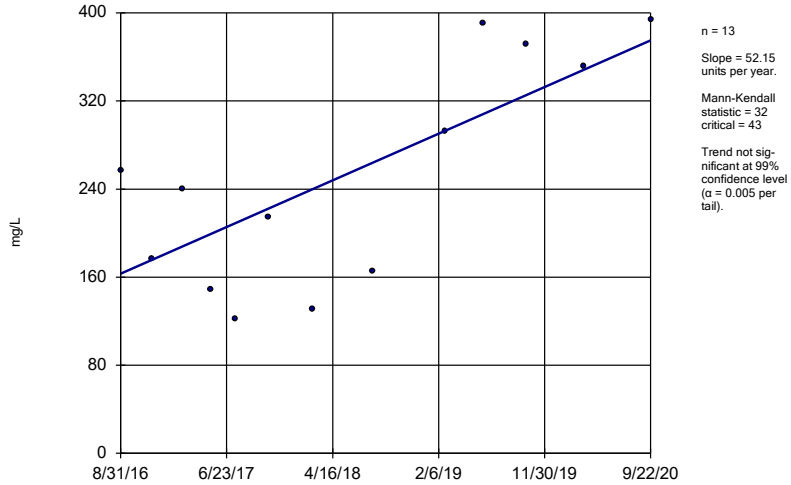
Constituent: TDS Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-2R



n = 13

Slope = 52.15 units per year.

Mann-Kendall statistic = 32 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

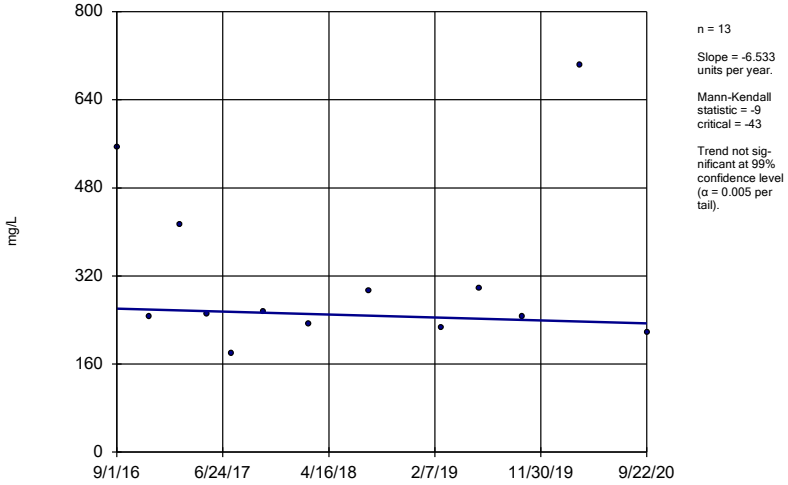
Constituent: TDS Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-4R



n = 13

Slope = -6.533 units per year.

Mann-Kendall statistic = -9 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

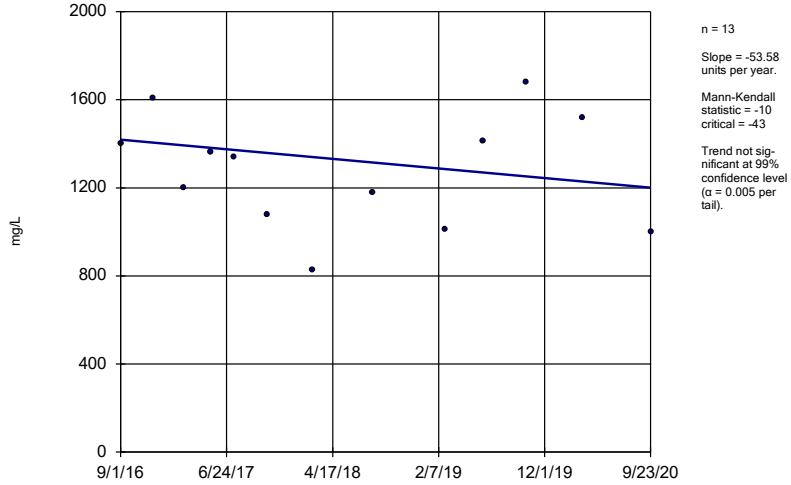
Constituent: TDS Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-5R



n = 13

Slope = -53.58 units per year.

Mann-Kendall statistic = -10 critical = -43

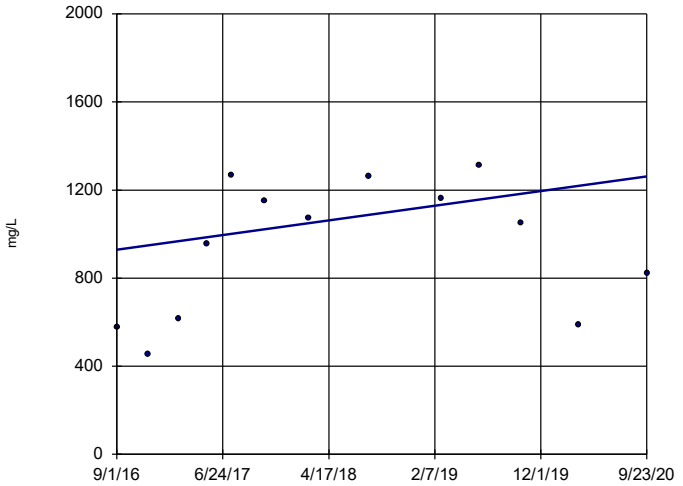
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-6R



n = 13

Slope = 81.82 units per year.

Mann-Kendall statistic = 18 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 2/12/2021 10:48 AM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

FIGURE I.

Upper Tolerance Limit Summary Table

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 12/1/2020, 12:41 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0047	n/a	n/a	280	n/a	n/a	86.43	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	328	n/a	n/a	77.13	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.071	n/a	n/a	328	n/a	n/a	3.354	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.003	n/a	n/a	312	n/a	n/a	83.01	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0025	n/a	n/a	313	n/a	n/a	96.17	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.01	n/a	n/a	280	n/a	n/a	77.14	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	326	n/a	n/a	69.63	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	306	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	327	n/a	n/a	68.5	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.005	n/a	n/a	282	n/a	n/a	85.82	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	307	n/a	n/a	28.34	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0005	n/a	n/a	251	n/a	n/a	92.43	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	272	n/a	n/a	59.56	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.01	n/a	n/a	311	n/a	n/a	91	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	281	n/a	n/a	96.44	n/a	n/a	NaN	NP Inter(NDs)

FIGURE J.

YATES LANDFILL GYPSUM STACK GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.0047	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.071	2
Beryllium, Total (mg/L)	0.004	0.003	0.004
Cadmium, Total (mg/L)	0.005	0.0025	0.005
Chromium, Total (mg/L)	0.1	0.01	0.1
Cobalt, Total (mg/L)		0.035	0.035
Combined Radium, Total (pCi/L)	5	6.9	6.9
Fluoride, Total (mg/L)	4	0.68	4
Lead, Total (mg/L)		0.005	0.005
Lithium, Total (mg/L)		0.03	0.03
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)		0.014	0.014
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Grey cell indicates Background Limit is higher than MCL*

**MCL = Maximum Contaminant Level*

**GWPS = Groundwater Protection Standard*

FIGURE K.

State Confidence Intervals Summary - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 12/2/2020, 9:05 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-2R	0.003	0.0017	0.006	No	16	0.002919	0.000325	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-4R	0.003	0.0014	0.006	No	16	0.002576	0.0009373	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-5R	0.003	0.00054	0.006	No	16	0.002678	0.0008805	87.5	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-1R	0.005	0.0009	0.01	No	16	0.003934	0.001913	75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-2R	0.005	0.00075	0.01	No	16	0.004734	0.001062	93.75	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-3R	0.005	0.0016	0.01	No	16	0.004301	0.001518	81.25	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-4R	0.005	0.00059	0.01	No	16	0.004435	0.001544	87.5	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-5R	0.005	0.00091	0.01	No	16	0.002116	0.001751	25	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-6R	0.005	0.0007	0.01	No	16	0.002743	0.002092	43.75	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-1R	0.06018	0.03661	2	No	16	0.04928	0.01825	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2R	0.05363	0.04542	2	No	16	0.04953	0.006304	0	None	No	0.01	Param.
Barium (mg/L)	GWC-3R	0.03333	0.02107	2	No	16	0.0272	0.009421	0	None	No	0.01	Param.
Barium (mg/L)	GWC-4R	0.032	0.0157	2	No	16	0.02264	0.007834	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-5R	0.0347	0.014	2	No	16	0.02198	0.01037	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-6R	0.07258	0.04933	2	No	16	0.06096	0.01786	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-1R	0.003	0.000076	0.004	No	16	0.001199	0.001441	37.5	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-2R	0.003	0.00012	0.004	No	16	0.001748	0.001467	56.25	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-3R	0.00084	0.00026	0.004	No	16	0.0005944	0.0006732	6.25	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-4R	0.003	0.000058	0.004	No	16	0.002816	0.0007355	93.75	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-5R	0.001885	0.0005811	0.004	No	16	0.001384	0.001036	6.25	None	x^(1/3)	0.01	Param.
Cadmium (mg/L)	GWC-1R	0.0025	0.00016	0.005	No	16	0.002054	0.0009595	81.25	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-2R	0.0025	0.00015	0.005	No	16	0.001907	0.001061	75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-3R	0.0025	0.00014	0.005	No	16	0.001493	0.001181	56.25	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-4R	0.0025	0.0001	0.005	No	16	0.00235	0.0006	93.75	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-5R	0.001123	0.0005183	0.005	No	16	0.0008556	0.0005334	6.25	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GWC-1R	0.01	0.0009	0.1	No	16	0.003294	0.004001	25	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2R	0.01	0.00059	0.1	No	16	0.007647	0.004209	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-3R	0.0017	0.0009	0.1	No	16	0.002819	0.003572	18.75	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-4R	0.01	0.0007	0.1	No	16	0.007136	0.004391	68.75	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-5R	0.0024	0.0018	0.1	No	16	0.002637	0.001988	6.25	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-6R	0.0017	0.0012	0.1	No	16	0.002968	0.003496	18.75	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-1R	0.005	0.0006	0.035	No	16	0.002194	0.002053	31.25	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-2R	0.02235	0.01282	0.035	No	16	0.01759	0.007326	6.25	None	No	0.01	Param.
Cobalt (mg/L)	GWC-3R	0.01	0.0041	0.035	No	16	0.005237	0.002322	68.75	None	No	0.01	NP (NDs)
Cobalt (mg/L)	GWC-4R	0.002103	0.0006031	0.035	No	16	0.002353	0.00231	18.75	Kaplan-Meier	x^(1/3)	0.01	Param.
Cobalt (mg/L)	GWC-5R	0.005	0.00044	0.035	No	16	0.004131	0.001869	81.25	Kaplan-Meier	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWC-1R	1.047	0.5017	6.9	No	12	0.7863	0.369	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2R	1.582	0.6153	6.9	No	12	1.099	0.616	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-3R	1.124	0.1796	6.9	No	12	0.7012	0.7531	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-4R	0.6758	0.2045	6.9	No	12	0.4401	0.3003	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-5R	0.9945	0.2318	6.9	No	12	0.6132	0.486	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-6R	1.235	0.4183	6.9	No	12	0.8532	0.6004	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GWC-1R	0.1	0.06	4	No	15	0.08733	0.02219	73.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-2R	0.58	0.05	4	No	15	0.1187	0.13	66.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-3R	0.22	0.04	4	No	15	0.1249	0.1333	46.67	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-4R	0.11	0.08	4	No	15	0.09867	0.02167	73.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-5R	0.35	0.035	4	No	15	0.1186	0.102	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-6R	0.28	0.07	4	No	15	0.1013	0.05489	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-1R	0.005	0.000067	0.005	No	16	0.004382	0.001688	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-2R	0.005	0.00007	0.005	No	16	0.003153	0.002462	62.5	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-3R	0.005	0.00008	0.005	No	16	0.003158	0.002456	62.5	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-4R	0.005	0.000041	0.005	No	16	0.00469	0.00124	93.75	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-5R	0.005	0.00007	0.005	No	16	0.003465	0.002351	68.75	None	No	0.01	NP (NDs)

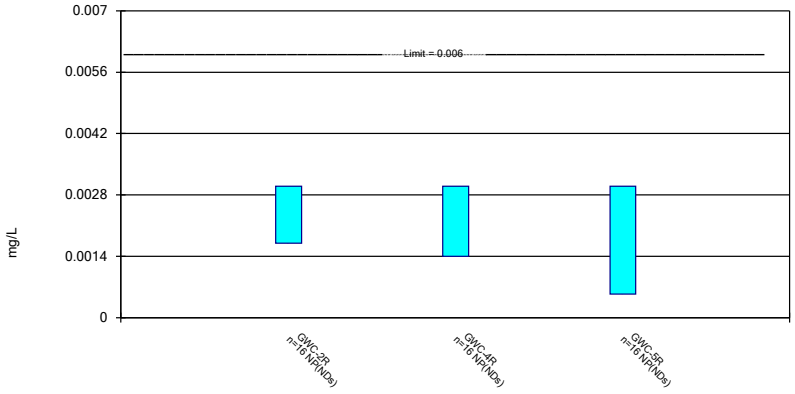
State Confidence Intervals Summary - All Results (No Significant)

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 12/2/2020, 9:05 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GWC-1R	0.03	0.001	0.03	No	13	0.00808	0.0125	23.08	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-2R	0.03	0.0035	0.03	No	13	0.01003	0.0114	23.08	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-3R	0.03	0.0012	0.03	No	13	0.02778	0.007988	92.31	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-4R	0.03	0.0011	0.03	No	13	0.02113	0.01385	69.23	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-5R	0.03	0.0013	0.03	No	13	0.01901	0.01447	61.54	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-6R	0.03	0.002	0.03	No	13	0.01148	0.01297	30.77	None	No	0.01	NP (normality)
Mercury (mg/L)	GWC-1R	0.0005	0.000059	0.002	No	16	0.0004724	0.0001103	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-2R	0.0005	0.000071	0.002	No	16	0.0004732	0.0001073	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-3R	0.0005	0.00043	0.002	No	16	0.000438	0.0001571	81.25	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-4R	0.0005	0.000058	0.002	No	16	0.0004724	0.0001105	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-5R	0.0005	0.00006	0.002	No	16	0.0004725	0.00011	93.75	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-6R	0.0005	0.000067	0.002	No	16	0.0004424	0.0001577	87.5	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1R	0.006121	0.002273	0.05	No	16	0.00495	0.003318	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-2R	0.003921	0.002367	0.05	No	16	0.003144	0.001194	12.5	None	No	0.01	Param.
Selenium (mg/L)	GWC-3R	0.005918	0.002636	0.05	No	16	0.004712	0.002557	18.75	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-4R	0.0054	0.0029	0.05	No	16	0.0049	0.00295	6.25	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-5R	0.02728	0.01843	0.05	No	16	0.02286	0.006805	0	None	No	0.01	Param.
Selenium (mg/L)	GWC-6R	0.004315	0.002697	0.05	No	16	0.003506	0.001243	12.5	None	No	0.01	Param.
Thallium (mg/L)	GWC-2R	0.001	0.00007	0.002	No	16	0.0009419	0.0002325	93.75	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-5R	0.001	0.000053	0.002	No	16	0.0009408	0.0002368	93.75	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

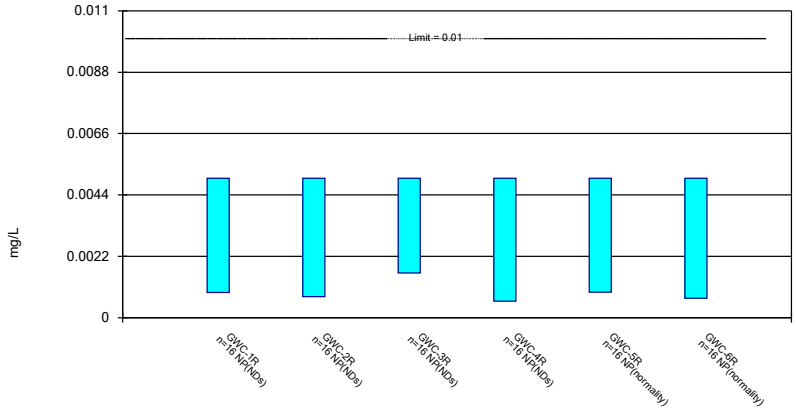
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

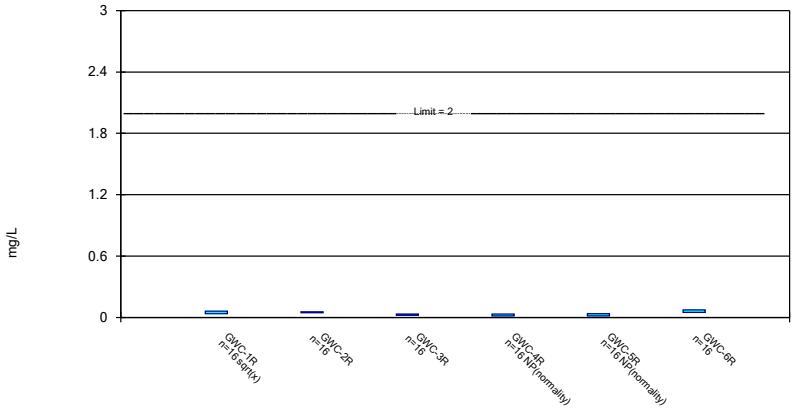
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

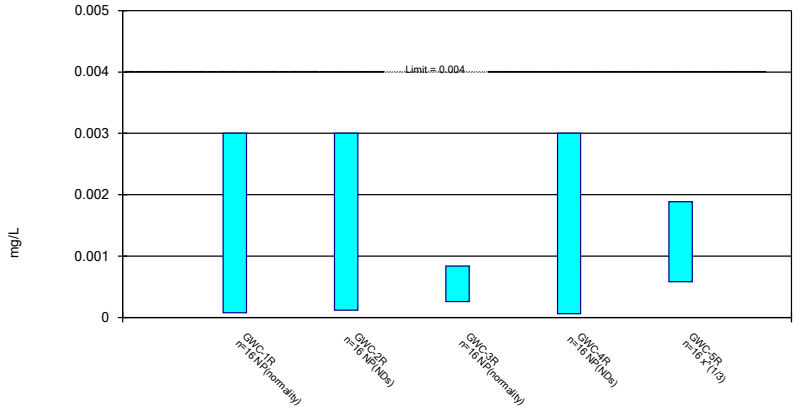
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

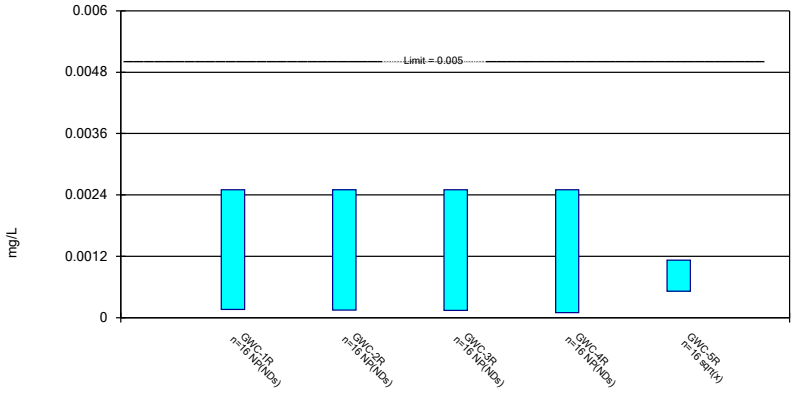
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

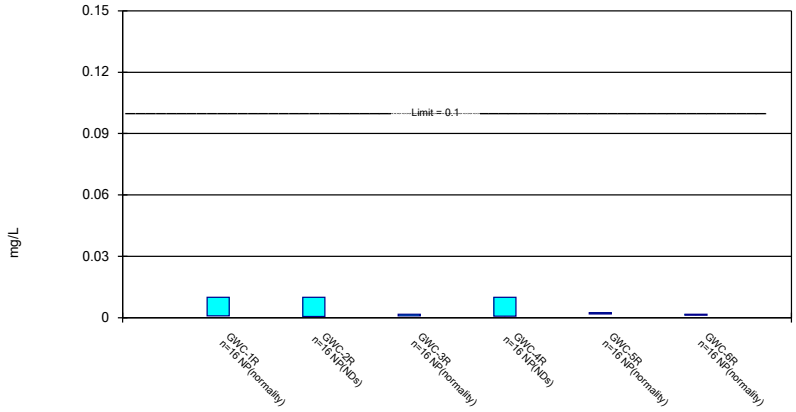
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

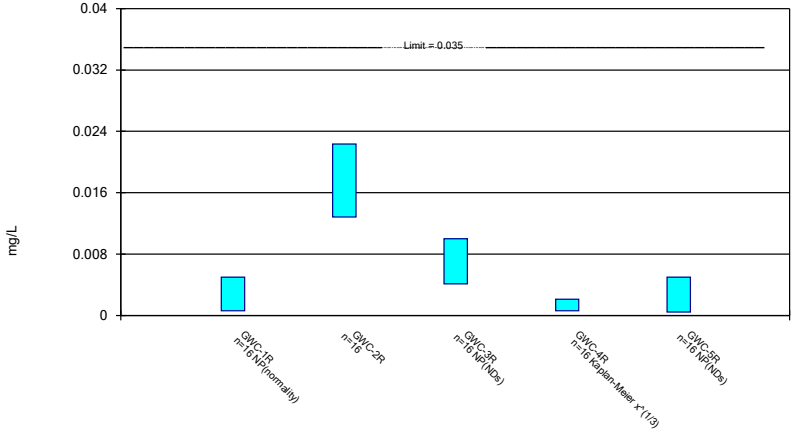
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

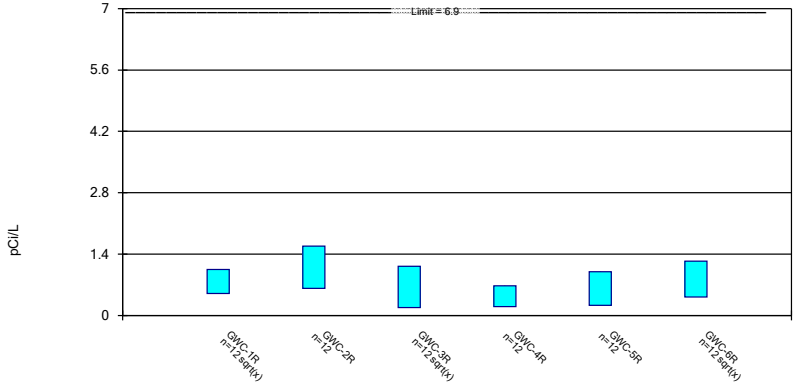
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric Confidence Interval

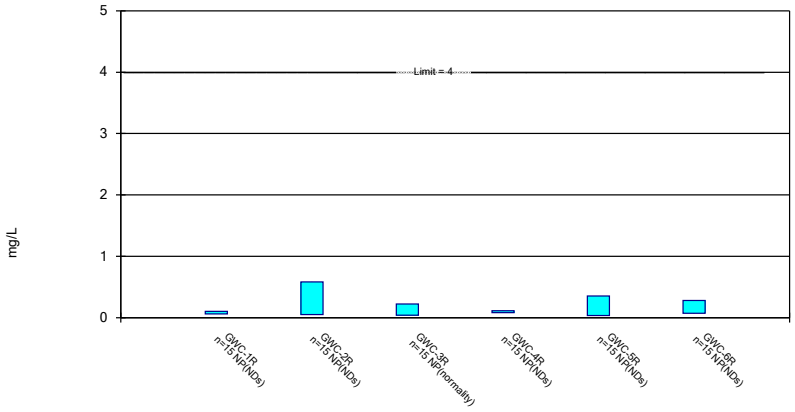
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

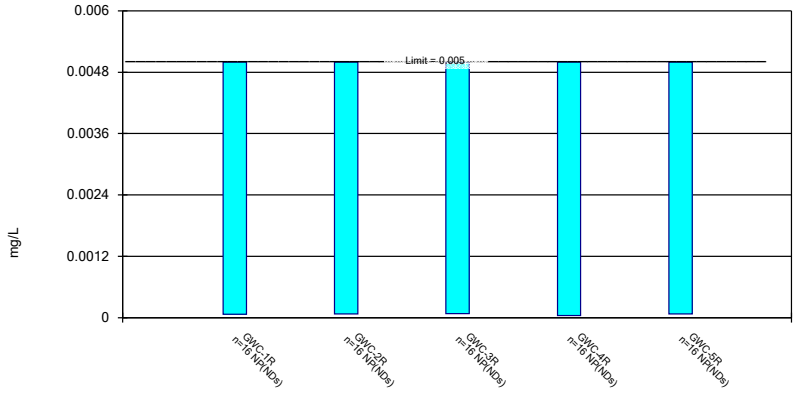


Constituent: Fluoride Analysis Run 12/2/2020 9:02 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

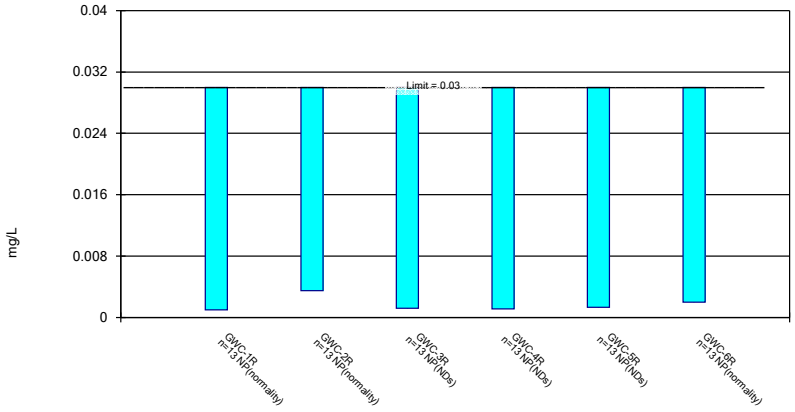


Constituent: Lead Analysis Run 12/2/2020 9:02 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

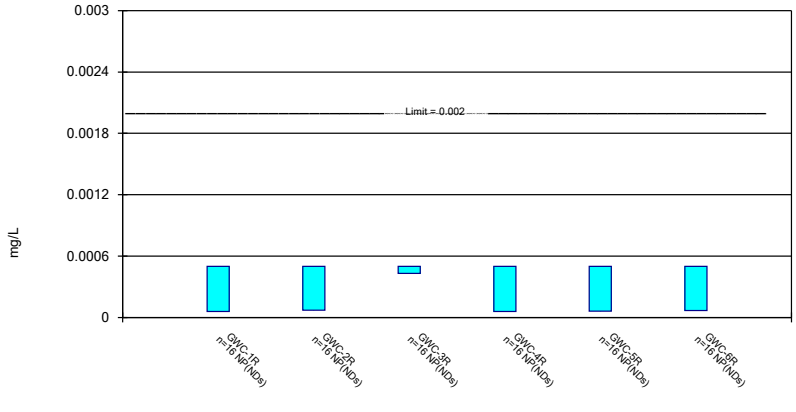


Constituent: Lithium Analysis Run 12/2/2020 9:02 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

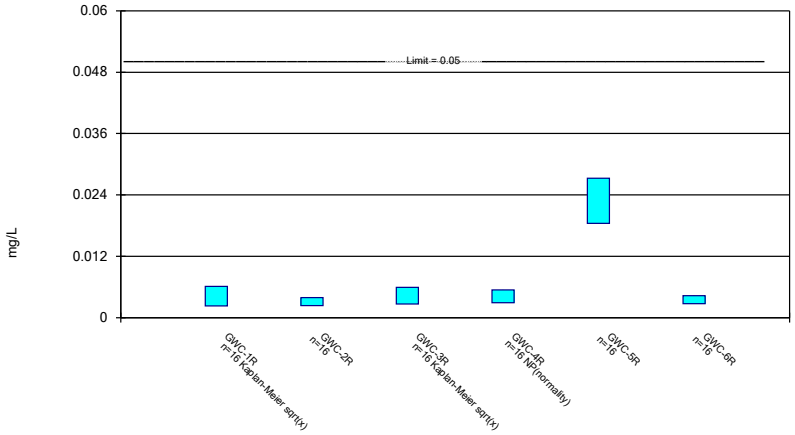


Constituent: Mercury Analysis Run 12/2/2020 9:02 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

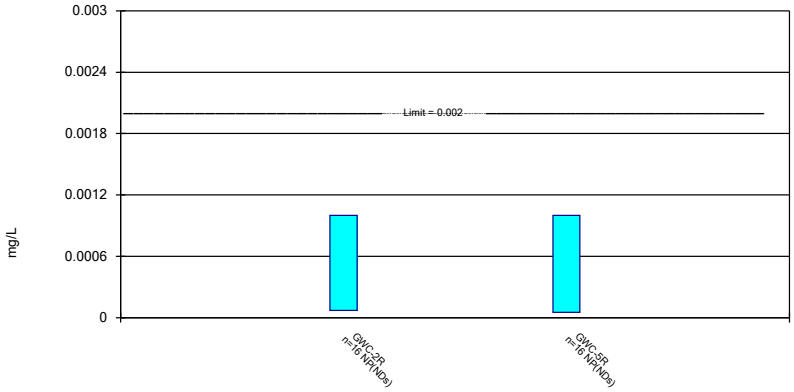


Constituent: Selenium Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.27 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 12/2/2020 9:02 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

March 2021 Event

GROUNDWATER STATS CONSULTING

July 27, 2021

Southern Company Services
Attn: Ms. Lauren Coker
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant Yates CCR Landfill Gypsum Stack
March 2021 Statistical Analysis

Dear Ms. Coker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2021 semi-annual Groundwater Detection and Assessment Monitoring statistical analysis for Georgia Power Company's Plant Yates Landfill Gypsum Stack. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015), the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10, and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:**
  - **AP-1:** YGWA-47
  - **AP-2:** YGWA-1D, YGWA-1I, YGWA-2I, YGWA-3D, YGWA-3I, YGWA-14S and, YGWA-30I
  - **Gypsum Landfill:** GWA-2

        - **AMA-R6:** YGWA-17S, YGWA-18I, YGWA-18S, YGWA-20S, YGWA-21I, YGWA-39, YGWA-40, YGWA-4I, YGWA-5D, and YGWA-5I
    - **Downgradient wells:** GWC-1R, GWC-2R, GWC-3R, GWC-4R, GWC-5R, GWC-6R

Note that in addition to the wells listed above, well GWA-1, which has not been sampled since 2004, provides historical upgradient data for a handful of Georgia EPD constituents. GWA-1 is only plotted on time series graphs and box plots as reference data, and no formal statistics using this well are included in this report.

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to Groundwater Stats Consulting. The analysis was prepared according to the recommended statistical methodology provided in the Fall 2017 by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting and primary author of the USEPA Unified Guidance.

The CCR and Georgia EPD programs consist of the constituents listed below. The terms "parameters" and "constituents" are used interchangeably.

- **CCR Appendix III:** boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **CCR Appendix IV:** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lithium, lead, mercury, molybdenum, selenium, and thallium
- **Georgia EPD Appendix I & II:** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of all well/constituent pairs containing 100% non-detects for Appendix I and II parameters and downgradient well/constituent pairs containing 100% non-detects for Appendix IV parameters follows this letter. Additionally, when Appendix IV constituents are not detected during a scheduled Scan event, no statistical analyses are required during the semi-annual sample event, and sampling of those constituents is not required during the subsequent events. During the annual Scan event for Yates Gypsum Landfill, conducted in August 2020, molybdenum was not detected; therefore, it was not required to be sampled during the subsequent events. In some cases, upgradient wells at a given unit were not sampled for all constituents if no detections were present at downgradient wells for that particular unit. The following constituents were not detected during their respective Scan events at

other Plant Yates units; therefore, upgradient wells at the units listed below were not sampled for such constituents:

- Yates AP-1: cadmium, mercury, selenium, and thallium
- Yates AP-2: mercury or thallium
- Yates AMA-R6: thallium

Combined upgradient well data from all units at Plant Yates are utilized to construct interwell prediction limits and upper tolerance limits for Appendix III and IV parameters, respectively. The absence of samples from some upgradient wells due to the reasons discussed above will affect the overall number of samples used for construction of interwell limits among all units at Plant Yates. Background data sets from upgradient wells may appear to be incomplete but this is a result of no sample collection requirements for all of the same sample events which should not greatly affect the calculated limits.

Time series plots for all well/constituent pairs are provided and are particularly useful for screening parameters detected in downgradient wells which require statistical analyses (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

In time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. For interwell prediction and tolerance limits, a single reporting limit substitution is used across upgradient wells for a given parameter. For intrawell prediction limits, the most recent reporting limit for a given well/constituent will be substituted for any non-detect values. Regarding the case of cobalt, due to varying detection limits in individual wells, the most recent reporting limit of 0.005 mg/L was substituted across all wells for all calculations and reports. For zinc, the most recent reporting limit increased compared to historical data, and therefore, the historical reporting limit was substituted for non-detects across all well for all calculations and reports to maintain more conservative limits for zinc with a reporting limit of 0.01 mg/L instead of 0.02 mg/L.

Based on the previous screenings, data at all wells for constituents detected in downgradient wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical

methods are recommended. Power curves were provided in the previous screening to demonstrate that the selected statistical methods for the parameters listed above comply with the USEPA Unified Guidance and the Georgia Environmental Protection Division Rules for Solid Waste Management Chapter 391-3-4-.10. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves were based on the following statistical methods:

Georgia EPD Appendix I & II Constituents:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan (all parameters)
- # Constituents: 15 (Silver is non-detect in all wells)
- # Downgradient wells: 6

CCR Appendix III Constituents:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan – (fluoride and pH)
- Interwell Prediction Limits with 1-of-2 resample plan – (boron, calcium, chloride, sulfate, and TDS)
- # Constituents: 7
- # Downgradient wells: 6

The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. Parametric prediction limits (or tolerance limits or confidence intervals, as applicable) are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the false positive rate associated with parametric limits is based on an annual 10% (5% per semi-annual event) as recommend by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009).

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.

- When data contain between 15-50% 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 reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Screening Summaries – State and Federal

Georgia EPD Appendix I & II Constituents – Conducted in August 2019

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells and parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, one outlier was identified. Although there were no cases of this present in the datasets, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Tukey's test method did not identify outliers for the highest measurements of zinc in wells GWA-2, GWC-3R and GWC-4R; however, these values were flagged in the database so that resulting statistical limits will be lower and more conservative, i.e. sensitive to changes in concentration. A list of all flagged outliers is presented in the Outlier Summary (Appendix C).

Additionally, when any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test, which tests for statistically significant increasing or decreasing trends, was used to evaluate data at all upgradient wells and downgradient wells with detections.

In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different from current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

Statistically significant decreasing trends were noted for a few constituents, and one statistically significant increasing trend was identified for barium in well GWC-6R. The data sets are still relatively small, and the magnitudes of these trends were low relative to the average concentrations. Therefore, no adjustments were required to any of the records except for barium in wells GWC-4R and GWC-5R. Earlier measurements for barium in these wells were considerably higher than currently reported measurements. In order to construct prediction limits that are lower and more conservative from a regulatory perspective, only the more recent portion of these records were used for the statistical

limits. All background data will be re-evaluated during the next background update. A summary of these background data ranges follows this letter.

CCR Appendix III Constituents – Conducted in April 2019

Using the Tukey box plot method, one outlier was identified. The outlier identified by Tukey's method was not flagged in the database as it was similar to remaining measurements within the same well and neighboring wells. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages will display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made.

The results of the trend analyses were included in the previous screening and showed a few statistically significant decreasing trends. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period was short in 2019; therefore, no adjustments were made to the data sets. However, when decreasing trends persist over a longer time frame for intrawell parameters in downgradient wells or interwell parameters in upgradient wells, some records may need to be truncated in order to maintain conservative limits

Evaluation of Georgia EPD Appendix I & II Constituents – March 2021

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility.

In cases where downgradient average concentrations are higher than observed upgradient concentrations for a given constituent where intrawell analyses are recommended, the current assumption is that this is due to natural spatial variation rather than a result of practices at the landfill. Validation of this assumption requires a separate analysis or investigation that is beyond the scope of this data screening study. However,

for this site, the pre-waste data support the assumption of natural variation rather than impacts of the landfill.

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed using all available data through August 2018, except for the cases mentioned above and listed in the background date range table. The prediction limits are presented in Figure D. Compliance data are compared to these intrawell background limits during each subsequent semi-annual sampling event. Since there were no detections during the March 2021 sampling event above the reporting limit for antimony, arsenic, chromium, copper, lead, mercury, thallium, and vanadium in any of the wells, no prediction limits were required. Additionally, no statistical analyses were included for well/constituent pairs with 100% non-detects, which includes silver for all wells.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If any resample falls within the statistical limit, the initial exceedance is considered to be a false positive result, and no further action is necessary. Statistical exceedances were identified in the following wells (Figure D):

- Beryllium: GWC-5R
- Cadmium: GWC-5R
- Cobalt: GWC-3R
- Nickel: GWA-2 (upgradient)
- Selenium: GWC-1R and GWC-3R
- Zinc: GWA-2 (upgradient) and GWC-5R

Note that the reported March 2021 observations for beryllium, cadmium, and selenium reported measurement are at or below their respective Maximum Contaminant Levels (MCL) of 0.004 mg/L, 0.005 mg/L, and 0.05 mg/L.

When prediction limit exceedances occur in any of the downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable. Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of natural variability in groundwater unrelated to practices at the site. Since upgradient wells across all units at Plant Yates were not used in constructing intrawell limits for Appendix I & II parameters, not all upgradient wells

were included in trend test analyses. Upgradient well GWA-2 is the only well directly upgradient of the Plant Yates Gypsum Landfill; therefore, it was included in the trend analyses for the well/constituent pairs with intrawell prediction limit exceedances. A summary and graphical presentation of the trend test results follows this letter (Figure E). The following statistically significant trend was noted:

Increasing:

- Zinc: GWC-5R

Evaluation of Appendix III Parameters – March 2021

For fluoride and pH, intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical data through February 2019 (Figure F). The most recent sample from each downgradient well is compared to the background limit to determine whether there are exceedances over background. Exceedances were identified for the following well/constituent pairs:

- pH (lower limit): GWA-2 (upgradient) and GWC-5R

Note that the exceedance in well GWA-2 for pH resulted from the number of significant figures included in the limit.

For Appendix III parameters that are analyzed using interwell prediction limits (boron, calcium, chloride, sulfate, and TDS), background (upgradient) well data from all the Yates units were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No new values were flagged, and a summary of flagged outliers follows this report (Figure C).

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data from all of the Yates units through March 2021 (Figure G). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. Note that reporting limit changes during this analysis occurred for boron (from <0.1 mg/L to <0.04 mg/L), but there were no changes in statistical limits. The most recent sample from each downgradient well is compared to the background limit to determine whether there are exceedances over background. Exceedances were noted for the following downgradient well/constituent pairs:

- Boron: GWC-4R
- Calcium: GWC-1R, GWC-2R, GWC-4R, GWC-5R, and GWC-6R

- Chloride: GWC-1R, GWC-2R and GWC-4R
- Sulfate: GWC-1R, GWC-2R, GWC-4R, GWC-5R, and GWC-6R
- TDS: GWC-1R, GWC-2R, GWC-4R, GWC-5R, and GWC-6R

Data from downgradient well/constituent pairs found to exceed their respective intrawell and interwell prediction limits were further evaluated using the Sen's Slope/Mann Kendall trend test. Trend tests were also performed for upgradient well GWA-2 for intrawell prediction limits and for all upgradient wells across all Yates units for interwell prediction limits (Figures H and I, respectively). Statistically significant trends were identified among the following downgradient well/constituent pairs:

Trends – Intrawell Prediction Limit Exceedances

Increasing

- None

Decreasing

- pH: GWC-5R

Trends – Interwell Prediction Limit Exceedances

Increasing:

- Calcium: YGWA-1D, YGWA-21I, YGWA-17S, and GWA-2 (all upgradient), GWC-2R (downgradient)
- Chloride: YGWA-17S and YGWA-20S (all upgradient)
- Sulfate: YGWA-1D, YGWA-3D, YGWA-5I, and GWA-2 (all upgradient)

Decreasing:

- Boron: YGWA-21I (upgradient)
- Calcium: YGWA-1I, YGWA-5D, YGWA-18S, YGWA-47, and YGWA-40 (all upgradient)
- Chloride: YGWA-3D, YGWA-3I, YGWA-5D, and YGWA-47 (all upgradient)
- Sulfate: YGWA-5D, YGWA-39, YGWA-40, and YGWA-47 (all upgradient)
- TDS: YGWA-5D, YGWA-40, YGWA-47 (all upgradient)

When trends are noted upgradient of the facility, it is an indication that groundwater concentrations are naturally changing over time.

Statistical Analysis of Appendix IV Parameters – March 2021

For analysis of Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis.

A high value for cobalt at upgradient well GWA-2, 0.21 mg/L from March 2021, along with high values for 0.20 mg/L and 0.16 mg/L from August and September 2020, were two orders of magnitude higher than the other values for that well. The August and September 2020 values were flagged during the previous analysis, and the March 2021 value was flagged as an outlier during this analysis in order to maintain limits that were conservative from a regulatory perspective. However, since three observations were reported at this level, further study may indicate that the values should not be flagged. A summary of flagged outliers follows this report (Figure C).

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data from all the Yates units for Appendix IV constituents (Figure J). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. When the alpha level for a nonparametric limit is shown as NaN in the results table, it indicates that the background sample size is large enough such that the resulting alpha level is too small to display in the results table. The background limits were then used when determining the groundwater protection standard (GWPS) under Georgia EPD Rule 391-3-4-.10(6)(a). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL

Following the above Georgia EPD Rule requirements, GWPS were established for Appendix IV constituents for the March 2021 sample event for the state rule (Figure K). To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well using all historical data since 2016 (Figure L). As mentioned above, confidence intervals were not required for downgradient well/constituent pairs with 100% non-detects since 2016 and molybdenum since it was not sampled during the March 2021 sampling event.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Note that reporting limits decreased for the following constituents during this analysis:

- Beryllium from <0.003 mg/L to <0.0005 mg/L
- Cadmium from <0.0025 mg/L to <0.0005 mg/L
- Chromium from <0.01 mg/L to <0.005 mg/L
- Lead from <0.005 mg/L to <0.001 mg/L
- Mercury from <0.0005 mg/L to <0.0002 mg/L
- Selenium from <0.01 mg/L to <0.005 mg/L

As a result, background limits were lower for these constituents as compared to the previous analysis. However, in all cases for confidence intervals, except for lead, which uses the background limit as the GWPS, the established MCL levels were higher than the background limits. Therefore, these GWPS were not affected. Summaries of confidence intervals and complete graphical results follow this letter. No exceedances were identified for the confidence intervals.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Yates CCR Landfill Gypsum Stack. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner
Groundwater Statistician

100% Non-Detects: Appendix I & II

Analysis Run 5/5/2021 2:46 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Antimony (mg/L)
GWC-1R, GWC-3R, GWC-6R

Beryllium (mg/L)
GWA-2, GWC-6R

Cadmium (mg/L)
GWA-2, GWC-6R

Lead (mg/L)
GWC-6R

Selenium (mg/L)
GWA-2

Silver (mg/L)
GWA-2, GWC-1R, GWC-2R, GWC-3R, GWC-4R, GWC-5R, GWC-6R

Thallium (mg/L)
GWC-1R, GWC-3R, GWC-4R, GWC-6R

100% Non-Detects: Appendix IV Downgradient Wells

Analysis Run 5/5/2021 3:28 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Antimony (mg/L)
GWC-1R, GWC-3R, GWC-6R

Beryllium (mg/L)
GWC-6R

Cadmium (mg/L)
GWC-6R

Cobalt (mg/L)
GWC-6R

Lead (mg/L)
GWC-6R

Molybdenum (mg/L)
GWC-1R, GWC-2R, GWC-3R, GWC-4R, GWC-5R, GWC-6R

Thallium (mg/L)
GWC-1R, GWC-3R, GWC-4R, GWC-6R

Date Ranges

Date: 5/5/2021 2:45 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Barium (mg/L)

GWC-4R background:3/28/2011-8/8/2018

GWC-5R background:8/14/2013-8/7/2018

Appendix I & II Intrawell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**GWC-5R**	**0.003**	**n/a**	**3/2/2021**	**0.0037**	**Yes**	**18**	**n/a**	**n/a**	**38.89**	**n/a**	**n/a**	**0.005373**	**NP Intra (normality) 1 of 2**
Cadmium (mg/L)	**GWC-5R**	**0.001**	**n/a**	**3/2/2021**	**0.0011**	**Yes**	**18**	**n/a**	**n/a**	**44.44**	**n/a**	**n/a**	**0.005373**	**NP Intra (normality) 1 of 2**
Cobalt (mg/L)	**GWC-3R**	**0.005**	**n/a**	**3/2/2021**	**0.0086**	**Yes**	**18**	**n/a**	**n/a**	**100**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Nickel (mg/L)	**GWA-2**	**0.021**	**n/a**	**3/2/2021**	**0.034**	**Yes**	**22**	**n/a**	**n/a**	**13.64**	**n/a**	**n/a**	**0.003707**	**NP Intra (normality) 1 of 2**
Selenium (mg/L)	**GWC-1R**	**0.01**	**n/a**	**3/1/2021**	**0.011**	**Yes**	**18**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Selenium (mg/L)	**GWC-3R**	**0.01**	**n/a**	**3/2/2021**	**0.012**	**Yes**	**18**	**n/a**	**n/a**	**61.11**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Zinc (mg/L)	**GWA-2**	**0.009584**	**n/a**	**3/2/2021**	**0.031**	**Yes**	**23**	**0.004991**	**0.002**	**4.348**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	**GWC-5R**	**0.01798**	**n/a**	**3/2/2021**	**0.022**	**Yes**	**15**	**0.00738**	**0.004189**	**0**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**

Appendix I & II Intrawell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	GWA-2	0.07943	n/a	3/2/2021	0.039	No	27	0.05023	0.01305	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-1R	0.09203	n/a	3/1/2021	0.063	No	18	0.04614	0.01903	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-2R	0.13	n/a	3/1/2021	0.043	No	23	n/a	n/a	0	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-3R	0.1072	n/a	3/2/2021	0.015	No	18	0.1832	0.05976	0	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-4R	0.0778	n/a	3/1/2021	0.035	No	19	0.1732	0.04443	0	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-5R	0.06311	n/a	3/2/2021	0.011	No	14	0.03304	0.01162	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-6R	0.1025	n/a	3/3/2021	0.043	No	24	0.04776	0.02401	0	None	No	0.0005852	Param Intra 1 of 2
Beryllium (mg/L)	GWC-1R	0.003	n/a	3/1/2021	0.00023J	No	18	n/a	n/a	66.67	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-2R	0.003	n/a	3/1/2021	0.00032J	No	23	n/a	n/a	95.65	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-3R	0.003	n/a	3/2/2021	0.00081	No	18	n/a	n/a	38.89	n/a	n/a	0.005373	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWC-4R	0.003	n/a	3/1/2021	0.00006J	No	23	n/a	n/a	100	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	**GWC-5R**	**0.003**	**n/a**	**3/2/2021**	**0.0037**	**Yes**	**18**	**n/a**	**n/a**	**38.89**	**n/a**	**n/a**	**0.005373**	**NP Intra (normality) 1 of 2**
Cadmium (mg/L)	GWC-1R	0.0025	n/a	3/1/2021	0.00013J	No	18	n/a	n/a	94.44	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-2R	0.0025	n/a	3/1/2021	0.00016J	No	23	n/a	n/a	91.3	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-3R	0.0025	n/a	3/2/2021	0.00021J	No	18	n/a	n/a	88.89	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-4R	0.0005	n/a	3/1/2021	0.0005ND	No	23	n/a	n/a	95.65	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	**GWC-5R**	**0.001**	**n/a**	**3/2/2021**	**0.0011**	**Yes**	**18**	**n/a**	**n/a**	**44.44**	**n/a**	**n/a**	**0.005373**	**NP Intra (normality) 1 of 2**
Cobalt (mg/L)	GWA-2	0.006994	n/a	3/17/2020	0.003J	No	27	0.003556	0.001537	40.74	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-1R	0.008717	n/a	3/1/2021	0.00083J	No	18	-6.613	0.7756	50	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-2R	0.04742	n/a	3/1/2021	0.00074J	No	23	0.02477	0.009863	4.348	None	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	**GWC-3R**	**0.005**	**n/a**	**3/2/2021**	**0.0086**	**Yes**	**18**	**n/a**	**n/a**	**100**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Cobalt (mg/L)	GWC-4R	0.007137	n/a	3/1/2021	0.0016J	No	23	0.002697	0.001934	34.78	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-5R	0.005	n/a	3/2/2021	0.00039J	No	18	n/a	n/a	100	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-6R	0.005	n/a	3/3/2021	0.005ND	No	24	n/a	n/a	95.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Nickel (mg/L)	**GWA-2**	**0.021**	**n/a**	**3/2/2021**	**0.034**	**Yes**	**22**	**n/a**	**n/a**	**13.64**	**n/a**	**n/a**	**0.003707**	**NP Intra (normality) 1 of 2**
Nickel (mg/L)	GWC-1R	0.01331	n/a	3/1/2021	0.0024J	No	13	-6.05	0.655	38.46	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-2R	0.01015	n/a	3/1/2021	0.005ND	No	18	0.003546	0.00274	44.44	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-3R	0.0054	n/a	3/2/2021	0.005ND	No	13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-4R	0.01	n/a	3/1/2021	0.0021J	No	18	n/a	n/a	77.78	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-5R	0.005956	n/a	3/2/2021	0.0014J	No	13	0.002281	0.00139	30.77	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-6R	0.005	n/a	3/3/2021	0.0016J	No	19	n/a	n/a	89.47	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Selenium (mg/L)	**GWC-1R**	**0.01**	**n/a**	**3/1/2021**	**0.011**	**Yes**	**18**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Selenium (mg/L)	GWC-2R	0.01	n/a	3/1/2021	0.0043J	No	23	n/a	n/a	69.57	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Selenium (mg/L)	**GWC-3R**	**0.01**	**n/a**	**3/2/2021**	**0.012**	**Yes**	**18**	**n/a**	**n/a**	**61.11**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Selenium (mg/L)	GWC-4R	0.01548	n/a	3/1/2021	0.0041J	No	23	0.007285	0.003569	34.78	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-5R	0.04273	n/a	3/2/2021	0.019	No	18	0.1371	0.02884	5.556	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-6R	0.01	n/a	3/3/2021	0.002J	No	24	n/a	n/a	70.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Zinc (mg/L)	**GWA-2**	**0.009584**	**n/a**	**3/2/2021**	**0.031**	**Yes**	**23**	**0.004991**	**0.002**	**4.348**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	GWC-1R	0.007102	n/a	3/1/2021	0.01ND	No	15	0.05264	0.0125	20	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-2R	0.01249	n/a	3/1/2021	0.01ND	No	20	0.0653	0.01977	10	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-3R	0.01462	n/a	3/2/2021	0.0069J	No	14	0.00605	0.003313	7.143	None	No	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-4R	0.01	n/a	3/1/2021	0.01ND	No	19	n/a	n/a	63.16	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Zinc (mg/L)	**GWC-5R**	**0.01798**	**n/a**	**3/2/2021**	**0.022**	**Yes**	**15**	**0.00738**	**0.004189**	**0**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	GWC-6R	0.01	n/a	3/3/2021	0.01ND	No	21	n/a	n/a	33.33	n/a	n/a	0.003999	NP Intra (normality) 1 of 2

Appendix I & II Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:08 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Zinc (mg/L)	**GWC-5R**	**0.001805**	**148**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix I & II Trend Tests - Prediction Limit Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:08 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Beryllium (mg/L)	GWA-2 (bg)	0	0	184	No	35	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	GWC-5R	0.00001446	26	118	No	26	26.92	n/a	n/a	0.01	NP
Cadmium (mg/L)	GWA-2 (bg)	0	0	184	No	35	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	GWC-5R	0	15	118	No	26	30.77	n/a	n/a	0.01	NP
Cobalt (mg/L)	GWA-2 (bg)	-0.0001578	-161	-161	No	32	34.38	n/a	n/a	0.01	NP
Cobalt (mg/L)	GWC-3R	0	-1	-118	No	26	76.92	n/a	n/a	0.01	NP
Nickel (mg/L)	GWA-2 (bg)	0.00002566	13	131	No	28	10.71	n/a	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	184	No	35	100	n/a	n/a	0.01	NP
Selenium (mg/L)	GWC-1R	0	-46	-118	No	26	50	n/a	n/a	0.01	NP
Selenium (mg/L)	GWC-3R	-0.000118	-85	-118	No	26	42.31	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-2 (bg)	0.0000575	29	139	No	29	10.34	n/a	n/a	0.01	NP
Zinc (mg/L)	**GWC-5R**	**0.001805**	**148**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Intrawell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (S.U.)	**GWA-2**	**7.106**	**5.427**	**3/2/2021**	**5.42**	**Yes**	**21**	**6.266**	**0.401**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**
pH (S.U.)	**GWC-5R**	**5.711**	**4.765**	**3/2/2021**	**4.63**	**Yes**	**9**	**5.238**	**0.1758**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GWA-2	0.2151	n/a	3/2/2021	0.073J	No	9	0.1174	0.03628	0	None	No	0.001254	Param Intra 1 of 2
Fluoride (mg/L)	GWC-1R	0.1	n/a	3/1/2021	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-2R	0.1	n/a	3/1/2021	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-3R	0.22	n/a	3/2/2021	0.15	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-4R	0.15	n/a	3/1/2021	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-5R	0.37	n/a	3/2/2021	0.094J	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-6R	0.28	n/a	3/3/2021	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
pH (S.U.)	**GWA-2**	**7.106**	**5.427**	**3/2/2021**	**5.42**	**Yes**	**21**	**6.266**	**0.401**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**
pH (S.U.)	GWC-1R	5.52	4.49	3/1/2021	5.25	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-2R	6.8	4.35	3/1/2021	5.17	No	16	n/a	n/a	0	n/a	n/a	0.01291	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-3R	5.28	4.31	3/2/2021	4.82	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-4R	6.245	4.827	3/1/2021	5.62	No	10	5.536	0.2783	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	**GWC-5R**	**5.711**	**4.765**	**3/2/2021**	**4.63**	**Yes**	**9**	**5.238**	**0.1758**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**
pH (S.U.)	GWC-6R	6.687	5.169	3/3/2021	5.78	No	19	5.928	0.3559	0	None	No	0.0006268	Param Intra 1 of 2

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-4R	0.16	n/a	3/1/2021	5.1	Yes	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-1R	37	n/a	3/1/2021	117	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2R	37	n/a	3/1/2021	54.1	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-4R	37	n/a	3/1/2021	69.5	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-5R	37	n/a	3/2/2021	145	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-6R	37	n/a	3/3/2021	105	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1R	7.9	n/a	3/1/2021	8.6	Yes	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2R	7.9	n/a	3/1/2021	49.6	Yes	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-4R	7.9	n/a	3/1/2021	194	Yes	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-1R	160	n/a	3/1/2021	525	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-2R	160	n/a	3/1/2021	244	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-4R	160	n/a	3/1/2021	177	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-5R	160	n/a	3/2/2021	906	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-6R	160	n/a	3/3/2021	476	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
TDS (mg/L)	GWC-1R	216.2	n/a	3/1/2021	974	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-2R	216.2	n/a	3/1/2021	516	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-4R	216.2	n/a	3/1/2021	666	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-5R	216.2	n/a	3/2/2021	980	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-6R	216.2	n/a	3/3/2021	942	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-1R	0.16	n/a	3/1/2021	0.046	No	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-2R	0.16	n/a	3/1/2021	0.087	No	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	**GWC-4R**	**0.16**	**n/a**	**3/1/2021**	**5.1**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	GWC-5R	0.16	n/a	3/2/2021	0.023J	No	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-6R	0.16	n/a	3/3/2021	0.04ND	No	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GWC-1R**	**37**	**n/a**	**3/1/2021**	**117**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-2R**	**37**	**n/a**	**3/1/2021**	**54.1**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-4R**	**37**	**n/a**	**3/1/2021**	**69.5**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-5R**	**37**	**n/a**	**3/2/2021**	**145**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-6R**	**37**	**n/a**	**3/3/2021**	**105**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GWC-1R**	**7.9**	**n/a**	**3/1/2021**	**8.6**	**Yes**	**293**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GWC-2R**	**7.9**	**n/a**	**3/1/2021**	**49.6**	**Yes**	**293**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GWC-4R**	**7.9**	**n/a**	**3/1/2021**	**194**	**Yes**	**293**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-5R	7.9	n/a	3/2/2021	2.9	No	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-6R	7.9	n/a	3/3/2021	5	No	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GWC-1R**	**160**	**n/a**	**3/1/2021**	**525**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-2R**	**160**	**n/a**	**3/1/2021**	**244**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-4R**	**160**	**n/a**	**3/1/2021**	**177**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-5R**	**160**	**n/a**	**3/2/2021**	**906**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-6R**	**160**	**n/a**	**3/3/2021**	**476**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GWC-1R**	**216.2**	**n/a**	**3/1/2021**	**974**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-2R**	**216.2**	**n/a**	**3/1/2021**	**516**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-4R**	**216.2**	**n/a**	**3/1/2021**	**666**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-5R**	**216.2**	**n/a**	**3/2/2021**	**980**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-6R**	**216.2**	**n/a**	**3/3/2021**	**942**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**

Appendix III Trend Tests - Intrawell Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 2:59 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH (S.U.)	**GWC-5R**	**-0.0905**	**-93**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Intrawell Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 2:59 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH (S.U.)	GWA-2 (bg)	-0.03439	-128	-139	No	29	0	n/a	n/a	0.01	NP
pH (S.U.)	**GWC-5R**	**-0.0905**	**-93**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - Interwell Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 3:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-21I (bg)	-0.006801	-60	-58	Yes	16	56.25	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	4.949	63	48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-2R	7.08	51	48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.118	59	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.0863	-67	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.7865	60	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.1168	-63	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	1.232	68	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-0.9737	-45	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-2.036	-56	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.574	-62	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.3002	76	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.189	71	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.06529	-59	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05699	-66	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.5003	-45	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.9116	-83	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	25.64	66	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.091	76	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.687	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.4938	60	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-12.05	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-25.19	-71	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-3.891	-96	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.09335	70	58	Yes	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-40 (bg)	-18.83	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-47 (bg)	-14.88	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-5D (bg)	-18.77	-74	-58	Yes	16	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Interwell Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 3:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GWA-2 (bg)	0	5	48	No	14	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	GWC-4R	0.04845	3	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.00131	-37	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-17S (bg)	-0.0002497	-11	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-34	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003285	-14	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0	-2	-58	No	16	25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-23	-58	No	16	68.75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-15	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWA-21I (bg)**	**-0.006801**	**-60**	**-58**	**Yes**	**16**	**56.25**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-2I (bg)	0	-18	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-28	-58	No	16	81.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.002402	14	43	No	13	7.692	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-8	-58	No	16	56.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-23	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.02279	-41	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-47 (bg)	-0.001291	-39	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-17	-58	No	16	62.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0001974	12	58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	-0.0019	-46	-58	No	16	56.25	n/a	n/a	0.01	NP
Calcium (mg/L)	**GWA-2 (bg)**	**4.949**	**63**	**48**	**Yes**	**14**	**7.143**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-1R	-1.257	-5	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GWC-2R**	**7.08**	**51**	**48**	**Yes**	**14**	**7.143**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-4R	2.203	19	48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-5R	5.514	29	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-6R	11.02	18	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-14S (bg)	-0.03659	-46	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-17S (bg)**	**0.118**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-18I (bg)	0.02122	10	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.0863**	**-67**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1D (bg)**	**0.7865**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1I (bg)**	**-0.1168**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.09145	54	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**1.232**	**68**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-2I (bg)	0.5792	38	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	0	-6	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-39 (bg)	0.4473	13	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	0.7746	48	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.43	27	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-40 (bg)**	**-0.9737**	**-45**	**-43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-47 (bg)**	**-2.036**	**-56**	**-43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-4I (bg)	0.2746	37	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-5D (bg)**	**-2.574**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-5I (bg)	0.09171	50	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	0.1272	29	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-1R	-0.07861	-1	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-2R	1.64	38	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-4R	0.8892	3	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.1626	30	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.3002**	**76**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18I (bg)	0.05099	35	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2082	50	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	-0.02735	-40	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	-0.02869	-33	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.189**	**71**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.1117	-28	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.05296	-45	-58	No	16	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Interwell Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 3:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	YGWA-30I (bg)	0	-21	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.2329	13	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-3D (bg)**	**-0.06529**	**-59**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-3I (bg)**	**-0.05699**	**-66**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-40 (bg)	0.1751	26	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-47 (bg)**	**-0.5003**	**-45**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-4I (bg)	0.1099	36	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.9116**	**-83**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-5I (bg)	0	-1	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GWA-2 (bg)**	**25.64**	**66**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GWC-1R	-27.43	-13	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-2R	25.14	33	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-4R	6.538	22	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-5R	-5.034	-3	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-6R	25.75	9	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-14S (bg)	0.09469	17	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.1322	51	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2007	-54	-58	No	16	25	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.1939	-48	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-1D (bg)**	**1.091**	**76**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.2947	-23	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	24	58	No	16	62.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.2852	-25	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.1728	11	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.08892	-28	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-39 (bg)**	**-3.687**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-3D (bg)**	**0.4938**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-3I (bg)	0.6094	45	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-40 (bg)**	**-12.05**	**-54**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-25.19**	**-71**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.1751	39	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-3.891**	**-96**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.09335**	**70**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GWA-2 (bg)	29.32	40	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-1R	-31.04	-11	-48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-2R	61.34	45	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-4R	7.11	2	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-5R	-58.17	-21	-48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-6R	59.56	15	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-14S (bg)	2.021	18	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-17S (bg)	4.826	22	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-18I (bg)	-2.316	-19	-58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-18S (bg)	3.74	25	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-1D (bg)	1.869	13	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-1I (bg)	-3.828	-26	-58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-20S (bg)	3.156	31	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-21I (bg)	15.05	46	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-2I (bg)	-3.302	-32	-58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-30I (bg)	2.131	17	58	No	16	12.5	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-39 (bg)	17.14	28	43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-3D (bg)	1.956	12	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-3I (bg)	0.9644	5	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	**YGWA-40 (bg)**	**-18.83**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**YGWA-47 (bg)**	**-14.88**	**-54**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-4I (bg)	1.119	8	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	**YGWA-5D (bg)**	**-18.77**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-5I (bg)	-1.204	-7	-58	No	16	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:27 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0047	n/a	n/a	315	n/a	n/a	86.03	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	363	n/a	n/a	77.96	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.071	n/a	n/a	363	n/a	n/a	3.03	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	347	n/a	n/a	81.27	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	347	n/a	n/a	95.68	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.0093	n/a	n/a	315	n/a	n/a	77.46	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	360	n/a	n/a	69.72	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	342	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	362	n/a	n/a	68.51	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.0013	n/a	n/a	317	n/a	n/a	82.65	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	342	n/a	n/a	27.49	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	278	n/a	n/a	93.17	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	306	n/a	n/a	59.8	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	345	n/a	n/a	91.59	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	298	n/a	n/a	96.64	n/a	n/a	NaN	NP Inter(NDs)

YATES LANDFILL GYPSUM STACK GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.0047	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.071	2
Beryllium, Total (mg/L)	0.004	0.0005	0.004
Cadmium, Total (mg/L)	0.005	0.0005	0.005
Chromium, Total (mg/L)	0.1	0.0093	0.1
Cobalt, Total (mg/L)		0.035	0.035
Combined Radium, Total (pCi/L)	5	6.92	6.92
Fluoride, Total (mg/L)	4	0.68	4
Lead, Total (mg/L)		0.0013	0.0013
Lithium, Total (mg/L)		0.03	0.03
Mercury, Total (mg/L)	0.002	0.0002	0.002
Molybdenum, Total (mg/L)		0.014	0.014
Selenium, Total (mg/L)	0.05	0.005	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Grey cell indicates Background Limit is higher than MCL*

**MCL = Maximum Contaminant Level*

**GWPS = Groundwater Protection Standard*

Appendix IV Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-2R	0.003	0.0017	0.006	No	17	0.002924	0.0003153	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-4R	0.003	0.0014	0.006	No	17	0.002601	0.0009133	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-5R	0.003	0.00054	0.006	No	17	0.002697	0.0008561	88.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-1R	0.005	0.0011	0.01	No	17	0.003832	0.001899	70.59	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-2R	0.005	0.0011	0.01	No	17	0.004521	0.001355	88.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-3R	0.005	0.0017	0.01	No	17	0.004148	0.001599	76.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-4R	0.005	0.00059	0.01	No	17	0.004468	0.001502	88.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-5R	0.005	0.00092	0.01	No	17	0.002133	0.001697	23.53	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-6R	0.005	0.00072	0.01	No	17	0.002876	0.002098	47.06	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-1R	0.06047	0.03787	2	No	17	0.05009	0.01798	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2R	0.05309	0.04519	2	No	17	0.04914	0.006305	0	None	No	0.01	Param.
Barium (mg/L)	GWC-3R	0.03249	0.02047	2	No	17	0.02648	0.00959	0	None	No	0.01	Param.
Barium (mg/L)	GWC-4R	0.032	0.0157	2	No	17	0.02336	0.008156	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-5R	0.0345	0.013	2	No	17	0.02133	0.01039	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-6R	0.07108	0.04872	2	No	17	0.0599	0.01784	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-1R	0.003	0.00008	0.004	No	17	0.001142	0.001415	35.29	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-2R	0.003	0.00014	0.004	No	17	0.001664	0.001462	52.94	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-3R	0.00081	0.00026	0.004	No	17	0.0006071	0.0006539	5.882	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-4R	0.003	0.00006	0.004	No	17	0.002654	0.0009767	88.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-5R	0.00224	0.0007995	0.004	No	17	0.00152	0.00115	5.882	None	No	0.01	Param.
Cadmium (mg/L)	GWC-1R	0.0005	0.00016	0.005	No	17	0.0004112	0.0001657	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-2R	0.0005	0.00015	0.005	No	17	0.0003924	0.0001726	70.59	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-3R	0.0005	0.00018	0.005	No	17	0.0003588	0.0001639	52.94	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-4R	0.0005	0.0001	0.005	No	17	0.0004765	0.00009701	94.12	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-5R	0.0009485	0.0005562	0.005	No	17	0.0007524	0.000313	5.882	None	No	0.01	Param.
Chromium (mg/L)	GWC-1R	0.005	0.0009	0.1	No	17	0.001994	0.001724	23.53	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2R	0.005	0.0008	0.1	No	17	0.003962	0.00193	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-3R	0.0017	0.0009	0.1	No	17	0.00183	0.001534	17.65	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-4R	0.005	0.0011	0.1	No	17	0.003775	0.001963	70.59	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-5R	0.0024	0.0018	0.1	No	17	0.002312	0.0007557	5.882	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-6R	0.0017	0.0012	0.1	No	17	0.001994	0.00145	17.65	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-1R	0.005	0.00064	0.035	No	17	0.002114	0.002015	29.41	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-2R	0.02173	0.01147	0.035	No	17	0.0166	0.008186	5.882	None	No	0.01	Param.
Cobalt (mg/L)	GWC-3R	0.0086	0.0041	0.035	No	17	0.005435	0.002392	64.71	None	No	0.01	NP (NDs)
Cobalt (mg/L)	GWC-4R	0.002075	0.0006537	0.035	No	17	0.002309	0.002244	17.65	Kaplan-Meier	x^(1/3)	0.01	Param.
Cobalt (mg/L)	GWC-5R	0.005	0.00044	0.035	No	17	0.003911	0.002025	76.47	Kaplan-Meier	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWC-1R	1.065	0.5348	6.92	No	13	0.8002	0.3568	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2R	1.529	0.6499	6.92	No	13	1.089	0.5908	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-3R	1.13	0.2214	6.92	No	13	0.7342	0.7308	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-4R	0.6477	0.2185	6.92	No	13	0.4331	0.2886	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-5R	0.9651	0.2724	6.92	No	13	0.6188	0.4658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-6R	1.183	0.4434	6.92	No	13	0.843	0.576	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GWC-1R	0.1	0.06	4	No	16	0.08813	0.02167	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-2R	0.58	0.05	4	No	16	0.1175	0.1257	68.75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-3R	0.15	0.04	4	No	16	0.1265	0.129	43.75	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-4R	0.11	0.08	4	No	16	0.09875	0.02094	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-5R	0.35	0.035	4	No	16	0.1171	0.09869	56.25	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-6R	0.28	0.07	4	No	16	0.1013	0.05303	75	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-1R	0.001	0.000067	0.0013	No	17	0.0008894	0.0003124	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-2R	0.001	0.00007	0.0013	No	17	0.0006191	0.0004694	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-3R	0.001	0.000082	0.0013	No	17	0.0006251	0.0004623	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-4R	0.001	0.000041	0.0013	No	17	0.0009436	0.0002326	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-5R	0.001	0.00007	0.0013	No	17	0.0006765	0.0004524	64.71	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-1R	0.03	0.0012	0.03	No	14	0.00761	0.01214	21.43	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-2R	0.03	0.0035	0.03	No	14	0.009593	0.01108	21.43	None	No	0.01	NP (normality)

Appendix IV Confidence Intervals - All Results

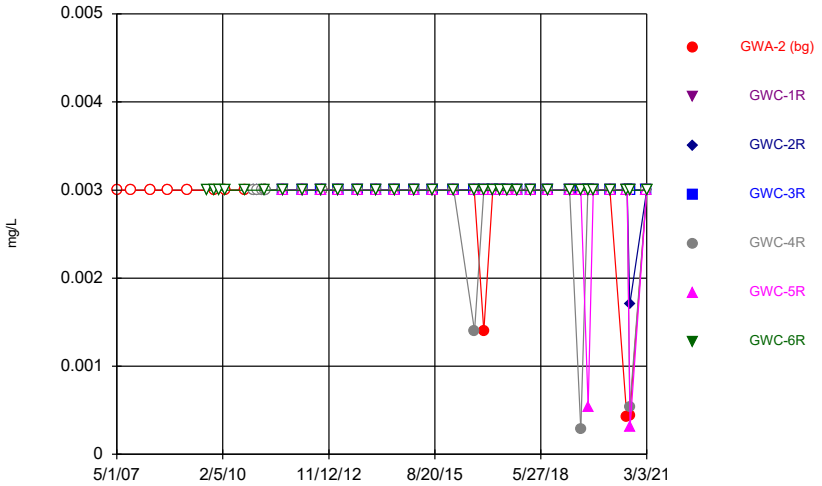
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GWC-3R	0.03	0.0012	0.03	No	14	0.02586	0.01052	85.71	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-4R	0.03	0.0011	0.03	No	14	0.02176	0.01352	71.43	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-5R	0.03	0.0014	0.03	No	14	0.01776	0.01466	57.14	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-6R	0.03	0.002	0.03	No	14	0.01079	0.01273	28.57	None	No	0.01	NP (normality)
Mercury (mg/L)	GWC-1R	0.0002	0.000059	0.002	No	17	0.0001917	0.0000342	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-2R	0.0002	0.000071	0.002	No	17	0.0001924	0.00003129	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-3R	0.00043	0.000064	0.002	No	17	0.0001946	0.00008128	82.35	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-4R	0.0002	0.000058	0.002	No	17	0.0001916	0.00003444	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-5R	0.0002	0.00006	0.002	No	17	0.0001918	0.00003395	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-6R	0.0002	0.000067	0.002	No	17	0.0001811	0.00005432	88.24	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1R	0.00595	0.002307	0.05	No	17	0.005306	0.003532	23.53	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-2R	0.003957	0.002466	0.05	No	17	0.003212	0.00119	11.76	None	No	0.01	Param.
Selenium (mg/L)	GWC-3R	0.006481	0.00282	0.05	No	17	0.005141	0.003042	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-4R	0.005	0.003	0.05	No	17	0.004853	0.002862	5.882	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-5R	0.0268	0.01846	0.05	No	17	0.02263	0.006655	0	None	No	0.01	Param.
Selenium (mg/L)	GWC-6R	0.004143	0.002559	0.05	No	17	0.003418	0.001258	11.76	None	sqrt(x)	0.01	Param.
Thallium (mg/L)	GWC-2R	0.001	0.00007	0.002	No	17	0.0009453	0.0002256	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-5R	0.001	0.000053	0.002	No	17	0.0009443	0.0002297	94.12	None	No	0.01	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

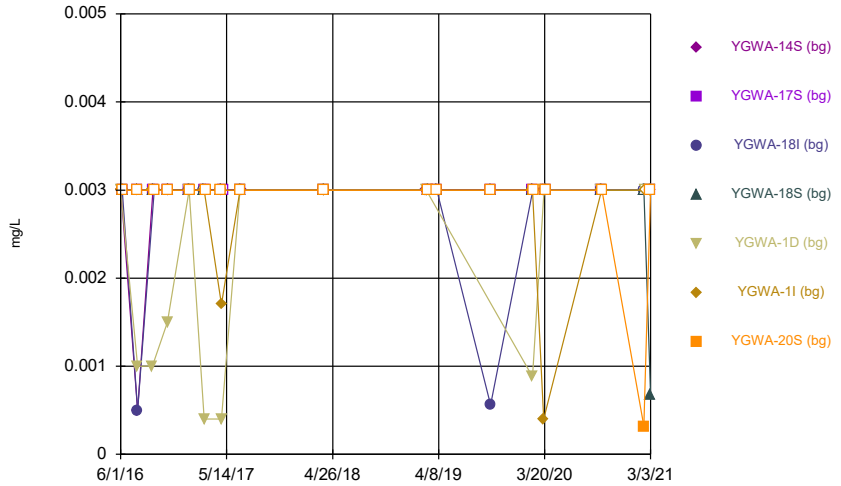
Time Series



Constituent: Antimony Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

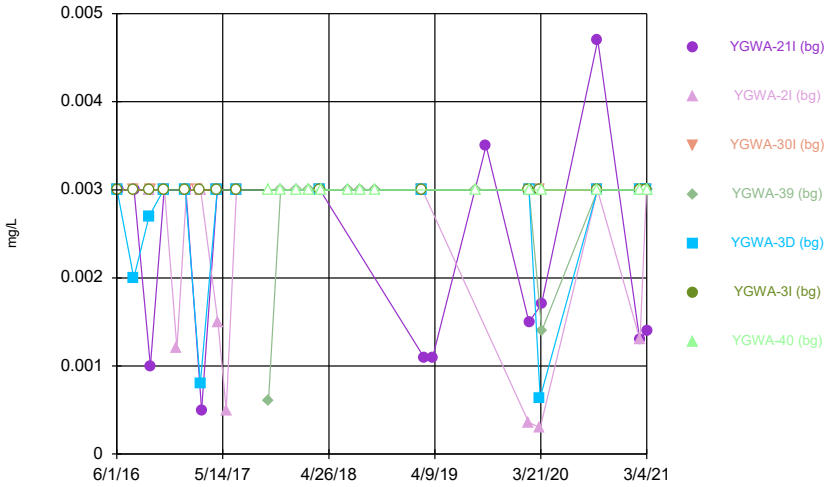
Time Series



Constituent: Antimony Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

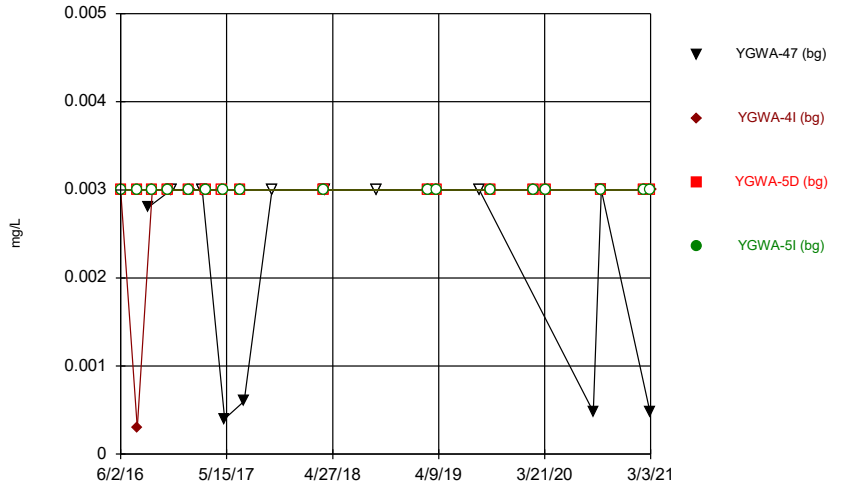
Time Series



Constituent: Antimony Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

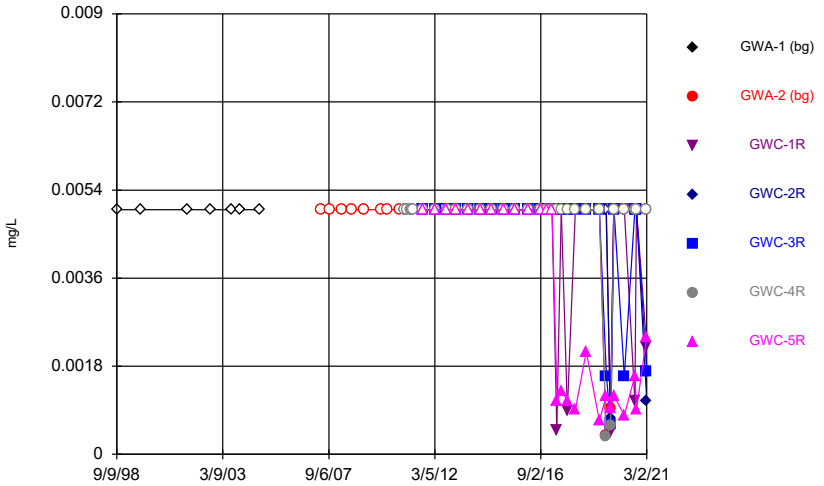
Time Series



Constituent: Antimony Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

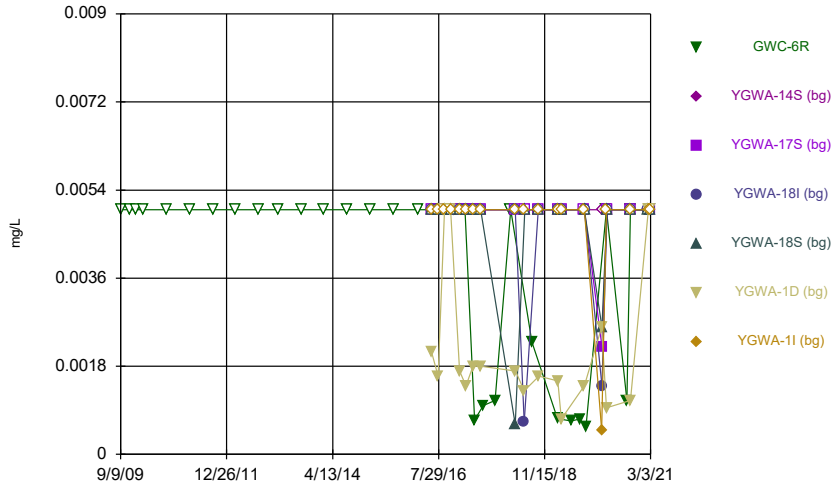


Constituent: Arsenic Analysis Run 5/5/2021 2:26 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

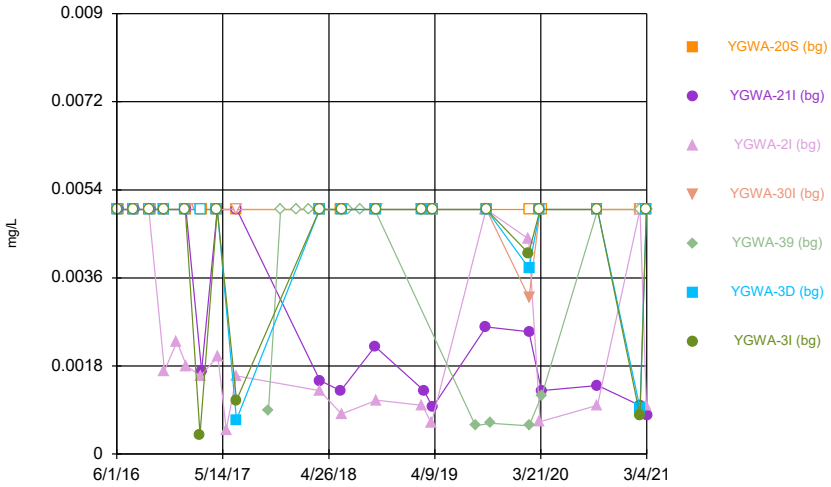


Constituent: Arsenic Analysis Run 5/5/2021 2:26 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

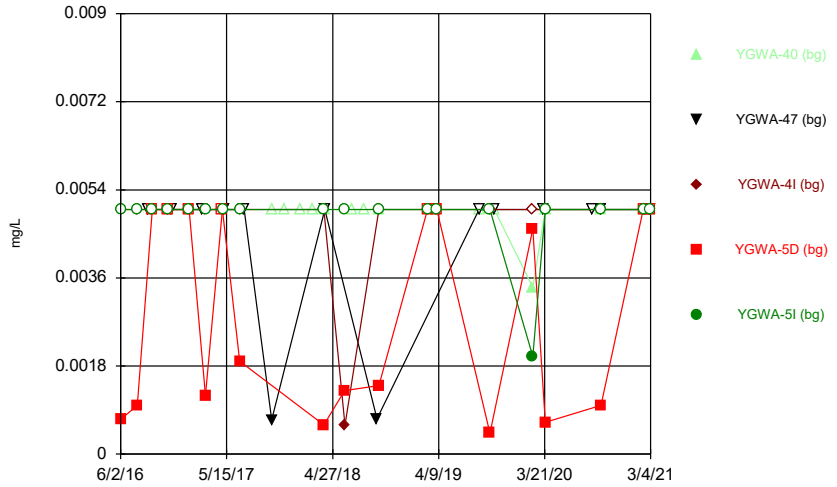


Constituent: Arsenic Analysis Run 5/5/2021 2:26 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

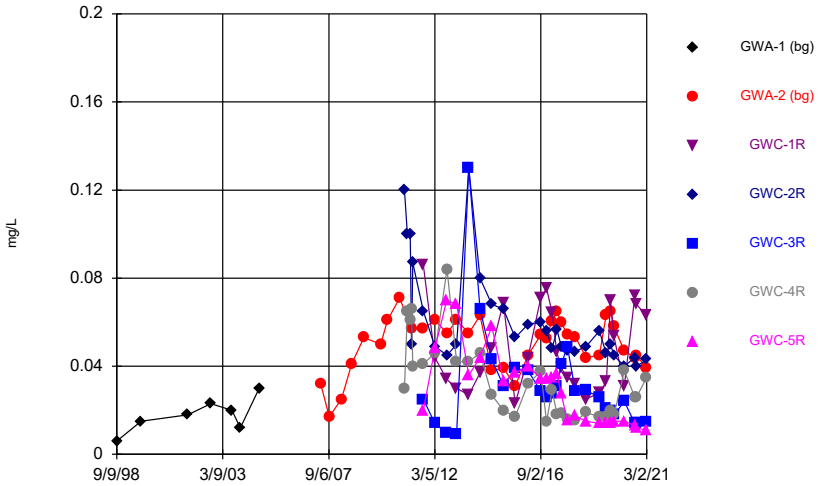


Constituent: Arsenic Analysis Run 5/5/2021 2:26 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



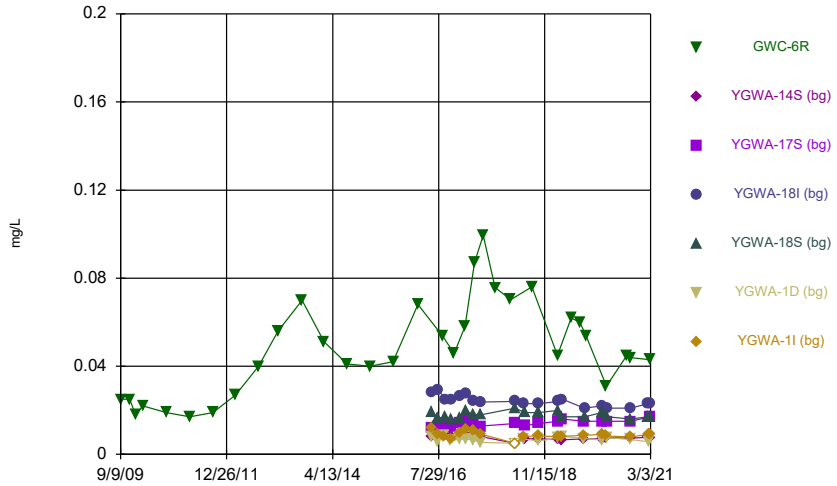
Constituent: Barium Analysis Run 5/5/2021 2:26 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



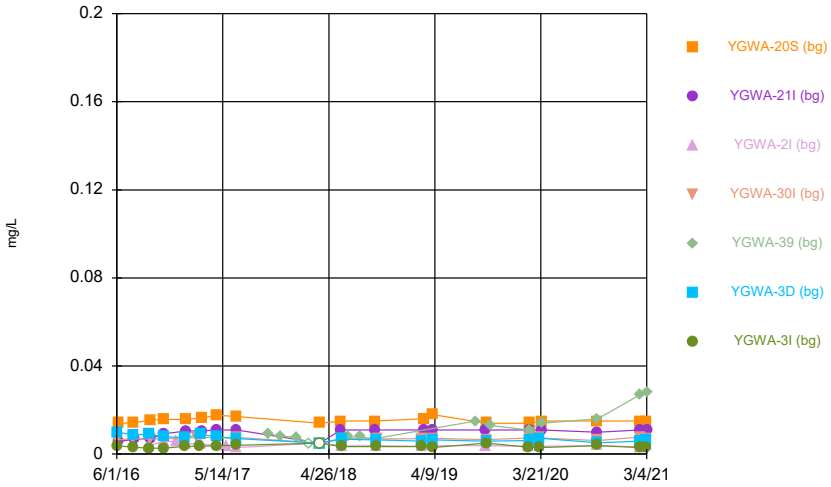
Constituent: Barium Analysis Run 5/5/2021 2:26 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



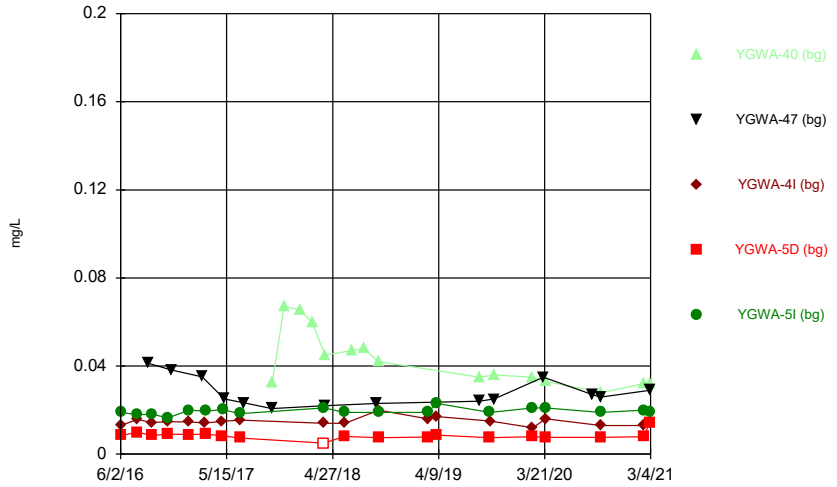
Constituent: Barium Analysis Run 5/5/2021 2:26 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

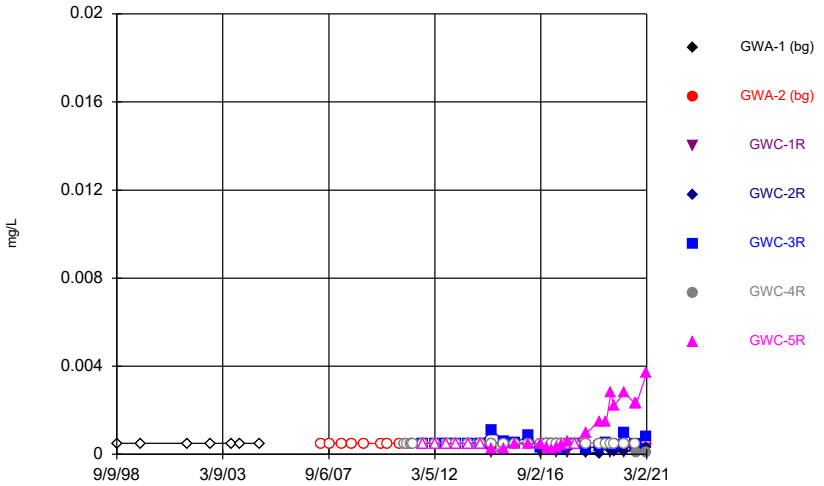


Constituent: Barium Analysis Run 5/5/2021 2:26 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

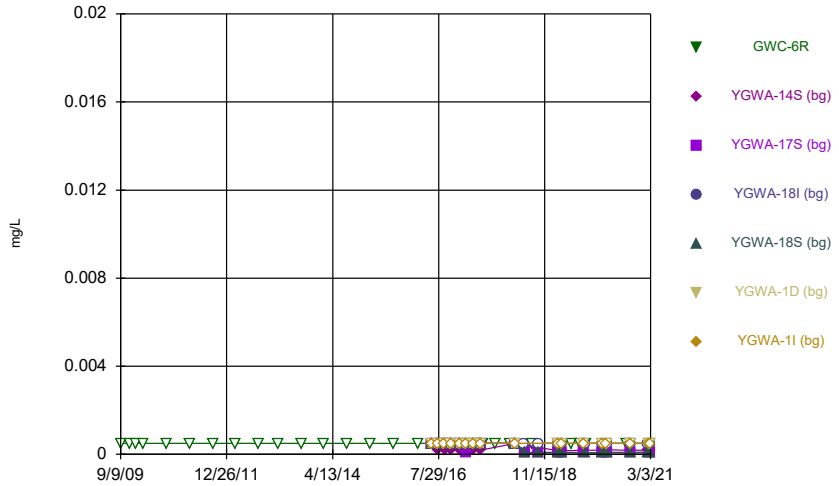
Time Series



Constituent: Beryllium Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

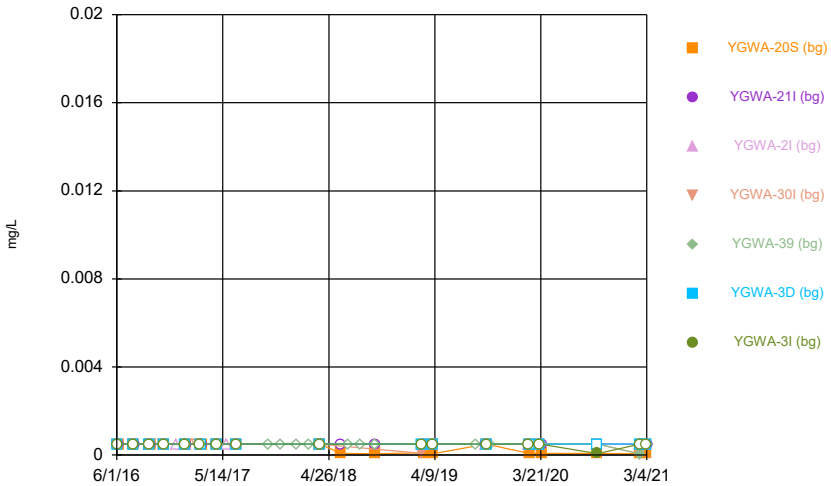
Time Series



Constituent: Beryllium Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

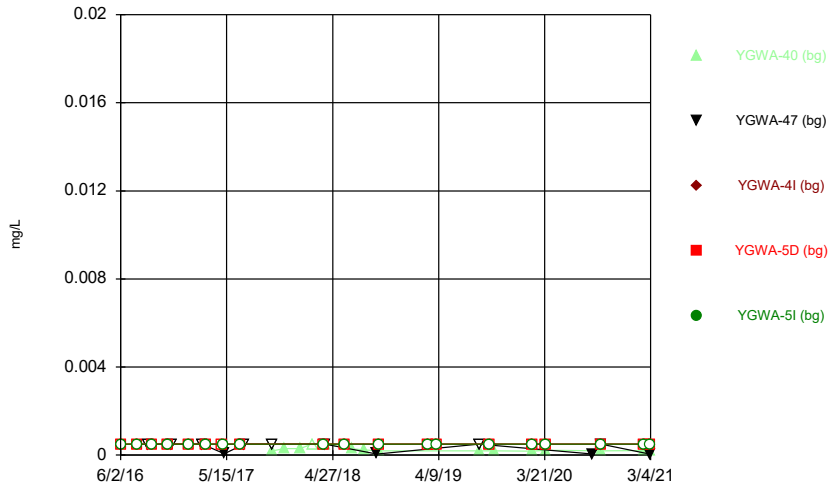
Time Series



Constituent: Beryllium Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

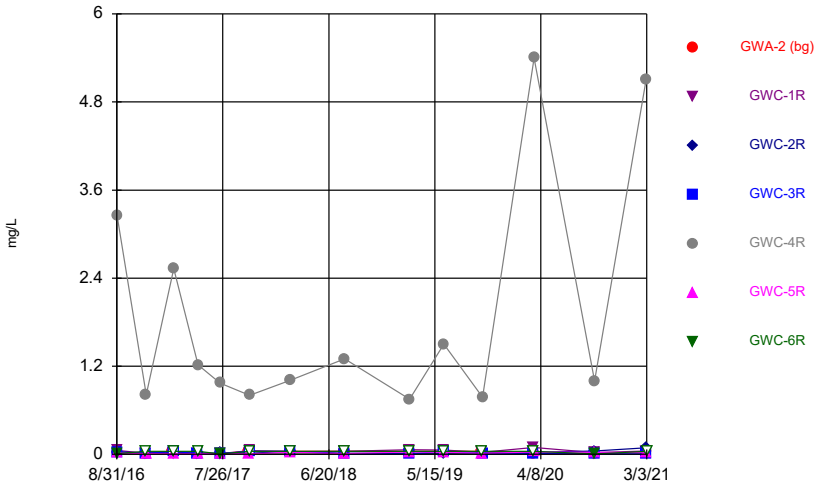
Time Series



Constituent: Beryllium Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

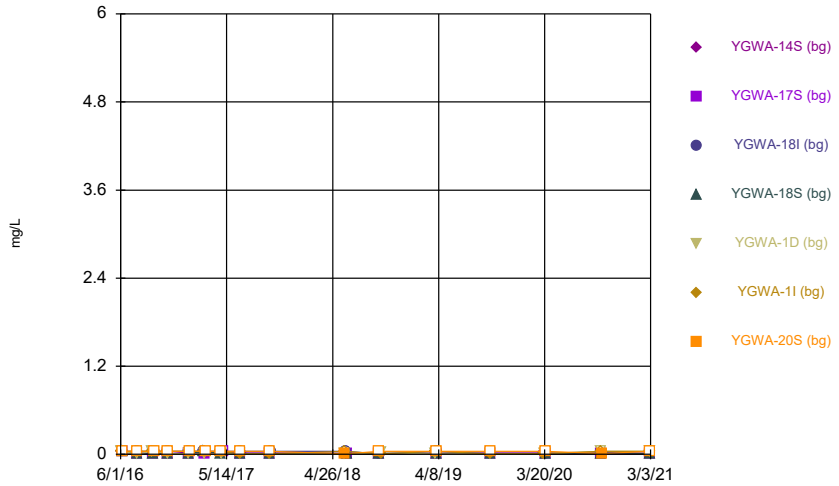
Time Series



Constituent: Boron Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

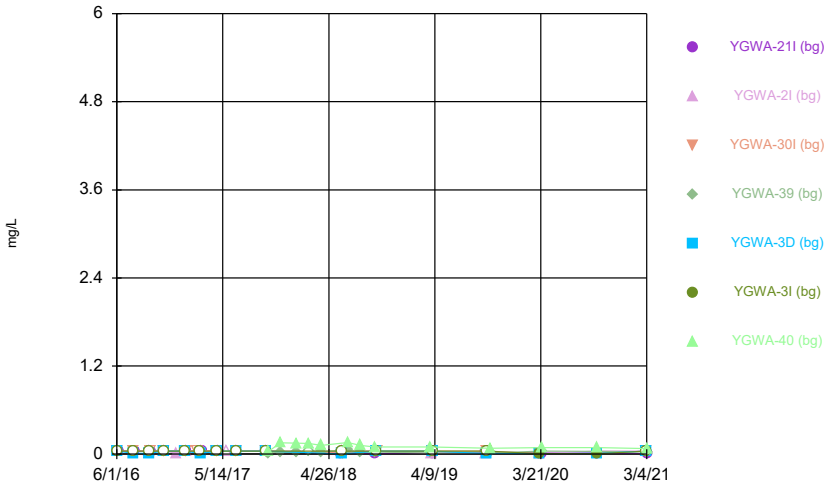
Time Series



Constituent: Boron Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

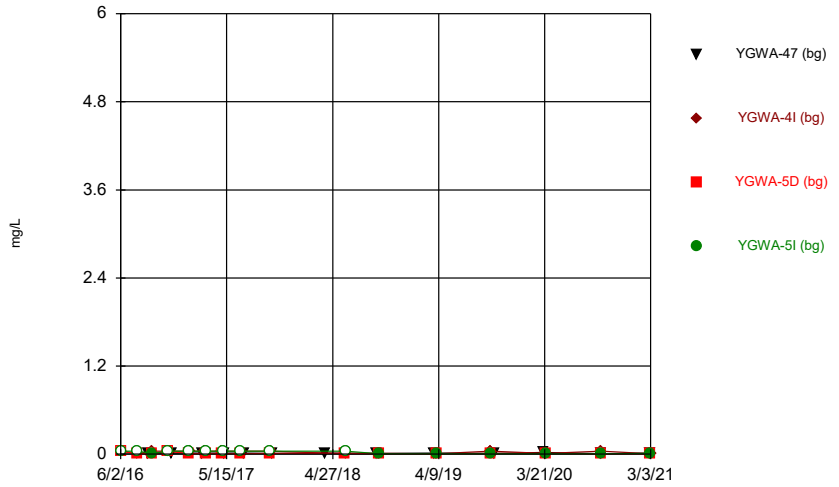
Time Series



Constituent: Boron Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

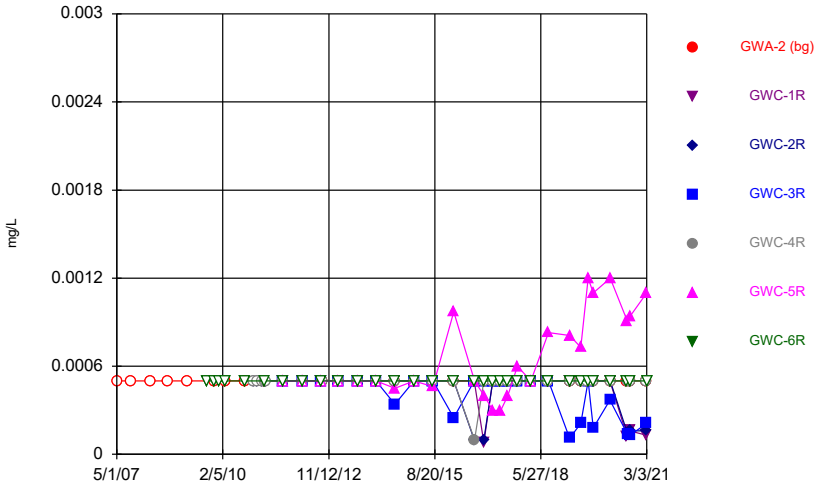
Time Series



Constituent: Boron Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

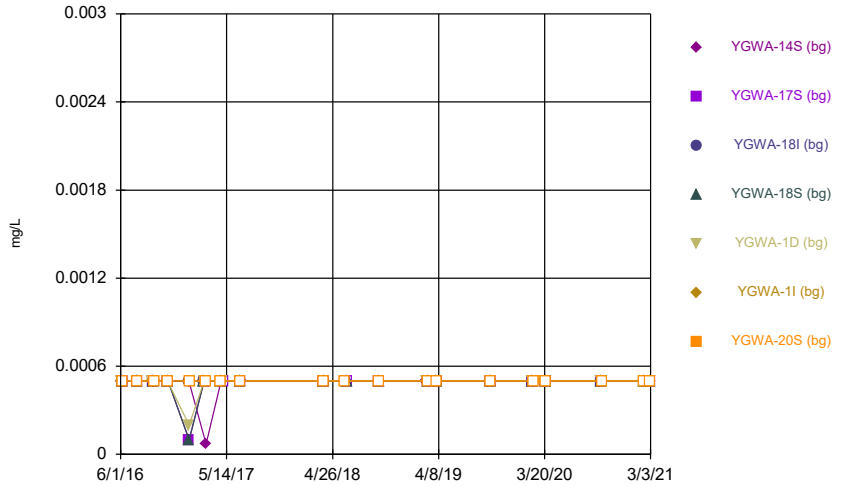
Time Series



Constituent: Cadmium Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

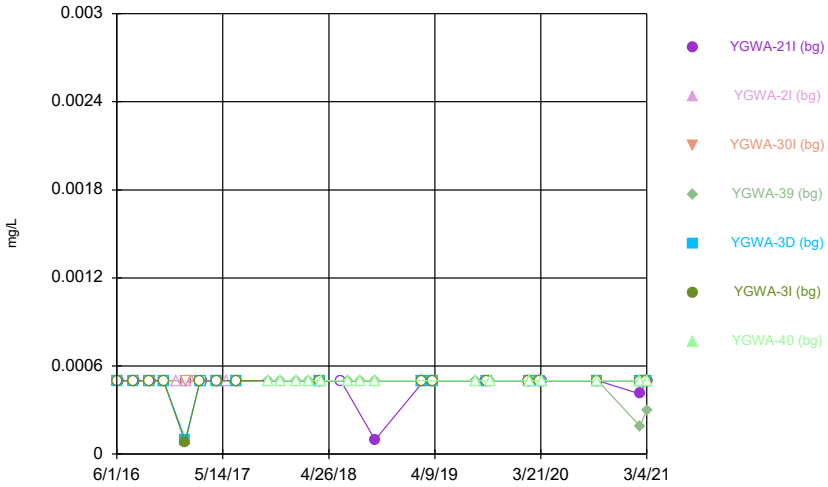
Time Series



Constituent: Cadmium Analysis Run 5/5/2021 2:26 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

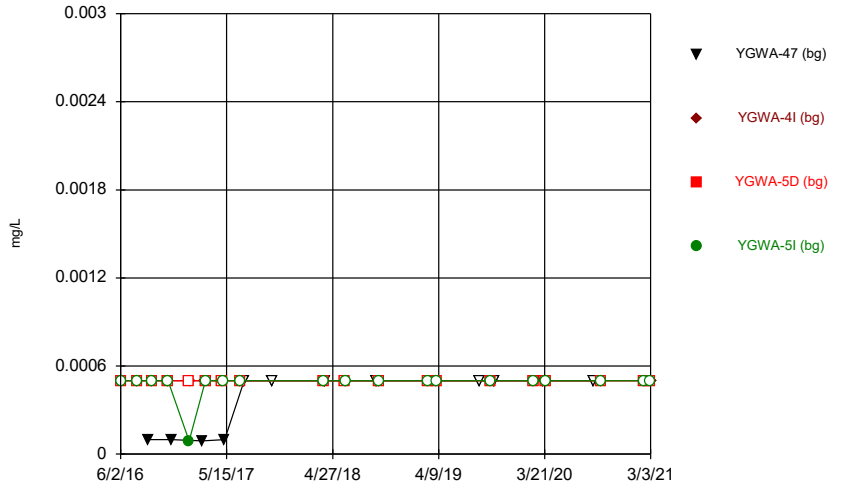
Time Series



Constituent: Cadmium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

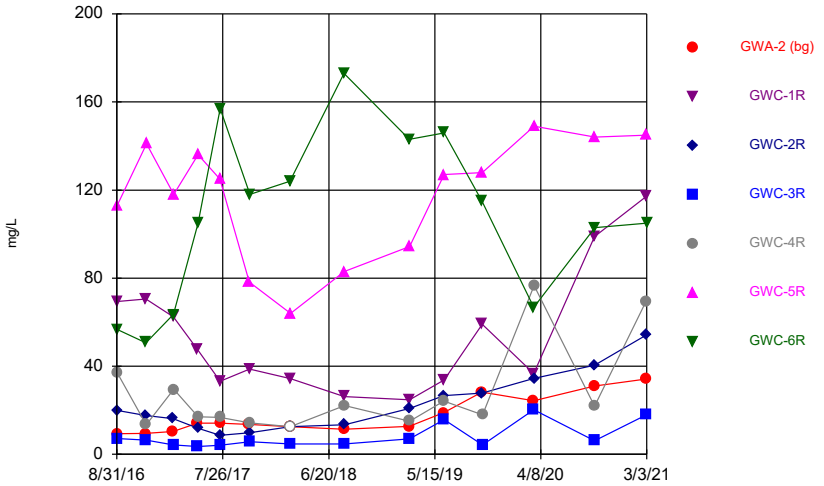
Time Series



Constituent: Cadmium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

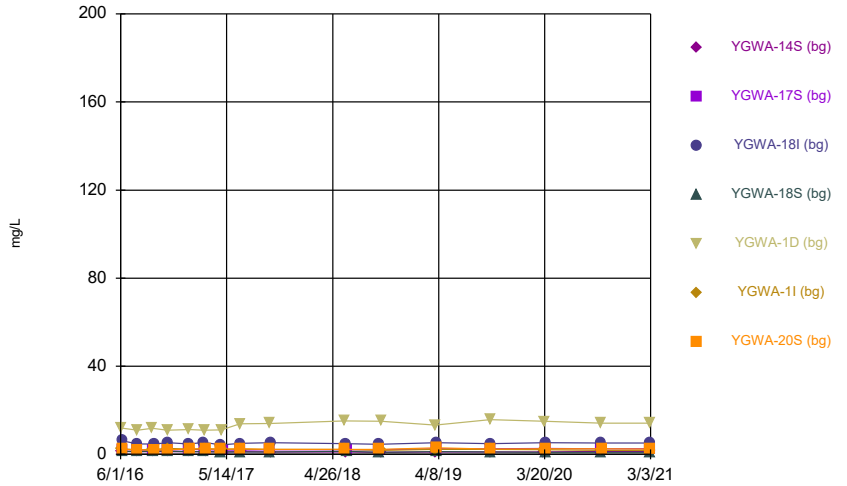
Time Series



Constituent: Calcium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

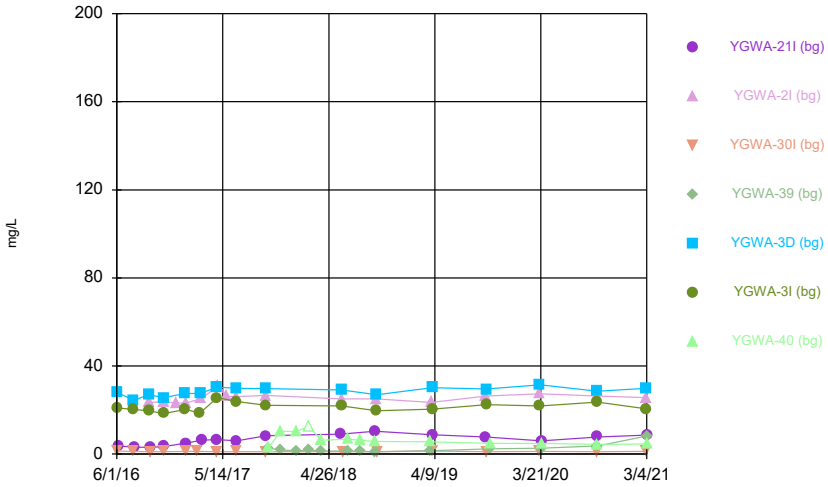
Time Series



Constituent: Calcium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

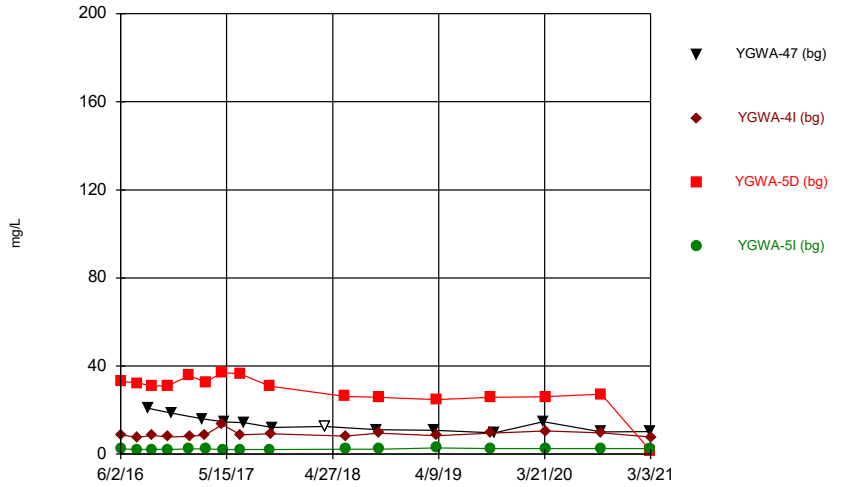
Time Series



Constituent: Calcium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

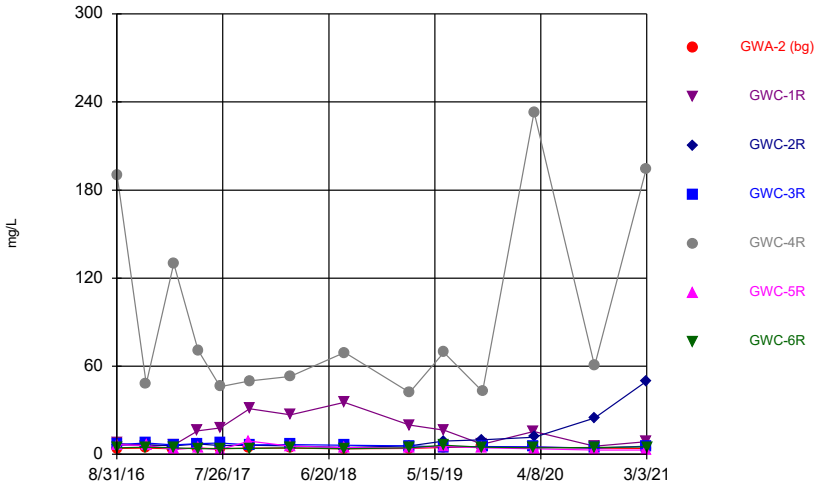
Time Series



Constituent: Calcium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

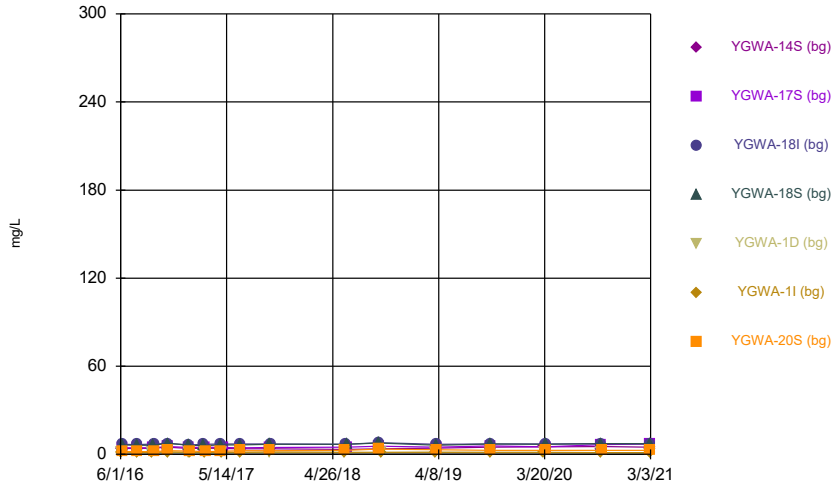


Constituent: Chloride Analysis Run 5/5/2021 2:27 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

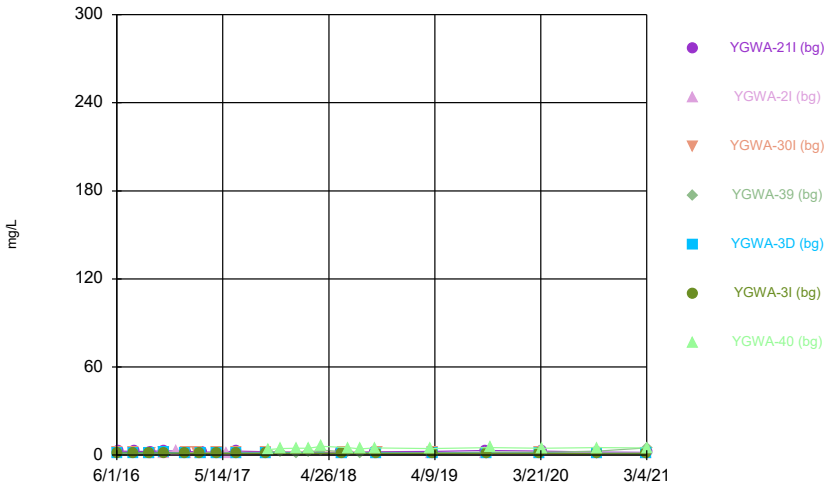


Constituent: Chloride Analysis Run 5/5/2021 2:27 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

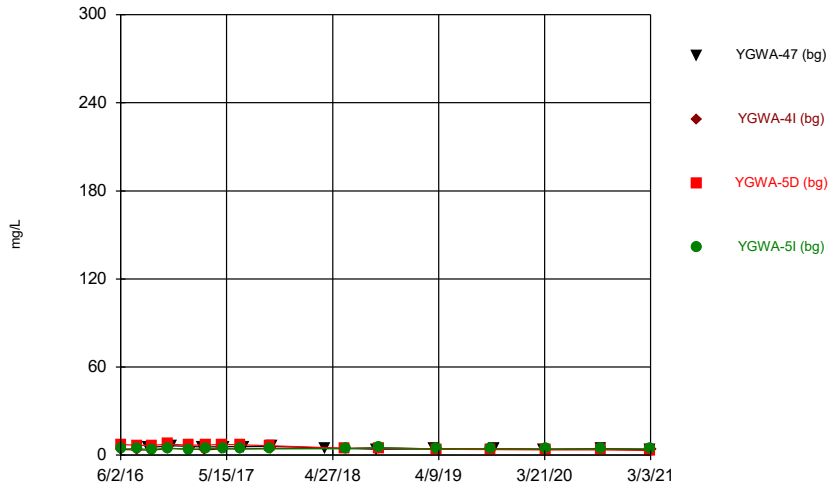


Constituent: Chloride Analysis Run 5/5/2021 2:27 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

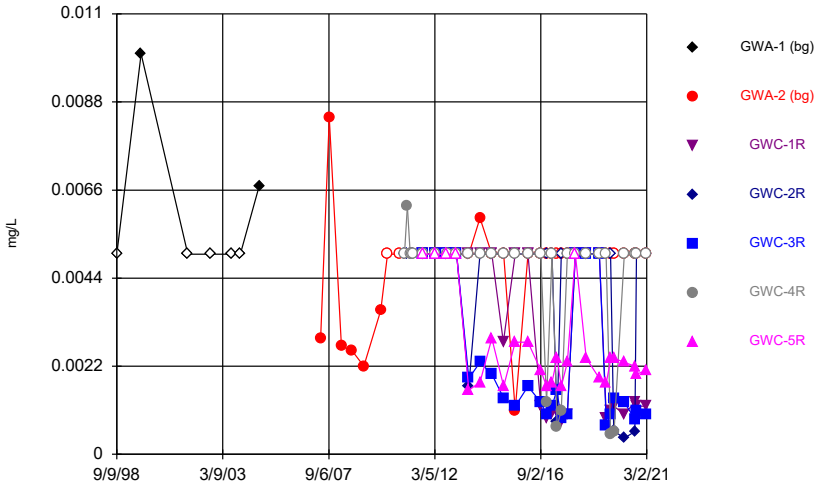


Constituent: Chloride Analysis Run 5/5/2021 2:27 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

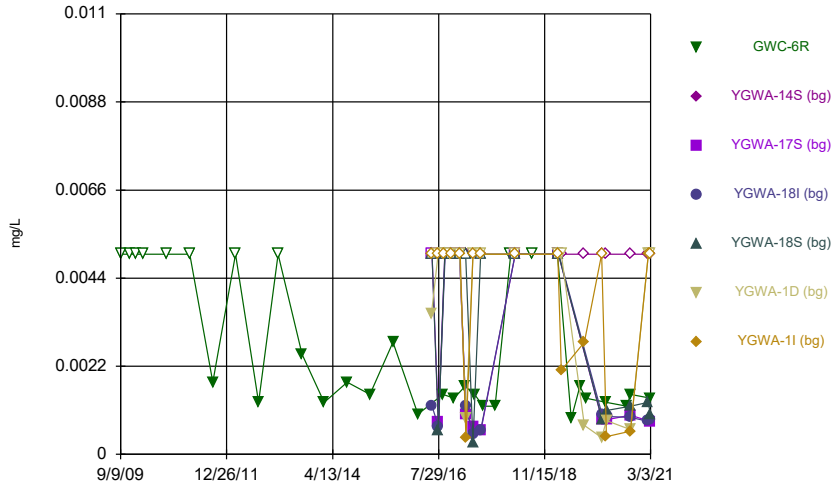
Time Series



Constituent: Chromium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

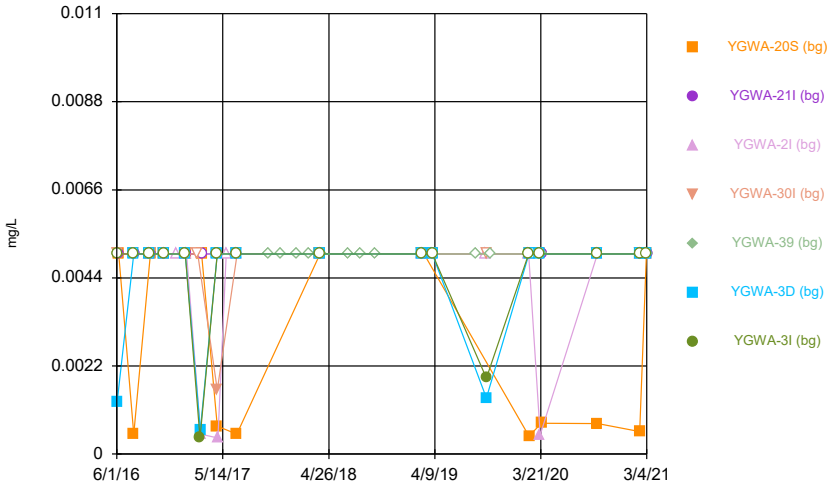
Time Series



Constituent: Chromium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

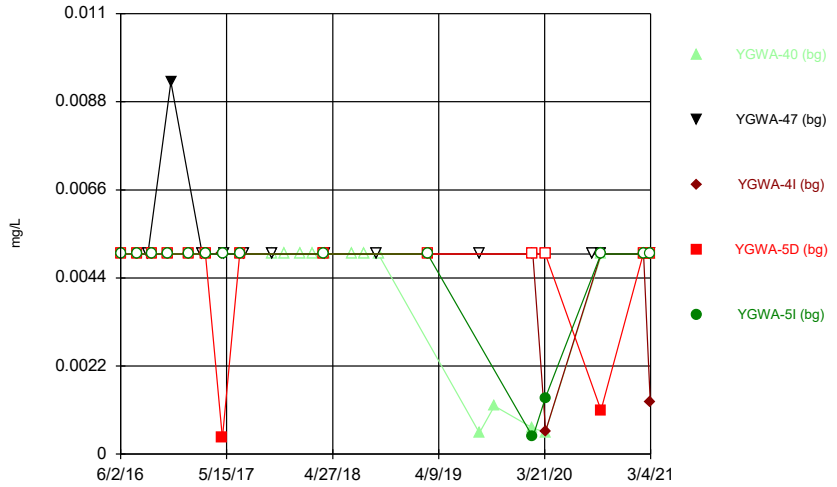
Time Series



Constituent: Chromium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

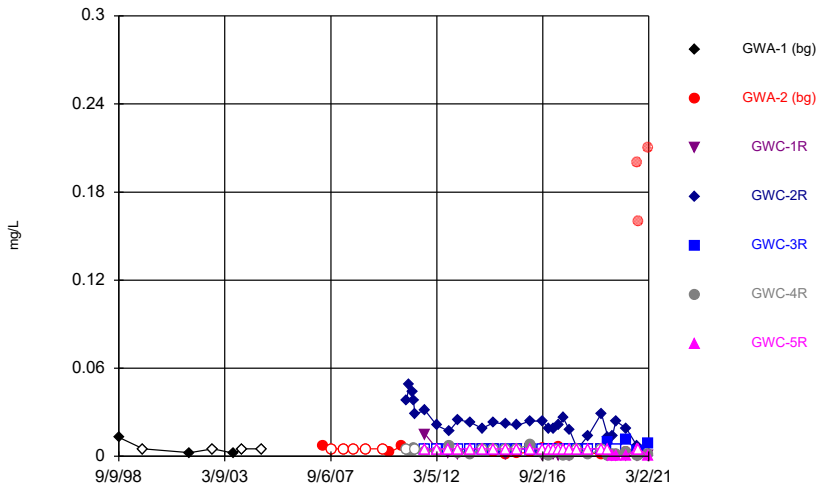
Time Series



Constituent: Chromium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

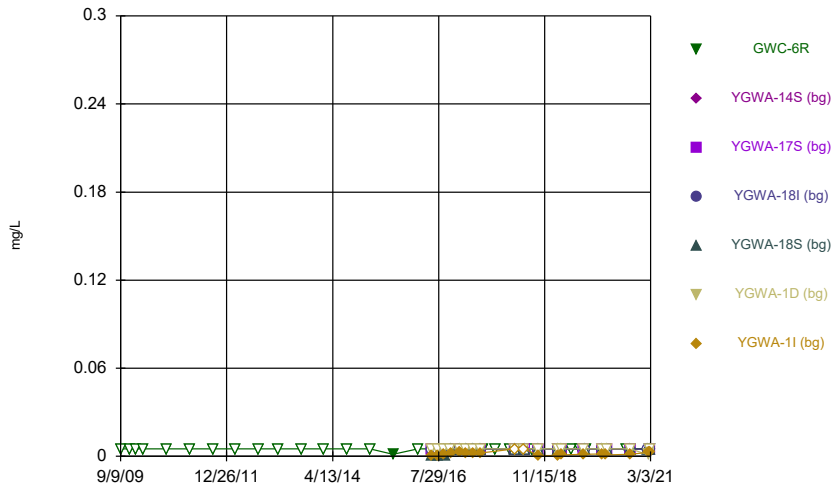
Time Series



Constituent: Cobalt Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

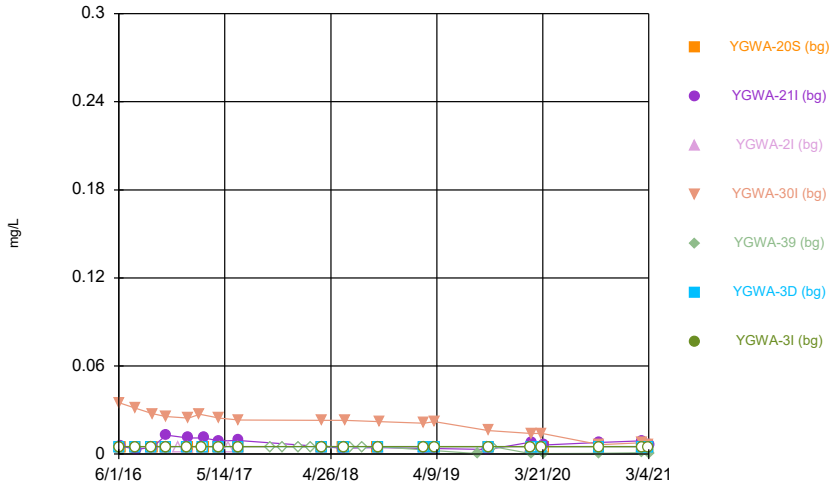
Time Series



Constituent: Cobalt Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

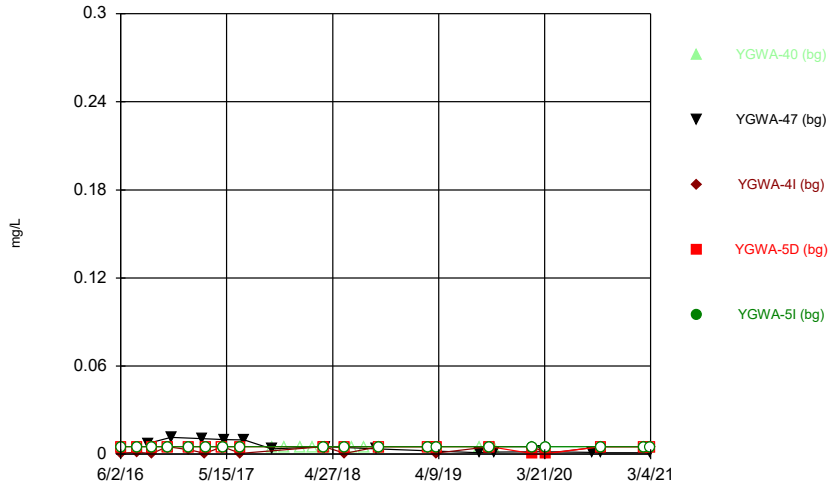
Time Series



Constituent: Cobalt Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

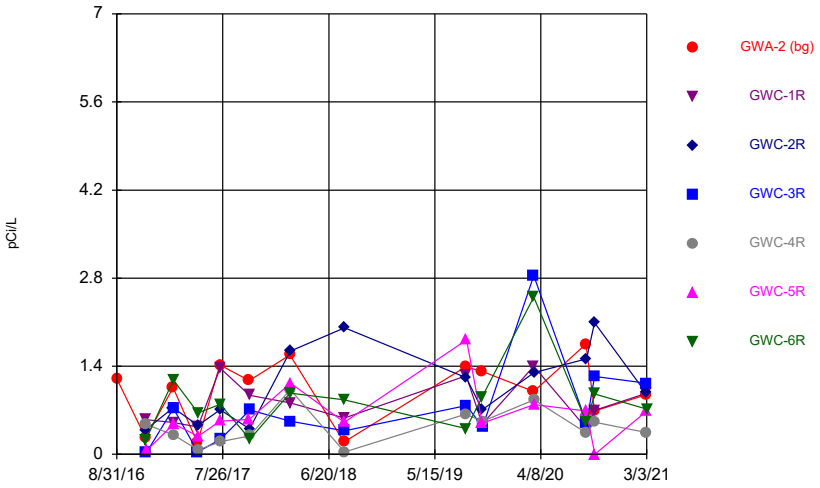
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

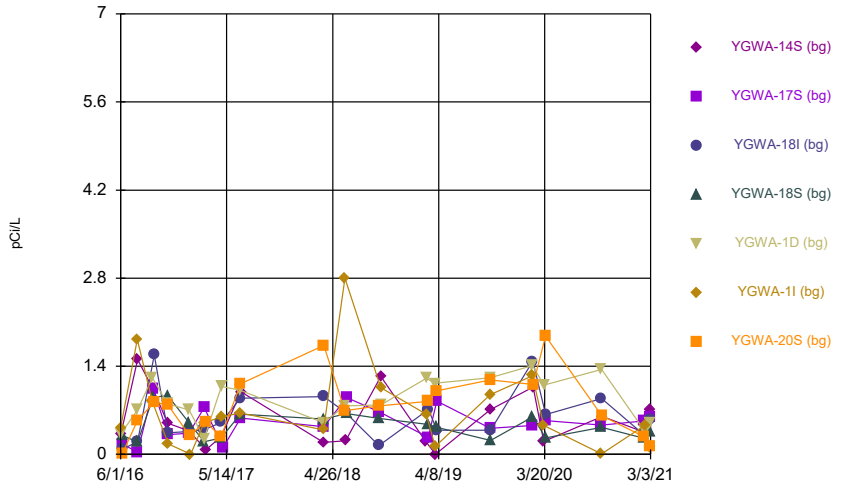
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

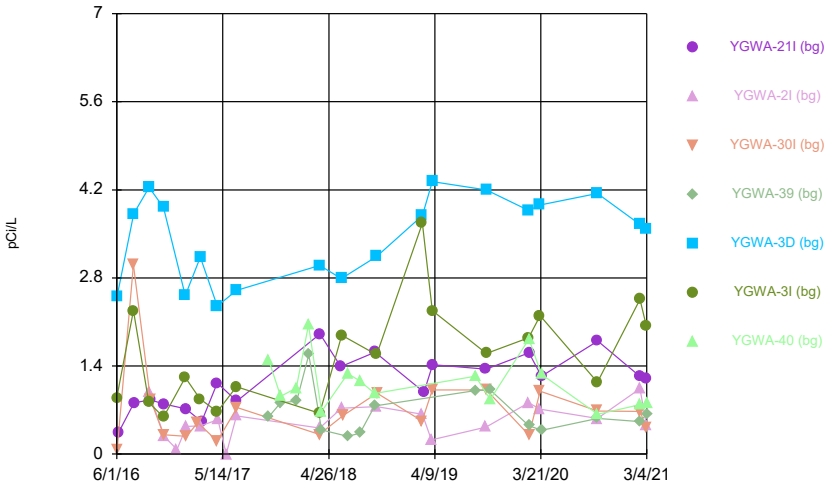
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

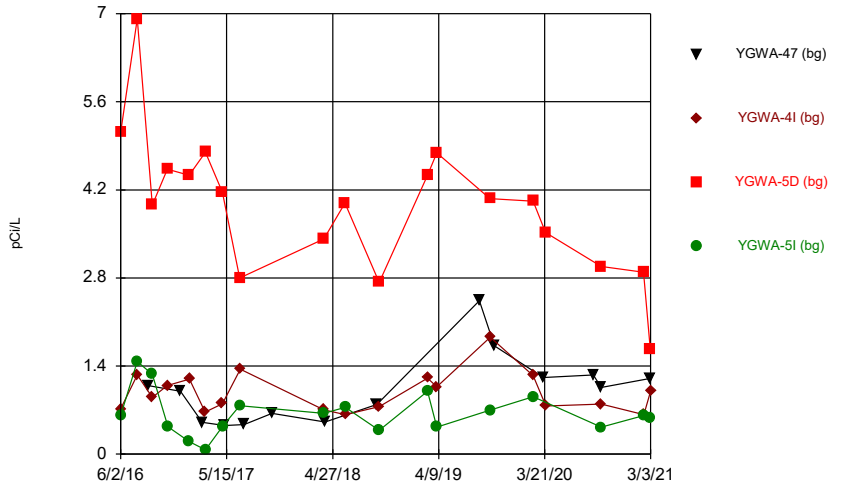
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

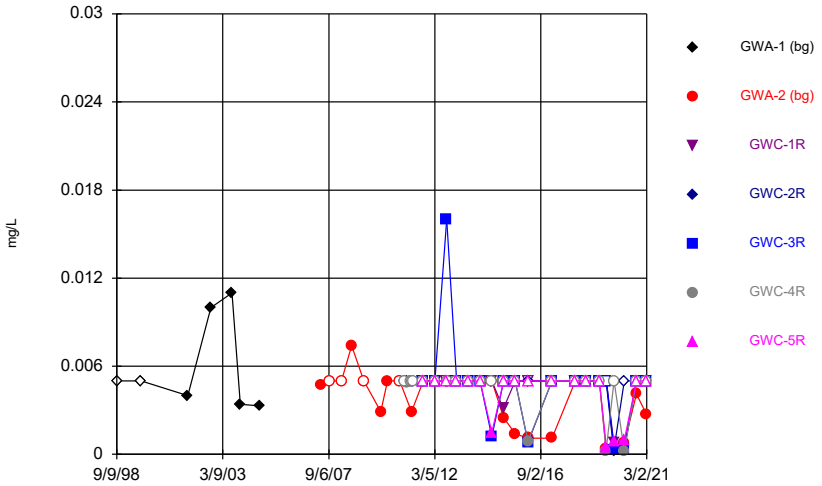
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

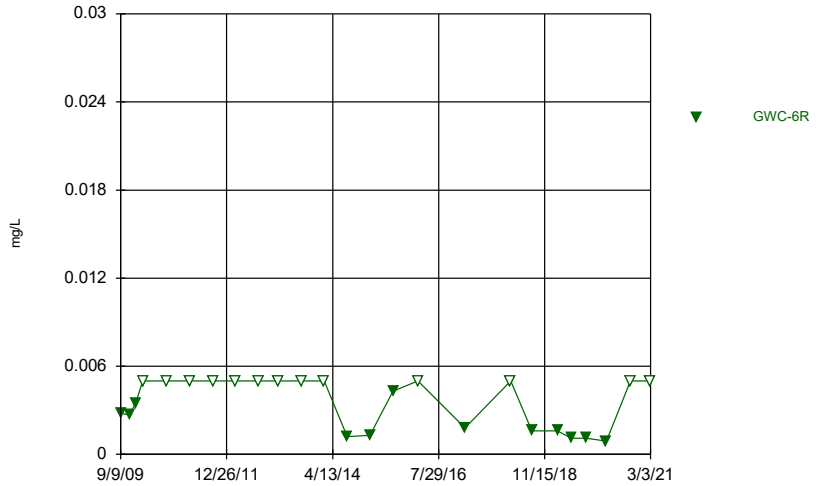
Time Series



Constituent: Copper Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

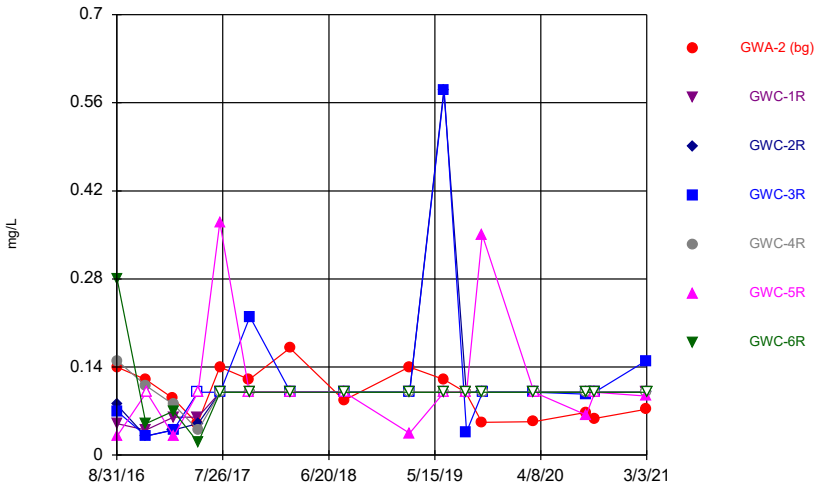
Time Series



Constituent: Copper Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

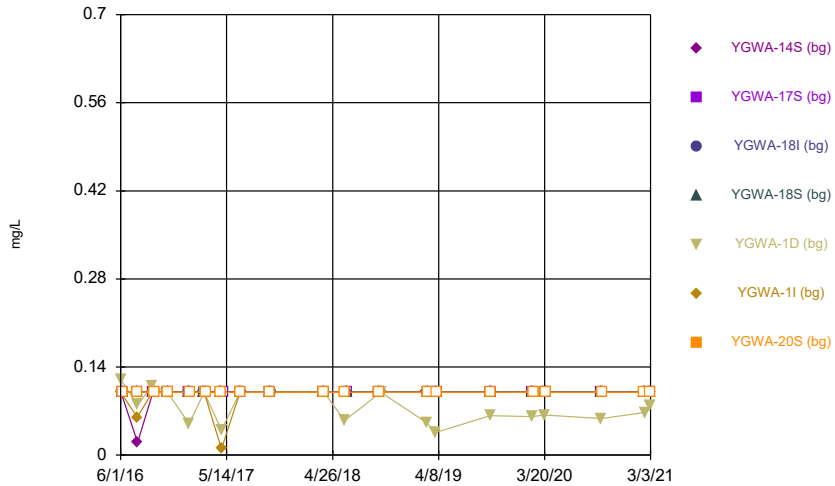
Time Series



Constituent: Fluoride Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

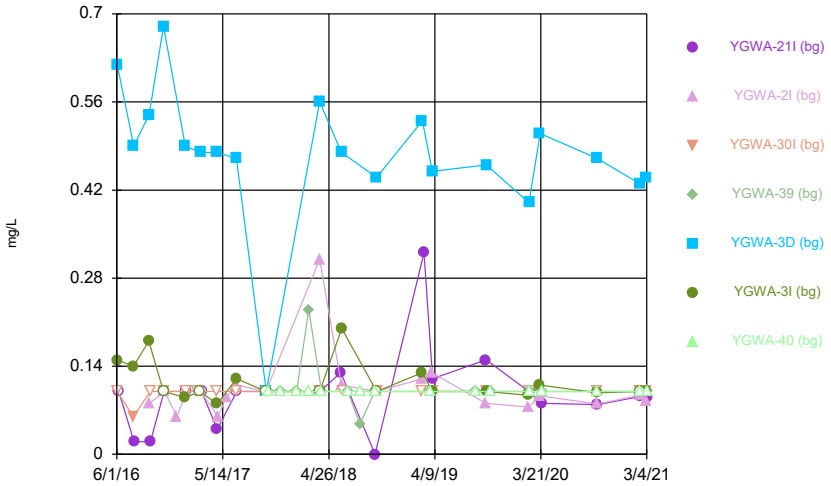
Time Series



Constituent: Fluoride Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

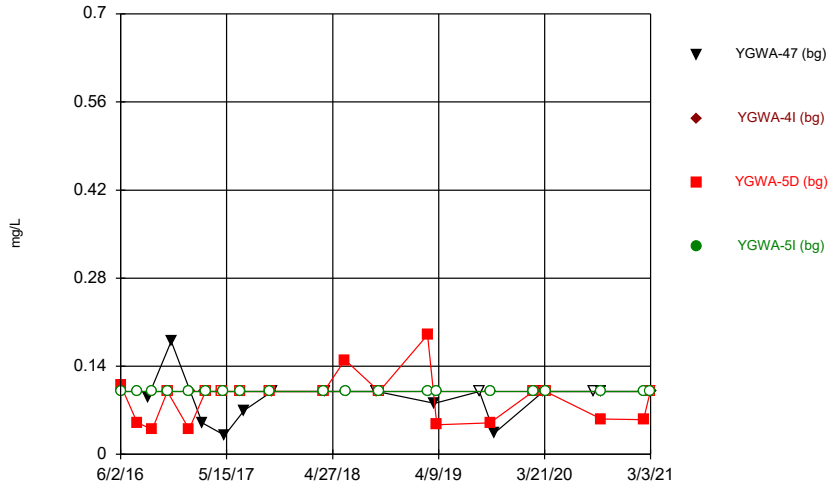
Time Series



Constituent: Fluoride Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

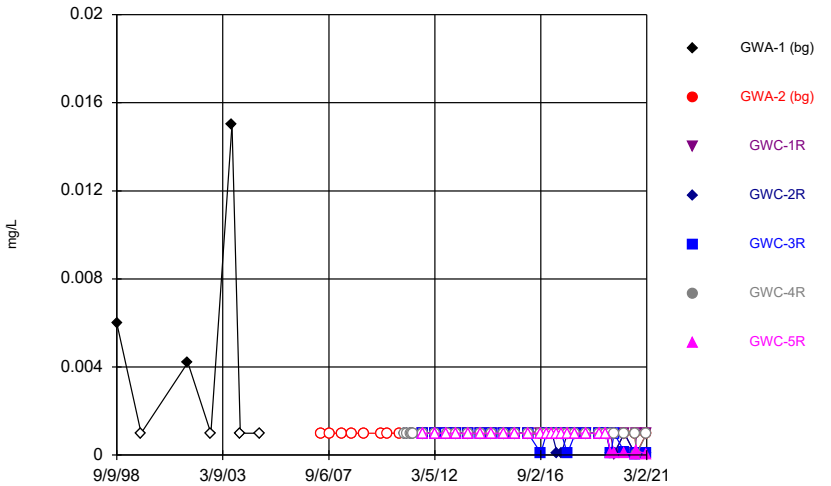
Time Series



Constituent: Fluoride Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

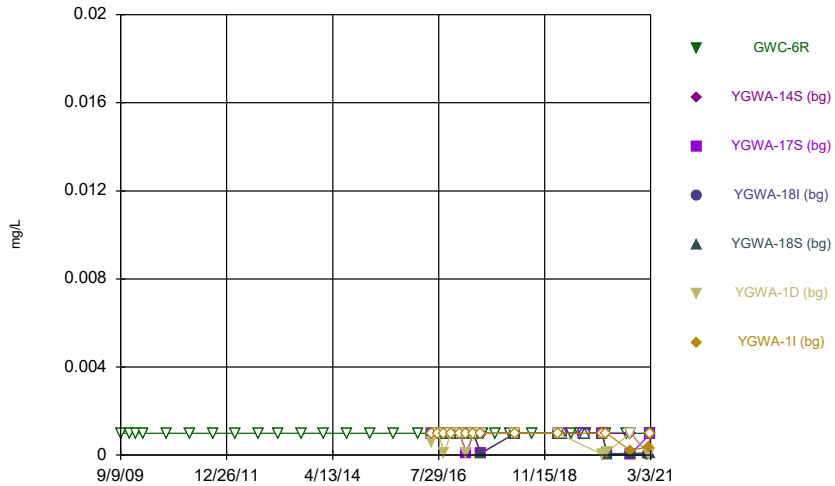
Time Series



Constituent: Lead Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

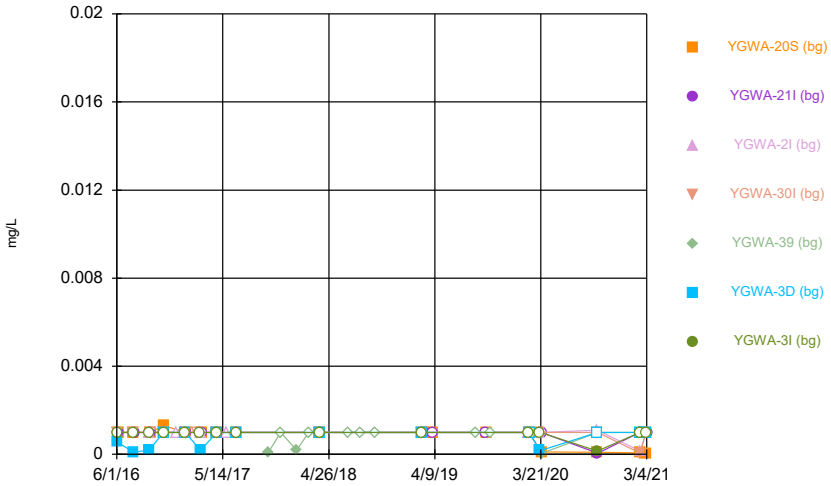
Time Series



Constituent: Lead Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

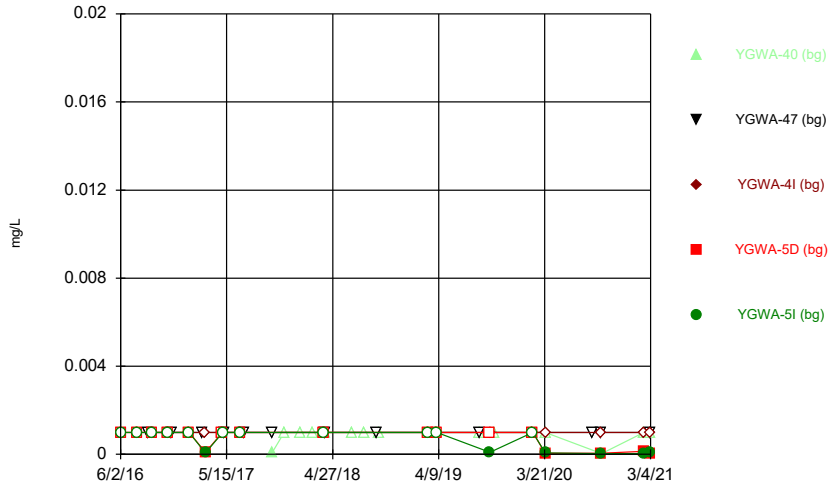
Time Series



Constituent: Lead Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

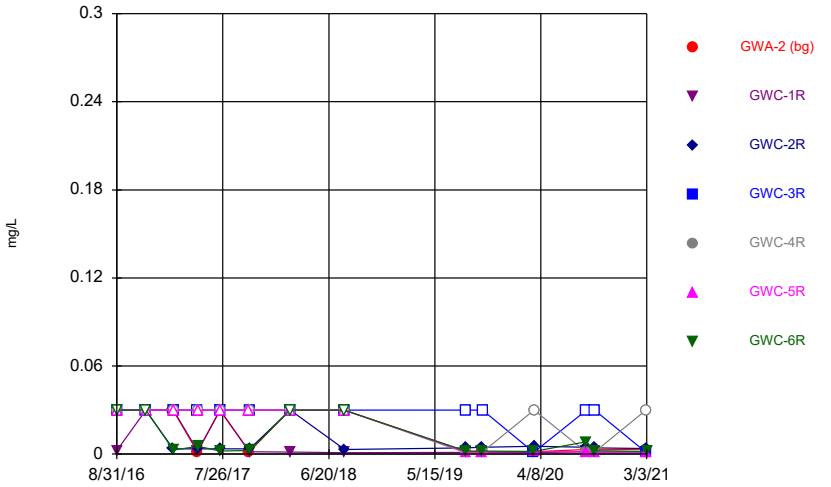
Time Series



Constituent: Lead Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

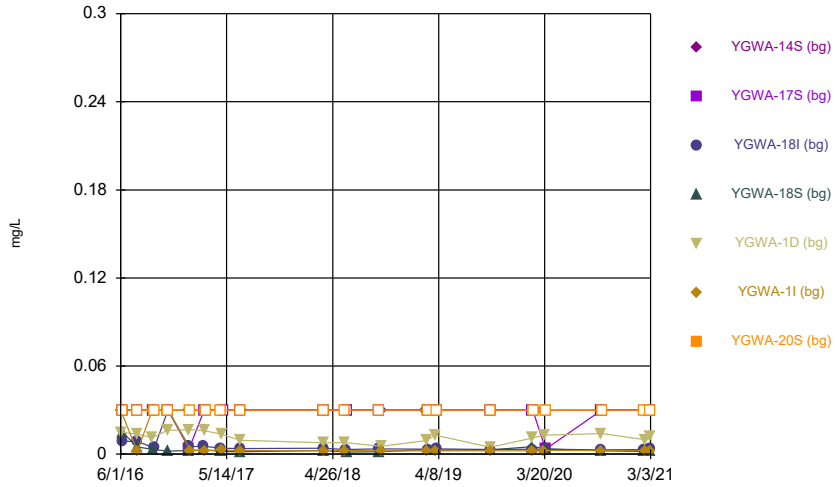
Time Series



Constituent: Lithium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

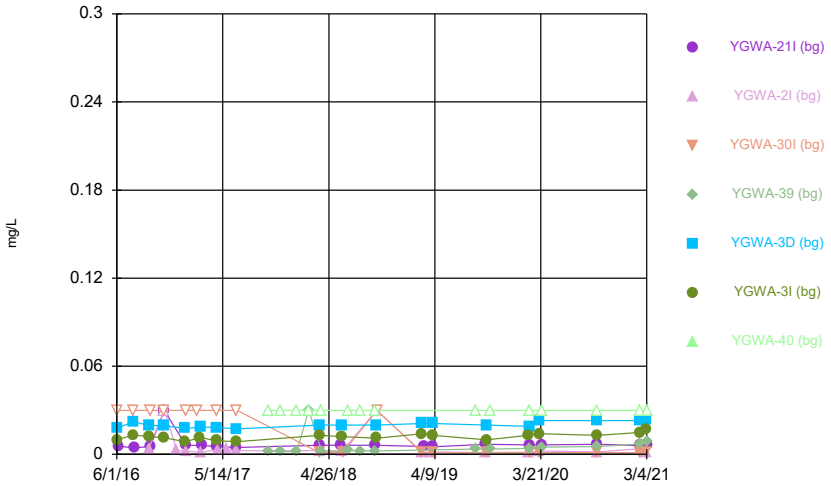
Time Series



Constituent: Lithium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

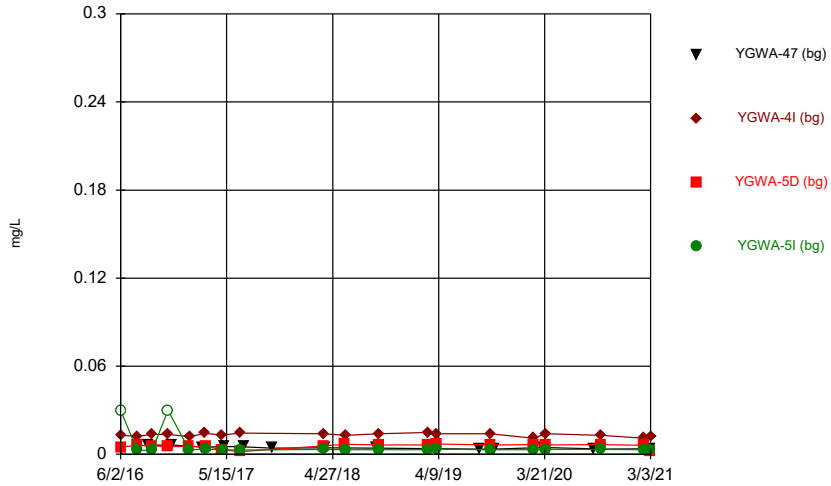
Time Series



Constituent: Lithium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

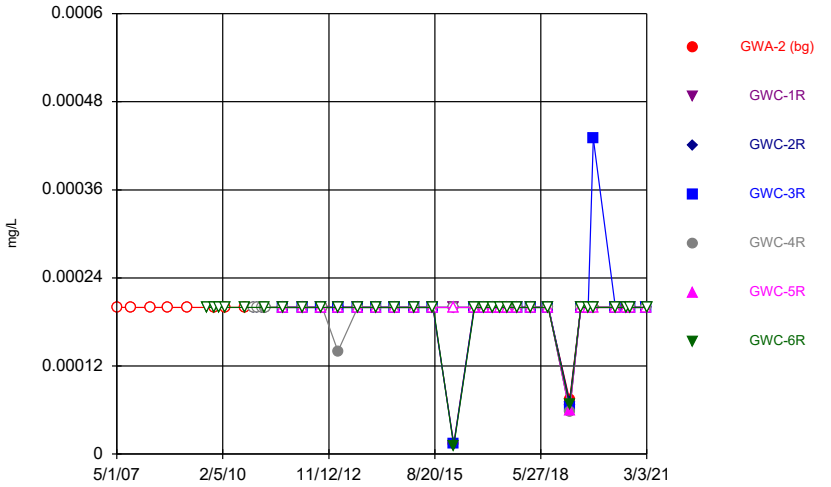
Time Series



Constituent: Lithium Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

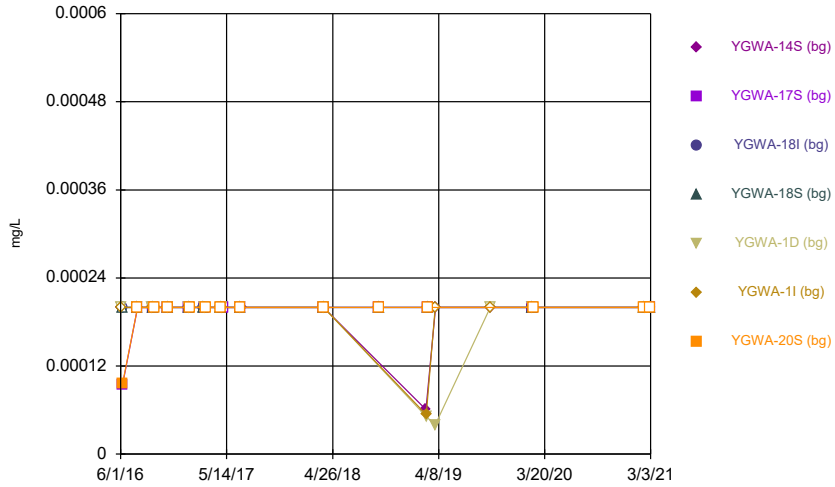
Time Series



Constituent: Mercury Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

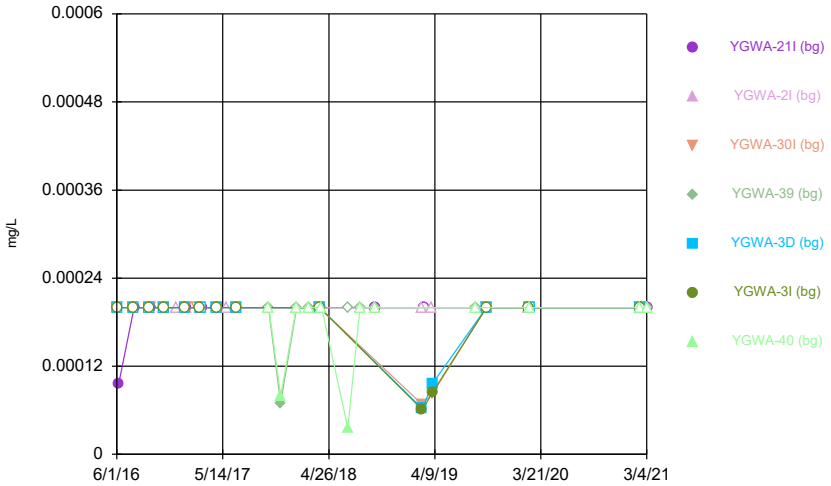
Time Series



Constituent: Mercury Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

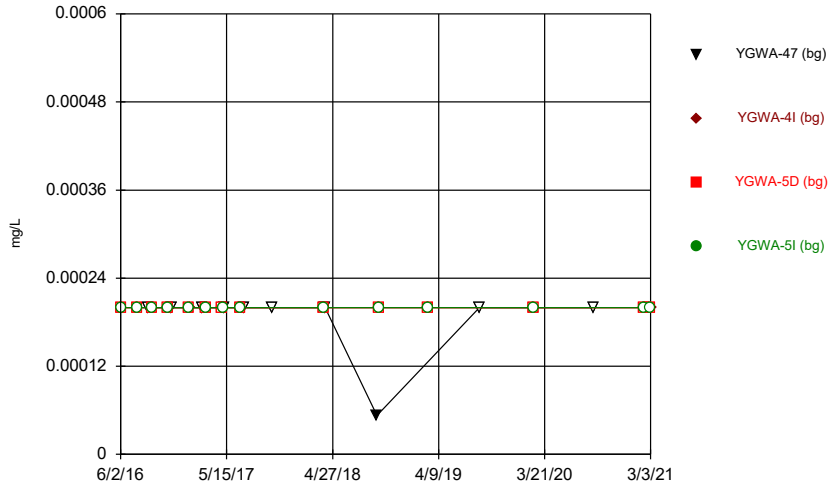
Time Series



Constituent: Mercury Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

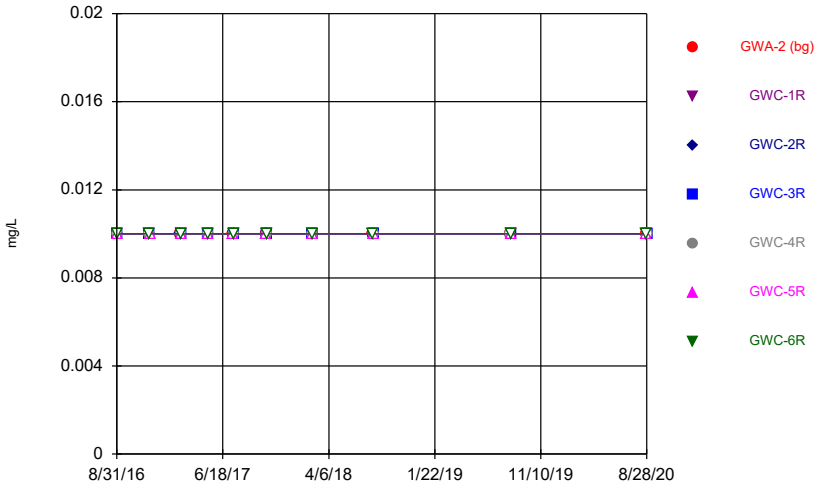
Time Series



Constituent: Mercury Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

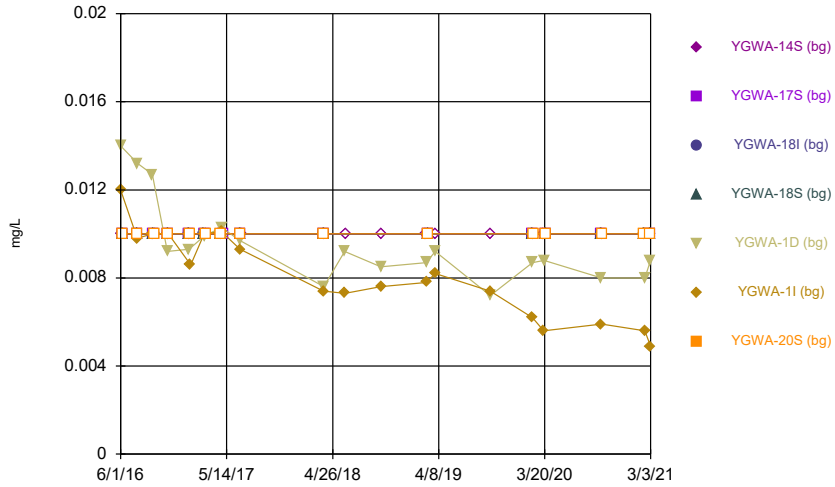
Time Series



Constituent: Molybdenum Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

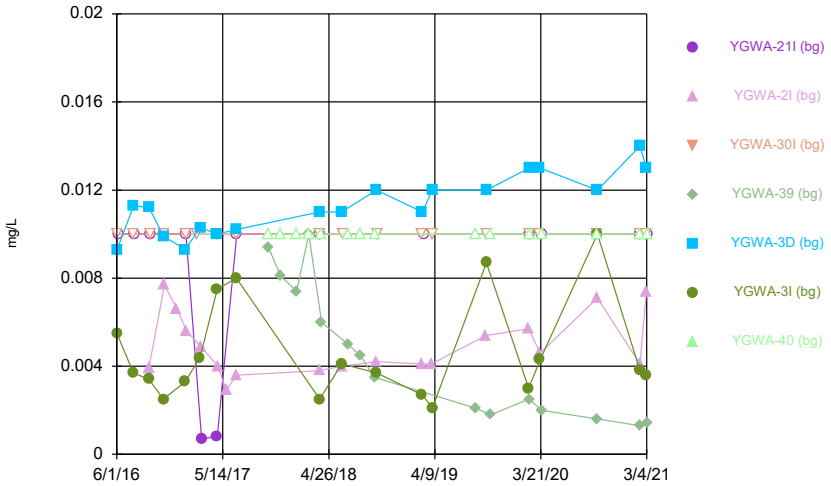
Time Series



Constituent: Molybdenum Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

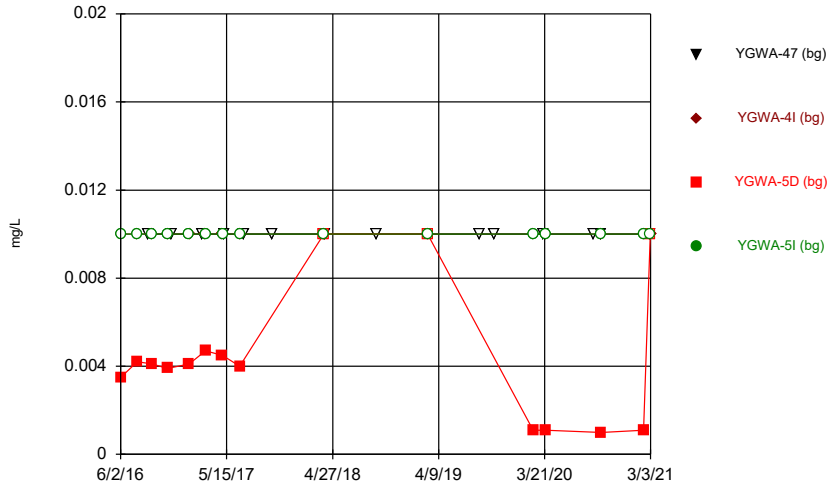
Time Series



Constituent: Molybdenum Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

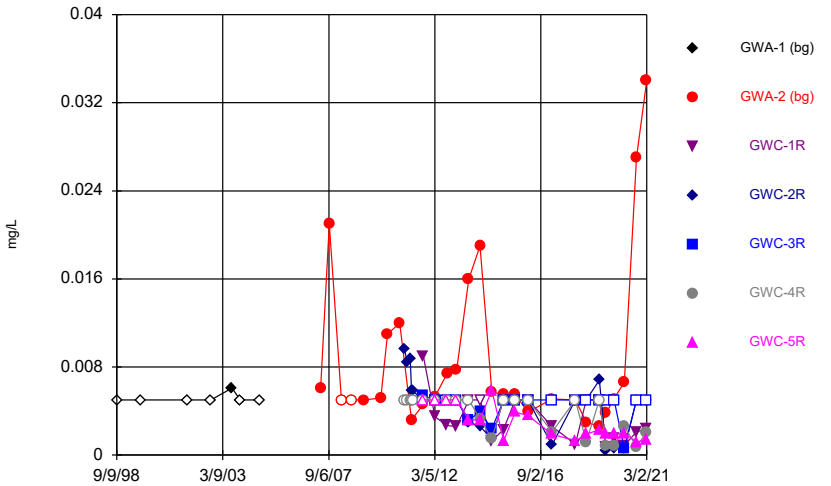
Time Series



Constituent: Molybdenum Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

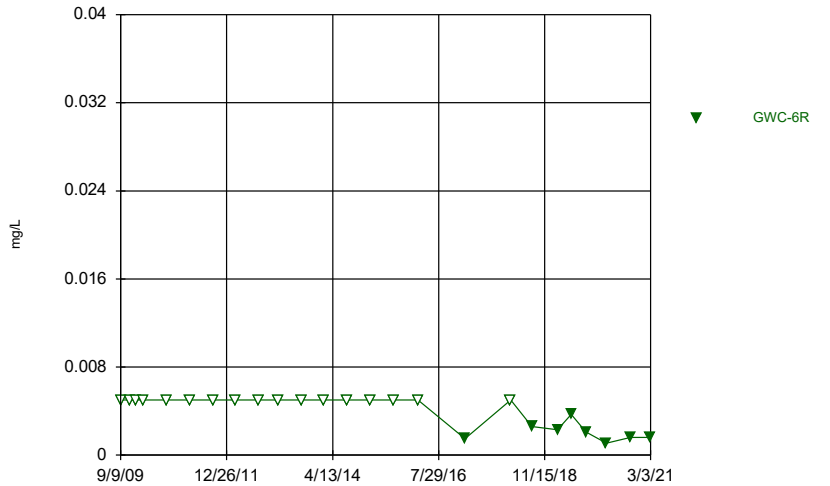
Time Series



Constituent: Nickel Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

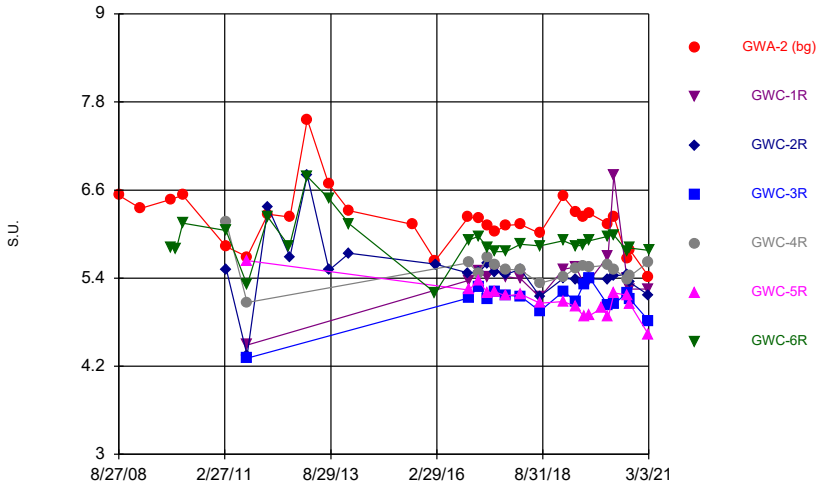
Time Series



Constituent: Nickel Analysis Run 5/5/2021 2:27 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

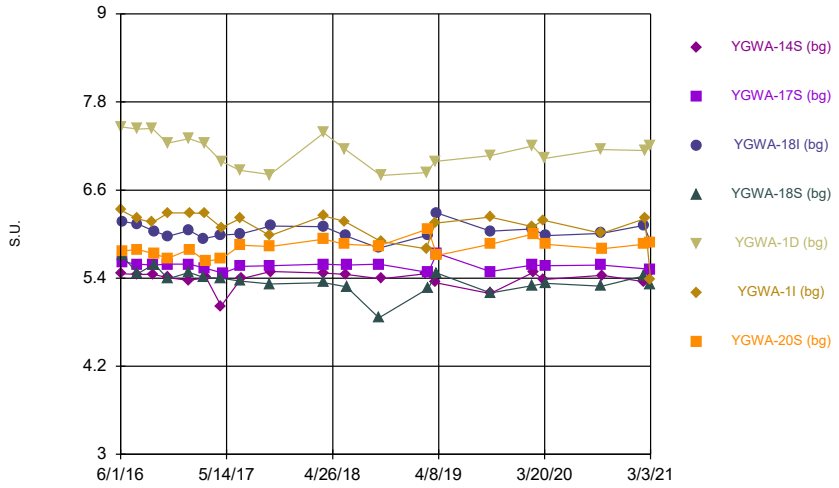


Constituent: pH Analysis Run 5/5/2021 2:27 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

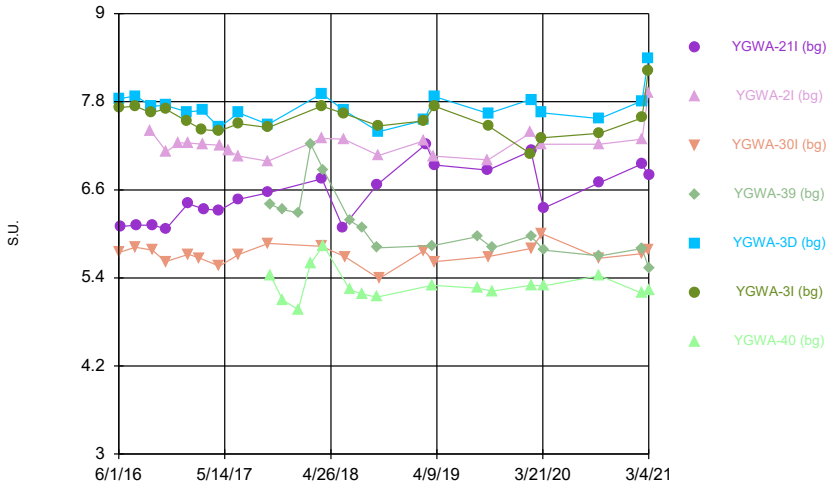


Constituent: pH Analysis Run 5/5/2021 2:27 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

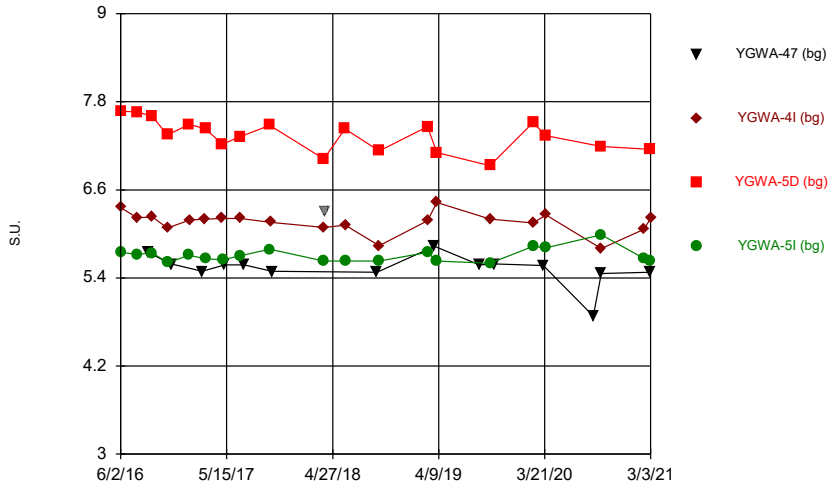


Constituent: pH Analysis Run 5/5/2021 2:27 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

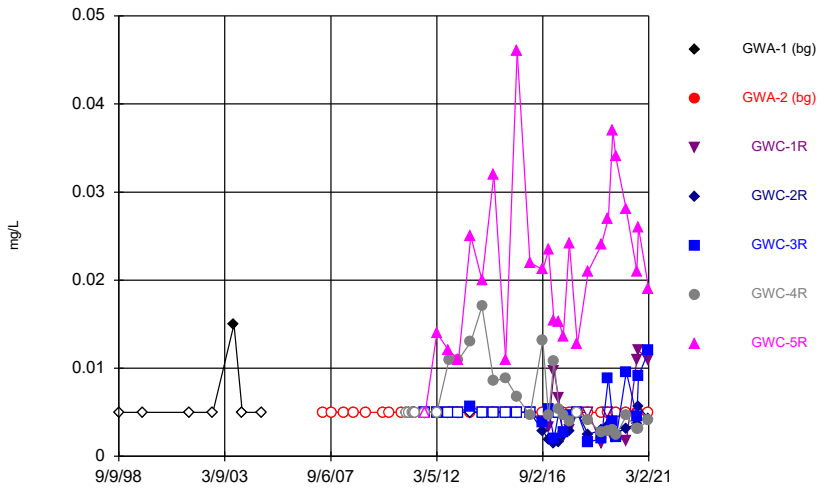


Constituent: pH Analysis Run 5/5/2021 2:27 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

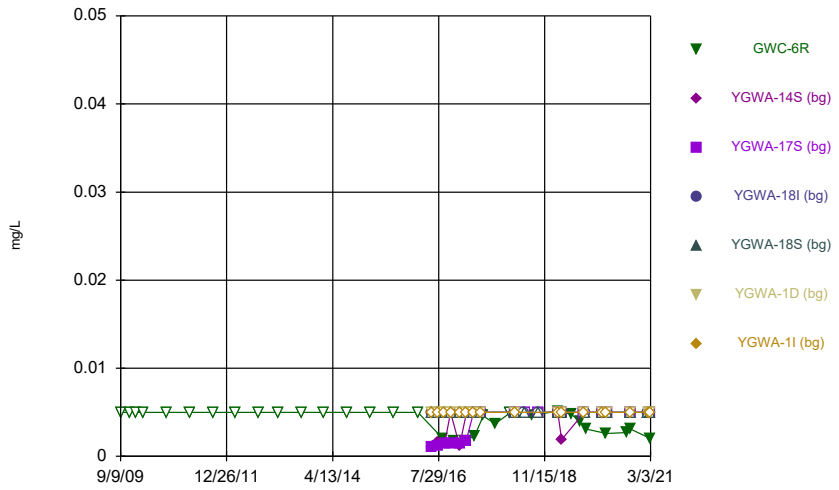
Time Series



Constituent: Selenium Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

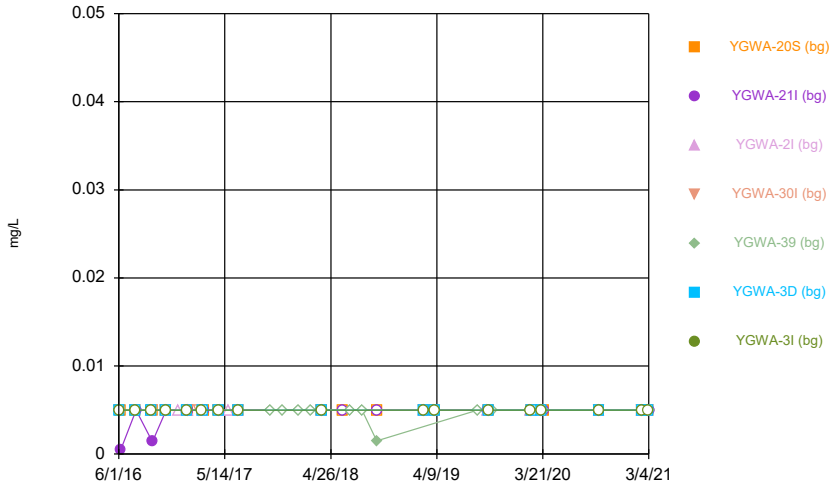
Time Series



Constituent: Selenium Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

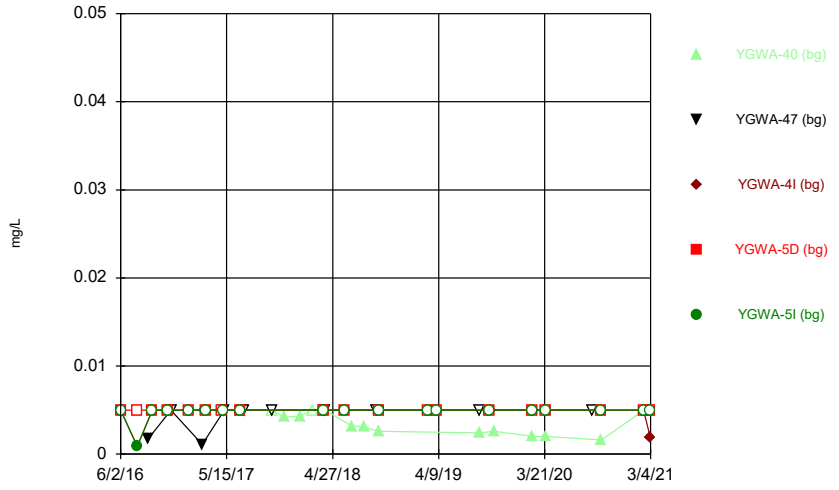
Time Series



Constituent: Selenium Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

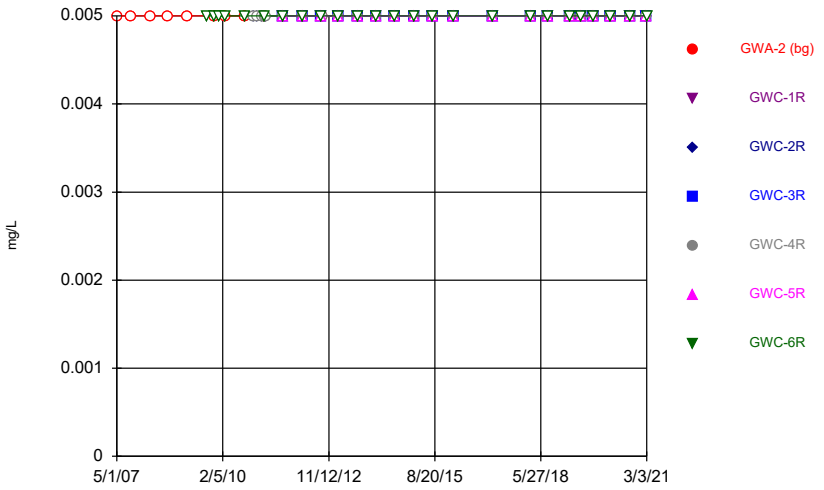
Time Series



Constituent: Selenium Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

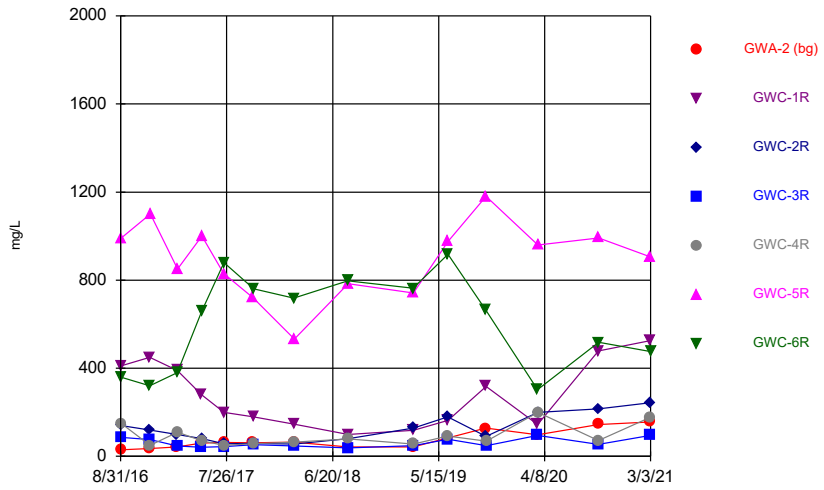
Time Series



Constituent: Silver Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

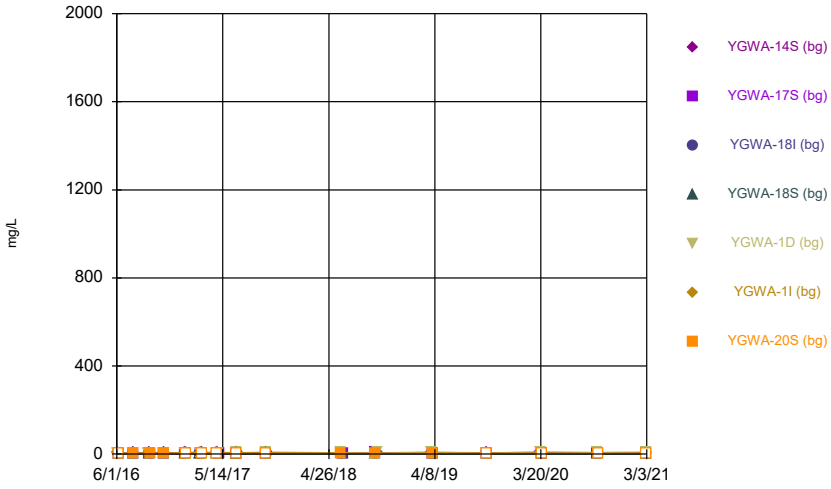
Time Series



Constituent: Sulfate Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

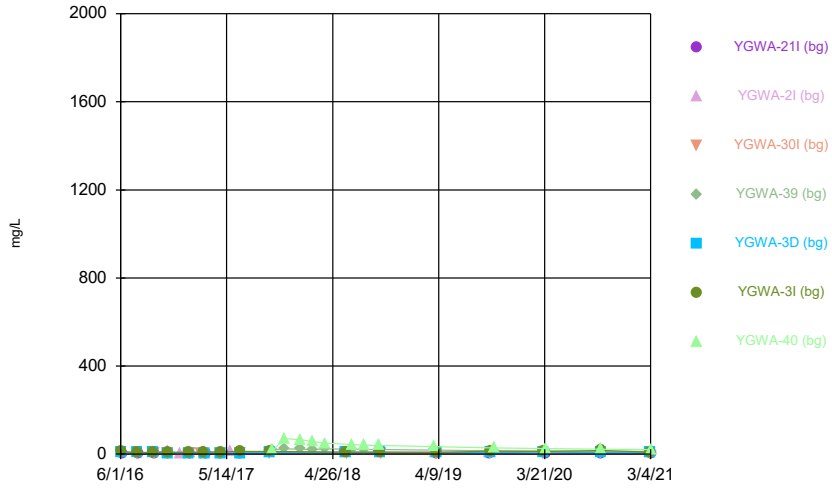
Time Series



Constituent: Sulfate Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

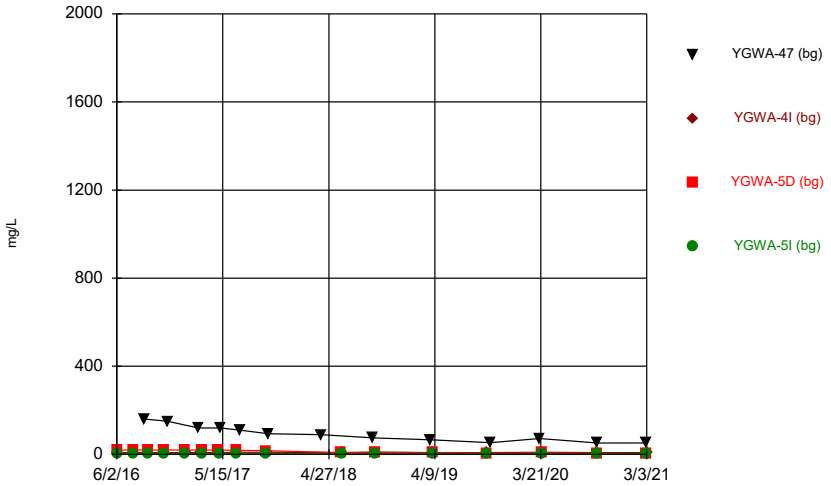
Time Series



Constituent: Sulfate Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

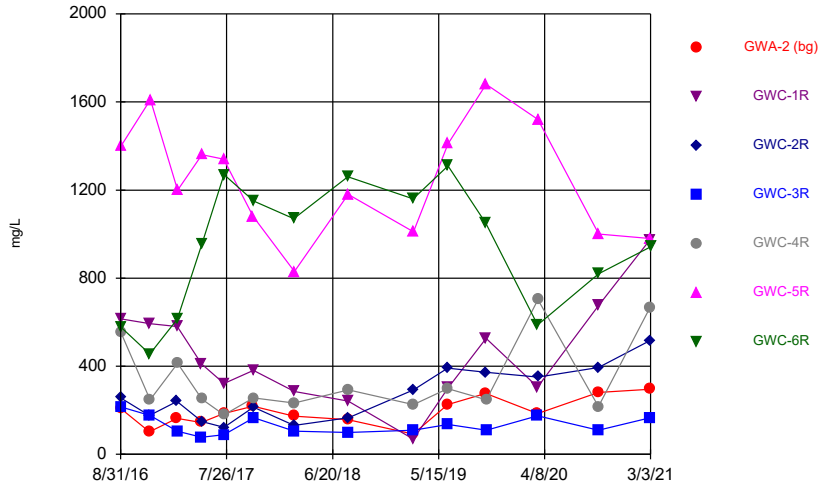


Constituent: Sulfate Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

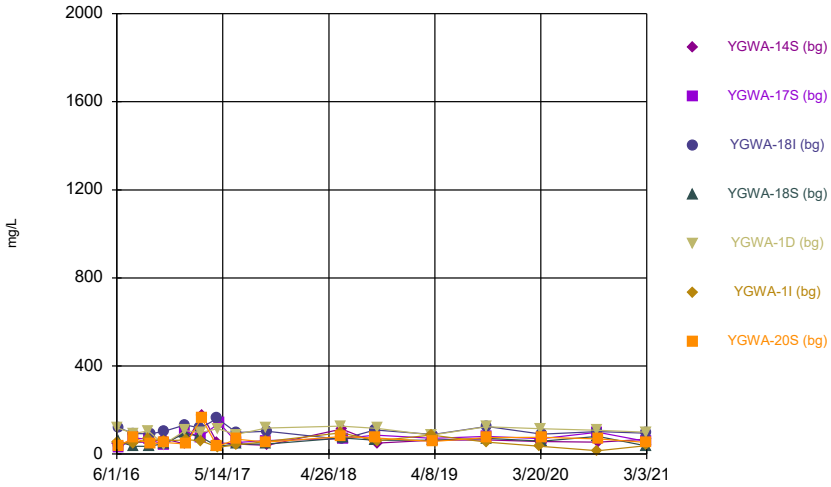


Constituent: TDS Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

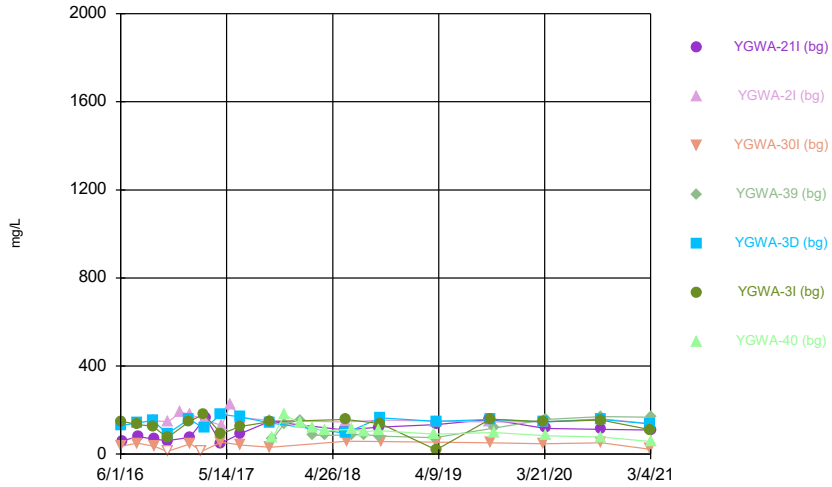


Constituent: TDS Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

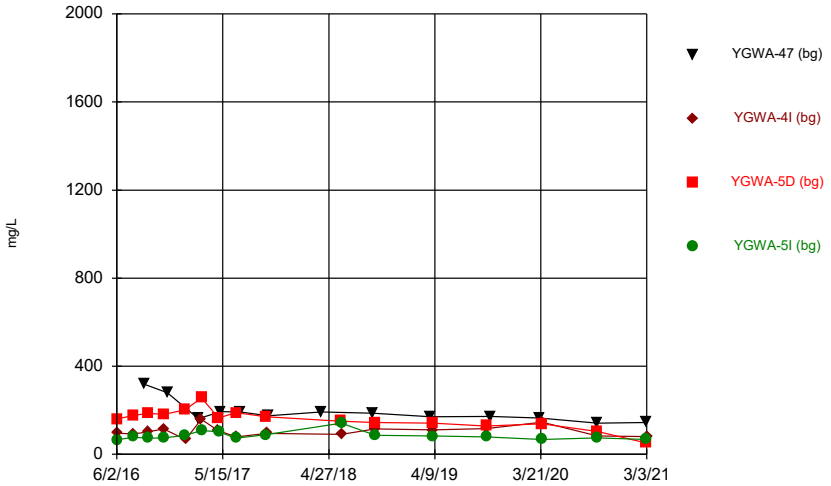


Constituent: TDS Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



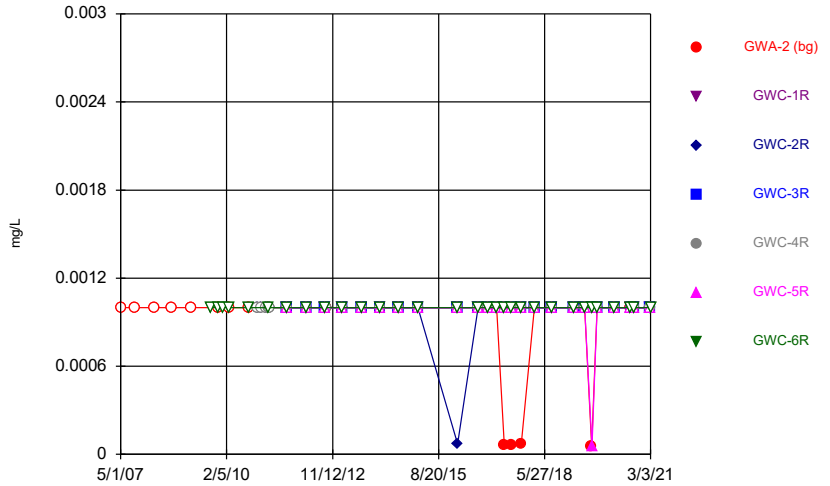
Constituent: TDS Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



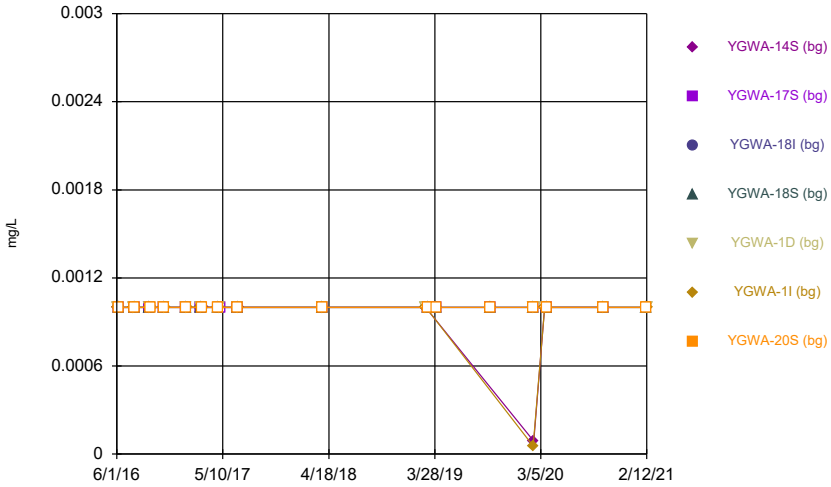
Constituent: Thallium Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



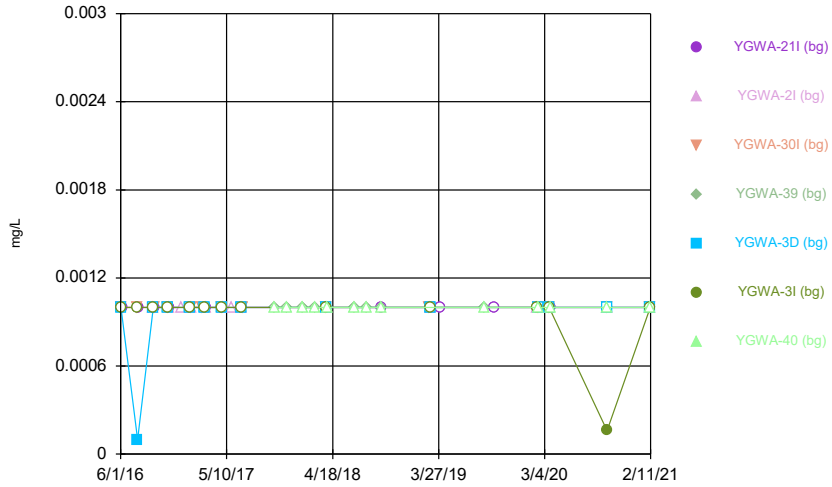
Constituent: Thallium Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

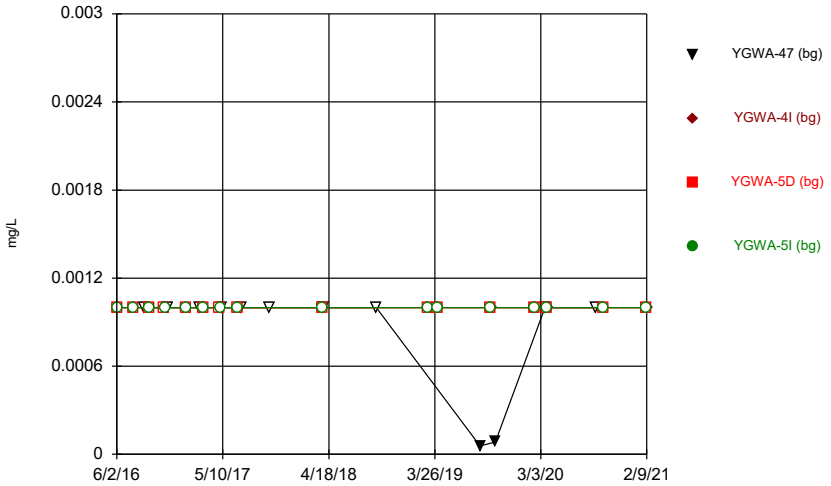


Constituent: Thallium Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

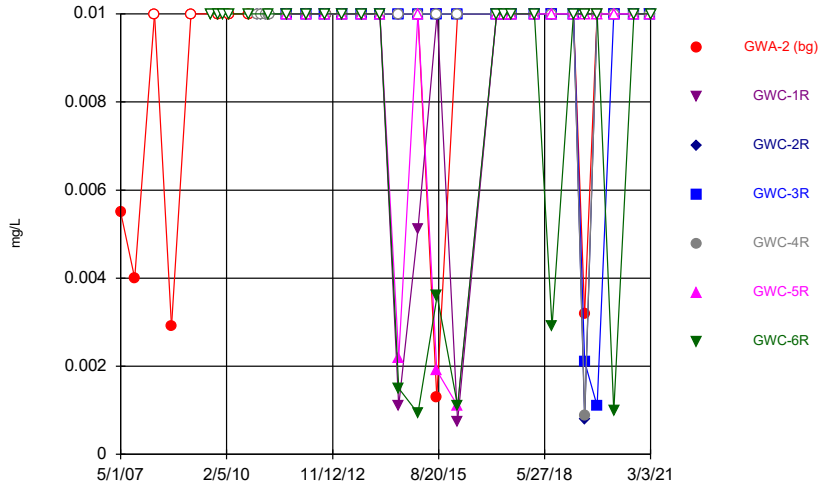
Time Series



Constituent: Thallium Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

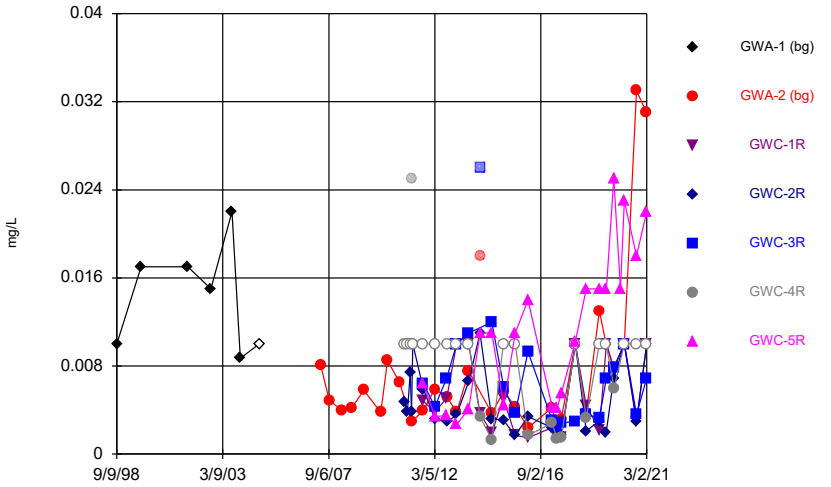
Time Series



Constituent: Vanadium Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

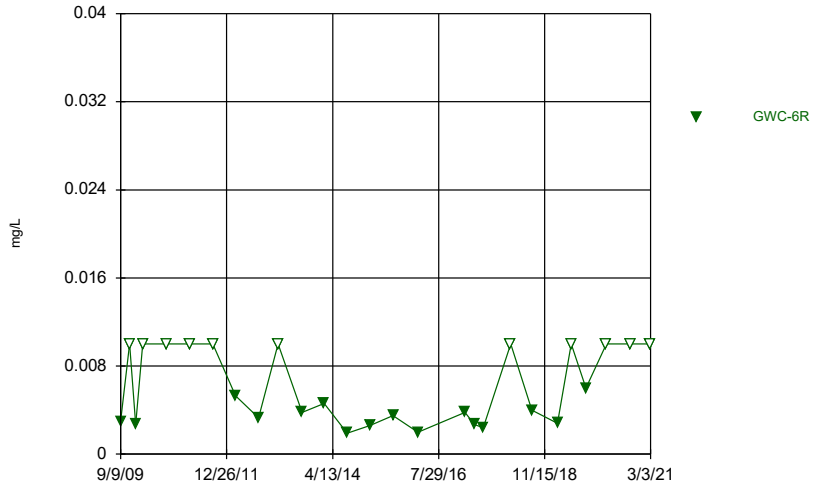
Time Series



Constituent: Zinc Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Zinc Analysis Run 5/5/2021 2:28 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.003						
9/11/2007	<0.003						
3/20/2008	<0.003						
8/27/2008	<0.003						
3/3/2009	<0.003						
9/9/2009							<0.003
11/18/2009	<0.003						<0.003
1/5/2010							<0.003
3/3/2010	<0.003						<0.003
9/7/2010							<0.003
9/8/2010	<0.003						
11/22/2010			<0.003		<0.003		
1/4/2011			<0.003		<0.003		
2/17/2011			<0.003		<0.003		
3/10/2011	<0.003						<0.003
3/11/2011			<0.003		<0.003		
3/28/2011			<0.003		<0.003		
9/7/2011			<0.003	<0.003	<0.003	<0.003	
9/8/2011	<0.003	<0.003					<0.003
3/4/2012					<0.003		
3/5/2012	<0.003	<0.003		<0.003		<0.003	<0.003
3/6/2012			<0.003				
9/5/2012		<0.003		<0.003		<0.003	<0.003
9/10/2012	<0.003				<0.003		
9/11/2012			<0.003				
2/5/2013		<0.003				<0.003	<0.003
2/6/2013	<0.003		<0.003	<0.003	<0.003		
8/12/2013	<0.003						
8/13/2013		<0.003	<0.003	<0.003			<0.003
8/14/2013					<0.003	<0.003	
2/4/2014		<0.003	<0.003		<0.003		<0.003
2/5/2014	<0.003			<0.003		<0.003	
8/4/2014				<0.003	<0.003	<0.003	
8/5/2014	<0.003	<0.003	<0.003				<0.003
2/2/2015		<0.003	<0.003		<0.003		
2/3/2015				<0.003		<0.003	<0.003
2/4/2015	<0.003						
8/3/2015	<0.003			<0.003 (D)	<0.003 (D)	<0.003 (D)	
8/4/2015		<0.003 (D)	<0.003				<0.003
2/16/2016	<0.003	<0.003		<0.003	<0.003	<0.003	<0.003
2/17/2016			<0.003				
8/31/2016	<0.003	<0.003	<0.003	<0.003			
9/1/2016					0.0014 (J)	<0.003	<0.003
11/28/2016	0.0014 (J)		<0.003				
11/29/2016		<0.003					<0.003
11/30/2016				<0.003	<0.003		
12/1/2016						<0.003	
2/22/2017	<0.003		<0.003				
2/23/2017		<0.003		<0.003			<0.003
2/24/2017					<0.003	<0.003	
5/8/2017	<0.003						
5/9/2017		<0.003		<0.003			

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/10/2017			<0.003		<0.003	<0.003	<0.003
7/17/2017	<0.003					<0.003	
7/18/2017		<0.003	<0.003	<0.003	<0.003		<0.003
10/16/2017	<0.003					<0.003	
10/17/2017		<0.003	<0.003		<0.003		
10/18/2017				<0.003			<0.003
2/19/2018	<0.003						<0.003
2/20/2018			<0.003		<0.003		
2/21/2018		<0.003		<0.003		<0.003	
8/6/2018	<0.003						<0.003
8/7/2018		<0.003		<0.003		<0.003	
8/8/2018			<0.003		<0.003		
2/25/2019	<0.003						<0.003
2/26/2019		<0.003	<0.003	<0.003	<0.003	<0.003	
6/12/2019	<0.003		<0.003		0.00028 (J)		
6/13/2019		<0.003		<0.003		<0.003	<0.003
8/19/2019	<0.003				<0.003		
8/20/2019		<0.003	<0.003				<0.003
8/21/2019				<0.003		0.00054 (J)	
10/8/2019	<0.003						<0.003
10/9/2019		<0.003	<0.003			<0.003	
10/10/2019				<0.003	<0.003		
3/17/2020	<0.003	<0.003		<0.003			<0.003
3/18/2020			<0.003		<0.003	<0.003	
8/26/2020	0.00042 (J)						
8/27/2020		<0.003				<0.003	<0.003
8/28/2020			<0.003	<0.003	<0.003		
9/22/2020	0.00044 (J)	<0.003	0.0017 (J)	<0.003	0.00053 (J)		
9/23/2020						0.00031 (J)	<0.003
3/1/2021		<0.003	<0.003		<0.003		
3/2/2021	<0.003			<0.003		<0.003	
3/3/2021							<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.003	<0.003	
6/2/2016	<0.003						
6/6/2016			<0.003	<0.003			
6/7/2016		<0.003					<0.003
7/25/2016						<0.003	
7/26/2016	0.0005 (J)				0.001 (J)		
7/27/2016		<0.003	0.0005 (J)	<0.003			<0.003
9/13/2016					0.001 (J)	<0.003	
9/15/2016	<0.003						
9/16/2016		<0.003		<0.003			
9/19/2016			<0.003				<0.003
11/1/2016					0.0015 (J)		
11/2/2016	<0.003						<0.003
11/3/2016		<0.003	<0.003	<0.003			
11/4/2016						<0.003	
1/10/2017	<0.003						
1/11/2017		<0.003	<0.003	<0.003	<0.003		
1/13/2017							<0.003
1/16/2017						<0.003	
3/1/2017			<0.003	<0.003			
3/2/2017		<0.003			0.0004 (J)	<0.003	
3/6/2017							<0.003
3/8/2017	<0.003						
4/26/2017	<0.003		<0.003	<0.003			<0.003
4/27/2017					0.0004 (J)	0.0017 (J)	
5/2/2017		<0.003					
6/27/2017					<0.003	<0.003	
6/28/2017			<0.003	<0.003			
6/29/2017		<0.003					<0.003
6/30/2017	<0.003						
3/27/2018	<0.003					<0.003	
3/28/2018		<0.003	<0.003	<0.003			
3/29/2018					<0.003		<0.003
2/26/2019	<0.003						
2/27/2019					<0.003	<0.003	
3/5/2019		<0.003		<0.003			<0.003
3/6/2019			<0.003				
4/2/2019		<0.003					
4/3/2019			<0.003	<0.003			<0.003
9/25/2019		<0.003					<0.003
9/26/2019			0.00056 (J)	<0.003			
2/10/2020					0.00088 (J)	<0.003	
2/11/2020		<0.003	<0.003	<0.003			
2/12/2020	<0.003						<0.003
3/18/2020	<0.003					0.0004 (J)	
3/19/2020					<0.003		
3/24/2020		<0.003	<0.003	<0.003			<0.003
9/23/2020		<0.003	<0.003	<0.003	<0.003	<0.003	
9/24/2020							<0.003
9/25/2020	<0.003						
2/9/2021			<0.003	<0.003			0.00032 (J)
2/10/2021	<0.003						

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
2/12/2021					<0.003	<0.003	
3/2/2021	<0.003						
3/3/2021		<0.003	<0.003	0.00067 (J)	<0.003	<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.003	
6/2/2016			<0.003		<0.003		
6/7/2016	<0.003						
7/25/2016			<0.003			<0.003	
7/26/2016					0.002 (J)		
7/28/2016	<0.003						
9/14/2016		<0.003				<0.003	
9/15/2016					0.0027 (J)		
9/19/2016	0.001 (J)		<0.003				
11/1/2016			<0.003		<0.003	<0.003	
11/3/2016	<0.003						
11/4/2016		<0.003					
12/15/2016		0.0012 (J)					
1/11/2017					<0.003	<0.003	
1/13/2017	<0.003						
1/16/2017		<0.003	<0.003				
2/21/2017			<0.003				
3/1/2017						<0.003	
3/2/2017					0.0008 (J)		
3/3/2017		<0.003					
3/6/2017	0.0005 (J)						
4/26/2017	<0.003		<0.003		<0.003	<0.003	
4/28/2017		0.0015 (J)					
5/26/2017		0.0005 (J)					
6/28/2017		<0.003			<0.003	<0.003	
6/29/2017	<0.003						
6/30/2017			<0.003				
10/11/2017				0.0006 (J)			
10/12/2017							<0.003
11/20/2017				<0.003			<0.003
1/10/2018							<0.003
1/11/2018				<0.003			
2/19/2018							<0.003
2/20/2018				<0.003			
3/27/2018			<0.003				
3/28/2018		<0.003			<0.003	<0.003	
3/29/2018	<0.003						
4/3/2018				<0.003			<0.003
6/28/2018				<0.003			<0.003
8/7/2018				<0.003			<0.003
9/24/2018				<0.003			<0.003
2/26/2019			<0.003				
2/27/2019		<0.003			<0.003	<0.003	
3/5/2019	0.0011 (J)						
4/2/2019	0.0011 (J)						
8/21/2019				<0.003			<0.003
9/24/2019	0.0035						
2/11/2020		0.00036 (J)				<0.003	
2/12/2020	0.0015 (J)		<0.003	<0.003	<0.003		<0.003
3/19/2020		0.0003 (J)	<0.003		0.00064 (J)	<0.003	
3/24/2020	0.0017 (J)						<0.003
3/25/2020				0.0014 (J)			

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/23/2020		<0.003			<0.003	<0.003	
9/24/2020	0.0047		<0.003	<0.003			<0.003
2/9/2021	0.0013 (J)						
2/10/2021		0.0013 (J)		<0.003	<0.003	<0.003	<0.003
2/11/2021			<0.003				
3/1/2021			<0.003				
3/3/2021		<0.003			<0.003	<0.003	
3/4/2021	0.0014 (J)			<0.003			<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.003	<0.003	<0.003
7/26/2016		0.0003 (J)	<0.003	<0.003
8/30/2016	0.0028 (J)			
9/14/2016		<0.003	<0.003	<0.003
11/2/2016		<0.003	<0.003	
11/4/2016				<0.003
11/14/2016	<0.003			
1/12/2017			<0.003	<0.003
1/13/2017		<0.003		
2/24/2017	<0.003			
3/6/2017		<0.003		
3/7/2017			<0.003	<0.003
5/1/2017		<0.003	<0.003	
5/2/2017				<0.003
5/8/2017	0.0004 (J)			
6/27/2017			<0.003	<0.003
6/29/2017		<0.003		
7/11/2017	0.0006 (J)			
10/10/2017	<0.003			
3/29/2018		<0.003	<0.003	<0.003
4/2/2018	<0.003			
9/19/2018	<0.003			
3/4/2019		<0.003	<0.003	<0.003
4/3/2019		<0.003	<0.003	<0.003
8/20/2019	<0.003			
9/24/2019			<0.003	<0.003
9/25/2019		<0.003		
2/12/2020		<0.003	<0.003	<0.003
3/24/2020			<0.003	<0.003
3/25/2020		<0.003		
8/27/2020	0.00048 (J)			
9/22/2020	<0.003	<0.003	<0.003	<0.003
2/8/2021			<0.003	<0.003
2/9/2021		<0.003		
3/1/2021	0.00048 (J)			
3/2/2021			<0.003	<0.003
3/3/2021		<0.003		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.005						
9/20/1999	<0.005						
9/12/2001	<0.005						
9/3/2002	<0.005						
7/29/2003	<0.005						
12/5/2003	<0.005						
9/22/2004	<0.005						
5/1/2007		<0.005					
9/11/2007		<0.005					
3/20/2008		<0.005					
8/27/2008		<0.005					
3/3/2009		<0.005					
11/18/2009		<0.005					
3/3/2010		<0.005					
9/8/2010		<0.005					
11/22/2010				<0.005		<0.005	
1/4/2011				<0.005		<0.005	
2/17/2011				<0.005		<0.005	
3/10/2011		<0.005					
3/11/2011				<0.005		<0.005	
3/28/2011				<0.005		<0.005	
9/7/2011				<0.005	<0.005	<0.005	<0.005
9/8/2011		<0.005	<0.005				
3/4/2012						<0.005	
3/5/2012		<0.005	<0.005		<0.005		<0.005
3/6/2012				<0.005			
9/5/2012			<0.005		<0.005		<0.005
9/10/2012		<0.005				<0.005	
9/11/2012				<0.005			
2/5/2013			<0.005				<0.005
2/6/2013		<0.005		<0.005	<0.005	<0.005	
8/12/2013		<0.005					
8/13/2013			<0.005	<0.005	<0.005		
8/14/2013						<0.005	<0.005
2/4/2014			<0.005	<0.005		<0.005	
2/5/2014		<0.005			<0.005		<0.005
8/4/2014					<0.005	<0.005	<0.005
8/5/2014		<0.005	<0.005	<0.005			
2/2/2015			<0.005	<0.005		<0.005	
2/3/2015					<0.005		<0.005
2/4/2015		<0.005					
8/3/2015		<0.005			<0.005 (D)	<0.005 (D)	<0.005 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		<0.005	<0.005		<0.005	<0.005	<0.005
2/17/2016				<0.005			
8/31/2016		<0.005	<0.005	<0.005	<0.005		
9/1/2016						<0.005	<0.005
11/28/2016		<0.005		<0.005			
11/29/2016			<0.005				
11/30/2016					<0.005	<0.005	
12/1/2016							<0.005
2/22/2017		<0.005		<0.005			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			<0.005		<0.005		
2/24/2017						<0.005	<0.005
5/8/2017		<0.005					
5/9/2017			0.0005 (J)		<0.005		
5/10/2017				<0.005		<0.005	0.0011 (J)
7/17/2017		<0.005					0.0013 (J)
7/18/2017			<0.005	<0.005	<0.005	<0.005	
10/16/2017		<0.005					0.0011 (J)
10/17/2017			0.0009 (J)	<0.005		<0.005	
10/18/2017					<0.005		
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		0.00091 (J)
8/6/2018		<0.005					
8/7/2018			<0.005		<0.005		0.0021 (J)
8/8/2018				<0.005		<0.005	
2/25/2019		<0.005					
2/26/2019			<0.005	<0.005	<0.005	<0.005	0.00069 (J)
6/12/2019		0.00038 (J)		<0.005		0.00037 (J)	
6/13/2019			<0.005		0.0016 (J)		0.0012 (J)
8/19/2019		0.00095 (J)				0.00059 (J)	
8/20/2019			0.00044 (J)	0.00075 (J)			
8/21/2019					0.00061 (J)		0.00094 (J)
10/8/2019		<0.005					
10/9/2019			<0.005	<0.005			0.0012 (J)
10/10/2019					<0.005	<0.005	
3/17/2020		<0.005	<0.005		0.0016 (J)		
3/18/2020				<0.005		<0.005	0.0008 (J)
8/26/2020		<0.005					
8/27/2020			0.0011 (J)				0.0016 (J)
8/28/2020				<0.005	<0.005	<0.005	
9/22/2020		<0.005	<0.005	<0.005	<0.005	<0.005	
9/23/2020							0.00092 (J)
3/1/2021			0.0022 (J)	0.0011 (J)		<0.005	
3/2/2021		<0.005			0.0017 (J)		0.0024 (J)

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.005						
11/18/2009	<0.005						
1/5/2010	<0.005						
3/3/2010	<0.005						
9/7/2010	<0.005						
3/10/2011	<0.005						
9/8/2011	<0.005						
3/5/2012	<0.005						
9/5/2012	<0.005						
2/5/2013	<0.005						
8/13/2013	<0.005						
2/4/2014	<0.005						
8/5/2014	<0.005						
2/3/2015	<0.005						
8/4/2015	<0.005						
2/16/2016	<0.005						
6/1/2016						0.0021	<0.005
6/2/2016		<0.005					
6/6/2016				<0.005	<0.005		
6/7/2016			<0.005				
7/25/2016							<0.005
7/26/2016		<0.005				0.0016 (J)	
7/27/2016			<0.005	<0.005	<0.005		
9/1/2016	<0.005						
9/13/2016						<0.005	<0.005
9/15/2016		<0.005					
9/16/2016			<0.005		<0.005		
9/19/2016				<0.005			
11/1/2016						<0.005	
11/2/2016		<0.005					
11/3/2016			<0.005	<0.005	<0.005		
11/4/2016							<0.005
11/29/2016	<0.005						
1/10/2017		<0.005					
1/11/2017			<0.005	<0.005	<0.005	0.0017 (J)	
1/16/2017							<0.005
2/23/2017	<0.005						
3/1/2017				<0.005	<0.005		
3/2/2017			<0.005			0.0014 (J)	<0.005
3/8/2017		<0.005					
4/26/2017		<0.005		<0.005	<0.005		
4/27/2017						0.0018 (J)	<0.005
5/2/2017			<0.005				
5/10/2017	0.0007 (J)						
6/27/2017						0.0018 (J)	<0.005
6/28/2017				<0.005	<0.005		
6/29/2017			<0.005				
6/30/2017		<0.005					
7/18/2017	0.001 (J)						
10/18/2017	0.0011 (J)						
2/19/2018	<0.005						
3/27/2018		<0.005					<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.005	<0.005	0.00061 (J)		
3/29/2018						0.0017 (J)	
6/5/2018						0.0013 (J)	
6/6/2018							<0.005
6/7/2018				0.00066 (J)			
6/8/2018		<0.005					
6/11/2018			<0.005		<0.005		
8/6/2018	0.0023 (J)						
9/25/2018			<0.005	<0.005	<0.005		
10/1/2018		<0.005				0.0016 (J)	<0.005
2/25/2019	0.00073 (J)						
2/26/2019		<0.005					
2/27/2019						0.0015 (J)	<0.005
3/5/2019			<0.005		<0.005		
3/6/2019				<0.005			
3/28/2019						0.00072 (J)	<0.005
3/29/2019		<0.005					
4/2/2019			<0.005				
4/3/2019				<0.005	<0.005		
6/13/2019	0.00068 (J)						
8/20/2019	0.00072 (J)						
9/24/2019						0.0014 (J)	<0.005
9/25/2019		<0.005	<0.005				
9/26/2019				<0.005	<0.005		
10/8/2019	0.00056 (J)						
2/10/2020						0.0026 (J)	0.0005 (J)
2/11/2020			0.0022 (J)	0.0014 (J)	0.0026 (J)		
2/12/2020		<0.005					
3/17/2020	<0.005						
3/18/2020		<0.005					<0.005
3/19/2020						0.00095 (J)	
3/24/2020			<0.005	<0.005	<0.005		
8/27/2020	0.0011 (J)						
9/23/2020	<0.005		<0.005	<0.005	<0.005	0.0011 (J)	<0.005
9/25/2020		<0.005					
2/9/2021				<0.005	<0.005		
2/10/2021		<0.005					
2/12/2021						<0.005	<0.005
3/2/2021		<0.005					
3/3/2021	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.005
6/2/2016				<0.005		<0.005	
6/7/2016	<0.005	<0.005					
7/25/2016				<0.005			<0.005
7/26/2016						<0.005	
7/27/2016	<0.005						
7/28/2016		<0.005					
9/14/2016			<0.005				<0.005
9/15/2016						<0.005	
9/19/2016	<0.005	<0.005		<0.005			
11/1/2016				<0.005		<0.005	<0.005
11/2/2016	<0.005						
11/3/2016		<0.005					
11/4/2016			0.0017 (J)				
12/15/2016			0.0023 (J)				
1/11/2017						<0.005	<0.005
1/13/2017	<0.005	<0.005					
1/16/2017			0.0018 (J)	<0.005			
2/21/2017				<0.005			
3/1/2017							0.0004 (J)
3/2/2017						<0.005	
3/3/2017			0.0016 (J)				
3/6/2017	<0.005	0.0017 (J)					
4/26/2017	<0.005	<0.005		<0.005		<0.005	<0.005
4/28/2017			0.002 (J)				
5/26/2017			0.0005 (J)				
6/28/2017			0.0016 (J)			0.0007 (J)	0.0011 (J)
6/29/2017	<0.005	<0.005					
6/30/2017				<0.005			
10/11/2017					0.0009 (J)		
11/20/2017					<0.005		
1/11/2018					<0.005		
2/20/2018					<0.005		
3/27/2018				<0.005			
3/28/2018			0.0013 (J)			<0.005	<0.005
3/29/2018	<0.005	0.0015 (J)					
4/3/2018					<0.005		
6/5/2018		0.0013 (J)					
6/6/2018	<0.005						
6/7/2018			0.00082 (J)			<0.005	
6/8/2018							<0.005
6/11/2018				<0.005			
6/28/2018					<0.005		
8/7/2018					<0.005		
9/24/2018					<0.005		
9/25/2018	<0.005	0.0022 (J)					
10/1/2018			0.0011 (J)			<0.005	<0.005
10/2/2018				<0.005			
2/26/2019				<0.005			
2/27/2019			0.001 (J)			<0.005	<0.005
3/5/2019	<0.005	0.0013 (J)					
3/29/2019			0.00063 (J)				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
4/1/2019				<0.005		<0.005	<0.005
4/2/2019		0.00096 (J)					
4/3/2019	<0.005						
8/21/2019					0.00058 (J)		
9/24/2019		0.0026 (J)	<0.005				
9/25/2019	<0.005			<0.005		<0.005	<0.005
10/9/2019					0.00063 (J)		
2/11/2020			0.0044 (J)				0.0041 (J)
2/12/2020	<0.005	0.0025 (J)		0.0032 (J)	0.00058 (J)	0.0038 (J)	
3/19/2020			0.00066 (J)	<0.005		<0.005	<0.005
3/24/2020	<0.005	0.0013 (J)					
3/25/2020					0.0012 (J)		
9/23/2020			0.001 (J)			<0.005	<0.005
9/24/2020	<0.005	0.0014 (J)		<0.005	<0.005		
2/9/2021	<0.005	0.001 (J)					
2/10/2021			<0.005		<0.005	0.00094 (J)	0.00078 (J)
2/11/2021				<0.005			
3/1/2021				<0.005			
3/3/2021	<0.005		0.00098 (J)			<0.005	<0.005
3/4/2021		0.00078 (J)			<0.005		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.005	0.00071 (J)	<0.005
7/26/2016			<0.005	0.001 (J)	<0.005
8/30/2016		<0.005			
9/14/2016			<0.005	<0.005	<0.005
11/2/2016			<0.005	<0.005	
11/4/2016					<0.005
11/14/2016		<0.005			
1/12/2017				<0.005	<0.005
1/13/2017			<0.005		
2/24/2017		<0.005			
3/6/2017			<0.005		
3/7/2017				0.0012 (J)	<0.005
5/1/2017			<0.005	<0.005	
5/2/2017					<0.005
5/8/2017		<0.005			
6/27/2017				0.0019 (J)	<0.005
6/29/2017			<0.005		
7/11/2017		<0.005			
10/10/2017		0.0007 (J)			
10/12/2017	<0.005				
11/20/2017	<0.005				
1/10/2018	<0.005				
2/19/2018	<0.005				
3/29/2018			<0.005	0.0006 (J)	<0.005
4/2/2018		<0.005			
4/3/2018	<0.005				
6/6/2018				0.0013 (J)	
6/7/2018			0.00059 (J)		<0.005
6/28/2018	<0.005				
8/7/2018	<0.005				
9/19/2018		0.00072 (J)			
9/24/2018	<0.005				
9/26/2018			<0.005	0.0014 (J)	<0.005
3/4/2019			<0.005	<0.005	<0.005
4/3/2019			<0.005	<0.005	<0.005
8/20/2019		<0.005			
8/21/2019	<0.005				
9/24/2019				0.00043 (J)	<0.005
9/25/2019			<0.005		
10/8/2019		<0.005			
10/9/2019	<0.005				
2/12/2020	0.0034 (J)		<0.005	0.0046 (J)	0.002 (J)
3/17/2020		<0.005			
3/24/2020	<0.005			0.00065 (J)	<0.005
3/25/2020			<0.005		
8/27/2020		<0.005			
9/22/2020		<0.005	<0.005	0.001 (J)	<0.005
9/24/2020	<0.005				
2/8/2021				<0.005	<0.005
2/9/2021			<0.005		
2/10/2021	<0.005				
3/1/2021		<0.005			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
3/2/2021				<0.005	<0.005
3/3/2021			<0.005		
3/4/2021	<0.005				

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	0.006						
9/20/1999	0.015						
9/12/2001	0.018						
9/3/2002	0.023						
7/29/2003	0.02						
12/5/2003	0.012						
9/22/2004	0.03						
5/1/2007		0.032					
9/11/2007		0.017					
3/20/2008		0.025					
8/27/2008		0.041					
3/3/2009		0.053					
11/18/2009		0.05					
3/3/2010		0.061					
9/8/2010		0.071					
11/22/2010				0.12		0.03	
1/4/2011				0.1		0.065	
2/17/2011				0.1		0.061	
3/10/2011		0.057					
3/11/2011				0.05		0.066	
3/28/2011				0.087		0.04	
9/7/2011				0.065	0.025	0.041	0.02
9/8/2011		0.057	0.086				
3/4/2012						0.046	
3/5/2012		0.061	0.044		0.014		0.048
3/6/2012				0.049			
9/5/2012			0.034		0.0095		0.07
9/10/2012		0.055				0.084	
9/11/2012				0.045			
2/5/2013			0.03				0.068
2/6/2013		0.061		0.05	0.0094	0.042	
8/12/2013		0.055					
8/13/2013			0.027	0.13	0.13		
8/14/2013						0.042	0.036
2/4/2014			0.037	0.08		0.046	
2/5/2014		0.063			0.066		0.044
8/4/2014					0.043	0.027	0.058
8/5/2014		0.038	0.048	0.068			
2/2/2015			0.069	0.066		0.02	
2/3/2015					0.031		0.033
2/4/2015		0.039					
8/3/2015		0.031			0.039 (D)	0.017 (D)	0.037 (D)
8/4/2015			0.023 (D)	0.053			
2/16/2016		0.045	0.044		0.038	0.032	0.04
2/17/2016				0.059			
8/31/2016		0.0542	0.0711	0.0601	0.0286		
9/1/2016						0.0377	0.0345
11/28/2016		0.0529		0.0562			
11/29/2016			0.0754				
11/30/2016					0.0258	0.0148	
12/1/2016							0.0342
2/22/2017		0.0607		0.0481			

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			0.0646		0.0278		
2/24/2017						0.029	0.0347
5/8/2017		0.065					
5/9/2017			0.0463		0.0308		
5/10/2017				0.0563		0.0182	0.0363
7/17/2017		0.06					0.0274
7/18/2017			0.039	0.049	0.0407	0.0187	
10/16/2017		0.0542					0.0151
10/17/2017			0.0349	0.047		0.0157	
10/18/2017					0.049		
2/19/2018		0.0533					
2/20/2018				0.0467		0.0151	
2/21/2018			0.0322		0.0285		0.0174
8/6/2018		0.044					
8/7/2018			0.025		0.029		0.015
8/8/2018				0.049		0.019	
2/25/2019		0.045					
2/26/2019			0.028	0.056	0.026	0.017	0.014
6/12/2019		0.063		0.046		0.017	
6/13/2019			0.033		0.021		0.014
8/19/2019		0.065				0.02	
8/20/2019			0.07	0.05			
8/21/2019					0.02		0.014
10/8/2019		0.058					
10/9/2019			0.054	0.045			0.015
10/10/2019					0.018	0.018	
3/17/2020		0.047	0.031		0.024		
3/18/2020				0.04		0.038	0.015
8/26/2020		0.044					
8/27/2020			0.072				0.013
8/28/2020				0.044	0.014	0.026	
9/22/2020		0.045	0.068	0.04	0.014	0.026	
9/23/2020							0.012
3/1/2021			0.063	0.043		0.035	
3/2/2021		0.039			0.015		0.011

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	0.025						
11/18/2009	0.025						
1/5/2010	0.018						
3/3/2010	0.022						
9/7/2010	0.019						
3/10/2011	0.017						
9/8/2011	0.019						
3/5/2012	0.027						
9/5/2012	0.04						
2/5/2013	0.056						
8/13/2013	0.07						
2/4/2014	0.051						
8/5/2014	0.041						
2/3/2015	0.04						
8/4/2015	0.042						
2/16/2016	0.068						
6/1/2016						0.008	0.012
6/2/2016		0.0081					
6/6/2016				0.028	0.019		
6/7/2016			0.012				
7/25/2016							0.0091 (J)
7/26/2016		0.0082 (J)				0.006 (J)	
7/27/2016			0.0126	0.0294	0.0167		
9/1/2016	0.0536						
9/13/2016						0.0084 (J)	0.008 (J)
9/15/2016		0.0087 (J)					
9/16/2016			0.0127		0.0168		
9/19/2016				0.0247			
11/1/2016						0.0062 (J)	
11/2/2016		0.0082 (J)					
11/3/2016			0.0128	0.0248	0.0159		
11/4/2016							0.0067 (J)
11/29/2016	0.0459						
1/10/2017		0.0086 (J)					
1/11/2017			0.0142	0.0266	0.0162	0.0069 (J)	
1/16/2017							0.0096 (J)
2/23/2017	0.0581						
3/1/2017				0.0275	0.0195		
3/2/2017			0.0155			0.0071 (J)	0.0112
3/8/2017		0.0088 (J)					
4/26/2017		0.0085 (J)		0.024	0.0182		
4/27/2017						0.0064 (J)	0.0106
5/2/2017			0.0138				
5/10/2017	0.0873						
6/27/2017						0.0054 (J)	0.0092 (J)
6/28/2017				0.0237	0.018		
6/29/2017			0.0128				
6/30/2017		0.0081 (J)					
7/18/2017	0.0994						
10/18/2017	0.0757						
2/19/2018	0.0703						
3/27/2018		<0.01					<0.01

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			0.014	0.024	0.021		
3/29/2018						<0.01	
6/5/2018						0.0069 (J)	
6/6/2018							0.0082 (J)
6/7/2018				0.023			
6/8/2018		0.007 (J)					
6/11/2018			0.013		0.019		
8/6/2018	0.076						
9/25/2018			0.014	0.023	0.019		
10/1/2018		0.007 (J)				0.0062 (J)	0.0084 (J)
2/25/2019	0.045						
2/26/2019		0.0067 (J)					
2/27/2019						0.0074 (J)	0.008 (J)
3/5/2019			0.015		0.02		
3/6/2019				0.024			
3/28/2019						0.0082 (J)	0.0082 (J)
3/29/2019		0.0066 (J)					
4/2/2019			0.016				
4/3/2019				0.025	0.017		
6/13/2019	0.062						
8/20/2019	0.06						
9/24/2019						0.0072 (J)	0.0086 (J)
9/25/2019		0.0071 (J)	0.015				
9/26/2019				0.021	0.017		
10/8/2019	0.054						
2/10/2020						0.0066 (J)	0.0091 (J)
2/11/2020			0.015	0.022	0.019		
2/12/2020		0.007 (J)					
3/17/2020	0.031						
3/18/2020		0.0076 (J)					0.0084 (J)
3/19/2020						0.0076 (J)	
3/24/2020			0.015	0.021	0.017		
8/27/2020	0.045						
9/23/2020	0.044		0.015	0.021	0.016	0.0068 (J)	0.0079 (J)
9/25/2020		0.0073 (J)					
2/9/2021				0.023	0.017		
2/10/2021		0.0078 (J)					
2/12/2021						0.0057 (J)	0.009 (J)
3/2/2021		0.0076					
3/3/2021	0.043		0.017	0.023	0.017	0.0068	0.0094

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							0.0038
6/2/2016				0.0064		0.01	
6/7/2016	0.014	0.0058					
7/25/2016				0.0071 (J)			0.0031 (J)
7/26/2016						0.0088 (J)	
7/27/2016	0.0141						
7/28/2016		0.0068 (J)					
9/14/2016			0.0037 (J)				0.0027 (J)
9/15/2016						0.009 (J)	
9/19/2016	0.0155	0.0071 (J)		0.0069 (J)			
11/1/2016				0.007 (J)		0.0079 (J)	0.0027 (J)
11/2/2016	0.0157						
11/3/2016		0.0092 (J)					
11/4/2016			0.0059 (J)				
12/15/2016			0.0056 (J)				
1/11/2017						0.0075 (J)	0.0036 (J)
1/13/2017	0.0158	0.0105					
1/16/2017			0.0049 (J)	0.0071 (J)			
2/21/2017				0.0077 (J)			
3/1/2017							0.0036 (J)
3/2/2017						0.009 (J)	
3/3/2017			0.0046 (J)				
3/6/2017	0.0163	0.0105					
4/26/2017	0.0177	0.011		0.0074 (J)		0.0078 (J)	0.0038 (J)
4/28/2017			0.0039 (J)				
5/26/2017			0.0034 (J)				
6/28/2017			0.003 (J)			0.0071 (J)	0.004 (J)
6/29/2017	0.017	0.0109					
6/30/2017				0.0076 (J)			
10/11/2017					0.0092 (J)		
11/20/2017					0.0081 (J)		
1/11/2018					0.0077 (J)		
2/20/2018					<0.01		
3/27/2018				<0.01			
3/28/2018			<0.01			<0.01	<0.01
3/29/2018	0.014	<0.01					
4/3/2018					<0.01		
6/5/2018		0.011					
6/6/2018	0.015						
6/7/2018			0.0037 (J)			0.0068 (J)	
6/8/2018							0.0034 (J)
6/11/2018				0.007 (J)			
6/28/2018					0.0078 (J)		
8/7/2018					0.0078 (J)		
9/24/2018					0.0071 (J)		
9/25/2018	0.015	0.011					
10/1/2018			0.0038 (J)			0.0065 (J)	0.0034 (J)
10/2/2018				0.0069 (J)			
2/26/2019				0.007 (J)			
2/27/2019			0.0035 (J)			0.0059 (J)	0.0034 (J)
3/5/2019	0.016	0.011					
3/29/2019			0.0039 (J)				

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
4/1/2019				0.0072 (J)		0.0064 (J)	0.003 (J)
4/2/2019		0.011					
4/3/2019	0.018						
8/21/2019					0.015		
9/24/2019		0.011	0.0038 (J)				
9/25/2019	0.014			0.0066 (J)		0.0059 (J)	0.005 (J)
10/9/2019					0.013		
2/11/2020			0.0036 (J)				0.0031 (J)
2/12/2020	0.014	0.011		0.0073 (J)	0.011	0.0062 (J)	
3/19/2020			0.0036 (J)	0.0074 (J)		0.0072 (J)	0.0029 (J)
3/24/2020	0.015	0.011					
3/25/2020					0.014		
9/23/2020			0.0039 (J)			0.0051 (J)	0.0039 (J)
9/24/2020	0.015	0.01		0.0062 (J)	0.016		
2/9/2021	0.015	0.011					
2/10/2021			0.0032 (J)		0.027	0.0059 (J)	0.0029 (J)
2/11/2021				0.0077 (J)			
3/1/2021				0.007			
3/3/2021	0.015		0.0041 (J)			0.0064	0.0031 (J)
3/4/2021		0.011			0.028		

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			0.013	0.0084	0.019
7/26/2016			0.0158	0.01	0.0179
8/30/2016		0.0413			
9/14/2016			0.0143	0.0085 (J)	0.0181
11/2/2016			0.0148	0.0091 (J)	
11/4/2016					0.0165
11/14/2016		0.0383			
1/12/2017				0.0089 (J)	0.0199
1/13/2017			0.0146		
2/24/2017		0.0351			
3/6/2017			0.0141		
3/7/2017				0.009 (J)	0.0196
5/1/2017			0.0149	0.0083 (J)	
5/2/2017					0.0202
5/8/2017		0.0251			
6/27/2017				0.0074 (J)	0.0184
6/29/2017			0.0154		
7/11/2017		0.0233			
10/10/2017		0.0207			
10/12/2017	0.0328				
11/20/2017	0.0671				
1/10/2018	0.0656				
2/19/2018	0.0598				
3/29/2018			0.014	<0.01	0.021
4/2/2018		0.022			
4/3/2018	0.045				
6/6/2018				0.008 (J)	
6/7/2018			0.014		0.019
6/28/2018	0.047				
8/7/2018	0.048				
9/19/2018		0.023			
9/24/2018	0.042				
9/26/2018			0.02	0.0075 (J)	0.019
3/4/2019			0.016	0.0077 (J)	0.019
4/3/2019			0.017	0.0087 (J)	0.023
8/20/2019		0.024			
8/21/2019	0.035				
9/24/2019				0.0075 (J)	0.019
9/25/2019			0.015		
10/8/2019		0.025			
10/9/2019	0.036				
2/12/2020	0.035		0.012	0.0079 (J)	0.021
3/17/2020		0.035			
3/24/2020	0.033			0.0076 (J)	0.021
3/25/2020			0.016		
8/27/2020		0.027			
9/22/2020		0.026	0.013	0.0076 (J)	0.019
9/24/2020	0.028				
2/8/2021				0.0079 (J)	0.02
2/9/2021			0.013		
2/10/2021	0.032				
3/1/2021		0.029			

Time Series

Constituent: Barium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
3/2/2021				0.014	0.019
3/3/2021			0.014		
3/4/2021	0.032				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.0005						
9/20/1999	<0.0005						
9/12/2001	<0.0005						
9/3/2002	<0.0005						
7/29/2003	<0.0005						
12/5/2003	<0.0005						
9/22/2004	<0.0005						
5/1/2007		<0.0005					
9/11/2007		<0.0005					
3/20/2008		<0.0005					
8/27/2008		<0.0005					
3/3/2009		<0.0005					
11/18/2009		<0.0005					
3/3/2010		<0.0005					
9/8/2010		<0.0005					
11/22/2010				<0.0005		<0.0005	
1/4/2011				<0.0005		<0.0005	
2/17/2011				<0.0005		<0.0005	
3/10/2011		<0.0005					
3/11/2011				<0.0005		<0.0005	
3/28/2011				<0.0005		<0.0005	
9/7/2011				<0.0005	<0.0005	<0.0005	<0.0005
9/8/2011		<0.0005	<0.0005				
3/4/2012						<0.0005	
3/5/2012		<0.0005	<0.0005		<0.0005		<0.0005
3/6/2012				<0.0005			
9/5/2012			<0.0005		<0.0005		<0.0005
9/10/2012		<0.0005				<0.0005	
9/11/2012				<0.0005			
2/5/2013			<0.0005				<0.0005
2/6/2013		<0.0005		<0.0005	<0.0005	<0.0005	
8/12/2013		<0.0005					
8/13/2013			<0.0005	<0.0005	<0.0005		
8/14/2013						<0.0005	<0.0005
2/4/2014			<0.0005	<0.0005		<0.0005	
2/5/2014		<0.0005			<0.0005		<0.0005
8/4/2014					0.0011 (J)	<0.0005	0.00026 (J)
8/5/2014		<0.0005	7.5E-05 (J)	<0.0005			
2/2/2015			0.00023 (J)	<0.0005		<0.0005	
2/3/2015					0.00061 (J)		0.00023 (J)
2/4/2015		<0.0005					
8/3/2015		<0.0005			0.00051 (JD)	<0.0005 (D)	0.00046 (JD)
8/4/2015			<0.0005 (D)	<0.0005			
2/16/2016		<0.0005	<0.0005		0.00084 (J)	<0.0005	0.00048 (J)
2/17/2016				<0.0005			
8/31/2016		<0.0005	0.0001 (J)	<0.0005	0.0003 (J)		
9/1/2016						<0.0005	0.0005 (J)
11/28/2016		<0.0005		<0.0005			
11/29/2016			<0.0005				
11/30/2016					0.0004 (J)	<0.0005	
12/1/2016							0.0003 (J)
2/22/2017		<0.0005		<0.0005			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			<0.0005		0.0003 (J)		
2/24/2017						<0.0005	0.0002 (J)
5/8/2017		<0.0005					
5/9/2017			8E-05 (J)		0.0002 (J)		
5/10/2017				<0.0005		<0.0005	0.0003 (J)
7/17/2017		<0.0005					0.0004 (J)
7/18/2017			<0.0005	<0.0005	0.0002 (J)	<0.0005	
10/16/2017		<0.0005					0.0006 (J)
10/17/2017			0.0001 (J)	<0.0005		<0.0005	
10/18/2017					0.0004 (J)		
2/19/2018		<0.0005					
2/20/2018				<0.0005		<0.0005	
2/21/2018			<0.0005		<0.0005		<0.0005
8/6/2018		<0.0005					
8/7/2018			7.4E-05 (J)		0.00026 (J)		0.00096 (J)
8/8/2018				7E-05 (J)		<0.0005	
2/25/2019		<0.0005					
2/26/2019			7.5E-05 (J)	5.3E-05 (J)	0.00038 (J)	<0.0005	0.0015 (J)
6/12/2019		<0.0005		<0.0005		<0.0005	
6/13/2019			<0.0005		0.00051 (J)		0.0015 (J)
8/19/2019		<0.0005				<0.0005	
8/20/2019			0.0001 (J)	0.00017 (J)			
8/21/2019					0.00046 (J)		0.0028 (J)
10/8/2019		<0.0005					
10/9/2019			0.00013 (J)	0.00014 (J)			0.0022 (J)
10/10/2019					0.00039 (J)	<0.0005	
3/17/2020		<0.0005	7.6E-05 (J)		0.00095 (J)		
3/18/2020				0.00012 (J)		<0.0005	0.0028 (J)
8/26/2020		<0.0005					
8/27/2020			0.00024 (J)				0.0023 (J)
8/28/2020				0.0002 (J)	0.0005 (J)	<0.0005	
9/22/2020		<0.0005	0.00021 (J)	0.00021 (J)	0.00042 (J)	5.8E-05 (J)	
9/23/2020							0.0023 (J)
3/1/2021			0.00023 (J)	0.00032 (J)		6E-05 (J)	
3/2/2021		<0.0005			0.00081		0.0037

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.0005						
11/18/2009	<0.0005						
1/5/2010	<0.0005						
3/3/2010	<0.0005						
9/7/2010	<0.0005						
3/10/2011	<0.0005						
9/8/2011	<0.0005						
3/5/2012	<0.0005						
9/5/2012	<0.0005						
2/5/2013	<0.0005						
8/13/2013	<0.0005						
2/4/2014	<0.0005						
8/5/2014	<0.0005						
2/3/2015	<0.0005						
8/4/2015	<0.0005						
2/16/2016	<0.0005						
6/1/2016						<0.0005	<0.0005
6/2/2016		<0.0005					
6/6/2016				<0.0005	<0.0005		
6/7/2016			<0.0005				
7/25/2016							<0.0005
7/26/2016		0.0002 (J)				<0.0005	
7/27/2016			<0.0005	<0.0005	<0.0005		
9/1/2016	<0.0005						
9/13/2016						<0.0005	<0.0005
9/15/2016		0.0002 (J)					
9/16/2016			<0.0005		<0.0005		
9/19/2016				<0.0005			
11/1/2016						<0.0005	
11/2/2016		0.0002 (J)					
11/3/2016			<0.0005	<0.0005	<0.0005		
11/4/2016							<0.0005
11/29/2016	<0.0005						
1/10/2017		0.0002 (J)					
1/11/2017			<0.0005	<0.0005	<0.0005	<0.0005	
1/16/2017							<0.0005
2/23/2017	<0.0005						
3/1/2017				<0.0005	<0.0005		
3/2/2017			8E-05 (J)			<0.0005	<0.0005
3/8/2017		0.0002 (J)					
4/26/2017		0.0002 (J)		<0.0005	<0.0005		
4/27/2017						<0.0005	<0.0005
5/2/2017			<0.0005				
5/10/2017	<0.0005						
6/27/2017						<0.0005	<0.0005
6/28/2017				<0.0005	<0.0005		
6/29/2017			<0.0005				
6/30/2017		0.0002 (J)					
7/18/2017	<0.0005						
10/18/2017	<0.0005						
2/19/2018	<0.0005						
3/27/2018		<0.0005					<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.0005	<0.0005	<0.0005		
3/29/2018						<0.0005	
6/7/2018				<0.0005			
6/11/2018			9E-05 (J)		5.7E-05 (J)		
8/6/2018	<0.0005						
9/25/2018			8.9E-05 (J)	<0.0005	8.2E-05 (J)		
2/25/2019	<0.0005						
2/26/2019		0.00016 (J)					
2/27/2019						<0.0005	<0.0005
3/5/2019			9.1E-05 (J)		7.9E-05 (J)		
3/6/2019				<0.0005			
3/28/2019						<0.0005	<0.0005
3/29/2019		0.00017 (J)					
4/2/2019			9E-05 (J)				
4/3/2019				<0.0005	7.5E-05 (J)		
6/13/2019	<0.0005						
8/20/2019	<0.0005						
9/24/2019						<0.0005	<0.0005
9/25/2019		0.00018 (J)	8.1E-05 (J)				
9/26/2019				<0.0005	8.4E-05 (J)		
10/8/2019	<0.0005						
2/10/2020						<0.0005	<0.0005
2/11/2020			7.8E-05 (J)	<0.0005	7.6E-05 (J)		
2/12/2020		0.00019 (J)					
3/17/2020	<0.0005						
3/18/2020		0.00021 (J)					<0.0005
3/19/2020						<0.0005	
3/24/2020			8E-05 (J)	<0.0005	8.9E-05 (J)		
8/27/2020	<0.0005						
9/23/2020	<0.0005		8.1E-05 (J)	<0.0005	8.8E-05 (J)	<0.0005	<0.0005
9/25/2020		0.00018 (J)					
2/9/2021				<0.0005	9.8E-05 (J)		
2/10/2021		0.00019 (J)					
2/12/2021						<0.0005	<0.0005
3/2/2021		0.00018 (J)					
3/3/2021	<0.0005		9.9E-05 (J)	<0.0005	0.00011 (J)	<0.0005	<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.0005
6/2/2016				<0.0005		<0.0005	
6/7/2016	<0.0005	<0.0005					
7/25/2016				<0.0005			<0.0005
7/26/2016						<0.0005	
7/27/2016	<0.0005						
7/28/2016		<0.0005					
9/14/2016			<0.0005				<0.0005
9/15/2016						<0.0005	
9/19/2016	<0.0005	<0.0005		<0.0005			
11/1/2016				<0.0005		<0.0005	<0.0005
11/2/2016	<0.0005						
11/3/2016		<0.0005					
11/4/2016			<0.0005				
12/15/2016			<0.0005				
1/11/2017						<0.0005	<0.0005
1/13/2017	<0.0005	<0.0005					
1/16/2017			<0.0005	<0.0005			
2/21/2017				<0.0005			
3/1/2017							<0.0005
3/2/2017						<0.0005	
3/3/2017			<0.0005				
3/6/2017	<0.0005	<0.0005					
4/26/2017	<0.0005	<0.0005		<0.0005		<0.0005	<0.0005
4/28/2017			<0.0005				
5/26/2017			<0.0005				
6/28/2017			<0.0005			<0.0005	<0.0005
6/29/2017	<0.0005	<0.0005					
6/30/2017				<0.0005			
10/11/2017					<0.0005		
11/20/2017					<0.0005		
1/11/2018					<0.0005		
2/20/2018					<0.0005		
3/27/2018				<0.0005			
3/28/2018			<0.0005			<0.0005	<0.0005
3/29/2018	<0.0005	<0.0005					
4/3/2018					<0.0005		
6/5/2018		<0.0005					
6/6/2018	8E-05 (J)						
6/28/2018					<0.0005		
8/7/2018					<0.0005		
9/24/2018					<0.0005		
9/25/2018	6.1E-05 (J)	<0.0005					
2/26/2019				7.2E-05 (J)			
2/27/2019			<0.0005			<0.0005	<0.0005
3/5/2019	0.00011 (J)	<0.0005					
3/29/2019			<0.0005				
4/1/2019				<0.0005		<0.0005	<0.0005
4/2/2019		<0.0005					
4/3/2019	6.4E-05 (J)						
8/21/2019					<0.0005		
9/24/2019		<0.0005	<0.0005				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
9/25/2019	<0.0005			<0.0005		<0.0005	<0.0005
10/9/2019					<0.0005		
2/11/2020			<0.0005				<0.0005
2/12/2020	7.8E-05 (J)	<0.0005		<0.0005	<0.0005	<0.0005	
3/19/2020			<0.0005	<0.0005		<0.0005	<0.0005
3/24/2020	7.6E-05 (J)	<0.0005					
3/25/2020					<0.0005		
9/23/2020			<0.0005			<0.0005	5.9E-05 (J)
9/24/2020	8.3E-05 (J)	<0.0005		<0.0005	<0.0005		
2/9/2021	6.8E-05 (J)	<0.0005					
2/10/2021			<0.0005		5.1E-05 (J)	<0.0005	<0.0005
2/11/2021				4.7E-05 (J)			
3/1/2021				<0.0005			
3/3/2021	6.8E-05 (J)		<0.0005			<0.0005	<0.0005
3/4/2021		<0.0005			<0.0005		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.0005	<0.0005	<0.0005
7/26/2016			<0.0005	<0.0005	<0.0005
8/30/2016		<0.0005			
9/14/2016			<0.0005	<0.0005	<0.0005
11/2/2016			<0.0005	<0.0005	
11/4/2016					<0.0005
11/14/2016		<0.0005			
1/12/2017				<0.0005	<0.0005
1/13/2017			<0.0005		
2/24/2017		<0.0005			
3/6/2017			<0.0005		
3/7/2017				<0.0005	<0.0005
5/1/2017			<0.0005	<0.0005	
5/2/2017					<0.0005
5/8/2017		7E-05 (J)			
6/27/2017				<0.0005	<0.0005
6/29/2017			<0.0005		
7/11/2017		<0.0005			
10/10/2017		<0.0005			
10/12/2017	0.0002 (J)				
11/20/2017	0.0003 (J)				
1/10/2018	0.0003 (J)				
2/19/2018	<0.0005				
3/29/2018			<0.0005	<0.0005	<0.0005
4/2/2018		<0.0005			
4/3/2018	<0.0005				
6/6/2018				<0.0005	
6/7/2018			<0.0005		<0.0005
6/28/2018	0.00029 (J)				
8/7/2018	0.00024 (J)				
9/19/2018		5.7E-05 (J)			
9/24/2018	0.00019 (J)				
9/26/2018			<0.0005	<0.0005	<0.0005
3/4/2019			<0.0005	<0.0005	<0.0005
4/3/2019			<0.0005	<0.0005	<0.0005
8/20/2019		<0.0005			
8/21/2019	0.0002 (J)				
9/24/2019				<0.0005	<0.0005
9/25/2019			<0.0005		
10/9/2019	0.0002 (J)				
2/12/2020	0.00018 (J)		<0.0005	<0.0005	<0.0005
3/24/2020	0.00022 (J)			<0.0005	<0.0005
3/25/2020			<0.0005		
8/27/2020		4.7E-05 (J)			
9/22/2020		<0.0005	<0.0005	<0.0005	<0.0005
9/24/2020	0.0002 (J)				
2/8/2021				<0.0005	<0.0005
2/9/2021			<0.0005		
2/10/2021	0.00021 (J)				
3/1/2021		5.5E-05 (J)			
3/2/2021				<0.0005	<0.0005
3/3/2021			<0.0005		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
3/4/2021	0.00021 (J)				

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	0.0315 (J)	0.0553 (J)	0.0305 (J)	0.0315 (J)			
9/1/2016					3.25	0.0191 (J)	0.0108 (J)
11/28/2016	0.0095 (J)		0.0206 (J)				
11/29/2016		0.0149 (J)					<0.04
11/30/2016				0.0089 (J)	0.813		
12/1/2016						0.0088 (J)	
2/22/2017	<0.04		0.0192 (J)				
2/23/2017		0.0082 (J)		<0.04			<0.04
2/24/2017					2.53	0.0067 (J)	
5/8/2017	0.0084 (J)						
5/9/2017		0.0097 (J)		0.0077 (J)			
5/10/2017			0.0179 (J)		1.22	0.0068 (J)	<0.04
7/17/2017	0.0092 (J)					0.0102 (J)	
7/18/2017		0.0123 (J)	0.0169 (J)	0.0073 (J)	0.97		0.0061 (J)
10/16/2017	<0.04					0.0066 (J)	
10/17/2017		0.0513	0.0168 (J)		0.804		
10/18/2017				<0.04			<0.04
2/19/2018	<0.04						<0.04
2/20/2018			<0.04		1.01		
2/21/2018		0.0378 (J)		0.0399 (J)		0.0268 (J)	
8/6/2018	<0.04						<0.04
8/7/2018		0.043		0.0049 (J)		0.012 (J)	
8/8/2018			0.017 (J)		1.3		
2/25/2019	<0.04						<0.04
2/26/2019		0.062	0.017 (J)	0.0053 (J)	0.75	0.033 (J)	
6/12/2019	<0.04		0.013 (J)		1.5		
6/13/2019		0.057		<0.04		0.03 (J)	<0.04
10/8/2019	<0.04						<0.04
10/9/2019		0.029 (J)	0.018 (J)			0.013 (J)	
10/10/2019				0.0061 (J)	0.78		
3/17/2020	0.0051 (J)	0.092 (J)		0.0099 (J)			<0.04
3/18/2020			0.026 (J)		5.4	0.034 (J)	
9/22/2020	0.0079 (J)	0.025 (J)	0.046 (J)	0.0066 (J)	1		
9/23/2020						0.028 (J)	0.0055 (J)
3/1/2021		0.046	0.087		5.1		
3/2/2021	<0.04			0.0071 (J)		0.023 (J)	
3/3/2021							<0.04

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.04	<0.04	
6/2/2016	<0.04						
6/6/2016			<0.04	<0.04			
6/7/2016		<0.04					<0.04
7/25/2016						<0.04	
7/26/2016	0.0177 (J)				0.0055 (J)		
7/27/2016		0.008 (J)	<0.04	0.0059 (J)			<0.04
9/13/2016					<0.04	<0.04	
9/15/2016	0.0214 (J)						
9/16/2016		0.0086 (J)		0.0079 (J)			
9/19/2016			<0.04				<0.04
11/1/2016					0.0086 (J)		
11/2/2016	<0.04						<0.04
11/3/2016		0.0077 (J)	<0.04	0.0082 (J)			
11/4/2016						<0.04	
1/10/2017	0.0198 (J)						
1/11/2017		0.0092 (J)	<0.04	0.0096 (J)	0.0074 (J)		
1/13/2017							<0.04
1/16/2017						<0.04	
3/1/2017			<0.04	<0.04			
3/2/2017		0.0095 (J)			0.008 (J)	<0.04	
3/6/2017							<0.04
3/8/2017	0.0189 (J)						
4/26/2017	0.0161 (J)		<0.04	0.0091 (J)			<0.04
4/27/2017					0.0066 (J)	<0.04	
5/2/2017		<0.04					
6/27/2017					0.0087 (J)	0.006 (J)	
6/28/2017			<0.04	0.0079 (J)			
6/29/2017		0.0074 (J)					<0.04
6/30/2017	0.0173 (J)						
10/3/2017					0.0072 (J)	0.0071 (J)	
10/4/2017		0.0077 (J)		0.009 (J)			<0.04
10/5/2017	0.0173 (J)		<0.04				
6/5/2018					0.0052 (J)		
6/6/2018						<0.04	0.0049 (J)
6/7/2018			<0.04				
6/8/2018	0.013 (J)						
6/11/2018		0.01 (J)		0.0093 (J)			
9/25/2018		0.0096 (J)	0.0046 (J)	0.007 (J)			<0.04
10/1/2018	0.015 (J)				0.021 (J)	0.0049 (J)	
3/28/2019					0.005 (J)	<0.04	
3/29/2019	0.014 (J)						
4/2/2019		0.0066 (J)					
4/3/2019			<0.04	0.0053 (J)			<0.04
9/24/2019					0.0064 (J)	0.0055 (J)	
9/25/2019	0.018 (J)	0.0081 (J)					<0.04
9/26/2019			0.0062 (J)	0.0072 (J)			
3/18/2020	0.02 (J)					0.0087 (J)	
3/19/2020					0.0085 (J)		
3/24/2020		0.0092 (J)	0.0054 (J)	0.01 (J)			<0.04
9/23/2020		0.0066 (J)	0.021 (J)	0.006 (J)	<0.04	<0.04	
9/24/2020							0.0094 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	0.02 (J)						
3/2/2021	0.017 (J)						
3/3/2021		0.01 (J)	<0.04	0.0094 (J)	<0.04	<0.04	<0.04

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.04	
6/2/2016			<0.04		<0.04		
6/7/2016	<0.04						
7/25/2016			<0.04			<0.04	
7/26/2016					0.0097 (J)		
7/28/2016	<0.04						
9/14/2016		<0.04				<0.04	
9/15/2016					0.0102 (J)		
9/19/2016	<0.04		<0.04				
11/1/2016			<0.04		<0.04	<0.04	
11/3/2016	<0.04						
11/4/2016		<0.04					
12/15/2016		0.0107 (J)					
1/11/2017					<0.04	<0.04	
1/13/2017	<0.04						
1/16/2017		<0.04	<0.04				
2/21/2017			<0.04				
3/1/2017						<0.04	
3/2/2017					0.0084 (J)		
3/3/2017		<0.04					
3/6/2017	<0.04						
4/26/2017	<0.04		<0.04		<0.04	<0.04	
4/28/2017		<0.04					
5/26/2017		<0.04					
6/28/2017		<0.04			<0.04	<0.04	
6/29/2017	<0.04						
6/30/2017			<0.04				
10/3/2017	<0.04	<0.04					
10/4/2017			<0.04		<0.04	<0.04	
10/11/2017				0.0135 (J)			
10/12/2017							0.0401
11/20/2017				0.0251 (J)			0.156
1/10/2018							0.15
1/11/2018				0.0255 (J)			
2/19/2018							0.146
2/20/2018				<0.04			
4/3/2018				0.033 (J)			0.12
6/5/2018	0.0092 (J)						
6/7/2018		<0.04			0.004 (J)		
6/8/2018						<0.04	
6/11/2018			0.014 (J)				
6/28/2018				0.053			0.16
8/7/2018				0.024 (J)			0.12
9/24/2018				0.028 (J)			0.099
9/25/2018	0.0054 (J)						
10/1/2018		<0.04			<0.04	<0.04	
10/2/2018			<0.04				
3/26/2019							0.096
3/27/2019				0.017 (J)			
3/29/2019		0.0065 (J)					
4/1/2019			<0.04		<0.04	<0.04	
4/2/2019	0.011 (J)						

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	0.018 (J)	0.0076 (J)					
9/25/2019			<0.04		0.0054 (J)	<0.04	
10/9/2019				0.017 (J)			0.079
3/19/2020		0.0073 (J)	0.0052 (J)		0.0073 (J)	0.0053 (J)	
3/24/2020	0.016 (J)						0.088 (J)
3/25/2020				0.043 (J)			
9/23/2020		<0.04			0.012 (J)	0.0073 (J)	
9/24/2020	0.013 (J)		0.0075 (J)	0.037 (J)			0.087 (J)
3/1/2021			<0.04				
3/3/2021		<0.04			<0.04	<0.04	
3/4/2021	0.0079 (J)			0.033 (J)			0.078

Time Series

Constituent: Boron (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.04	<0.04	<0.04
7/26/2016		0.0047 (J)	0.0052 (J)	<0.04
8/30/2016	0.0166 (J)			
9/14/2016		<0.04	0.0071 (J)	0.01 (J)
11/2/2016		<0.04	<0.04	
11/4/2016				<0.04
11/14/2016	0.0166 (J)			
1/12/2017			0.0076 (J)	<0.04
1/13/2017		<0.04		
2/24/2017	0.0145 (J)			
3/6/2017		<0.04		
3/7/2017			0.0089 (J)	<0.04
5/1/2017		<0.04	0.0061 (J)	
5/2/2017				<0.04
5/8/2017	0.0141 (J)			
6/27/2017			0.0079 (J)	<0.04
6/29/2017		<0.04		
7/11/2017	0.0131 (J)			
10/3/2017			0.0094 (J)	<0.04
10/5/2017		<0.04		
10/10/2017	0.0124 (J)			
4/2/2018	0.013 (J)			
6/6/2018			0.0098 (J)	
6/7/2018		0.0045 (J)		<0.04
9/19/2018	0.012 (J)			
9/26/2018		0.005 (J)	0.01 (J)	0.0057 (J)
3/27/2019	0.013 (J)			
4/3/2019		0.0055 (J)	0.0076 (J)	0.0044 (J)
9/24/2019			0.01 (J)	0.0049 (J)
9/25/2019		<0.04		
10/8/2019	0.012 (J)			
3/17/2020	0.023 (J)			
3/24/2020			0.011 (J)	0.0068 (J)
3/25/2020		0.011 (J)		
9/22/2020	0.0076 (J)	<0.04	0.0079 (J)	0.0053 (J)
3/1/2021	0.013 (J)			
3/2/2021			0.0068 (J)	0.011 (J)
3/3/2021		0.0056 (J)		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.0005						
9/11/2007	<0.0005						
3/20/2008	<0.0005						
8/27/2008	<0.0005						
3/3/2009	<0.0005						
9/9/2009							<0.0005
11/18/2009	<0.0005						<0.0005
1/5/2010							<0.0005
3/3/2010	<0.0005						<0.0005
9/7/2010							<0.0005
9/8/2010	<0.0005						
11/22/2010			<0.0005		<0.0005		
1/4/2011			<0.0005		<0.0005		
2/17/2011			<0.0005		<0.0005		
3/10/2011	<0.0005						<0.0005
3/11/2011			<0.0005		<0.0005		
3/28/2011			<0.0005		<0.0005		
9/7/2011			<0.0005	<0.0005	<0.0005	<0.0005	
9/8/2011	<0.0005	<0.0005					<0.0005
3/4/2012					<0.0005		
3/5/2012	<0.0005	<0.0005		<0.0005		<0.0005	<0.0005
3/6/2012			<0.0005				
9/5/2012		<0.0005		<0.0005		<0.0005	<0.0005
9/10/2012	<0.0005				<0.0005		
9/11/2012			<0.0005				
2/5/2013		<0.0005				<0.0005	<0.0005
2/6/2013	<0.0005		<0.0005	<0.0005	<0.0005		
8/12/2013	<0.0005						
8/13/2013		<0.0005	<0.0005	<0.0005			<0.0005
8/14/2013					<0.0005	<0.0005	
2/4/2014		<0.0005	<0.0005		<0.0005		<0.0005
2/5/2014	<0.0005			<0.0005		<0.0005	
8/4/2014				0.00034 (J)	<0.0005	0.00045 (J)	
8/5/2014	<0.0005	<0.0005	<0.0005				<0.0005
2/2/2015		<0.0005	<0.0005		<0.0005		
2/3/2015				<0.0005		<0.0005	<0.0005
2/4/2015	<0.0005						
8/3/2015	<0.0005			<0.0005 (D)	<0.0005 (D)	0.00046 (JD)	
8/4/2015		<0.0005 (D)	<0.0005				<0.0005
2/16/2016	<0.0005	<0.0005		0.00025 (J)	<0.0005	0.00097 (J)	<0.0005
2/17/2016			<0.0005				
8/31/2016	<0.0005	<0.0005	0.0001 (J)	<0.0005			
9/1/2016					0.0001 (J)	0.0005 (J)	<0.0005
11/28/2016	<0.0005		0.0001 (J)				
11/29/2016		8E-05 (J)					<0.0005
11/30/2016				<0.0005	<0.0005		
12/1/2016						0.0004 (J)	
2/22/2017	<0.0005		<0.0005				
2/23/2017		<0.0005		<0.0005			<0.0005
2/24/2017					<0.0005	0.0003 (J)	
5/8/2017	<0.0005						
5/9/2017		<0.0005		<0.0005			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/10/2017			<0.0005		<0.0005	0.0003 (J)	<0.0005
7/17/2017	<0.0005					0.0004 (J)	
7/18/2017		<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
10/16/2017	<0.0005					0.0006 (J)	
10/17/2017		<0.0005	<0.0005		<0.0005		
10/18/2017				<0.0005			<0.0005
2/19/2018	<0.0005						<0.0005
2/20/2018			<0.0005		<0.0005		
2/21/2018		<0.0005		<0.0005		<0.0005	
8/6/2018	<0.0005						<0.0005
8/7/2018		<0.0005		<0.0005		0.00083 (J)	
8/8/2018			<0.0005		<0.0005		
2/25/2019	<0.0005						<0.0005
2/26/2019		<0.0005	<0.0005	0.00011 (J)	<0.0005	0.00081 (J)	
6/12/2019	<0.0005		<0.0005		<0.0005		
6/13/2019		<0.0005		0.00021 (J)		0.00073 (J)	<0.0005
8/19/2019	<0.0005				<0.0005		
8/20/2019		<0.0005	<0.0005				<0.0005
8/21/2019				<0.0005		0.0012 (J)	
10/8/2019	<0.0005						<0.0005
10/9/2019		<0.0005	<0.0005			0.0011 (J)	
10/10/2019				0.00018 (J)	<0.0005		
3/17/2020	<0.0005	<0.0005		0.00037 (J)			<0.0005
3/18/2020			<0.0005		<0.0005	0.0012 (J)	
8/26/2020	<0.0005						
8/27/2020		0.00012 (J)				0.00091 (J)	<0.0005
8/28/2020			0.00015 (J)	0.00014 (J)	<0.0005		
9/22/2020	<0.0005	0.00016 (J)	0.00016 (J)	0.00013 (J)	<0.0005		
9/23/2020						0.00094 (J)	<0.0005
3/1/2021		0.00013 (J)	0.00016 (J)		<0.0005		
3/2/2021	<0.0005			0.00021 (J)		0.0011	
3/3/2021							<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.0005	<0.0005	
6/2/2016	<0.0005						
6/6/2016			<0.0005	<0.0005			
6/7/2016		<0.0005					<0.0005
7/25/2016						<0.0005	
7/26/2016	<0.0005				<0.0005		
7/27/2016		<0.0005	<0.0005	<0.0005			<0.0005
9/13/2016					<0.0005	<0.0005	
9/15/2016	<0.0005						
9/16/2016		<0.0005		<0.0005			
9/19/2016			<0.0005				<0.0005
11/1/2016					<0.0005		
11/2/2016	<0.0005						<0.0005
11/3/2016		<0.0005	<0.0005	<0.0005			
11/4/2016						<0.0005	
1/10/2017	<0.0005						
1/11/2017		0.0001 (J)	<0.0005	0.0001 (J)	0.0002 (J)		
1/13/2017							<0.0005
1/16/2017						<0.0005	
3/1/2017			<0.0005	<0.0005			
3/2/2017		<0.0005			<0.0005	<0.0005	
3/6/2017							<0.0005
3/8/2017	7E-05 (J)						
4/26/2017	<0.0005		<0.0005	<0.0005			<0.0005
4/27/2017					<0.0005	<0.0005	
5/2/2017		<0.0005					
6/27/2017					<0.0005	<0.0005	
6/28/2017			<0.0005	<0.0005			
6/29/2017		<0.0005					<0.0005
6/30/2017	<0.0005						
3/27/2018	<0.0005					<0.0005	
3/28/2018		<0.0005	<0.0005	<0.0005			
3/29/2018					<0.0005		<0.0005
6/6/2018							<0.0005
6/7/2018			<0.0005				
6/11/2018		<0.0005		<0.0005			
9/25/2018		<0.0005	<0.0005	<0.0005			<0.0005
2/26/2019	<0.0005						
2/27/2019					<0.0005	<0.0005	
3/5/2019		<0.0005		<0.0005			<0.0005
3/6/2019			<0.0005				
3/28/2019					<0.0005	<0.0005	
3/29/2019	<0.0005						
4/2/2019		<0.0005					
4/3/2019			<0.0005	<0.0005			<0.0005
9/24/2019					<0.0005	<0.0005	
9/25/2019	<0.0005	<0.0005					<0.0005
9/26/2019			<0.0005	<0.0005			
2/10/2020					<0.0005	<0.0005	
2/11/2020		<0.0005	<0.0005	<0.0005			
2/12/2020	<0.0005						<0.0005
3/18/2020	<0.0005					<0.0005	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
3/19/2020					<0.0005		
3/24/2020		<0.0005	<0.0005	<0.0005			<0.0005
9/23/2020		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9/24/2020							<0.0005
9/25/2020	<0.0005						
2/9/2021			<0.0005	<0.0005			<0.0005
2/10/2021	<0.0005						
2/12/2021					<0.0005	<0.0005	
3/2/2021	<0.0005						
3/3/2021		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.0005	
6/2/2016			<0.0005		<0.0005		
6/7/2016	<0.0005						
7/25/2016			<0.0005			<0.0005	
7/26/2016					<0.0005		
7/28/2016	<0.0005						
9/14/2016		<0.0005				<0.0005	
9/15/2016					<0.0005		
9/19/2016	<0.0005		<0.0005				
11/1/2016			<0.0005		<0.0005	<0.0005	
11/3/2016	<0.0005						
11/4/2016		<0.0005					
12/15/2016		<0.0005					
1/11/2017					0.0001 (J)	8E-05 (J)	
1/13/2017	<0.0005						
1/16/2017		<0.0005	<0.0005				
2/21/2017			<0.0005				
3/1/2017						<0.0005	
3/2/2017					<0.0005		
3/3/2017		<0.0005					
3/6/2017	<0.0005						
4/26/2017	<0.0005		<0.0005		<0.0005	<0.0005	
4/28/2017		<0.0005					
5/26/2017		<0.0005					
6/28/2017		<0.0005			<0.0005	<0.0005	
6/29/2017	<0.0005						
6/30/2017			<0.0005				
10/11/2017				<0.0005			
10/12/2017							<0.0005
11/20/2017				<0.0005			<0.0005
1/10/2018							<0.0005
1/11/2018				<0.0005			
2/19/2018							<0.0005
2/20/2018				<0.0005			
3/27/2018			<0.0005				
3/28/2018		<0.0005			<0.0005	<0.0005	
3/29/2018	<0.0005						
4/3/2018				<0.0005			<0.0005
6/5/2018	<0.0005						
6/28/2018				<0.0005			<0.0005
8/7/2018				<0.0005			<0.0005
9/24/2018				<0.0005			<0.0005
9/25/2018	9.6E-05 (J)						
2/26/2019			<0.0005				
2/27/2019		<0.0005			<0.0005	<0.0005	
3/5/2019	<0.0005						
3/29/2019		<0.0005					
4/1/2019			<0.0005		<0.0005	<0.0005	
4/2/2019	<0.0005						
8/21/2019				<0.0005			<0.0005
9/24/2019	<0.0005	<0.0005					
9/25/2019			<0.0005		<0.0005	<0.0005	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
10/9/2019				<0.0005			<0.0005
2/11/2020		<0.0005				<0.0005	
2/12/2020	<0.0005		<0.0005	<0.0005	<0.0005		<0.0005
3/19/2020		<0.0005	<0.0005		<0.0005	<0.0005	
3/24/2020	<0.0005						<0.0005
3/25/2020				<0.0005			
9/23/2020		<0.0005			<0.0005	<0.0005	
9/24/2020	<0.0005		<0.0005	<0.0005			<0.0005
2/9/2021	0.00041 (J)						
2/10/2021		<0.0005		0.00019 (J)	<0.0005	<0.0005	<0.0005
2/11/2021			<0.0005				
3/1/2021			<0.0005				
3/3/2021		<0.0005			<0.0005	<0.0005	
3/4/2021	<0.0005			0.0003 (J)			<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.0005	<0.0005	<0.0005
7/26/2016		<0.0005	<0.0005	<0.0005
8/30/2016	0.0001 (J)			
9/14/2016		<0.0005	<0.0005	<0.0005
11/2/2016		<0.0005	<0.0005	
11/4/2016				<0.0005
11/14/2016	0.0001 (J)			
1/12/2017			<0.0005	9E-05 (J)
1/13/2017		<0.0005		
2/24/2017	9E-05 (J)			
3/6/2017		<0.0005		
3/7/2017			<0.0005	<0.0005
5/1/2017		<0.0005	<0.0005	
5/2/2017				<0.0005
5/8/2017	0.0001 (J)			
6/27/2017			<0.0005	<0.0005
6/29/2017		<0.0005		
7/11/2017	<0.0005			
10/10/2017	<0.0005			
3/29/2018		<0.0005	<0.0005	<0.0005
4/2/2018	<0.0005			
6/6/2018			<0.0005	
6/7/2018		<0.0005		<0.0005
9/19/2018	<0.0005			
9/26/2018		<0.0005	<0.0005	<0.0005
3/4/2019		<0.0005	<0.0005	<0.0005
4/3/2019		<0.0005	<0.0005	<0.0005
8/20/2019	<0.0005			
9/24/2019			<0.0005	<0.0005
9/25/2019		<0.0005		
10/8/2019	<0.0005			
2/12/2020		<0.0005	<0.0005	<0.0005
3/17/2020	<0.0005			
3/24/2020			<0.0005	<0.0005
3/25/2020		<0.0005		
8/27/2020	<0.0005			
9/22/2020		<0.0005	<0.0005	<0.0005
2/8/2021			<0.0005	<0.0005
2/9/2021		<0.0005		
3/2/2021			<0.0005	<0.0005
3/3/2021		<0.0005		

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	9.31	69.4	19.9	7.23			
9/1/2016					37.1	113	56.8
11/28/2016	9.47 (B)		17.7 (B)				
11/29/2016		70.6 (B)					50.7 (B)
11/30/2016				6.43 (B)	13.4 (B)		
12/1/2016						141 (B)	
2/22/2017	10.4		16.2				
2/23/2017		62.4		4.25			63.5
2/24/2017					29.5	118	
5/8/2017	14.2						
5/9/2017		47.4		3.56			
5/10/2017			11.8		17	136	105
7/17/2017	14.1					125	
7/18/2017		33.2	8.69	4.16	16.8		157
10/16/2017	13.6					78.2	
10/17/2017		38.7	9.77		14.3		
10/18/2017				5.67			118
2/19/2018	<25						124
2/20/2018			<25		<25		
2/21/2018		34.3		4.76		64	
8/6/2018	11.4 (J)						173
8/7/2018		26.2		4.7		83	
8/8/2018			13.4 (J)		22.1 (J)		
2/25/2019	12.7 (J)						143
2/26/2019		24.7 (J)	20.9 (J)	7.1	15.1 (J)	94.4	
6/12/2019	18.9		26.6		24.2		
6/13/2019		33.8		15.7		127	146
10/8/2019	28.3						115
10/9/2019		59.1	27.8			128	
10/10/2019				4.3	18		
3/17/2020	24.3	36.7		20.3			66.8
3/18/2020			34.5		76.6	149	
9/22/2020	31	98.8	40.5	6.2	21.8		
9/23/2020						144	103
3/1/2021		117	54.1		69.5		
3/2/2021	34.2			17.9		145	
3/3/2021							105

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					12	2.5	
6/2/2016	1.3						
6/6/2016			6.2	1.4			
6/7/2016		2.2					2.3
7/25/2016						2.16	
7/26/2016	1.24				11		
7/27/2016		2	4.73	1.19			2.08
9/13/2016					11.8	2.21	
9/15/2016	1.17						
9/16/2016		1.97		1.5			
9/19/2016			4.76				1.97
11/1/2016					11		
11/2/2016	1.23						2.13
11/3/2016		1.99	5.25	1.31			
11/4/2016						2.67	
1/10/2017	1.24						
1/11/2017		2.28	4.74	1.25	11.2		
1/13/2017							2.45
1/16/2017						2.45	
3/1/2017			5.37	1.26			
3/2/2017		2.15			11	2.57	
3/6/2017							2.48
3/8/2017	1.21						
4/26/2017	1.14		4.28	1.05			2.3
4/27/2017					11.1	2.38	
5/2/2017		1.95					
6/27/2017					13.8	2.36	
6/28/2017			4.95	1.06			
6/29/2017		2.02					2.54
6/30/2017	1.24						
10/3/2017					14	2.21	
10/4/2017		2.03		1.1			2.25
10/5/2017	1.11		5.28				
6/5/2018					15.2 (J)		
6/6/2018						2.3	2.3
6/7/2018			4.8				
6/8/2018	1.1						
6/11/2018		2.1		1.4			
9/25/2018		2.1	4.6	1			2.3
10/1/2018	0.99				15.1	1.8	
3/28/2019					13.3 (J)	2.2	
3/29/2019	1.1						
4/2/2019		2.5					
4/3/2019			5.3	1.2			2.9
9/24/2019					15.8	2.3	
9/25/2019	1.1	2.6					2.4
9/26/2019			4.9	1.1			
3/18/2020	1.1					2.1	
3/19/2020					15		
3/24/2020		2.7	5.3	1			2.6
9/23/2020		2.6	5.2	0.91 (J)	14.1	1.8	
9/24/2020							2.6

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	1.3						
3/2/2021	1.2						
3/3/2021		2.5	5.2	0.96 (J)	14.1	1.8	2.4

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						21	
6/2/2016			1.3		28		
6/7/2016	3.7						
7/25/2016			1.17			20.3	
7/26/2016					24.5		
7/28/2016	3.15						
9/14/2016		23.5				19.7	
9/15/2016					27		
9/19/2016	3.17		1.05				
11/1/2016			1.14		25.6	18.4	
11/3/2016	3.4						
11/4/2016		23.7					
12/15/2016		23.1					
1/11/2017					27.5	20.3	
1/13/2017	4.98						
1/16/2017		23.3	1.23				
2/21/2017			1.25				
3/1/2017						18.6	
3/2/2017					27.5		
3/3/2017		25.1					
3/6/2017	6.28						
4/26/2017	6.65		1.03		30.4	25.6	
4/28/2017		30.7					
5/26/2017		26.2					
6/28/2017		26.1			29.8	23.9	
6/29/2017	6.04						
6/30/2017			1.13				
10/3/2017	8.28	26.7					
10/4/2017			1.09		29.7	22.1	
10/11/2017				2.74			
10/12/2017							2.9
11/20/2017				1.81			10.4
1/10/2018							10.2
1/11/2018				1.54			
2/19/2018							<25
2/20/2018				1.71			
4/3/2018				1.4			6.3
6/5/2018	9.1						
6/7/2018		25			29.1		
6/8/2018						21.9 (J)	
6/11/2018			1.1				
6/28/2018				1.4			6.7
8/7/2018				1.2			6.3
9/24/2018				1.1			5.7
9/25/2018	10.4 (J)						
10/1/2018		25			26.9	19.7	
10/2/2018			1.1				
3/26/2019							5.6
3/27/2019				1.5			
3/29/2019		23.5 (J)					
4/1/2019			1.3		30.1	20.4 (J)	
4/2/2019	8.8						

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	7.7	26.4					
9/25/2019			1.1		29.5	22.4	
10/9/2019				2.4			4.9
3/19/2020		27.4	1.2		31.5	21.9	
3/24/2020	6						4.8
3/25/2020				2.7			
9/23/2020		26.3			28.6	23.6	
9/24/2020	7.8		1.1	3.7			4.4
3/1/2021			1.2				
3/3/2021		25.6			29.8	20.6	
3/4/2021	8.7			8.2			4.6

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		8.8	33	2.4
7/26/2016		7.69	32.3	2.12
8/30/2016	20.9			
9/14/2016		8.49	31	2.18
11/2/2016		7.83	30.9	
11/4/2016				2.17 (J)
11/14/2016	18.6			
1/12/2017			35.7	2.37
1/13/2017		8.08		
2/24/2017	16.1			
3/6/2017		8.64		
3/7/2017			32.7	2.34
5/1/2017		13.4	37	
5/2/2017				2.17
5/8/2017	14.6			
6/27/2017			36.5	2.13
6/29/2017		8.81		
7/11/2017	14.3			
10/3/2017			30.9	2.15
10/5/2017		9.29		
10/10/2017	12.1			
4/2/2018	<25			
6/6/2018			26.2	
6/7/2018		8.2		2.3
9/19/2018	11.1 (J)			
9/26/2018		9.5 (J)	25.8	2.3
3/27/2019	10.8 (J)			
4/3/2019		8.4	24.7 (J)	2.8
9/24/2019			25.8	2.5
9/25/2019		9.5		
10/8/2019	9.7			
3/17/2020	14.8			
3/24/2020			26.1	2.5
3/25/2020		10.5		
9/22/2020	10.1	9.6	27.2	2.6
3/1/2021	10.3			
3/2/2021			1.6	2.6
3/3/2021		7.7		

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	4	7.6	6.3	6.7			
9/1/2016					190	6.6	4.4
11/28/2016	4.2		6.7				
11/29/2016		5.8					4.8
11/30/2016				7.8	48		
12/1/2016						6	
2/22/2017	3.7		5.7				
2/23/2017		6.2		6.5			4.4
2/24/2017					130	3.4	
5/8/2017	4.2						
5/9/2017		16		7.2			
5/10/2017			7.1		71	4.5	3.9
7/17/2017	3.8					3.2	
7/18/2017		18	6	7.7	46		4
10/16/2017	4.2					9	
10/17/2017		31	6.1		50		
10/18/2017				6.5			4.1
2/19/2018	4.3						4.4
2/20/2018			5.8		53.1		
2/21/2018		27		6.7		5.6	
8/6/2018	3.8						3.9
8/7/2018		35.4		6.3		4.7	
8/8/2018			4.7		69.3		
2/25/2019	4.1						4.4
2/26/2019		20	5.7	5.7	42.2	4.2	
6/12/2019	4.7		9.1		69.5		
6/13/2019		16.4		5		5.5	6.2
10/8/2019	5.1						4.9
10/9/2019		6.9	9.8			4.5	
10/10/2019				5.3	42.8		
3/17/2020	4.8	15.5		5.2			4.4
3/18/2020			11.7		233	3.8	
9/22/2020	4.2	5.5	24.7	4.2	60.2		
9/23/2020						3	4.7
3/1/2021		8.6	49.6		194		
3/2/2021	4.1			5.5		2.9	
3/3/2021							5

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					1.3	1.6	
6/2/2016	4.1						
6/6/2016			6.8	6.4			
6/7/2016		4.5					1.9
7/25/2016						1.4	
7/26/2016	4				1.2		
7/27/2016		4.5	6.7	6.2			1.9
9/13/2016					1.1	1.3	
9/15/2016	4.2						
9/16/2016		4.5		6.1			
9/19/2016			7				1.9
11/1/2016					1.3		
11/2/2016	4.9						2.6
11/3/2016		5.4	7.5	7.4			
11/4/2016						1.6	
1/10/2017	4.1						
1/11/2017		4.7	6.5	6.1	1.1		
1/13/2017							2.3
1/16/2017						1.4	
3/1/2017			6.9	6			
3/2/2017		4.8			1	1.3	
3/6/2017							1.9
3/8/2017	4.2						
4/26/2017	4.1		7	6.5			2
4/27/2017					1	1.3	
5/2/2017		4.6					
6/27/2017					1.1	1.4	
6/28/2017			7	6.4			
6/29/2017		4.5					2.6
6/30/2017	3.7						
10/3/2017					1.1	1.7	
10/4/2017		4.7		6.8			2.6
10/5/2017	3.8		7				
6/5/2018					1.1		
6/6/2018						1.4	2.7
6/7/2018			6.8				
6/8/2018	3.4						
6/11/2018		4.9		6.8			
9/25/2018		5.6	7.9	7.8			3.6
10/1/2018	3.8				1.1	1.4	
3/28/2019					1.4	1.5	
3/29/2019	4.2						
4/2/2019		4.8					
4/3/2019			6.9	6.3			3.1
9/24/2019					1.1	1.3	
9/25/2019	4.8	5.7					2.8
9/26/2019			7	7.1			
3/18/2020	5.2					1.4	
3/19/2020					1.1		
3/24/2020		5	7	6.8			2.7
9/23/2020		6.6	7.2	7.2	0.99 (J)	1.2	
9/24/2020							2.7

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	5.3						
3/2/2021	4.9						
3/3/2021		7.1	7	7.2	0.96 (J)	1.2	2.7

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						1.3	
6/2/2016			1.9		1.4		
6/7/2016	2.8						
7/25/2016			1.7			1.3	
7/26/2016					1.6		
7/28/2016	2.6						
9/14/2016		1.1				1.3	
9/15/2016					1.5		
9/19/2016	2.4		1.6				
11/1/2016			1.8		1.7	1.4	
11/3/2016	2.9						
11/4/2016		1.4					
12/15/2016		2.9					
1/11/2017					1.2	1.1	
1/13/2017	2.5						
1/16/2017		0.98	1.7				
2/21/2017			1.7				
3/1/2017						1.1	
3/2/2017					1.2		
3/3/2017		1.1					
3/6/2017	2.1						
4/26/2017	2.1		1.7		1.2	1.1	
4/28/2017		0.91					
5/26/2017		0.93					
6/28/2017		1			1.3	1.2	
6/29/2017	2.8						
6/30/2017			1.8				
10/3/2017	2.2	1.2					
10/4/2017			1.8		1.5	1.2	
10/11/2017				2.4			
10/12/2017							3.8
11/20/2017				1.8			4.4
1/10/2018							4.6
1/11/2018				1.6			
2/19/2018							4.6
2/20/2018				2			
4/3/2018				3.3			5.9
6/5/2018	1.7						
6/7/2018		1			1.2		
6/8/2018						1.2	
6/11/2018			2				
6/28/2018				2.1			5
8/7/2018				1.2			4.3
9/24/2018				1.3			4.9
9/25/2018	2.2						
10/1/2018		1.1			1.5	1.2	
10/2/2018			1.8				
3/26/2019							4.4
3/27/2019				1.4			
3/29/2019		1.2					
4/1/2019			1.7		1.2	1.1	
4/2/2019	2.5						

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	3.1	0.95 (J)					
9/25/2019			1.6		1.1	1.1	
10/9/2019				2.1			5.1
3/19/2020		0.97 (J)	1.8		1.2	1.1	
3/24/2020	2.8						4.7
3/25/2020				1.9			
9/23/2020		0.88 (J)			1.1	1	
9/24/2020	2		1.5	2.7			5
3/1/2021			1.6				
3/3/2021		0.86 (J)			1.1	0.99 (J)	
3/4/2021	1.8			4.9			4.9

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		3.7	7.2	4.3
7/26/2016		3.6	6.6	4.4
8/30/2016	5.2			
9/14/2016		3.4	6.6	3.8
11/2/2016		4.5	7.6	
11/4/2016				4.8
11/14/2016	6.4			
1/12/2017			6.8	3.8
1/13/2017		4.2		
2/24/2017	5.5			
3/6/2017		3.6		
3/7/2017			6.8	4.5
5/1/2017		4.3	7.2	
5/2/2017				4.6
5/8/2017	5.8			
6/27/2017			7	4.3
6/29/2017		4.2		
7/11/2017	5.8			
10/3/2017			6.5	4.2
10/5/2017		4.7		
10/10/2017	5.9			
4/2/2018	4.8			
6/6/2018			4.7	
6/7/2018		4.4		4.5
9/19/2018	4			
9/26/2018		4.8	4.8	5.1
3/27/2019	4.3			
4/3/2019		4.3	4	4.2
9/24/2019			3.7	4.5
9/25/2019		4.5		
10/8/2019	4.4			
3/17/2020	4.1			
3/24/2020			3.5	4.3
3/25/2020		3.9		
9/22/2020	4.2	4.5	3.6	4.2
3/1/2021	3.7			
3/2/2021			3.2	4.3
3/3/2021		4.1		

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.005						
9/20/1999	0.01						
9/12/2001	<0.005						
9/3/2002	<0.005						
7/29/2003	<0.005						
12/5/2003	<0.005						
9/22/2004	0.0067						
5/1/2007		0.0029					
9/11/2007		0.0084					
3/20/2008		0.0027					
8/27/2008		0.0026					
3/3/2009		0.0022					
11/18/2009		0.0036					
3/3/2010		<0.005					
9/8/2010		<0.005					
11/22/2010				<0.005		<0.005	
1/4/2011				<0.005		0.0062	
2/17/2011				<0.005		<0.005	
3/10/2011		<0.005					
3/11/2011				<0.005		<0.005	
3/28/2011				<0.005		<0.005	
9/7/2011				<0.005	<0.005	<0.005	<0.005
9/8/2011		<0.005	<0.005				
3/4/2012						<0.005	
3/5/2012		<0.005	<0.005		<0.005		<0.005
3/6/2012				<0.005			
9/5/2012			<0.005		<0.005		<0.005
9/10/2012		<0.005				<0.005	
9/11/2012				<0.005			
2/5/2013			<0.005				<0.005
2/6/2013		<0.005		<0.005	<0.005	<0.005	
8/12/2013		<0.005					
8/13/2013			<0.005	0.0017	0.0019		
8/14/2013						<0.005	0.0016
2/4/2014			<0.005	<0.005		<0.005	
2/5/2014		0.0059			0.0023		0.0018
8/4/2014					0.002	<0.005	0.0029
8/5/2014		<0.005	<0.005	<0.005			
2/2/2015			0.0028	<0.005		<0.005	
2/3/2015					0.0014		0.0017
2/4/2015		<0.005					
8/3/2015		0.0011 (J)			0.0012 (JD)	<0.005 (D)	0.0028 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		<0.005	<0.005		0.0017	<0.005	0.0028
2/17/2016				<0.005			
8/31/2016		<0.005	0.0012 (J)	<0.005	0.0013 (J)		
9/1/2016						<0.005	0.0021 (J)
11/28/2016		<0.005		<0.005			
11/29/2016			0.0009 (J)				
11/30/2016					0.001 (J)	0.0013 (J)	
12/1/2016							0.0017 (J)
2/22/2017		<0.005		<0.005			

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			0.001 (J)		0.0012 (J)		
2/24/2017						<0.005	0.0018 (J)
5/8/2017		<0.005					
5/9/2017			0.0011 (J)		0.0016 (J)		
5/10/2017				0.0008 (J)		0.0007 (J)	0.0024 (J)
7/17/2017		<0.005					0.0017 (J)
7/18/2017			0.0008 (J)	<0.005	0.0009 (J)	0.0011 (J)	
10/16/2017		<0.005					0.0023 (J)
10/17/2017			0.001 (J)	<0.005		<0.005	
10/18/2017					0.001 (J)		
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		<0.005
8/6/2018		<0.005					
8/7/2018			<0.005		<0.005		0.0024 (J)
8/8/2018				<0.005		<0.005	
2/25/2019		<0.005					
2/26/2019			<0.005	<0.005	<0.005	<0.005	0.0019 (J)
6/12/2019		<0.005		<0.005		<0.005	
6/13/2019			0.0009 (J)		0.00073 (J)		0.0018 (J)
8/19/2019		<0.005				0.00051 (J)	
8/20/2019			0.0011 (J)	<0.005			
8/21/2019					0.001 (J)		0.0024 (J)
10/8/2019		<0.005					
10/9/2019			0.0012 (J)	0.00059 (J)			0.0024 (J)
10/10/2019					0.0014 (J)	0.00057 (J)	
3/17/2020		<0.005	0.001 (J)		0.0013 (J)		
3/18/2020				0.0004 (J)		<0.005	0.0023 (J)
8/26/2020		<0.005					
8/27/2020			0.0013 (J)				0.0022 (J)
8/28/2020				0.00057 (J)	0.00088 (J)	<0.005	
9/22/2020		<0.005	0.0012 (J)	<0.005	0.0011 (J)	<0.005	
9/23/2020							0.002 (J)
3/1/2021			0.0012 (J)	<0.005		<0.005	
3/2/2021		<0.005			0.001 (J)		0.0021 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.005						
11/18/2009	<0.005						
1/5/2010	<0.005						
3/3/2010	<0.005						
9/7/2010	<0.005						
3/10/2011	<0.005						
9/8/2011	0.0018						
3/5/2012	<0.005						
9/5/2012	0.0013						
2/5/2013	<0.005						
8/13/2013	0.0025						
2/4/2014	0.0013						
8/5/2014	0.0018						
2/3/2015	0.0015						
8/4/2015	0.0028						
2/16/2016	0.001 (J)						
6/1/2016						0.0035	<0.005
6/2/2016		<0.005					
6/6/2016				0.0012 (J)	<0.005		
6/7/2016			<0.005				
7/25/2016							<0.005
7/26/2016		<0.005				<0.005	
7/27/2016			0.0008 (J)	0.0007 (J)	0.0006 (J)		
9/1/2016	0.0015 (J)						
9/13/2016						<0.005	<0.005
9/15/2016		<0.005					
9/16/2016			<0.005		<0.005		
9/19/2016				<0.005			
11/1/2016						<0.005	
11/2/2016		<0.005					
11/3/2016			<0.005	<0.005	<0.005		
11/4/2016							<0.005
11/29/2016	0.0014 (J)						
1/10/2017		<0.005					
1/11/2017			<0.005	<0.005	<0.005	<0.005	
1/16/2017							<0.005
2/23/2017	0.0017 (J)						
3/1/2017				0.0012 (J)	<0.005		
3/2/2017			0.001 (J)			0.0009 (J)	0.0004 (J)
3/8/2017		<0.005					
4/26/2017		<0.005		0.0005 (J)	0.0003 (J)		
4/27/2017						<0.005	<0.005
5/2/2017			0.0007 (J)				
5/10/2017	0.0015 (J)						
6/27/2017						<0.005	<0.005
6/28/2017				0.0006 (J)	<0.005		
6/29/2017			0.0006 (J)				
6/30/2017		<0.005					
7/18/2017	0.0012 (J)						
10/18/2017	0.0012 (J)						
2/19/2018	<0.005						
3/27/2018		<0.005					<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.005	<0.005	<0.005		
3/29/2018						<0.005	
8/6/2018	<0.005						
2/25/2019	<0.005						
2/26/2019		<0.005					
2/27/2019						<0.005	<0.005
3/5/2019			<0.005		<0.005		
3/6/2019				<0.005			
3/28/2019						<0.005	0.0021 (J)
3/29/2019		<0.005					
6/13/2019	0.00089 (J)						
8/20/2019	0.0017 (J)						
9/24/2019						0.00072 (J)	0.0028 (J)
9/25/2019		<0.005					
10/8/2019	0.0014 (J)						
2/10/2020						0.00042 (J)	<0.005
2/11/2020			0.00087 (J)	0.001 (J)	0.00088 (J)		
2/12/2020		<0.005					
3/17/2020	0.0013 (J)						
3/18/2020		<0.005					0.00044 (J)
3/19/2020						0.00084 (J)	
3/24/2020			0.00087 (J)	0.00095 (J)	0.0011 (J)		
8/27/2020	0.0012 (J)						
9/23/2020	0.0015 (J)		0.00098 (J)	0.00092 (J)	0.0012 (J)	0.00062 (J)	0.00058 (J)
9/25/2020		<0.005					
2/9/2021				0.00083 (J)	0.0013 (J)		
2/10/2021		<0.005					
2/12/2021						<0.005	<0.005
3/2/2021		<0.005					
3/3/2021	0.0014 (J)		0.00082 (J)	0.00087 (J)	0.001 (J)	<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.005
6/2/2016				<0.005		0.0013 (J)	
6/7/2016	<0.005	<0.005					
7/25/2016				<0.005			<0.005
7/26/2016						<0.005	
7/27/2016	0.0005 (J)						
7/28/2016		<0.005					
9/14/2016			<0.005				<0.005
9/15/2016						<0.005	
9/19/2016	<0.005	<0.005		<0.005			
11/1/2016				<0.005		<0.005	<0.005
11/2/2016	<0.005						
11/3/2016		<0.005					
11/4/2016			<0.005				
12/15/2016			<0.005				
1/11/2017						<0.005	<0.005
1/13/2017	<0.005	<0.005					
1/16/2017			<0.005	<0.005			
2/21/2017				<0.005			
3/1/2017							0.0004 (J)
3/2/2017						0.0006 (J)	
3/3/2017			0.0005 (J)				
3/6/2017	<0.005	<0.005					
4/26/2017	0.0007 (J)	<0.005		0.0016 (J)		<0.005	<0.005
4/28/2017			0.0004 (J)				
5/26/2017			<0.005				
6/28/2017			<0.005			<0.005	<0.005
6/29/2017	0.0005 (J)	<0.005					
6/30/2017				<0.005			
10/11/2017					<0.005		
11/20/2017					<0.005		
1/11/2018					<0.005		
2/20/2018					<0.005		
3/27/2018				<0.005			
3/28/2018			<0.005			<0.005	<0.005
3/29/2018	<0.005	<0.005					
4/3/2018					<0.005		
6/28/2018					<0.005		
8/7/2018					<0.005		
9/24/2018					<0.005		
2/26/2019				<0.005			
2/27/2019			<0.005			<0.005	<0.005
3/5/2019	<0.005	<0.005					
3/29/2019			<0.005				
4/1/2019				<0.005		<0.005	<0.005
8/21/2019					<0.005		
9/24/2019			<0.005				
9/25/2019				<0.005		0.0014 (J)	0.0019 (J)
10/9/2019					<0.005		
2/11/2020			<0.005				<0.005
2/12/2020	0.00045 (J)	<0.005		<0.005	<0.005	<0.005	
3/19/2020			0.00048 (J)	<0.005		<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
3/24/2020	0.00077 (J)	<0.005					
3/25/2020					<0.005		
9/23/2020			<0.005			<0.005	<0.005
9/24/2020	0.00076 (J)	<0.005		<0.005	<0.005		
2/9/2021	0.00056 (J)	<0.005					
2/10/2021			<0.005		<0.005	<0.005	<0.005
2/11/2021				<0.005			
3/1/2021				<0.005			
3/3/2021	<0.005		<0.005			<0.005	<0.005
3/4/2021		<0.005			<0.005		

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.005	<0.005	<0.005
7/26/2016			<0.005	<0.005	<0.005
8/30/2016		<0.005			
9/14/2016			<0.005	<0.005	<0.005
11/2/2016			<0.005	<0.005	
11/4/2016					<0.005
11/14/2016		0.0093 (J)			
1/12/2017				<0.005	<0.005
1/13/2017			<0.005		
2/24/2017		<0.005			
3/6/2017			<0.005		
3/7/2017				<0.005	<0.005
5/1/2017			<0.005	0.0004 (J)	
5/2/2017					<0.005
5/8/2017		<0.005			
6/27/2017				<0.005	<0.005
6/29/2017			<0.005		
7/11/2017		<0.005			
10/10/2017		<0.005			
10/12/2017	<0.005				
11/20/2017	<0.005				
1/10/2018	<0.005				
2/19/2018	<0.005				
3/29/2018			<0.005	<0.005	<0.005
4/2/2018		<0.005			
4/3/2018	<0.005				
6/28/2018	<0.005				
8/7/2018	<0.005				
9/19/2018		<0.005			
9/24/2018	<0.005				
3/4/2019			<0.005	<0.005	<0.005
8/20/2019		<0.005			
8/21/2019	0.00053 (J)				
10/9/2019	0.0012 (J)				
2/12/2020	0.00065 (J)		<0.005	<0.005	0.00043 (J)
3/24/2020	0.00055 (J)			<0.005	0.0014 (J)
3/25/2020			0.00058 (J)		
8/27/2020		<0.005			
9/22/2020		<0.005	<0.005	0.0011 (J)	<0.005
9/24/2020	<0.005				
2/8/2021				<0.005	<0.005
2/9/2021			<0.005		
2/10/2021	<0.005				
3/1/2021		<0.005			
3/2/2021				<0.005	<0.005
3/3/2021			0.0013 (J)		
3/4/2021	<0.005				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	0.013						
9/20/1999	<0.005						
9/12/2001	0.0024						
9/3/2002	<0.005						
7/29/2003	0.002						
12/5/2003	<0.005						
9/22/2004	<0.005						
5/1/2007		0.0067					
9/11/2007		<0.005					
3/20/2008		<0.005					
8/27/2008		<0.005					
3/3/2009		<0.005					
11/18/2009		<0.005					
3/3/2010		0.0027					
9/8/2010		0.007					
11/22/2010				0.038		<0.005	
1/4/2011				0.049		0.0036	
2/17/2011				0.044		0.0035	
3/10/2011		<0.005					
3/11/2011				0.038		0.0053	
3/28/2011				0.029		<0.005	
9/7/2011				0.031	<0.005	0.0033	<0.005
9/8/2011		<0.005	0.015				
3/4/2012						0.0032	
3/5/2012		0.0032	<0.005		<0.005		<0.005
3/6/2012				0.021			
9/5/2012			0.0018		<0.005		<0.005
9/10/2012		<0.005				0.0067	
9/11/2012				0.017			
2/5/2013			0.0013				<0.005
2/6/2013		<0.005		0.025	<0.005	0.0024	
8/12/2013		0.0045					
8/13/2013			<0.005	0.023	<0.005		
8/14/2013						0.0014	<0.005
2/4/2014			<0.005	0.019		<0.005	
2/5/2014		<0.005			<0.005		<0.005
8/4/2014					<0.005	<0.005	<0.005
8/5/2014		0.0027	<0.005	0.023			
2/2/2015			0.0015	0.022		<0.005	
2/3/2015					<0.005		<0.005
2/4/2015		0.0016					
8/3/2015		0.002			<0.005 (D)	<0.005 (D)	<0.005 (D)
8/4/2015			<0.005 (D)	0.021			
2/16/2016		0.0027	<0.005		<0.005	0.0082	<0.005
2/17/2016				0.024			
8/31/2016		0.0053 (J)	0.0006 (J)	0.0239	<0.005		
9/1/2016						0.0023 (J)	<0.005
11/28/2016		0.0036 (J)		0.0189			
11/29/2016			<0.005				
11/30/2016					<0.005	0.0008 (J)	
12/1/2016							<0.005
2/22/2017		0.0049 (J)		0.0184			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			0.0009 (J)		<0.005		
2/24/2017						0.0025 (J)	<0.005
5/8/2017		0.0059 (J)					
5/9/2017			0.0008 (J)		<0.005		
5/10/2017				0.0213		<0.005	<0.005
7/17/2017		0.0046 (J)					<0.005
7/18/2017			0.0032 (J)	0.0261	<0.005	0.0005 (J)	
10/16/2017		0.0034 (J)					<0.005
10/17/2017			0.0007 (J)	0.0182		0.0006 (J)	
10/18/2017					<0.005		
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		<0.005
8/6/2018		0.003 (J)					
8/7/2018			<0.005		<0.005		<0.005
8/8/2018				0.014		0.001 (J)	
2/25/2019		0.001 (J)					
2/26/2019			<0.005	0.029	<0.005	<0.005	<0.005
6/12/2019		0.003 (J)		0.013		0.00078 (J)	
6/13/2019			0.00033 (J)		0.01		<0.005
8/19/2019		0.0035 (J)				0.001 (J)	
8/20/2019			0.00079 (J)	0.014			
8/21/2019					0.0016 (J)		0.00034 (J)
10/8/2019		0.0039 (J)					
10/9/2019			0.00064 (J)	0.024			0.00031 (J)
10/10/2019					<0.005	0.00099 (J)	
3/17/2020		0.003 (J)	0.00054 (J)		0.011		
3/18/2020				0.019		0.0031 (J)	0.00044 (J)
8/26/2020		0.2 (o)					
8/27/2020			0.00081 (J)				<0.005
8/28/2020				0.0072	0.0041 (J)	0.00049 (J)	
9/22/2020		0.16 (o)	0.0008 (J)	0.0054	0.0021 (J)	0.00039 (J)	
9/23/2020							<0.005
3/1/2021			0.00083 (J)	0.00074 (J)		0.0016 (J)	
3/2/2021		0.21 (o)			0.0086		0.00039 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.005						
11/18/2009	<0.005						
1/5/2010	<0.005						
3/3/2010	<0.005						
9/7/2010	<0.005						
3/10/2011	<0.005						
9/8/2011	<0.005						
3/5/2012	<0.005						
9/5/2012	<0.005						
2/5/2013	<0.005						
8/13/2013	<0.005						
2/4/2014	<0.005						
8/5/2014	<0.005						
2/3/2015	<0.005						
8/4/2015	0.0014						
2/16/2016	<0.005						
6/1/2016						<0.005	0.00082 (J)
6/2/2016		<0.005					
6/6/2016				<0.005	0.00061 (J)		
6/7/2016			<0.005				
7/25/2016							0.0008 (J)
7/26/2016		<0.005				<0.005	
7/27/2016			<0.005	<0.005	0.0004 (J)		
9/1/2016	<0.005						
9/13/2016						<0.005	0.0009 (J)
9/15/2016		<0.005					
9/16/2016			<0.005		0.0008 (J)		
9/19/2016				<0.005			
11/1/2016						<0.005	
11/2/2016		<0.005					
11/3/2016			<0.005	<0.005	<0.005		
11/4/2016							0.0025 (J)
11/29/2016	<0.005						
1/10/2017		<0.005					
1/11/2017			<0.005	<0.005	<0.005	<0.005	
1/16/2017							0.0027 (J)
2/23/2017	<0.005						
3/1/2017				<0.005	<0.005		
3/2/2017			<0.005			<0.005	0.0022 (J)
3/8/2017		<0.005					
4/26/2017		<0.005		<0.005	<0.005		
4/27/2017						<0.005	0.0018 (J)
5/2/2017			<0.005				
5/10/2017	<0.005						
6/27/2017						<0.005	0.0023 (J)
6/28/2017				<0.005	<0.005		
6/29/2017			<0.005				
6/30/2017		<0.005					
7/18/2017	<0.005						
10/18/2017	<0.005						
2/19/2018	<0.005						
3/27/2018		<0.005					<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.005	<0.005	<0.005		
3/29/2018						<0.005	
6/5/2018						<0.005	
6/6/2018							<0.005
6/7/2018				<0.005			
6/8/2018		<0.005					
6/11/2018			<0.005		<0.005		
8/6/2018	<0.005						
9/25/2018			<0.005	<0.005	<0.005		
10/1/2018		<0.005				<0.005	0.00059 (J)
2/25/2019	<0.005						
2/26/2019		<0.005					
2/27/2019						<0.005	0.00064 (J)
3/5/2019			<0.005		<0.005		
3/6/2019				<0.005			
3/28/2019						<0.005	0.00091 (J)
3/29/2019		<0.005					
4/2/2019			<0.005				
4/3/2019				<0.005	<0.005		
6/13/2019	<0.005						
8/20/2019	<0.005						
9/24/2019						<0.005	0.0013 (J)
9/25/2019		<0.005	<0.005				
9/26/2019				<0.005	<0.005		
10/8/2019	<0.005						
2/10/2020						<0.005	0.0016 (J)
2/11/2020			<0.005	<0.005	<0.005		
2/12/2020		<0.005					
3/17/2020	<0.005						
3/18/2020		<0.005					0.00087 (J)
3/19/2020						<0.005	
3/24/2020			<0.005	<0.005	<0.005		
8/27/2020	<0.005						
9/23/2020	<0.005		<0.005	<0.005	<0.005	<0.005	0.0013 (J)
9/25/2020		<0.005					
2/9/2021				<0.005	<0.005		
2/10/2021		<0.005					
2/12/2021						0.00086 (J)	0.0028 (J)
3/2/2021		<0.005					
3/3/2021	<0.005		<0.005	<0.005	<0.005	<0.005	0.003 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.005
6/2/2016				0.035		<0.005	
6/7/2016	<0.005	0.0056					
7/25/2016				0.0312			<0.005
7/26/2016						<0.005	
7/27/2016	<0.005						
7/28/2016		0.0032 (J)					
9/14/2016			<0.005				<0.005
9/15/2016						<0.005	
9/19/2016	<0.005	0.0047 (J)		0.0275			
11/1/2016				0.0255		<0.005	<0.005
11/2/2016	<0.005						
11/3/2016		0.013					
11/4/2016			<0.005				
12/15/2016			<0.005				
1/11/2017						<0.005	<0.005
1/13/2017	<0.005	0.011					
1/16/2017			<0.005	0.0245			
2/21/2017				0.0272			
3/1/2017							<0.005
3/2/2017						<0.005	
3/3/2017			<0.005				
3/6/2017	<0.005	0.011					
4/26/2017	<0.005	0.009 (J)		0.0244		<0.005	<0.005
4/28/2017			<0.005				
5/26/2017			<0.005				
6/28/2017			<0.005			<0.005	<0.005
6/29/2017	<0.005	0.0093 (J)					
6/30/2017				0.0233			
10/11/2017					<0.005		
11/20/2017					<0.005		
1/11/2018					<0.005		
2/20/2018					<0.005		
3/27/2018				0.023			
3/28/2018			<0.005			<0.005	<0.005
3/29/2018	<0.005	<0.005					
4/3/2018					<0.005		
6/5/2018		0.0041 (J)					
6/6/2018	<0.005						
6/7/2018			<0.005			<0.005	
6/8/2018							<0.005
6/11/2018				0.023			
6/28/2018					<0.005		
8/7/2018					<0.005		
9/24/2018					<0.005		
9/25/2018	<0.005	0.0044 (J)					
10/1/2018			<0.005			<0.005	<0.005
10/2/2018				0.022			
2/26/2019				0.021			
2/27/2019			<0.005			<0.005	<0.005
3/5/2019	<0.005	0.0039 (J)					
3/29/2019			<0.005				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
4/1/2019				0.022		<0.005	<0.005
4/2/2019		0.0039 (J)					
4/3/2019	<0.005						
8/21/2019					0.00034 (J)		
9/24/2019		0.0032 (J)	<0.005				
9/25/2019	<0.005			0.016		<0.005	<0.005
10/9/2019					<0.005		
2/11/2020			<0.005				<0.005
2/12/2020	<0.005	0.0081		0.014	0.00034 (J)	<0.005	
3/19/2020			<0.005	0.014		<0.005	<0.005
3/24/2020	<0.005	0.0061					
3/25/2020					0.00034 (J)		
9/23/2020			<0.005			<0.005	<0.005
9/24/2020	<0.005	0.0079		0.0064	0.00053 (J)		
2/9/2021	<0.005	0.009					
2/10/2021			<0.005		0.00098 (J)	<0.005	<0.005
2/11/2021				0.0078			
3/1/2021				0.0061			
3/3/2021	<0.005		<0.005			<0.005	<0.005
3/4/2021		0.0065			0.00071 (J)		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			0.00082 (J)	<0.005	<0.005
7/26/2016			0.0012 (J)	<0.005	<0.005
8/30/2016		0.0073 (J)			
9/14/2016			0.0006 (J)	<0.005	<0.005
11/2/2016			<0.005	<0.005	
11/4/2016					<0.005
11/14/2016		0.0115			
1/12/2017				<0.005	<0.005
1/13/2017			0.0029 (J)		
2/24/2017		0.0106			
3/6/2017			0.0006 (J)		
3/7/2017				<0.005	<0.005
5/1/2017			<0.005	<0.005	
5/2/2017					<0.005
5/8/2017		0.0099 (J)			
6/27/2017				<0.005	<0.005
6/29/2017			0.0005 (J)		
7/11/2017		0.0096 (J)			
10/10/2017		0.0036 (J)			
10/12/2017	<0.005				
11/20/2017	<0.005				
1/10/2018	<0.005				
2/19/2018	<0.005				
3/29/2018			<0.005	<0.005	<0.005
4/2/2018		<0.005			
4/3/2018	<0.005				
6/6/2018				<0.005	
6/7/2018			0.00058 (J)		<0.005
6/28/2018	<0.005				
8/7/2018	<0.005				
9/19/2018		0.0036 (J)			
9/24/2018	<0.005				
9/26/2018			<0.005	<0.005	<0.005
3/4/2019			<0.005	<0.005	<0.005
4/3/2019			0.00083 (J)	<0.005	<0.005
8/20/2019		0.00092 (J)			
8/21/2019	<0.005				
9/24/2019				<0.005	<0.005
9/25/2019			<0.005		
10/8/2019		0.0014 (J)			
10/9/2019	<0.005				
2/12/2020	<0.005		<0.005	0.00037 (J)	<0.005
3/17/2020		0.0017 (J)			
3/24/2020	<0.005			0.00035 (J)	<0.005
3/25/2020			0.00056 (J)		
8/27/2020		0.0011 (J)			
9/22/2020		0.00097 (J)	<0.005	<0.005	<0.005
9/24/2020	<0.005				
2/8/2021				<0.005	<0.005
2/9/2021			<0.005		
2/10/2021	<0.005				
3/1/2021		0.001 (J)			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
3/2/2021				<0.005	<0.005
3/3/2021			<0.005		
3/4/2021	<0.005				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	1.2						
11/28/2016	0.264 (U)		0.387 (U)				
11/29/2016		0.551 (U)					0.232 (U)
11/30/2016				0.0236 (U)	0.477 (U)		
12/1/2016						0.0588 (U)	
2/22/2017	1.06 (U)		0.739 (U)				
2/23/2017		0.504 (U)		0.728 (U)			1.18 (U)
2/24/2017					0.305 (U)	0.487 (U)	
5/8/2017	0.187 (U)						
5/9/2017		0.434 (U)		0.0367 (U)			
5/10/2017			0.458 (U)		0.0659 (U)	0.289 (U)	0.658 (U)
7/17/2017	1.42					0.528 (U)	
7/18/2017		1.37	0.708 (U)	0.237 (U)	0.199 (U)		0.797 (U)
10/16/2017	1.17					0.558 (U)	
10/17/2017		0.937 (U)	0.402 (U)		0.294 (U)		
10/18/2017				0.706 (U)			0.239 (U)
2/19/2018	1.58 (D)						0.973 (D)
2/20/2018			1.64 (D)		1.03 (UD)		
2/21/2018		0.817 (UD)		0.526 (UD)		1.13 (UD)	
8/6/2018	0.196 (U)						0.866 (U)
8/7/2018		0.578 (U)		0.376 (U)		0.51 (U)	
8/8/2018			2.01		0.0378 (U)		
8/19/2019	1.39				0.637 (U)		
8/20/2019		1.25 (U)	1.22				0.409 (U)
8/21/2019				0.774 (U)		1.82	
10/8/2019	1.32 (U)						0.91 (U)
10/9/2019		0.482 (U)	0.71 (U)			0.498 (U)	
10/10/2019				0.433 (U)	0.525 (U)		
3/17/2020	1 (U)	1.4		2.84			2.5
3/18/2020			1.3		0.866 (U)	0.788 (U)	
8/26/2020	1.75 (U)						
8/27/2020		0.413 (U)				0.691 (U)	0.514 (U)
8/28/2020			1.52 (U)	0.494 (U)	0.336 (U)		
9/22/2020	0.688 (U)	0.7 (U)	2.09	1.24 (U)	0.509 (U)		
9/23/2020						0 (U)	0.96 (U)
3/1/2021		0.966 (U)	0.976		0.349 (U)		
3/2/2021	0.948 (U)			1.13 (U)		0.686 (U)	
3/3/2021							0.721 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					0.321 (U)	0.42	
6/2/2016	0.329 (U)						
6/6/2016			0.0804 (U)	0.301 (U)			
6/7/2016		0.158 (U)					0.0191 (U)
7/25/2016						1.83	
7/26/2016	1.51				0.707 (U)		
7/27/2016		0.0354 (U)	0.206 (U)	0.196 (U)			0.541 (U)
9/13/2016					1.22	0.841	
9/15/2016	1.04 (U)						
9/16/2016		1.04		0.915 (U)			
9/19/2016			1.58				0.826 (U)
11/1/2016					0.805 (U)		
11/2/2016	0.496 (U)						0.791 (U)
11/3/2016		0.314 (U)	0.342 (U)	0.928 (U)			
11/4/2016						0.166 (U)	
1/10/2017	0.376 (U)						
1/11/2017		0.34 (U)	0.365 (U)	0.502 (U)	0.705 (U)		
1/13/2017							0.296 (U)
1/16/2017						0	
3/1/2017			0.395 (U)	0.202 (U)			
3/2/2017		0.746 (U)			0.251 (U)	0.504 (U)	
3/6/2017							0.518 (U)
3/8/2017	0.0745 (U)						
4/26/2017	0.282 (U)		0.507 (U)	0.264 (U)			0.282 (U)
4/27/2017					1.08	0.593 (U)	
5/2/2017		0.111 (U)					
6/27/2017					1.02 (U)	0.657 (U)	
6/28/2017			0.892	0.636 (U)			
6/29/2017		0.576 (U)					1.12
6/30/2017	0.994						
3/27/2018	0.189 (U)					0.39 (U)	
3/28/2018		0.438 (U)	0.92 (U)	0.56 (U)			
3/29/2018					0.503 (U)		1.73
6/5/2018					0.771 (U)		
6/6/2018						2.8	0.694 (U)
6/7/2018			0.668 (U)				
6/8/2018	0.218 (U)						
6/11/2018		0.901 (U)		0.649 (U)			
9/25/2018		0.68 (U)	0.141 (U)	0.574 (U)			0.772 (U)
10/1/2018	1.24				0.783 (U)	1.06 (U)	
2/26/2019	0.202 (U)						
2/27/2019					1.21 (U)	0.637 (U)	
3/5/2019		0.272 (U)		0.474 (U)			0.84 (U)
3/6/2019			0.714 (U)				
3/28/2019					1.13 (U)	0.125 (U)	
3/29/2019	0 (U)						
4/2/2019		0.847 (U)					
4/3/2019			0.385 (U)	0.429 (U)			1.01
9/24/2019					1.22 (U)	0.949 (U)	
9/25/2019	0.707 (U)	0.412 (U)					1.18 (U)
9/26/2019			0.386 (U)	0.222 (U)			
2/10/2020					1.41	1.25 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
2/11/2020		0.461 (U)	1.48	0.597 (U)			
2/12/2020	1.07 (U)						1.11 (U)
3/18/2020	0.207 (U)					0.458 (U)	
3/19/2020					1.1		
3/24/2020		0.534 (U)	0.632 (U)	0.262 (U)			1.88
9/23/2020		0.466 (U)	0.887 (U)	0.43 (U)	1.35 (U)	0.00884 (U)	
9/24/2020							0.611 (U)
9/25/2020	0.603 (U)						
2/9/2021		0.529 (U)	0.314 (U)	0.259 (U)			0.284 (U)
2/10/2021	0.353 (U)						
2/12/2021					0.366 (U)	0.458 (U)	
3/2/2021	0.71 (U)						
3/3/2021		0.59 (U)	0.565 (U)	0.352 (U)	0.492 (U)	0.105 (U)	0.133 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						0.896	
6/2/2016			0.0652 (U)		2.51		
6/7/2016	0.347						
7/25/2016			3.01			2.28	
7/26/2016					3.82		
7/28/2016	0.815 (U)						
9/14/2016		0.98 (U)				0.821 (U)	
9/15/2016					4.24		
9/19/2016	0.862 (U)		0.871 (U)				
11/1/2016			0.307 (U)		3.92	0.585 (U)	
11/3/2016	0.797 (U)						
11/4/2016		0.277 (U)					
12/15/2016		0.071 (U)					
1/11/2017					2.52	1.22	
1/13/2017	0.72 (U)						
1/16/2017		0.44 (U)	0.284 (U)				
2/21/2017			0.503 (U)				
3/1/2017						0.877 (U)	
3/2/2017					3.13		
3/3/2017		0.448 (U)					
3/6/2017	0.518 (U)						
4/26/2017	1.13 (U)		0.204 (U)		2.35	0.672 (U)	
4/28/2017		0.548 (U)					
5/26/2017		0 (U)					
6/28/2017		0.608 (U)			2.6	1.07 (U)	
6/29/2017	0.841 (U)						
6/30/2017			0.738 (U)				
10/11/2017				0.586 (U)			
10/12/2017							1.49
11/20/2017				0.816 (U)			0.918 (U)
1/10/2018							1.05
1/11/2018				0.841 (U)			
2/19/2018							2.05
2/20/2018				1.58			
3/27/2018			0.31 (U)				
3/28/2018		0.412 (U)			3	0.65 (U)	
3/29/2018	1.91						
4/3/2018				0.385 (U)			0.68 (U)
6/5/2018	1.39						
6/7/2018		0.73 (U)			2.79		
6/8/2018						1.89	
6/11/2018			0.608 (U)				
6/28/2018				0.283 (U)			1.28
8/7/2018				0.332 (U)			1.16
9/24/2018				0.767 (U)			0.965 (U)
9/25/2018	1.62						
10/1/2018		0.756 (U)			3.14	1.58	
10/2/2018			0.97 (U)				
2/26/2019			0.524 (U)				
2/27/2019		0.635 (U)			3.79	3.67	
3/5/2019	0.985 (U)						
3/29/2019		0.224 (U)					

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
4/1/2019			1.02 (U)		4.33	2.28	
4/2/2019	1.42						
8/21/2019				1.01 (U)			1.24 (U)
9/24/2019	1.35	0.429 (U)					
9/25/2019			1.02 (U)		4.2	1.6	
10/8/2019				1.02 (U)			0.866 (U)
2/11/2020		0.817 (U)			3.87	1.85	
2/12/2020	1.61		0.301 (U)	0.45 (U)			1.83
3/19/2020		0.715 (U)	1		3.96	2.2	
3/24/2020	1.24 (U)						1.27 (U)
3/25/2020				0.377 (U)			
9/23/2020		0.565 (U)			4.14	1.14 (U)	
9/24/2020	1.8		0.684 (U)	0.568 (U)			0.634 (U)
2/9/2021	1.24						
2/10/2021		1.04 (U)		0.518 (U)	3.65	2.46	0.783 (U)
2/11/2021			0.678 (U)				
3/1/2021			0.412 (U)				
3/3/2021	1.2	0.459 (U)			3.58	2.03	
3/4/2021				0.636 (U)			0.818 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		0.721	5.11	0.614
7/26/2016		1.26	6.92	1.47
8/30/2016	1.09			
9/14/2016		0.901 (U)	3.96	1.27
11/2/2016		1.09 (U)	4.53	
11/4/2016				0.434 (U)
12/15/2016	1 (U)			
1/12/2017			4.43	0.202 (U)
1/13/2017		1.19		
2/24/2017	0.504 (U)			
3/6/2017		0.669 (U)		
3/7/2017			4.8	0.0674 (U)
5/1/2017		0.803 (U)	4.16	
5/2/2017				0.444 (U)
5/8/2017	0.455 (U)			
6/27/2017			2.8	0.77 (U)
6/29/2017		1.35		
7/11/2017	0.471 (U)			
10/10/2017	0.649 (U)			
3/29/2018		0.703 (U)	3.42	0.648 (U)
4/2/2018	0.512 (U)			
6/6/2018			3.99	
6/7/2018		0.628 (U)		0.745 (U)
9/19/2018	0.789 (U)			
9/26/2018		0.756 (U)	2.73	0.377 (U)
3/4/2019		1.21 (U)	4.43	1 (U)
4/3/2019		1.07 (U)	4.79	0.43 (U)
8/20/2019	2.44			
9/24/2019			4.06	0.699 (U)
9/25/2019		1.86		
10/8/2019	1.72			
2/12/2020		1.25	4.02	0.913 (U)
3/17/2020	1.22 (U)			
3/24/2020			3.52	
3/25/2020		0.766 (U)		
8/27/2020	1.26 (U)			
9/22/2020	1.06 (U)	0.795 (U)	2.98	0.428 (U)
2/8/2021			2.89	0.613 (U)
2/9/2021		0.626 (U)		
3/1/2021	1.2			
3/2/2021			1.67	0.579 (U)
3/3/2021		1		

Time Series

Constituent: Copper (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.005						
9/20/1999	<0.005						
9/12/2001	0.004						
9/3/2002	0.01						
7/29/2003	0.011						
12/5/2003	0.0034						
9/22/2004	0.0033						
5/1/2007		0.0047					
9/11/2007		<0.005					
3/20/2008		<0.005					
8/27/2008		0.0074					
3/3/2009		<0.005					
11/18/2009		0.0029					
3/3/2010		0.005					
9/8/2010		<0.005					
11/22/2010				<0.005		<0.005	
1/4/2011				<0.005		0.0049	
2/17/2011				<0.005		<0.005	
3/10/2011		0.0029					
3/11/2011				<0.005		<0.005	
3/28/2011				<0.005		<0.005	
9/7/2011				<0.005	<0.005	<0.005	<0.005
9/8/2011		<0.005	<0.005				
3/4/2012						<0.005	
3/5/2012		<0.005	<0.005		<0.005		<0.005
3/6/2012				<0.005			
9/5/2012			<0.005		0.016		<0.005
9/10/2012		<0.005				<0.005	
9/11/2012				<0.005			
2/5/2013			<0.005				<0.005
2/6/2013		<0.005		<0.005	<0.005	<0.005	
8/12/2013		<0.005					
8/13/2013			<0.005	<0.005	<0.005		
8/14/2013						<0.005	<0.005
2/4/2014			<0.005	<0.005		<0.005	
2/5/2014		<0.005			<0.005		<0.005
8/4/2014					0.0012 (J)	<0.005	0.0015 (J)
8/5/2014		0.005	<0.005	<0.005			
2/2/2015			0.0031 (J)	<0.005		<0.005	
2/3/2015					<0.005		<0.005
2/4/2015		0.0025 (J)					
8/3/2015		0.0014 (J)			<0.005 (D)	<0.005 (D)	<0.005 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		0.0011 (J)	<0.005		0.00082 (J)	0.00088 (J)	<0.005
2/17/2016				<0.005			
2/22/2017		0.0011 (J)		<0.005			
2/23/2017			<0.005		<0.005		
2/24/2017						<0.005	<0.005
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		<0.005
8/6/2018		<0.005					

Time Series

Constituent: Copper (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
8/7/2018			<0.005		<0.005		<0.005
8/8/2018				<0.005		<0.005	
2/25/2019		<0.005					
2/26/2019			<0.005	<0.005	<0.005	<0.005	<0.005
6/12/2019		0.00034 (J)		<0.005		0.00025 (J)	
6/13/2019			<0.005		<0.005		0.00049 (J)
10/8/2019		0.00041 (J)					
10/9/2019			0.00079 (J)	0.00024 (J)			0.00087 (J)
10/10/2019					0.00033 (J)	<0.005	
3/17/2020		0.00078 (J)	0.0004 (J)		0.00039 (J)		
3/18/2020				<0.005		0.00021 (J)	0.00097 (J)
9/22/2020		0.0041 (J)	<0.005	<0.005	<0.005	<0.005	
9/23/2020							<0.005
3/1/2021			<0.005	<0.005		<0.005	
3/2/2021		0.0027 (J)			<0.005		<0.005

Time Series

Constituent: Copper (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R
9/9/2009	0.0028
11/18/2009	0.0027
1/5/2010	0.0035
3/3/2010	<0.005
9/7/2010	<0.005
3/10/2011	<0.005
9/8/2011	<0.005
3/5/2012	<0.005
9/5/2012	<0.005
2/5/2013	<0.005
8/13/2013	<0.005
2/4/2014	<0.005
8/5/2014	0.0012 (J)
2/3/2015	0.0013 (J)
8/4/2015	0.0043 (J)
2/16/2016	<0.005
2/23/2017	0.0018 (J)
2/19/2018	<0.005
8/6/2018	0.0016 (J)
2/25/2019	0.0016 (J)
6/13/2019	0.0011 (J)
10/8/2019	0.0011 (J)
3/17/2020	0.00091 (J)
9/23/2020	<0.005
3/3/2021	<0.005

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	0.14 (J)	0.05 (J)	0.08 (J)	0.07 (J)			
9/1/2016					0.15 (J)	0.03 (J)	0.28 (J)
11/28/2016	0.12 (J)		0.03 (J)				
11/29/2016		0.04 (J)					0.05 (J)
11/30/2016				0.03 (J)	0.11 (J)		
12/1/2016						<0.1	
2/22/2017	0.09 (J)		0.04 (J)				
2/23/2017		0.06 (J)		0.04 (J)			0.07 (J)
2/24/2017					0.08 (J)	0.03 (J)	
5/8/2017	0.05 (J)						
5/9/2017		0.06 (J)		<0.1			
5/10/2017			0.05 (J)		0.04 (J)	<0.1	0.02 (J)
7/17/2017	0.14 (J)					0.37	
7/18/2017		<0.1	<0.1	<0.1	<0.1		<0.1
10/16/2017	0.12 (J)					<0.1	
10/17/2017		<0.1	<0.1		<0.1		
10/18/2017				0.22 (J)			<0.1
2/19/2018	0.17						<0.1
2/20/2018			<0.1		<0.1		
2/21/2018		<0.1		<0.1		<0.1	
8/6/2018	0.087 (J)						<0.1
8/7/2018		<0.1		<0.1		<0.1	
8/8/2018			<0.1		<0.1		
2/25/2019	0.14 (J)						<0.1
2/26/2019		<0.1	<0.1	<0.1	<0.1	0.035 (J)	
6/12/2019	0.12 (J)		0.58		<0.1		
6/13/2019		<0.1		0.58		<0.1	<0.1
8/19/2019	<0.1				<0.1		
8/20/2019		<0.1	<0.1				<0.1
8/21/2019				0.037 (J)		<0.1	
10/8/2019	0.052 (J)						<0.1
10/9/2019		<0.1	<0.1			0.35	
10/10/2019				<0.1	<0.1		
3/17/2020	0.053 (J)	<0.1		0.1 (J)			<0.1
3/18/2020			<0.1		<0.1	<0.1	
8/26/2020	0.068 (J)						
8/27/2020		<0.1				0.064 (J)	<0.1
8/28/2020			<0.1	0.097 (J)	<0.1		
9/22/2020	0.058 (J)	<0.1	<0.1	<0.1	<0.1		
9/23/2020						<0.1	<0.1
3/1/2021		<0.1	<0.1		<0.1		
3/2/2021	0.073 (J)			0.15		0.094 (J)	
3/3/2021							<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					0.12 (J)	<0.1	
6/2/2016	<0.1						
6/6/2016			<0.1	<0.1			
6/7/2016		<0.1					<0.1
7/25/2016						0.06 (J)	
7/26/2016	0.02 (J)				0.08 (J)		
7/27/2016		<0.1	<0.1	<0.1			<0.1
9/13/2016					0.11 (J)	<0.1	
9/15/2016	<0.1						
9/16/2016		<0.1		<0.1			
9/19/2016			<0.1				<0.1
11/1/2016					<0.1		
11/2/2016	<0.1						<0.1
11/3/2016		<0.1	<0.1	<0.1			
11/4/2016						<0.1	
1/10/2017	<0.1						
1/11/2017		<0.1	<0.1	<0.1	0.05 (J)		
1/13/2017							<0.1
1/16/2017						<0.1	
3/1/2017			<0.1	<0.1			
3/2/2017		<0.1			<0.1	<0.1	
3/6/2017							<0.1
3/8/2017	<0.1						
4/26/2017	<0.1		<0.1	<0.1			<0.1
4/27/2017					0.04 (J)	0.01 (J)	
5/2/2017		<0.1					
6/27/2017					<0.1	<0.1	
6/28/2017			<0.1	<0.1			
6/29/2017		<0.1					<0.1
6/30/2017	<0.1						
10/3/2017					<0.1	<0.1	
10/4/2017		<0.1		<0.1			<0.1
10/5/2017	<0.1		<0.1				
3/27/2018	<0.1					<0.1	
3/28/2018		<0.1	<0.1	<0.1			
3/29/2018					<0.1		<0.1
6/5/2018					0.055 (J)		
6/6/2018						<0.1	<0.1
6/7/2018			<0.1				
6/8/2018	<0.1						
6/11/2018		<0.1		<0.1			
9/25/2018		<0.1	<0.1	<0.1			<0.1
10/1/2018	<0.1				<0.1	<0.1	
2/26/2019	<0.1						
2/27/2019					0.052 (J)	<0.1	
3/5/2019		<0.1		<0.1			<0.1
3/6/2019			<0.1				
3/28/2019					0.036 (J)	<0.1	
3/29/2019	<0.1						
4/2/2019		<0.1					
4/3/2019			<0.1	<0.1			<0.1
9/24/2019					0.063 (J)	<0.1	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2019	<0.1	<0.1					<0.1
9/26/2019			<0.1	<0.1			
2/10/2020					0.061 (J)	<0.1	
2/11/2020		<0.1	<0.1	<0.1			
2/12/2020	<0.1						<0.1
3/18/2020	<0.1					<0.1	
3/19/2020					0.064 (J)		
3/24/2020		<0.1	<0.1	<0.1			<0.1
9/23/2020		<0.1	<0.1	<0.1	0.058 (J)	<0.1	
9/24/2020							<0.1
9/25/2020	<0.1						
2/9/2021			<0.1	<0.1			<0.1
2/10/2021	<0.1						
2/12/2021					0.068 (J)	<0.1	
3/2/2021	<0.1						
3/3/2021		<0.1	<0.1	<0.1	0.078 (J)	<0.1	<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						0.15 (J)	
6/2/2016			<0.1		0.62		
6/7/2016	<0.1						
7/25/2016			0.06 (J)			0.14 (J)	
7/26/2016					0.49		
7/28/2016	0.02 (J)						
9/14/2016		0.08 (J)				0.18 (J)	
9/15/2016					0.54		
9/19/2016	0.02 (J)		<0.1				
11/1/2016			<0.1		0.68	<0.1	
11/3/2016	<0.1						
11/4/2016		<0.1					
12/15/2016		0.06 (J)					
1/11/2017					0.49	0.09 (J)	
1/13/2017	<0.1						
1/16/2017		0.1 (J)	<0.1				
2/21/2017			<0.1				
3/1/2017						<0.1	
3/2/2017					0.48		
3/3/2017		<0.1					
3/6/2017	<0.1						
4/26/2017	0.04 (J)		<0.1		0.48	0.08 (J)	
4/28/2017		0.06 (J)					
5/26/2017		0.09 (J)					
6/28/2017		0.11 (J)			0.47	0.12 (J)	
6/29/2017	<0.1						
6/30/2017			<0.1				
10/3/2017	<0.1	<0.1					
10/4/2017			<0.1		<0.1	<0.1	
10/11/2017				<0.1			
10/12/2017							<0.1
11/20/2017				<0.1			<0.1
1/10/2018							<0.1
1/11/2018				<0.1			
2/19/2018							<0.1
2/20/2018				0.23			
3/27/2018			<0.1				
3/28/2018		0.31			0.56	<0.1	
3/29/2018	<0.1						
4/3/2018				<0.1			<0.1
6/5/2018	0.13 (J)						
6/7/2018		0.11 (J)			0.48		
6/8/2018						0.2 (J)	
6/11/2018			<0.1				
6/28/2018				<0.1			<0.1
8/7/2018				0.048 (J)			<0.1
9/24/2018				<0.1			<0.1
9/25/2018	0 (J)						
10/1/2018		<0.1			0.44	<0.1	
10/2/2018			<0.1				
2/26/2019			<0.1				
2/27/2019		0.12 (J)			0.53	0.13 (J)	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
3/5/2019	0.32						
3/26/2019							<0.1
3/27/2019				<0.1			
3/29/2019		0.13 (J)					
4/1/2019			<0.1		0.45	0.1 (J)	
4/2/2019	0.12 (J)						
8/21/2019				<0.1			<0.1
9/24/2019	0.15 (J)	0.081 (J)					
9/25/2019			<0.1		0.46	0.1 (J)	
10/9/2019				<0.1			<0.1
2/11/2020		0.075 (J)				0.094 (J)	
2/12/2020	0.1 (J)		<0.1	<0.1	0.4		<0.1
3/19/2020		0.093 (J)	<0.1		0.51	0.11 (J)	
3/24/2020	0.081 (J)						<0.1
3/25/2020				<0.1			
9/23/2020		0.08 (J)			0.47	0.098 (J)	
9/24/2020	0.079 (J)		<0.1	<0.1			<0.1
2/9/2021	0.092 (J)						
2/10/2021		0.094 (J)		<0.1	0.43	<0.1	<0.1
2/11/2021			<0.1				
3/1/2021			<0.1				
3/3/2021		0.085 (J)			0.44	0.1	
3/4/2021	0.091 (J)			<0.1			<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.1	0.11 (J)	<0.1
7/26/2016		<0.1	0.05 (J)	<0.1
8/30/2016	0.09 (J)			
9/14/2016		<0.1	0.04 (J)	<0.1
11/2/2016		<0.1	<0.1	
11/4/2016				<0.1
11/14/2016	0.18 (J)			
1/12/2017			0.04 (J)	<0.1
1/13/2017		<0.1		
2/24/2017	0.05 (J)			
3/6/2017		<0.1		
3/7/2017			<0.1	<0.1
5/1/2017		<0.1	<0.1	
5/2/2017				<0.1
5/8/2017	0.03 (J)			
6/27/2017			<0.1	<0.1
6/29/2017		<0.1		
7/11/2017	0.07 (J)			
10/3/2017			<0.1	<0.1
10/5/2017		<0.1		
10/10/2017	<0.1			
3/29/2018		<0.1	<0.1	<0.1
4/2/2018	<0.1			
6/6/2018			0.15 (J)	
6/7/2018		<0.1		<0.1
9/19/2018	<0.1			
9/26/2018		<0.1	<0.1	<0.1
3/4/2019		<0.1	0.19 (J)	<0.1
3/27/2019	0.081 (J)			
4/3/2019		<0.1	0.047 (J)	<0.1
8/20/2019	<0.1			
9/24/2019			0.05 (J)	<0.1
9/25/2019		<0.1		
10/8/2019	0.034 (J)			
2/12/2020		<0.1	<0.1	<0.1
3/17/2020	<0.1			
3/24/2020			<0.1	<0.1
3/25/2020		<0.1		
8/27/2020	<0.1			
9/22/2020	<0.1	<0.1	0.056 (J)	<0.1
2/8/2021			0.055 (J)	<0.1
2/9/2021		<0.1		
3/1/2021	<0.1			
3/2/2021			<0.1	<0.1
3/3/2021		<0.1		

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	0.006						
9/20/1999	<0.001						
9/12/2001	0.0042						
9/3/2002	<0.001						
7/29/2003	0.015						
12/5/2003	<0.001						
9/22/2004	<0.001						
5/1/2007		<0.001					
9/11/2007		<0.001					
3/20/2008		<0.001					
8/27/2008		<0.001					
3/3/2009		<0.001					
11/18/2009		<0.001					
3/3/2010		<0.001					
9/8/2010		<0.001					
11/22/2010				<0.001		<0.001	
1/4/2011				<0.001		<0.001	
2/17/2011				<0.001		<0.001	
3/10/2011		<0.001					
3/11/2011				<0.001		<0.001	
3/28/2011				<0.001		<0.001	
9/7/2011				<0.001	<0.001	<0.001	<0.001
9/8/2011		<0.001	<0.001				
3/4/2012						<0.001	
3/5/2012		<0.001	<0.001		<0.001		<0.001
3/6/2012				<0.001			
9/5/2012			<0.001		<0.001		<0.001
9/10/2012		<0.001				<0.001	
9/11/2012				<0.001			
2/5/2013			<0.001				<0.001
2/6/2013		<0.001		<0.001	<0.001	<0.001	
8/12/2013		<0.001					
8/13/2013			<0.001	<0.001	<0.001		
8/14/2013						<0.001	<0.001
2/4/2014			<0.001	<0.001		<0.001	
2/5/2014		<0.001			<0.001		<0.001
8/4/2014					<0.001	<0.001	<0.001
8/5/2014		<0.001	<0.001	<0.001			
2/2/2015			<0.001	<0.001		<0.001	
2/3/2015					<0.001		<0.001
2/4/2015		<0.001					
8/3/2015		<0.001			<0.001 (D)	<0.001 (D)	<0.001 (D)
8/4/2015			<0.001 (D)	<0.001			
2/16/2016		<0.001	<0.001		<0.001	<0.001	<0.001
2/17/2016				<0.001			
8/31/2016		<0.001	<0.001	<0.001	0.0001 (J)		
9/1/2016						<0.001	<0.001
11/28/2016		<0.001		<0.001			
11/29/2016			<0.001				
11/30/2016					<0.001	<0.001	
12/1/2016							<0.001
2/22/2017		<0.001		<0.001			

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			<0.001		<0.001		
2/24/2017						<0.001	<0.001
5/8/2017		<0.001					
5/9/2017			<0.001		<0.001		
5/10/2017				0.0001 (J)		<0.001	<0.001
7/17/2017		<0.001					<0.001
7/18/2017			<0.001	7E-05 (J)	<0.001	<0.001	
10/16/2017		<0.001					<0.001
10/17/2017			<0.001	<0.001		<0.001	
10/18/2017					8E-05 (J)		
2/19/2018		<0.001					
2/20/2018				<0.001		<0.001	
2/21/2018			<0.001		<0.001		<0.001
8/6/2018		<0.001					
8/7/2018			<0.001		<0.001		<0.001
8/8/2018				<0.001		<0.001	
2/25/2019		<0.001					
2/26/2019			<0.001	<0.001	<0.001	<0.001	<0.001
6/12/2019		<0.001		<0.001		<0.001	
6/13/2019			<0.001		<0.001		<0.001
8/19/2019		<0.001				<0.001	
8/20/2019			<0.001	6.1E-05 (J)			
8/21/2019					8.2E-05 (J)		7E-05 (J)
10/8/2019		<0.001					
10/9/2019			5.2E-05 (J)	5.7E-05 (J)			5.9E-05 (J)
10/10/2019					<0.001	<0.001	
3/17/2020		<0.001	<0.001		0.00015 (J)		
3/18/2020				<0.001		<0.001	7.9E-05 (J)
8/26/2020		<0.001					
8/27/2020			6.7E-05 (J)				4.9E-05 (J)
8/28/2020				8.4E-05 (J)	5.4E-05 (J)	<0.001	
9/22/2020		0.0001 (J)	<0.001	8.2E-05 (J)	6.4E-05 (J)	4.1E-05 (J)	
9/23/2020							0.00019 (J)
3/1/2021			<0.001	7E-05 (J)		<0.001	
3/2/2021		<0.001			9.6E-05 (J)		5.4E-05 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.001						
11/18/2009	<0.001						
1/5/2010	<0.001						
3/3/2010	<0.001						
9/7/2010	<0.001						
3/10/2011	<0.001						
9/8/2011	<0.001						
3/5/2012	<0.001						
9/5/2012	<0.001						
2/5/2013	<0.001						
8/13/2013	<0.001						
2/4/2014	<0.001						
8/5/2014	<0.001						
2/3/2015	<0.001						
8/4/2015	<0.001						
2/16/2016	<0.001						
6/1/2016						0.00056 (J)	<0.001
6/2/2016		<0.001					
6/6/2016				<0.001	<0.001		
6/7/2016			<0.001				
7/25/2016							<0.001
7/26/2016		<0.001				<0.001	
7/27/2016			<0.001	<0.001	<0.001		
9/1/2016	<0.001						
9/13/2016						0.0001 (J)	<0.001
9/15/2016		<0.001					
9/16/2016			<0.001		<0.001		
9/19/2016				<0.001			
11/1/2016						<0.001	
11/2/2016		<0.001					
11/3/2016			<0.001	<0.001	<0.001		
11/4/2016							<0.001
11/29/2016	<0.001						
1/10/2017		<0.001					
1/11/2017			<0.001	<0.001	<0.001	<0.001	
1/16/2017							<0.001
2/23/2017	<0.001						
3/1/2017				<0.001	<0.001		
3/2/2017			8E-05 (J)			0.0001 (J)	<0.001
3/8/2017		0.0001 (J)					
4/26/2017		<0.001		<0.001	<0.001		
4/27/2017						<0.001	<0.001
5/2/2017			<0.001				
5/10/2017	<0.001						
6/27/2017						<0.001	<0.001
6/28/2017				<0.001	0.0001 (J)		
6/29/2017			8E-05 (J)				
6/30/2017		<0.001					
7/18/2017	<0.001						
10/18/2017	<0.001						
2/19/2018	<0.001						
3/27/2018		<0.001					<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.001	<0.001	<0.001		
3/29/2018						<0.001	
8/6/2018	<0.001						
2/25/2019	<0.001						
2/26/2019		<0.001					
2/27/2019						<0.001	<0.001
3/5/2019			<0.001		<0.001		
3/6/2019				<0.001			
4/2/2019			<0.001				
4/3/2019				<0.001	<0.001		
6/13/2019	<0.001						
8/20/2019	<0.001						
9/25/2019			<0.001				
9/26/2019				<0.001	<0.001		
10/8/2019	<0.001						
2/10/2020						4.9E-05 (J)	<0.001
2/11/2020			<0.001	<0.001	<0.001		
2/12/2020		<0.001					
3/17/2020	<0.001						
3/18/2020		<0.001					<0.001
3/19/2020						0.00012 (J)	
3/24/2020			6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)		
8/27/2020	<0.001						
9/23/2020	<0.001		4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)	<0.001	0.00021 (J)
9/25/2020		<0.001					
2/9/2021				5E-05 (J)	9.4E-05 (J)		
2/10/2021		4.8E-05 (J)					
2/12/2021						4.4E-05 (J)	0.00038 (J)
3/2/2021		<0.001					
3/3/2021	<0.001		<0.001	<0.001	7.6E-05 (J)	5.6E-05 (J)	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.001
6/2/2016				<0.001		0.00056 (J)	
6/7/2016	<0.001	<0.001					
7/25/2016				<0.001			<0.001
7/26/2016						0.0001 (J)	
7/27/2016	<0.001						
7/28/2016		<0.001					
9/14/2016			<0.001				<0.001
9/15/2016						0.0002 (J)	
9/19/2016	<0.001	<0.001		<0.001			
11/1/2016				<0.001		<0.001	<0.001
11/2/2016	0.0013 (J)						
11/3/2016		<0.001					
11/4/2016			<0.001				
12/15/2016			<0.001				
1/11/2017						<0.001	<0.001
1/13/2017	<0.001	<0.001					
1/16/2017			<0.001	<0.001			
2/21/2017				<0.001			
3/1/2017							<0.001
3/2/2017						0.0002 (J)	
3/3/2017			<0.001				
3/6/2017	<0.001	<0.001					
4/26/2017	<0.001	<0.001		<0.001		<0.001	<0.001
4/28/2017			<0.001				
5/26/2017			<0.001				
6/28/2017			<0.001			<0.001	<0.001
6/29/2017	<0.001	<0.001					
6/30/2017				<0.001			
10/11/2017					0.0001 (J)		
11/20/2017					<0.001		
1/11/2018					0.0002 (J)		
2/20/2018					<0.001		
3/27/2018				<0.001			
3/28/2018			<0.001			<0.001	<0.001
3/29/2018	<0.001	<0.001					
4/3/2018					<0.001		
6/28/2018					<0.001		
8/7/2018					<0.001		
9/24/2018					<0.001		
2/26/2019				<0.001			
2/27/2019			<0.001			<0.001	<0.001
3/5/2019	<0.001	<0.001					
4/2/2019		<0.001					
4/3/2019	<0.001						
8/21/2019					<0.001		
9/24/2019		<0.001					
9/25/2019	<0.001						
10/9/2019					<0.001		
2/11/2020			<0.001				<0.001
2/12/2020	<0.001	<0.001		<0.001	<0.001	<0.001	
3/19/2020			<0.001	<0.001		0.00017 (J)	<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
3/24/2020	0.00011 (J)	<0.001					
3/25/2020					5.1E-05 (J)		
9/23/2020			0.0011 (J)			<0.001	0.00015 (J)
9/24/2020	9.2E-05 (J)	4.6E-05 (J)		<0.001	<0.001		
2/9/2021	6.3E-05 (J)	<0.001					
2/10/2021			0.00015 (J)		<0.001	<0.001	<0.001
2/11/2021				4.6E-05 (J)			
3/1/2021				<0.001			
3/3/2021	4.5E-05 (J)		<0.001			<0.001	<0.001
3/4/2021		<0.001			<0.001		

Time Series

Constituent: Lead (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.001	<0.001	<0.001
7/26/2016			<0.001	<0.001	<0.001
8/30/2016		<0.001			
9/14/2016			<0.001	<0.001	<0.001
11/2/2016			<0.001	<0.001	
11/4/2016					<0.001
11/14/2016		<0.001			
1/12/2017				<0.001	<0.001
1/13/2017			<0.001		
2/24/2017		<0.001			
3/6/2017			<0.001		
3/7/2017				0.0001 (J)	7E-05 (J)
5/1/2017			<0.001	<0.001	
5/2/2017					<0.001
5/8/2017		<0.001			
6/27/2017				<0.001	<0.001
6/29/2017			<0.001		
7/11/2017		<0.001			
10/10/2017		<0.001			
10/12/2017	9E-05 (J)				
11/20/2017	<0.001				
1/10/2018	<0.001				
2/19/2018	<0.001				
3/29/2018			<0.001	<0.001	<0.001
4/2/2018		<0.001			
4/3/2018	<0.001				
6/28/2018	<0.001				
8/7/2018	<0.001				
9/19/2018		<0.001			
9/24/2018	<0.001				
3/4/2019			<0.001	<0.001	<0.001
4/3/2019			<0.001	<0.001	<0.001
8/20/2019		<0.001			
8/21/2019	<0.001				
9/24/2019				<0.001	9E-05 (J)
9/25/2019			<0.001		
10/9/2019	<0.001				
2/12/2020	<0.001		<0.001	<0.001	<0.001
3/24/2020	<0.001			5.4E-05 (J)	6.8E-05 (J)
3/25/2020			<0.001		
8/27/2020		<0.001			
9/22/2020		<0.001	<0.001	4.5E-05 (J)	4.2E-05 (J)
9/24/2020	3.8E-05 (J)				
2/8/2021				0.00013 (J)	3.7E-05 (J)
2/9/2021			<0.001		
2/10/2021	<0.001				
3/1/2021		<0.001			
3/2/2021				5.1E-05 (J)	9.2E-05 (J)
3/3/2021			<0.001		
3/4/2021	<0.001				

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	<0.03	0.0024 (J)	<0.03	<0.03			
9/1/2016					<0.03	<0.03	<0.03
11/28/2016	<0.03		<0.03				
11/29/2016		<0.03					<0.03
11/30/2016				<0.03	<0.03		
12/1/2016						<0.03	
2/22/2017	<0.03		0.0036 (J)				
2/23/2017		<0.03		<0.03			0.0028 (J)
2/24/2017					<0.03	<0.03	
5/8/2017	0.0014 (J)						
5/9/2017		0.002 (J)		<0.03			
5/10/2017			0.0035 (J)		<0.03	<0.03	0.0054 (J)
7/17/2017	<0.03					<0.03	
7/18/2017		<0.03	0.0035 (J)	<0.03	<0.03		0.002 (J)
10/16/2017	0.0016 (J)					<0.03	
10/17/2017		0.0016 (J)	0.0035 (J)		<0.03		
10/18/2017				<0.03			0.0026 (J)
2/19/2018	<0.03						<0.03
2/20/2018			<0.03		<0.03		
2/21/2018		0.0014 (J)		<0.03		<0.03	
8/6/2018	<0.03						<0.03
8/7/2018		0.001 (J)		<0.03		<0.03	
8/8/2018			0.0031 (J)		<0.03		
8/19/2019	0.0019 (J)				0.00094 (J)		
8/20/2019		0.0012 (J)	0.0043 (J)				0.002 (J)
8/21/2019				<0.03		0.0015 (J)	
10/8/2019	0.0015 (J)						0.0021 (J)
10/9/2019		0.0013 (J)	0.0047 (J)			0.0014 (J)	
10/10/2019				<0.03	0.0013 (J)		
3/17/2020	0.0017 (J)	0.00094 (J)		0.0012 (J)			0.0018 (J)
3/18/2020			0.0053 (J)		<0.03	0.0017 (J)	
8/26/2020	0.0032 (J)						
8/27/2020		0.0017 (J)				0.0013 (J)	0.0083 (J)
8/28/2020			0.0047 (J)	<0.03	0.0011 (J)		
9/22/2020	0.0029 (J)	0.0015 (J)	0.0042 (J)	<0.03	0.0013 (J)		
9/23/2020						0.0012 (J)	0.0023 (J)
3/1/2021		0.0015 (J)	0.0039 (J)		<0.03		
3/2/2021	0.0033 (J)			0.00088 (J)		0.0016 (J)	
3/3/2021							0.0018 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					0.015	<0.03	
6/2/2016	<0.03						
6/6/2016			0.0088	0.015			
6/7/2016		<0.03					<0.03
7/25/2016						0.002 (J)	
7/26/2016	<0.03				0.0135 (J)		
7/27/2016		<0.03	0.0087 (J)	0.0049 (J)			<0.03
9/13/2016					0.0112 (J)	<0.03	
9/15/2016	<0.03						
9/16/2016		<0.03		0.0031 (J)			
9/19/2016			0.0043 (J)				<0.03
11/1/2016					0.0163 (J)		
11/2/2016	<0.03						<0.03
11/3/2016		<0.03	<0.03	0.0021 (J)			
11/4/2016						<0.03	
1/10/2017	<0.03						
1/11/2017		0.0035 (J)	0.0052 (J)	0.0025 (J)	0.0166 (J)		
1/13/2017							<0.03
1/16/2017						0.0023 (J)	
3/1/2017			0.0053 (J)	0.0029 (J)			
3/2/2017		<0.03			0.0159 (J)	0.0025 (J)	
3/6/2017							<0.03
3/8/2017	<0.03						
4/26/2017	<0.03		0.0041 (J)	0.0019 (J)			<0.03
4/27/2017					0.0137 (J)	0.0027 (J)	
5/2/2017		<0.03					
6/27/2017					0.0094 (J)	0.0024 (J)	
6/28/2017			0.0039 (J)	0.0016 (J)			
6/29/2017		<0.03					<0.03
6/30/2017	<0.03						
3/27/2018	<0.03					0.0023 (J)	
3/28/2018		<0.03	0.0041 (J)	0.0024 (J)			
3/29/2018					0.0078 (J)		<0.03
6/5/2018					0.0079 (J)		
6/6/2018						0.0024 (J)	<0.03
6/7/2018			0.0032 (J)				
6/8/2018	<0.03						
6/11/2018		<0.03		0.0014 (J)			
9/25/2018		<0.03	0.0036 (J)	0.0016 (J)			<0.03
10/1/2018	<0.03				0.0053 (J)	0.0023 (J)	
2/26/2019	<0.03						
2/27/2019					0.0093 (J)	0.0023 (J)	
3/5/2019		<0.03		0.0031 (J)			<0.03
3/6/2019			0.0033 (J)				
3/28/2019					0.013 (J)	0.0022 (J)	
3/29/2019	<0.03						
4/2/2019		<0.03					
4/3/2019			0.0035 (J)	0.0028 (J)			<0.03
9/24/2019					0.0046 (J)	0.0023 (J)	
9/25/2019	<0.03	<0.03					<0.03
9/26/2019			0.0032 (J)	0.0029 (J)			
2/10/2020					0.011 (J)	0.0023 (J)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
2/11/2020		<0.03	0.0033 (J)	0.005 (J)			
2/12/2020	<0.03						<0.03
3/18/2020	<0.03					0.0024 (J)	
3/19/2020					0.013 (J)		
3/24/2020		0.0034 (J)	0.0033 (J)	0.0035 (J)			<0.03
9/23/2020		<0.03	0.003 (J)	0.0022 (J)	0.014 (J)	0.0024 (J)	
9/24/2020							<0.03
9/25/2020	<0.03						
2/9/2021			0.0031 (J)	0.0019 (J)			<0.03
2/10/2021	<0.03						
2/12/2021					0.01 (J)	0.0025 (J)	
3/2/2021	<0.03						
3/3/2021		<0.03	0.0034 (J)	0.0021 (J)	0.012 (J)	0.0025 (J)	<0.03

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						0.01	
6/2/2016			<0.03		0.018		
6/7/2016	0.0055						
7/25/2016			<0.03			0.0132 (J)	
7/26/2016					0.0221 (J)		
7/28/2016	0.0045 (J)						
9/14/2016		0.004 (J)				0.012 (J)	
9/15/2016					0.0197 (J)		
9/19/2016	0.0054 (J)		<0.03				
11/1/2016			<0.03		0.0194 (J)	0.0115 (J)	
11/3/2016	<0.03						
11/4/2016		<0.03					
12/15/2016		0.0026 (J)					
1/11/2017					0.0177 (J)	0.0085 (J)	
1/13/2017	0.0062 (J)						
1/16/2017		0.0023 (J)	<0.03				
2/21/2017			<0.03				
3/1/2017						0.0114 (J)	
3/2/2017					0.0185 (J)		
3/3/2017		0.0013 (J)					
3/6/2017	0.0059 (J)						
4/26/2017	0.0054 (J)		<0.03		0.0183 (J)	0.0092 (J)	
4/28/2017		0.0031 (J)					
5/26/2017		0.0038 (J)					
6/28/2017		0.0026 (J)			0.0173 (J)	0.0085 (J)	
6/29/2017	0.0047 (J)						
6/30/2017			<0.03				
10/11/2017				0.0018 (J)			
10/12/2017							<0.03
11/20/2017				0.0018 (J)			<0.03
1/10/2018							<0.03
1/11/2018				0.0019 (J)			
2/19/2018							<0.03
2/20/2018				<0.03			
3/27/2018			0.0011 (J)				
3/28/2018		0.0025 (J)			0.02 (J)	0.013 (J)	
3/29/2018	0.0062 (J)						
4/3/2018				0.0022 (J)			<0.03
6/5/2018	0.0061 (J)						
6/7/2018		0.0017 (J)			0.02 (J)		
6/8/2018						0.012 (J)	
6/11/2018			0.0012 (J)				
6/28/2018				0.0026 (J)			<0.03
8/7/2018				0.0024 (J)			<0.03
9/24/2018				0.0022 (J)			<0.03
9/25/2018	0.0062 (J)						
10/1/2018		<0.03			0.02 (J)	0.011 (J)	
10/2/2018			<0.03				
2/26/2019			0.0011 (J)				
2/27/2019		0.0011 (J)			0.021 (J)	0.014 (J)	
3/5/2019	0.0053 (J)						
3/29/2019		0.0016 (J)					

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
4/1/2019			0.001 (J)		0.021 (J)	0.013 (J)	
4/2/2019	0.0051 (J)						
8/21/2019				0.0035 (J)			<0.03
9/24/2019	0.0068 (J)	0.0011 (J)					
9/25/2019			0.0011 (J)		0.02 (J)	0.01 (J)	
10/9/2019				0.0036 (J)			<0.03
2/11/2020		0.0012 (J)				0.013 (J)	
2/12/2020	0.0065 (J)		0.0013 (J)	0.0041 (J)	0.019 (J)		<0.03
3/19/2020		0.0022 (J)	0.0012 (J)		0.023 (J)	0.014 (J)	
3/24/2020	0.0064 (J)						<0.03
3/25/2020				0.0049 (J)			
9/23/2020		0.0016 (J)			0.023 (J)	0.013 (J)	
9/24/2020	0.0069 (J)		0.0011 (J)	0.0054 (J)			<0.03
2/9/2021	0.006 (J)						
2/10/2021		0.0039 (J)		0.0071 (J)	0.023 (J)	0.015 (J)	<0.03
2/11/2021			0.0012 (J)				
3/1/2021			0.0011 (J)				
3/3/2021		0.0016 (J)			0.024 (J)	0.017 (J)	
3/4/2021	0.0062 (J)			0.0084 (J)			<0.03

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		0.013	0.0049 (J)	<0.03
7/26/2016		0.0123 (J)	0.0063 (J)	0.0027 (J)
8/30/2016	0.0061 (J)			
9/14/2016		0.0137 (J)	0.0058 (J)	0.0029 (J)
11/2/2016		0.0136 (J)	0.0053 (J)	
11/4/2016				<0.03
11/14/2016	0.0064 (J)			
1/12/2017			0.0054 (J)	0.0032 (J)
1/13/2017		0.0121 (J)		
2/24/2017	0.0049 (J)			
3/6/2017		0.0143 (J)		
3/7/2017			0.0056 (J)	0.0035 (J)
5/1/2017		0.0132 (J)	0.0031 (J)	
5/2/2017				0.0031 (J)
5/8/2017	0.0053 (J)			
6/27/2017			0.0018 (J)	0.0029 (J)
6/29/2017		0.0145 (J)		
7/11/2017	0.0051 (J)			
10/10/2017	0.0043 (J)			
3/29/2018		0.014 (J)	0.0058 (J)	0.0034 (J)
4/2/2018	0.0045 (J)			
6/6/2018			0.0068 (J)	
6/7/2018		0.013 (J)		0.0032 (J)
9/19/2018	0.0043 (J)			
9/26/2018		0.014 (J)	0.0065 (J)	0.0032 (J)
3/4/2019		0.015 (J)	0.0065 (J)	0.0032 (J)
4/3/2019		0.014 (J)	0.007 (J)	0.0035 (J)
8/20/2019	0.0036 (J)			
9/24/2019			0.0065 (J)	0.0031 (J)
9/25/2019		0.014 (J)		
10/8/2019	0.0036 (J)			
2/12/2020		0.011 (J)	0.0066 (J)	0.0032 (J)
3/17/2020	0.0046 (J)			
3/24/2020			0.0064 (J)	0.0033 (J)
3/25/2020		0.014 (J)		
8/27/2020	0.0039 (J)			
9/22/2020	0.0036 (J)	0.013 (J)	0.0066 (J)	0.0034 (J)
2/8/2021			0.0063 (J)	0.0032 (J)
2/9/2021		0.011 (J)		
3/1/2021	0.0037 (J)			
3/2/2021			0.0018 (J)	0.0031 (J)
3/3/2021		0.012 (J)		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.0002						
9/11/2007	<0.0002						
3/20/2008	<0.0002						
8/27/2008	<0.0002						
3/3/2009	<0.0002						
9/9/2009							<0.0002
11/18/2009	<0.0002						<0.0002
1/5/2010							<0.0002
3/3/2010	<0.0002						<0.0002
9/7/2010							<0.0002
9/8/2010	<0.0002						
11/22/2010			<0.0002		<0.0002		
1/4/2011			<0.0002		<0.0002		
2/17/2011			<0.0002		<0.0002		
3/10/2011	<0.0002						<0.0002
3/11/2011			<0.0002		<0.0002		
3/28/2011			<0.0002		<0.0002		
9/7/2011			<0.0002	<0.0002	<0.0002	<0.0002	
9/8/2011	<0.0002	<0.0002					<0.0002
3/4/2012					<0.0002		
3/5/2012	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002
3/6/2012			<0.0002				
9/5/2012		<0.0002		<0.0002		<0.0002	<0.0002
9/10/2012	<0.0002				<0.0002		
9/11/2012			<0.0002				
2/5/2013		<0.0002				<0.0002	<0.0002
2/6/2013	<0.0002		<0.0002	<0.0002	0.00014		
8/12/2013	<0.0002						
8/13/2013		<0.0002	<0.0002	<0.0002			<0.0002
8/14/2013					<0.0002	<0.0002	
2/4/2014		<0.0002	<0.0002		<0.0002		<0.0002
2/5/2014	<0.0002			<0.0002		<0.0002	
8/4/2014				<0.0002	<0.0002	<0.0002	
8/5/2014	<0.0002	<0.0002	<0.0002				<0.0002
2/2/2015		<0.0002	<0.0002		<0.0002		
2/3/2015				<0.0002		<0.0002	<0.0002
2/4/2015	<0.0002						
8/3/2015	<0.0002			<0.0002 (D)	<0.0002 (D)	<0.0002 (D)	
8/4/2015		<0.0002 (D)	<0.0002				<0.0002
2/16/2016	1.36E-05 (J)	<0.0002		1.34E-05 (J)	<0.0002	<0.0002	1.13E-05 (J)
2/17/2016			<0.0002				
8/31/2016	<0.0002	<0.0002	<0.0002	<0.0002			
9/1/2016					<0.0002	<0.0002	<0.0002
11/28/2016	<0.0002		<0.0002				
11/29/2016		<0.0002					<0.0002
11/30/2016				<0.0002	<0.0002		
12/1/2016						<0.0002	
2/22/2017	<0.0002		<0.0002				
2/23/2017		<0.0002		<0.0002			<0.0002
2/24/2017					<0.0002	<0.0002	
5/8/2017	<0.0002						
5/9/2017		<0.0002		<0.0002			

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/10/2017			<0.0002		<0.0002	<0.0002	<0.0002
7/17/2017	<0.0002					<0.0002	
7/18/2017		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
10/16/2017	<0.0002					<0.0002	
10/17/2017		<0.0002	<0.0002		<0.0002		
10/18/2017				<0.0002			<0.0002
2/19/2018	<0.0002						<0.0002
2/20/2018			<0.0002		<0.0002		
2/21/2018		<0.0002		<0.0002		<0.0002	
8/6/2018	<0.0002						<0.0002
8/7/2018		<0.0002		<0.0002		<0.0002	
8/8/2018			<0.0002		<0.0002		
2/25/2019	7.4E-05 (J)						6.7E-05 (J)
2/26/2019		5.9E-05 (J)	7.1E-05 (J)	6.4E-05 (J)	5.8E-05 (J)	6E-05 (J)	
6/12/2019	<0.0002		<0.0002		<0.0002		
6/13/2019		<0.0002		<0.0002		<0.0002	<0.0002
8/19/2019	<0.0002				<0.0002		
8/20/2019		<0.0002	<0.0002				<0.0002
8/21/2019				<0.0002		<0.0002	
10/8/2019	<0.0002						<0.0002
10/9/2019		<0.0002	<0.0002			<0.0002	
10/10/2019				0.00043 (J)	<0.0002		
5/6/2020	<0.0002	<0.0002					<0.0002
5/7/2020			<0.0002	<0.0002	<0.0002	<0.0002	
8/26/2020	<0.0002						
8/27/2020		<0.0002				<0.0002	<0.0002
8/28/2020			<0.0002	<0.0002	<0.0002		
9/22/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
9/23/2020						<0.0002	<0.0002
3/1/2021		<0.0002	<0.0002		<0.0002		
3/2/2021	<0.0002			<0.0002		<0.0002	
3/3/2021							<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.0002	<0.0002	
6/2/2016	<0.0002						
6/6/2016			<0.0002	<0.0002			
6/7/2016		9.5E-05 (J)					9.6E-05 (J)
7/25/2016						<0.0002	
7/26/2016	<0.0002				<0.0002		
7/27/2016		<0.0002	<0.0002	<0.0002			<0.0002
9/13/2016					<0.0002	<0.0002	
9/15/2016	<0.0002						
9/16/2016		<0.0002		<0.0002			
9/19/2016			<0.0002				<0.0002
11/1/2016					<0.0002		
11/2/2016	<0.0002						<0.0002
11/3/2016		<0.0002	<0.0002	<0.0002			
11/4/2016						<0.0002	
1/10/2017	<0.0002						
1/11/2017		<0.0002	<0.0002	<0.0002	<0.0002		
1/13/2017							<0.0002
1/16/2017						<0.0002	
3/1/2017			<0.0002	<0.0002			
3/2/2017		<0.0002			<0.0002	<0.0002	
3/6/2017							<0.0002
3/8/2017	<0.0002						
4/26/2017	<0.0002		<0.0002	<0.0002			<0.0002
4/27/2017					<0.0002	<0.0002	
5/2/2017		<0.0002					
6/27/2017					<0.0002	<0.0002	
6/28/2017			<0.0002	<0.0002			
6/29/2017		<0.0002					<0.0002
6/30/2017	<0.0002						
3/27/2018	<0.0002					<0.0002	
3/28/2018		<0.0002	<0.0002	<0.0002			
3/29/2018					<0.0002		<0.0002
9/25/2018		<0.0002	<0.0002	<0.0002			<0.0002
2/26/2019	6.1E-05 (J)						
2/27/2019					5.1E-05 (J)	5.4E-05 (J)	
3/5/2019		<0.0002		<0.0002			<0.0002
3/6/2019			<0.0002				
3/28/2019					4E-05 (J)	<0.0002	
3/29/2019	<0.0002						
9/24/2019					<0.0002	<0.0002	
9/25/2019	<0.0002						
2/10/2020					<0.0002	<0.0002	
2/11/2020		<0.0002	<0.0002	<0.0002			
2/12/2020	<0.0002						<0.0002
2/9/2021			<0.0002	<0.0002			<0.0002
2/10/2021	<0.0002						
2/12/2021					<0.0002	<0.0002	
3/3/2021		<0.0002	<0.0002	<0.0002			<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.0002	
6/2/2016			<0.0002		<0.0002		
6/7/2016	9.6E-05 (J)						
7/25/2016			<0.0002			<0.0002	
7/26/2016					<0.0002		
7/28/2016	<0.0002						
9/14/2016		<0.0002				<0.0002	
9/15/2016					<0.0002		
9/19/2016	<0.0002		<0.0002				
11/1/2016			<0.0002		<0.0002	<0.0002	
11/3/2016	<0.0002						
11/4/2016		<0.0002					
12/15/2016		<0.0002					
1/11/2017					<0.0002	<0.0002	
1/13/2017	<0.0002						
1/16/2017		<0.0002	<0.0002				
2/21/2017			<0.0002				
3/1/2017						<0.0002	
3/2/2017					<0.0002		
3/3/2017		<0.0002					
3/6/2017	<0.0002						
4/26/2017	<0.0002		<0.0002		<0.0002	<0.0002	
4/28/2017		<0.0002					
5/26/2017		<0.0002					
6/28/2017		<0.0002			<0.0002	<0.0002	
6/29/2017	<0.0002						
6/30/2017			<0.0002				
10/11/2017				<0.0002			
10/12/2017							<0.0002
11/20/2017				7E-05 (J)			8E-05 (J)
1/10/2018							<0.0002
1/11/2018				<0.0002			
2/19/2018							<0.0002
2/20/2018				<0.0002			
3/27/2018			<0.0002				
3/28/2018		<0.0002			<0.0002	<0.0002	
3/29/2018	<0.0002						
4/3/2018				<0.0002			<0.0002
6/28/2018				<0.0002			3.6E-05 (J)
8/7/2018				<0.0002			<0.0002
9/24/2018				<0.0002			<0.0002
9/25/2018	<0.0002						
2/26/2019			6.8E-05 (J)				
2/27/2019		<0.0002			6.2E-05 (J)	6.1E-05 (J)	
3/5/2019	<0.0002						
3/29/2019		<0.0002					
4/1/2019			8.2E-05 (J)		9.6E-05 (J)	8.4E-05 (J)	
8/21/2019				<0.0002			<0.0002
9/24/2019		<0.0002					
9/25/2019			<0.0002		<0.0002	<0.0002	
2/11/2020		<0.0002				<0.0002	
2/12/2020	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
2/9/2021	<0.0002						
2/10/2021		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
2/11/2021			<0.0002				
3/4/2021	<0.0002			<0.0002			<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.0002	<0.0002	<0.0002
7/26/2016		<0.0002	<0.0002	<0.0002
8/30/2016	<0.0002			
9/14/2016		<0.0002	<0.0002	<0.0002
11/2/2016		<0.0002	<0.0002	
11/4/2016				<0.0002
11/14/2016	<0.0002			
1/12/2017			<0.0002	<0.0002
1/13/2017		<0.0002		
2/24/2017	<0.0002			
3/6/2017		<0.0002		
3/7/2017			<0.0002	<0.0002
5/1/2017		<0.0002	<0.0002	
5/2/2017				<0.0002
5/8/2017	<0.0002			
6/27/2017			<0.0002	<0.0002
6/29/2017		<0.0002		
7/11/2017	<0.0002			
10/10/2017	<0.0002			
3/29/2018		<0.0002	<0.0002	<0.0002
4/2/2018	<0.0002			
9/19/2018	5.3E-05 (J)			
9/26/2018		<0.0002	<0.0002	<0.0002
3/4/2019		<0.0002	<0.0002	<0.0002
8/20/2019	<0.0002			
2/12/2020		<0.0002	<0.0002	<0.0002
8/27/2020	<0.0002			
2/8/2021			<0.0002	<0.0002
2/9/2021		<0.0002		
3/2/2021			<0.0002	<0.0002
3/3/2021		<0.0002		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	<0.01	<0.01	<0.01	<0.01			
9/1/2016					<0.01	<0.01	<0.01
11/28/2016	<0.01		<0.01				
11/29/2016		<0.01					<0.01
11/30/2016				<0.01	<0.01		
12/1/2016						<0.01	
2/22/2017	<0.01		<0.01				
2/23/2017		<0.01		<0.01			<0.01
2/24/2017					<0.01	<0.01	
5/8/2017	<0.01						
5/9/2017		<0.01		<0.01			
5/10/2017			<0.01		<0.01	<0.01	<0.01
7/17/2017	<0.01					<0.01	
7/18/2017		<0.01	<0.01	<0.01	<0.01		<0.01
10/16/2017	<0.01					<0.01	
10/17/2017		<0.01	<0.01		<0.01		
10/18/2017				<0.01			<0.01
2/19/2018	<0.01						<0.01
2/20/2018			<0.01		<0.01		
2/21/2018		<0.01		<0.01		<0.01	
8/6/2018	<0.01						<0.01
8/7/2018		<0.01		<0.01		<0.01	
8/8/2018			<0.01		<0.01		
8/19/2019	<0.01				<0.01		
8/20/2019		<0.01	<0.01				<0.01
8/21/2019				<0.01		<0.01	
8/26/2020	<0.01						
8/27/2020		<0.01				<0.01	<0.01
8/28/2020			<0.01	<0.01	<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					0.014 (J)	0.012 (J)	
6/2/2016	<0.01						
6/6/2016			<0.01	<0.01			
6/7/2016		<0.01					<0.01
7/25/2016						0.0098 (J)	
7/26/2016	<0.01				0.0132		
7/27/2016		<0.01	<0.01	<0.01			<0.01
9/13/2016					0.0127	0.01 (J)	
9/15/2016	<0.01						
9/16/2016		<0.01		<0.01			
9/19/2016			<0.01				<0.01
11/1/2016					0.0092 (J)		
11/2/2016	<0.01						<0.01
11/3/2016		<0.01	<0.01	<0.01			
11/4/2016						0.01	
1/10/2017	<0.01						
1/11/2017		<0.01	<0.01	<0.01	0.0093 (J)		
1/13/2017							<0.01
1/16/2017						0.0086 (J)	
3/1/2017			<0.01	<0.01			
3/2/2017		<0.01			0.0099 (J)	0.01	
3/6/2017							<0.01
3/8/2017	<0.01						
4/26/2017	<0.01		<0.01	<0.01			<0.01
4/27/2017					0.0103	0.0101	
5/2/2017		<0.01					
6/27/2017					0.0097 (J)	0.0093 (J)	
6/28/2017			<0.01	<0.01			
6/29/2017		<0.01					<0.01
6/30/2017	<0.01						
3/27/2018	<0.01					0.0074 (J)	
3/28/2018		<0.01	<0.01	<0.01			
3/29/2018					0.0076 (J)		<0.01
6/5/2018					0.0092 (J)		
6/6/2018						0.0073 (J)	
6/8/2018	<0.01						
10/1/2018	<0.01				0.0085 (J)	0.0076 (J)	
2/26/2019	<0.01						
2/27/2019					0.0087 (J)	0.0078 (J)	
3/5/2019		<0.01		<0.01			<0.01
3/6/2019			<0.01				
3/28/2019					0.0092 (J)	0.0082 (J)	
3/29/2019	<0.01						
9/24/2019					0.0072 (J)	0.0074 (J)	
9/25/2019	<0.01						
2/10/2020					0.0087 (J)	0.0062 (J)	
2/11/2020		<0.01	<0.01	<0.01			
2/12/2020	<0.01						<0.01
3/18/2020	<0.01					0.0056 (J)	
3/19/2020					0.0088 (J)		
3/24/2020		<0.01	<0.01	<0.01			<0.01
9/23/2020		<0.01	<0.01	<0.01	0.008 (J)	0.0059 (J)	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/24/2020							<0.01
9/25/2020	<0.01						
2/9/2021			<0.01	<0.01			<0.01
2/10/2021	<0.01						
2/12/2021					0.008 (J)	0.0056 (J)	
3/2/2021	<0.01						
3/3/2021		<0.01	<0.01	<0.01	0.0088 (J)	0.0049 (J)	<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						0.0055 (J)	
6/2/2016			<0.01		0.0093 (J)		
6/7/2016	<0.01						
7/25/2016			<0.01			0.0037 (J)	
7/26/2016					0.0113		
7/28/2016	<0.01						
9/14/2016		0.0039 (J)				0.0034 (J)	
9/15/2016					0.0112		
9/19/2016	<0.01		<0.01				
11/1/2016			<0.01		0.0099 (J)	0.0025 (J)	
11/3/2016	<0.01						
11/4/2016		0.0077 (J)					
12/15/2016		0.0066 (J)					
1/11/2017					0.0093 (J)	0.0033 (J)	
1/13/2017	<0.01						
1/16/2017		0.0056 (J)	<0.01				
2/21/2017			<0.01				
3/1/2017						0.0044 (J)	
3/2/2017					0.0103		
3/3/2017		0.0049 (J)					
3/6/2017	0.0007 (J)						
4/26/2017	0.0008 (J)		<0.01		0.01	0.0075 (J)	
4/28/2017		0.004 (J)					
5/26/2017		0.0029 (J)					
6/28/2017		0.0036 (J)			0.0102	0.008 (J)	
6/29/2017	<0.01						
6/30/2017			<0.01				
10/11/2017				0.0094 (J)			
10/12/2017							<0.01
11/20/2017				0.0081 (J)			<0.01
1/10/2018							<0.01
1/11/2018				0.0074 (J)			
2/19/2018							<0.01
2/20/2018				<0.01			
3/27/2018			<0.01				
3/28/2018		0.0038 (J)			0.011	0.0025 (J)	
3/29/2018	<0.01						
4/3/2018				0.006 (J)			<0.01
6/7/2018		0.004 (J)			0.011		
6/8/2018						0.0041 (J)	
6/11/2018			<0.01				
6/28/2018				0.005 (J)			<0.01
8/7/2018				0.0045 (J)			<0.01
9/24/2018				0.0035 (J)			<0.01
10/1/2018		0.0042 (J)			0.012	0.0037 (J)	
10/2/2018			<0.01				
2/26/2019			<0.01				
2/27/2019		0.0041 (J)			0.011	0.0027 (J)	
3/5/2019	<0.01						
3/29/2019		0.0041 (J)					
4/1/2019			<0.01		0.012	0.0021 (J)	
8/21/2019				0.0021 (J)			<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019		0.0054 (J)					
9/25/2019			<0.01		0.012	0.0087 (J)	
10/9/2019				0.0018 (J)			<0.01
2/11/2020		0.0057 (J)				0.003 (J)	
2/12/2020	<0.01		<0.01	0.0025 (J)	0.013		<0.01
3/19/2020		0.0046 (J)	<0.01		0.013	0.0043 (J)	
3/24/2020	<0.01						<0.01
3/25/2020				0.002 (J)			
9/23/2020		0.0071 (J)			0.012	0.01	
9/24/2020	<0.01		<0.01	0.0016 (J)			<0.01
2/9/2021	<0.01						
2/10/2021		0.0041 (J)		0.0013 (J)	0.014	0.0038 (J)	<0.01
2/11/2021			<0.01				
3/1/2021			<0.01				
3/3/2021		0.0074 (J)			0.013	0.0036 (J)	
3/4/2021	<0.01			0.0014 (J)			<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.01	0.0035 (J)	<0.01
7/26/2016		<0.01	0.0042 (J)	<0.01
8/30/2016	<0.01			
9/14/2016		<0.01	0.0041 (J)	<0.01
11/2/2016		<0.01	0.0039 (J)	
11/4/2016				<0.01
11/14/2016	<0.01			
1/12/2017			0.0041 (J)	<0.01
1/13/2017		<0.01		
2/24/2017	<0.01			
3/6/2017		<0.01		
3/7/2017			0.0047 (J)	<0.01
5/1/2017		<0.01	0.0045 (J)	
5/2/2017				<0.01
5/8/2017	<0.01			
6/27/2017			0.004 (J)	<0.01
6/29/2017		<0.01		
7/11/2017	<0.01			
10/10/2017	<0.01			
3/29/2018		<0.01	<0.01	<0.01
4/2/2018	<0.01			
9/19/2018	<0.01			
3/4/2019		<0.01	<0.01	<0.01
8/20/2019	<0.01			
10/8/2019	<0.01			
2/12/2020		<0.01	0.0011 (J)	<0.01
3/17/2020	<0.01			
3/24/2020			0.0011 (J)	<0.01
3/25/2020		<0.01		
8/27/2020	<0.01			
9/22/2020	<0.01	<0.01	0.00099 (J)	<0.01
2/8/2021			0.0011 (J)	<0.01
2/9/2021		<0.01		
3/1/2021	<0.01			
3/2/2021			<0.01	<0.01
3/3/2021		<0.01		

Time Series

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.005						
9/20/1999	<0.005						
9/12/2001	<0.005						
9/3/2002	<0.005						
7/29/2003	0.0061						
12/5/2003	<0.005						
9/22/2004	<0.005						
5/1/2007		0.0061					
9/11/2007		0.021					
3/20/2008		<0.005					
8/27/2008		<0.005					
3/3/2009		0.005					
11/18/2009		0.0052					
3/3/2010		0.011					
9/8/2010		0.012					
11/22/2010				0.0096		<0.005	
1/4/2011				0.0084		<0.005	
2/17/2011				0.0088		<0.005	
3/10/2011		0.0032					
3/11/2011				0.0058		<0.005	
3/28/2011				0.0058		<0.005	
9/7/2011				0.005	0.0054	<0.005	<0.005
9/8/2011		0.0046	0.009				
3/4/2012						<0.005	
3/5/2012		0.0053	0.0035		<0.005		<0.005
3/6/2012				<0.005			
9/5/2012			0.0027		<0.005		<0.005
9/10/2012		0.0074				<0.005	
9/11/2012				<0.005			
2/5/2013			0.0026				<0.005
2/6/2013		0.0077		<0.005	<0.005	<0.005	
8/12/2013		0.016					
8/13/2013			<0.005	0.003	0.0032		
8/14/2013						<0.005	0.0032
2/4/2014			<0.005	0.0026		0.0033	
2/5/2014		0.019			0.0039		0.0032
8/4/2014					0.0024 (J)	0.0015 (J)	0.0059
8/5/2014		0.0057	0.0013 (J)	0.0015 (J)			
2/2/2015			0.0023 (J)	<0.005		<0.005	
2/3/2015					<0.005		0.0013 (J)
2/4/2015		0.0055					
8/3/2015		0.0055			<0.005 (D)	<0.005 (D)	0.0039 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		0.0039	<0.005		<0.005	<0.005	0.0036
2/17/2016				<0.005			
2/22/2017		0.0051 (J)		0.0009 (J)			
2/23/2017			0.0026 (J)		<0.005		
2/24/2017						0.0021 (J)	0.0019 (J)
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			0.001 (J)		<0.005		0.0013 (J)
8/6/2018		0.003 (J)					

Time Series

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
8/7/2018			<0.005		<0.005		0.0019 (J)
8/8/2018				<0.005		0.0012 (J)	
2/25/2019		0.0026 (J)					
2/26/2019			<0.005	0.0068 (J)	<0.005	<0.005	0.0023 (J)
6/12/2019		0.0038 (J)		0.00043 (J)		0.00082 (J)	
6/13/2019			0.00072 (J)		<0.005		0.0019 (J)
10/8/2019		0.0051 (J)					
10/9/2019			0.0015 (J)	0.00058 (J)			0.0019 (J)
10/10/2019					<0.005	0.00084 (J)	
3/17/2020		0.0066	0.00087 (J)		0.00056 (J)		
3/18/2020				0.00063 (J)		0.0026 (J)	0.002 (J)
9/22/2020		0.027	0.0021 (J)	<0.005	<0.005	0.00077 (J)	
9/23/2020							0.0012 (J)
3/1/2021			0.0024 (J)	<0.005		0.0021 (J)	
3/2/2021		0.034			<0.005		0.0014 (J)

Time Series

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R
9/9/2009	<0.005
11/18/2009	<0.005
1/5/2010	<0.005
3/3/2010	<0.005
9/7/2010	<0.005
3/10/2011	<0.005
9/8/2011	<0.005
3/5/2012	<0.005
9/5/2012	<0.005
2/5/2013	<0.005
8/13/2013	<0.005
2/4/2014	<0.005
8/5/2014	<0.005
2/3/2015	<0.005
8/4/2015	<0.005
2/16/2016	<0.005
2/23/2017	0.0015 (J)
2/19/2018	<0.005
8/6/2018	0.0026 (J)
2/25/2019	0.0023 (J)
6/13/2019	0.0037 (J)
10/8/2019	0.0021 (J)
3/17/2020	0.0011 (J)
9/23/2020	0.0016 (J)
3/3/2021	0.0016 (J)

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/27/2008	6.53						
3/3/2009	6.35						
11/18/2009	6.47						5.82
1/5/2010							5.8
3/3/2010	6.53						6.15
3/10/2011	5.83						6.05
3/11/2011			5.52		6.16		
9/7/2011			4.35	4.31	5.07	5.64	
9/8/2011	5.69	4.49					5.31
3/5/2012	6.27						6.23
3/6/2012			6.37				
9/5/2012							5.83
9/10/2012	6.23						
9/11/2012			5.69				
2/5/2013							6.79
2/6/2013	7.56		6.8				
8/12/2013	6.68						
8/13/2013			5.51				6.48
2/4/2014			5.74				6.14
2/5/2014	6.32						
8/3/2015	6.13 (D)						
2/16/2016	5.64						5.2
2/17/2016			5.59				
11/28/2016	6.23		5.47				
11/29/2016		5.37					5.92
11/30/2016				5.13	5.61		
12/1/2016						5.24	
2/22/2017	6.21		5.48				
2/23/2017		5.5		5.28			5.97
2/24/2017					5.47	5.37	
5/8/2017	6.12						
5/9/2017		5.41		5.12			
5/10/2017			5.6		5.68	5.2	5.82
7/17/2017	6.03					5.21	
7/18/2017		5.5	5.49	5.21	5.59		5.76
10/16/2017	6.12					5.16	
10/17/2017		5.42	5.45		5.52		
10/18/2017				5.17			5.76
2/19/2018	6.13						5.86
2/20/2018			5.52		5.51		
2/21/2018		5.39		5.15		5.18	
8/6/2018	6.01						5.84
8/7/2018		5.14		4.95		5.06	
8/8/2018			5.15		5.33		
2/25/2019	6.51						5.91
2/26/2019		5.52	5.4	5.22	5.42	5.08	
6/12/2019	6.3		5.38		5.54		
6/13/2019		5.55		5.08		5.01	5.84
8/19/2019	6.23				5.56		
8/20/2019		5.33	5.33				5.85
8/21/2019				5.32		4.88	
10/8/2019	6.28						5.91

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
10/9/2019		5.37	5.39			4.89	
10/10/2019				5.4	5.55		
1/21/2020						4.99	
3/17/2020	6.14	5.7		5.03			5.97
3/18/2020			5.38		5.58	4.88	
5/6/2020	6.24	6.8					5.99
5/7/2020			5.43	5.05	5.52	5.2	
8/26/2020	5.67						
8/27/2020		5.39				5.17	5.77
8/28/2020			5.45	5.2	5.38		
9/22/2020	5.78	5.25	5.34	5.11	5.43		
9/23/2020						5.04	5.81
3/1/2021		5.25	5.17		5.62		
3/2/2021	5.42 (D)			4.82		4.63	
3/3/2021							5.78

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					7.46	6.33	
6/2/2016	5.46						
6/6/2016			6.17	5.71			
6/7/2016		5.62					5.77
7/25/2016						6.21	
7/26/2016	5.45				7.43		
7/27/2016		5.59	6.14	5.46			5.79
9/13/2016					7.44	6.16	
9/15/2016	5.45						
9/16/2016		5.58					
9/19/2016			6.04	5.59			5.73
11/1/2016					7.24		
11/2/2016	5.41						5.67
11/3/2016		5.59	5.97	5.39			
11/4/2016						6.29	
1/10/2017	5.37						
1/11/2017		5.59	6.05	5.48	7.3		
1/13/2017							5.79
1/16/2017						6.29	
3/1/2017			5.94	5.41			
3/2/2017		5.54			7.23	6.28	
3/6/2017							5.63
3/8/2017	5.41						
4/26/2017	5.02		5.99	5.4			5.66
4/27/2017					6.99	6.09	
5/2/2017		5.47					
6/27/2017					6.87	6.21	
6/28/2017			6	5.36			
6/29/2017		5.56					5.85
6/30/2017	5.39						
10/3/2017					6.81	5.98	
10/4/2017		5.57		5.32			5.83
10/5/2017	5.49		6.11				
3/27/2018	5.47					6.25	
3/28/2018		5.59	6.1	5.34			
3/29/2018					7.38		5.93
6/5/2018					7.16		
6/6/2018						6.17	5.86
6/7/2018			5.98				
6/8/2018	5.45						
6/11/2018		5.58		5.28			
9/25/2018		5.59	5.81	4.86			5.84
10/1/2018	5.39				6.8	5.9	
2/26/2019	5.46						
2/27/2019					6.84	5.8	
3/5/2019		5.48		5.26			6.07
3/6/2019			5.99				
3/28/2019					6.99	6.15	
3/29/2019	5.34						
4/2/2019		5.74					
4/3/2019			6.29	5.47			5.71
9/24/2019					7.07	6.23	

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2019	5.19	5.49					5.86
9/26/2019			6.04	5.2			
2/10/2020					7.2	6.1	
2/11/2020		5.58	6.07	5.3			
2/12/2020	5.48						6
3/18/2020	5.38					6.19	
3/19/2020					7.03		
3/24/2020		5.57	5.98	5.33			5.86
9/23/2020		5.58	6.01	5.29	7.15	6.01	
9/24/2020							5.8
9/25/2020	5.44						
2/9/2021			6.12	5.43			5.86
2/10/2021	5.35						
2/12/2021					7.14	6.21	
3/2/2021	5.49						
3/3/2021		5.52	5.89	5.31	7.2	5.38	5.89

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						7.72	
6/2/2016			5.75		7.84		
6/7/2016	6.1						
7/25/2016			5.82			7.74	
7/26/2016					7.88		
7/28/2016	6.12						
9/13/2016		7.41					
9/14/2016						7.65	
9/15/2016					7.74		
9/19/2016	6.12		5.78 (D)				
11/1/2016			5.62		7.75	7.7	
11/3/2016	6.07						
11/4/2016		7.12					
12/15/2016		7.24					
1/11/2017					7.66	7.53	
1/13/2017	6.41						
1/16/2017		7.24	5.72				
2/21/2017			5.67				
3/1/2017						7.42	
3/2/2017					7.68		
3/3/2017		7.22					
3/6/2017	6.34						
4/26/2017	6.32		5.56		7.45	7.4	
4/28/2017		7.21					
5/26/2017		7.13					
6/28/2017		7.06			7.65	7.5	
6/29/2017	6.47						
6/30/2017			5.72				
10/3/2017	6.56	6.99					
10/4/2017			5.87		7.49	7.45	
10/11/2017				6.4			
10/12/2017							5.43
11/20/2017				6.33			5.1
1/10/2018							4.97
1/11/2018				6.29			
2/19/2018							5.6
2/20/2018				7.22			
3/27/2018			5.83				
3/28/2018		7.3			7.91	7.74	
3/29/2018	6.75						
4/3/2018				6.87			5.84
6/5/2018	6.09						
6/7/2018		7.29			7.69		
6/8/2018						7.64	
6/11/2018			5.69				
6/28/2018				6.18			5.24
8/7/2018				6.08			5.18
9/24/2018				5.81			5.14
9/25/2018	6.67						
10/1/2018		7.07			7.39	7.47	
10/2/2018			5.39				
2/26/2019			5.77				

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
2/27/2019		7.27			7.55	7.54	
3/5/2019	7.22						
3/26/2019							5.3
3/27/2019				5.84			
3/29/2019		7.06					
4/1/2019			5.62		7.87	7.74	
4/2/2019	6.94						
8/21/2019				5.96			5.26
9/24/2019	6.87	7.01					
9/25/2019			5.69		7.64	7.47	
10/9/2019				5.81			5.22
2/11/2020		7.38				7.09	
2/12/2020	7.13		5.8	5.97	7.83		5.3
3/19/2020		7.22	6		7.65	7.31	
3/24/2020	6.35						5.29
3/25/2020				5.78			
9/23/2020		7.22			7.57	7.37	
9/24/2020	6.7		5.67	5.7			5.43
2/9/2021	6.95						
2/10/2021		7.29		5.8	7.81	7.58	5.19
2/11/2021			5.73				
3/1/2021			5.78				
3/3/2021		7.92			8.39	8.23	
3/4/2021	6.8			5.54			5.23

Time Series

Constituent: pH (S.U.) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		6.36	7.67	5.75
7/26/2016		6.22	7.66	5.72
8/30/2016	5.75			
9/14/2016		6.23	7.6	5.74
11/2/2016		6.08	7.35	
11/4/2016				5.61
11/14/2016	5.59			
1/12/2017			7.49	5.71
1/13/2017		6.19		
2/24/2017	5.49			
3/6/2017		6.2		
3/7/2017			7.43	5.66
5/1/2017		6.21	7.22	
5/2/2017				5.65
5/8/2017	5.58			
6/27/2017			7.32	5.7
6/29/2017		6.21		
7/11/2017	5.58			
10/3/2017			7.48	5.79
10/5/2017		6.16		
10/10/2017	5.49			
3/29/2018		6.09	7.02	5.63
4/2/2018	6.3 (O)			
6/6/2018			7.43	
6/7/2018		6.12		5.63
9/19/2018	5.48			
9/26/2018		5.84	7.13	5.63
3/4/2019		6.18	7.46	5.75
3/27/2019	5.83			
4/3/2019		6.43	7.11	5.63
8/20/2019	5.58			
9/24/2019			6.93	5.6
9/25/2019		6.2		
10/8/2019	5.59			
2/12/2020		6.15	7.52	5.83
3/17/2020	5.57			
3/24/2020			7.34	5.81
3/25/2020		6.26		
8/27/2020	4.88			
9/22/2020	5.46	5.8	7.19	5.99
2/8/2021				5.67
2/9/2021		6.06		
3/1/2021	5.48			
3/2/2021			7.15	5.63
3/3/2021		6.21		

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	<0.005						
9/20/1999	<0.005						
9/12/2001	<0.005						
9/3/2002	<0.005						
7/29/2003	0.015						
12/5/2003	<0.005						
9/22/2004	<0.005						
5/1/2007		<0.005					
9/11/2007		<0.005					
3/20/2008		<0.005					
8/27/2008		<0.005					
3/3/2009		<0.005					
11/18/2009		<0.005					
3/3/2010		<0.005					
9/8/2010		<0.005					
11/22/2010				<0.005		<0.005	
1/4/2011				<0.005		<0.005	
2/17/2011				<0.005		<0.005	
3/10/2011		<0.005					
3/11/2011				<0.005		<0.005	
3/28/2011				<0.005		<0.005	
9/7/2011				<0.005	<0.005	<0.005	<0.005
9/8/2011		<0.005	<0.005				
3/4/2012						<0.005	
3/5/2012		<0.005	<0.005		<0.005		0.014
3/6/2012				<0.005			
9/5/2012			<0.005		<0.005		0.012
9/10/2012		<0.005				0.011	
9/11/2012				<0.005			
2/5/2013			<0.005				0.011
2/6/2013		<0.005		<0.005	<0.005	0.011	
8/12/2013		<0.005					
8/13/2013			<0.005	<0.005	0.0057		
8/14/2013						0.013	0.025
2/4/2014			<0.005	<0.005		0.017	
2/5/2014		<0.005			<0.005		0.02
8/4/2014					<0.005	0.0085	0.032
8/5/2014		<0.005	<0.005	<0.005			
2/2/2015			<0.005	<0.005		0.0089	
2/3/2015					<0.005		0.011
2/4/2015		<0.005					
8/3/2015		<0.005			<0.005 (D)	0.0067 (D)	0.046 (D)
8/4/2015			<0.005 (D)	<0.005			
2/16/2016		<0.005	<0.005		<0.005	0.0047 (J)	0.022
2/17/2016				<0.005			
8/31/2016		<0.005	0.0039 (J)	0.0029 (J)	0.0038 (J)		
9/1/2016						0.0132	0.0212
11/28/2016		<0.005		0.0019 (J)			
11/29/2016			0.0033 (J)				
11/30/2016					0.0054 (J)	0.0046 (J)	
12/1/2016							0.0234
2/22/2017		<0.005		0.0015 (J)			

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
2/23/2017			0.0097 (J)		0.002 (J)		
2/24/2017						0.0108	0.0154
5/8/2017		<0.005					
5/9/2017			0.0066 (J)		<0.005		
5/10/2017				0.0016 (J)		0.0054 (J)	0.0152
7/17/2017		<0.005					0.0136
7/18/2017			0.0021 (J)	0.0024 (J)	0.0027 (J)	0.0047 (J)	
10/16/2017		<0.005					0.0242
10/17/2017			0.003 (J)	0.0028 (J)		0.004 (J)	
10/18/2017					0.0047 (J)		
2/19/2018		<0.005					
2/20/2018				<0.005		<0.005	
2/21/2018			<0.005		<0.005		0.0127
8/6/2018		<0.005					
8/7/2018			<0.005		0.0016 (J)		0.021
8/8/2018				0.0025 (J)		0.0041 (J)	
2/25/2019		<0.005					
2/26/2019			0.0014 (J)	0.003 (J)	0.002 (J)	0.0027 (J)	0.024
6/12/2019		<0.005		0.0034 (J)		0.0029 (J)	
6/13/2019			<0.005		0.0089 (J)		0.027
8/19/2019		<0.005				0.003 (J)	
8/20/2019			0.0022 (J)	0.0032 (J)			
8/21/2019					0.004 (J)		0.037
10/8/2019		<0.005					
10/9/2019			0.0023 (J)	0.0026 (J)			0.034
10/10/2019					0.0021 (J)	0.0024 (J)	
3/17/2020		<0.005	0.0017 (J)		0.0096 (J)		
3/18/2020				0.0032 (J)		0.0046 (J)	0.028
8/26/2020		<0.005					
8/27/2020			0.011				0.021
8/28/2020				0.0037 (J)	0.0045 (J)	0.0031 (J)	
9/22/2020		<0.005	0.012	0.0056 (J)	0.0091 (J)	0.0032 (J)	
9/23/2020							0.026
3/1/2021			0.011	0.0043 (J)		0.0041 (J)	
3/2/2021		<0.005			0.012		0.019

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
9/9/2009	<0.005						
11/18/2009	<0.005						
1/5/2010	<0.005						
3/3/2010	<0.005						
9/7/2010	<0.005						
3/10/2011	<0.005						
9/8/2011	<0.005						
3/5/2012	<0.005						
9/5/2012	<0.005						
2/5/2013	<0.005						
8/13/2013	<0.005						
2/4/2014	<0.005						
8/5/2014	<0.005						
2/3/2015	<0.005						
8/4/2015	<0.005						
2/16/2016	<0.005						
6/1/2016						<0.005	<0.005
6/2/2016		0.0011 (J)					
6/6/2016				<0.005	<0.005		
6/7/2016			0.001 (J)				
7/25/2016							<0.005
7/26/2016		0.0016 (J)				<0.005	
7/27/2016			0.0012 (J)	<0.005	<0.005		
9/1/2016	0.002 (J)						
9/13/2016						<0.005	<0.005
9/15/2016		0.0014 (J)					
9/16/2016			0.0015 (J)		<0.005		
9/19/2016				<0.005			
11/1/2016						<0.005	
11/2/2016		<0.005					
11/3/2016			0.0015 (J)	<0.005	<0.005		
11/4/2016							<0.005
11/29/2016	0.0017 (J)						
1/10/2017		0.0012 (J)					
1/11/2017			0.0014 (J)	<0.005	<0.005	<0.005	
1/16/2017							<0.005
2/23/2017	0.0018 (J)						
3/1/2017				<0.005	<0.005		
3/2/2017			0.0017 (J)			<0.005	<0.005
3/8/2017		<0.005					
4/26/2017		<0.005		<0.005	<0.005		
4/27/2017						<0.005	<0.005
5/2/2017			<0.005				
5/10/2017	0.0023 (J)						
6/27/2017						<0.005	<0.005
6/28/2017				<0.005	<0.005		
6/29/2017			<0.005				
6/30/2017		<0.005					
7/18/2017	0.0046 (J)						
10/18/2017	0.0037 (J)						
2/19/2018	<0.005						
3/27/2018		<0.005					<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)
3/28/2018			<0.005	<0.005	<0.005		
3/29/2018						<0.005	
6/7/2018				<0.005			
6/11/2018			<0.005		<0.005		
8/6/2018	0.0047 (J)						
9/25/2018			<0.005	<0.005	<0.005		
2/25/2019	0.0051 (J)						
2/26/2019		<0.005					
2/27/2019						<0.005	<0.005
3/5/2019			<0.005		<0.005		
3/6/2019				<0.005			
3/28/2019						<0.005	<0.005
3/29/2019		0.0019 (J)					
4/2/2019			<0.005				
4/3/2019				<0.005	<0.005		
6/13/2019	0.0048 (J)						
8/20/2019	0.0039 (J)						
9/24/2019						<0.005	<0.005
9/25/2019		<0.005	<0.005				
9/26/2019				<0.005	<0.005		
10/8/2019	0.0031 (J)						
2/10/2020						<0.005	<0.005
2/11/2020			<0.005	<0.005	<0.005		
2/12/2020		<0.005					
3/17/2020	0.0026 (J)						
3/18/2020		<0.005					<0.005
3/19/2020						<0.005	
3/24/2020			<0.005	<0.005	<0.005		
8/27/2020	0.0027 (J)						
9/23/2020	0.0031 (J)		<0.005	<0.005	<0.005	<0.005	<0.005
9/25/2020		<0.005					
2/9/2021				<0.005	<0.005		
2/10/2021		<0.005					
2/12/2021						<0.005	<0.005
3/2/2021		<0.005					
3/3/2021	0.002 (J)		<0.005	<0.005	<0.005	<0.005	<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
6/1/2016							<0.005
6/2/2016				<0.005		<0.005	
6/7/2016	<0.005	0.00048 (J)					
7/25/2016				<0.005			<0.005
7/26/2016						<0.005	
7/27/2016	<0.005						
7/28/2016		<0.005					
9/14/2016			<0.005				<0.005
9/15/2016						<0.005	
9/19/2016	<0.005	0.0014 (J)		<0.005			
11/1/2016				<0.005		<0.005	<0.005
11/2/2016	<0.005						
11/3/2016		<0.005					
11/4/2016			<0.005				
12/15/2016			<0.005				
1/11/2017						<0.005	<0.005
1/13/2017	<0.005	<0.005					
1/16/2017			<0.005	<0.005			
2/21/2017				<0.005			
3/1/2017							<0.005
3/2/2017						<0.005	
3/3/2017			<0.005				
3/6/2017	<0.005	<0.005					
4/26/2017	<0.005	<0.005		<0.005		<0.005	<0.005
4/28/2017			<0.005				
5/26/2017			<0.005				
6/28/2017			<0.005			<0.005	<0.005
6/29/2017	<0.005	<0.005					
6/30/2017				<0.005			
10/11/2017					<0.005		
11/20/2017					<0.005		
1/11/2018					<0.005		
2/20/2018					<0.005		
3/27/2018				<0.005			
3/28/2018			<0.005			<0.005	<0.005
3/29/2018	<0.005	<0.005					
4/3/2018					<0.005		
6/5/2018		<0.005					
6/6/2018	<0.005						
6/28/2018					<0.005		
8/7/2018					<0.005		
9/24/2018					0.0015 (J)		
9/25/2018	<0.005	<0.005					
2/26/2019				<0.005			
2/27/2019			<0.005			<0.005	<0.005
3/5/2019	<0.005	<0.005					
3/29/2019			<0.005				
4/1/2019				<0.005		<0.005	<0.005
4/2/2019		<0.005					
4/3/2019	<0.005						
8/21/2019					<0.005		
9/24/2019		<0.005	<0.005				

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)
9/25/2019	<0.005			<0.005		<0.005	<0.005
10/9/2019					<0.005		
2/11/2020			<0.005				<0.005
2/12/2020	<0.005	<0.005		<0.005	<0.005	<0.005	
3/19/2020			<0.005	<0.005		<0.005	<0.005
3/24/2020	<0.005	<0.005					
3/25/2020					<0.005		
9/23/2020			<0.005			<0.005	<0.005
9/24/2020	<0.005	<0.005		<0.005	<0.005		
2/9/2021	<0.005	<0.005					
2/10/2021			<0.005		<0.005	<0.005	<0.005
2/11/2021				<0.005			
3/1/2021				<0.005			
3/3/2021	<0.005		<0.005			<0.005	<0.005
3/4/2021		<0.005			<0.005		

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-40 (bg)	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016			<0.005	<0.005	<0.005
7/26/2016			0.0009 (J)	<0.005	0.0009 (J)
8/30/2016		0.0017 (J)			
9/14/2016			<0.005	<0.005	<0.005
11/2/2016			<0.005	<0.005	
11/4/2016					<0.005
11/14/2016		<0.005			
1/12/2017				<0.005	<0.005
1/13/2017			<0.005		
2/24/2017		0.0011 (J)			
3/6/2017			<0.005		
3/7/2017				<0.005	<0.005
5/1/2017			<0.005	<0.005	
5/2/2017					<0.005
5/8/2017		<0.005			
6/27/2017				<0.005	<0.005
6/29/2017			<0.005		
7/11/2017		<0.005			
10/10/2017		<0.005			
10/12/2017	<0.005				
11/20/2017	0.0042 (J)				
1/10/2018	0.0043 (J)				
2/19/2018	<0.005				
3/29/2018			<0.005	<0.005	<0.005
4/2/2018		<0.005			
4/3/2018	<0.005				
6/6/2018				<0.005	
6/7/2018			<0.005		<0.005
6/28/2018	0.0032 (J)				
8/7/2018	0.0031 (J)				
9/19/2018		<0.005			
9/24/2018	0.0026 (J)				
9/26/2018			<0.005	<0.005	<0.005
3/4/2019			<0.005	<0.005	<0.005
4/3/2019			<0.005	<0.005	<0.005
8/20/2019		<0.005			
8/21/2019	0.0024 (J)				
9/24/2019				<0.005	<0.005
9/25/2019			<0.005		
10/9/2019	0.0026 (J)				
2/12/2020	0.002 (J)		<0.005	<0.005	<0.005
3/24/2020	0.002 (J)			<0.005	<0.005
3/25/2020			<0.005		
8/27/2020		<0.005			
9/22/2020			<0.005	<0.005	<0.005
9/24/2020	0.0016 (J)				
2/8/2021				<0.005	<0.005
2/9/2021			<0.005		
2/10/2021	<0.005				
3/2/2021				<0.005	<0.005
3/3/2021			0.0019 (J)		
3/4/2021	<0.005				

Time Series

Constituent: Silver (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.005						
9/11/2007	<0.005						
3/20/2008	<0.005						
8/27/2008	<0.005						
3/3/2009	<0.005						
9/9/2009							<0.005
11/18/2009	<0.005						<0.005
1/5/2010							<0.005
3/3/2010	<0.005						<0.005
9/7/2010							<0.005
9/8/2010	<0.005						
11/22/2010			<0.005		<0.005		
1/4/2011			<0.005		<0.005		
2/17/2011			<0.005		<0.005		
3/10/2011	<0.005						<0.005
3/11/2011			<0.005		<0.005		
3/28/2011			<0.005		<0.005		
9/7/2011			<0.005	<0.005	<0.005	<0.005	
9/8/2011	<0.005	<0.005					<0.005
3/4/2012					<0.005		
3/5/2012	<0.005	<0.005		<0.005		<0.005	<0.005
3/6/2012			<0.005				
9/5/2012		<0.005		<0.005		<0.005	<0.005
9/10/2012	<0.005				<0.005		
9/11/2012			<0.005				
2/5/2013		<0.005				<0.005	<0.005
2/6/2013	<0.005		<0.005	<0.005	<0.005		
8/12/2013	<0.005						
8/13/2013		<0.005	<0.005	<0.005			<0.005
8/14/2013					<0.005	<0.005	
2/4/2014		<0.005	<0.005		<0.005		<0.005
2/5/2014	<0.005			<0.005		<0.005	
8/4/2014				<0.005	<0.005	<0.005	
8/5/2014	<0.005	<0.005	<0.005				<0.005
2/2/2015		<0.005	<0.005		<0.005		
2/3/2015				<0.005		<0.005	<0.005
2/4/2015	<0.005						
8/3/2015	<0.005			<0.005 (D)	<0.005 (D)	<0.005 (D)	
8/4/2015		<0.005 (D)	<0.005				<0.005
2/16/2016	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005
2/17/2016			<0.005				
2/22/2017	<0.005		<0.005				
2/23/2017		<0.005		<0.005			<0.005
2/24/2017					<0.005	<0.005	
2/19/2018	<0.005						<0.005
2/20/2018			<0.005		<0.005		
2/21/2018		<0.005		<0.005		<0.005	
8/6/2018	<0.005						<0.005
8/7/2018		<0.005		<0.005		<0.005	
8/8/2018			<0.005		<0.005		
2/25/2019	<0.005						<0.005
2/26/2019		<0.005	<0.005	<0.005	<0.005	<0.005	

Time Series

Constituent: Silver (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
6/12/2019	<0.005		<0.005		<0.005		
6/13/2019		<0.005		<0.005		<0.005	<0.005
10/8/2019	<0.005						<0.005
10/9/2019		<0.005	<0.005			<0.005	
10/10/2019				<0.005	<0.005		
3/17/2020	<0.005	<0.005		<0.005			<0.005
3/18/2020			<0.005		<0.005	<0.005	
9/22/2020	<0.005	<0.005	<0.005	<0.005	<0.005		
9/23/2020						<0.005	<0.005
3/1/2021		<0.005	<0.005		<0.005		
3/2/2021	<0.005			<0.005		<0.005	
3/3/2021							<0.005

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	29	410	140	87			
9/1/2016					150	990	360
11/28/2016	36		120				
11/29/2016		450					320
11/30/2016				76	50		
12/1/2016						1100	
2/22/2017	43		100				
2/23/2017		390		47			380
2/24/2017					110	850	
5/8/2017	60						
5/9/2017		280		41			
5/10/2017			80		70	1000	660
7/17/2017	63					830	
7/18/2017		200	57	44	50		880
10/16/2017	62					720	
10/17/2017		180	59		58		
10/18/2017				53			760
2/19/2018	64.6						718
2/20/2018			55.9		64.6		
2/21/2018		146		46.7		533	
8/6/2018	42.1						797
8/7/2018		100		38.8		784	
8/8/2018			81.1		79.5		
2/25/2019	42.1						763
2/26/2019		118	129	49.3	55.8	742	
6/12/2019	83.4		180		92.8		
6/13/2019		163		77.1		976	918
10/8/2019	128						664
10/9/2019		318	91.2			1180	
10/10/2019				48	68.7		
3/17/2020	98.6	145		95.2			303
3/18/2020			200		199	960	
9/22/2020	145	478	216	55.1	72.1		
9/23/2020						992	518
3/1/2021		525	244		177		
3/2/2021	156			95.5		906	
3/3/2021							476

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					5	4.2	
6/2/2016	6.6						
6/6/2016			1.2	1.8			
6/7/2016		4.4					<1
7/25/2016						3.7	
7/26/2016	6.1				5.4		
7/27/2016		4.7	1.7	1.9			0.08 (J)
9/13/2016					2.9	5.2	
9/15/2016	6.1						
9/16/2016		4.8		1.7			
9/19/2016			1.8				0.08 (J)
11/1/2016					3.9		
11/2/2016	6.3						0.1 (J)
11/3/2016		5.3	0.69 (J)	1.9			
11/4/2016						5	
1/10/2017	5.9						
1/11/2017		5.2	<1	1.7	3.7		
1/13/2017							<1
1/16/2017						7.9	
3/1/2017			1.8	<1			
3/2/2017		5			4.6	7.4	
3/6/2017							<1
3/8/2017	7						
4/26/2017	7		1.6	1.9			<1
4/27/2017					5.2	7.4	
5/2/2017		5					
6/27/2017					5.9	6.4	
6/28/2017			<1	<1			
6/29/2017		5.2					<1
6/30/2017	6.5						
10/3/2017					6.6	5.9	
10/4/2017		5.3		1.7			<1
10/5/2017	7.9		1.6				
6/5/2018					6.4		
6/6/2018						4.4	0.049 (J)
6/7/2018			0.68 (J)				
6/8/2018	6.4						
6/11/2018		5.2		0.95 (J)			
9/25/2018		6.1	1	1.5			0.13 (J)
10/1/2018	6.8				5.6	4	
3/28/2019					8	4.3	
3/29/2019	7.3						
4/2/2019		5.1					
4/3/2019			0.82 (J)	1.3			0.12 (J)
9/24/2019					5.3	4.3	
9/25/2019	6.6	5.5					<1
9/26/2019			0.64 (J)	1			
3/18/2020	8.1					5.3	
3/19/2020					10		
3/24/2020		5.4	<1	0.99 (J)			<1
9/23/2020		5.1	0.53 (J)	1.1	8.1	3.4	
9/24/2020							<1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	6.1						
3/2/2021	6						
3/3/2021		5.2	<1	1	9	4.4	<1

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						12	
6/2/2016			1.3		5.8		
6/7/2016	5.2						
7/25/2016			1.2			8.4	
7/26/2016					6.7		
7/28/2016	5.1						
9/14/2016		9.4				8.6	
9/15/2016					6		
9/19/2016	4.8		1.2				
11/1/2016			1.3		4.9	8.9	
11/3/2016	5						
11/4/2016		13					
12/15/2016		1.8					
1/11/2017					4.5	8.6	
1/13/2017	4.3						
1/16/2017		11	<1				
2/21/2017			1.4				
3/1/2017						9.3	
3/2/2017					4.4		
3/3/2017		8.8					
3/6/2017	4.5						
4/26/2017	4.9		1.4		5.1	11	
4/28/2017		10					
5/26/2017		12					
6/28/2017		11			5.4	12	
6/29/2017	5.5						
6/30/2017			<1				
10/3/2017	5.8	7.9					
10/4/2017			1.4		6.2	12	
10/11/2017				20			
10/12/2017							17
11/20/2017				24			71
1/10/2018							66
1/11/2018				23			
2/19/2018							57.2
2/20/2018				20.6			
4/3/2018				24.5			49.4
6/5/2018	6.1						
6/7/2018		8.8			6.7		
6/8/2018						9.6	
6/11/2018			1.1				
6/28/2018				22			43.8
8/7/2018				20.7			40.5
9/24/2018				21.2			39.7
9/25/2018	7						
10/1/2018		9.1			7.1	9.1	
10/2/2018			1				
3/26/2019							34.3
3/27/2019				17.7			
3/29/2019		9					
4/1/2019			0.96 (J)		7.2	8.5	
4/2/2019	3.8						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	1	9.1					
9/25/2019			0.81 (J)		7	13.8	
10/9/2019				15			27.9
3/19/2020		12.4	1.6		9	12.9	
3/24/2020	3						25.2
3/25/2020				14.3			
9/23/2020		11.8			6.9	16.8	
9/24/2020	3.6		0.69 (J)	11.7			22.9
3/1/2021			0.88 (J)				
3/3/2021		10.6			7	9.6	
3/4/2021	4.5			12			21.5

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		8	20	1.9
7/26/2016		7.7	20	1.8
8/30/2016	160			
9/14/2016		7.5	19	1.8
11/2/2016		8.2	20	
11/4/2016				2
11/14/2016	150			
1/12/2017			19	1.9
1/13/2017		8.1		
2/24/2017	120			
3/6/2017		8		
3/7/2017			20	2.1
5/1/2017		8.4	20	
5/2/2017				2
5/8/2017	120			
6/27/2017			18	2.1
6/29/2017		9.2		
7/11/2017	110			
10/3/2017			16	2.3
10/5/2017		9.6		
10/10/2017	93			
4/2/2018	88.8			
6/6/2018			8.3	
6/7/2018		8.5		2
9/19/2018	75			
9/26/2018		10.2	7.9	2.3
3/27/2019	65.9			
4/3/2019		8.5	7	2.1
9/24/2019			5.5	2.4
9/25/2019		8.5		
10/8/2019	52.3			
3/17/2020	71.6			
3/24/2020			5.9	2.1
3/25/2020		8.8		
9/22/2020	51.5	8.2	5.5	2.1
3/1/2021	51.6			
3/2/2021			2.6	2.3
3/3/2021		7.8		

Time Series

Constituent: TDS (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/31/2016	209	616	257	216			
9/1/2016					553	1400	578
11/28/2016	102		177				
11/29/2016		594					455
11/30/2016				177 (B)	247 (B)		
12/1/2016						1610 (B)	
2/22/2017	164		240				
2/23/2017		581		105			614
2/24/2017					414	1200	
5/8/2017	145						
5/9/2017		410		77			
5/10/2017			149		251	1360	955
7/17/2017	185					1340	
7/18/2017		322	122	89	179		1270
10/16/2017	218					1080	
10/17/2017		381	214		256		
10/18/2017				166			1150
2/19/2018	173						1070
2/20/2018			131		233		
2/21/2018		285		105		830	
8/6/2018	158						1260
8/7/2018		242		99		1180	
8/8/2018			166		292		
2/25/2019	92						1160
2/26/2019		69	293	109	226	1010	
6/12/2019	226		391		298		
6/13/2019		301		136		1410	1310
10/8/2019	276						1050
10/9/2019		526	372			1680	
10/10/2019				109	247		
3/17/2020	185	306		175			588
3/18/2020			351		703	1520	
9/22/2020	281	675	394	110	217		
9/23/2020						1000	820
3/1/2021		974	516		666		
3/2/2021	296 (D)			167		980	
3/3/2021							942

Time Series

Constituent: TDS (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					120	54	
6/2/2016	46						
6/6/2016			120	58			
6/7/2016		28					38
7/25/2016						48	
7/26/2016	54				94		
7/27/2016		74	94	35			74
9/13/2016					105	67	
9/15/2016	54						
9/16/2016		67		35			
9/19/2016			92				45
11/1/2016					44		
11/2/2016	71						53
11/3/2016		41	104	48			
11/4/2016						60	
1/10/2017	45						
1/11/2017		104	133	95	107		
1/13/2017							46
1/16/2017						65	
3/1/2017			119	79			
3/2/2017		77			98	61	
3/6/2017							164
3/8/2017	178						
4/26/2017	52		162	36			34
4/27/2017					116	31	
5/2/2017		142					
6/27/2017					89	42	
6/28/2017			98	45			
6/29/2017		53					68
6/30/2017	45						
10/3/2017					119	58	
10/4/2017		61		45			54
10/5/2017	40		104				
6/5/2018					127		
6/6/2018						96	79
6/7/2018			68				
6/8/2018	114						
6/11/2018		70		74			
9/25/2018		86	109	63			73
10/1/2018	50				117	60	
3/28/2019					87	87	
3/29/2019	63						
4/2/2019		72					
4/3/2019			89	63			57
9/24/2019					124	54	
9/25/2019	64	81					75
9/26/2019			126	72			
3/18/2020	57					35	
3/19/2020					116		
3/24/2020		71	91	59			76
9/23/2020		99	103	81	108	15	
9/24/2020							69

Time Series

Constituent: TDS (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
9/25/2020	54						
3/2/2021	67						
3/3/2021		57	95	37	99	39	53

Time Series

Constituent: TDS (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						150	
6/2/2016			36		130		
6/7/2016	60						
7/25/2016			50			135	
7/26/2016					141		
7/28/2016	81						
9/14/2016		152				127	
9/15/2016					153		
9/19/2016	68		35				
11/1/2016			<25		92	75	
11/3/2016	61						
11/4/2016		148					
12/15/2016		191					
1/11/2017					159	148	
1/13/2017	76						
1/16/2017		180	47				
2/21/2017			<25				
3/1/2017						182	
3/2/2017					117		
3/3/2017		156					
3/6/2017	167						
4/26/2017	50		55		181	92	
4/28/2017		130					
5/26/2017		223					
6/28/2017		166			169	126	
6/29/2017	94						
6/30/2017			42				
10/3/2017	149	153					
10/4/2017			31		141	147	
10/11/2017				68			
10/12/2017							74
11/20/2017				139			179
1/10/2018							140
1/11/2018				153			
2/19/2018							119
2/20/2018				87			
4/3/2018				85			106
6/5/2018	109						
6/7/2018		146			95		
6/8/2018						158	
6/11/2018			59				
6/28/2018				88			112
8/7/2018				89			103
9/24/2018				82			107
9/25/2018	122						
10/1/2018		155			165	138	
10/2/2018			57				
3/26/2019							90
3/27/2019				75			
3/29/2019		150					
4/1/2019			54		149	19 (J)	
4/2/2019	134						

Time Series

Constituent: TDS (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
9/24/2019	157	146					
9/25/2019			51		157	159	
10/9/2019				119			98
3/19/2020		148	47		146	148	
3/24/2020	117						84
3/25/2020				158			
9/23/2020		161			157	155	
9/24/2020	113		51	170			77
3/1/2021			23				
3/3/2021		138			137	111	
3/4/2021	110			168			57

Time Series

Constituent: TDS (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		96	160	66
7/26/2016		92	177	78
8/30/2016	319			
9/14/2016		102	187	73
11/2/2016		115	181	
11/4/2016				75
11/14/2016	280			
1/12/2017			202	86
1/13/2017		67		
2/24/2017	162			
3/6/2017		159		
3/7/2017			257	108
5/1/2017		107	165	
5/2/2017				103
5/8/2017	194			
6/27/2017			189	73
6/29/2017		79		
7/11/2017	193			
10/3/2017			170	89
10/5/2017		95		
10/10/2017	175			
4/2/2018	192			
6/6/2018			151	
6/7/2018		90		142
9/19/2018	186			
9/26/2018		116	144	86
3/27/2019	170			
4/3/2019		111	142	83
9/24/2019			129	79
9/25/2019		117		
10/8/2019	172			
3/17/2020	165			
3/24/2020			139	68
3/25/2020		146		
9/22/2020	141	83	104	75
3/1/2021	145			
3/2/2021			52	67
3/3/2021		80		

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	<0.001						
9/11/2007	<0.001						
3/20/2008	<0.001						
8/27/2008	<0.001						
3/3/2009	<0.001						
9/9/2009							<0.001
11/18/2009	<0.001						<0.001
1/5/2010							<0.001
3/3/2010	<0.001						<0.001
9/7/2010							<0.001
9/8/2010	<0.001						
11/22/2010			<0.001		<0.001		
1/4/2011			<0.001		<0.001		
2/17/2011			<0.001		<0.001		
3/10/2011	<0.001						<0.001
3/11/2011			<0.001		<0.001		
3/28/2011			<0.001		<0.001		
9/7/2011			<0.001	<0.001	<0.001	<0.001	
9/8/2011	<0.001	<0.001					<0.001
3/4/2012					<0.001		
3/5/2012	<0.001	<0.001		<0.001		<0.001	<0.001
3/6/2012			<0.001				
9/5/2012		<0.001		<0.001		<0.001	<0.001
9/10/2012	<0.001				<0.001		
9/11/2012			<0.001				
2/5/2013		<0.001				<0.001	<0.001
2/6/2013	<0.001		<0.001	<0.001	<0.001		
8/12/2013	<0.001						
8/13/2013		<0.001	<0.001	<0.001			<0.001
8/14/2013					<0.001	<0.001	
2/4/2014		<0.001	<0.001		<0.001		<0.001
2/5/2014	<0.001			<0.001		<0.001	
8/4/2014				<0.001	<0.001	<0.001	
8/5/2014	<0.001	<0.001					<0.001
2/2/2015		<0.001	<0.001		<0.001		
2/3/2015				<0.001		<0.001	<0.001
2/4/2015	<0.001						
2/16/2016	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001
2/17/2016			7E-05 (J)				
8/31/2016	<0.001	<0.001	<0.001	<0.001			
9/1/2016					<0.001	<0.001	<0.001
11/28/2016	<0.001		<0.001				
11/29/2016		<0.001					<0.001
11/30/2016				<0.001	<0.001		
12/1/2016						<0.001	
2/22/2017	<0.001		<0.001				
2/23/2017		<0.001		<0.001			<0.001
2/24/2017					<0.001	<0.001	
5/8/2017	6E-05 (J)						
5/9/2017		<0.001		<0.001			
5/10/2017			<0.001		<0.001	<0.001	<0.001
7/17/2017	6E-05 (J)					<0.001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
7/18/2017		<0.001	<0.001	<0.001	<0.001		<0.001
10/16/2017	7E-05 (J)					<0.001	
10/17/2017		<0.001	<0.001		<0.001		
10/18/2017				<0.001			<0.001
2/19/2018	<0.001						<0.001
2/20/2018			<0.001		<0.001		
2/21/2018		<0.001		<0.001		<0.001	
8/6/2018	<0.001						<0.001
8/7/2018		<0.001		<0.001		<0.001	
8/8/2018			<0.001		<0.001		
2/25/2019	<0.001						<0.001
2/26/2019		<0.001	<0.001	<0.001	<0.001	<0.001	
6/12/2019	<0.001		<0.001		<0.001		
6/13/2019		<0.001		<0.001		<0.001	<0.001
8/19/2019	5.5E-05 (J)				<0.001		
8/20/2019		<0.001	<0.001				<0.001
8/21/2019				<0.001		5.3E-05 (J)	
10/8/2019	<0.001						<0.001
10/9/2019		<0.001	<0.001			<0.001	
10/10/2019				<0.001	<0.001		
3/17/2020	<0.001	<0.001		<0.001			<0.001
3/18/2020			<0.001		<0.001	<0.001	
8/26/2020	<0.001						
8/27/2020		<0.001				<0.001	<0.001
8/28/2020			<0.001	<0.001	<0.001		
9/22/2020	<0.001	<0.001	<0.001	<0.001	<0.001		
9/23/2020						<0.001	<0.001
3/1/2021		<0.001	<0.001		<0.001		
3/2/2021	<0.001			<0.001		<0.001	
3/3/2021							<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
6/1/2016					<0.001	<0.001	
6/2/2016	<0.001						
6/6/2016			<0.001	<0.001			
6/7/2016		<0.001					<0.001
7/25/2016						<0.001	
7/26/2016	<0.001				<0.001		
7/27/2016		<0.001	<0.001	<0.001			<0.001
9/13/2016					<0.001	<0.001	
9/15/2016	<0.001						
9/16/2016		<0.001		<0.001			
9/19/2016			<0.001				<0.001
11/1/2016					<0.001		
11/2/2016	<0.001						<0.001
11/3/2016		<0.001	<0.001	<0.001			
11/4/2016						<0.001	
1/10/2017	<0.001						
1/11/2017		<0.001	<0.001	<0.001	<0.001		
1/13/2017							<0.001
1/16/2017						<0.001	
3/1/2017			<0.001	<0.001			
3/2/2017		<0.001			<0.001	<0.001	
3/6/2017							<0.001
3/8/2017	<0.001						
4/26/2017	<0.001		<0.001	<0.001			<0.001
4/27/2017					<0.001	<0.001	
5/2/2017		<0.001					
6/27/2017					<0.001	<0.001	
6/28/2017			<0.001	<0.001			
6/29/2017		<0.001					<0.001
6/30/2017	<0.001						
3/27/2018	<0.001					<0.001	
3/28/2018		<0.001	<0.001	<0.001			
3/29/2018					<0.001		<0.001
2/26/2019	<0.001						
2/27/2019					<0.001	<0.001	
3/5/2019		<0.001		<0.001			<0.001
3/6/2019			<0.001				
4/2/2019		<0.001					
4/3/2019			<0.001	<0.001			<0.001
9/25/2019		<0.001					<0.001
9/26/2019			<0.001	<0.001			
2/10/2020					<0.001	5.5E-05 (J)	
2/11/2020		<0.001	<0.001	<0.001			
2/12/2020	8.9E-05 (J)						<0.001
3/18/2020	<0.001					<0.001	
3/19/2020					<0.001		
3/24/2020		<0.001	<0.001	<0.001			<0.001
9/23/2020		<0.001	<0.001	<0.001	<0.001	<0.001	
9/24/2020							<0.001
9/25/2020	<0.001						
2/9/2021			<0.001	<0.001			<0.001
2/10/2021	<0.001						

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-14S (bg)	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-20S (bg)
2/12/2021					<0.001	<0.001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
6/1/2016						<0.001	
6/2/2016			<0.001		<0.001		
6/7/2016	<0.001						
7/25/2016			<0.001			<0.001	
7/26/2016					0.0001 (J)		
7/28/2016	<0.001						
9/14/2016		<0.001				<0.001	
9/15/2016					<0.001		
9/19/2016	<0.001		<0.001				
11/1/2016			<0.001		<0.001	<0.001	
11/3/2016	<0.001						
11/4/2016		<0.001					
12/15/2016		<0.001					
1/11/2017					<0.001	<0.001	
1/13/2017	<0.001						
1/16/2017		<0.001	<0.001				
2/21/2017			<0.001				
3/1/2017						<0.001	
3/2/2017					<0.001		
3/3/2017		<0.001					
3/6/2017	<0.001						
4/26/2017	<0.001		<0.001		<0.001	<0.001	
4/28/2017		<0.001					
5/26/2017		<0.001					
6/28/2017		<0.001			<0.001	<0.001	
6/29/2017	<0.001						
6/30/2017			<0.001				
10/11/2017				<0.001			
10/12/2017							<0.001
11/20/2017				<0.001			<0.001
1/10/2018							<0.001
1/11/2018				<0.001			
2/19/2018							<0.001
2/20/2018				<0.001			
3/27/2018			<0.001				
3/28/2018		<0.001			<0.001	<0.001	
3/29/2018	<0.001						
4/3/2018				<0.001			<0.001
6/28/2018				<0.001			<0.001
8/7/2018				<0.001			<0.001
9/24/2018				<0.001			<0.001
9/25/2018	<0.001						
2/26/2019			<0.001				
2/27/2019		<0.001			<0.001	<0.001	
3/5/2019	<0.001						
4/2/2019	<0.001						
8/21/2019				<0.001			<0.001
9/24/2019	<0.001						
2/11/2020		<0.001				<0.001	
2/12/2020	<0.001		<0.001	<0.001	<0.001		<0.001
3/19/2020		<0.001	<0.001		<0.001	<0.001	
3/24/2020	<0.001						<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-21I (bg)	YGWA-2I (bg)	YGWA-30I (bg)	YGWA-39 (bg)	YGWA-3D (bg)	YGWA-3I (bg)	YGWA-40 (bg)
3/25/2020				<0.001			
9/23/2020		<0.001			<0.001	0.00016 (J)	
9/24/2020	<0.001		<0.001	<0.001			<0.001
2/9/2021	<0.001						
2/10/2021		<0.001		<0.001	<0.001	<0.001	<0.001
2/11/2021			<0.001				

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-47 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/2/2016		<0.001	<0.001	<0.001
7/26/2016		<0.001	<0.001	<0.001
8/30/2016	<0.001			
9/14/2016		<0.001	<0.001	<0.001
11/2/2016		<0.001	<0.001	
11/4/2016				<0.001
11/14/2016	<0.001			
1/12/2017			<0.001	<0.001
1/13/2017		<0.001		
2/24/2017	<0.001			
3/6/2017		<0.001		
3/7/2017			<0.001	<0.001
5/1/2017		<0.001	<0.001	
5/2/2017				<0.001
5/8/2017	<0.001			
6/27/2017			<0.001	<0.001
6/29/2017		<0.001		
7/11/2017	<0.001			
10/10/2017	<0.001			
3/29/2018		<0.001	<0.001	<0.001
4/2/2018	<0.001			
9/19/2018	<0.001			
3/4/2019		<0.001	<0.001	<0.001
4/3/2019		<0.001	<0.001	<0.001
8/20/2019	5.8E-05 (J)			
9/24/2019			<0.001	<0.001
9/25/2019		<0.001		
10/8/2019	8.4E-05 (J)			
2/12/2020		<0.001	<0.001	<0.001
3/17/2020	<0.001			
3/24/2020			<0.001	<0.001
3/25/2020		<0.001		
8/27/2020	<0.001			
9/22/2020		<0.001	<0.001	<0.001
2/8/2021			<0.001	<0.001
2/9/2021		<0.001		

Time Series

Constituent: Vanadium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
5/1/2007	0.0055						
9/11/2007	0.004						
3/20/2008	<0.01						
8/27/2008	0.0029						
3/3/2009	<0.01						
9/9/2009							<0.01
11/18/2009	<0.01						<0.01
1/5/2010							<0.01
3/3/2010	<0.01						<0.01
9/7/2010							<0.01
9/8/2010	<0.01						
11/22/2010			<0.01		<0.01		
1/4/2011			<0.01		<0.01		
2/17/2011			<0.01		<0.01		
3/10/2011	<0.01						<0.01
3/11/2011			<0.01		<0.01		
3/28/2011			<0.01		<0.01		
9/7/2011			<0.01	<0.01	<0.01	<0.01	
9/8/2011	<0.01	<0.01					<0.01
3/4/2012					<0.01		
3/5/2012	<0.01	<0.01		<0.01		<0.01	<0.01
3/6/2012			<0.01				
9/5/2012		<0.01		<0.01		<0.01	<0.01
9/10/2012	<0.01				<0.01		
9/11/2012			<0.01				
2/5/2013		<0.01				<0.01	<0.01
2/6/2013	<0.01		<0.01	<0.01	<0.01		
8/12/2013	<0.01						
8/13/2013		<0.01	<0.01	<0.01			<0.01
8/14/2013					<0.01	<0.01	
2/4/2014		<0.01	<0.01		<0.01		<0.01
2/5/2014	<0.01			<0.01		<0.01	
8/4/2014				<0.01	<0.01	0.0022 (J)	
8/5/2014	<0.01	0.0011 (J)	<0.01				0.0015 (J)
2/2/2015		0.0051	<0.01		<0.01		
2/3/2015				<0.01		<0.01	0.00093 (J)
2/4/2015	<0.01						
8/3/2015	0.0013 (J)			<0.01 (D)	<0.01 (D)	0.0019 (JD)	
8/4/2015		<0.01 (D)	<0.01				0.0036 (J)
2/16/2016	<0.01	0.00075 (J)		<0.01	<0.01	0.0011 (J)	0.0011 (J)
2/17/2016			<0.01				
2/22/2017	<0.01		<0.01				
2/23/2017		<0.01		<0.01			<0.01
2/24/2017					<0.01	<0.01	
5/8/2017	<0.01						
5/9/2017		<0.01		<0.01			
5/10/2017			<0.01		<0.01	<0.01	<0.01
7/17/2017	<0.01					<0.01	
7/18/2017		<0.01	<0.01	<0.01	<0.01		<0.01
2/19/2018	<0.01						<0.01
2/20/2018			<0.01		<0.01		
2/21/2018		<0.01		<0.01		<0.01	

Time Series

Constituent: Vanadium (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R	GWC-6R
8/6/2018	<0.01						0.0029 (J)
8/7/2018		<0.01		<0.01		<0.01	
8/8/2018			<0.01		<0.01		
2/25/2019	<0.01						<0.01
2/26/2019		<0.01	<0.01	<0.01	<0.01	<0.01	
6/12/2019	0.0032 (J)		0.00079 (J)		0.00088 (J)		
6/13/2019		<0.01		0.0021 (J)		<0.01	<0.01
10/8/2019	<0.01						<0.01
10/9/2019		<0.01	<0.01			<0.01	
10/10/2019				0.0011 (J)	<0.01		
3/17/2020	<0.01	<0.01		<0.01			0.00098 (J)
3/18/2020			<0.01		<0.01	<0.01	
9/22/2020	<0.01	<0.01	<0.01	<0.01	<0.01		
9/23/2020						<0.01	<0.01
3/1/2021		<0.01	<0.01		<0.01		
3/2/2021	<0.01			<0.01		<0.01	
3/3/2021							<0.01

Time Series

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
9/9/1998	0.01						
9/20/1999	0.017						
9/12/2001	0.017						
9/3/2002	0.015						
7/29/2003	0.022						
12/5/2003	0.0087						
9/22/2004	<0.01						
5/1/2007		0.0081					
9/11/2007		0.0049					
3/20/2008		0.004					
8/27/2008		0.0042					
3/3/2009		0.0058					
11/18/2009		0.0038					
3/3/2010		0.0085					
9/8/2010		0.0065					
11/22/2010				0.0047		<0.01	
1/4/2011				0.0038		<0.01	
2/17/2011				0.0074		<0.01	
3/10/2011		0.0029					
3/11/2011				0.0038		0.025 (o)	
3/28/2011				<0.01		<0.01	
9/7/2011				0.0059	0.0064	<0.01	0.0064
9/8/2011		0.004	0.0048				
3/4/2012						<0.01	
3/5/2012		0.0059	0.0038		0.0043		0.0034
3/6/2012				0.0032			
9/5/2012			0.0051		0.0069		0.0035
9/10/2012		0.0052				<0.01	
9/11/2012				0.0029			
2/5/2013			<0.01				0.0027
2/6/2013		0.0038		0.0036	<0.01	<0.01	
8/12/2013		0.0075					
8/13/2013			<0.01	0.0066	0.011		
8/14/2013						<0.01	0.0041
2/4/2014			0.0037	0.011		0.0034	
2/5/2014		0.018 (o)			0.026 (o)		0.011
8/4/2014					0.012	0.0013 (J)	0.011
8/5/2014		0.0037	0.0019 (J)	0.0032			
2/2/2015			0.0051	0.0031		<0.01	
2/3/2015					0.0061		0.0044
2/4/2015		0.0057					
8/3/2015		0.0043			0.0037 (D)	<0.01 (D)	0.011 (D)
8/4/2015			0.0017 (JD)	0.0017 (J)			
2/16/2016		0.0024 (J)	0.0015 (J)		0.0093	0.0017 (J)	0.014
2/17/2016				0.0034			
2/22/2017		0.0042 (J)		0.0024 (J)			
2/23/2017			0.0024 (J)		0.0031 (J)		
2/24/2017						0.0028 (J)	0.0043 (J)
5/8/2017		0.0025 (J)					
5/9/2017			0.0016 (J)		0.0025 (J)		
5/10/2017				0.0022 (J)		0.0014 (J)	0.0042 (J)
7/17/2017		0.0032 (J)					0.0055 (J)

Time Series

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-1 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R	GWC-3R	GWC-4R	GWC-5R
7/18/2017			0.0015 (J)	0.0017 (J)	0.0028 (J)	0.0015 (J)	
2/19/2018		<0.01					
2/20/2018				<0.01		<0.01	
2/21/2018			<0.01		0.003 (J)		0.0102
8/6/2018		0.0037 (J)					
8/7/2018			0.0044 (J)		0.0036 (J)		0.015
8/8/2018				0.0021 (J)		0.0033 (J)	
2/25/2019		0.013					
2/26/2019			0.0022 (J)	0.003 (J)	0.0033 (J)	<0.01	0.015
6/12/2019		<0.01		0.0019 (J)		<0.01	
6/13/2019			<0.01		0.0069 (J)		0.015
10/8/2019		0.0078 (J)					
10/9/2019			0.0078 (J)	0.0069 (J)			0.025
10/10/2019					0.0079 (J)	0.006 (J)	
1/21/2020							0.015
3/17/2020		<0.01	<0.01		<0.01		
3/18/2020				<0.01		<0.01	0.023
9/22/2020		0.033	0.0029 (J)	0.003 (J)	0.0036 (J)	<0.01	
9/23/2020							0.018
3/1/2021			<0.01	<0.01		<0.01	
3/2/2021		0.031			0.0069 (J)		0.022

Time Series

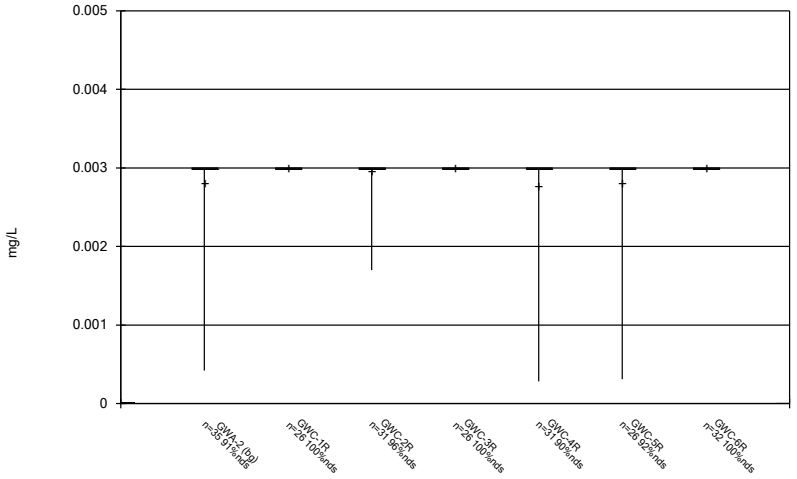
Constituent: Zinc (mg/L) Analysis Run 5/5/2021 2:28 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R
9/9/2009	0.003
11/18/2009	<0.01
1/5/2010	0.0027
3/3/2010	<0.01
9/7/2010	<0.01
3/10/2011	<0.01
9/8/2011	<0.01
3/5/2012	0.0053
9/5/2012	0.0033
2/5/2013	<0.01
8/13/2013	0.0038
2/4/2014	0.0046
8/5/2014	0.0019 (J)
2/3/2015	0.0026
8/4/2015	0.0035
2/16/2016	0.002 (J)
2/23/2017	0.0038 (J)
5/10/2017	0.0027 (J)
7/18/2017	0.0024 (J)
2/19/2018	<0.01
8/6/2018	0.004 (J)
2/25/2019	0.0028 (J)
6/13/2019	<0.01
10/8/2019	0.006 (J)
3/17/2020	<0.01
9/23/2020	<0.01
3/3/2021	<0.01

FIGURE B.

Box & Whiskers Plot

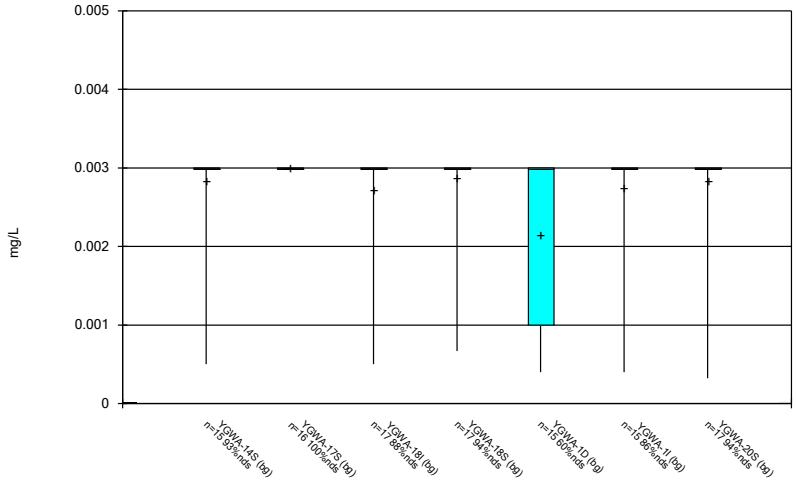


Constituent: Antimony Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

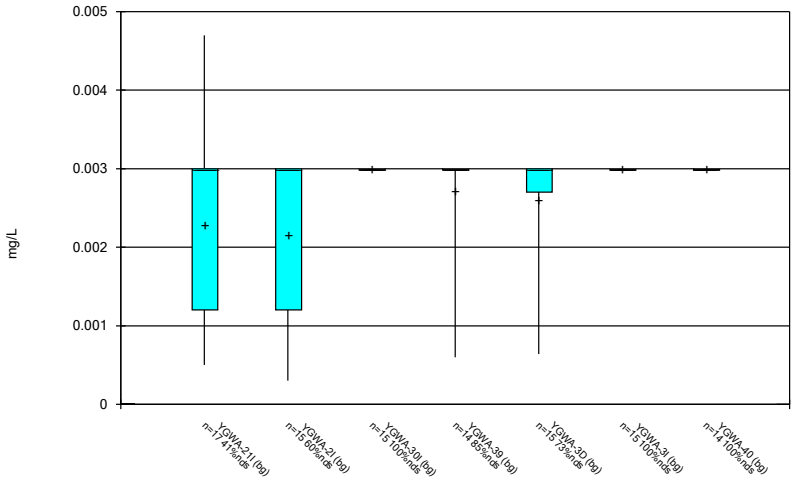


Constituent: Antimony Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

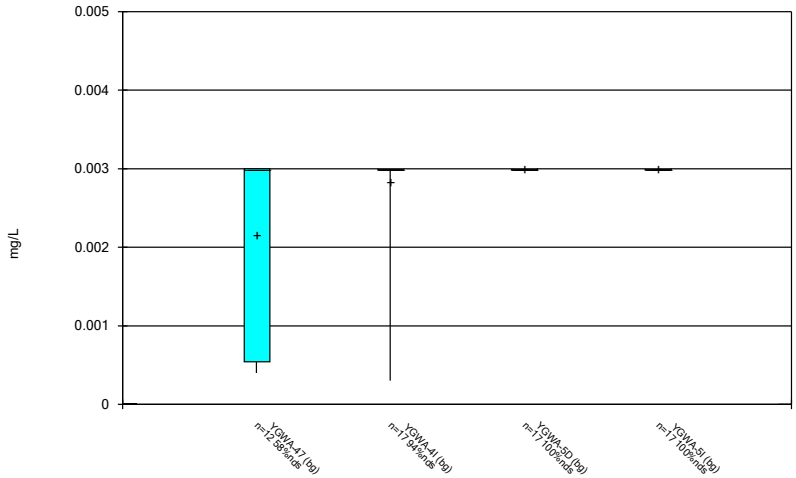


Constituent: Antimony Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

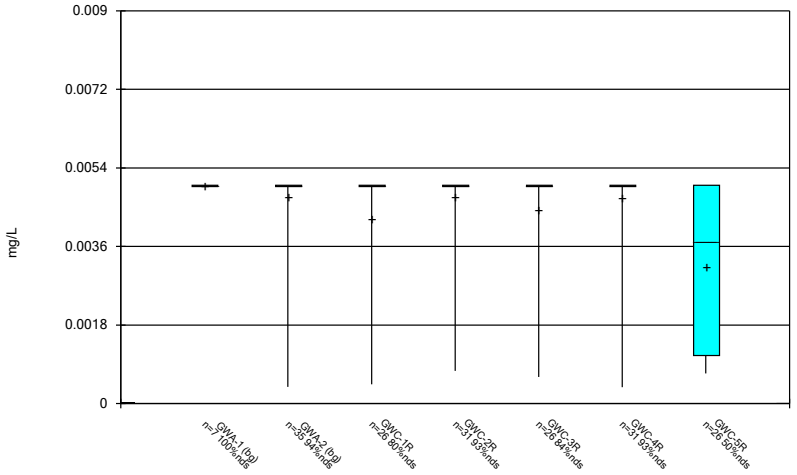
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

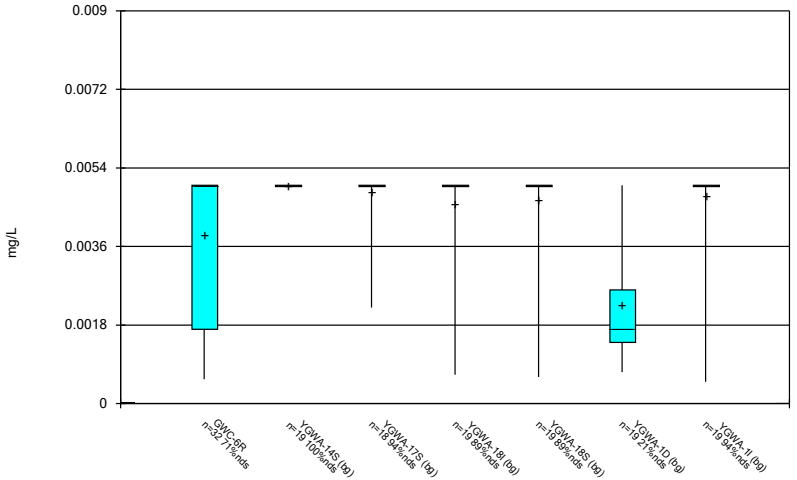


Constituent: Arsenic Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

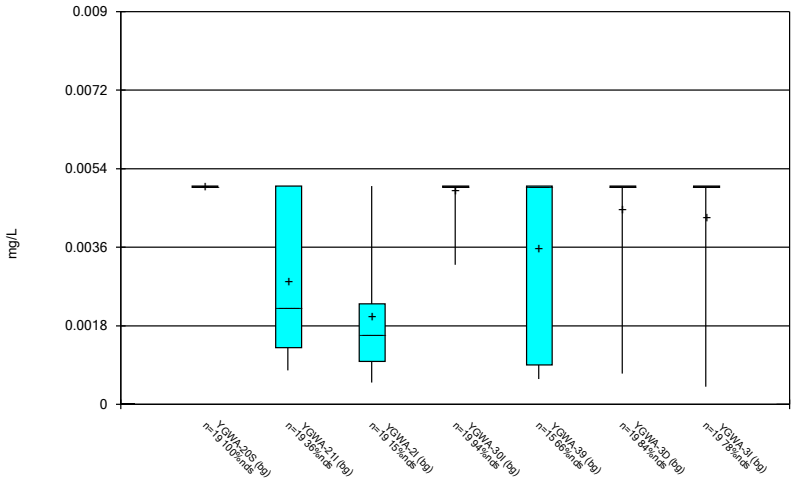


Constituent: Arsenic Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

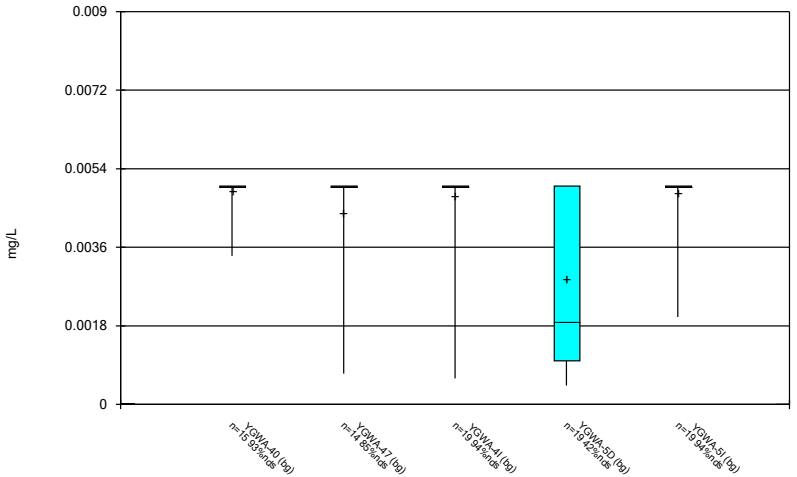


Constituent: Arsenic Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

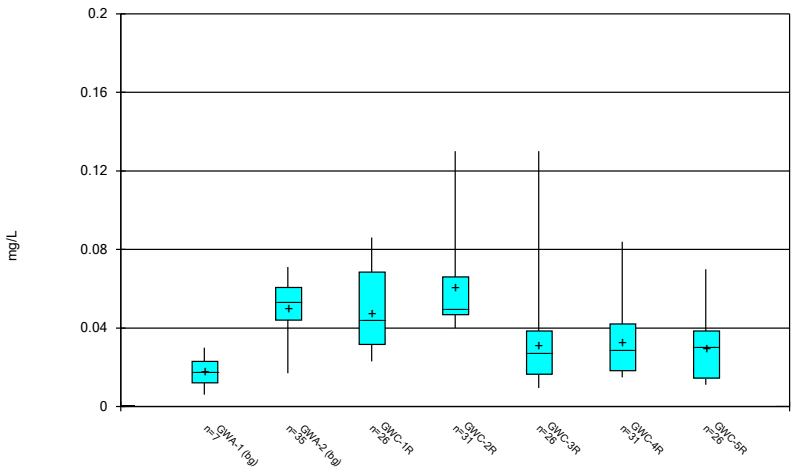
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

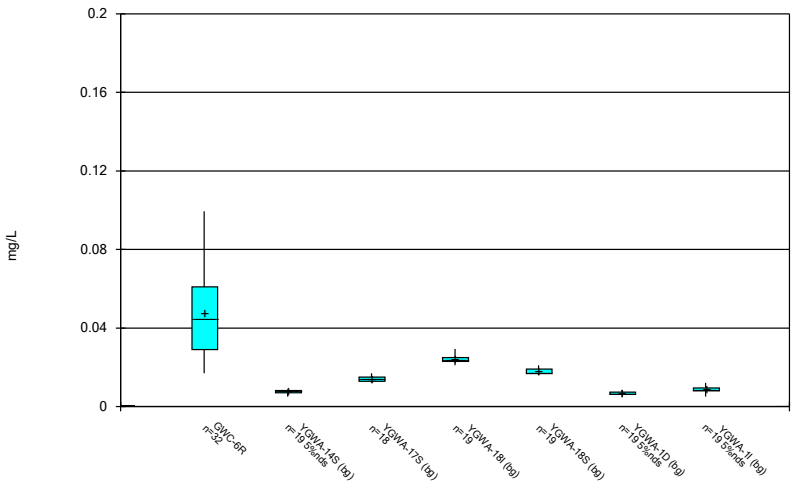


Constituent: Barium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

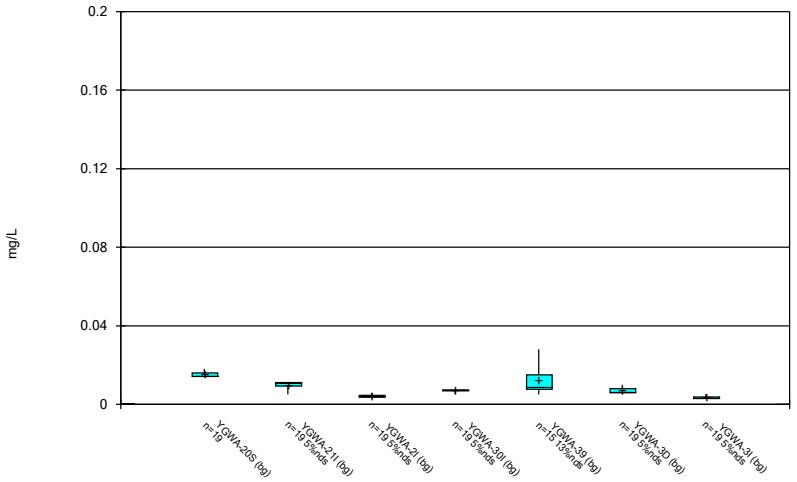


Constituent: Barium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

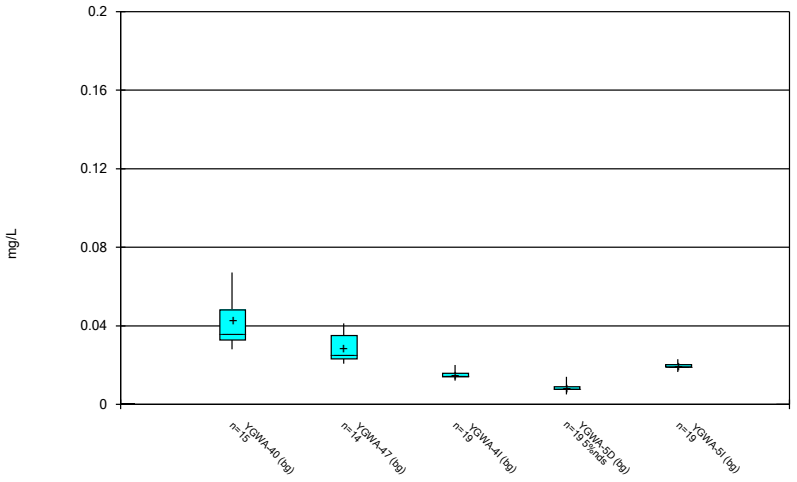


Constituent: Barium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

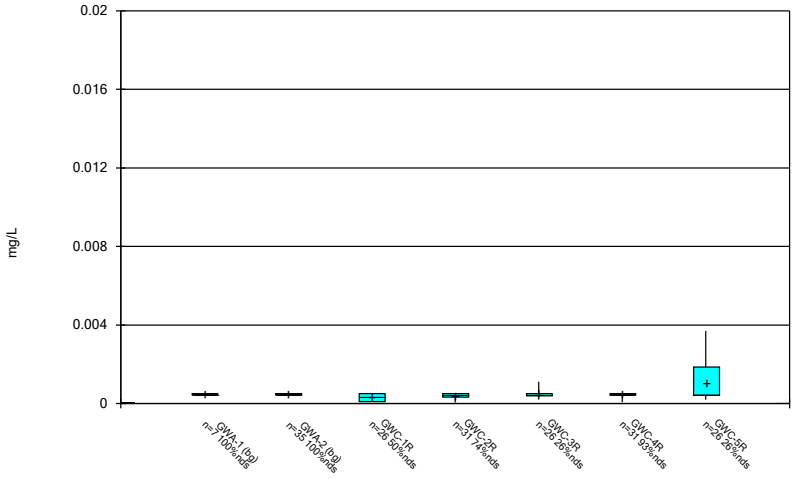
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

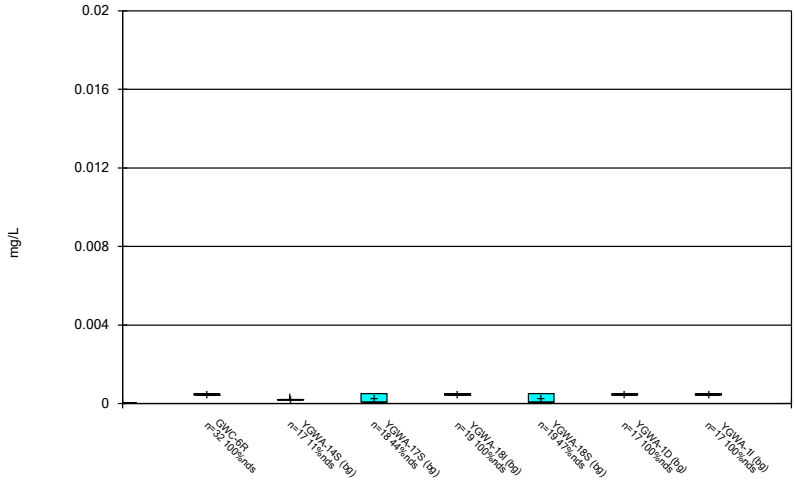


Constituent: Beryllium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

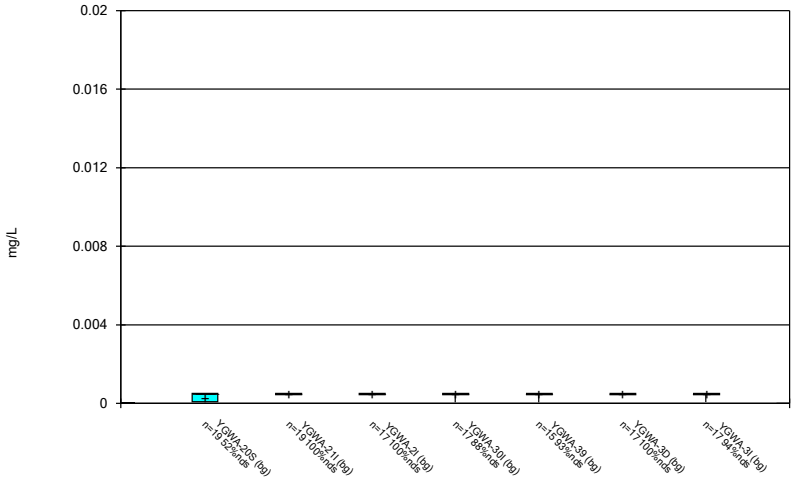


Constituent: Beryllium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

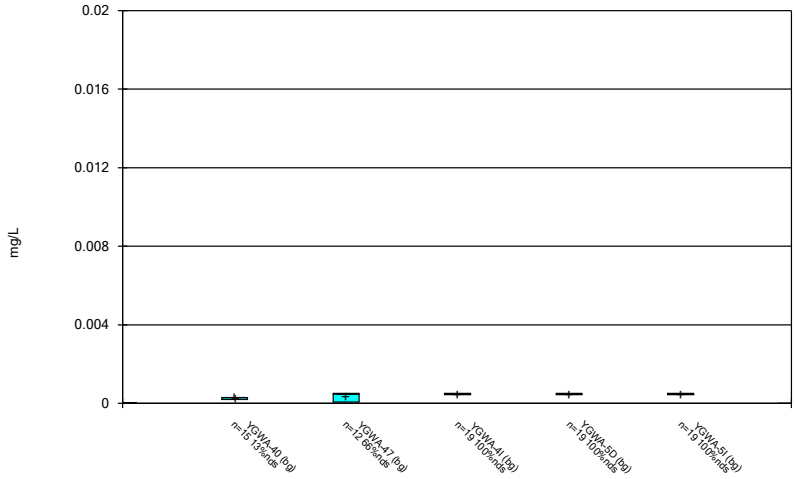


Constituent: Beryllium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

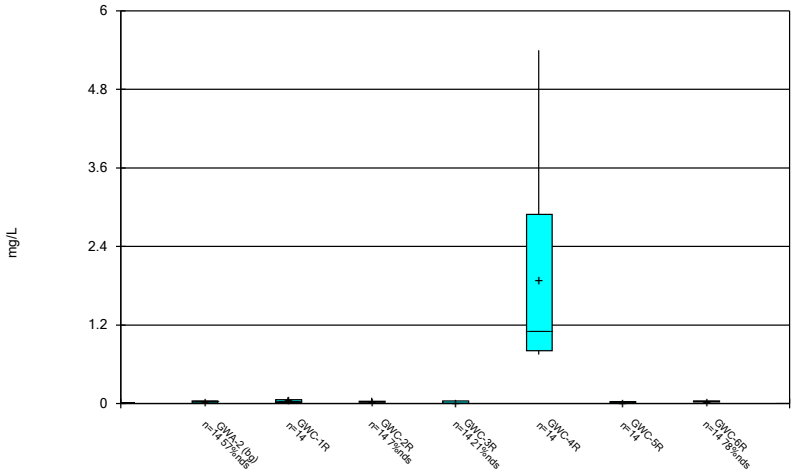
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

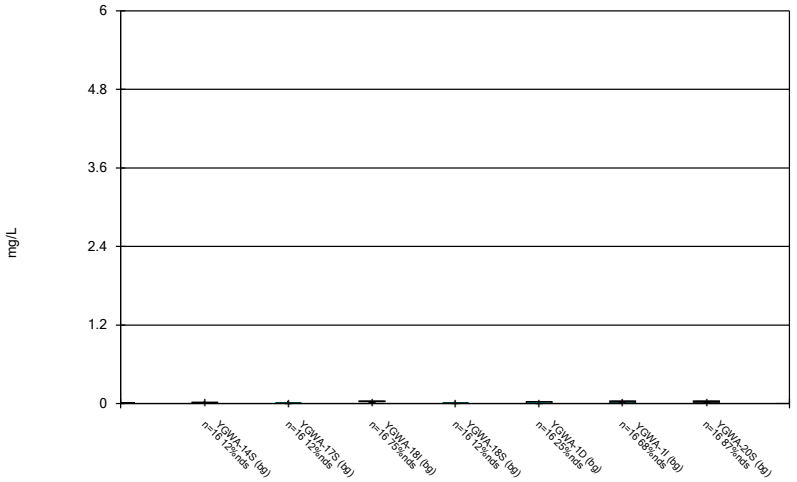


Constituent: Boron Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

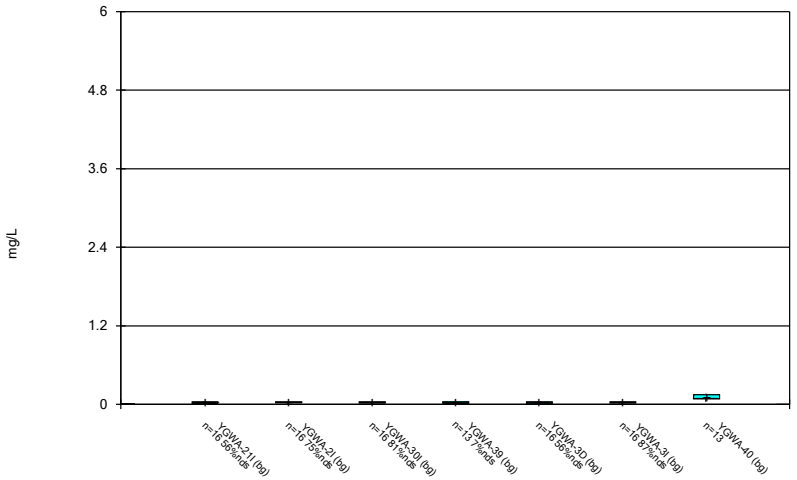


Constituent: Boron Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

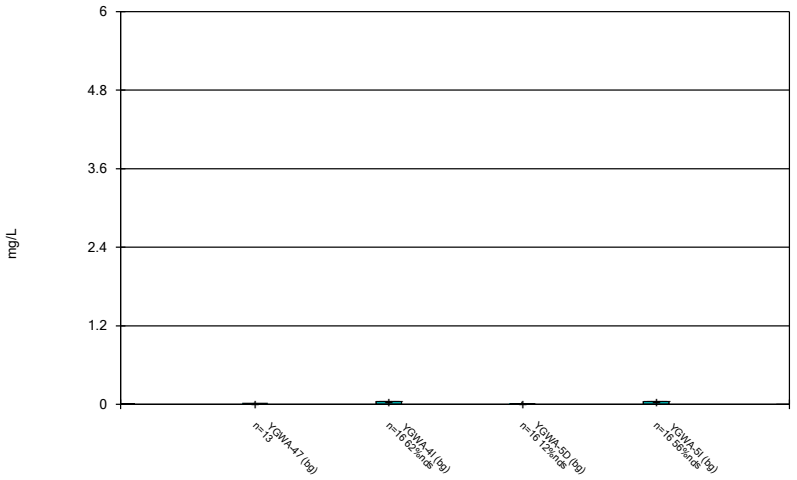


Constituent: Boron Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

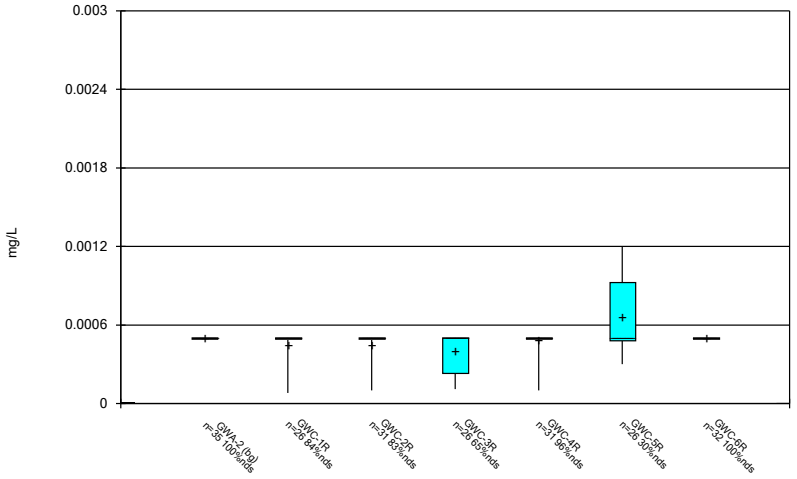
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

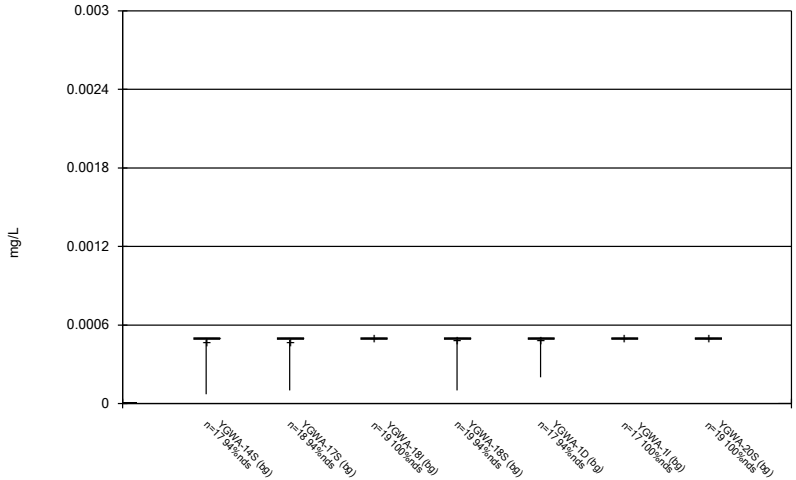


Constituent: Cadmium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

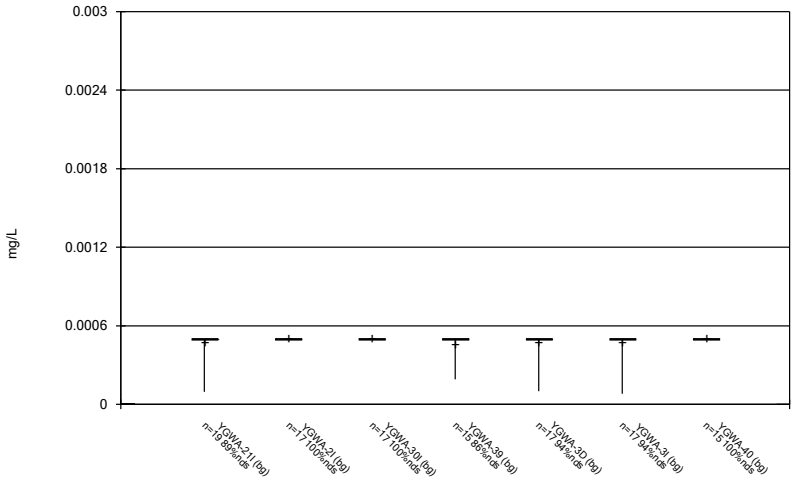


Constituent: Cadmium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

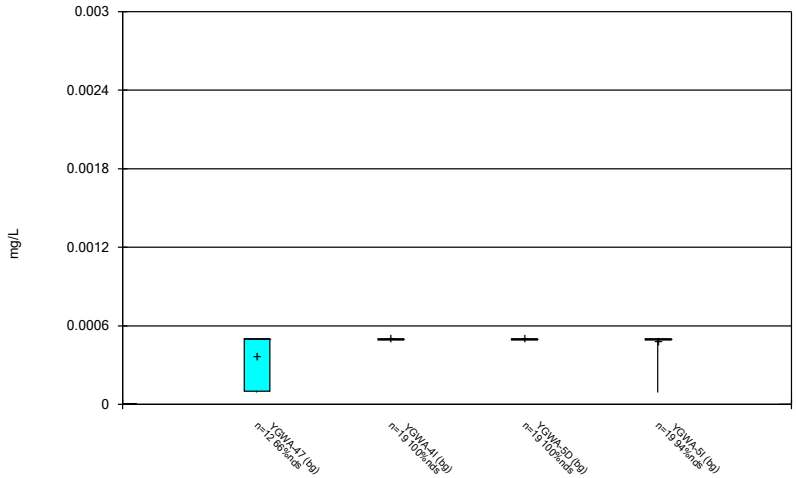


Constituent: Cadmium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

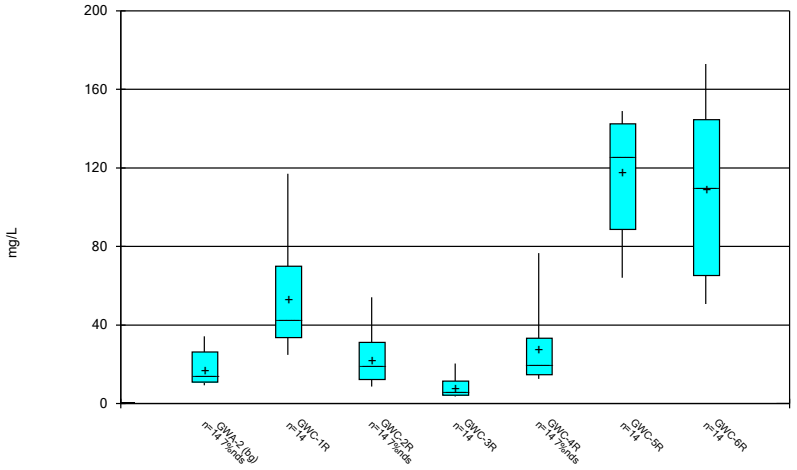
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

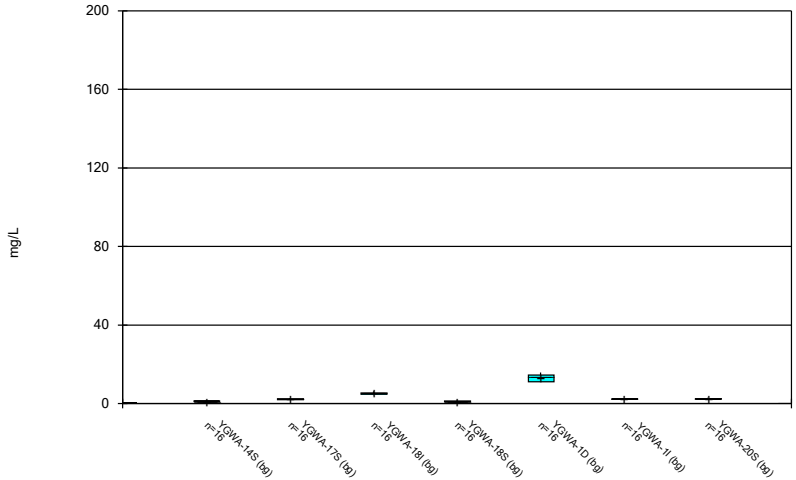


Constituent: Calcium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

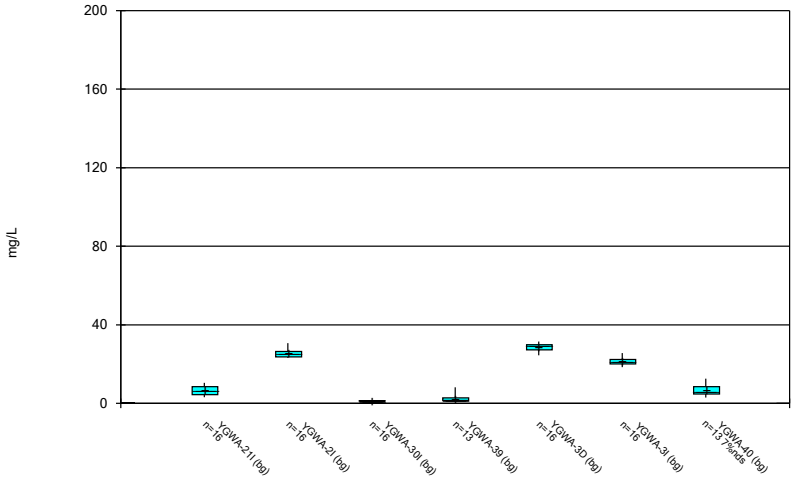


Constituent: Calcium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

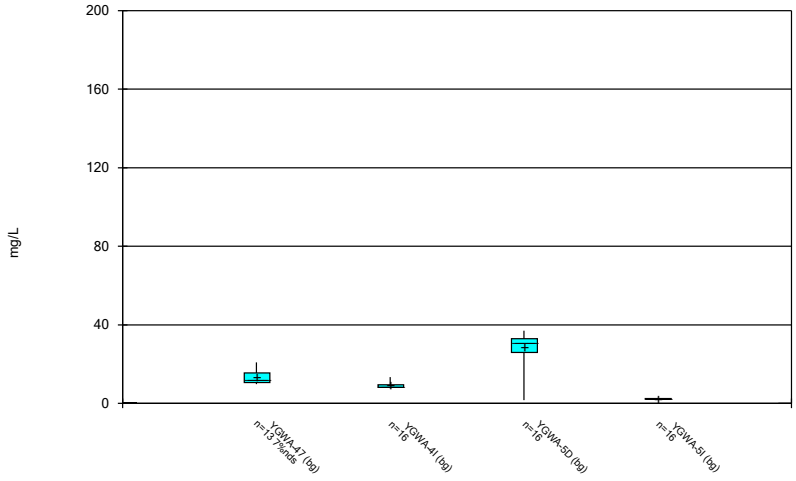


Constituent: Calcium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

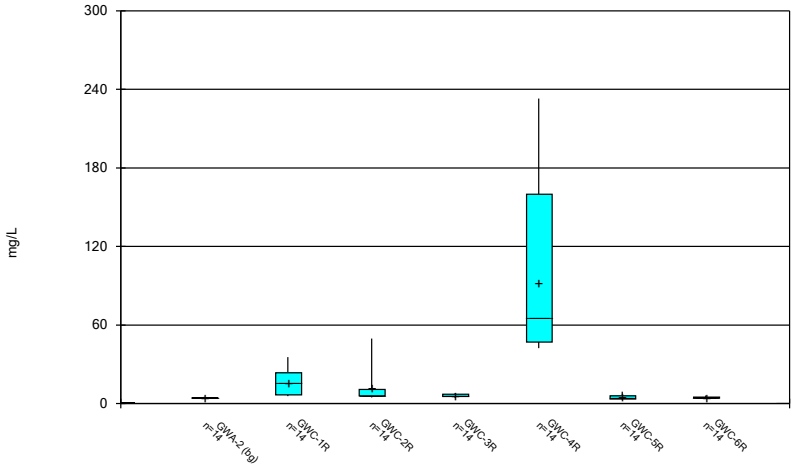
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

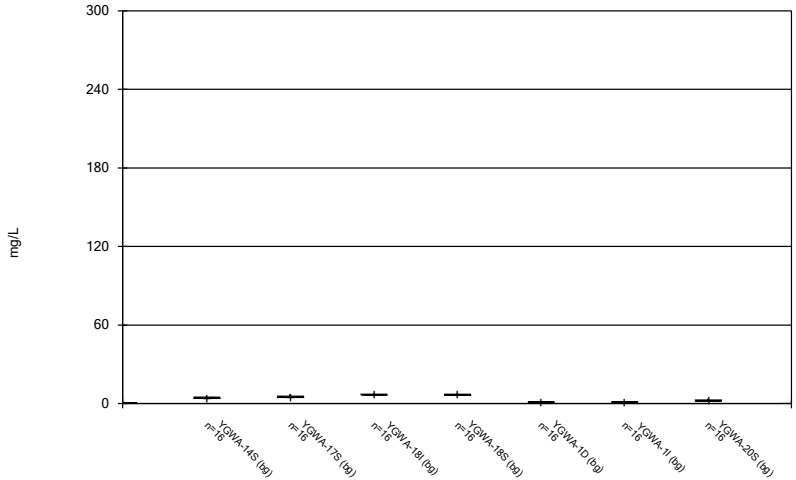


Constituent: Chloride Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

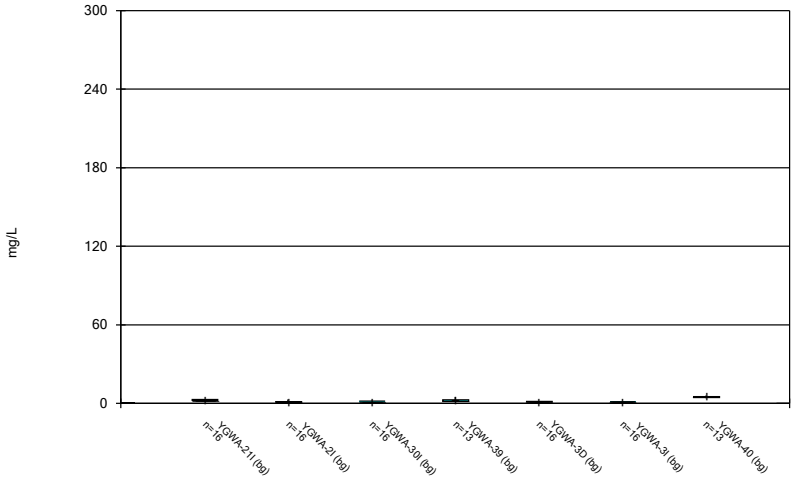


Constituent: Chloride Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

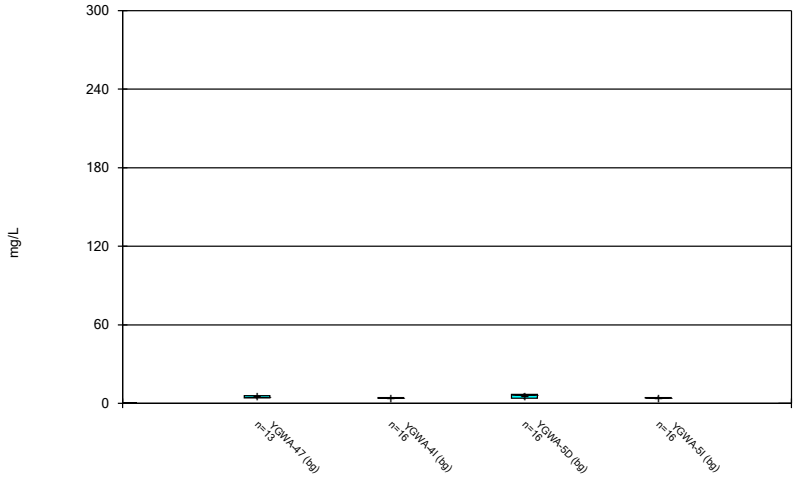


Constituent: Chloride Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

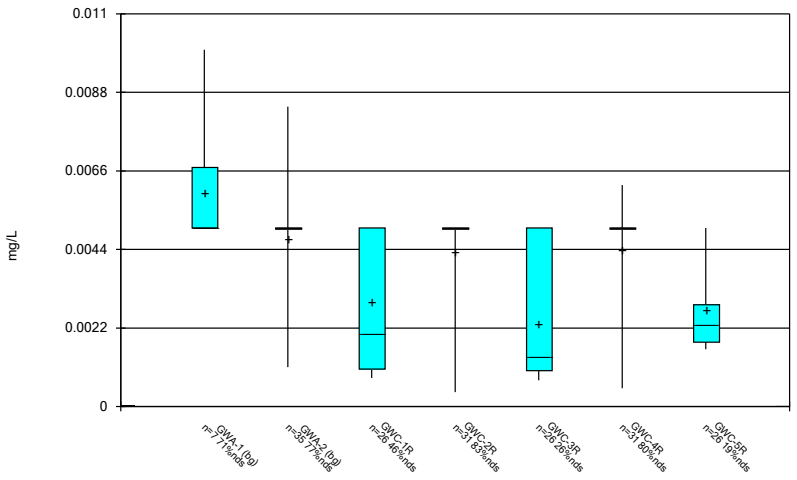
Box & Whiskers Plot



Constituent: Chloride Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

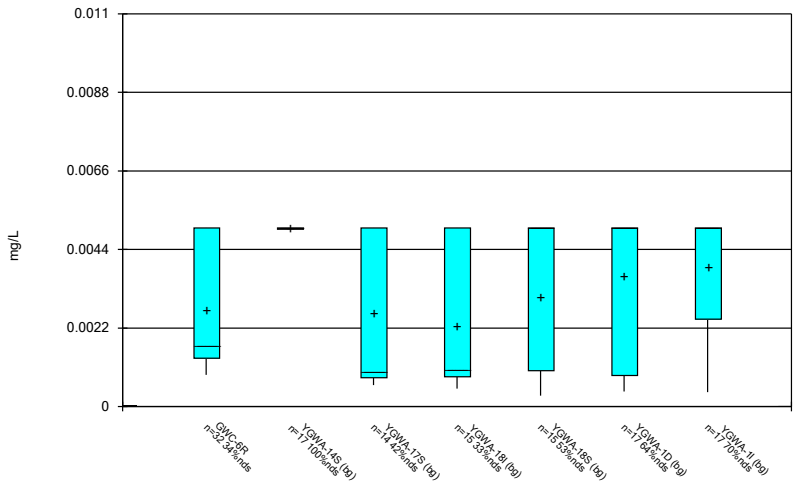


Constituent: Chromium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

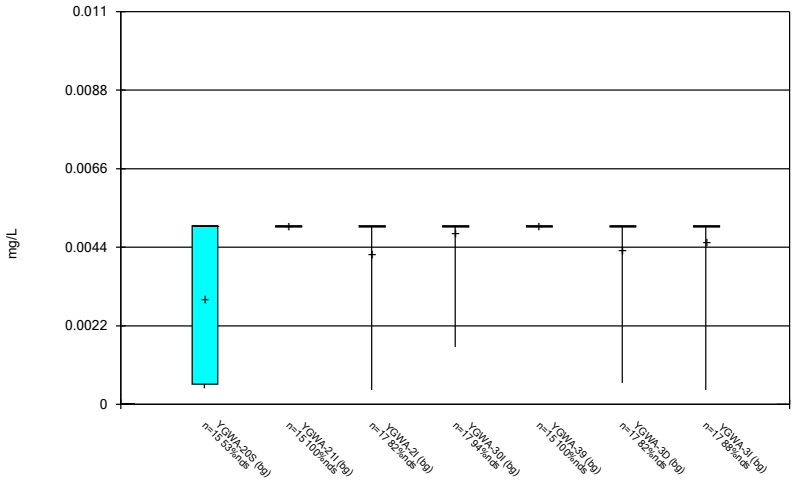


Constituent: Chromium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

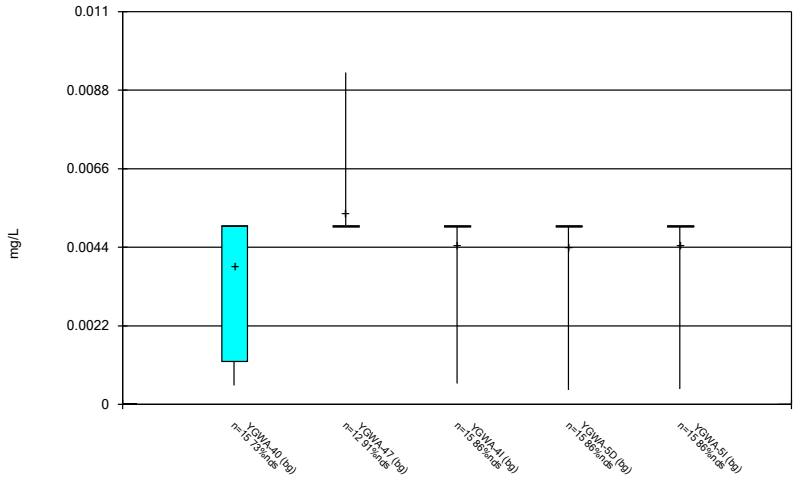


Constituent: Chromium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

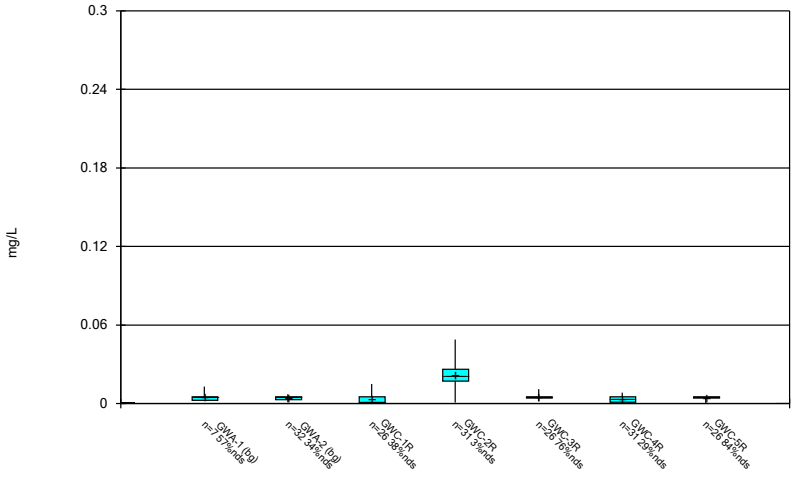
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

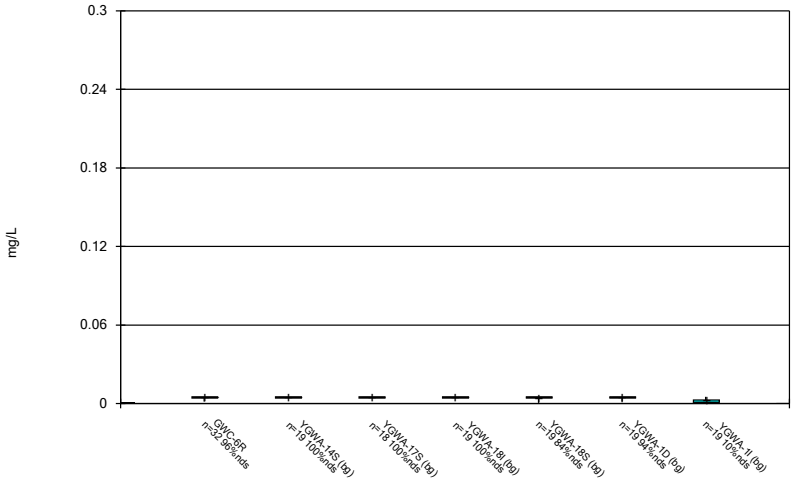


Constituent: Cobalt Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

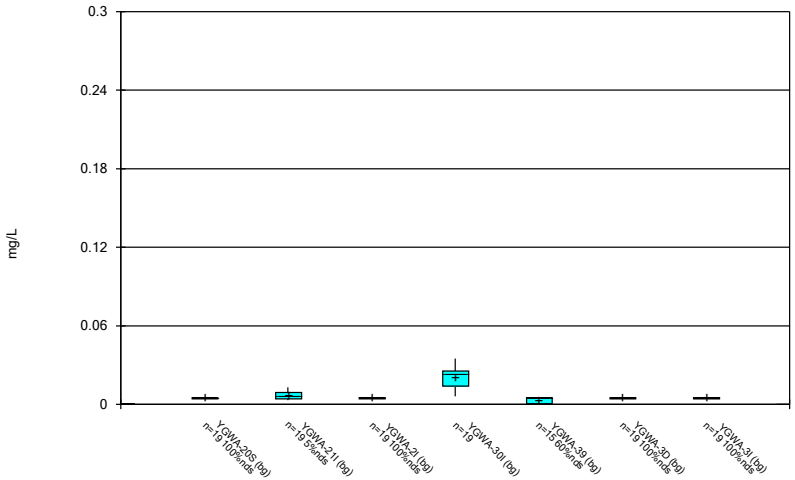


Constituent: Cobalt Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

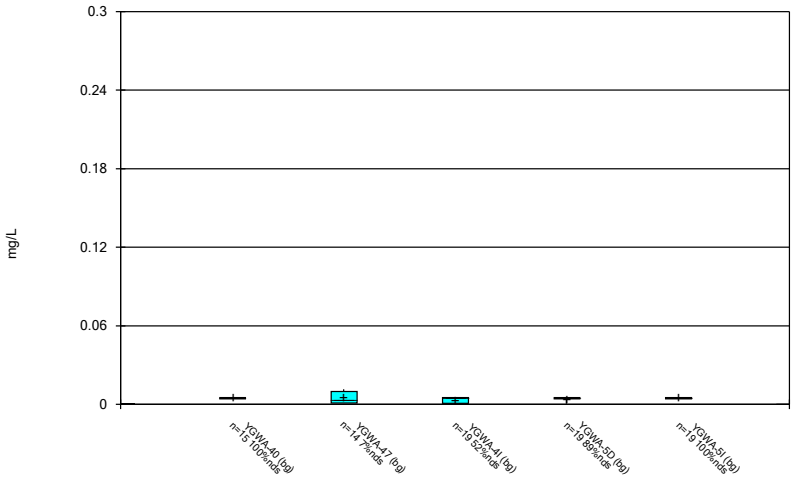


Constituent: Cobalt Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

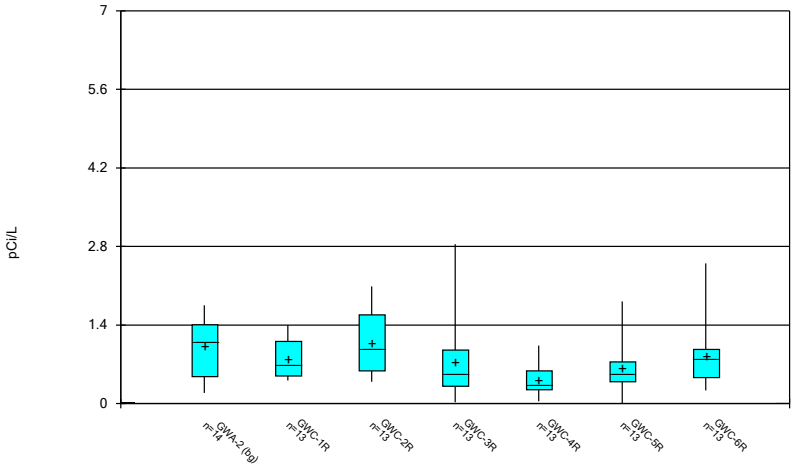
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

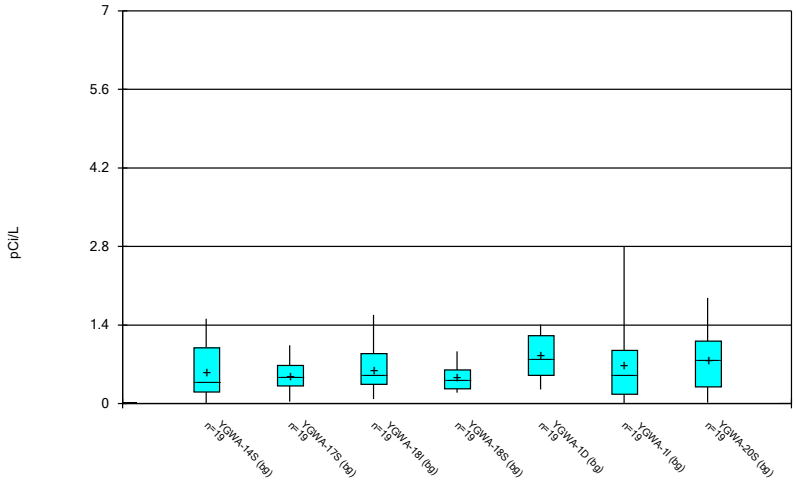
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 2:34 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

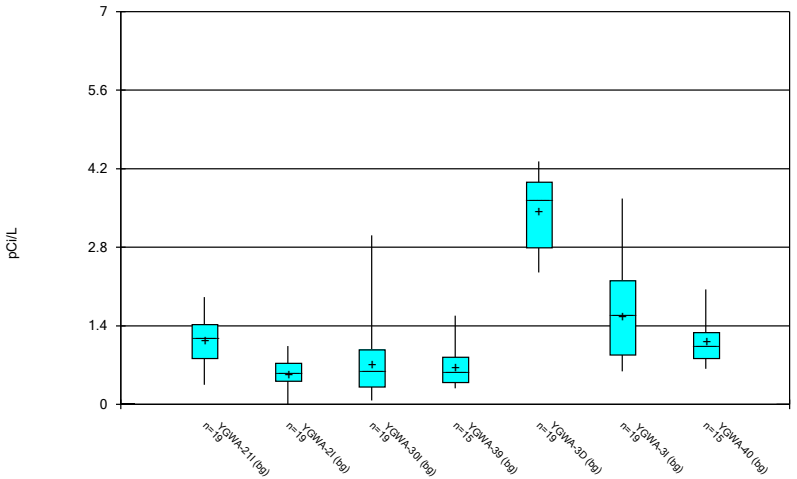
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 2:34 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

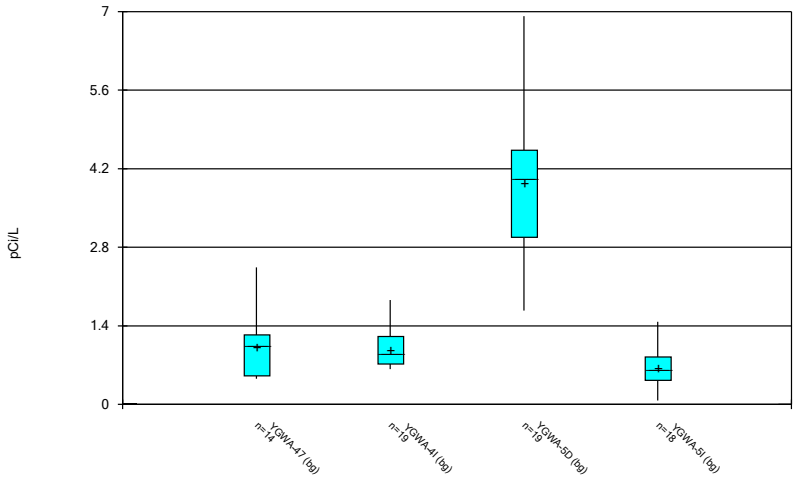
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 2:34 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

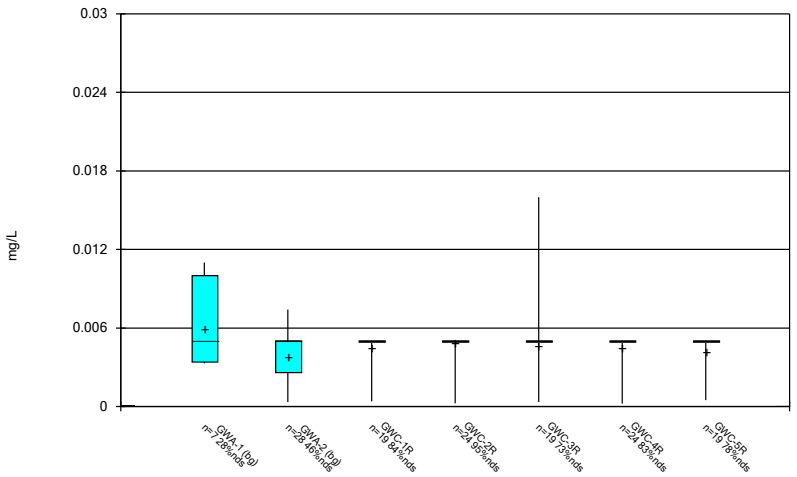
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 2:34 PM
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

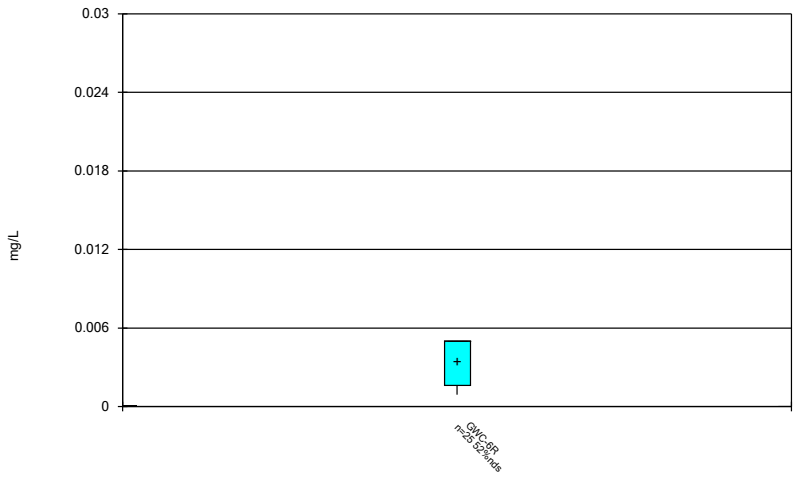


Constituent: Copper Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

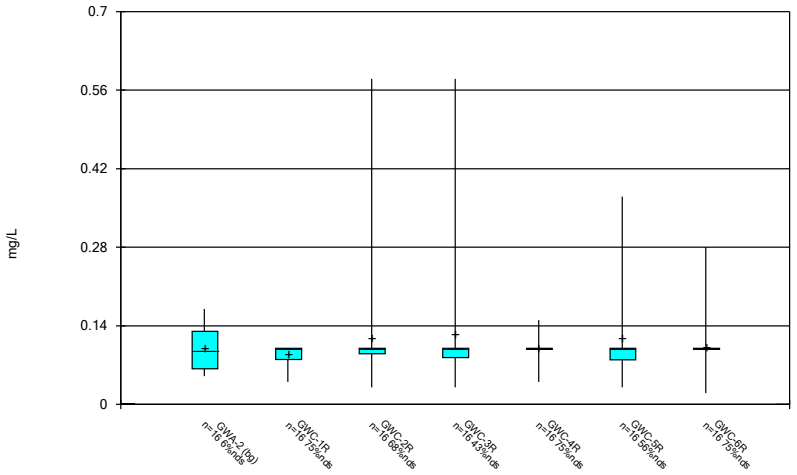


Constituent: Copper Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

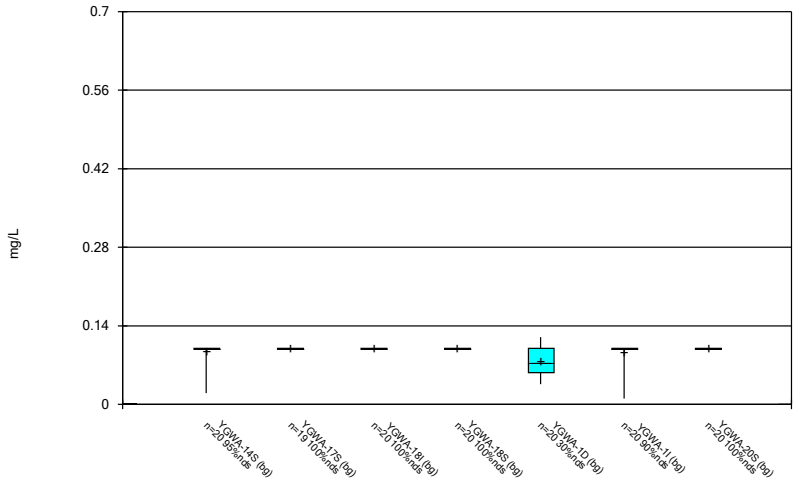


Constituent: Fluoride Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

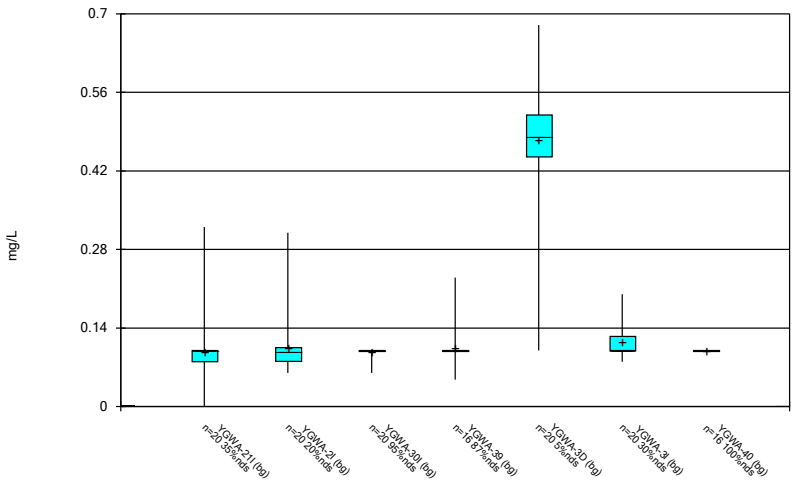
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

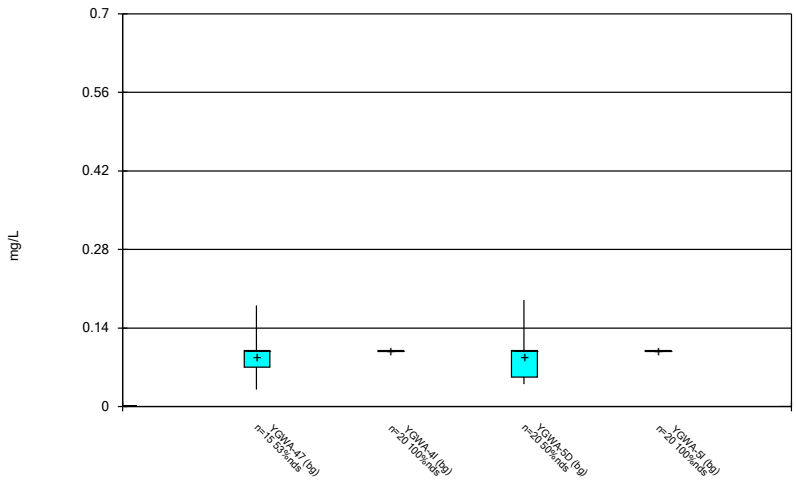


Constituent: Fluoride Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

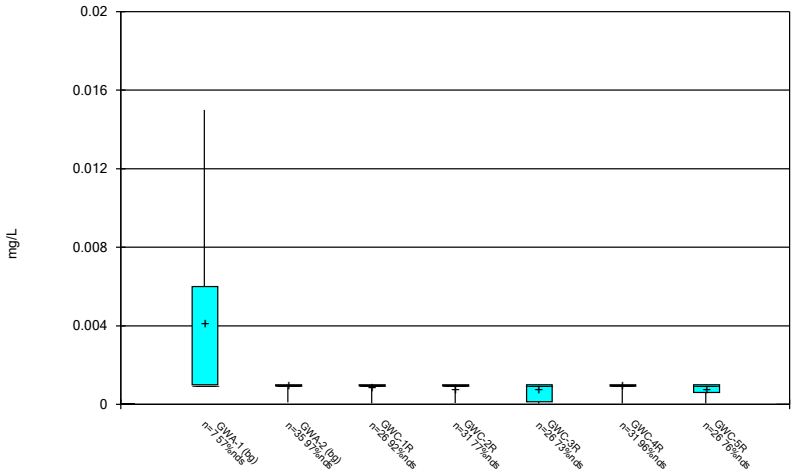


Constituent: Fluoride Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

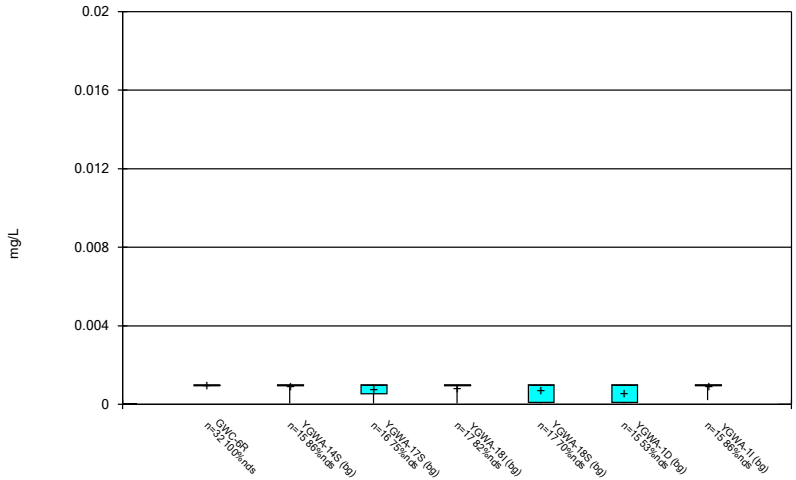


Constituent: Lead Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

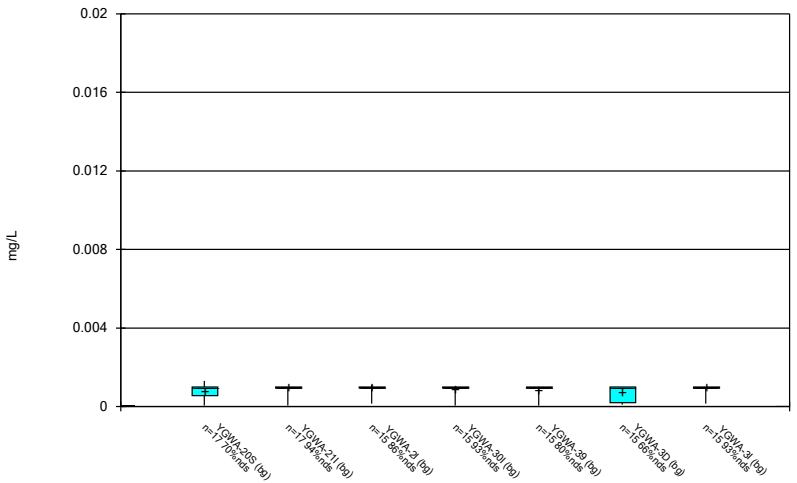
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

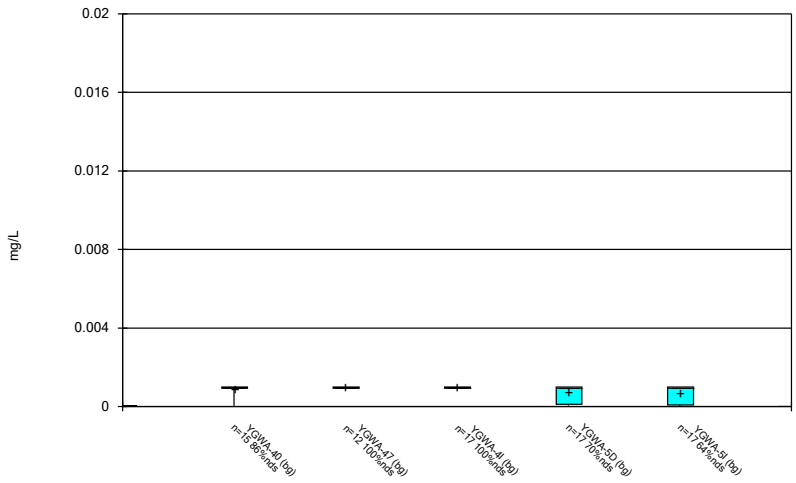


Constituent: Lead Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

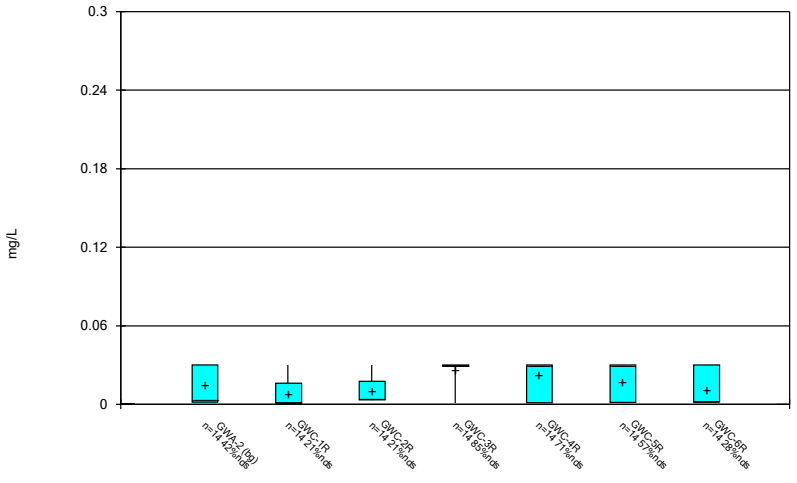


Constituent: Lead Analysis Run 5/5/2021 2:34 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

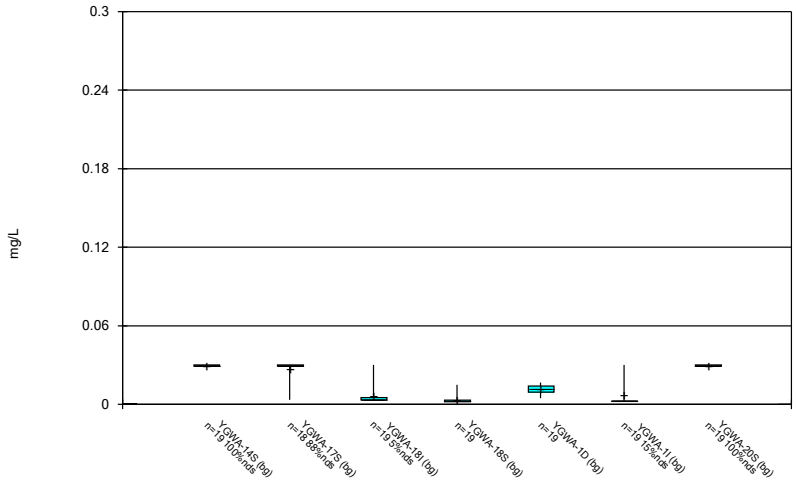


Constituent: Lithium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

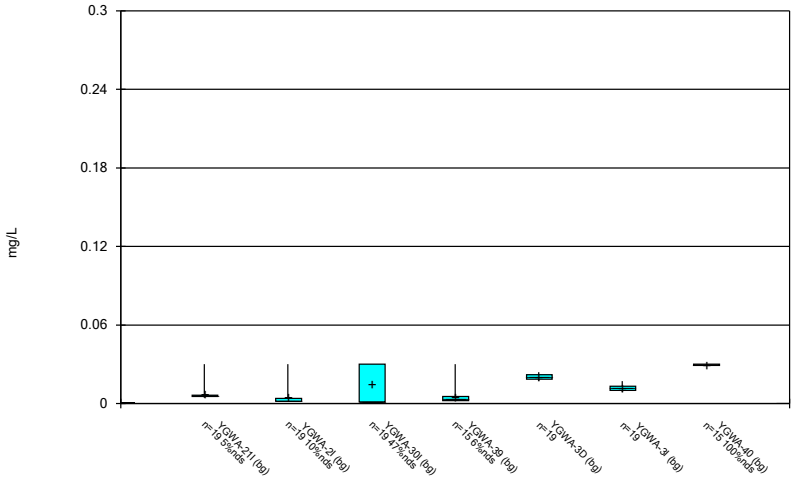
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

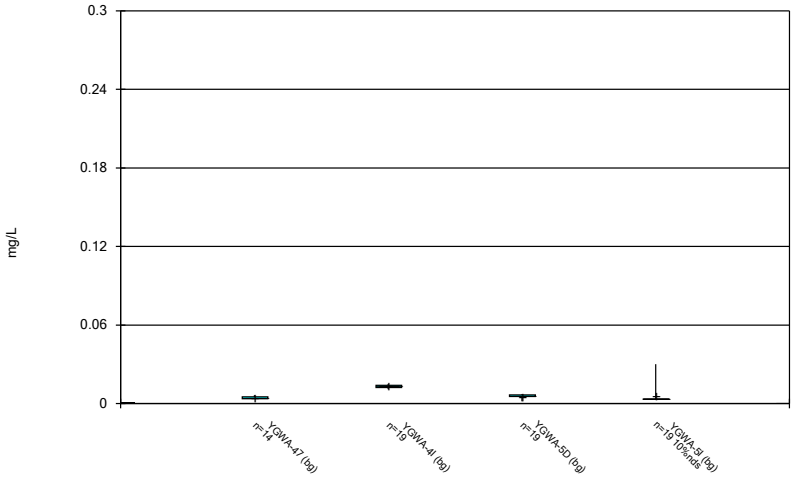


Constituent: Lithium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

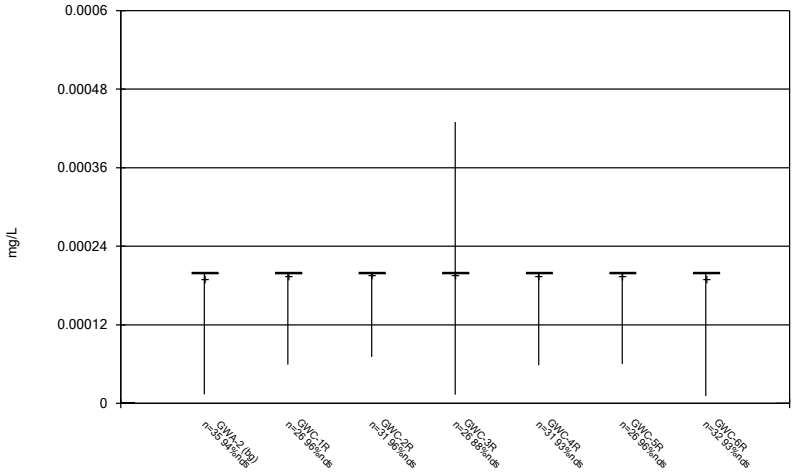


Constituent: Lithium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

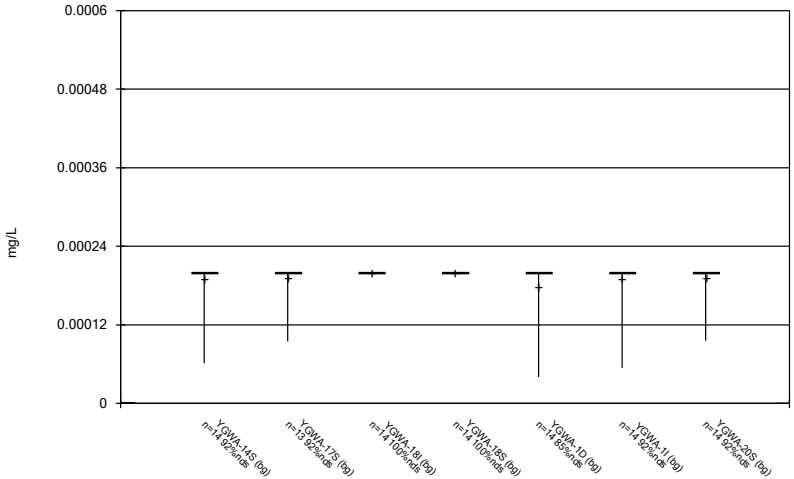


Constituent: Mercury Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

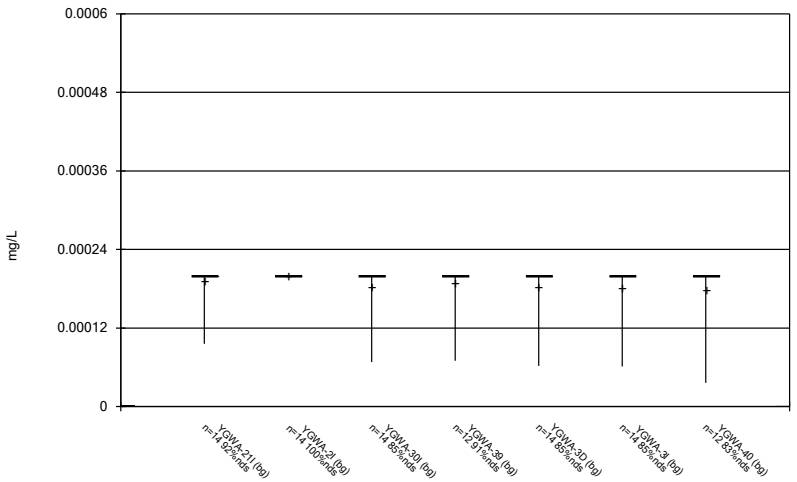
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

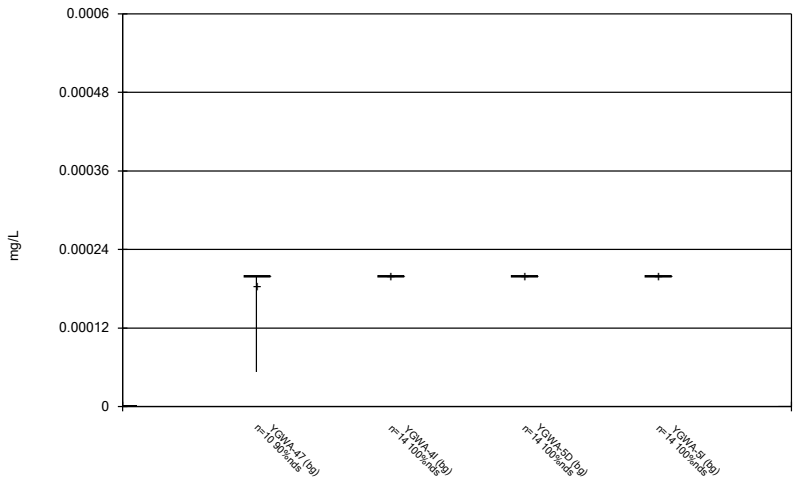


Constituent: Mercury Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

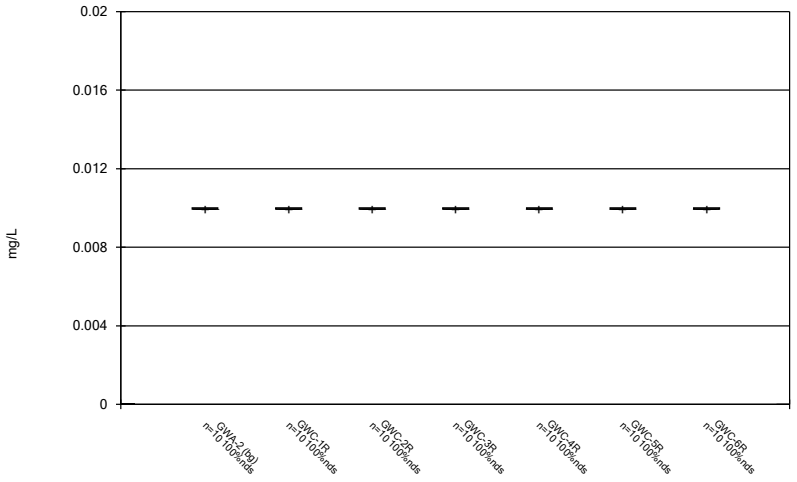


Constituent: Mercury Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

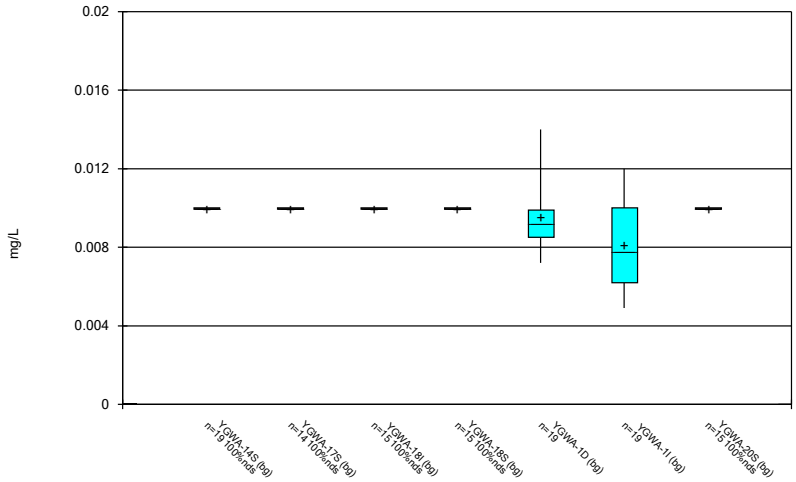


Constituent: Molybdenum Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

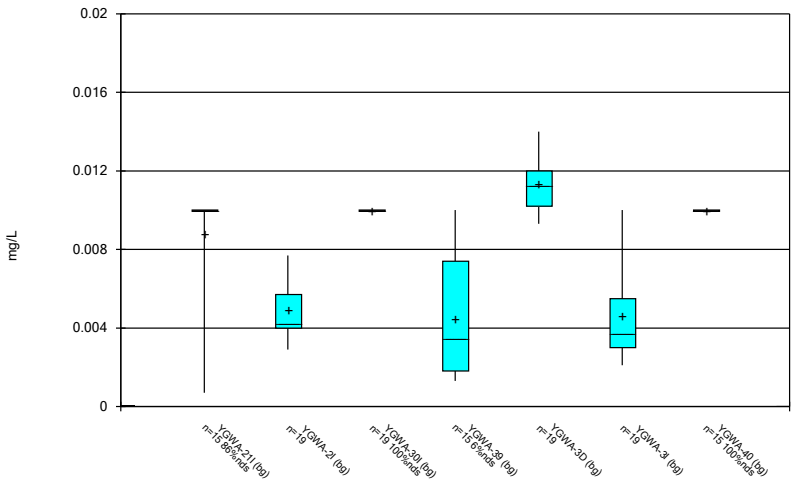
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

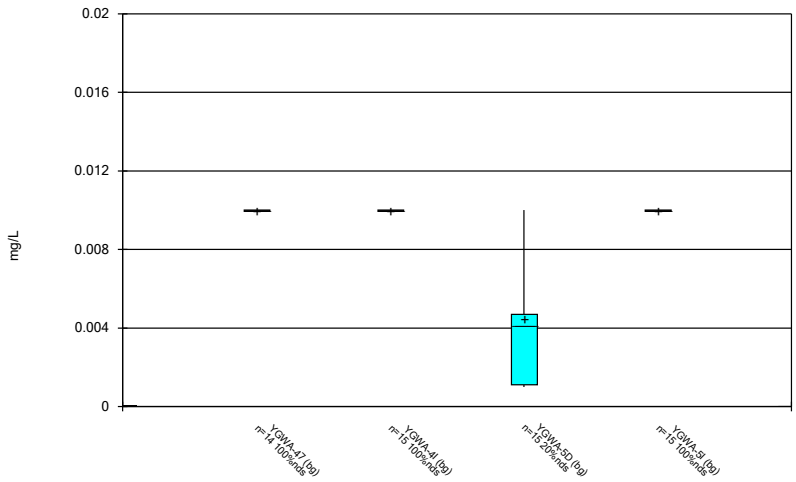


Constituent: Molybdenum Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

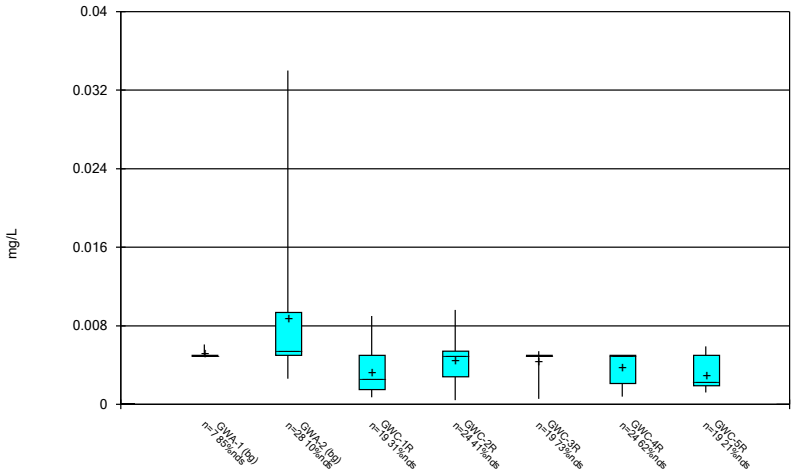


Constituent: Molybdenum Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

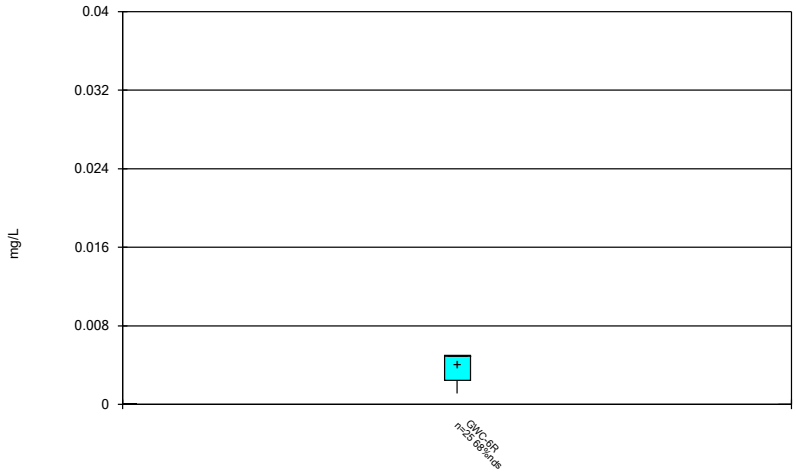


Constituent: Nickel Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

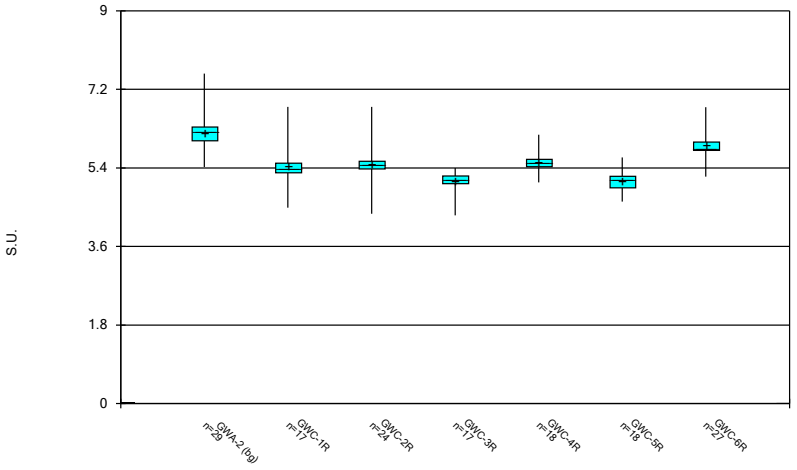
Box & Whiskers Plot



Constituent: Nickel Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

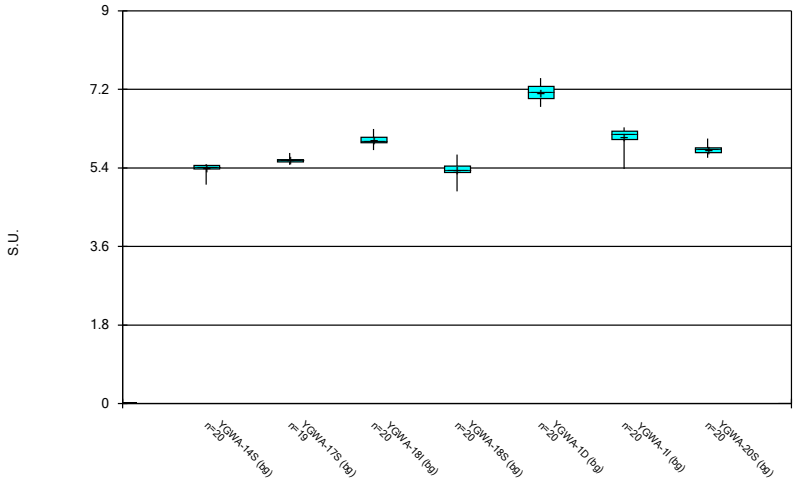


Constituent: pH Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

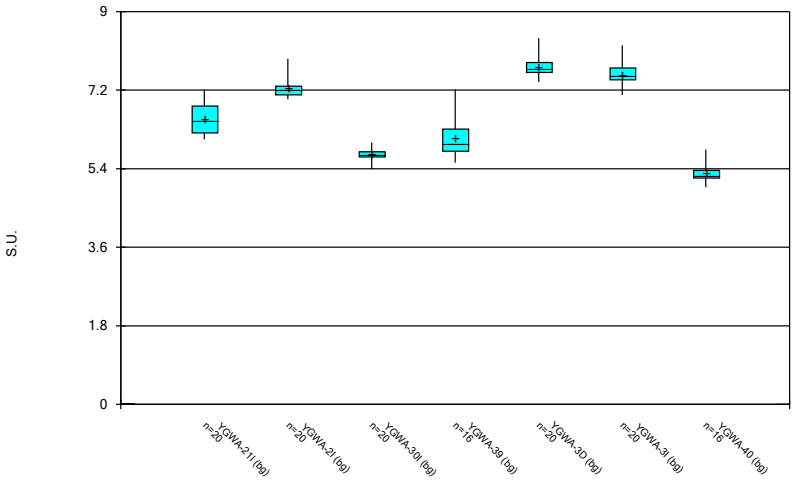


Constituent: pH Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

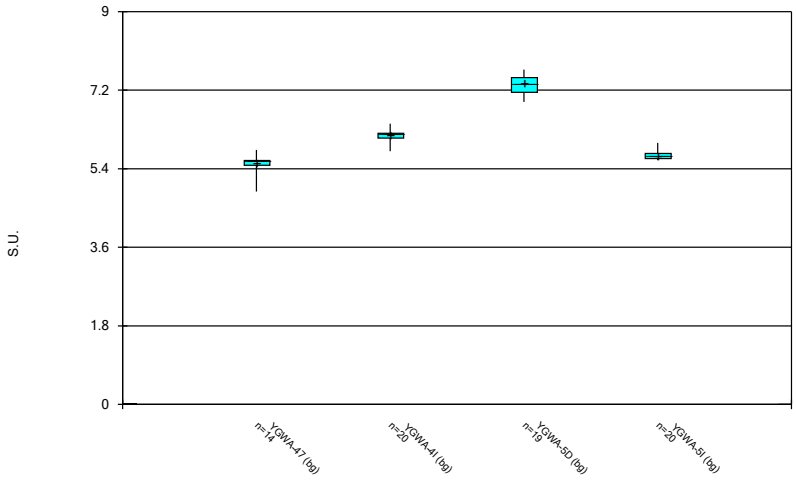


Constituent: pH Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

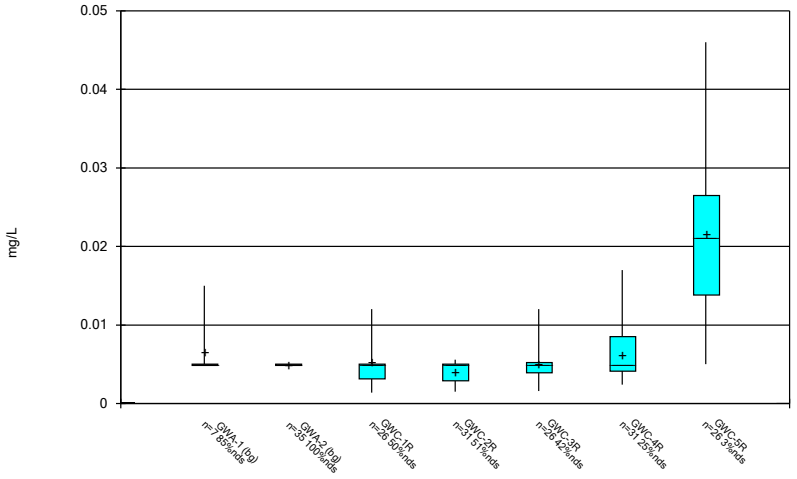
Box & Whiskers Plot



Constituent: pH Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

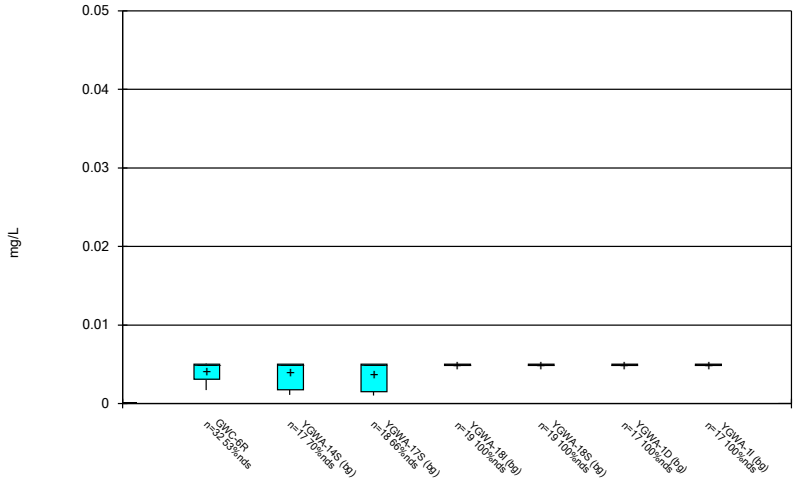


Constituent: Selenium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

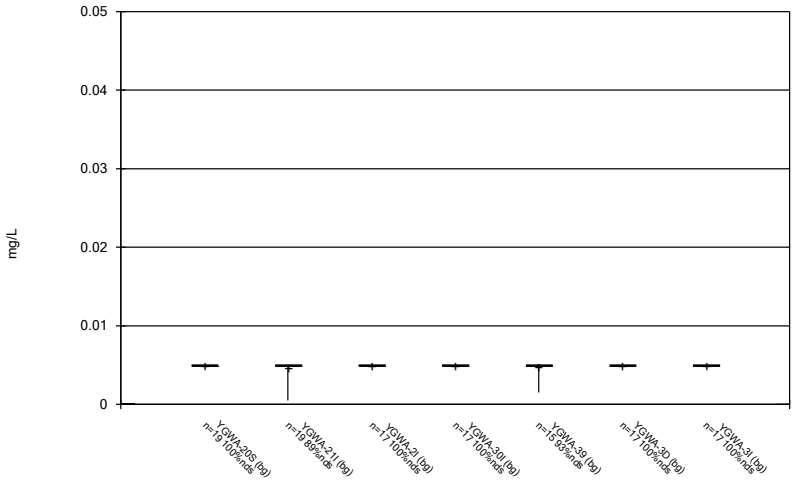


Constituent: Selenium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

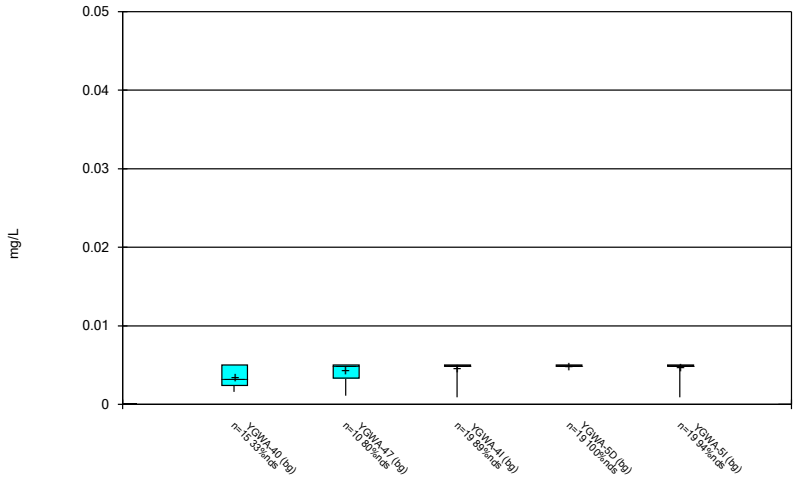


Constituent: Selenium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

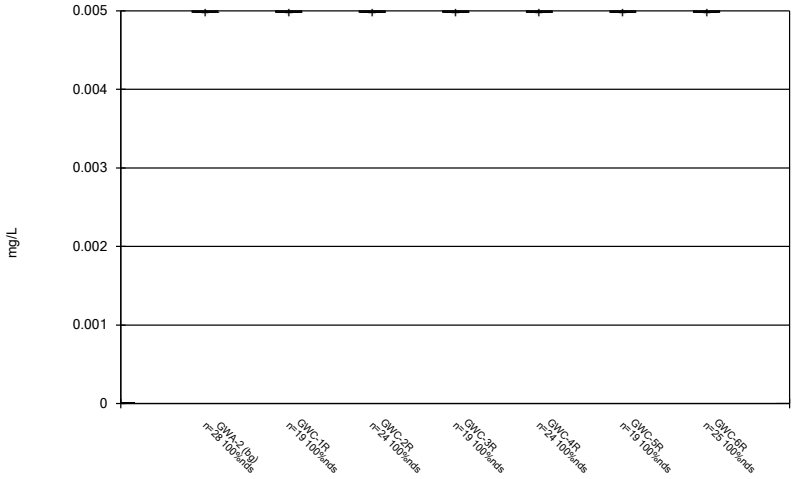


Constituent: Selenium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

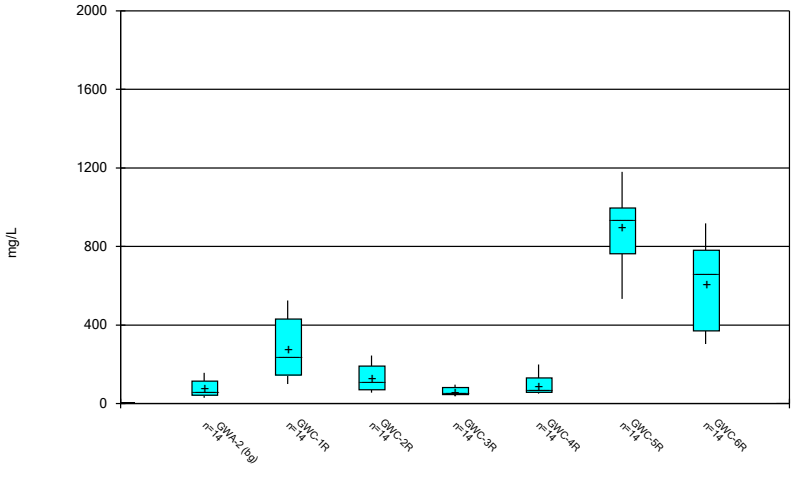


Constituent: Silver Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

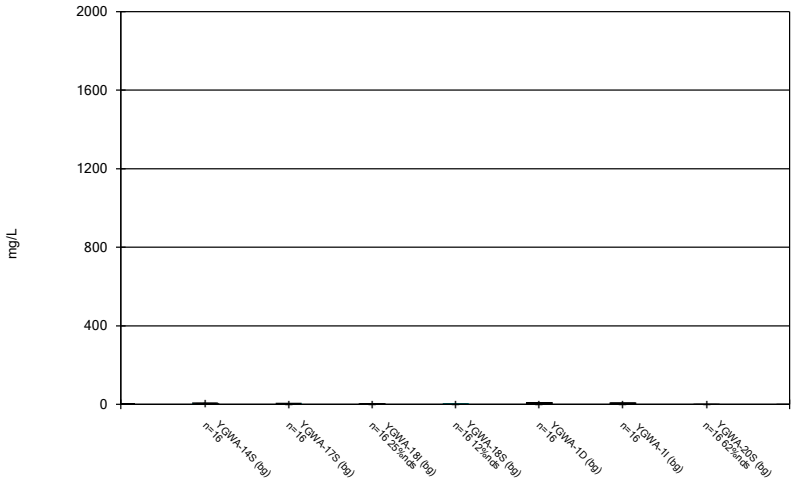


Constituent: Sulfate Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

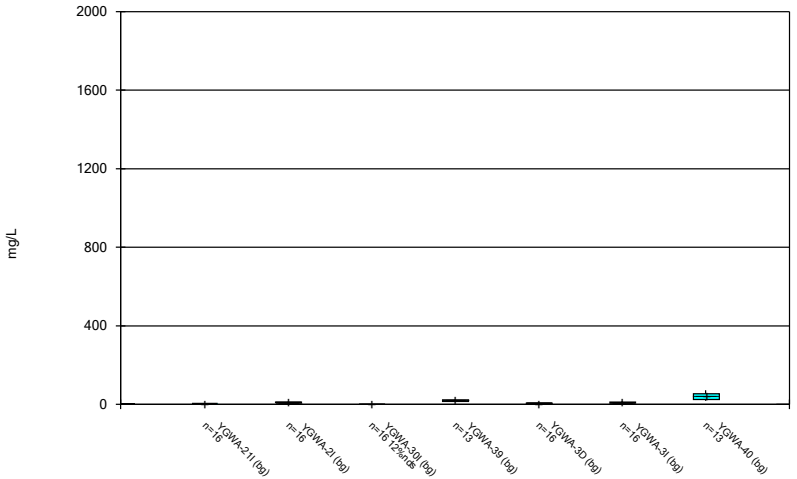


Constituent: Sulfate Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

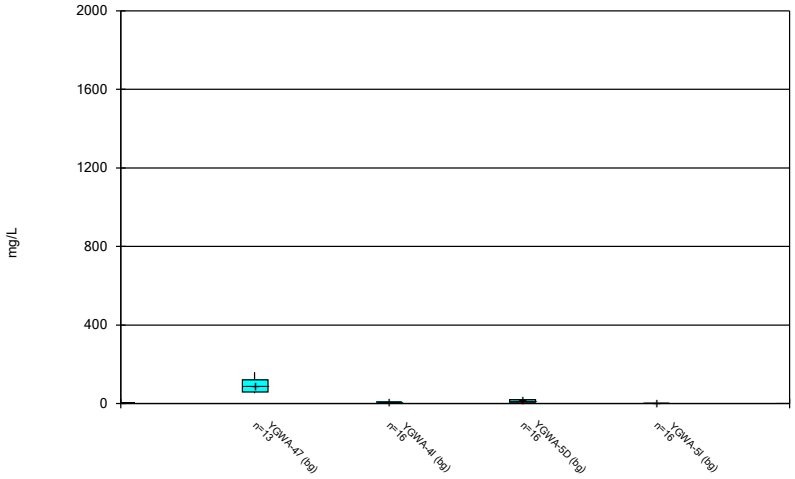


Constituent: Sulfate Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

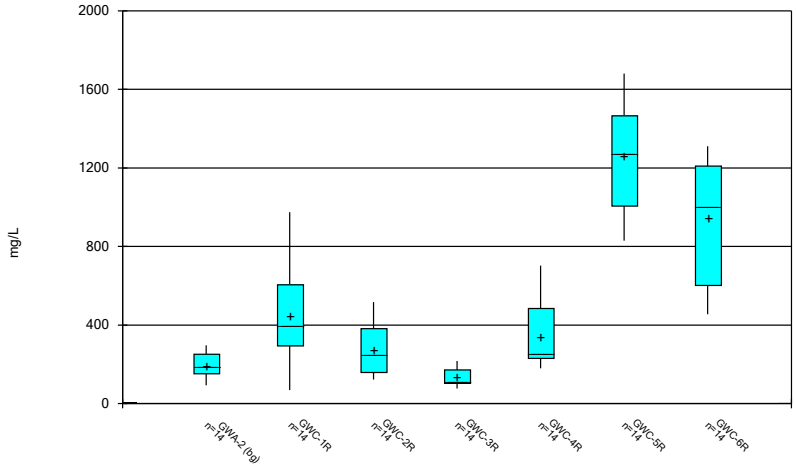


Constituent: Sulfate Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

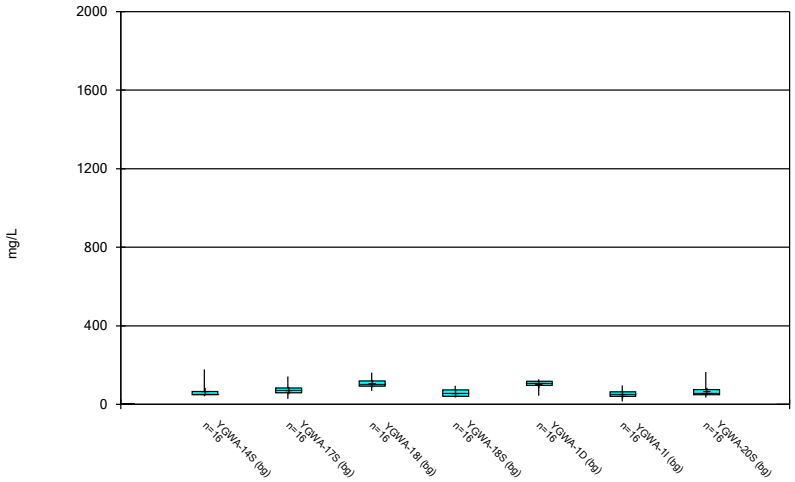


Constituent: TDS Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

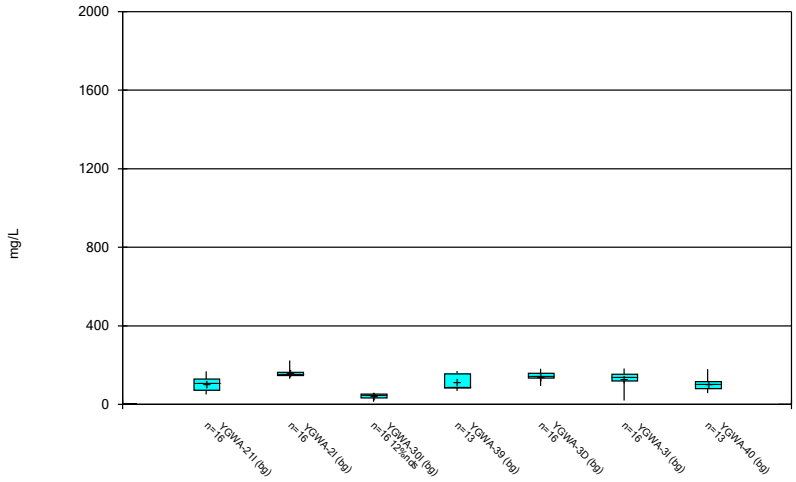


Constituent: TDS Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

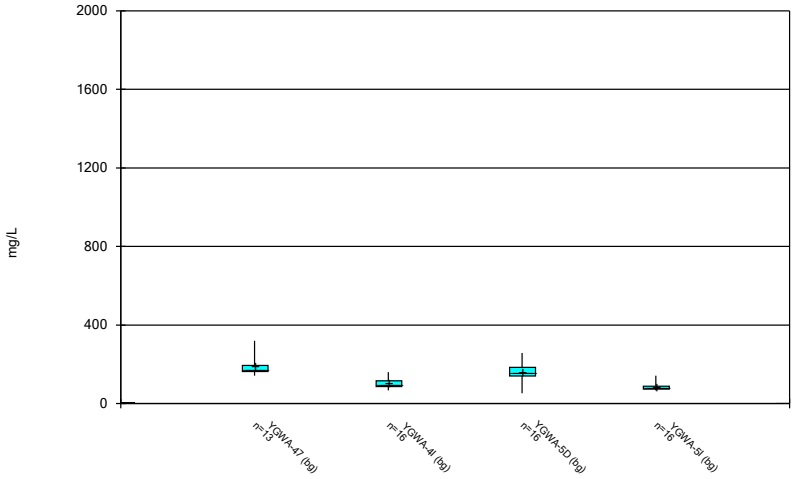
Box & Whiskers Plot



Constituent: TDS Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

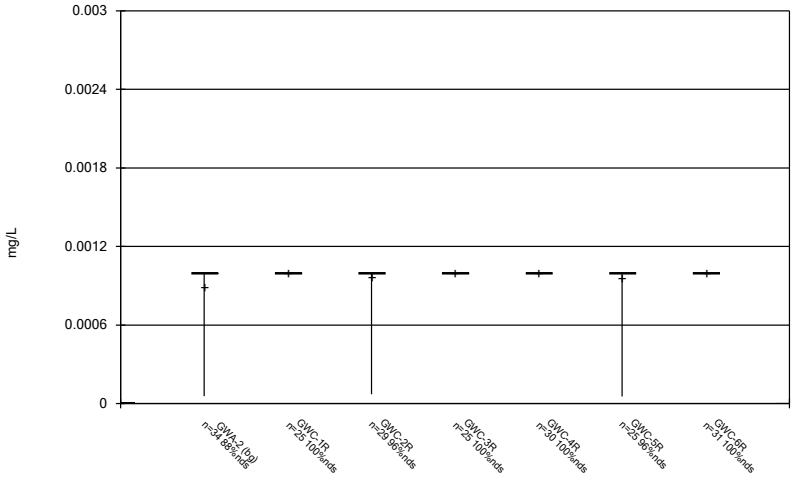


Constituent: TDS Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

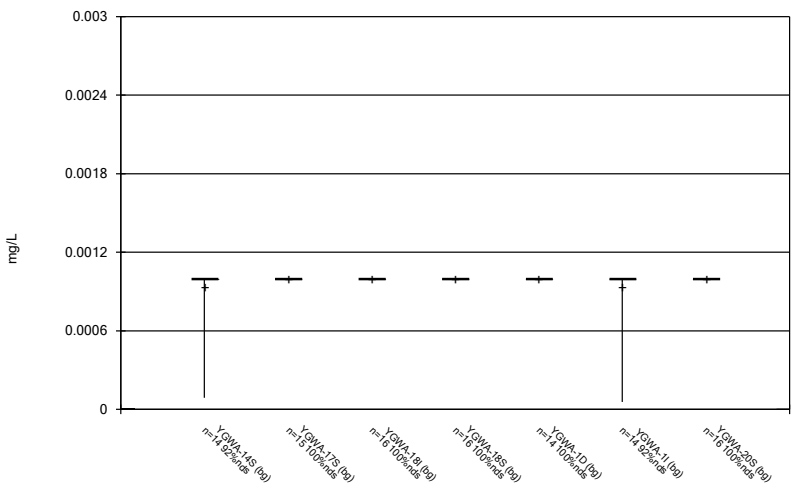


Constituent: Thallium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

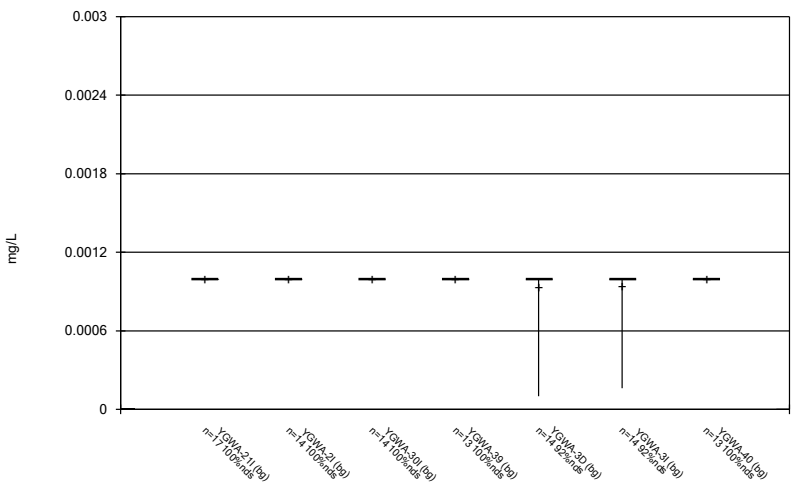


Constituent: Thallium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

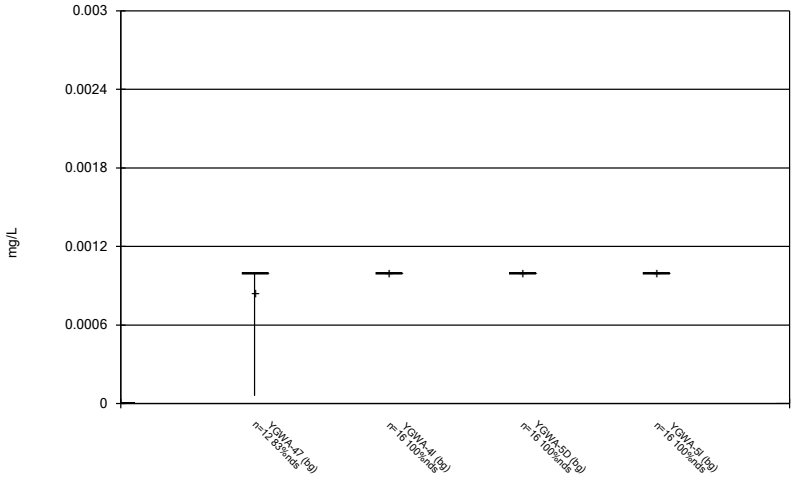
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Box & Whiskers Plot

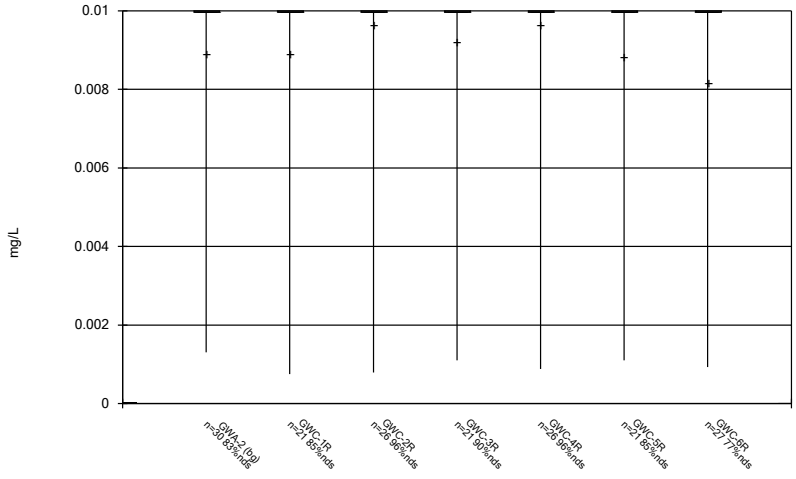


Constituent: Thallium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

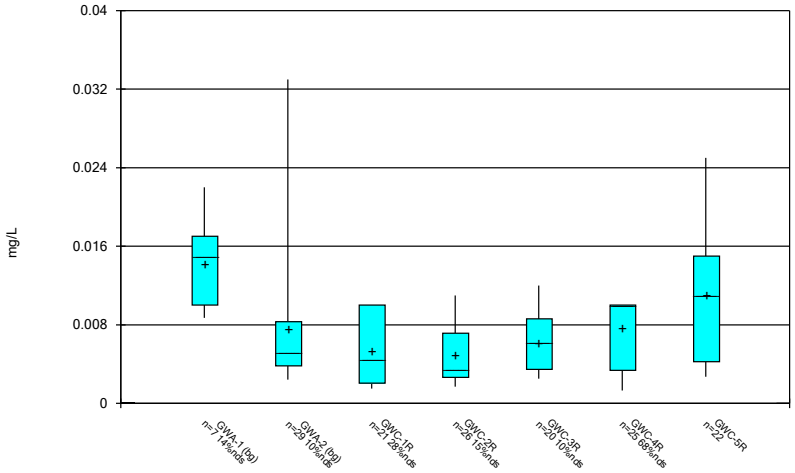


Constituent: Vanadium Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

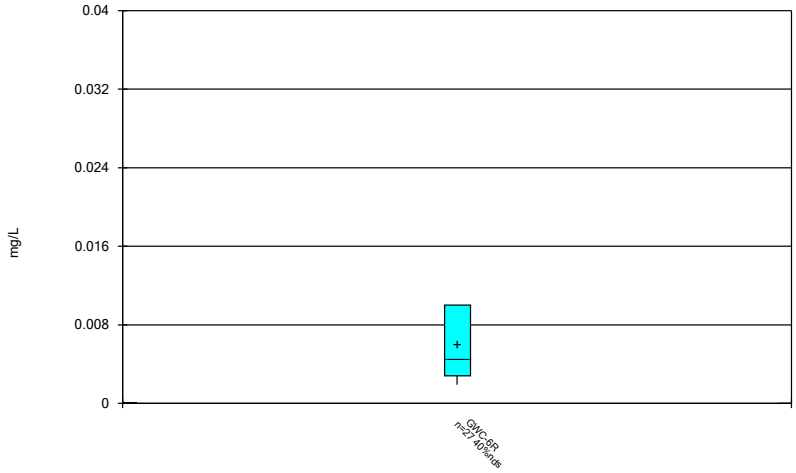


Constituent: Zinc Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Zinc Analysis Run 5/5/2021 2:35 PM

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

FIGURE C.

Outlier Summary

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 2:31 PM

	GWA-2 Cobalt (mg/L)	YGWA-47 pH (S.U.)	GWA-2 Zinc (mg/L)	GWC-3R Zinc (mg/L)	GWC-4R Zinc (mg/L)
3/11/2011					0.025 (o)
2/5/2014			0.018 (o)	0.026 (o)	
4/2/2018		6.3 (O)			
8/26/2020	0.2 (o)				
9/22/2020	0.16 (o)				
3/2/2021	0.21 (o)				

FIGURE D.

Appendix I & II Intrawell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**GWC-5R**	**0.003**	**n/a**	**3/2/2021**	**0.0037**	**Yes**	**18**	**n/a**	**n/a**	**38.89**	**n/a**	**n/a**	**0.005373**	**NP Intra (normality) 1 of 2**
Cadmium (mg/L)	**GWC-5R**	**0.001**	**n/a**	**3/2/2021**	**0.0011**	**Yes**	**18**	**n/a**	**n/a**	**44.44**	**n/a**	**n/a**	**0.005373**	**NP Intra (normality) 1 of 2**
Cobalt (mg/L)	**GWC-3R**	**0.005**	**n/a**	**3/2/2021**	**0.0086**	**Yes**	**18**	**n/a**	**n/a**	**100**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Nickel (mg/L)	**GWA-2**	**0.021**	**n/a**	**3/2/2021**	**0.034**	**Yes**	**22**	**n/a**	**n/a**	**13.64**	**n/a**	**n/a**	**0.003707**	**NP Intra (normality) 1 of 2**
Selenium (mg/L)	**GWC-1R**	**0.01**	**n/a**	**3/1/2021**	**0.011**	**Yes**	**18**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Selenium (mg/L)	**GWC-3R**	**0.01**	**n/a**	**3/2/2021**	**0.012**	**Yes**	**18**	**n/a**	**n/a**	**61.11**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Zinc (mg/L)	**GWA-2**	**0.009584**	**n/a**	**3/2/2021**	**0.031**	**Yes**	**23**	**0.004991**	**0.002**	**4.348**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	**GWC-5R**	**0.01798**	**n/a**	**3/2/2021**	**0.022**	**Yes**	**15**	**0.00738**	**0.004189**	**0**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**

Appendix I & II Intrawell Prediction Limits - All Results

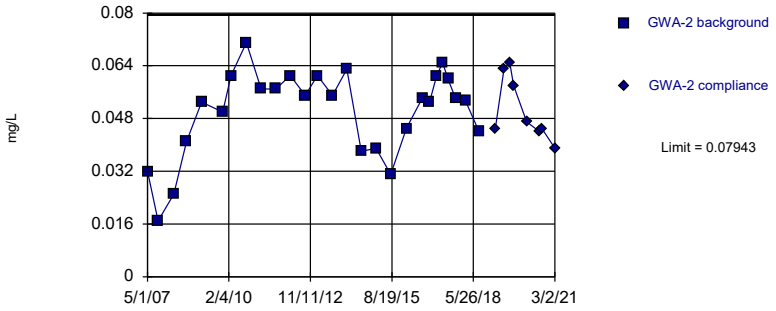
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Barium (mg/L)	GWA-2	0.07943	n/a	3/2/2021	0.039	No	27	0.05023	0.01305	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-1R	0.09203	n/a	3/1/2021	0.063	No	18	0.04614	0.01903	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-2R	0.13	n/a	3/1/2021	0.043	No	23	n/a	n/a	0	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Barium (mg/L)	GWC-3R	0.1072	n/a	3/2/2021	0.015	No	18	0.1832	0.05976	0	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-4R	0.0778	n/a	3/1/2021	0.035	No	19	0.1732	0.04443	0	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-5R	0.06311	n/a	3/2/2021	0.011	No	14	0.03304	0.01162	0	None	No	0.0005852	Param Intra 1 of 2
Barium (mg/L)	GWC-6R	0.1025	n/a	3/3/2021	0.043	No	24	0.04776	0.02401	0	None	No	0.0005852	Param Intra 1 of 2
Beryllium (mg/L)	GWC-1R	0.003	n/a	3/1/2021	0.00023J	No	18	n/a	n/a	66.67	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-2R	0.003	n/a	3/1/2021	0.00032J	No	23	n/a	n/a	95.65	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	GWC-3R	0.003	n/a	3/2/2021	0.00081	No	18	n/a	n/a	38.89	n/a	n/a	0.005373	NP Intra (normality) 1 of 2
Beryllium (mg/L)	GWC-4R	0.003	n/a	3/1/2021	0.00006J	No	23	n/a	n/a	100	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Beryllium (mg/L)	**GWC-5R**	**0.003**	**n/a**	**3/2/2021**	**0.0037**	**Yes**	**18**	**n/a**	**n/a**	**38.89**	**n/a**	**n/a**	**0.005373**	**NP Intra (normality) 1 of 2**
Cadmium (mg/L)	GWC-1R	0.0025	n/a	3/1/2021	0.00013J	No	18	n/a	n/a	94.44	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-2R	0.0025	n/a	3/1/2021	0.00016J	No	23	n/a	n/a	91.3	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-3R	0.0025	n/a	3/2/2021	0.00021J	No	18	n/a	n/a	88.89	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	GWC-4R	0.0005	n/a	3/1/2021	0.0005ND	No	23	n/a	n/a	95.65	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Cadmium (mg/L)	**GWC-5R**	**0.001**	**n/a**	**3/2/2021**	**0.0011**	**Yes**	**18**	**n/a**	**n/a**	**44.44**	**n/a**	**n/a**	**0.005373**	**NP Intra (normality) 1 of 2**
Cobalt (mg/L)	GWA-2	0.006994	n/a	3/17/2020	0.003J	No	27	0.003556	0.001537	40.74	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-1R	0.008717	n/a	3/1/2021	0.00083J	No	18	-6.613	0.7756	50	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-2R	0.04742	n/a	3/1/2021	0.00074J	No	23	0.02477	0.009863	4.348	None	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	**GWC-3R**	**0.005**	**n/a**	**3/2/2021**	**0.0086**	**Yes**	**18**	**n/a**	**n/a**	**100**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Cobalt (mg/L)	GWC-4R	0.007137	n/a	3/1/2021	0.0016J	No	23	0.002697	0.001934	34.78	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Cobalt (mg/L)	GWC-5R	0.005	n/a	3/2/2021	0.00039J	No	18	n/a	n/a	100	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Cobalt (mg/L)	GWC-6R	0.005	n/a	3/3/2021	0.005ND	No	24	n/a	n/a	95.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Nickel (mg/L)	**GWA-2**	**0.021**	**n/a**	**3/2/2021**	**0.034**	**Yes**	**22**	**n/a**	**n/a**	**13.64**	**n/a**	**n/a**	**0.003707**	**NP Intra (normality) 1 of 2**
Nickel (mg/L)	GWC-1R	0.01331	n/a	3/1/2021	0.0024J	No	13	-6.05	0.655	38.46	Kaplan-Meier	ln(x)	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-2R	0.01015	n/a	3/1/2021	0.005ND	No	18	0.003546	0.00274	44.44	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-3R	0.0054	n/a	3/2/2021	0.005ND	No	13	n/a	n/a	69.23	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-4R	0.01	n/a	3/1/2021	0.0021J	No	18	n/a	n/a	77.78	n/a	n/a	0.005373	NP Intra (NDs) 1 of 2
Nickel (mg/L)	GWC-5R	0.005956	n/a	3/2/2021	0.0014J	No	13	0.002281	0.00139	30.77	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Nickel (mg/L)	GWC-6R	0.005	n/a	3/3/2021	0.0016J	No	19	n/a	n/a	89.47	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Selenium (mg/L)	**GWC-1R**	**0.01**	**n/a**	**3/1/2021**	**0.011**	**Yes**	**18**	**n/a**	**n/a**	**66.67**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Selenium (mg/L)	GWC-2R	0.01	n/a	3/1/2021	0.0043J	No	23	n/a	n/a	69.57	n/a	n/a	0.003415	NP Intra (NDs) 1 of 2
Selenium (mg/L)	**GWC-3R**	**0.01**	**n/a**	**3/2/2021**	**0.012**	**Yes**	**18**	**n/a**	**n/a**	**61.11**	**n/a**	**n/a**	**0.005373**	**NP Intra (NDs) 1 of 2**
Selenium (mg/L)	GWC-4R	0.01548	n/a	3/1/2021	0.0041J	No	23	0.007285	0.003569	34.78	Kaplan-Meier	No	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-5R	0.04273	n/a	3/2/2021	0.019	No	18	0.1371	0.02884	5.556	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Selenium (mg/L)	GWC-6R	0.01	n/a	3/3/2021	0.002J	No	24	n/a	n/a	70.83	n/a	n/a	0.003124	NP Intra (NDs) 1 of 2
Zinc (mg/L)	**GWA-2**	**0.009584**	**n/a**	**3/2/2021**	**0.031**	**Yes**	**23**	**0.004991**	**0.002**	**4.348**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	GWC-1R	0.007102	n/a	3/1/2021	0.01ND	No	15	0.05264	0.0125	20	Kaplan-Meier	sqrt(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-2R	0.01249	n/a	3/1/2021	0.01ND	No	20	0.0653	0.01977	10	None	sqrt(x)	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-3R	0.01462	n/a	3/2/2021	0.0069J	No	14	0.00605	0.003313	7.143	None	No	0.0005852	Param Intra 1 of 2
Zinc (mg/L)	GWC-4R	0.01	n/a	3/1/2021	0.01ND	No	19	n/a	n/a	63.16	n/a	n/a	0.004832	NP Intra (NDs) 1 of 2
Zinc (mg/L)	**GWC-5R**	**0.01798**	**n/a**	**3/2/2021**	**0.022**	**Yes**	**15**	**0.00738**	**0.004189**	**0**	**None**	**No**	**0.0005852**	**Param Intra 1 of 2**
Zinc (mg/L)	GWC-6R	0.01	n/a	3/3/2021	0.01ND	No	21	n/a	n/a	33.33	n/a	n/a	0.003999	NP Intra (normality) 1 of 2

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.05023, Std. Dev.=0.01305, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.924, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

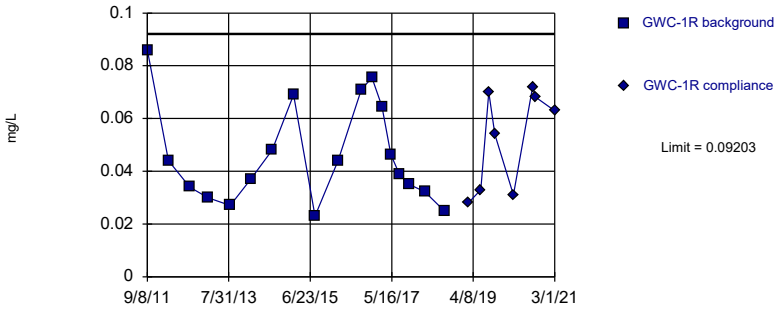
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.04614, Std. Dev.=0.01903, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9026, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

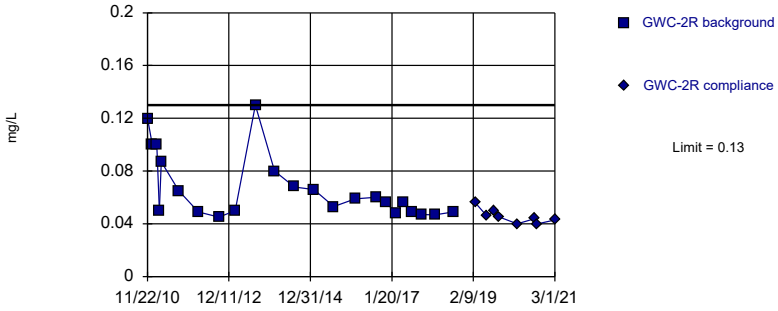
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. 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 23 background values. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Barium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

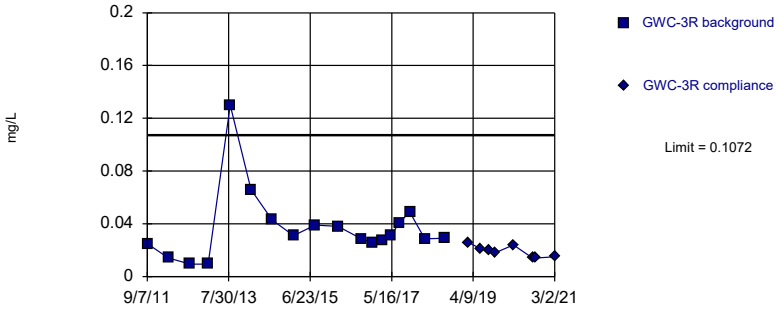
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1832, Std. Dev.=0.05976, n=18. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8697, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

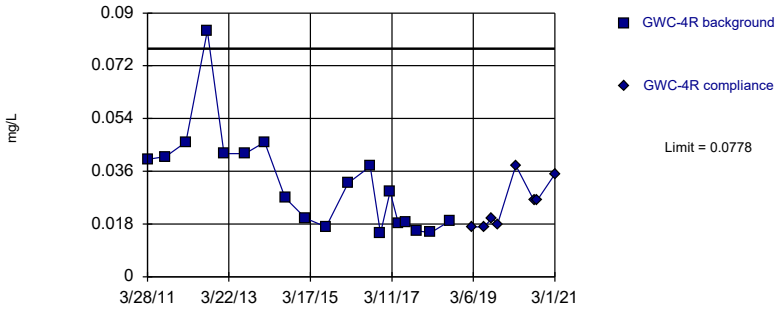
Constituent: Barium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1732, Std. Dev.=0.04443, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8913, critical = 0.863. Kappa = 2.381 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

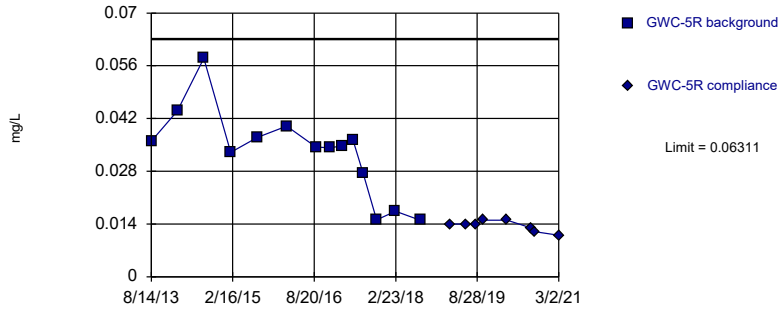
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.03304, Std. Dev.=0.01162, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.911, critical = 0.825. Kappa = 2.587 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

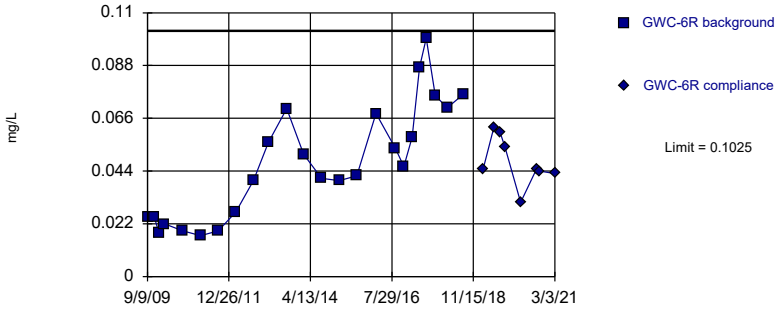
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.04776, Std. Dev.=0.02401, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9379, critical = 0.884. Kappa = 2.278 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Barium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

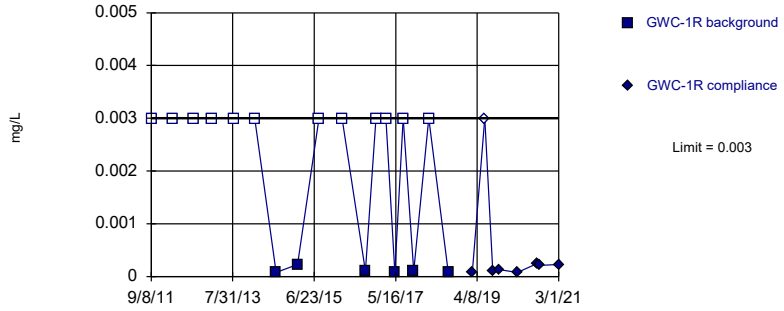
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

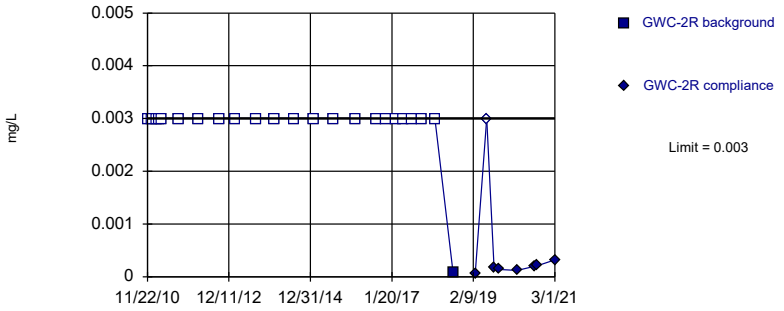
Constituent: Beryllium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



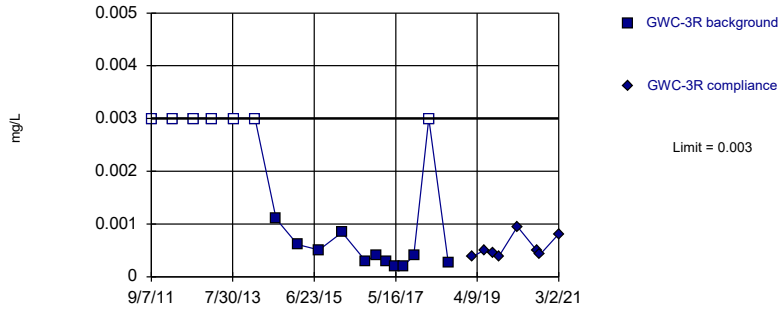
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 95.65% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Beryllium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



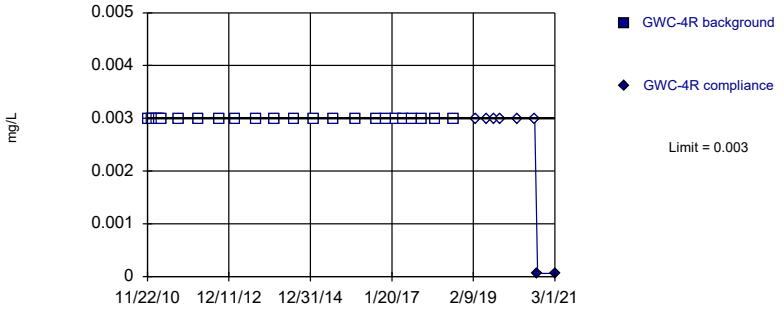
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 18 background values. 38.89% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Beryllium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



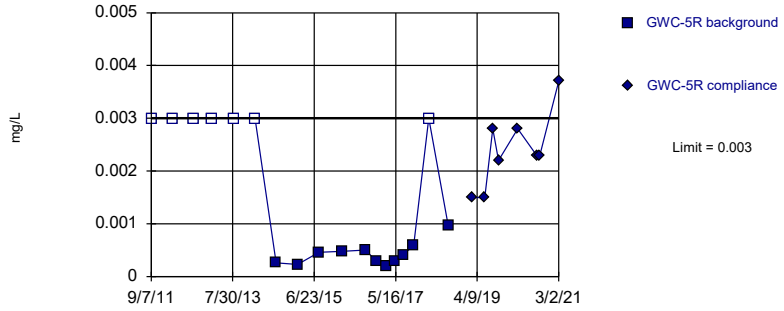
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 23) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Beryllium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 18 background values. 38.89% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

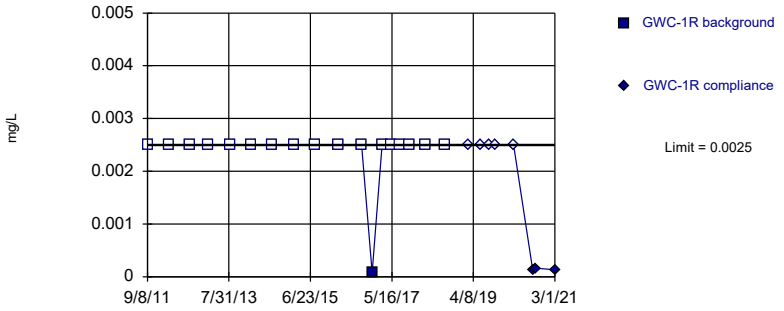
Constituent: Beryllium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 94.44% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Cadmium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

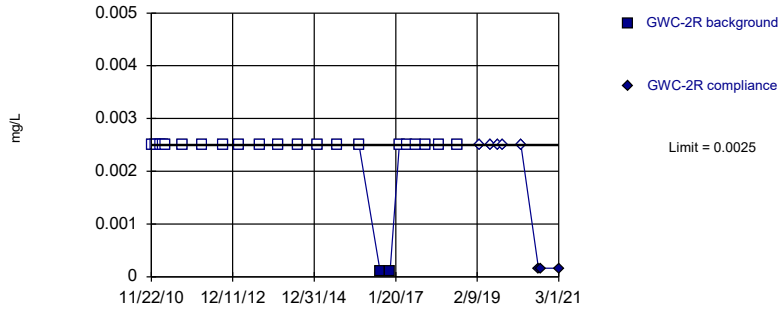
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 91.3% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Cadmium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

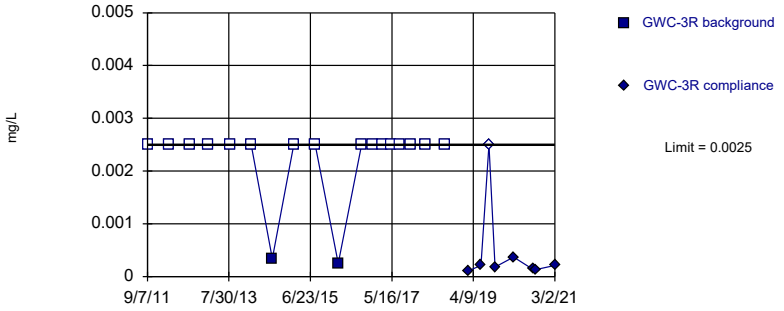
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 88.89% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Cadmium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

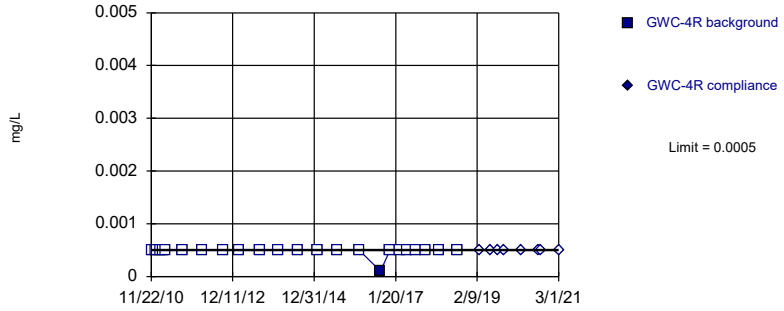
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 95.65% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Cadmium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

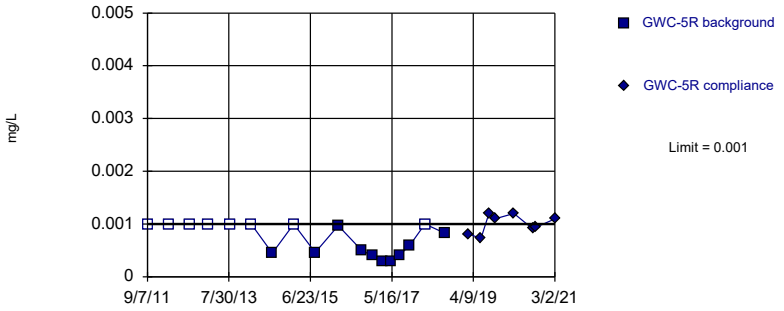
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 18 background values. 44.44% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

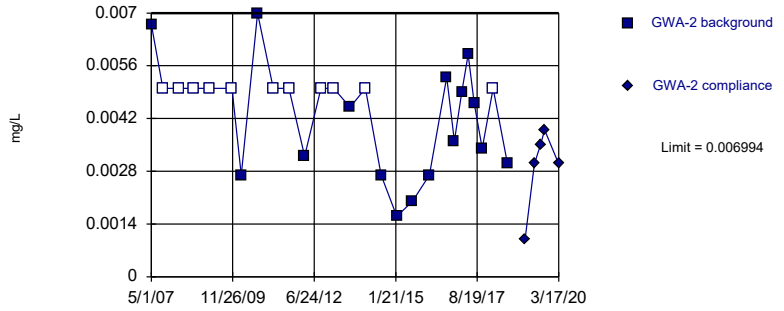
Constituent: Cadmium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.003556, Std. Dev.=0.001537, n=27, 40.74% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9046, critical = 0.894. Kappa = 2.237 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

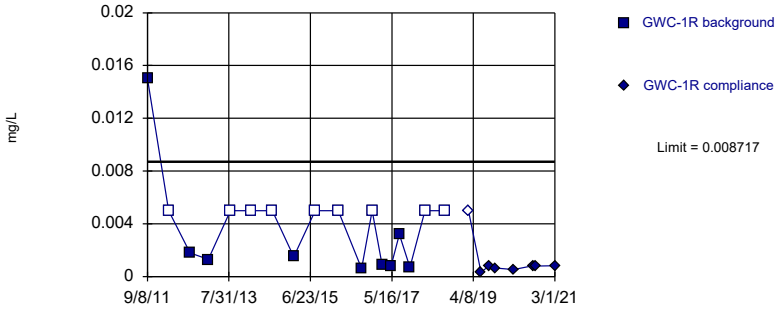
Constituent: Cobalt Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.613, Std. Dev.=0.7756, n=18, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8602, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

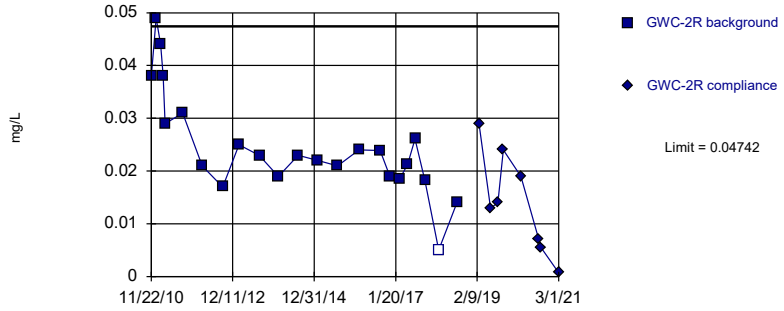
Constituent: Cobalt Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.02477, Std. Dev.=0.009863, n=23, 4.348% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9174, critical = 0.881. Kappa = 2.296 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

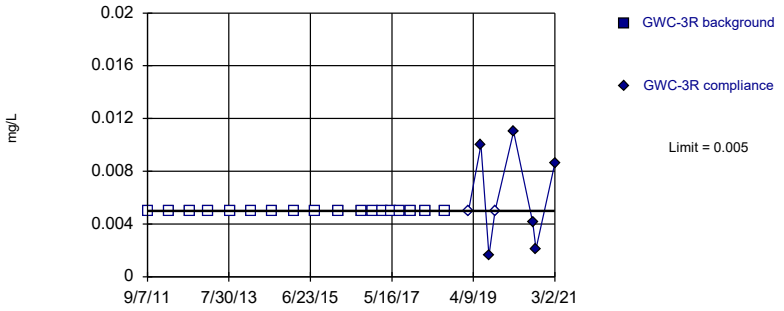
Constituent: Cobalt Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

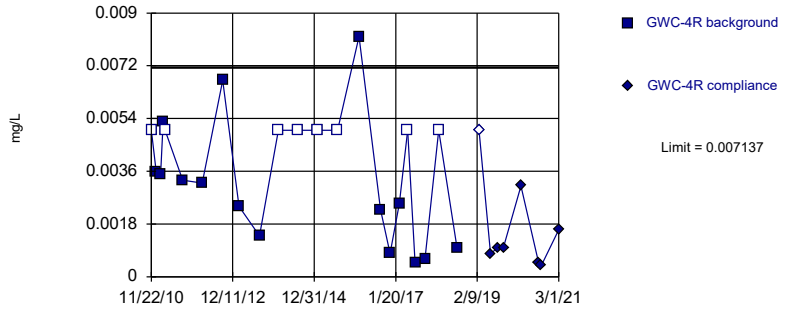
Constituent: Cobalt Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002697, Std. Dev.=0.001934, n=23, 34.78% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9311, critical = 0.881. Kappa = 2.296 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

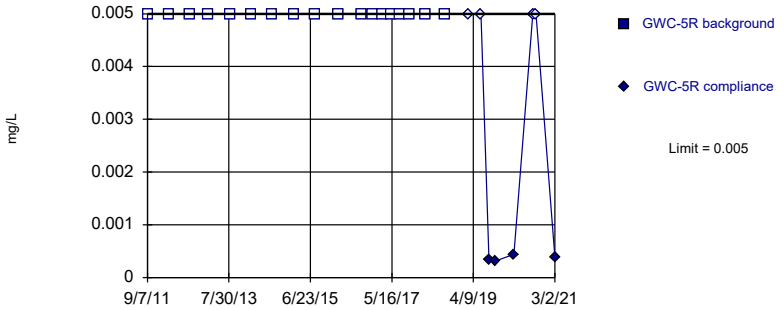
Constituent: Cobalt Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 18) were censored; limit is most recent reporting limit. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

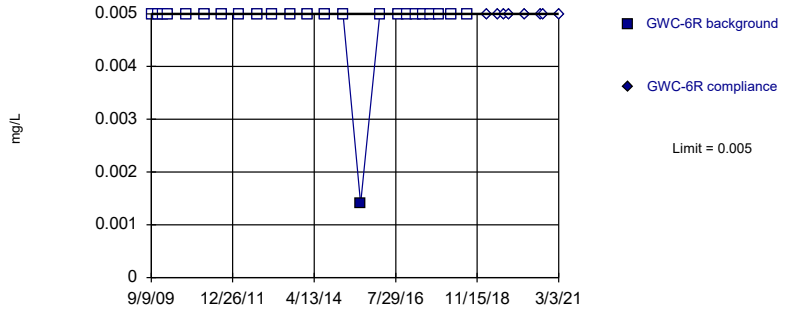
Constituent: Cobalt Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 95.83% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

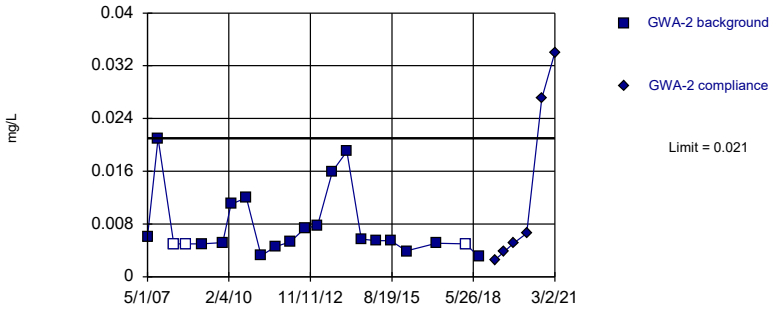
Constituent: Cobalt Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. 13.64% NDs. Well-constituent pair annual alpha = 0.007401. Individual comparison alpha = 0.003707 (1 of 2).

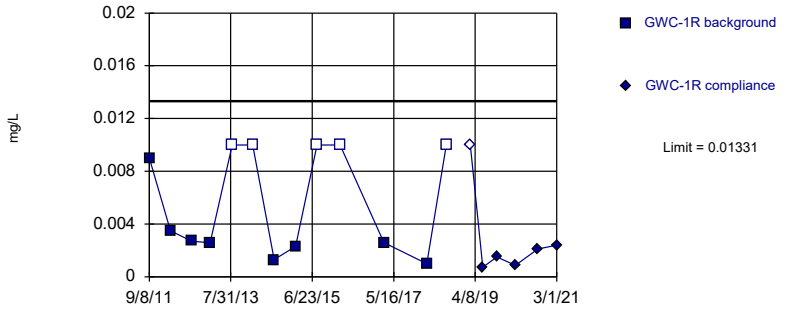
Constituent: Nickel Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-6.05, Std. Dev.=0.655, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8323, critical = 0.814. Kappa = 2.643 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

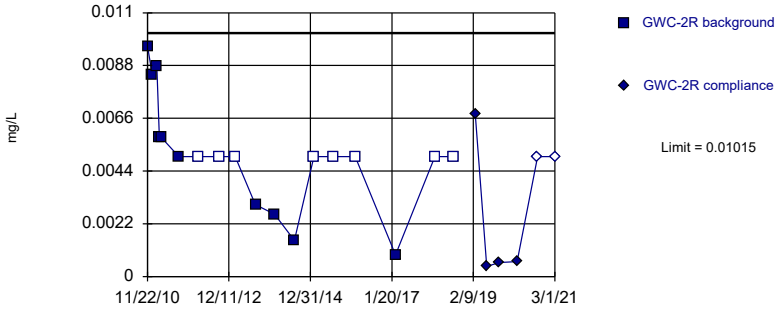
Constituent: Nickel Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.003546, Std. Dev.=0.00274, n=18, 44.44% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8887, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

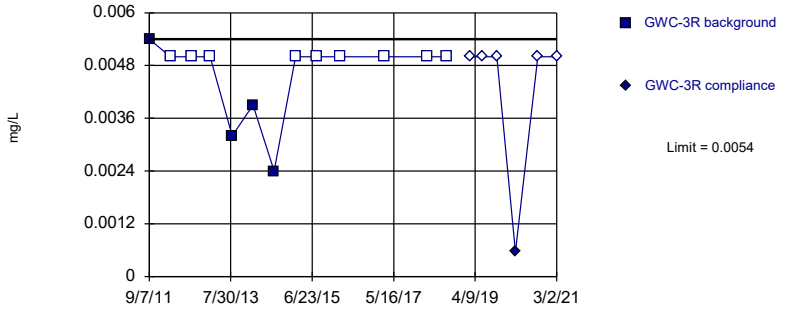
Constituent: Nickel Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 69.23% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

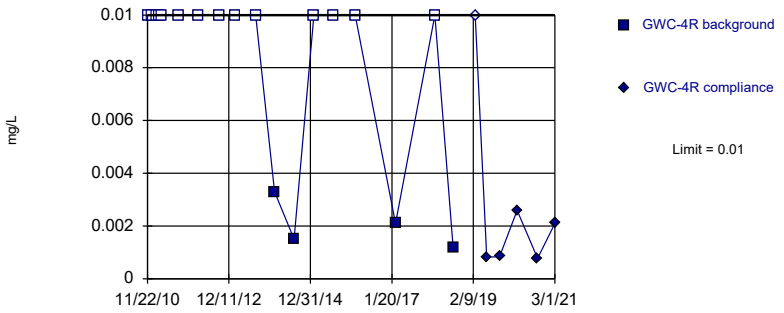
Constituent: Nickel Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 77.78% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

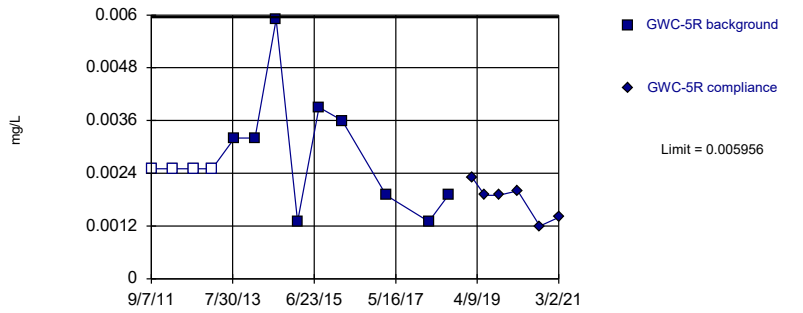
Constituent: Nickel Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.002281, Std. Dev.=0.00139, n=13, 30.77% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8933, critical = 0.814. Kappa = 2.643 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

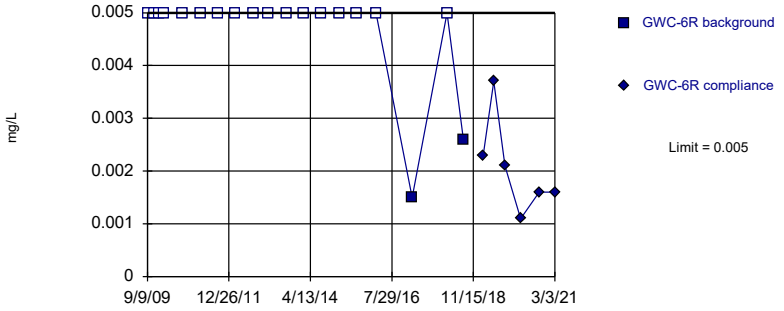
Constituent: Nickel Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 89.47% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

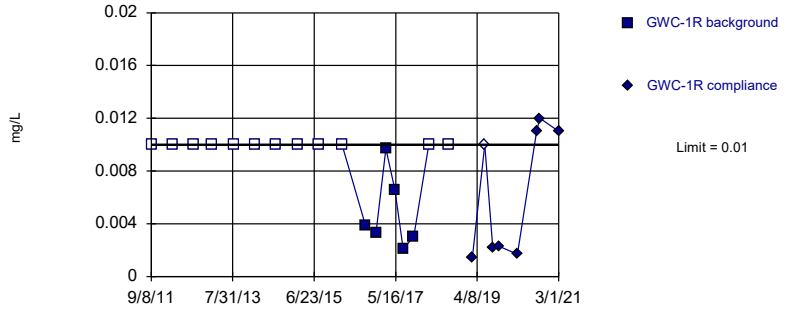
Constituent: Nickel Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 66.67% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

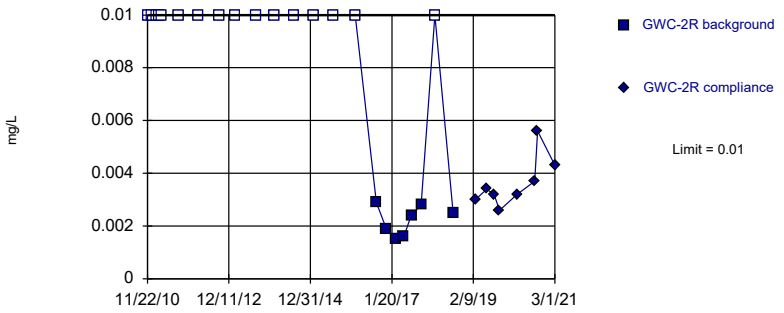
Constituent: Selenium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 23 background values. 69.57% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Selenium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

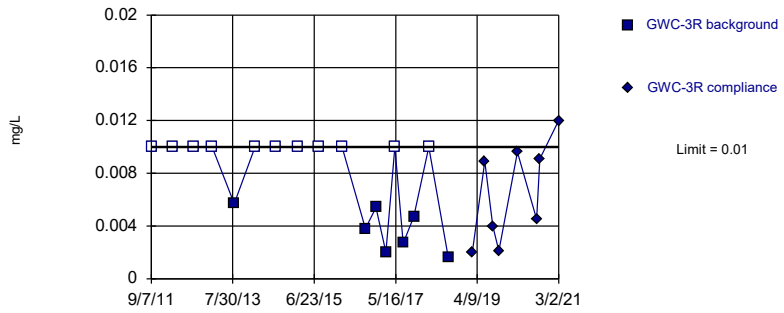
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 18 background values. 61.11% NDs. Well-constituent pair annual alpha = 0.01072. Individual comparison alpha = 0.005373 (1 of 2).

Constituent: Selenium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

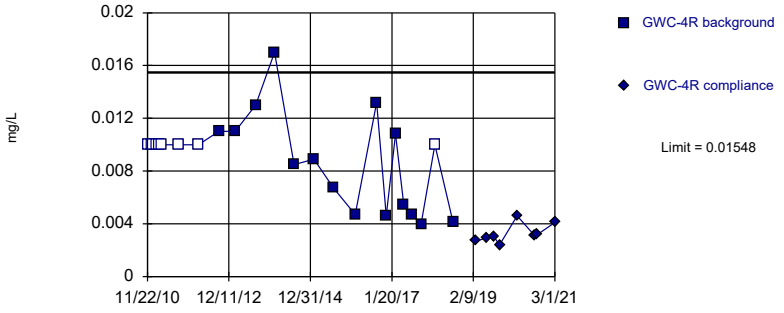
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.007285, Std. Dev.=0.003569, n=23, 34.78% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9085, critical = 0.881. Kappa = 2.296 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Selenium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

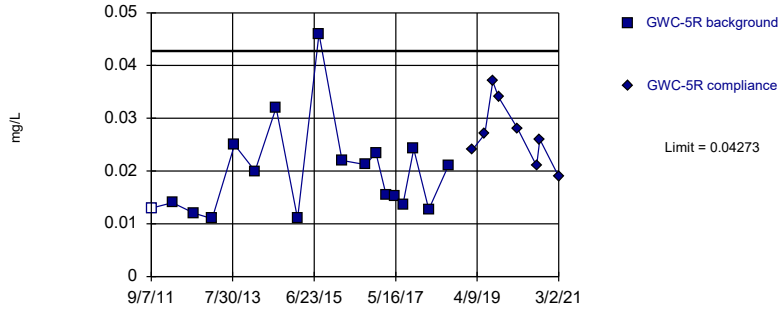
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.1371, Std. Dev.=0.02884, n=18, 5.556% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8922, critical = 0.858. Kappa = 2.412 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Selenium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

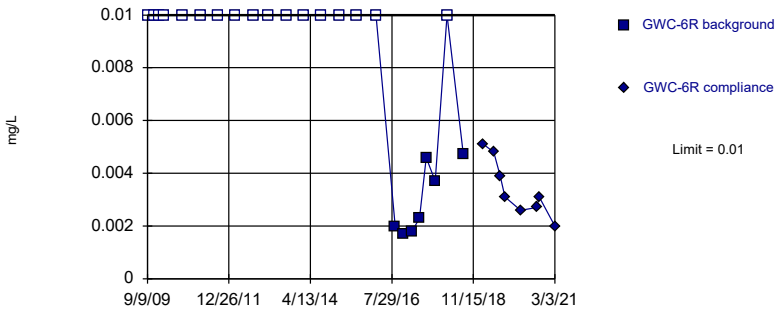
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 24 background values. 70.83% NDs. Well-constituent pair annual alpha = 0.006238. Individual comparison alpha = 0.003124 (1 of 2).

Constituent: Selenium Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

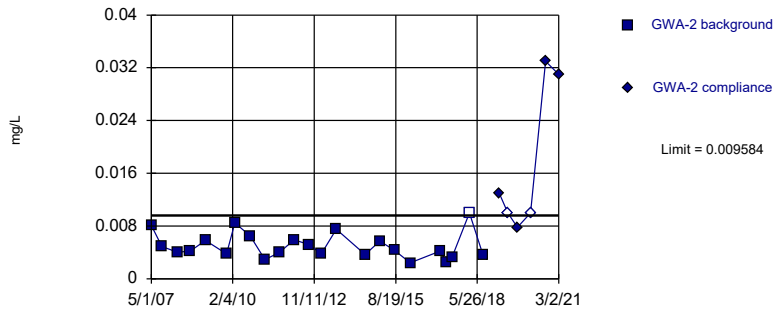
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.004991, Std. Dev.=0.002, n=23, 4.348% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9103, critical = 0.881. Kappa = 2.296 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Zinc Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

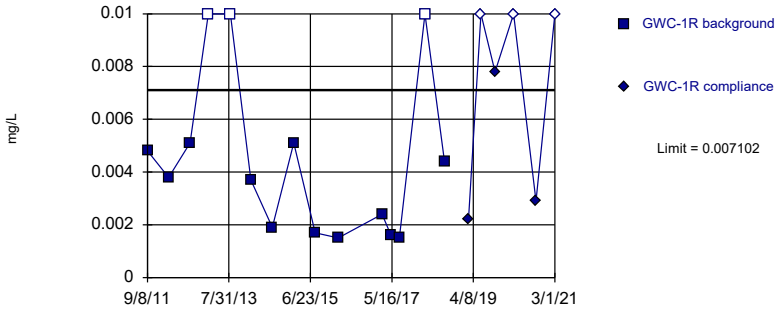
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation) (after Kaplan-Meier Adjustment): Mean=0.05264, Std. Dev.=0.0125, n=15, 20% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8675, critical = 0.835. Kappa = 2.53 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Zinc Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

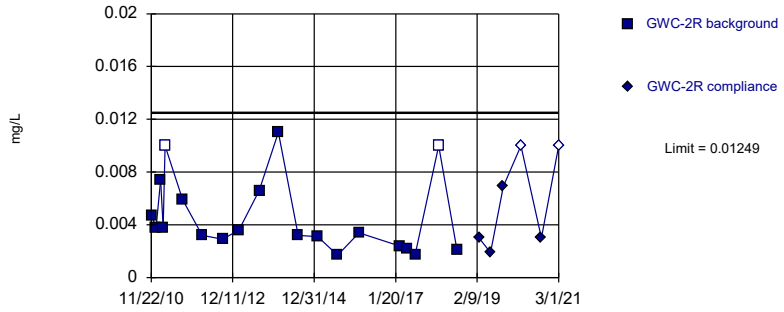
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square root transformation): Mean=0.0653, Std. Dev.=0.01977, n=20, 10% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8938, critical = 0.868. Kappa = 2.35 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

Constituent: Zinc Analysis Run 5/5/2021 3:04 PM View: Appendix I & II

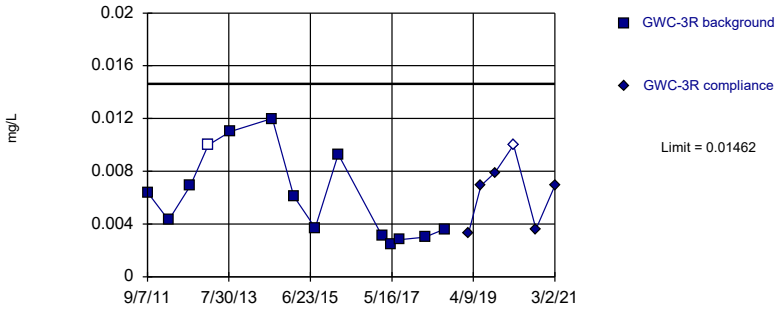
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00605, Std. Dev.=0.003313, n=14, 7.143% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8788, critical = 0.825. Kappa = 2.587 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

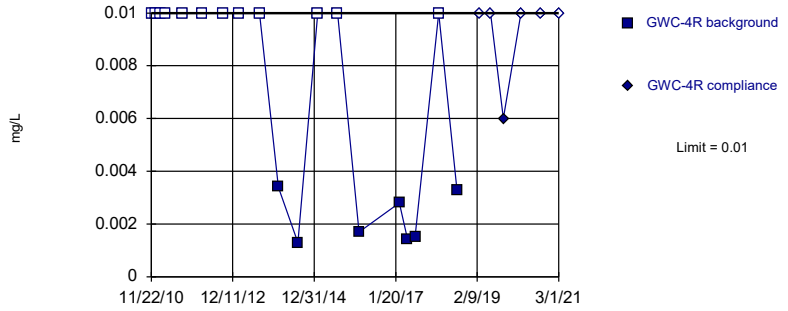
Constituent: Zinc Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 19 background values. 63.16% NDs. Well-constituent pair annual alpha = 0.009641. Individual comparison alpha = 0.004832 (1 of 2).

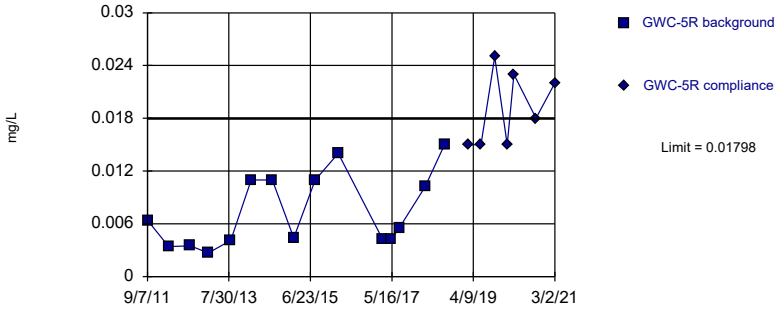
Constituent: Zinc Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.00738, Std. Dev.=0.004189, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8595, critical = 0.835. Kappa = 2.53 (c=15, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005852.

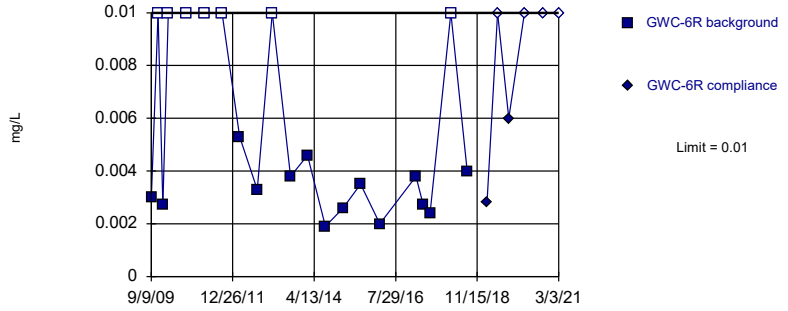
Constituent: Zinc Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. 33.33% NDs. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2).

Constituent: Zinc Analysis Run 5/5/2021 3:04 PM View: Appendix I & II
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	0.032	
9/11/2007	0.017	
3/20/2008	0.025	
8/27/2008	0.041	
3/3/2009	0.053	
11/18/2009	0.05	
3/3/2010	0.061	
9/8/2010	0.071	
3/10/2011	0.057	
9/8/2011	0.057	
3/5/2012	0.061	
9/10/2012	0.055	
2/6/2013	0.061	
8/12/2013	0.055	
2/5/2014	0.063	
8/5/2014	0.038	
2/4/2015	0.039	
8/3/2015	0.031	
2/16/2016	0.045	
8/31/2016	0.0542	
11/28/2016	0.0529	
2/22/2017	0.0607	
5/8/2017	0.065	
7/17/2017	0.06	
10/16/2017	0.0542	
2/19/2018	0.0533	
8/6/2018	0.044	
2/25/2019		0.045
6/12/2019		0.063
8/19/2019		0.065
10/8/2019		0.058
3/17/2020		0.047
8/26/2020		0.044
9/22/2020		0.045
3/2/2021		0.039

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	0.086	
3/5/2012	0.044	
9/5/2012	0.034	
2/5/2013	0.03	
8/13/2013	0.027	
2/4/2014	0.037	
8/5/2014	0.048	
2/2/2015	0.069	
8/4/2015	0.023 (D)	
2/16/2016	0.044	
8/31/2016	0.0711	
11/29/2016	0.0754	
2/23/2017	0.0646	
5/9/2017	0.0463	
7/18/2017	0.039	
10/17/2017	0.0349	
2/21/2018	0.0322	
8/7/2018	0.025	
2/26/2019		0.028
6/13/2019		0.033
8/20/2019		0.07
10/9/2019		0.054
3/17/2020		0.031
8/27/2020		0.072
9/22/2020		0.068
3/1/2021		0.063

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	0.12	
1/4/2011	0.1	
2/17/2011	0.1	
3/11/2011	0.05	
3/28/2011	0.087	
9/7/2011	0.065	
3/6/2012	0.049	
9/11/2012	0.045	
2/6/2013	0.05	
8/13/2013	0.13	
2/4/2014	0.08	
8/5/2014	0.068	
2/2/2015	0.066	
8/4/2015	0.053	
2/17/2016	0.059	
8/31/2016	0.0601	
11/28/2016	0.0562	
2/22/2017	0.0481	
5/10/2017	0.0563	
7/18/2017	0.049	
10/17/2017	0.047	
2/20/2018	0.0467	
8/8/2018	0.049	
2/26/2019		0.056
6/12/2019		0.046
8/20/2019		0.05
10/9/2019		0.045
3/18/2020		0.04
8/28/2020		0.044
9/22/2020		0.04
3/1/2021		0.043

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	0.025	
3/5/2012	0.014	
9/5/2012	0.0095	
2/6/2013	0.0094	
8/13/2013	0.13	
2/5/2014	0.066	
8/4/2014	0.043	
2/3/2015	0.031	
8/3/2015	0.039 (D)	
2/16/2016	0.038	
8/31/2016	0.0286	
11/30/2016	0.0258	
2/23/2017	0.0278	
5/9/2017	0.0308	
7/18/2017	0.0407	
10/18/2017	0.049	
2/21/2018	0.0285	
8/7/2018	0.029	
2/26/2019		0.026
6/13/2019		0.021
8/21/2019		0.02
10/10/2019		0.018
3/17/2020		0.024
8/28/2020		0.014
9/22/2020		0.014
3/2/2021		0.015

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	0.03	
1/4/2011	0.065	
2/17/2011	0.061	
3/11/2011	0.066	
3/28/2011	0.04	
9/7/2011	0.041	
3/4/2012	0.046	
9/10/2012	0.084	
2/6/2013	0.042	
8/14/2013	0.042	
2/4/2014	0.046	
8/4/2014	0.027	
2/2/2015	0.02	
8/3/2015	0.017 (D)	
2/16/2016	0.032	
9/1/2016	0.0377	
11/30/2016	0.0148	
2/24/2017	0.029	
5/10/2017	0.0182	
7/18/2017	0.0187	
10/17/2017	0.0157	
2/20/2018	0.0151	
8/8/2018	0.019	
2/26/2019		0.017
6/12/2019		0.017
8/19/2019		0.02
10/10/2019		0.018
3/18/2020		0.038
8/28/2020		0.026
9/22/2020		0.026
3/1/2021		0.035

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	0.02	
3/5/2012	0.048	
9/5/2012	0.07	
2/5/2013	0.068	
8/14/2013	0.036	
2/5/2014	0.044	
8/4/2014	0.058	
2/3/2015	0.033	
8/3/2015	0.037 (D)	
2/16/2016	0.04	
9/1/2016	0.0345	
12/1/2016	0.0342	
2/24/2017	0.0347	
5/10/2017	0.0363	
7/17/2017	0.0274	
10/16/2017	0.0151	
2/21/2018	0.0174	
8/7/2018	0.015	
2/26/2019		0.014
6/13/2019		0.014
8/21/2019		0.014
10/9/2019		0.015
3/18/2020		0.015
8/27/2020		0.013
9/23/2020		0.012
3/2/2021		0.011

Prediction Limit

Constituent: Barium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	0.025	
11/18/2009	0.025	
1/5/2010	0.018	
3/3/2010	0.022	
9/7/2010	0.019	
3/10/2011	0.017	
9/8/2011	0.019	
3/5/2012	0.027	
9/5/2012	0.04	
2/5/2013	0.056	
8/13/2013	0.07	
2/4/2014	0.051	
8/5/2014	0.041	
2/3/2015	0.04	
8/4/2015	0.042	
2/16/2016	0.068	
9/1/2016	0.0536	
11/29/2016	0.0459	
2/23/2017	0.0581	
5/10/2017	0.0873	
7/18/2017	0.0994	
10/18/2017	0.0757	
2/19/2018	0.0703	
8/6/2018	0.076	
2/25/2019		0.045
6/13/2019		0.062
8/20/2019		0.06
10/8/2019		0.054
3/17/2020		0.031
8/27/2020		0.045
9/23/2020		0.044
3/3/2021		0.043

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	<0.003	
3/5/2012	<0.003	
9/5/2012	<0.003	
2/5/2013	<0.003	
8/13/2013	<0.003	
2/4/2014	<0.003	
8/5/2014	7.5E-05 (J)	
2/2/2015	0.00023 (J)	
8/4/2015	<0.003 (D)	
2/16/2016	<0.003	
8/31/2016	0.0001 (J)	
11/29/2016	<0.003	
2/23/2017	<0.003	
5/9/2017	8E-05 (J)	
7/18/2017	<0.003	
10/17/2017	0.0001 (J)	
2/21/2018	<0.003	
8/7/2018	7.4E-05 (J)	
2/26/2019		7.5E-05 (J)
6/13/2019		<0.003
8/20/2019		0.0001 (J)
10/9/2019		0.00013 (J)
3/17/2020		7.6E-05 (J)
8/27/2020		0.00024 (J)
9/22/2020		0.00021 (J)
3/1/2021		0.00023 (J)

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.003	
1/4/2011	<0.003	
2/17/2011	<0.003	
3/11/2011	<0.003	
3/28/2011	<0.003	
9/7/2011	<0.003	
3/6/2012	<0.003	
9/11/2012	<0.003	
2/6/2013	<0.003	
8/13/2013	<0.003	
2/4/2014	<0.003	
8/5/2014	<0.003	
2/2/2015	<0.003	
8/4/2015	<0.003	
2/17/2016	<0.003	
8/31/2016	<0.003	
11/28/2016	<0.003	
2/22/2017	<0.003	
5/10/2017	<0.003	
7/18/2017	<0.003	
10/17/2017	<0.003	
2/20/2018	<0.003	
8/8/2018	7E-05 (J)	
2/26/2019		5.3E-05 (J)
6/12/2019		<0.003
8/20/2019		0.00017 (J)
10/9/2019		0.00014 (J)
3/18/2020		0.00012 (J)
8/28/2020		0.0002 (J)
9/22/2020		0.00021 (J)
3/1/2021		0.00032 (J)

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.003	
3/5/2012	<0.003	
9/5/2012	<0.003	
2/6/2013	<0.003	
8/13/2013	<0.003	
2/5/2014	<0.003	
8/4/2014	0.0011 (J)	
2/3/2015	0.00061 (J)	
8/3/2015	0.00051 (JD)	
2/16/2016	0.00084 (J)	
8/31/2016	0.0003 (J)	
11/30/2016	0.0004 (J)	
2/23/2017	0.0003 (J)	
5/9/2017	0.0002 (J)	
7/18/2017	0.0002 (J)	
10/18/2017	0.0004 (J)	
2/21/2018	<0.003	
8/7/2018	0.00026 (J)	
2/26/2019		0.00038 (J)
6/13/2019		0.00051 (J)
8/21/2019		0.00046 (J)
10/10/2019		0.00039 (J)
3/17/2020		0.00095 (J)
8/28/2020		0.0005 (J)
9/22/2020		0.00042 (J)
3/2/2021		0.00081

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.003	
1/4/2011	<0.003	
2/17/2011	<0.003	
3/11/2011	<0.003	
3/28/2011	<0.003	
9/7/2011	<0.003	
3/4/2012	<0.003	
9/10/2012	<0.003	
2/6/2013	<0.003	
8/14/2013	<0.003	
2/4/2014	<0.003	
8/4/2014	<0.003	
2/2/2015	<0.003	
8/3/2015	<0.003 (D)	
2/16/2016	<0.003	
9/1/2016	<0.003	
11/30/2016	<0.003	
2/24/2017	<0.003	
5/10/2017	<0.003	
7/18/2017	<0.003	
10/17/2017	<0.003	
2/20/2018	<0.003	
8/8/2018	<0.003	
2/26/2019		<0.003
6/12/2019		<0.003
8/19/2019		<0.003
10/10/2019		<0.003
3/18/2020		<0.003
8/28/2020		<0.003
9/22/2020		5.8E-05 (J)
3/1/2021		6E-05 (J)

Prediction Limit

Constituent: Beryllium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.003	
3/5/2012	<0.003	
9/5/2012	<0.003	
2/5/2013	<0.003	
8/14/2013	<0.003	
2/5/2014	<0.003	
8/4/2014	0.00026 (J)	
2/3/2015	0.00023 (J)	
8/3/2015	0.00046 (JD)	
2/16/2016	0.00048 (J)	
9/1/2016	0.0005 (J)	
12/1/2016	0.0003 (J)	
2/24/2017	0.0002 (J)	
5/10/2017	0.0003 (J)	
7/17/2017	0.0004 (J)	
10/16/2017	0.0006 (J)	
2/21/2018	<0.003	
8/7/2018	0.00096 (J)	
2/26/2019		0.0015 (J)
6/13/2019		0.0015 (J)
8/21/2019		0.0028 (J)
10/9/2019		0.0022 (J)
3/18/2020		0.0028 (J)
8/27/2020		0.0023 (J)
9/23/2020		0.0023 (J)
3/2/2021		0.0037

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	<0.0025	
3/5/2012	<0.0025	
9/5/2012	<0.0025	
2/5/2013	<0.0025	
8/13/2013	<0.0025	
2/4/2014	<0.0025	
8/5/2014	<0.0025	
2/2/2015	<0.0025	
8/4/2015	<0.0025 (D)	
2/16/2016	<0.0025	
8/31/2016	<0.0025	
11/29/2016	8E-05 (J)	
2/23/2017	<0.0025	
5/9/2017	<0.0025	
7/18/2017	<0.0025	
10/17/2017	<0.0025	
2/21/2018	<0.0025	
8/7/2018	<0.0025	
2/26/2019		<0.0025
6/13/2019		<0.0025
8/20/2019		<0.0025
10/9/2019		<0.0025
3/17/2020		<0.0025
8/27/2020		0.00012 (J)
9/22/2020		0.00016 (J)
3/1/2021		0.00013 (J)

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.0025	
1/4/2011	<0.0025	
2/17/2011	<0.0025	
3/11/2011	<0.0025	
3/28/2011	<0.0025	
9/7/2011	<0.0025	
3/6/2012	<0.0025	
9/11/2012	<0.0025	
2/6/2013	<0.0025	
8/13/2013	<0.0025	
2/4/2014	<0.0025	
8/5/2014	<0.0025	
2/2/2015	<0.0025	
8/4/2015	<0.0025	
2/17/2016	<0.0025	
8/31/2016	0.0001 (J)	
11/28/2016	0.0001 (J)	
2/22/2017	<0.0025	
5/10/2017	<0.0025	
7/18/2017	<0.0025	
10/17/2017	<0.0025	
2/20/2018	<0.0025	
8/8/2018	<0.0025	
2/26/2019		<0.0025
6/12/2019		<0.0025
8/20/2019		<0.0025
10/9/2019		<0.0025
3/18/2020		<0.0025
8/28/2020		0.00015 (J)
9/22/2020		0.00016 (J)
3/1/2021		0.00016 (J)

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.0025	
3/5/2012	<0.0025	
9/5/2012	<0.0025	
2/6/2013	<0.0025	
8/13/2013	<0.0025	
2/5/2014	<0.0025	
8/4/2014	0.00034 (J)	
2/3/2015	<0.0025	
8/3/2015	<0.0025 (D)	
2/16/2016	0.00025 (J)	
8/31/2016	<0.0025	
11/30/2016	<0.0025	
2/23/2017	<0.0025	
5/9/2017	<0.0025	
7/18/2017	<0.0025	
10/18/2017	<0.0025	
2/21/2018	<0.0025	
8/7/2018	<0.0025	
2/26/2019		0.00011 (J)
6/13/2019		0.00021 (J)
8/21/2019		<0.0025
10/10/2019		0.00018 (J)
3/17/2020		0.00037 (J)
8/28/2020		0.00014 (J)
9/22/2020		0.00013 (J)
3/2/2021		0.00021 (J)

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.0005	
1/4/2011	<0.0005	
2/17/2011	<0.0005	
3/11/2011	<0.0005	
3/28/2011	<0.0005	
9/7/2011	<0.0005	
3/4/2012	<0.0005	
9/10/2012	<0.0005	
2/6/2013	<0.0005	
8/14/2013	<0.0005	
2/4/2014	<0.0005	
8/4/2014	<0.0005	
2/2/2015	<0.0005	
8/3/2015	<0.0005 (D)	
2/16/2016	<0.0005	
9/1/2016	0.0001 (J)	
11/30/2016	<0.0005	
2/24/2017	<0.0005	
5/10/2017	<0.0005	
7/18/2017	<0.0005	
10/17/2017	<0.0005	
2/20/2018	<0.0005	
8/8/2018	<0.0005	
2/26/2019		<0.0005
6/12/2019		<0.0005
8/19/2019		<0.0005
10/10/2019		<0.0005
3/18/2020		<0.0005
8/28/2020		<0.0005
9/22/2020		<0.0005
3/1/2021		<0.0005

Prediction Limit

Constituent: Cadmium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.001	
3/5/2012	<0.001	
9/5/2012	<0.001	
2/5/2013	<0.001	
8/14/2013	<0.001	
2/5/2014	<0.001	
8/4/2014	0.00045 (J)	
2/3/2015	<0.001	
8/3/2015	0.00046 (JD)	
2/16/2016	0.00097 (J)	
9/1/2016	0.0005 (J)	
12/1/2016	0.0004 (J)	
2/24/2017	0.0003 (J)	
5/10/2017	0.0003 (J)	
7/17/2017	0.0004 (J)	
10/16/2017	0.0006 (J)	
2/21/2018	<0.001	
8/7/2018	0.00083 (J)	
2/26/2019		0.00081 (J)
6/13/2019		0.00073 (J)
8/21/2019		0.0012 (J)
10/9/2019		0.0011 (J)
3/18/2020		0.0012 (J)
8/27/2020		0.00091 (J)
9/23/2020		0.00094 (J)
3/2/2021		0.0011

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	0.0067	
9/11/2007	<0.005	
3/20/2008	<0.005	
8/27/2008	<0.005	
3/3/2009	<0.005	
11/18/2009	<0.005	
3/3/2010	0.0027	
9/8/2010	0.007	
3/10/2011	<0.005	
9/8/2011	<0.005	
3/5/2012	0.0032	
9/10/2012	<0.005	
2/6/2013	<0.005	
8/12/2013	0.0045	
2/5/2014	<0.005	
8/5/2014	0.0027	
2/4/2015	0.0016	
8/3/2015	0.002	
2/16/2016	0.0027	
8/31/2016	0.0053 (J)	
11/28/2016	0.0036 (J)	
2/22/2017	0.0049 (J)	
5/8/2017	0.0059 (J)	
7/17/2017	0.0046 (J)	
10/16/2017	0.0034 (J)	
2/19/2018	<0.005	
8/6/2018	0.003 (J)	
2/25/2019		0.001 (J)
6/12/2019		0.003 (J)
8/19/2019		0.0035 (J)
10/8/2019		0.0039 (J)
3/17/2020		0.003 (J)
8/26/2020		0.2 (o)
9/22/2020		0.16 (o)
3/2/2021		0.21 (o)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	0.015	
3/5/2012	<0.005	
9/5/2012	0.0018	
2/5/2013	0.0013	
8/13/2013	<0.005	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/2/2015	0.0015	
8/4/2015	<0.005 (D)	
2/16/2016	<0.005	
8/31/2016	0.0006 (J)	
11/29/2016	<0.005	
2/23/2017	0.0009 (J)	
5/9/2017	0.0008 (J)	
7/18/2017	0.0032 (J)	
10/17/2017	0.0007 (J)	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019		<0.005
6/13/2019		0.00033 (J)
8/20/2019		0.00079 (J)
10/9/2019		0.00064 (J)
3/17/2020		0.00054 (J)
8/27/2020		0.00081 (J)
9/22/2020		0.0008 (J)
3/1/2021		0.00083 (J)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	0.038	
1/4/2011	0.049	
2/17/2011	0.044	
3/11/2011	0.038	
3/28/2011	0.029	
9/7/2011	0.031	
3/6/2012	0.021	
9/11/2012	0.017	
2/6/2013	0.025	
8/13/2013	0.023	
2/4/2014	0.019	
8/5/2014	0.023	
2/2/2015	0.022	
8/4/2015	0.021	
2/17/2016	0.024	
8/31/2016	0.0239	
11/28/2016	0.0189	
2/22/2017	0.0184	
5/10/2017	0.0213	
7/18/2017	0.0261	
10/17/2017	0.0182	
2/20/2018	<0.005	
8/8/2018	0.014	
2/26/2019		0.029
6/12/2019		0.013
8/20/2019		0.014
10/9/2019		0.024
3/18/2020		0.019
8/28/2020		0.0072
9/22/2020		0.0054
3/1/2021		0.00074 (J)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.005	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	<0.005	
2/5/2014	<0.005	
8/4/2014	<0.005	
2/3/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
8/31/2016	<0.005	
11/30/2016	<0.005	
2/23/2017	<0.005	
5/9/2017	<0.005	
7/18/2017	<0.005	
10/18/2017	<0.005	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019		<0.005
6/13/2019		0.01
8/21/2019		0.0016 (J)
10/10/2019		<0.005
3/17/2020		0.011
8/28/2020		0.0041 (J)
9/22/2020		0.0021 (J)
3/2/2021		0.0086

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.005	
1/4/2011	0.0036	
2/17/2011	0.0035	
3/11/2011	0.0053	
3/28/2011	<0.005	
9/7/2011	0.0033	
3/4/2012	0.0032	
9/10/2012	0.0067	
2/6/2013	0.0024	
8/14/2013	0.0014	
2/4/2014	<0.005	
8/4/2014	<0.005	
2/2/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	0.0082	
9/1/2016	0.0023 (J)	
11/30/2016	0.0008 (J)	
2/24/2017	0.0025 (J)	
5/10/2017	<0.005	
7/18/2017	0.0005 (J)	
10/17/2017	0.0006 (J)	
2/20/2018	<0.005	
8/8/2018	0.001 (J)	
2/26/2019		<0.005
6/12/2019		0.00078 (J)
8/19/2019		0.001 (J)
10/10/2019		0.00099 (J)
3/18/2020		0.0031 (J)
8/28/2020		0.00049 (J)
9/22/2020		0.00039 (J)
3/1/2021		0.0016 (J)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.005	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/5/2013	<0.005	
8/14/2013	<0.005	
2/5/2014	<0.005	
8/4/2014	<0.005	
2/3/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
9/1/2016	<0.005	
12/1/2016	<0.005	
2/24/2017	<0.005	
5/10/2017	<0.005	
7/17/2017	<0.005	
10/16/2017	<0.005	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019		<0.005
6/13/2019		<0.005
8/21/2019		0.00034 (J)
10/9/2019		0.00031 (J)
3/18/2020		0.00044 (J)
8/27/2020		<0.005
9/23/2020		<0.005
3/2/2021		0.00039 (J)

Prediction Limit

Constituent: Cobalt (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	<0.005	
11/18/2009	<0.005	
1/5/2010	<0.005	
3/3/2010	<0.005	
9/7/2010	<0.005	
3/10/2011	<0.005	
9/8/2011	<0.005	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/5/2013	<0.005	
8/13/2013	<0.005	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/3/2015	<0.005	
8/4/2015	0.0014	
2/16/2016	<0.005	
9/1/2016	<0.005	
11/29/2016	<0.005	
2/23/2017	<0.005	
5/10/2017	<0.005	
7/18/2017	<0.005	
10/18/2017	<0.005	
2/19/2018	<0.005	
8/6/2018	<0.005	
2/25/2019		<0.005
6/13/2019		<0.005
8/20/2019		<0.005
10/8/2019		<0.005
3/17/2020		<0.005
8/27/2020		<0.005
9/23/2020		<0.005
3/3/2021		<0.005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	0.0061	
9/11/2007	0.021	
3/20/2008	<0.005	
8/27/2008	<0.005	
3/3/2009	0.005	
11/18/2009	0.0052	
3/3/2010	0.011	
9/8/2010	0.012	
3/10/2011	0.0032	
9/8/2011	0.0046	
3/5/2012	0.0053	
9/10/2012	0.0074	
2/6/2013	0.0077	
8/12/2013	0.016	
2/5/2014	0.019	
8/5/2014	0.0057	
2/4/2015	0.0055	
8/3/2015	0.0055	
2/16/2016	0.0039	
2/22/2017	0.0051 (J)	
2/19/2018	<0.005	
8/6/2018	0.003 (J)	
2/25/2019		0.0026 (J)
6/12/2019		0.0038 (J)
10/8/2019		0.0051 (J)
3/17/2020		0.0066
9/22/2020		0.027
3/2/2021		0.034

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	0.009	
3/5/2012	0.0035	
9/5/2012	0.0027	
2/5/2013	0.0026	
8/13/2013	<0.01	
2/4/2014	<0.01	
8/5/2014	0.0013 (J)	
2/2/2015	0.0023 (J)	
8/4/2015	<0.01 (D)	
2/16/2016	<0.01	
2/23/2017	0.0026 (J)	
2/21/2018	0.001 (J)	
8/7/2018	<0.01	
2/26/2019		<0.01
6/13/2019		0.00072 (J)
10/9/2019		0.0015 (J)
3/17/2020		0.00087 (J)
9/22/2020		0.0021 (J)
3/1/2021		0.0024 (J)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	0.0096	
1/4/2011	0.0084	
2/17/2011	0.0088	
3/11/2011	0.0058	
3/28/2011	0.0058	
9/7/2011	0.005	
3/6/2012	<0.005	
9/11/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	0.003	
2/4/2014	0.0026	
8/5/2014	0.0015 (J)	
2/2/2015	<0.005	
8/4/2015	<0.005	
2/17/2016	<0.005	
2/22/2017	0.0009 (J)	
2/20/2018	<0.005	
8/8/2018	<0.005	
2/26/2019		0.0068 (J)
6/12/2019		0.00043 (J)
10/9/2019		0.00058 (J)
3/18/2020		0.00063 (J)
9/22/2020		<0.005
3/1/2021		<0.005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	0.0054	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/6/2013	<0.005	
8/13/2013	0.0032	
2/5/2014	0.0039	
8/4/2014	0.0024 (J)	
2/3/2015	<0.005	
8/3/2015	<0.005 (D)	
2/16/2016	<0.005	
2/23/2017	<0.005	
2/21/2018	<0.005	
8/7/2018	<0.005	
2/26/2019		<0.005
6/13/2019		<0.005
10/10/2019		<0.005
3/17/2020		0.00056 (J)
9/22/2020		<0.005
3/2/2021		<0.005

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.01	
1/4/2011	<0.01	
2/17/2011	<0.01	
3/11/2011	<0.01	
3/28/2011	<0.01	
9/7/2011	<0.01	
3/4/2012	<0.01	
9/10/2012	<0.01	
2/6/2013	<0.01	
8/14/2013	<0.01	
2/4/2014	0.0033	
8/4/2014	0.0015 (J)	
2/2/2015	<0.01	
8/3/2015	<0.01 (D)	
2/16/2016	<0.01	
2/24/2017	0.0021 (J)	
2/20/2018	<0.01	
8/8/2018	0.0012 (J)	
2/26/2019		<0.01
6/12/2019		0.00082 (J)
10/10/2019		0.00084 (J)
3/18/2020		0.0026 (J)
9/22/2020		0.00077 (J)
3/1/2021		0.0021 (J)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.0025	
3/5/2012	<0.0025	
9/5/2012	<0.0025	
2/5/2013	<0.0025	
8/14/2013	0.0032	
2/5/2014	0.0032	
8/4/2014	0.0059	
2/3/2015	0.0013 (J)	
8/3/2015	0.0039 (D)	
2/16/2016	0.0036	
2/24/2017	0.0019 (J)	
2/21/2018	0.0013 (J)	
8/7/2018	0.0019 (J)	
2/26/2019		0.0023 (J)
6/13/2019		0.0019 (J)
10/9/2019		0.0019 (J)
3/18/2020		0.002 (J)
9/23/2020		0.0012 (J)
3/2/2021		0.0014 (J)

Prediction Limit

Constituent: Nickel (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	<0.005	
11/18/2009	<0.005	
1/5/2010	<0.005	
3/3/2010	<0.005	
9/7/2010	<0.005	
3/10/2011	<0.005	
9/8/2011	<0.005	
3/5/2012	<0.005	
9/5/2012	<0.005	
2/5/2013	<0.005	
8/13/2013	<0.005	
2/4/2014	<0.005	
8/5/2014	<0.005	
2/3/2015	<0.005	
8/4/2015	<0.005	
2/16/2016	<0.005	
2/23/2017	0.0015 (J)	
2/19/2018	<0.005	
8/6/2018	0.0026 (J)	
2/25/2019		0.0023 (J)
6/13/2019		0.0037 (J)
10/8/2019		0.0021 (J)
3/17/2020		0.0011 (J)
9/23/2020		0.0016 (J)
3/3/2021		0.0016 (J)

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	<0.01	
3/5/2012	<0.01	
9/5/2012	<0.01	
2/5/2013	<0.01	
8/13/2013	<0.01	
2/4/2014	<0.01	
8/5/2014	<0.01	
2/2/2015	<0.01	
8/4/2015	<0.01 (D)	
2/16/2016	<0.01	
8/31/2016	0.0039 (J)	
11/29/2016	0.0033 (J)	
2/23/2017	0.0097 (J)	
5/9/2017	0.0066 (J)	
7/18/2017	0.0021 (J)	
10/17/2017	0.003 (J)	
2/21/2018	<0.01	
8/7/2018	<0.01	
2/26/2019		0.0014 (J)
6/13/2019		<0.01
8/20/2019		0.0022 (J)
10/9/2019		0.0023 (J)
3/17/2020		0.0017 (J)
8/27/2020		0.011
9/22/2020		0.012
3/1/2021		0.011

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	<0.01	
1/4/2011	<0.01	
2/17/2011	<0.01	
3/11/2011	<0.01	
3/28/2011	<0.01	
9/7/2011	<0.01	
3/6/2012	<0.01	
9/11/2012	<0.01	
2/6/2013	<0.01	
8/13/2013	<0.01	
2/4/2014	<0.01	
8/5/2014	<0.01	
2/2/2015	<0.01	
8/4/2015	<0.01	
2/17/2016	<0.01	
8/31/2016	0.0029 (J)	
11/28/2016	0.0019 (J)	
2/22/2017	0.0015 (J)	
5/10/2017	0.0016 (J)	
7/18/2017	0.0024 (J)	
10/17/2017	0.0028 (J)	
2/20/2018	<0.01	
8/8/2018	0.0025 (J)	
2/26/2019		0.003 (J)
6/12/2019		0.0034 (J)
8/20/2019		0.0032 (J)
10/9/2019		0.0026 (J)
3/18/2020		0.0032 (J)
8/28/2020		0.0037 (J)
9/22/2020		0.0056 (J)
3/1/2021		0.0043 (J)

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	<0.01	
3/5/2012	<0.01	
9/5/2012	<0.01	
2/6/2013	<0.01	
8/13/2013	0.0057	
2/5/2014	<0.01	
8/4/2014	<0.01	
2/3/2015	<0.01	
8/3/2015	<0.01 (D)	
2/16/2016	<0.01	
8/31/2016	0.0038 (J)	
11/30/2016	0.0054 (J)	
2/23/2017	0.002 (J)	
5/9/2017	<0.01	
7/18/2017	0.0027 (J)	
10/18/2017	0.0047 (J)	
2/21/2018	<0.01	
8/7/2018	0.0016 (J)	
2/26/2019		0.002 (J)
6/13/2019		0.0089 (J)
8/21/2019		0.004 (J)
10/10/2019		0.0021 (J)
3/17/2020		0.0096 (J)
8/28/2020		0.0045 (J)
9/22/2020		0.0091 (J)
3/2/2021		0.012

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.01	
1/4/2011	<0.01	
2/17/2011	<0.01	
3/11/2011	<0.01	
3/28/2011	<0.01	
9/7/2011	<0.01	
3/4/2012	<0.01	
9/10/2012	0.011	
2/6/2013	0.011	
8/14/2013	0.013	
2/4/2014	0.017	
8/4/2014	0.0085	
2/2/2015	0.0089	
8/3/2015	0.0067 (D)	
2/16/2016	0.0047 (J)	
9/1/2016	0.0132	
11/30/2016	0.0046 (J)	
2/24/2017	0.0108	
5/10/2017	0.0054 (J)	
7/18/2017	0.0047 (J)	
10/17/2017	0.004 (J)	
2/20/2018	<0.01	
8/8/2018	0.0041 (J)	
2/26/2019		0.0027 (J)
6/12/2019		0.0029 (J)
8/19/2019		0.003 (J)
10/10/2019		0.0024 (J)
3/18/2020		0.0046 (J)
8/28/2020		0.0031 (J)
9/22/2020		0.0032 (J)
3/1/2021		0.0041 (J)

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	<0.013	
3/5/2012	0.014	
9/5/2012	0.012	
2/5/2013	0.011	
8/14/2013	0.025	
2/5/2014	0.02	
8/4/2014	0.032	
2/3/2015	0.011	
8/3/2015	0.046 (D)	
2/16/2016	0.022	
9/1/2016	0.0212	
12/1/2016	0.0234	
2/24/2017	0.0154	
5/10/2017	0.0152	
7/17/2017	0.0136	
10/16/2017	0.0242	
2/21/2018	0.0127	
8/7/2018	0.021	
2/26/2019		0.024
6/13/2019		0.027
8/21/2019		0.037
10/9/2019		0.034
3/18/2020		0.028
8/27/2020		0.021
9/23/2020		0.026
3/2/2021		0.019

Prediction Limit

Constituent: Selenium (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	<0.01	
11/18/2009	<0.01	
1/5/2010	<0.01	
3/3/2010	<0.01	
9/7/2010	<0.01	
3/10/2011	<0.01	
9/8/2011	<0.01	
3/5/2012	<0.01	
9/5/2012	<0.01	
2/5/2013	<0.01	
8/13/2013	<0.01	
2/4/2014	<0.01	
8/5/2014	<0.01	
2/3/2015	<0.01	
8/4/2015	<0.01	
2/16/2016	<0.01	
9/1/2016	0.002 (J)	
11/29/2016	0.0017 (J)	
2/23/2017	0.0018 (J)	
5/10/2017	0.0023 (J)	
7/18/2017	0.0046 (J)	
10/18/2017	0.0037 (J)	
2/19/2018	<0.01	
8/6/2018	0.0047 (J)	
2/25/2019		0.0051 (J)
6/13/2019		0.0048 (J)
8/20/2019		0.0039 (J)
10/8/2019		0.0031 (J)
3/17/2020		0.0026 (J)
8/27/2020		0.0027 (J)
9/23/2020		0.0031 (J)
3/3/2021		0.002 (J)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
5/1/2007	0.0081	
9/11/2007	0.0049	
3/20/2008	0.004	
8/27/2008	0.0042	
3/3/2009	0.0058	
11/18/2009	0.0038	
3/3/2010	0.0085	
9/8/2010	0.0065	
3/10/2011	0.0029	
9/8/2011	0.004	
3/5/2012	0.0059	
9/10/2012	0.0052	
2/6/2013	0.0038	
8/12/2013	0.0075	
2/5/2014	0.018 (o)	
8/5/2014	0.0037	
2/4/2015	0.0057	
8/3/2015	0.0043	
2/16/2016	0.0024 (J)	
2/22/2017	0.0042 (J)	
5/8/2017	0.0025 (J)	
7/17/2017	0.0032 (J)	
2/19/2018	<0.01	
8/6/2018	0.0037 (J)	
2/25/2019		0.013
6/12/2019		<0.01
10/8/2019		0.0078 (J)
3/17/2020		<0.01
9/22/2020		0.033
3/2/2021		0.031

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	0.0048	
3/5/2012	0.0038	
9/5/2012	0.0051	
2/5/2013	<0.01	
8/13/2013	<0.01	
2/4/2014	0.0037	
8/5/2014	0.0019 (J)	
2/2/2015	0.0051	
8/4/2015	0.0017 (JD)	
2/16/2016	0.0015 (J)	
2/23/2017	0.0024 (J)	
5/9/2017	0.0016 (J)	
7/18/2017	0.0015 (J)	
2/21/2018	<0.01	
8/7/2018	0.0044 (J)	
2/26/2019		0.0022 (J)
6/13/2019		<0.01
10/9/2019		0.0078 (J)
3/17/2020		<0.01
9/22/2020		0.0029 (J)
3/1/2021		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
11/22/2010	0.0047	
1/4/2011	0.0038	
2/17/2011	0.0074	
3/11/2011	0.0038	
3/28/2011	<0.01	
9/7/2011	0.0059	
3/6/2012	0.0032	
9/11/2012	0.0029	
2/6/2013	0.0036	
8/13/2013	0.0066	
2/4/2014	0.011	
8/5/2014	0.0032	
2/2/2015	0.0031	
8/4/2015	0.0017 (J)	
2/17/2016	0.0034	
2/22/2017	0.0024 (J)	
5/10/2017	0.0022 (J)	
7/18/2017	0.0017 (J)	
2/20/2018	<0.01	
8/8/2018	0.0021 (J)	
2/26/2019		0.003 (J)
6/12/2019		0.0019 (J)
10/9/2019		0.0069 (J)
3/18/2020		<0.01
9/22/2020		0.003 (J)
3/1/2021		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	0.0064	
3/5/2012	0.0043	
9/5/2012	0.0069	
2/6/2013	<0.01	
8/13/2013	0.011	
2/5/2014	0.026 (o)	
8/4/2014	0.012	
2/3/2015	0.0061	
8/3/2015	0.0037 (D)	
2/16/2016	0.0093	
2/23/2017	0.0031 (J)	
5/9/2017	0.0025 (J)	
7/18/2017	0.0028 (J)	
2/21/2018	0.003 (J)	
8/7/2018	0.0036 (J)	
2/26/2019		0.0033 (J)
6/13/2019		0.0069 (J)
10/10/2019		0.0079 (J)
3/17/2020		<0.01
9/22/2020		0.0036 (J)
3/2/2021		0.0069 (J)

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
11/22/2010	<0.01	
1/4/2011	<0.01	
2/17/2011	<0.01	
3/11/2011	0.025 (o)	
3/28/2011	<0.01	
9/7/2011	<0.01	
3/4/2012	<0.01	
9/10/2012	<0.01	
2/6/2013	<0.01	
8/14/2013	<0.01	
2/4/2014	0.0034	
8/4/2014	0.0013 (J)	
2/2/2015	<0.01	
8/3/2015	<0.01 (D)	
2/16/2016	0.0017 (J)	
2/24/2017	0.0028 (J)	
5/10/2017	0.0014 (J)	
7/18/2017	0.0015 (J)	
2/20/2018	<0.01	
8/8/2018	0.0033 (J)	
2/26/2019		<0.01
6/12/2019		<0.01
10/10/2019		0.006 (J)
3/18/2020		<0.01
9/22/2020		<0.01
3/1/2021		<0.01

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	0.0064	
3/5/2012	0.0034	
9/5/2012	0.0035	
2/5/2013	0.0027	
8/14/2013	0.0041	
2/5/2014	0.011	
8/4/2014	0.011	
2/3/2015	0.0044	
8/3/2015	0.011 (D)	
2/16/2016	0.014	
2/24/2017	0.0043 (J)	
5/10/2017	0.0042 (J)	
7/17/2017	0.0055 (J)	
2/21/2018	0.0102	
8/7/2018	0.015	
2/26/2019		0.015
6/13/2019		0.015
10/9/2019		0.025
1/21/2020		0.015
3/18/2020		0.023
9/23/2020		0.018
3/2/2021		0.022

Prediction Limit

Constituent: Zinc (mg/L) Analysis Run 5/5/2021 3:07 PM View: Appendix I & II

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/9/2009	0.003	
11/18/2009	<0.01	
1/5/2010	0.0027	
3/3/2010	<0.01	
9/7/2010	<0.01	
3/10/2011	<0.01	
9/8/2011	<0.01	
3/5/2012	0.0053	
9/5/2012	0.0033	
2/5/2013	<0.01	
8/13/2013	0.0038	
2/4/2014	0.0046	
8/5/2014	0.0019 (J)	
2/3/2015	0.0026	
8/4/2015	0.0035	
2/16/2016	0.002 (J)	
2/23/2017	0.0038 (J)	
5/10/2017	0.0027 (J)	
7/18/2017	0.0024 (J)	
2/19/2018	<0.01	
8/6/2018	0.004 (J)	
2/25/2019		0.0028 (J)
6/13/2019		<0.01
10/8/2019		0.006 (J)
3/17/2020		<0.01
9/23/2020		<0.01
3/3/2021		<0.01

FIGURE E.

Appendix I & II Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:08 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Zinc (mg/L)	**GWC-5R**	**0.001805**	**148**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix I & II Trend Tests - Prediction Limit Exceedances - All Results

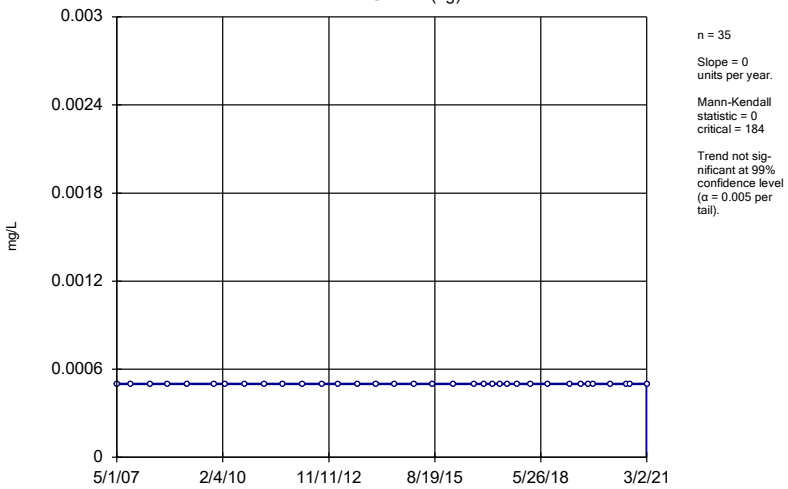
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:08 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Beryllium (mg/L)	GWA-2 (bg)	0	0	184	No	35	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	GWC-5R	0.00001446	26	118	No	26	26.92	n/a	n/a	0.01	NP
Cadmium (mg/L)	GWA-2 (bg)	0	0	184	No	35	100	n/a	n/a	0.01	NP
Cadmium (mg/L)	GWC-5R	0	15	118	No	26	30.77	n/a	n/a	0.01	NP
Cobalt (mg/L)	GWA-2 (bg)	-0.0001578	-161	-161	No	32	34.38	n/a	n/a	0.01	NP
Cobalt (mg/L)	GWC-3R	0	-1	-118	No	26	76.92	n/a	n/a	0.01	NP
Nickel (mg/L)	GWA-2 (bg)	0.00002566	13	131	No	28	10.71	n/a	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	184	No	35	100	n/a	n/a	0.01	NP
Selenium (mg/L)	GWC-1R	0	-46	-118	No	26	50	n/a	n/a	0.01	NP
Selenium (mg/L)	GWC-3R	-0.000118	-85	-118	No	26	42.31	n/a	n/a	0.01	NP
Zinc (mg/L)	GWA-2 (bg)	0.0000575	29	139	No	29	10.34	n/a	n/a	0.01	NP
Zinc (mg/L)	**GWC-5R**	**0.001805**	**148**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 35

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 184

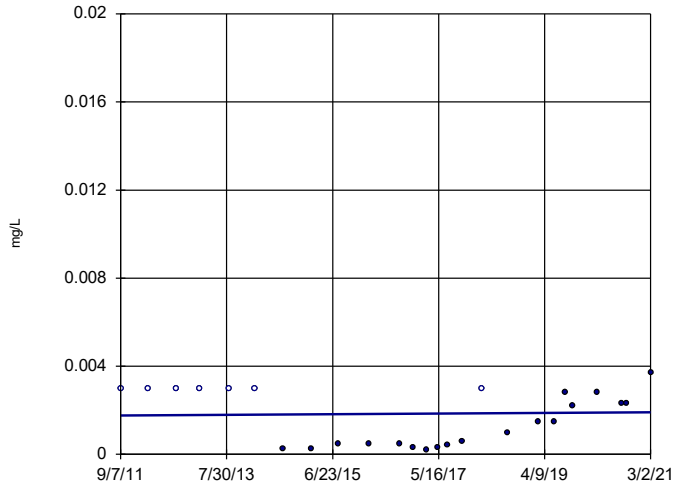
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Beryllium Analysis Run 5/5/2021 3:07 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-5R



n = 26

Slope = 0.00001446
units per year.

Mann-Kendall
statistic = 26
critical = 118

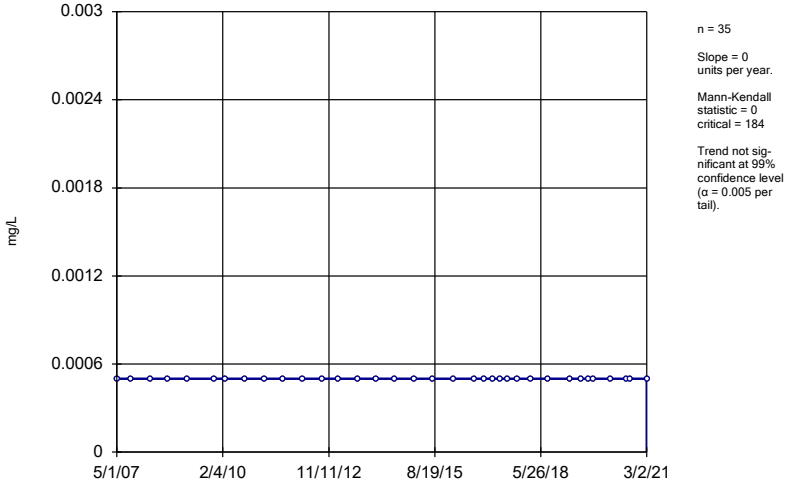
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Beryllium Analysis Run 5/5/2021 3:07 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 35

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 184

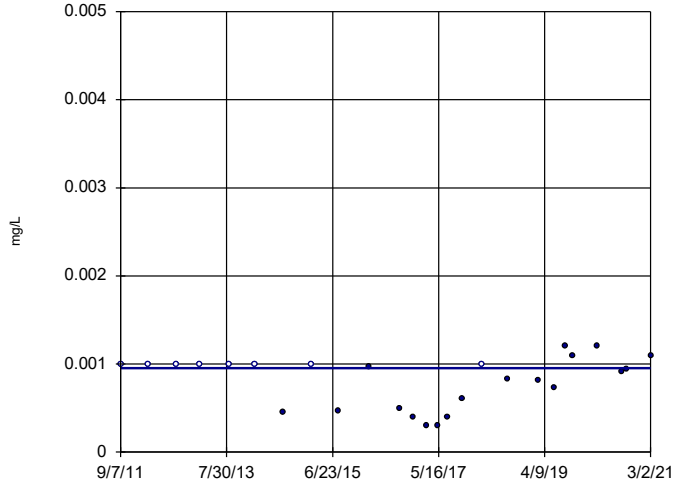
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 5/5/2021 3:07 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-5R



n = 26

Slope = 0
units per year.

Mann-Kendall
statistic = 15
critical = 118

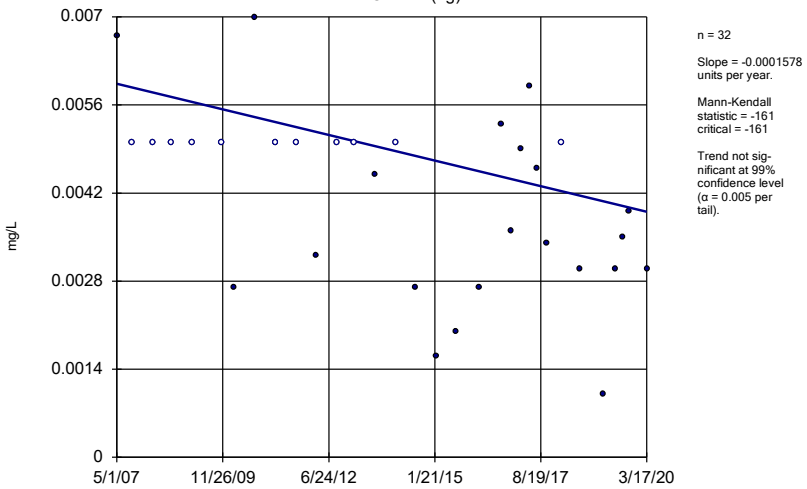
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Cadmium Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 32

Slope = -0.0001578 units per year.

Mann-Kendall statistic = -161
critical = -161

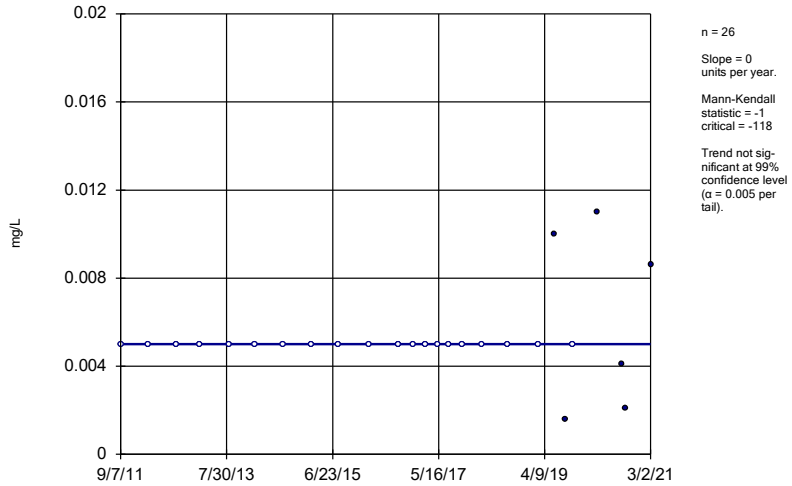
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-3R



n = 26

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -118

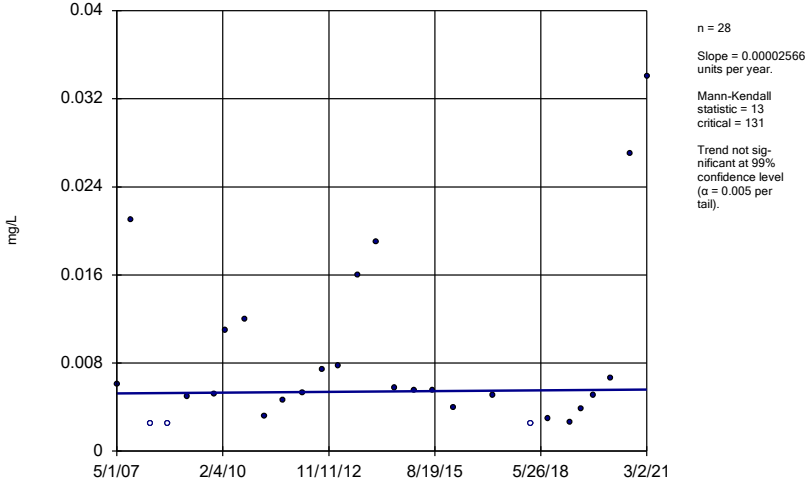
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Cobalt Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 28

Slope = 0.00002566 units per year.

Mann-Kendall statistic = 13
critical = 131

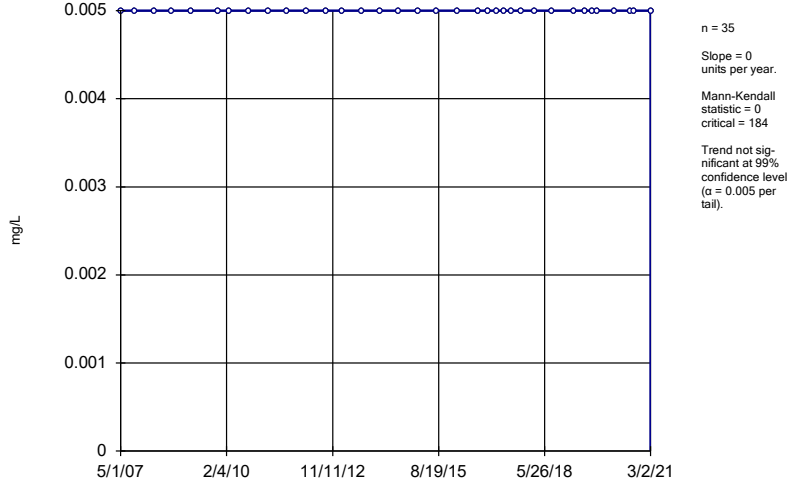
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Nickel Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 35

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 184

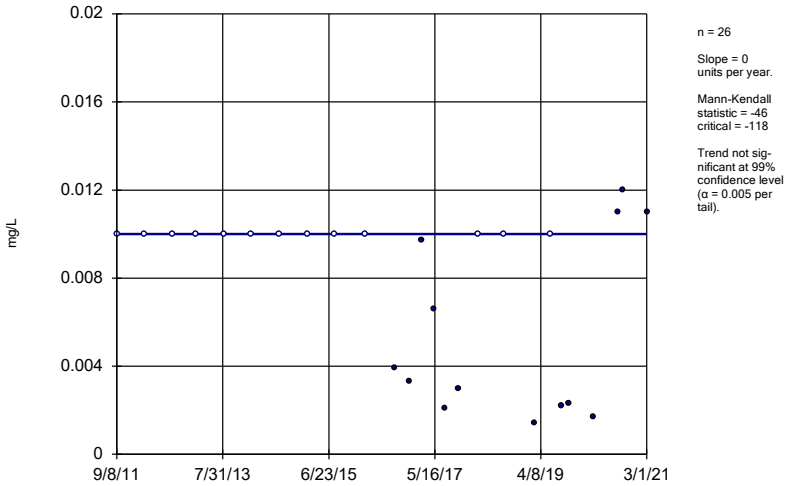
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-1R



n = 26

Slope = 0 units per year.

Mann-Kendall statistic = -46
critical = -118

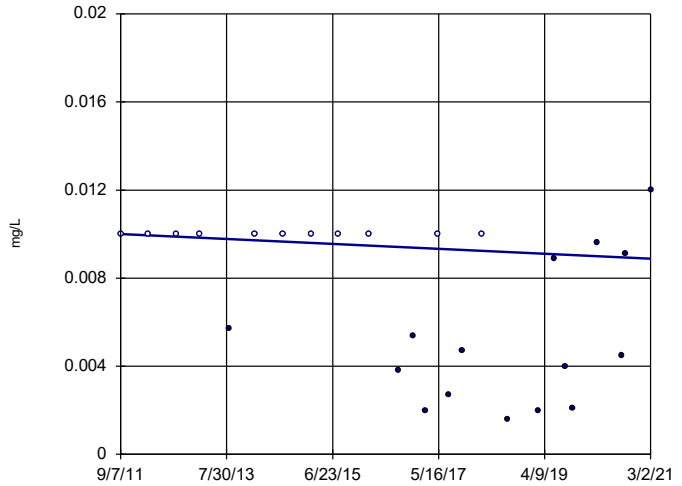
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-3R



n = 26

Slope = -0.000118 units per year.

Mann-Kendall statistic = -85
critical = -118

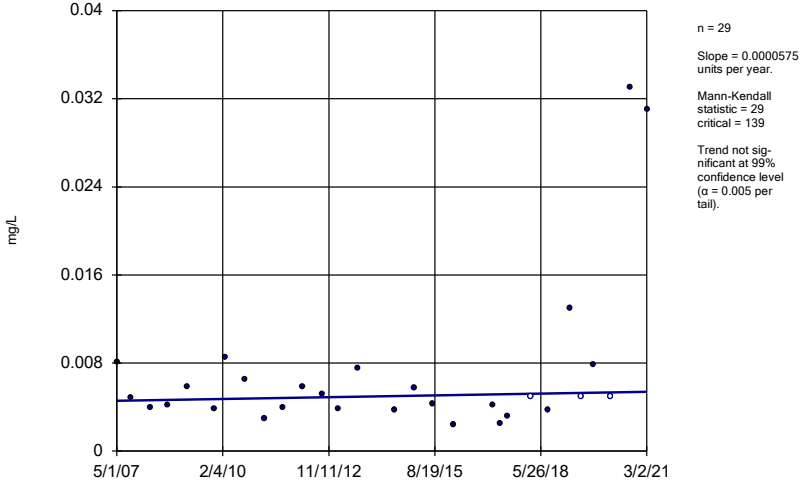
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 29

Slope = 0.0000575 units per year.

Mann-Kendall statistic = 29
critical = 139

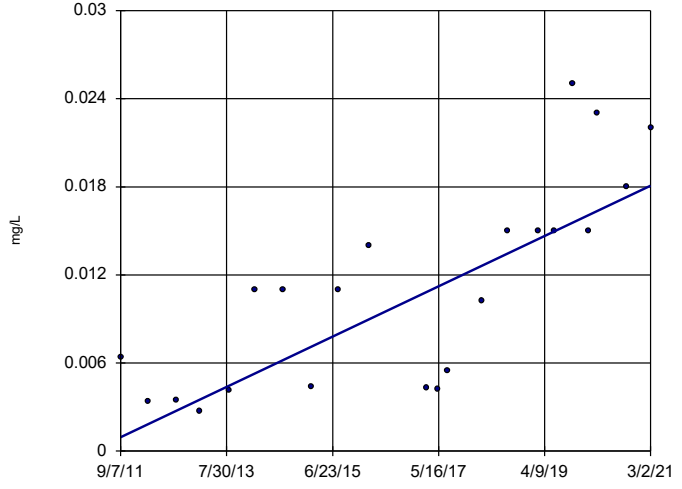
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-5R



n = 22

Slope = 0.001805 units per year.

Mann-Kendall statistic = 148
critical = 92

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Zinc Analysis Run 5/5/2021 3:08 PM View: Appendix I & II - Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

FIGURE F.

Appendix III Intrawell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (S.U.)	**GWA-2**	**7.106**	**5.427**	**3/2/2021**	**5.42**	**Yes**	**21**	**6.266**	**0.401**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**
pH (S.U.)	**GWC-5R**	**5.711**	**4.765**	**3/2/2021**	**4.63**	**Yes**	**9**	**5.238**	**0.1758**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:21 PM

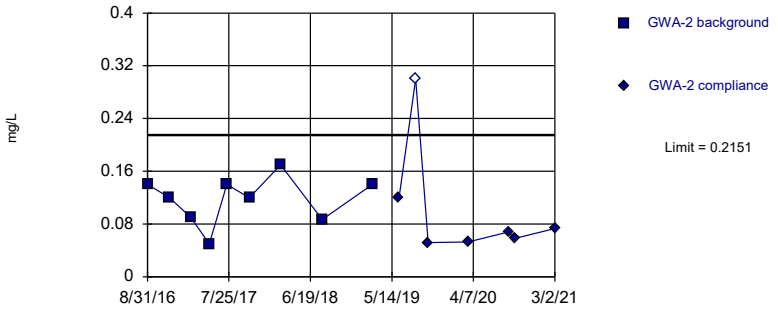
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GWA-2	0.2151	n/a	3/2/2021	0.073J	No	9	0.1174	0.03628	0	None	No	0.001254	Param Intra 1 of 2
Fluoride (mg/L)	GWC-1R	0.1	n/a	3/1/2021	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-2R	0.1	n/a	3/1/2021	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-3R	0.22	n/a	3/2/2021	0.15	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-4R	0.15	n/a	3/1/2021	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-5R	0.37	n/a	3/2/2021	0.094J	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GWC-6R	0.28	n/a	3/3/2021	0.1ND	No	9	n/a	n/a	55.56	n/a	n/a	0.01809	NP Intra (NDs) 1 of 2
pH (S.U.)	**GWA-2**	**7.106**	**5.427**	**3/2/2021**	**5.42**	**Yes**	**21**	**6.266**	**0.401**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**
pH (S.U.)	GWC-1R	5.52	4.49	3/1/2021	5.25	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-2R	6.8	4.35	3/1/2021	5.17	No	16	n/a	n/a	0	n/a	n/a	0.01291	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-3R	5.28	4.31	3/2/2021	4.82	No	9	n/a	n/a	0	n/a	n/a	0.03619	NP Intra (normality) 1 of 2
pH (S.U.)	GWC-4R	6.245	4.827	3/1/2021	5.62	No	10	5.536	0.2783	0	None	No	0.0006268	Param Intra 1 of 2
pH (S.U.)	**GWC-5R**	**5.711**	**4.765**	**3/2/2021**	**4.63**	**Yes**	**9**	**5.238**	**0.1758**	**0**	**None**	**No**	**0.0006268**	**Param Intra 1 of 2**
pH (S.U.)	GWC-6R	6.687	5.169	3/3/2021	5.78	No	19	5.928	0.3559	0	None	No	0.0006268	Param Intra 1 of 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1174, Std. Dev.=0.03628, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9425, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

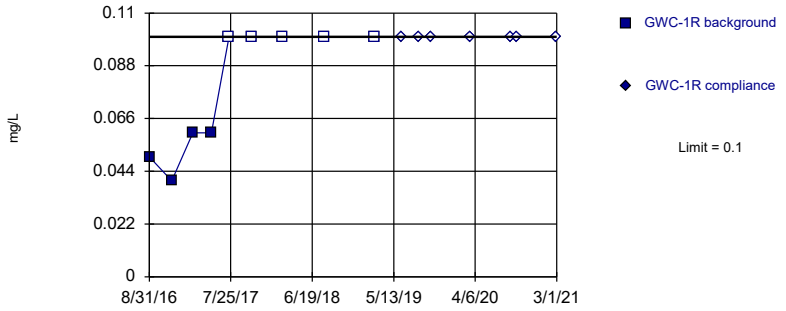
Constituent: Fluoride Analysis Run 5/5/2021 3:19 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

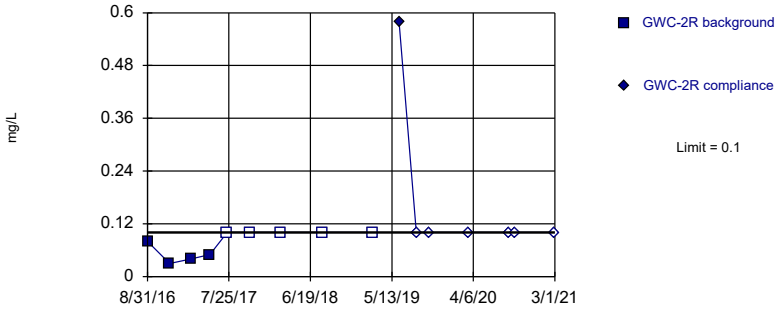
Constituent: Fluoride Analysis Run 5/5/2021 3:19 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

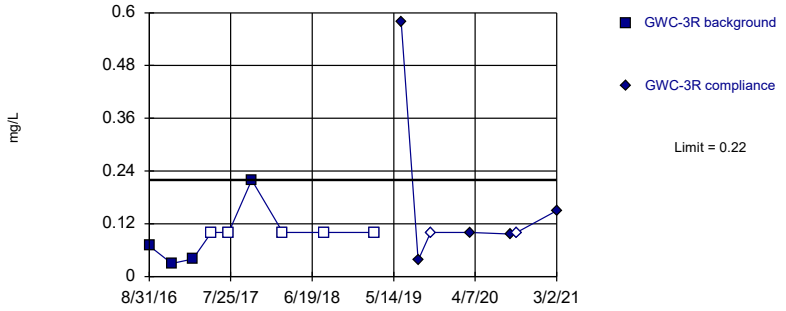
Constituent: Fluoride Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



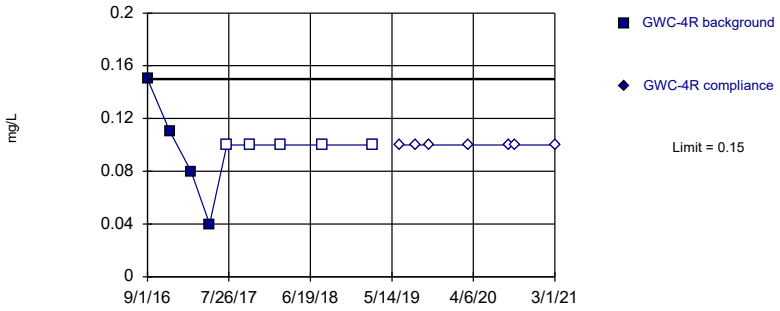
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

Constituent: Fluoride Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



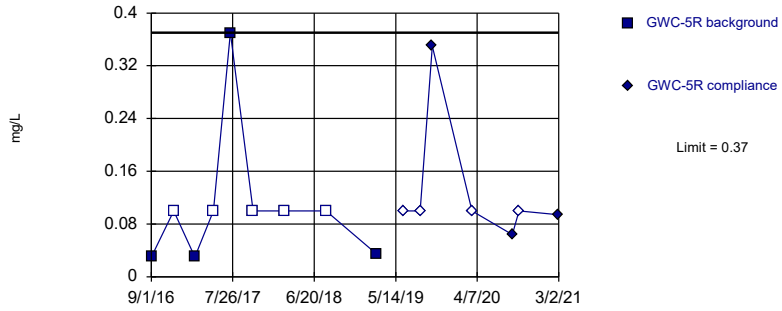
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

Constituent: Fluoride Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



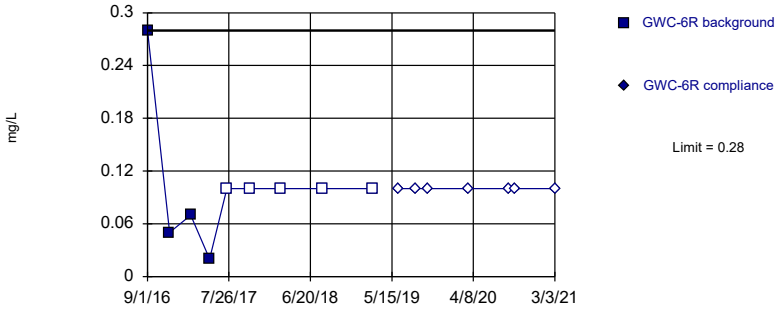
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

Constituent: Fluoride Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



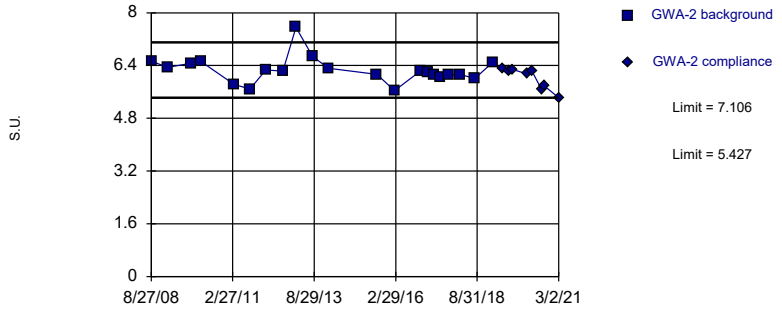
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 9 background values. 55.56% NDs. Well-constituent pair annual alpha = 0.03586. Individual comparison alpha = 0.01809 (1 of 2).

Constituent: Fluoride Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Exceeds Limits

Prediction Limit

Intrawell Parametric



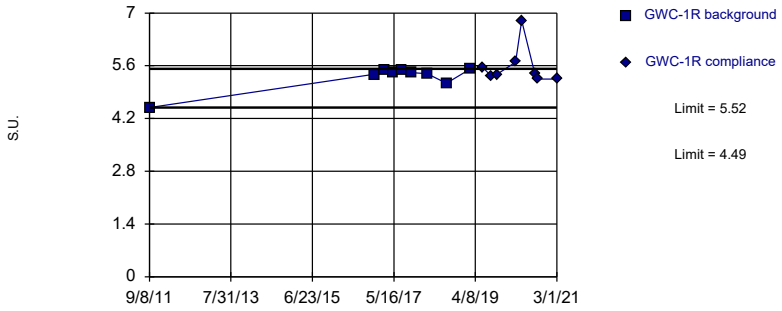
Background Data Summary: Mean=6.266, Std. Dev.=0.401, n=21. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8754, critical = 0.873. Kappa = 2.094 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Within Limits

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. Limits are highest and lowest of 9 background values. Well-constituent pair annual alpha = 0.07172. Individual comparison alpha = 0.03619 (1 of 2).

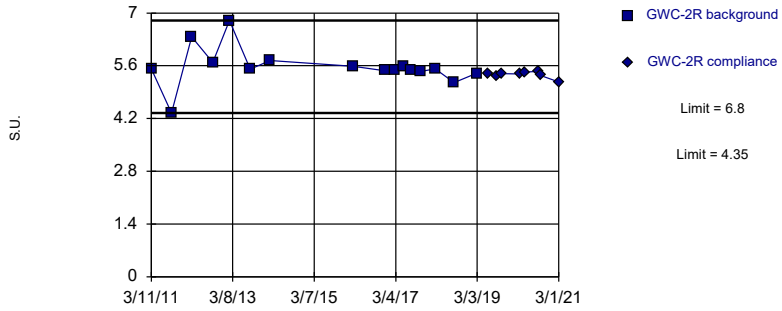
Constituent: pH Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limits

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. Limits are highest and lowest of 16 background values. Well-constituent pair annual alpha = 0.02574. Individual comparison alpha = 0.01291 (1 of 2).

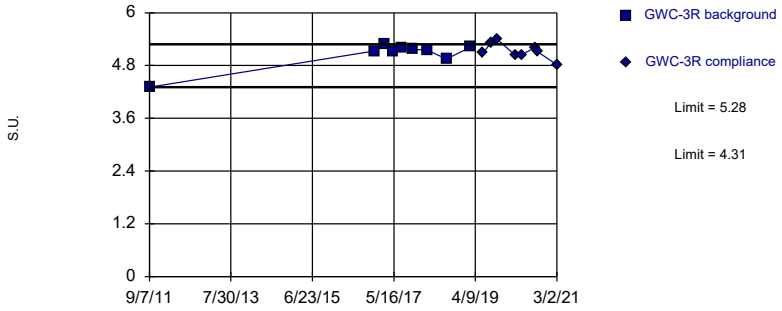
Constituent: pH Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limits

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. Limits are highest and lowest of 9 background values. Well-constituent pair annual alpha = 0.07172. Individual comparison alpha = 0.03619 (1 of 2).

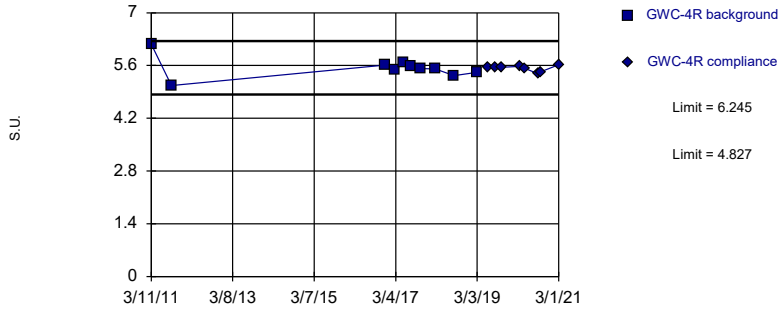
Constituent: pH Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



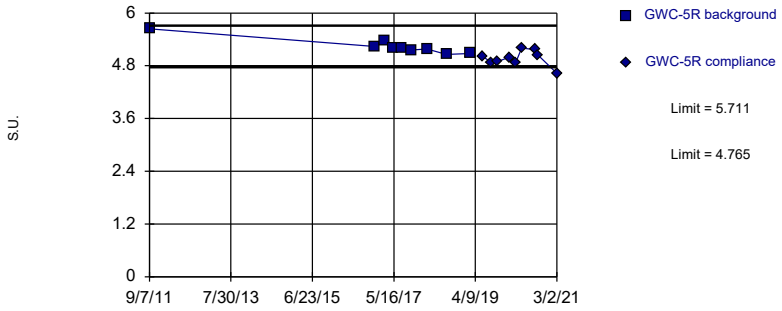
Background Data Summary: Mean=5.536, Std. Dev.=0.2783, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9104, critical = 0.781. Kappa = 2.549 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.238, Std. Dev.=0.1758, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8341, critical = 0.764. Kappa = 2.69 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

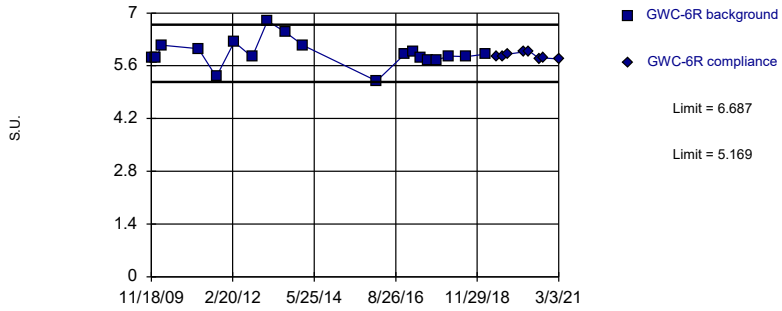
Constituent: pH Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.928, Std. Dev.=0.3559, n=19. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9219, critical = 0.863. Kappa = 2.132 (c=7, w=6, 1 of 2, event alpha = 0.05132). Report alpha = 0.001254.

Constituent: pH Analysis Run 5/5/2021 3:20 PM View: Appendix III - Intrawell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
8/31/2016	0.14 (J)	
11/28/2016	0.12 (J)	
2/22/2017	0.09 (J)	
5/8/2017	0.05 (J)	
7/17/2017	0.14 (J)	
10/16/2017	0.12 (J)	
2/19/2018	0.17	
8/6/2018	0.087 (J)	
2/25/2019	0.14 (J)	
6/12/2019		0.12 (J)
8/19/2019		<0.3
10/8/2019		0.052 (J)
3/17/2020		0.053 (J)
8/26/2020		0.068 (J)
9/22/2020		0.058 (J)
3/2/2021		0.073 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
8/31/2016	0.05 (J)	
11/29/2016	0.04 (J)	
2/23/2017	0.06 (J)	
5/9/2017	0.06 (J)	
7/18/2017	<0.1	
10/17/2017	<0.1	
2/21/2018	<0.1	
8/7/2018	<0.1	
2/26/2019	<0.1	
6/13/2019		<0.1
8/20/2019		<0.1
10/9/2019		<0.1
3/17/2020		<0.1
8/27/2020		<0.1
9/22/2020		<0.1
3/1/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
8/31/2016	0.08 (J)	
11/28/2016	0.03 (J)	
2/22/2017	0.04 (J)	
5/10/2017	0.05 (J)	
7/18/2017	<0.1	
10/17/2017	<0.1	
2/20/2018	<0.1	
8/8/2018	<0.1	
2/26/2019	<0.1	
6/12/2019		0.58
8/20/2019		<0.1
10/9/2019		<0.1
3/18/2020		<0.1
8/28/2020		<0.1
9/22/2020		<0.1
3/1/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
8/31/2016	0.07 (J)	
11/30/2016	0.03 (J)	
2/23/2017	0.04 (J)	
5/9/2017	<0.1	
7/18/2017	<0.1	
10/18/2017	0.22 (J)	
2/21/2018	<0.1	
8/7/2018	<0.1	
2/26/2019	<0.1	
6/13/2019		0.58
8/21/2019		0.037 (J)
10/10/2019		<0.1
3/17/2020		0.1 (J)
8/28/2020		0.097 (J)
9/22/2020		<0.1
3/2/2021		0.15

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
9/1/2016	0.15 (J)	
11/30/2016	0.11 (J)	
2/24/2017	0.08 (J)	
5/10/2017	0.04 (J)	
7/18/2017	<0.1	
10/17/2017	<0.1	
2/20/2018	<0.1	
8/8/2018	<0.1	
2/26/2019	<0.1	
6/12/2019		<0.1
8/19/2019		<0.1
10/10/2019		<0.1
3/18/2020		<0.1
8/28/2020		<0.1
9/22/2020		<0.1
3/1/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/1/2016	0.03 (J)	
12/1/2016	<0.1	
2/24/2017	0.03 (J)	
5/10/2017	<0.1	
7/17/2017	0.37	
10/16/2017	<0.1	
2/21/2018	<0.1	
8/7/2018	<0.1	
2/26/2019	0.035 (J)	
6/13/2019		<0.1
8/21/2019		<0.1
10/9/2019		0.35
3/18/2020		<0.1
8/27/2020		0.064 (J)
9/23/2020		<0.1
3/2/2021		0.094 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
9/1/2016	0.28 (J)	
11/29/2016	0.05 (J)	
2/23/2017	0.07 (J)	
5/10/2017	0.02 (J)	
7/18/2017	<0.1	
10/18/2017	<0.1	
2/19/2018	<0.1	
8/6/2018	<0.1	
2/25/2019	<0.1	
6/13/2019		<0.1
8/20/2019		<0.1
10/8/2019		<0.1
3/17/2020		<0.1
8/27/2020		<0.1
9/23/2020		<0.1
3/3/2021		<0.1

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWA-2	GWA-2
8/27/2008	6.53	
3/3/2009	6.35	
11/18/2009	6.47	
3/3/2010	6.53	
3/10/2011	5.83	
9/8/2011	5.69	
3/5/2012	6.27	
9/10/2012	6.23	
2/6/2013	7.56	
8/12/2013	6.68	
2/5/2014	6.32	
8/3/2015	6.13 (D)	
2/16/2016	5.64	
11/28/2016	6.23	
2/22/2017	6.21	
5/8/2017	6.12	
7/17/2017	6.03	
10/16/2017	6.12	
2/19/2018	6.13	
8/6/2018	6.01	
2/25/2019	6.51	
6/12/2019		6.3
8/19/2019		6.23
10/8/2019		6.28
3/17/2020		6.14
5/6/2020		6.24
8/26/2020		5.67
9/22/2020		5.78
3/2/2021		5.42 (D)

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-1R	GWC-1R
9/8/2011	4.49	
11/29/2016	5.37	
2/23/2017	5.5	
5/9/2017	5.41	
7/18/2017	5.5	
10/17/2017	5.42	
2/21/2018	5.39	
8/7/2018	5.14	
2/26/2019	5.52	
6/13/2019		5.55
8/20/2019		5.33
10/9/2019		5.37
3/17/2020		5.7
5/6/2020		6.8
8/27/2020		5.39
9/22/2020		5.25
3/1/2021		5.25

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-2R	GWC-2R
3/11/2011	5.52	
9/7/2011	4.35	
3/6/2012	6.37	
9/11/2012	5.69	
2/6/2013	6.8	
8/13/2013	5.51	
2/4/2014	5.74	
2/17/2016	5.59	
11/28/2016	5.47	
2/22/2017	5.48	
5/10/2017	5.6	
7/18/2017	5.49	
10/17/2017	5.45	
2/20/2018	5.52	
8/8/2018	5.15	
2/26/2019	5.4	
6/12/2019		5.38
8/20/2019		5.33
10/9/2019		5.39
3/18/2020		5.38
5/7/2020		5.43
8/28/2020		5.45
9/22/2020		5.34
3/1/2021		5.17

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-3R	GWC-3R
9/7/2011	4.31	
11/30/2016	5.13	
2/23/2017	5.28	
5/9/2017	5.12	
7/18/2017	5.21	
10/18/2017	5.17	
2/21/2018	5.15	
8/7/2018	4.95	
2/26/2019	5.22	
6/13/2019		5.08
8/21/2019		5.32
10/10/2019		5.4
3/17/2020		5.03
5/7/2020		5.05
8/28/2020		5.2
9/22/2020		5.11
3/2/2021		4.82

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-4R	GWC-4R
3/11/2011	6.16	
9/7/2011	5.07	
11/30/2016	5.61	
2/24/2017	5.47	
5/10/2017	5.68	
7/18/2017	5.59	
10/17/2017	5.52	
2/20/2018	5.51	
8/8/2018	5.33	
2/26/2019	5.42	
6/12/2019		5.54
8/19/2019		5.56
10/10/2019		5.55
3/18/2020		5.58
5/7/2020		5.52
8/28/2020		5.38
9/22/2020		5.43
3/1/2021		5.62

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-5R	GWC-5R
9/7/2011	5.64	
12/1/2016	5.24	
2/24/2017	5.37	
5/10/2017	5.2	
7/17/2017	5.21	
10/16/2017	5.16	
2/21/2018	5.18	
8/7/2018	5.06	
2/26/2019	5.08	
6/13/2019		5.01
8/21/2019		4.88
10/9/2019		4.89
1/21/2020		4.99
3/18/2020		4.88
5/7/2020		5.2
8/27/2020		5.17
9/23/2020		5.04
3/2/2021		4.63

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/5/2021 3:21 PM View: Appendix III - Intrawell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-6R
11/18/2009	5.82	
1/5/2010	5.8	
3/3/2010	6.15	
3/10/2011	6.05	
9/8/2011	5.31	
3/5/2012	6.23	
9/5/2012	5.83	
2/5/2013	6.79	
8/13/2013	6.48	
2/4/2014	6.14	
2/16/2016	5.2	
11/29/2016	5.92	
2/23/2017	5.97	
5/10/2017	5.82	
7/18/2017	5.76	
10/18/2017	5.76	
2/19/2018	5.86	
8/6/2018	5.84	
2/25/2019	5.91	
6/13/2019		5.84
8/20/2019		5.85
10/8/2019		5.91
3/17/2020		5.97
5/6/2020		5.99
8/27/2020		5.77
9/23/2020		5.81
3/3/2021		5.78

FIGURE G.

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-4R	0.16	n/a	3/1/2021	5.1	Yes	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-1R	37	n/a	3/1/2021	117	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-2R	37	n/a	3/1/2021	54.1	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-4R	37	n/a	3/1/2021	69.5	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-5R	37	n/a	3/2/2021	145	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	GWC-6R	37	n/a	3/3/2021	105	Yes	293	n/a	n/a	1.024	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-1R	7.9	n/a	3/1/2021	8.6	Yes	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-2R	7.9	n/a	3/1/2021	49.6	Yes	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-4R	7.9	n/a	3/1/2021	194	Yes	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-1R	160	n/a	3/1/2021	525	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-2R	160	n/a	3/1/2021	244	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-4R	160	n/a	3/1/2021	177	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-5R	160	n/a	3/2/2021	906	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GWC-6R	160	n/a	3/3/2021	476	Yes	293	n/a	n/a	6.143	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
TDS (mg/L)	GWC-1R	216.2	n/a	3/1/2021	974	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-2R	216.2	n/a	3/1/2021	516	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-4R	216.2	n/a	3/1/2021	666	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-5R	216.2	n/a	3/2/2021	980	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2
TDS (mg/L)	GWC-6R	216.2	n/a	3/3/2021	942	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.001254	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:17 PM

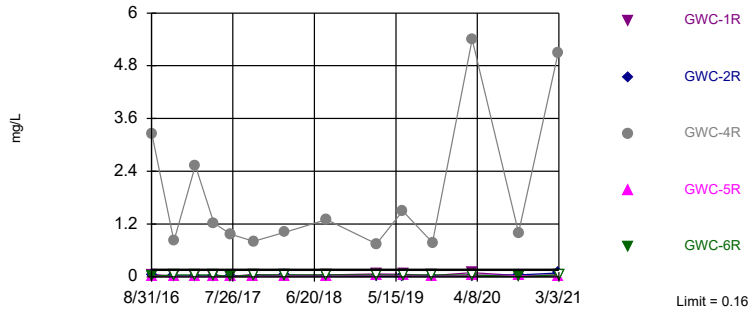
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GWC-1R	0.16	n/a	3/1/2021	0.046	No	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-2R	0.16	n/a	3/1/2021	0.087	No	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	**GWC-4R**	**0.16**	**n/a**	**3/1/2021**	**5.1**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	GWC-5R	0.16	n/a	3/2/2021	0.023J	No	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Boron (mg/L)	GWC-6R	0.16	n/a	3/3/2021	0.04ND	No	293	n/a	n/a	45.73	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GWC-1R**	**37**	**n/a**	**3/1/2021**	**117**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-2R**	**37**	**n/a**	**3/1/2021**	**54.1**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-4R**	**37**	**n/a**	**3/1/2021**	**69.5**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-5R**	**37**	**n/a**	**3/2/2021**	**145**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GWC-6R**	**37**	**n/a**	**3/3/2021**	**105**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GWC-1R**	**7.9**	**n/a**	**3/1/2021**	**8.6**	**Yes**	**293**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GWC-2R**	**7.9**	**n/a**	**3/1/2021**	**49.6**	**Yes**	**293**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GWC-4R**	**7.9**	**n/a**	**3/1/2021**	**194**	**Yes**	**293**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GWC-5R	7.9	n/a	3/2/2021	2.9	No	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Chloride (mg/L)	GWC-6R	7.9	n/a	3/3/2021	5	No	293	n/a	n/a	0	n/a	n/a	0.0000492	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GWC-1R**	**160**	**n/a**	**3/1/2021**	**525**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-2R**	**160**	**n/a**	**3/1/2021**	**244**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-4R**	**160**	**n/a**	**3/1/2021**	**177**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-5R**	**160**	**n/a**	**3/2/2021**	**906**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GWC-6R**	**160**	**n/a**	**3/3/2021**	**476**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.0000492**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GWC-1R**	**216.2**	**n/a**	**3/1/2021**	**974**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-2R**	**216.2**	**n/a**	**3/1/2021**	**516**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-4R**	**216.2**	**n/a**	**3/1/2021**	**666**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-5R**	**216.2**	**n/a**	**3/2/2021**	**980**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**
TDS (mg/L)	**GWC-6R**	**216.2**	**n/a**	**3/3/2021**	**942**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.001254**	**Param Inter 1 of 2**

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GWC-4R

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 293 background values. 45.73% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit. Assumes 1 future value.

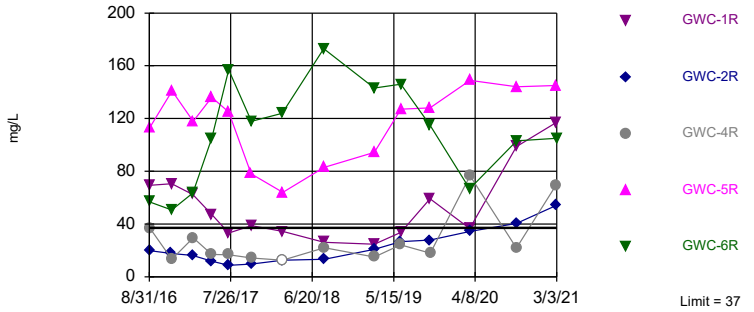
Constituent: Boron Analysis Run 5/5/2021 3:16 PM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R

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 293 background values. 1.024% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit. Assumes 1 future value.

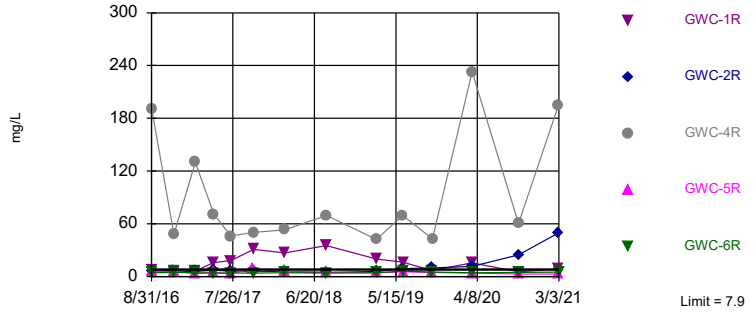
Constituent: Calcium Analysis Run 5/5/2021 3:16 PM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Exceeds Limit: GWC-1R, GWC-2R, GWC-4R

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 293 background values. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit. Assumes 1 future value.

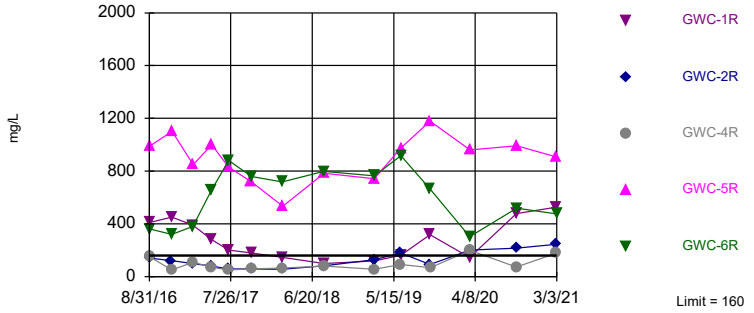
Constituent: Chloride Analysis Run 5/5/2021 3:16 PM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Exceeds Limit: GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R

Prediction Limit

Interwell Non-parametric



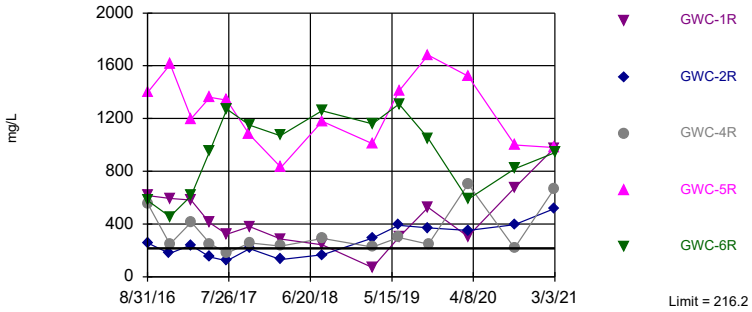
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 293 background values. 6.143% NDs. Annual per-constituent alpha = 0.0005902. Individual comparison alpha = 0.0000492 (1 of 2). Comparing 5 points to limit. Assumes 1 future value.

Constituent: Sulfate Analysis Run 5/5/2021 3:16 PM View: Appendix III - Interwell
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Exceeds Limit: GWC-1R, GWC-2R, GWC-4R, GWC-5R, GWC-6R

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=10.01, Std. Dev.=2.574, n=293, 0.6826% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.97, critical = 14.07. Kappa = 1.823 (c=7, w=6, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.001254. Comparing 5 points to limit. Assumes 1 future value.

Constituent: TDS Analysis Run 5/5/2021 3:16 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/1/2016	<0.04	<0.04	<0.04						
6/2/2016				<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
6/6/2016									
6/7/2016									
7/25/2016		<0.04	<0.04		<0.04				
7/26/2016	0.0055 (J)			0.0177 (J)		0.0047 (J)	0.0097 (J)	<0.04	0.0052 (J)
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	<0.04	<0.04							
9/14/2016			<0.04			<0.04		0.01 (J)	0.0071 (J)
9/15/2016				0.0214 (J)			0.0102 (J)		
9/16/2016									
9/19/2016					<0.04				
11/1/2016	0.0086 (J)		<0.04		<0.04		<0.04		
11/2/2016				<0.04		<0.04			<0.04
11/3/2016									
11/4/2016		<0.04						<0.04	
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017				0.0198 (J)					
1/11/2017	0.0074 (J)		<0.04				<0.04		
1/12/2017								<0.04	0.0076 (J)
1/13/2017						<0.04			
1/16/2017		<0.04			<0.04				
2/21/2017					<0.04				
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017			<0.04						
3/2/2017	0.008 (J)	<0.04					0.0084 (J)		
3/3/2017									
3/6/2017						<0.04			
3/7/2017								<0.04	0.0089 (J)
3/8/2017				0.0189 (J)					
4/26/2017			<0.04	0.0161 (J)	<0.04		<0.04		
4/27/2017	0.0066 (J)	<0.04							
4/28/2017									
5/1/2017						<0.04			0.0061 (J)
5/2/2017								<0.04	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017	0.0087 (J)	0.006 (J)						<0.04	0.0079 (J)
6/28/2017			<0.04				<0.04		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/29/2017						<0.04			
6/30/2017				0.0173 (J)	<0.04				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017	0.0072 (J)	0.0071 (J)						<0.04	0.0094 (J)
10/4/2017			<0.04		<0.04		<0.04		
10/5/2017				0.0173 (J)		<0.04			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018	0.0052 (J)								
6/6/2018		<0.04							0.0098 (J)
6/7/2018						0.0045 (J)	0.004 (J)	<0.04	
6/8/2018			<0.04	0.013 (J)					
6/11/2018					0.014 (J)				
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						0.005 (J)		0.0057 (J)	0.01 (J)
10/1/2018	0.021 (J)	0.0049 (J)	<0.04	0.015 (J)			<0.04		
10/2/2018					<0.04				
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019	0.005 (J)	<0.04							
3/29/2019				0.014 (J)					
4/1/2019			<0.04		<0.04		<0.04		
4/2/2019									
4/3/2019						0.0055 (J)		0.0044 (J)	0.0076 (J)
6/12/2019									
6/13/2019									
9/24/2019	0.0064 (J)	0.0055 (J)						0.0049 (J)	0.01 (J)
9/25/2019			<0.04	0.018 (J)	<0.04	<0.04	0.0054 (J)		
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020		0.0087 (J)		0.02 (J)					
3/19/2020	0.0085 (J)		0.0053 (J)		0.0052 (J)		0.0073 (J)		
3/24/2020								0.0068 (J)	0.011 (J)
3/25/2020						0.011 (J)			
9/22/2020						<0.04		0.0053 (J)	0.0079 (J)
9/23/2020	<0.04	<0.04	0.0073 (J)				0.012 (J)		
9/24/2020					0.0075 (J)				
9/25/2020				0.02 (J)					
3/1/2021					<0.04				
3/2/2021				0.017 (J)				0.011 (J)	0.0068 (J)
3/3/2021	<0.04	<0.04	<0.04			0.0056 (J)	<0.04		
3/4/2021									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/1/2016									
6/2/2016									
6/6/2016	<0.04	<0.04							
6/7/2016			<0.04	<0.04	<0.04				
7/25/2016									
7/26/2016									
7/27/2016	<0.04	0.0059 (J)	<0.04		0.008 (J)				
7/28/2016				<0.04					
8/30/2016						0.0166 (J)			
8/31/2016							0.0315 (J)	0.0553 (J)	0.0305 (J)
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		0.0079 (J)			0.0086 (J)				
9/19/2016	<0.04		<0.04	<0.04					
11/1/2016									
11/2/2016			<0.04						
11/3/2016	<0.04	0.0082 (J)		<0.04	0.0077 (J)				
11/4/2016									
11/14/2016						0.0166 (J)			
11/28/2016							0.0095 (J)		0.0206 (J)
11/29/2016								0.0149 (J)	
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	<0.04	0.0096 (J)			0.0092 (J)				
1/12/2017									
1/13/2017			<0.04	<0.04					
1/16/2017									
2/21/2017									
2/22/2017							<0.04		0.0192 (J)
2/23/2017								0.0082 (J)	
2/24/2017						0.0145 (J)			
3/1/2017	<0.04	<0.04							
3/2/2017					0.0095 (J)				
3/3/2017									
3/6/2017			<0.04	<0.04					
3/7/2017									
3/8/2017									
4/26/2017	<0.04	0.0091 (J)	<0.04	<0.04					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					<0.04				
5/8/2017						0.0141 (J)	0.0084 (J)		
5/9/2017								0.0097 (J)	
5/10/2017									0.0179 (J)
5/26/2017									
6/27/2017									
6/28/2017	<0.04	0.0079 (J)							

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/29/2017			<0.04	<0.04	0.0074 (J)				
6/30/2017									
7/11/2017						0.0131 (J)			
7/17/2017							0.0092 (J)		
7/18/2017								0.0123 (J)	0.0169 (J)
10/3/2017				<0.04					
10/4/2017		0.009 (J)	<0.04		0.0077 (J)				
10/5/2017	<0.04								
10/10/2017						0.0124 (J)			
10/11/2017									
10/12/2017									
10/16/2017							<0.04		
10/17/2017								0.0513	0.0168 (J)
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018							<0.04		
2/20/2018									<0.04
2/21/2018								0.0378 (J)	
4/2/2018						0.013 (J)			
4/3/2018									
6/5/2018				0.0092 (J)					
6/6/2018			0.0049 (J)						
6/7/2018	<0.04								
6/8/2018									
6/11/2018		0.0093 (J)			0.01 (J)				
6/28/2018									
8/6/2018							<0.04		
8/7/2018								0.043	
8/8/2018									0.017 (J)
9/19/2018						0.012 (J)			
9/24/2018									
9/25/2018	0.0046 (J)	0.007 (J)	<0.04	0.0054 (J)	0.0096 (J)				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019							<0.04		
2/26/2019								0.062	0.017 (J)
3/26/2019									
3/27/2019						0.013 (J)			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				0.011 (J)	0.0066 (J)				
4/3/2019	<0.04	0.0053 (J)	<0.04						
6/12/2019							<0.04		0.013 (J)
6/13/2019								0.057	
9/24/2019				0.018 (J)					
9/25/2019			<0.04		0.0081 (J)				
9/26/2019	0.0062 (J)	0.0072 (J)							
10/8/2019						0.012 (J)	<0.04		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
10/9/2019								0.029 (J)	0.018 (J)
10/10/2019									
3/17/2020						0.023 (J)	0.0051 (J)	0.092 (J)	
3/18/2020									0.026 (J)
3/19/2020									
3/24/2020	0.0054 (J)	0.01 (J)	<0.04	0.016 (J)	0.0092 (J)				
3/25/2020									
9/22/2020						0.0076 (J)	0.0079 (J)	0.025 (J)	0.046 (J)
9/23/2020	0.021 (J)	0.006 (J)			0.0066 (J)				
9/24/2020			0.0094 (J)	0.013 (J)					
9/25/2020									
3/1/2021						0.013 (J)		0.046	0.087
3/2/2021							<0.04		
3/3/2021	<0.04	0.0094 (J)	<0.04		0.01 (J)				
3/4/2021				0.0079 (J)					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016						
6/2/2016						
6/6/2016						
6/7/2016						
7/25/2016						
7/26/2016						
7/27/2016						
7/28/2016						
8/30/2016						
8/31/2016						
9/1/2016	0.0108 (J)	3.25	0.0191 (J)			
9/13/2016						
9/14/2016				<0.04		
9/15/2016						
9/16/2016						
9/19/2016						
11/1/2016						
11/2/2016						
11/3/2016						
11/4/2016				<0.04		
11/14/2016						
11/28/2016						
11/29/2016	<0.04					
11/30/2016		0.813				
12/1/2016			0.0088 (J)			
12/15/2016				0.0107 (J)		
1/10/2017						
1/11/2017						
1/12/2017						
1/13/2017						
1/16/2017				<0.04		
2/21/2017						
2/22/2017						
2/23/2017	<0.04					
2/24/2017		2.53	0.0067 (J)			
3/1/2017						
3/2/2017						
3/3/2017				<0.04		
3/6/2017						
3/7/2017						
3/8/2017						
4/26/2017						
4/27/2017						
4/28/2017				<0.04		
5/1/2017						
5/2/2017						
5/8/2017						
5/9/2017						
5/10/2017	<0.04	1.22	0.0068 (J)			
5/26/2017				<0.04		
6/27/2017						
6/28/2017				<0.04		

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017						
6/30/2017						
7/11/2017						
7/17/2017			0.0102 (J)			
7/18/2017	0.0061 (J)	0.97				
10/3/2017				<0.04		
10/4/2017						
10/5/2017						
10/10/2017						
10/11/2017					0.0135 (J)	
10/12/2017						0.0401
10/16/2017			0.0066 (J)			
10/17/2017		0.804				
10/18/2017	<0.04					
11/20/2017					0.0251 (J)	0.156
1/10/2018						0.15
1/11/2018					0.0255 (J)	
2/19/2018	<0.04					0.146
2/20/2018		1.01			<0.04	
2/21/2018			0.0268 (J)			
4/2/2018						
4/3/2018					0.033 (J)	0.12
6/5/2018						
6/6/2018						
6/7/2018				<0.04		
6/8/2018						
6/11/2018						
6/28/2018					0.053	0.16
8/6/2018	<0.04					
8/7/2018			0.012 (J)		0.024 (J)	0.12
8/8/2018		1.3				
9/19/2018						
9/24/2018					0.028 (J)	0.099
9/25/2018						
9/26/2018						
10/1/2018				<0.04		
10/2/2018						
2/25/2019	<0.04					
2/26/2019		0.75	0.033 (J)			
3/26/2019						0.096
3/27/2019					0.017 (J)	
3/28/2019						
3/29/2019				0.0065 (J)		
4/1/2019						
4/2/2019						
4/3/2019						
6/12/2019		1.5				
6/13/2019	<0.04		0.03 (J)			
9/24/2019				0.0076 (J)		
9/25/2019						
9/26/2019						
10/8/2019	<0.04					

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019			0.013 (J)		0.017 (J)	0.079
10/10/2019		0.78				
3/17/2020	<0.04					
3/18/2020		5.4	0.034 (J)			
3/19/2020				0.0073 (J)		
3/24/2020						0.088 (J)
3/25/2020					0.043 (J)	
9/22/2020		1				
9/23/2020	0.0055 (J)		0.028 (J)	<0.04		
9/24/2020					0.037 (J)	0.087 (J)
9/25/2020						
3/1/2021		5.1				
3/2/2021			0.023 (J)			
3/3/2021	<0.04			<0.04		
3/4/2021					0.033 (J)	0.078

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/1/2016	12	2.5	21						
6/2/2016				1.3	1.3	8.8	28	2.4	33
6/6/2016									
6/7/2016									
7/25/2016		2.16	20.3		1.17				
7/26/2016	11			1.24		7.69	24.5	2.12	32.3
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	11.8	2.21							
9/14/2016			19.7			8.49		2.18	31
9/15/2016				1.17			27		
9/16/2016									
9/19/2016					1.05				
11/1/2016	11		18.4		1.14		25.6		
11/2/2016				1.23		7.83			30.9
11/3/2016									
11/4/2016		2.67						2.17 (J)	
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017				1.24					
1/11/2017	11.2		20.3				27.5		
1/12/2017								2.37	35.7
1/13/2017						8.08			
1/16/2017		2.45			1.23				
2/21/2017					1.25				
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017			18.6						
3/2/2017	11	2.57					27.5		
3/3/2017									
3/6/2017						8.64			
3/7/2017								2.34	32.7
3/8/2017				1.21					
4/26/2017			25.6	1.14	1.03		30.4		
4/27/2017	11.1	2.38							
4/28/2017									
5/1/2017						13.4			37
5/2/2017								2.17	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017	13.8	2.36						2.13	36.5
6/28/2017			23.9				29.8		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/29/2017						8.81			
6/30/2017				1.24	1.13				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017	14	2.21						2.15	30.9
10/4/2017			22.1		1.09		29.7		
10/5/2017				1.11		9.29			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018	15.2 (J)								
6/6/2018		2.3							26.2
6/7/2018						8.2	29.1	2.3	
6/8/2018			21.9 (J)	1.1					
6/11/2018					1.1				
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						9.5 (J)		2.3	25.8
10/1/2018	15.1	1.8	19.7	0.99			26.9		
10/2/2018					1.1				
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019	13.3 (J)	2.2							
3/29/2019				1.1					
4/1/2019			20.4 (J)		1.3		30.1		
4/2/2019									
4/3/2019						8.4		2.8	24.7 (J)
6/12/2019									
6/13/2019									
9/24/2019	15.8	2.3						2.5	25.8
9/25/2019			22.4	1.1	1.1	9.5	29.5		
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020		2.1		1.1					
3/19/2020	15		21.9		1.2		31.5		
3/24/2020								2.5	26.1
3/25/2020						10.5			
9/22/2020						9.6		2.6	27.2
9/23/2020	14.1	1.8	23.6				28.6		
9/24/2020					1.1				
9/25/2020				1.3					
3/1/2021					1.2				
3/2/2021				1.2				2.6	1.6
3/3/2021	14.1	1.8	20.6			7.7	29.8		
3/4/2021									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/1/2016									
6/2/2016									
6/6/2016	6.2	1.4							
6/7/2016			2.3	3.7	2.2				
7/25/2016									
7/26/2016									
7/27/2016	4.73	1.19	2.08		2				
7/28/2016				3.15					
8/30/2016						20.9			
8/31/2016							9.31	69.4	19.9
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		1.5			1.97				
9/19/2016	4.76		1.97	3.17					
11/1/2016									
11/2/2016			2.13						
11/3/2016	5.25	1.31		3.4	1.99				
11/4/2016									
11/14/2016						18.6			
11/28/2016							9.47 (B)		17.7 (B)
11/29/2016								70.6 (B)	
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	4.74	1.25			2.28				
1/12/2017									
1/13/2017			2.45	4.98					
1/16/2017									
2/21/2017									
2/22/2017							10.4		16.2
2/23/2017								62.4	
2/24/2017						16.1			
3/1/2017	5.37	1.26							
3/2/2017					2.15				
3/3/2017									
3/6/2017			2.48	6.28					
3/7/2017									
3/8/2017									
4/26/2017	4.28	1.05	2.3	6.65					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					1.95				
5/8/2017						14.6	14.2		
5/9/2017								47.4	
5/10/2017									11.8
5/26/2017									
6/27/2017									
6/28/2017	4.95	1.06							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/29/2017			2.54	6.04	2.02				
6/30/2017									
7/11/2017						14.3			
7/17/2017							14.1		
7/18/2017								33.2	8.69
10/3/2017				8.28					
10/4/2017		1.1	2.25		2.03				
10/5/2017	5.28								
10/10/2017						12.1			
10/11/2017									
10/12/2017									
10/16/2017							13.6		
10/17/2017								38.7	9.77
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018							<25		
2/20/2018									<25
2/21/2018								34.3	
4/2/2018						<25			
4/3/2018									
6/5/2018				9.1					
6/6/2018			2.3						
6/7/2018	4.8								
6/8/2018									
6/11/2018		1.4			2.1				
6/28/2018									
8/6/2018							11.4 (J)		
8/7/2018								26.2	
8/8/2018									13.4 (J)
9/19/2018						11.1 (J)			
9/24/2018									
9/25/2018	4.6	1	2.3	10.4 (J)	2.1				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019							12.7 (J)		
2/26/2019								24.7 (J)	20.9 (J)
3/26/2019									
3/27/2019						10.8 (J)			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				8.8	2.5				
4/3/2019	5.3	1.2	2.9						
6/12/2019							18.9		26.6
6/13/2019								33.8	
9/24/2019				7.7					
9/25/2019			2.4		2.6				
9/26/2019	4.9	1.1							
10/8/2019						9.7	28.3		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
10/9/2019								59.1	27.8
10/10/2019									
3/17/2020						14.8	24.3	36.7	
3/18/2020									34.5
3/19/2020									
3/24/2020	5.3	1	2.6	6	2.7				
3/25/2020									
9/22/2020						10.1	31	98.8	40.5
9/23/2020	5.2	0.91 (J)			2.6				
9/24/2020			2.6	7.8					
9/25/2020									
3/1/2021						10.3		117	54.1
3/2/2021							34.2		
3/3/2021	5.2	0.96 (J)	2.4		2.5				
3/4/2021				8.7					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016						
6/2/2016						
6/6/2016						
6/7/2016						
7/25/2016						
7/26/2016						
7/27/2016						
7/28/2016						
8/30/2016						
8/31/2016						
9/1/2016	56.8	37.1	113			
9/13/2016						
9/14/2016				23.5		
9/15/2016						
9/16/2016						
9/19/2016						
11/1/2016						
11/2/2016						
11/3/2016						
11/4/2016				23.7		
11/14/2016						
11/28/2016						
11/29/2016	50.7 (B)					
11/30/2016		13.4 (B)				
12/1/2016			141 (B)			
12/15/2016				23.1		
1/10/2017						
1/11/2017						
1/12/2017						
1/13/2017						
1/16/2017				23.3		
2/21/2017						
2/22/2017						
2/23/2017	63.5					
2/24/2017		29.5	118			
3/1/2017						
3/2/2017						
3/3/2017				25.1		
3/6/2017						
3/7/2017						
3/8/2017						
4/26/2017						
4/27/2017						
4/28/2017				30.7		
5/1/2017						
5/2/2017						
5/8/2017						
5/9/2017						
5/10/2017	105	17	136			
5/26/2017				26.2		
6/27/2017						
6/28/2017				26.1		

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017						
6/30/2017						
7/11/2017						
7/17/2017			125			
7/18/2017	157	16.8				
10/3/2017				26.7		
10/4/2017						
10/5/2017						
10/10/2017						
10/11/2017					2.74	
10/12/2017						2.9
10/16/2017			78.2			
10/17/2017		14.3				
10/18/2017	118					
11/20/2017					1.81	10.4
1/10/2018						10.2
1/11/2018					1.54	
2/19/2018	124					<25
2/20/2018		<25			1.71	
2/21/2018			64			
4/2/2018						
4/3/2018					1.4	6.3
6/5/2018						
6/6/2018						
6/7/2018				25		
6/8/2018						
6/11/2018						
6/28/2018					1.4	6.7
8/6/2018	173					
8/7/2018			83		1.2	6.3
8/8/2018		22.1 (J)				
9/19/2018						
9/24/2018					1.1	5.7
9/25/2018						
9/26/2018						
10/1/2018				25		
10/2/2018						
2/25/2019	143					
2/26/2019		15.1 (J)	94.4			
3/26/2019						5.6
3/27/2019					1.5	
3/28/2019						
3/29/2019				23.5 (J)		
4/1/2019						
4/2/2019						
4/3/2019						
6/12/2019		24.2				
6/13/2019	146		127			
9/24/2019				26.4		
9/25/2019						
9/26/2019						
10/8/2019	115					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019			128		2.4	4.9
10/10/2019		18				
3/17/2020	66.8					
3/18/2020		76.6	149			
3/19/2020				27.4		
3/24/2020						4.8
3/25/2020					2.7	
9/22/2020		21.8				
9/23/2020	103		144	26.3		
9/24/2020					3.7	4.4
9/25/2020						
3/1/2021		69.5				
3/2/2021			145			
3/3/2021	105			25.6		
3/4/2021					8.2	4.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/1/2016	1.3	1.6	1.3						
6/2/2016				4.1	1.9	3.7	1.4	4.3	7.2
6/6/2016									
6/7/2016									
7/25/2016		1.4	1.3		1.7				
7/26/2016	1.2			4		3.6	1.6	4.4	6.6
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	1.1	1.3							
9/14/2016			1.3			3.4		3.8	6.6
9/15/2016				4.2			1.5		
9/16/2016									
9/19/2016					1.6				
11/1/2016	1.3		1.4		1.8		1.7		
11/2/2016				4.9		4.5			7.6
11/3/2016									
11/4/2016		1.6						4.8	
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017				4.1					
1/11/2017	1.1		1.1				1.2		
1/12/2017								3.8	6.8
1/13/2017						4.2			
1/16/2017		1.4			1.7				
2/21/2017					1.7				
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017			1.1						
3/2/2017	1	1.3					1.2		
3/3/2017									
3/6/2017						3.6			
3/7/2017								4.5	6.8
3/8/2017				4.2					
4/26/2017			1.1	4.1	1.7		1.2		
4/27/2017	1	1.3							
4/28/2017									
5/1/2017						4.3			7.2
5/2/2017								4.6	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017	1.1	1.4						4.3	7
6/28/2017			1.2				1.3		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/29/2017						4.2			
6/30/2017				3.7	1.8				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017	1.1	1.7						4.2	6.5
10/4/2017			1.2		1.8		1.5		
10/5/2017				3.8		4.7			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018	1.1								
6/6/2018		1.4							4.7
6/7/2018						4.4	1.2	4.5	
6/8/2018			1.2	3.4					
6/11/2018					2				
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						4.8		5.1	4.8
10/1/2018	1.1	1.4	1.2	3.8			1.5		
10/2/2018					1.8				
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019	1.4	1.5							
3/29/2019				4.2					
4/1/2019			1.1		1.7		1.2		
4/2/2019									
4/3/2019						4.3		4.2	4
6/12/2019									
6/13/2019									
9/24/2019	1.1	1.3						4.5	3.7
9/25/2019			1.1	4.8	1.6	4.5	1.1		
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020		1.4		5.2					
3/19/2020	1.1		1.1		1.8		1.2		
3/24/2020								4.3	3.5
3/25/2020						3.9			
9/22/2020						4.5		4.2	3.6
9/23/2020	0.99 (J)	1.2	1				1.1		
9/24/2020					1.5				
9/25/2020				5.3					
3/1/2021					1.6				
3/2/2021				4.9				4.3	3.2
3/3/2021	0.96 (J)	1.2	0.99 (J)			4.1	1.1		
3/4/2021									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/1/2016									
6/2/2016									
6/6/2016	6.8	6.4							
6/7/2016			1.9	2.8	4.5				
7/25/2016									
7/26/2016									
7/27/2016	6.7	6.2	1.9		4.5				
7/28/2016				2.6					
8/30/2016						5.2			
8/31/2016							4	7.6	6.3
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		6.1			4.5				
9/19/2016	7		1.9	2.4					
11/1/2016									
11/2/2016			2.6						
11/3/2016	7.5	7.4		2.9	5.4				
11/4/2016									
11/14/2016						6.4			
11/28/2016							4.2		6.7
11/29/2016								5.8	
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	6.5	6.1			4.7				
1/12/2017									
1/13/2017			2.3	2.5					
1/16/2017									
2/21/2017									
2/22/2017							3.7		5.7
2/23/2017								6.2	
2/24/2017						5.5			
3/1/2017	6.9	6							
3/2/2017					4.8				
3/3/2017									
3/6/2017			1.9	2.1					
3/7/2017									
3/8/2017									
4/26/2017	7	6.5	2	2.1					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					4.6				
5/8/2017						5.8	4.2		
5/9/2017								16	
5/10/2017									7.1
5/26/2017									
6/27/2017									
6/28/2017	7	6.4							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/29/2017			2.6	2.8	4.5				
6/30/2017									
7/11/2017						5.8			
7/17/2017							3.8		
7/18/2017								18	6
10/3/2017				2.2					
10/4/2017		6.8	2.6		4.7				
10/5/2017	7								
10/10/2017						5.9			
10/11/2017									
10/12/2017									
10/16/2017							4.2		
10/17/2017								31	6.1
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018							4.3		
2/20/2018									5.8
2/21/2018								27	
4/2/2018						4.8			
4/3/2018									
6/5/2018				1.7					
6/6/2018			2.7						
6/7/2018	6.8								
6/8/2018									
6/11/2018		6.8			4.9				
6/28/2018									
8/6/2018							3.8		
8/7/2018								35.4	
8/8/2018									4.7
9/19/2018						4			
9/24/2018									
9/25/2018	7.9	7.8	3.6	2.2	5.6				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019							4.1		
2/26/2019								20	5.7
3/26/2019									
3/27/2019						4.3			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				2.5	4.8				
4/3/2019	6.9	6.3	3.1						
6/12/2019							4.7		9.1
6/13/2019								16.4	
9/24/2019				3.1					
9/25/2019			2.8		5.7				
9/26/2019	7	7.1							
10/8/2019						4.4	5.1		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
10/9/2019								6.9	9.8
10/10/2019									
3/17/2020						4.1	4.8	15.5	
3/18/2020									11.7
3/19/2020									
3/24/2020	7	6.8	2.7	2.8	5				
3/25/2020									
9/22/2020						4.2	4.2	5.5	24.7
9/23/2020	7.2	7.2			6.6				
9/24/2020			2.7	2					
9/25/2020									
3/1/2021						3.7		8.6	49.6
3/2/2021							4.1		
3/3/2021	7	7.2	2.7		7.1				
3/4/2021				1.8					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016						
6/2/2016						
6/6/2016						
6/7/2016						
7/25/2016						
7/26/2016						
7/27/2016						
7/28/2016						
8/30/2016						
8/31/2016						
9/1/2016	4.4	190	6.6			
9/13/2016						
9/14/2016				1.1		
9/15/2016						
9/16/2016						
9/19/2016						
11/1/2016						
11/2/2016						
11/3/2016						
11/4/2016				1.4		
11/14/2016						
11/28/2016						
11/29/2016	4.8					
11/30/2016		48				
12/1/2016			6			
12/15/2016				2.9		
1/10/2017						
1/11/2017						
1/12/2017						
1/13/2017						
1/16/2017				0.98		
2/21/2017						
2/22/2017						
2/23/2017	4.4					
2/24/2017		130	3.4			
3/1/2017						
3/2/2017						
3/3/2017				1.1		
3/6/2017						
3/7/2017						
3/8/2017						
4/26/2017						
4/27/2017						
4/28/2017				0.91		
5/1/2017						
5/2/2017						
5/8/2017						
5/9/2017						
5/10/2017	3.9	71	4.5			
5/26/2017				0.93		
6/27/2017						
6/28/2017				1		

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017						
6/30/2017						
7/11/2017						
7/17/2017			3.2			
7/18/2017	4	46				
10/3/2017				1.2		
10/4/2017						
10/5/2017						
10/10/2017						
10/11/2017					2.4	
10/12/2017						3.8
10/16/2017			9			
10/17/2017		50				
10/18/2017	4.1					
11/20/2017					1.8	4.4
1/10/2018						4.6
1/11/2018					1.6	
2/19/2018	4.4					4.6
2/20/2018		53.1			2	
2/21/2018			5.6			
4/2/2018						
4/3/2018					3.3	5.9
6/5/2018						
6/6/2018						
6/7/2018				1		
6/8/2018						
6/11/2018						
6/28/2018					2.1	5
8/6/2018	3.9					
8/7/2018			4.7		1.2	4.3
8/8/2018		69.3				
9/19/2018						
9/24/2018					1.3	4.9
9/25/2018						
9/26/2018						
10/1/2018				1.1		
10/2/2018						
2/25/2019	4.4					
2/26/2019		42.2	4.2			
3/26/2019						4.4
3/27/2019					1.4	
3/28/2019						
3/29/2019				1.2		
4/1/2019						
4/2/2019						
4/3/2019						
6/12/2019		69.5				
6/13/2019	6.2		5.5			
9/24/2019				0.95 (J)		
9/25/2019						
9/26/2019						
10/8/2019	4.9					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019			4.5		2.1	5.1
10/10/2019		42.8				
3/17/2020	4.4					
3/18/2020		233	3.8			
3/19/2020				0.97 (J)		
3/24/2020						4.7
3/25/2020					1.9	
9/22/2020		60.2				
9/23/2020	4.7		3	0.88 (J)		
9/24/2020					2.7	5
9/25/2020						
3/1/2021		194				
3/2/2021			2.9			
3/3/2021	5			0.86 (J)		
3/4/2021					4.9	4.9

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/1/2016	5	4.2	12						
6/2/2016				6.6	1.3	8	5.8	1.9	20
6/6/2016									
6/7/2016									
7/25/2016		3.7	8.4		1.2				
7/26/2016	5.4			6.1		7.7	6.7	1.8	20
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	2.9	5.2							
9/14/2016			8.6			7.5		1.8	19
9/15/2016				6.1			6		
9/16/2016									
9/19/2016					1.2				
11/1/2016	3.9		8.9		1.3		4.9		
11/2/2016				6.3		8.2			20
11/3/2016									
11/4/2016		5						2	
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017				5.9					
1/11/2017	3.7		8.6				4.5		
1/12/2017								1.9	19
1/13/2017						8.1			
1/16/2017		7.9			<1				
2/21/2017					1.4				
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017			9.3						
3/2/2017	4.6	7.4					4.4		
3/3/2017									
3/6/2017						8			
3/7/2017								2.1	20
3/8/2017				7					
4/26/2017			11	7	1.4		5.1		
4/27/2017	5.2	7.4							
4/28/2017									
5/1/2017						8.4			20
5/2/2017								2	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017	5.9	6.4						2.1	18
6/28/2017			12				5.4		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/29/2017						9.2			
6/30/2017				6.5	<1				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017	6.6	5.9						2.3	16
10/4/2017			12		1.4		6.2		
10/5/2017				7.9		9.6			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018	6.4								
6/6/2018		4.4							8.3
6/7/2018						8.5	6.7	2	
6/8/2018			9.6	6.4					
6/11/2018					1.1				
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						10.2		2.3	7.9
10/1/2018	5.6	4	9.1	6.8			7.1		
10/2/2018					1				
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019	8	4.3							
3/29/2019				7.3					
4/1/2019			8.5		0.96 (J)		7.2		
4/2/2019									
4/3/2019						8.5		2.1	7
6/12/2019									
6/13/2019									
9/24/2019	5.3	4.3						2.4	5.5
9/25/2019			13.8	6.6	0.81 (J)	8.5	7		
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020		5.3		8.1					
3/19/2020	10		12.9		1.6		9		
3/24/2020								2.1	5.9
3/25/2020						8.8			
9/22/2020						8.2		2.1	5.5
9/23/2020	8.1	3.4	16.8				6.9		
9/24/2020					0.69 (J)				
9/25/2020				6.1					
3/1/2021					0.88 (J)				
3/2/2021				6				2.3	2.6
3/3/2021	9	4.4	9.6			7.8	7		
3/4/2021									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/1/2016									
6/2/2016									
6/6/2016	1.2	1.8							
6/7/2016			<1	5.2	4.4				
7/25/2016									
7/26/2016									
7/27/2016	1.7	1.9	0.08 (J)		4.7				
7/28/2016				5.1					
8/30/2016						160			
8/31/2016							29	410	140
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		1.7			4.8				
9/19/2016	1.8		0.08 (J)	4.8					
11/1/2016									
11/2/2016			0.1 (J)						
11/3/2016	0.69 (J)	1.9		5	5.3				
11/4/2016									
11/14/2016						150			
11/28/2016							36		120
11/29/2016								450	
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	<1	1.7			5.2				
1/12/2017									
1/13/2017			<1	4.3					
1/16/2017									
2/21/2017									
2/22/2017							43		100
2/23/2017								390	
2/24/2017						120			
3/1/2017	1.8	<1							
3/2/2017					5				
3/3/2017									
3/6/2017			<1	4.5					
3/7/2017									
3/8/2017									
4/26/2017	1.6	1.9	<1	4.9					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					5				
5/8/2017						120	60		
5/9/2017								280	
5/10/2017									80
5/26/2017									
6/27/2017									
6/28/2017	<1	<1							

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/29/2017			<1	5.5	5.2				
6/30/2017									
7/11/2017						110			
7/17/2017							63		
7/18/2017								200	57
10/3/2017				5.8					
10/4/2017		1.7	<1		5.3				
10/5/2017	1.6								
10/10/2017						93			
10/11/2017									
10/12/2017									
10/16/2017							62		
10/17/2017								180	59
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018							64.6		
2/20/2018									55.9
2/21/2018								146	
4/2/2018						88.8			
4/3/2018									
6/5/2018				6.1					
6/6/2018			0.049 (J)						
6/7/2018	0.68 (J)								
6/8/2018									
6/11/2018		0.95 (J)			5.2				
6/28/2018									
8/6/2018							42.1		
8/7/2018								100	
8/8/2018									81.1
9/19/2018						75			
9/24/2018									
9/25/2018	1	1.5	0.13 (J)	7	6.1				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019							42.1		
2/26/2019								118	129
3/26/2019									
3/27/2019						65.9			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				3.8	5.1				
4/3/2019	0.82 (J)	1.3	0.12 (J)						
6/12/2019							83.4		180
6/13/2019								163	
9/24/2019				1					
9/25/2019			<1		5.5				
9/26/2019	0.64 (J)	1							
10/8/2019						52.3	128		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
10/9/2019								318	91.2
10/10/2019									
3/17/2020						71.6	98.6	145	
3/18/2020									200
3/19/2020									
3/24/2020	<1	0.99 (J)	<1	3	5.4				
3/25/2020									
9/22/2020						51.5	145	478	216
9/23/2020	0.53 (J)	1.1			5.1				
9/24/2020			<1	3.6					
9/25/2020									
3/1/2021						51.6		525	244
3/2/2021							156		
3/3/2021	<1	1	<1		5.2				
3/4/2021				4.5					

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016						
6/2/2016						
6/6/2016						
6/7/2016						
7/25/2016						
7/26/2016						
7/27/2016						
7/28/2016						
8/30/2016						
8/31/2016						
9/1/2016	360	150	990			
9/13/2016						
9/14/2016				9.4		
9/15/2016						
9/16/2016						
9/19/2016						
11/1/2016						
11/2/2016						
11/3/2016						
11/4/2016				13		
11/14/2016						
11/28/2016						
11/29/2016	320					
11/30/2016		50				
12/1/2016			1100			
12/15/2016				1.8		
1/10/2017						
1/11/2017						
1/12/2017						
1/13/2017						
1/16/2017				11		
2/21/2017						
2/22/2017						
2/23/2017	380					
2/24/2017		110	850			
3/1/2017						
3/2/2017						
3/3/2017				8.8		
3/6/2017						
3/7/2017						
3/8/2017						
4/26/2017						
4/27/2017						
4/28/2017				10		
5/1/2017						
5/2/2017						
5/8/2017						
5/9/2017						
5/10/2017	660	70	1000			
5/26/2017				12		
6/27/2017						
6/28/2017				11		

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017						
6/30/2017						
7/11/2017						
7/17/2017			830			
7/18/2017	880	50				
10/3/2017				7.9		
10/4/2017						
10/5/2017						
10/10/2017						
10/11/2017					20	
10/12/2017						17
10/16/2017			720			
10/17/2017		58				
10/18/2017	760					
11/20/2017					24	71
1/10/2018						66
1/11/2018					23	
2/19/2018	718					57.2
2/20/2018		64.6			20.6	
2/21/2018			533			
4/2/2018						
4/3/2018					24.5	49.4
6/5/2018						
6/6/2018						
6/7/2018				8.8		
6/8/2018						
6/11/2018						
6/28/2018					22	43.8
8/6/2018	797					
8/7/2018			784		20.7	40.5
8/8/2018		79.5				
9/19/2018						
9/24/2018					21.2	39.7
9/25/2018						
9/26/2018						
10/1/2018				9.1		
10/2/2018						
2/25/2019	763					
2/26/2019		55.8	742			
3/26/2019						34.3
3/27/2019					17.7	
3/28/2019						
3/29/2019				9		
4/1/2019						
4/2/2019						
4/3/2019						
6/12/2019		92.8				
6/13/2019	918		976			
9/24/2019				9.1		
9/25/2019						
9/26/2019						
10/8/2019	664					

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019			1180		15	27.9
10/10/2019		68.7				
3/17/2020	303					
3/18/2020		199	960			
3/19/2020				12.4		
3/24/2020						25.2
3/25/2020					14.3	
9/22/2020		72.1				
9/23/2020	518		992	11.8		
9/24/2020					11.7	22.9
9/25/2020						
3/1/2021		177				
3/2/2021			906			
3/3/2021	476			10.6		
3/4/2021					12	21.5

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/1/2016	120	54	150						
6/2/2016				46	36	96	130	66	160
6/6/2016									
6/7/2016									
7/25/2016		48	135		50				
7/26/2016	94			54		92	141	78	177
7/27/2016									
7/28/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/13/2016	105	67							
9/14/2016			127			102		73	187
9/15/2016				54			153		
9/16/2016									
9/19/2016					35				
11/1/2016	44		75		<25		92		
11/2/2016				71		115			181
11/3/2016									
11/4/2016		60						75	
11/14/2016									
11/28/2016									
11/29/2016									
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017				45					
1/11/2017	107		148				159		
1/12/2017								86	202
1/13/2017						67			
1/16/2017		65			47				
2/21/2017					<25				
2/22/2017									
2/23/2017									
2/24/2017									
3/1/2017			182						
3/2/2017	98	61					117		
3/3/2017									
3/6/2017						159			
3/7/2017								108	257
3/8/2017				178					
4/26/2017			92	52	55		181		
4/27/2017	116	31							
4/28/2017									
5/1/2017						107			165
5/2/2017								103	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017	89	42						73	189
6/28/2017			126				169		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
6/29/2017						79			
6/30/2017				45	42				
7/11/2017									
7/17/2017									
7/18/2017									
10/3/2017	119	58						89	170
10/4/2017			147		31		141		
10/5/2017				40		95			
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
10/17/2017									
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018									
2/20/2018									
2/21/2018									
4/2/2018									
4/3/2018									
6/5/2018	127								
6/6/2018		96							151
6/7/2018						90	95	142	
6/8/2018			158	114					
6/11/2018					59				
6/28/2018									
8/6/2018									
8/7/2018									
8/8/2018									
9/19/2018									
9/24/2018									
9/25/2018									
9/26/2018						116		86	144
10/1/2018	117	60	138	50			165		
10/2/2018					57				
2/25/2019									
2/26/2019									
3/26/2019									
3/27/2019									
3/28/2019	87	87							
3/29/2019				63					
4/1/2019			19 (J)		54		149		
4/2/2019									
4/3/2019						111		83	142
6/12/2019									
6/13/2019									
9/24/2019	124	54						79	129
9/25/2019			159	64	51	117	157		
9/26/2019									
10/8/2019									

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-3D (bg)	YGWA-5I (bg)	YGWA-5D (bg)
10/9/2019									
10/10/2019									
3/17/2020									
3/18/2020		35		57					
3/19/2020	116		148		47		146		
3/24/2020								68	139
3/25/2020						146			
9/22/2020						83		75	104
9/23/2020	108	15	155				157		
9/24/2020					51				
9/25/2020				54					
3/1/2021					23				
3/2/2021				67				67	52
3/3/2021	99	39	111			80	137		
3/4/2021									

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/1/2016									
6/2/2016									
6/6/2016	120	58							
6/7/2016			38	60	28				
7/25/2016									
7/26/2016									
7/27/2016	94	35	74		74				
7/28/2016				81					
8/30/2016						319			
8/31/2016							209	616	257
9/1/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		35			67				
9/19/2016	92		45	68					
11/1/2016									
11/2/2016			53						
11/3/2016	104	48		61	41				
11/4/2016									
11/14/2016						280			
11/28/2016							102		177
11/29/2016								594	
11/30/2016									
12/1/2016									
12/15/2016									
1/10/2017									
1/11/2017	133	95			104				
1/12/2017									
1/13/2017			46	76					
1/16/2017									
2/21/2017									
2/22/2017							164		240
2/23/2017								581	
2/24/2017						162			
3/1/2017	119	79							
3/2/2017					77				
3/3/2017									
3/6/2017			164	167					
3/7/2017									
3/8/2017									
4/26/2017	162	36	34	50					
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017					142				
5/8/2017						194	145		
5/9/2017								410	
5/10/2017									149
5/26/2017									
6/27/2017									
6/28/2017	98	45							

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
6/29/2017			68	94	53				
6/30/2017									
7/11/2017						193			
7/17/2017							185		
7/18/2017								322	122
10/3/2017				149					
10/4/2017		45	54		61				
10/5/2017	104								
10/10/2017						175			
10/11/2017									
10/12/2017									
10/16/2017							218		
10/17/2017								381	214
10/18/2017									
11/20/2017									
1/10/2018									
1/11/2018									
2/19/2018							173		
2/20/2018									131
2/21/2018								285	
4/2/2018						192			
4/3/2018									
6/5/2018				109					
6/6/2018			79						
6/7/2018	68								
6/8/2018									
6/11/2018		74			70				
6/28/2018									
8/6/2018							158		
8/7/2018								242	
8/8/2018									166
9/19/2018						186			
9/24/2018									
9/25/2018	109	63	73	122	86				
9/26/2018									
10/1/2018									
10/2/2018									
2/25/2019							92		
2/26/2019								69	293
3/26/2019									
3/27/2019						170			
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				134	72				
4/3/2019	89	63	57						
6/12/2019							226		391
6/13/2019								301	
9/24/2019				157					
9/25/2019			75		81				
9/26/2019	126	72							
10/8/2019						172	276		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-47 (bg)	GWA-2 (bg)	GWC-1R	GWC-2R
10/9/2019								526	372
10/10/2019									
3/17/2020						165	185	306	
3/18/2020									351
3/19/2020									
3/24/2020	91	59	76	117	71				
3/25/2020									
9/22/2020						141	281	675	394
9/23/2020	103	81			99				
9/24/2020			69	113					
9/25/2020									
3/1/2021						145		974	516
3/2/2021							296 (D)		
3/3/2021	95	37	53		57				
3/4/2021				110					

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/1/2016						
6/2/2016						
6/6/2016						
6/7/2016						
7/25/2016						
7/26/2016						
7/27/2016						
7/28/2016						
8/30/2016						
8/31/2016						
9/1/2016	578	553	1400			
9/13/2016						
9/14/2016				152		
9/15/2016						
9/16/2016						
9/19/2016						
11/1/2016						
11/2/2016						
11/3/2016						
11/4/2016				148		
11/14/2016						
11/28/2016						
11/29/2016	455					
11/30/2016		247 (B)				
12/1/2016			1610 (B)			
12/15/2016				191		
1/10/2017						
1/11/2017						
1/12/2017						
1/13/2017						
1/16/2017				180		
2/21/2017						
2/22/2017						
2/23/2017	614					
2/24/2017		414	1200			
3/1/2017						
3/2/2017						
3/3/2017				156		
3/6/2017						
3/7/2017						
3/8/2017						
4/26/2017						
4/27/2017						
4/28/2017				130		
5/1/2017						
5/2/2017						
5/8/2017						
5/9/2017						
5/10/2017	955	251	1360			
5/26/2017				223		
6/27/2017						
6/28/2017				166		

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
6/29/2017						
6/30/2017						
7/11/2017						
7/17/2017			1340			
7/18/2017	1270	179				
10/3/2017				153		
10/4/2017						
10/5/2017						
10/10/2017						
10/11/2017					68	
10/12/2017						74
10/16/2017			1080			
10/17/2017		256				
10/18/2017	1150					
11/20/2017					139	179
1/10/2018						140
1/11/2018					153	
2/19/2018	1070					119
2/20/2018		233			87	
2/21/2018			830			
4/2/2018						
4/3/2018					85	106
6/5/2018						
6/6/2018						
6/7/2018				146		
6/8/2018						
6/11/2018						
6/28/2018					88	112
8/6/2018	1260					
8/7/2018			1180		89	103
8/8/2018		292				
9/19/2018						
9/24/2018					82	107
9/25/2018						
9/26/2018						
10/1/2018				155		
10/2/2018						
2/25/2019	1160					
2/26/2019		226	1010			
3/26/2019						90
3/27/2019					75	
3/28/2019						
3/29/2019				150		
4/1/2019						
4/2/2019						
4/3/2019						
6/12/2019		298				
6/13/2019	1310		1410			
9/24/2019				146		
9/25/2019						
9/26/2019						
10/8/2019	1050					

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/5/2021 3:17 PM View: Appendix III - Interwell

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

	GWC-6R	GWC-4R	GWC-5R	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)
10/9/2019			1680		119	98
10/10/2019		247				
3/17/2020	588					
3/18/2020		703	1520			
3/19/2020				148		
3/24/2020						84
3/25/2020					158	
9/22/2020		217				
9/23/2020	820		1000	161		
9/24/2020					170	77
9/25/2020						
3/1/2021		666				
3/2/2021			980			
3/3/2021	942			138		
3/4/2021					168	57

FIGURE H.

Appendix III Trend Tests - Intrawell Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 2:59 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH (S.U.)	**GWC-5R**	**-0.0905**	**-93**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

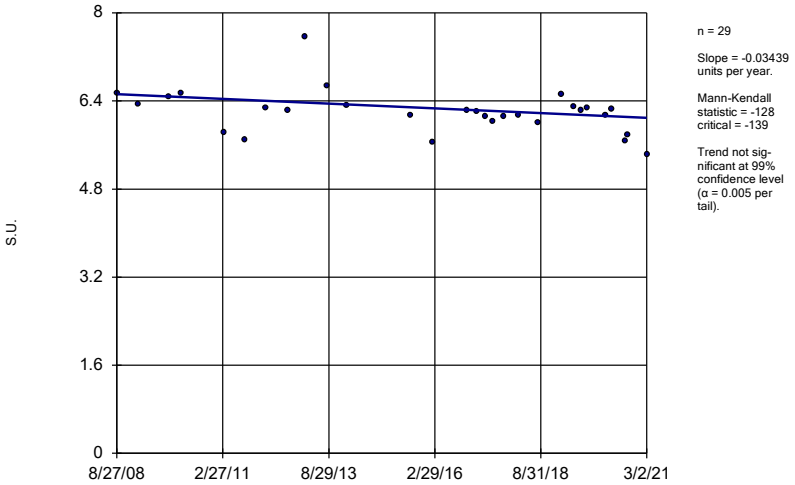
Appendix III Trend Tests - Intrawell Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 2:59 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH (S.U.)	GWA-2 (bg)	-0.03439	-128	-139	No	29	0	n/a	n/a	0.01	NP
pH (S.U.)	**GWC-5R**	**-0.0905**	**-93**	**-68**	**Yes**	**18**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sen's Slope Estimator

GWA-2 (bg)



n = 29

Slope = -0.03439 units per year.

Mann-Kendall statistic = -128 critical = -139

Trend not significant at 99% confidence level (α = 0.005 per tail).

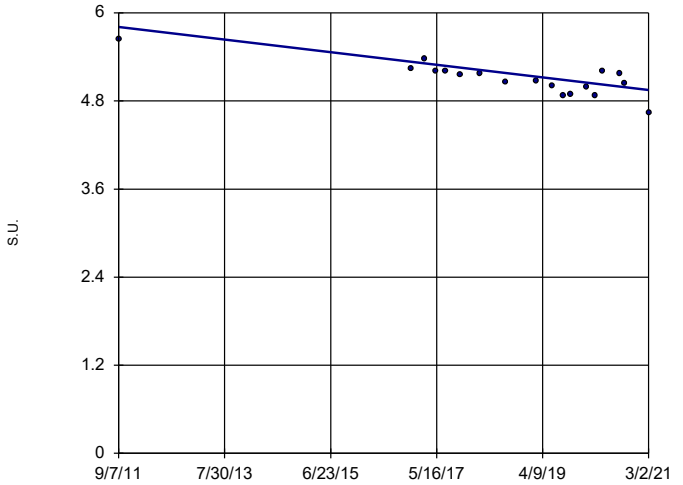
Constituent: pH Analysis Run 5/6/2021 2:58 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-5R



n = 18

Slope = -0.0905 units per year.

Mann-Kendall statistic = -93 critical = -68

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 2:58 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

FIGURE I.

Appendix III Trend Tests - Interwell Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 3:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-21I (bg)	-0.006801	-60	-58	Yes	16	56.25	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	4.949	63	48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-2R	7.08	51	48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.118	59	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.0863	-67	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.7865	60	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.1168	-63	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	1.232	68	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-0.9737	-45	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-2.036	-56	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.574	-62	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.3002	76	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.189	71	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.06529	-59	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05699	-66	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.5003	-45	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.9116	-83	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	25.64	66	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.091	76	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.687	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.4938	60	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-12.05	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-25.19	-71	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-3.891	-96	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.09335	70	58	Yes	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-40 (bg)	-18.83	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-47 (bg)	-14.88	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-5D (bg)	-18.77	-74	-58	Yes	16	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Interwell Exceedances - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 3:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GWA-2 (bg)	0	5	48	No	14	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	GWC-4R	0.04845	3	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.00131	-37	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-17S (bg)	-0.0002497	-11	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-34	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003285	-14	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0	-2	-58	No	16	25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-23	-58	No	16	68.75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-15	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWA-21I (bg)**	**-0.006801**	**-60**	**-58**	**Yes**	**16**	**56.25**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-2I (bg)	0	-18	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-28	-58	No	16	81.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.002402	14	43	No	13	7.692	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-8	-58	No	16	56.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-23	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.02279	-41	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-47 (bg)	-0.001291	-39	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-17	-58	No	16	62.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0001974	12	58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	-0.0019	-46	-58	No	16	56.25	n/a	n/a	0.01	NP
Calcium (mg/L)	**GWA-2 (bg)**	**4.949**	**63**	**48**	**Yes**	**14**	**7.143**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-1R	-1.257	-5	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GWC-2R**	**7.08**	**51**	**48**	**Yes**	**14**	**7.143**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GWC-4R	2.203	19	48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-5R	5.514	29	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GWC-6R	11.02	18	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-14S (bg)	-0.03659	-46	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-17S (bg)**	**0.118**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-18I (bg)	0.02122	10	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.0863**	**-67**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1D (bg)**	**0.7865**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1I (bg)**	**-0.1168**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.09145	54	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**1.232**	**68**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-2I (bg)	0.5792	38	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	0	-6	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-39 (bg)	0.4473	13	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	0.7746	48	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.43	27	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-40 (bg)**	**-0.9737**	**-45**	**-43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-47 (bg)**	**-2.036**	**-56**	**-43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-4I (bg)	0.2746	37	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-5D (bg)**	**-2.574**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-5I (bg)	0.09171	50	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWA-2 (bg)	0.1272	29	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-1R	-0.07861	-1	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-2R	1.64	38	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GWC-4R	0.8892	3	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.1626	30	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.3002**	**76**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18I (bg)	0.05099	35	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2082	50	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	-0.02735	-40	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	-0.02869	-33	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.189**	**71**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.1117	-28	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.05296	-45	-58	No	16	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Interwell Exceedances - All Results

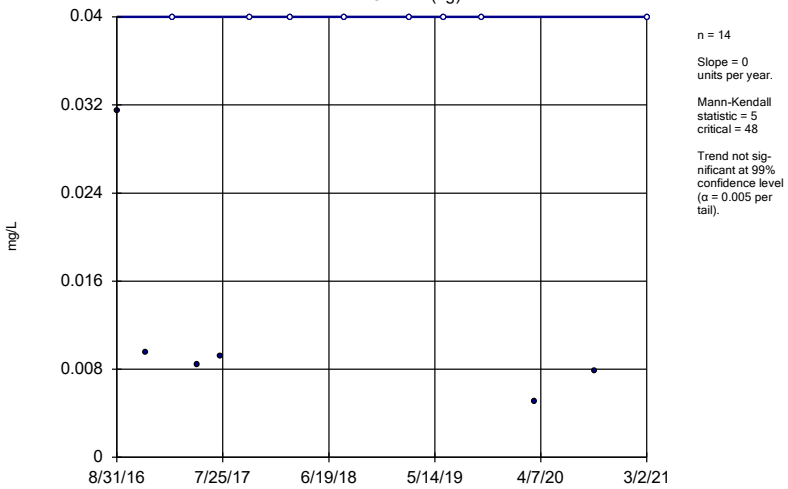
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/6/2021, 3:04 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	YGWA-30I (bg)	0	-21	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.2329	13	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-3D (bg)**	**-0.06529**	**-59**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-3I (bg)**	**-0.05699**	**-66**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-40 (bg)	0.1751	26	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-47 (bg)**	**-0.5003**	**-45**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-4I (bg)	0.1099	36	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.9116**	**-83**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-5I (bg)	0	-1	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GWA-2 (bg)**	**25.64**	**66**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GWC-1R	-27.43	-13	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-2R	25.14	33	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-4R	6.538	22	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-5R	-5.034	-3	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWC-6R	25.75	9	48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-14S (bg)	0.09469	17	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.1322	51	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2007	-54	-58	No	16	25	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.1939	-48	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-1D (bg)**	**1.091**	**76**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.2947	-23	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	24	58	No	16	62.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.2852	-25	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.1728	11	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.08892	-28	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-39 (bg)**	**-3.687**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-3D (bg)**	**0.4938**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-3I (bg)	0.6094	45	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-40 (bg)**	**-12.05**	**-54**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-25.19**	**-71**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.1751	39	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-3.891**	**-96**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.09335**	**70**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GWA-2 (bg)	29.32	40	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-1R	-31.04	-11	-48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-2R	61.34	45	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-4R	7.11	2	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-5R	-58.17	-21	-48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	GWC-6R	59.56	15	48	No	14	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-14S (bg)	2.021	18	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-17S (bg)	4.826	22	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-18I (bg)	-2.316	-19	-58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-18S (bg)	3.74	25	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-1D (bg)	1.869	13	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-1I (bg)	-3.828	-26	-58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-20S (bg)	3.156	31	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-21I (bg)	15.05	46	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-2I (bg)	-3.302	-32	-58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-30I (bg)	2.131	17	58	No	16	12.5	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-39 (bg)	17.14	28	43	No	13	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-3D (bg)	1.956	12	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	YGWA-3I (bg)	0.9644	5	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	**YGWA-40 (bg)**	**-18.83**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**YGWA-47 (bg)**	**-14.88**	**-54**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-4I (bg)	1.119	8	58	No	16	0	n/a	n/a	0.01	NP
TDS (mg/L)	**YGWA-5D (bg)**	**-18.77**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	YGWA-5I (bg)	-1.204	-7	-58	No	16	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 48

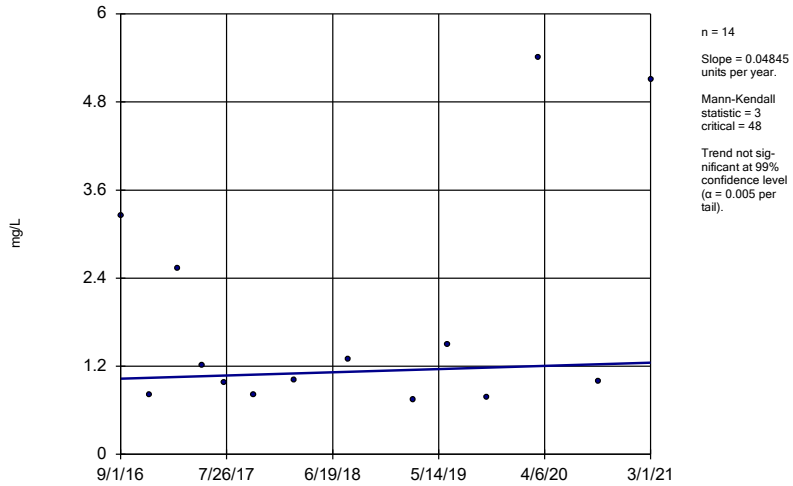
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-4R



n = 14

Slope = 0.04845 units per year.

Mann-Kendall statistic = 3
critical = 48

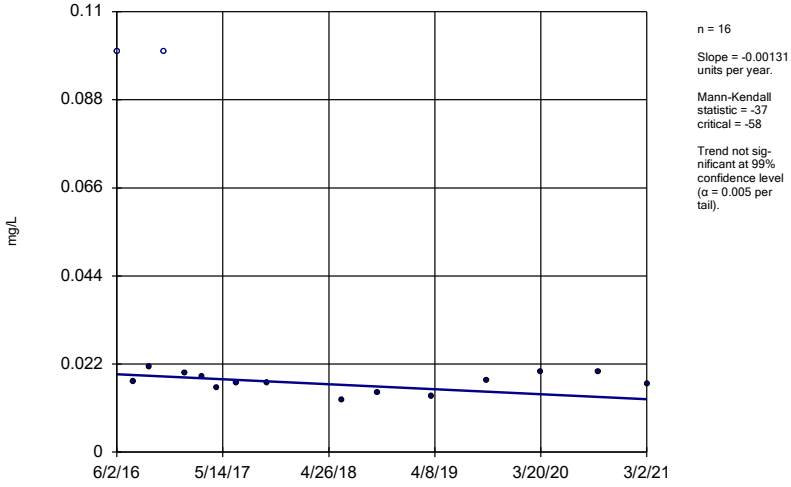
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = -0.00131 units per year.

Mann-Kendall statistic = -37
critical = -58

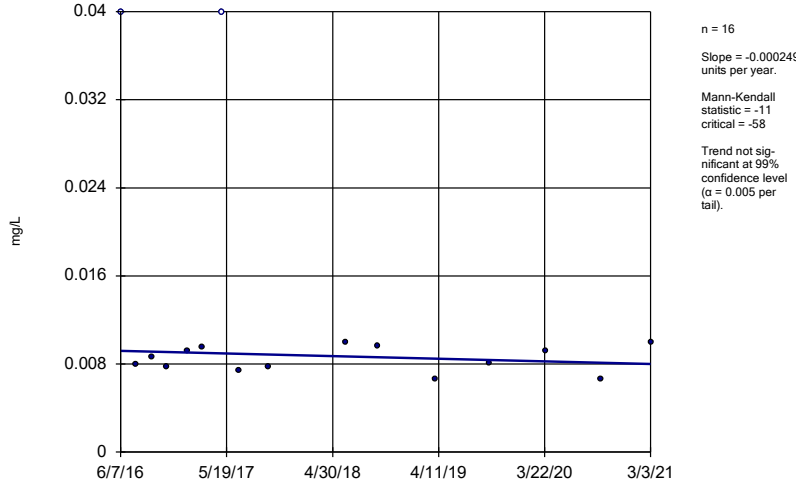
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = -0.0002497 units per year.

Mann-Kendall statistic = -11
critical = -58

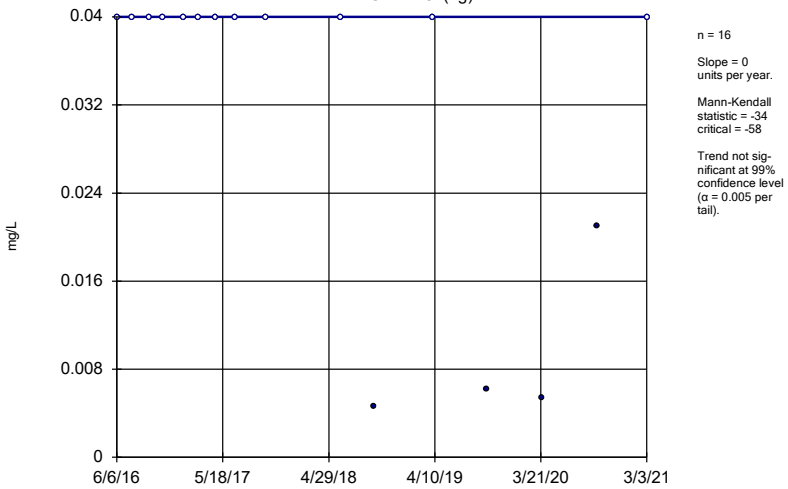
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = -34
critical = -58

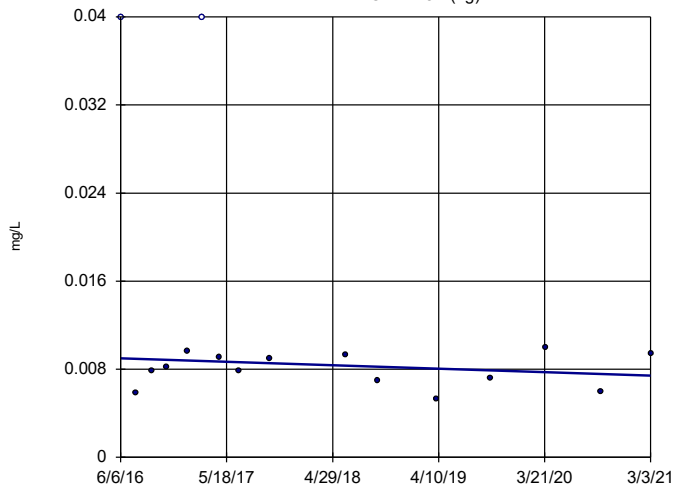
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = -0.0003285
units per year.

Mann-Kendall
statistic = -14
critical = -58

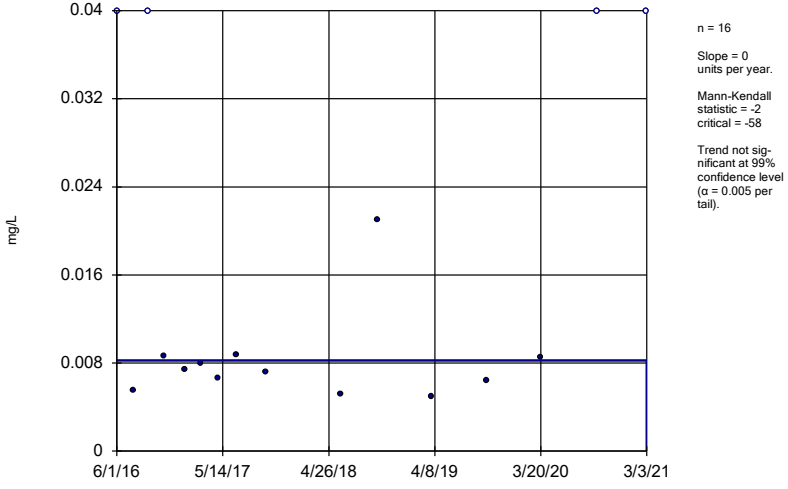
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = -2
critical = -58

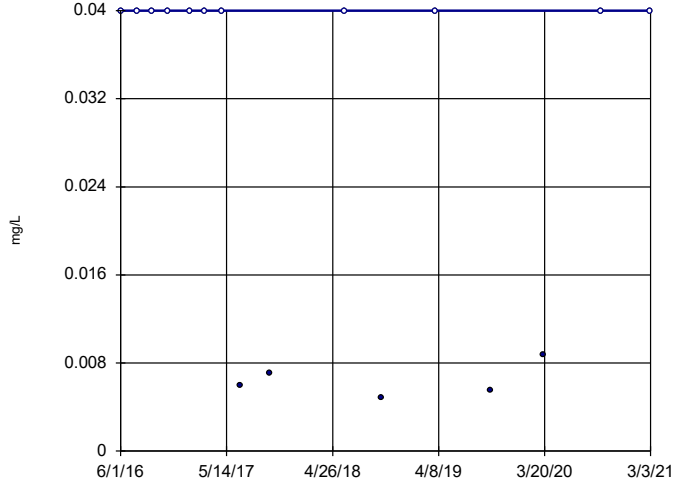
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = 0
units per year.

Mann-Kendall
statistic = -23
critical = -58

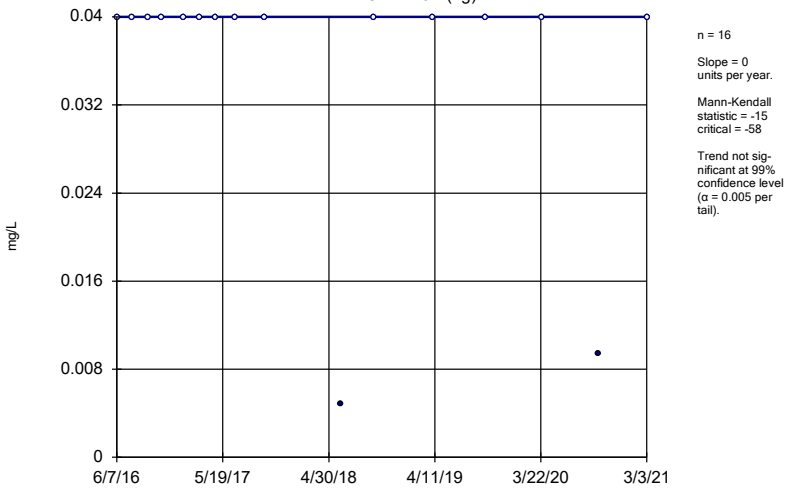
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -15
critical = -58

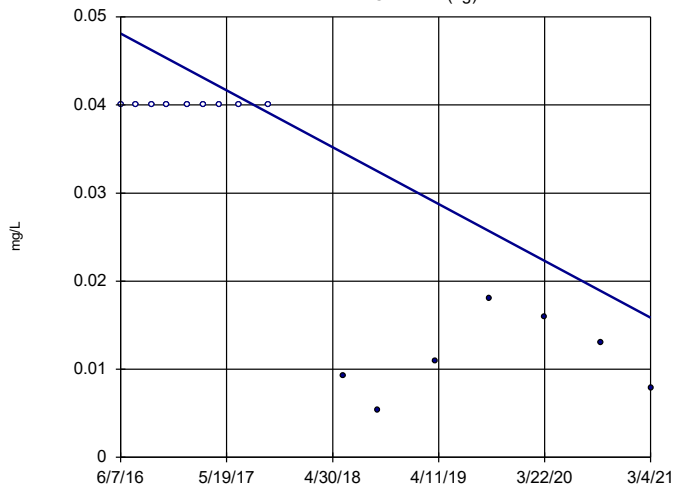
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = -0.006801 units per year.

Mann-Kendall statistic = -60
critical = -58

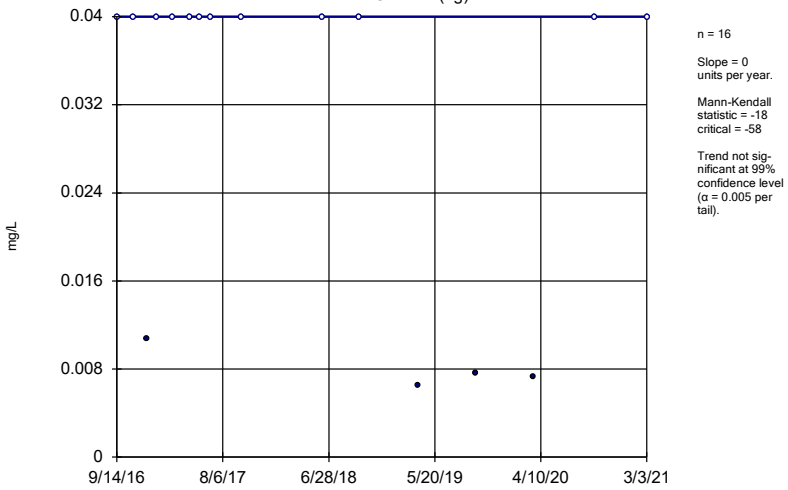
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -18
critical = -58

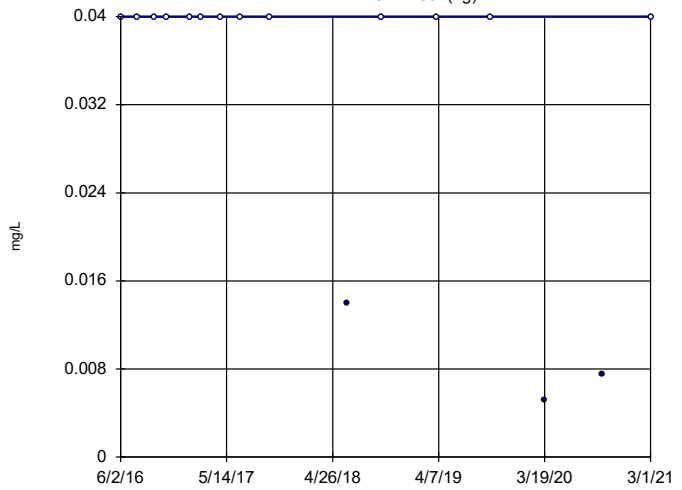
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -28
critical = -58

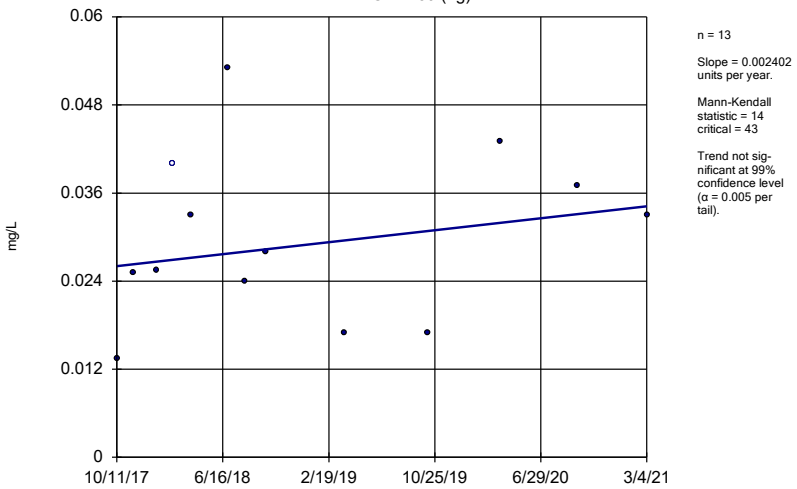
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = 0.002402 units per year.

Mann-Kendall statistic = 14
critical = 43

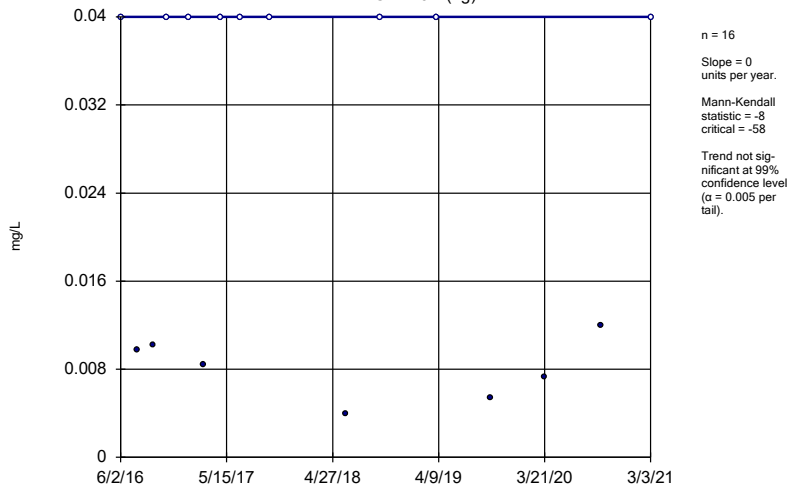
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -8
critical = -58

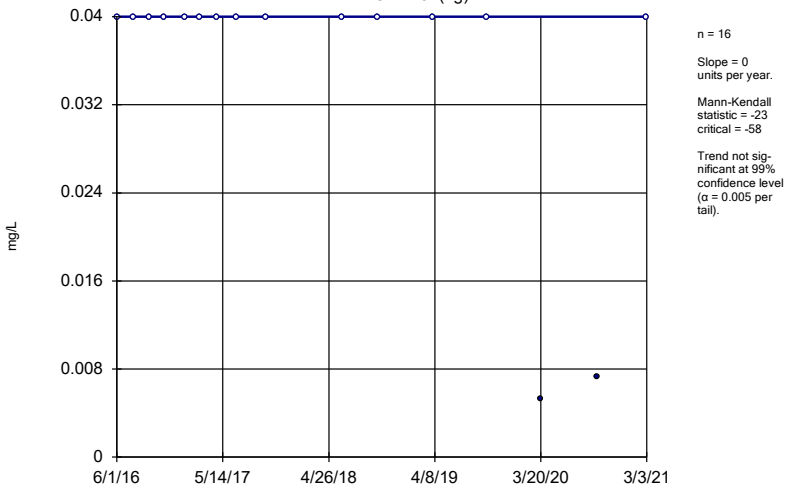
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -23
critical = -58

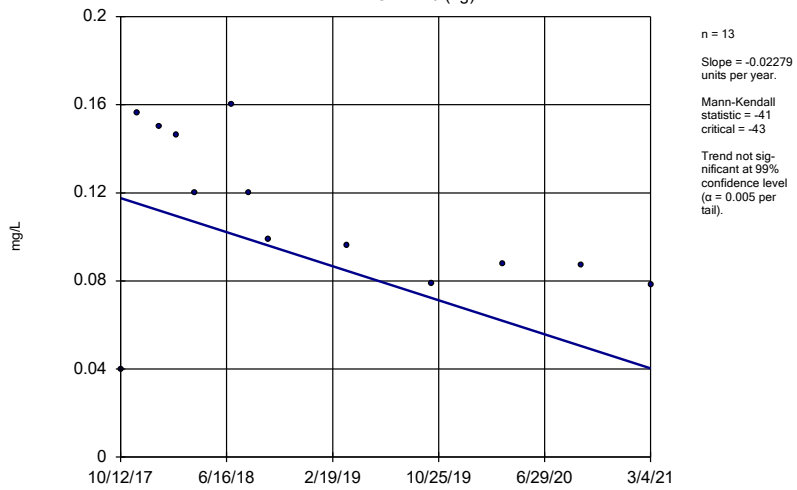
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = -0.02279 units per year.

Mann-Kendall statistic = -41
critical = -43

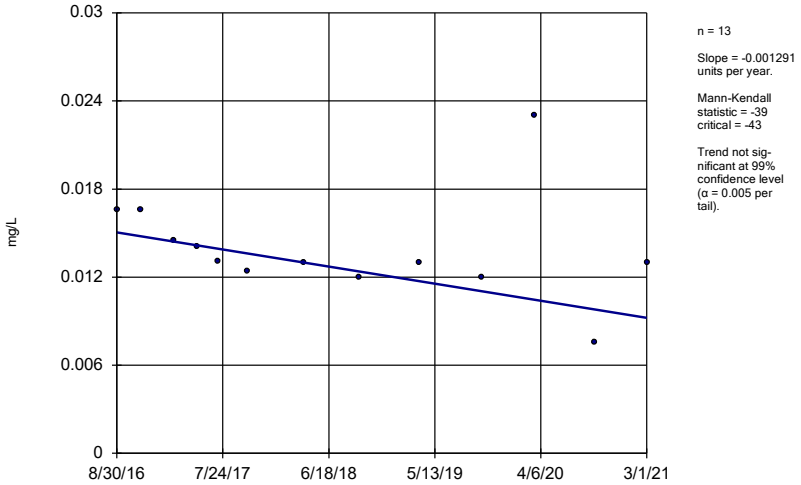
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -0.001291 units per year.

Mann-Kendall statistic = -39
critical = -43

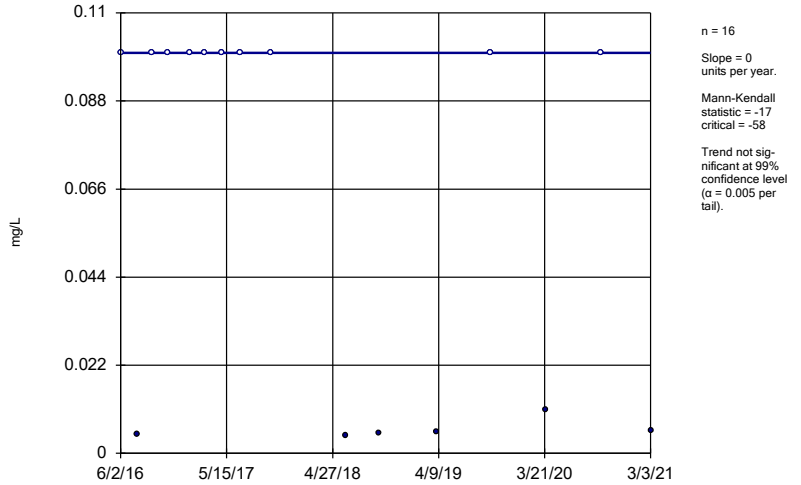
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -17
critical = -58

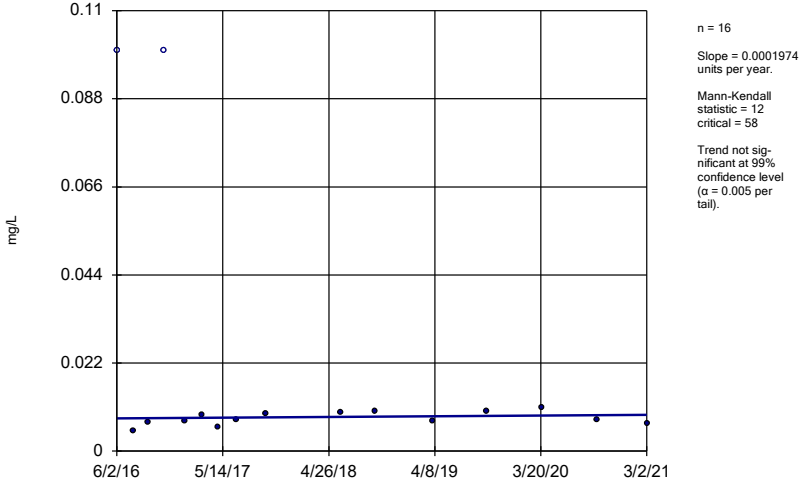
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = 0.0001974 units per year.

Mann-Kendall statistic = 12
critical = 58

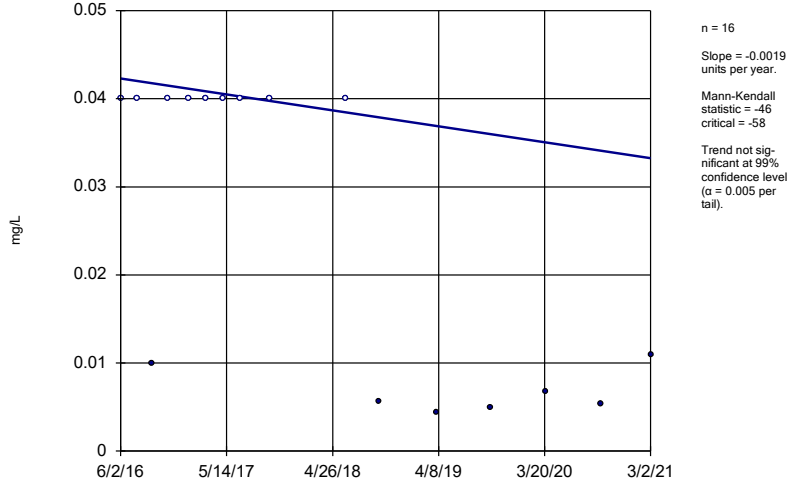
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = -0.0019 units per year.

Mann-Kendall statistic = -46
critical = -58

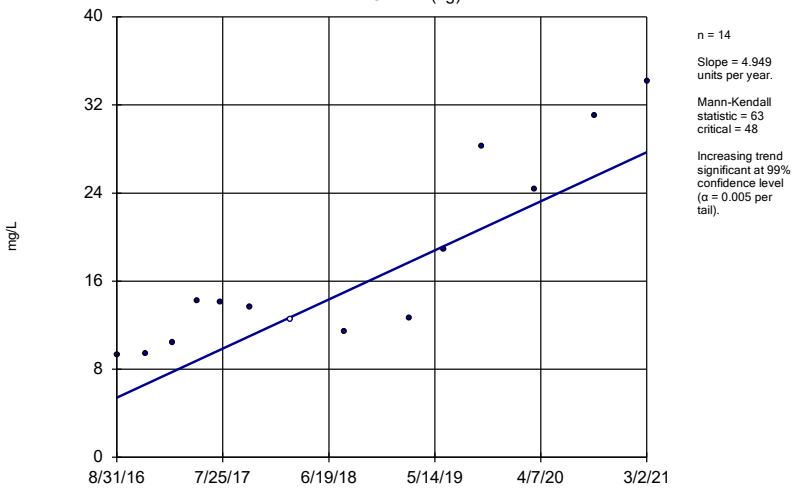
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 4.949 units per year.

Mann-Kendall statistic = 63
critical = 48

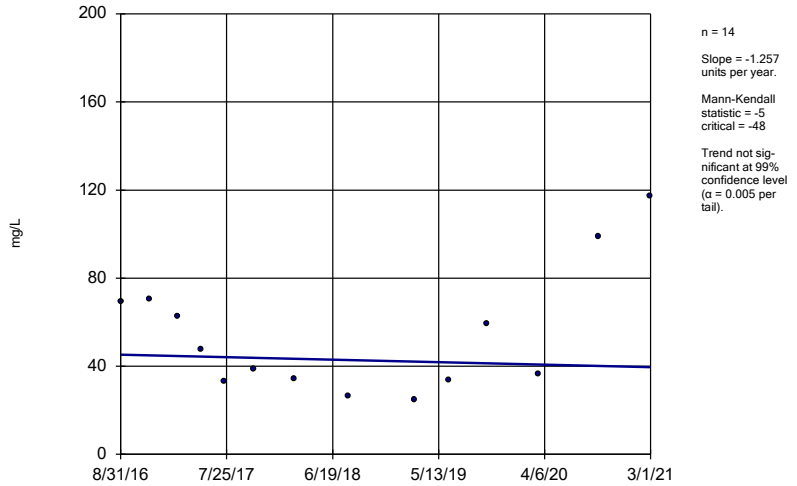
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-1R



n = 14

Slope = -1.257 units per year.

Mann-Kendall statistic = -5
critical = -48

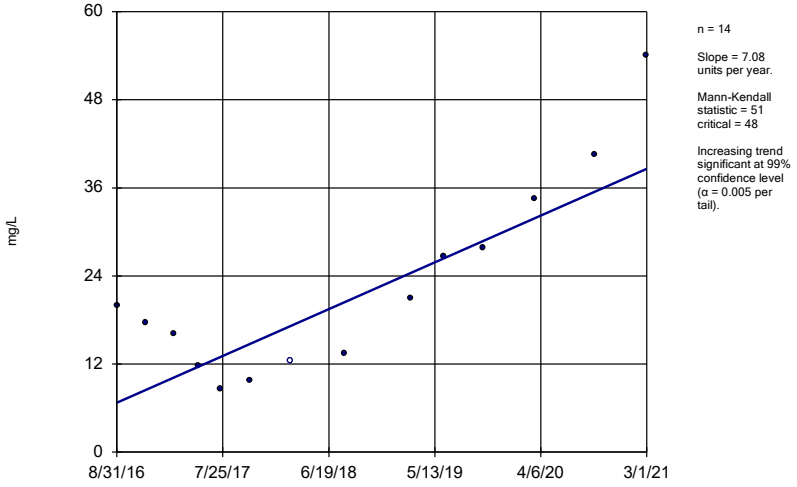
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-2R



n = 14

Slope = 7.08 units per year.

Mann-Kendall statistic = 51
critical = 48

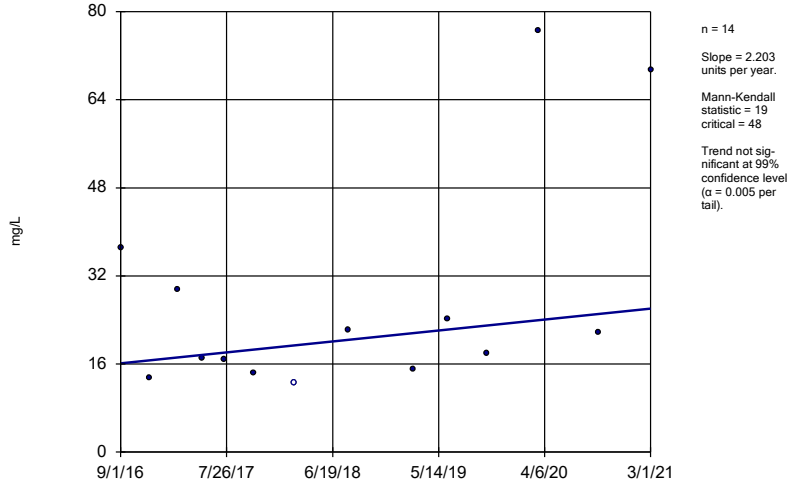
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWC-4R



n = 14

Slope = 2.203 units per year.

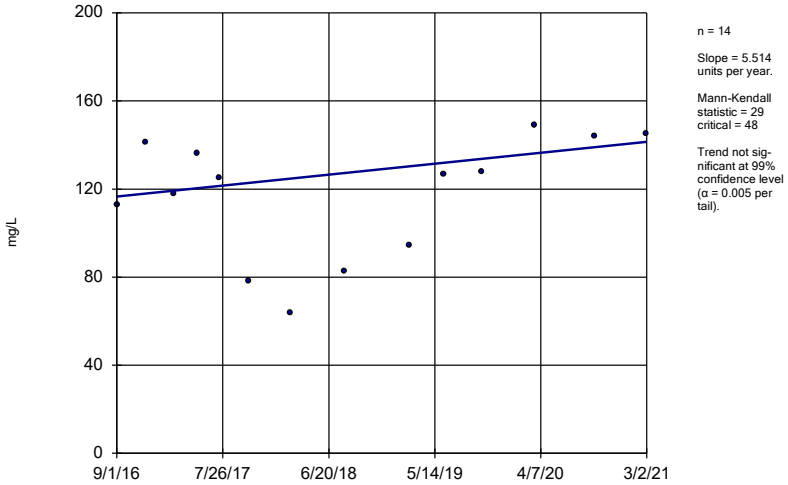
Mann-Kendall statistic = 19
critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:01 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-5R



n = 14

Slope = 5.514 units per year.

Mann-Kendall statistic = 29 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

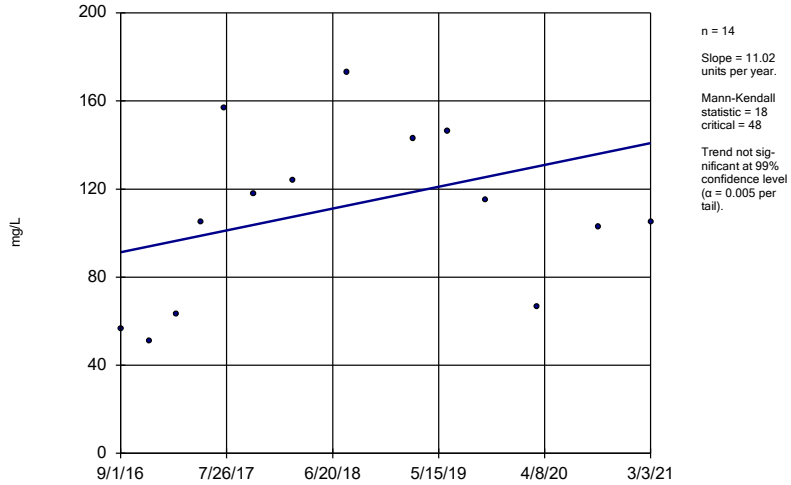
Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-6R



n = 14

Slope = 11.02 units per year.

Mann-Kendall statistic = 18 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

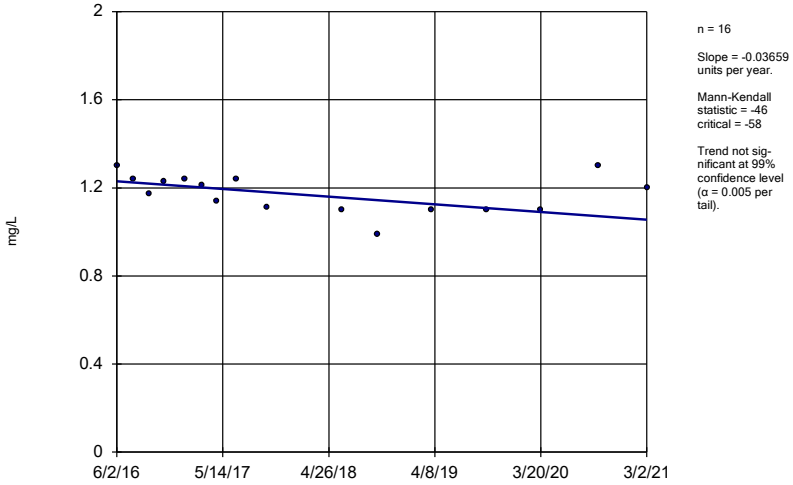
Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = -0.03659 units per year.

Mann-Kendall statistic = -46 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

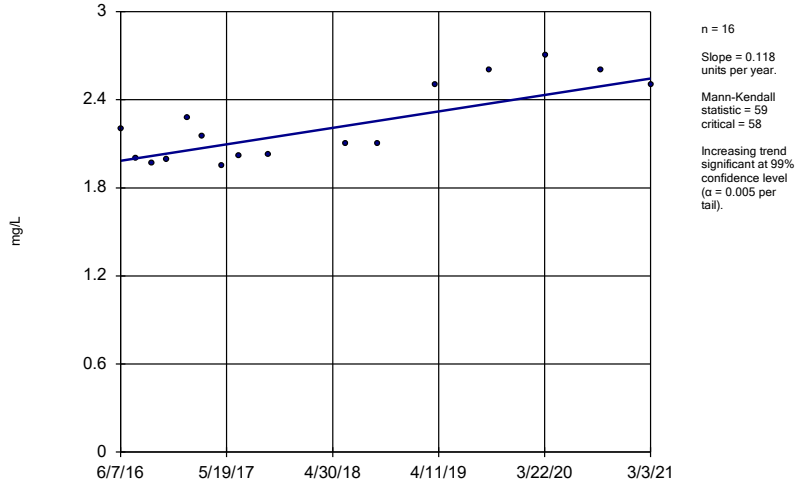
Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = 0.118 units per year.

Mann-Kendall statistic = 59 critical = 58

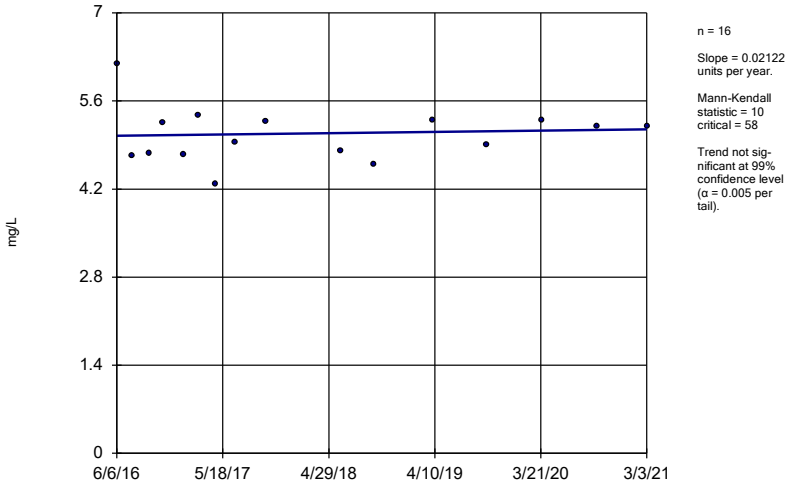
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = 0.02122 units per year.

Mann-Kendall statistic = 10
critical = 58

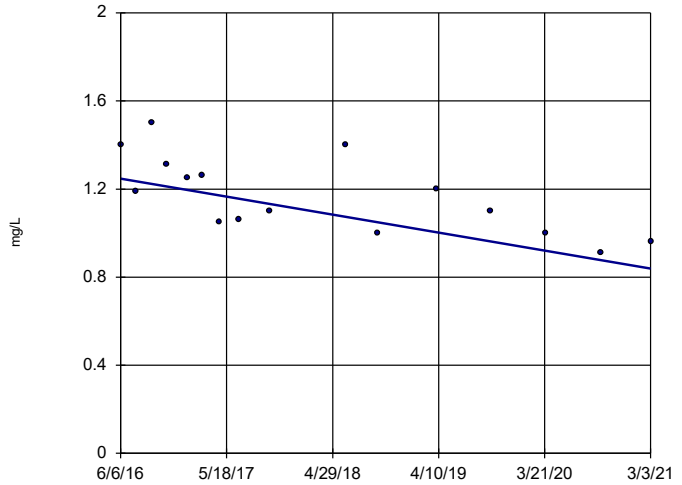
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = -0.0863 units per year.

Mann-Kendall statistic = -67
critical = -58

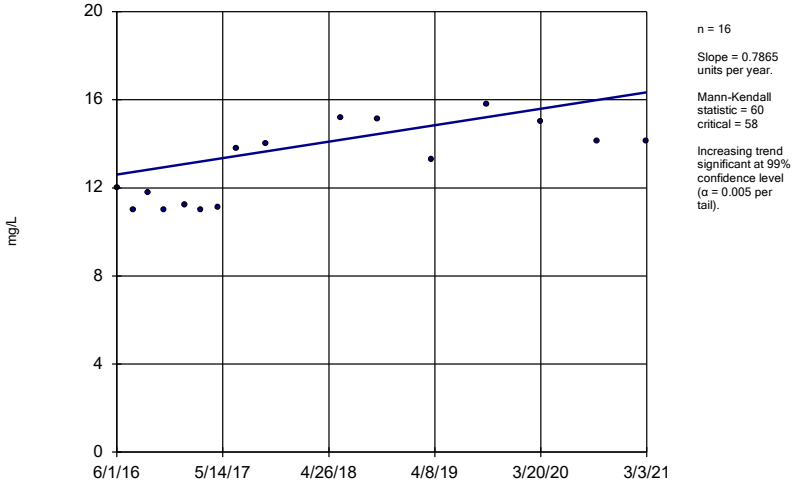
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = 0.7865 units per year.

Mann-Kendall statistic = 60
critical = 58

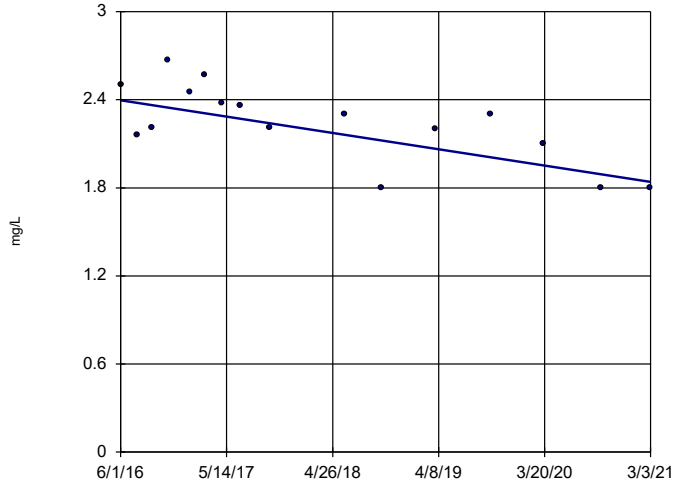
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = -0.1168 units per year.

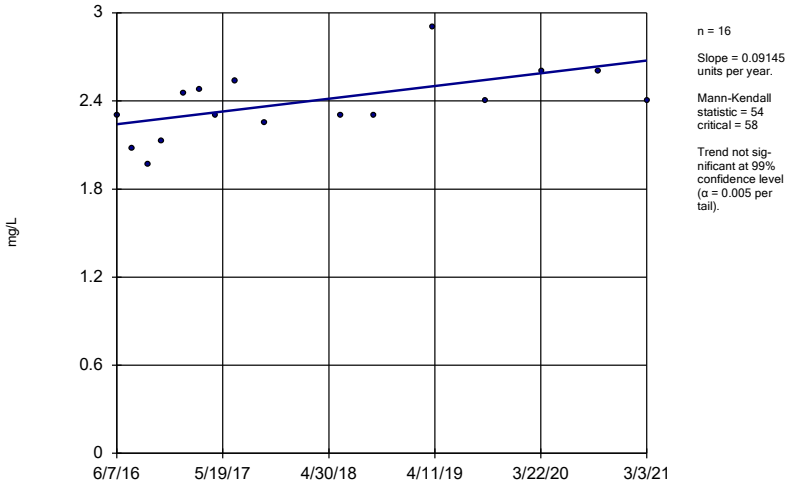
Mann-Kendall statistic = -63
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0.09145 units per year.

Mann-Kendall statistic = 54
critical = 58

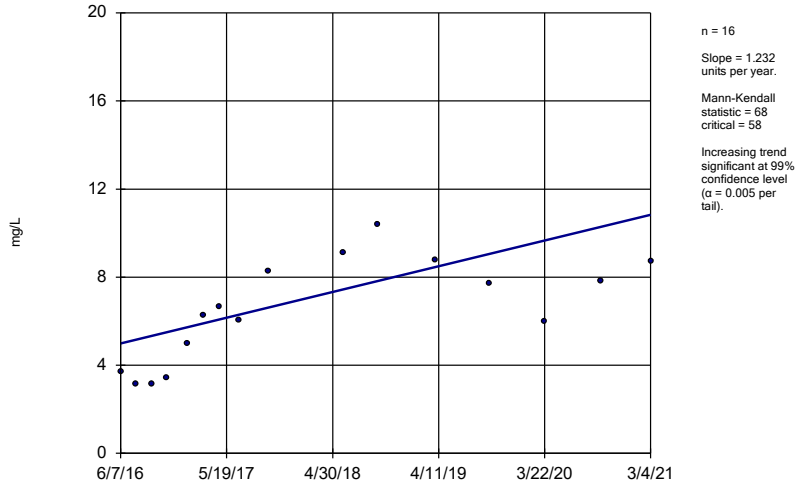
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = 1.232 units per year.

Mann-Kendall statistic = 68
critical = 58

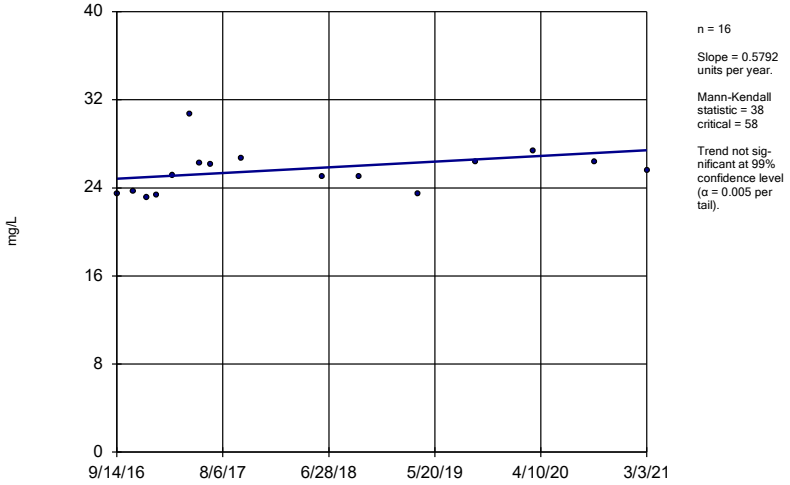
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = 0.5792 units per year.

Mann-Kendall statistic = 38
critical = 58

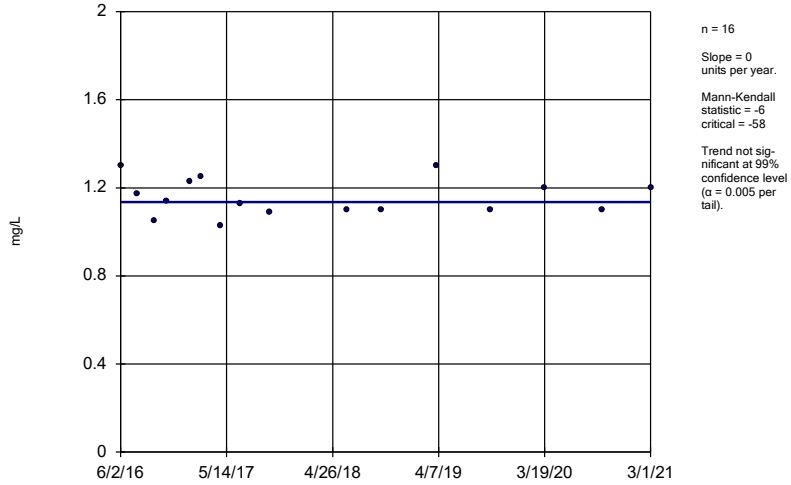
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = 0 units per year.

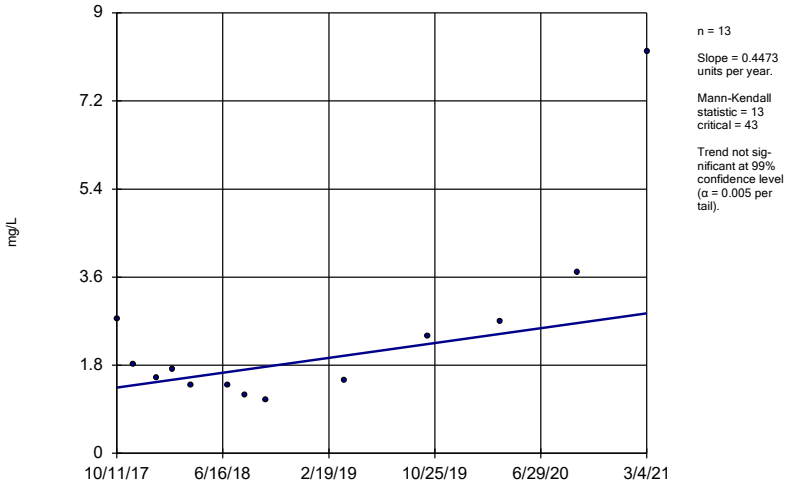
Mann-Kendall statistic = -6
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = 0.4473 units per year.

Mann-Kendall statistic = 13 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

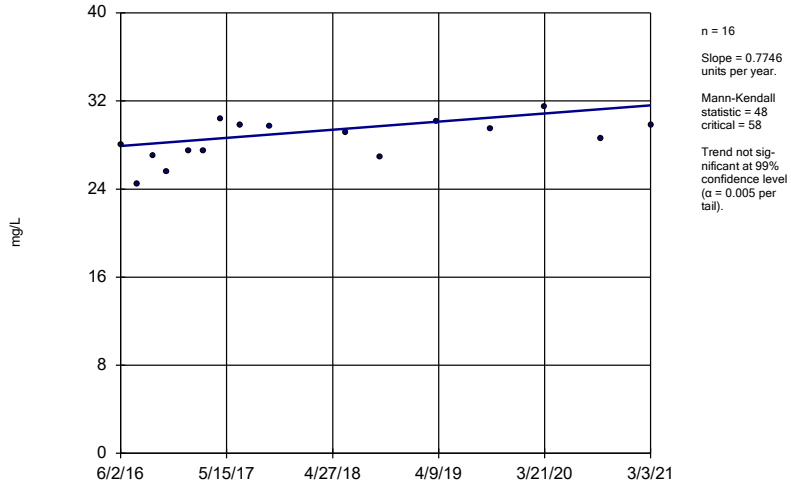
Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = 0.7746 units per year.

Mann-Kendall statistic = 48 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

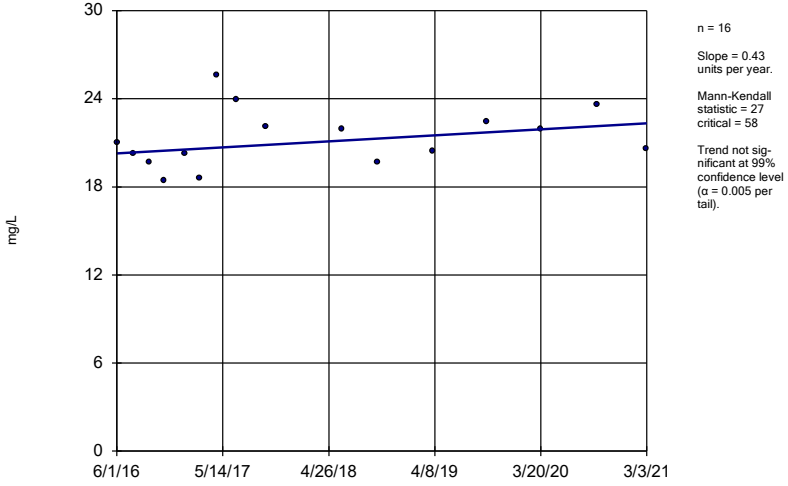
Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = 0.43 units per year.

Mann-Kendall statistic = 27 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

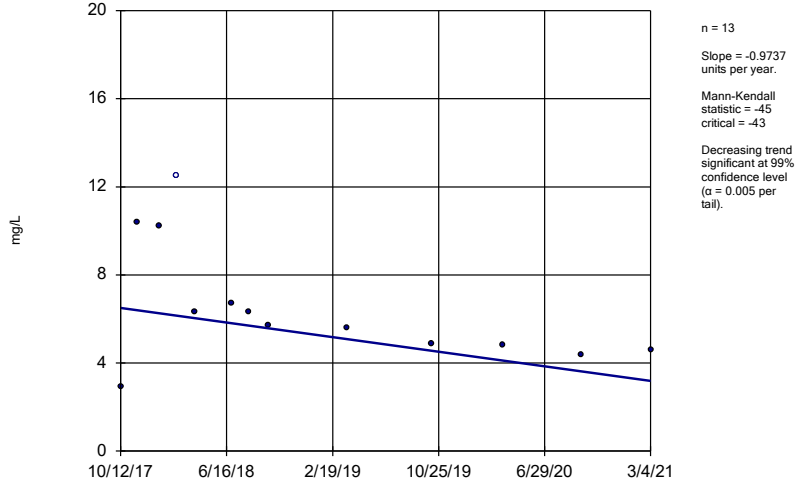
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = -0.9737 units per year.

Mann-Kendall statistic = -45 critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

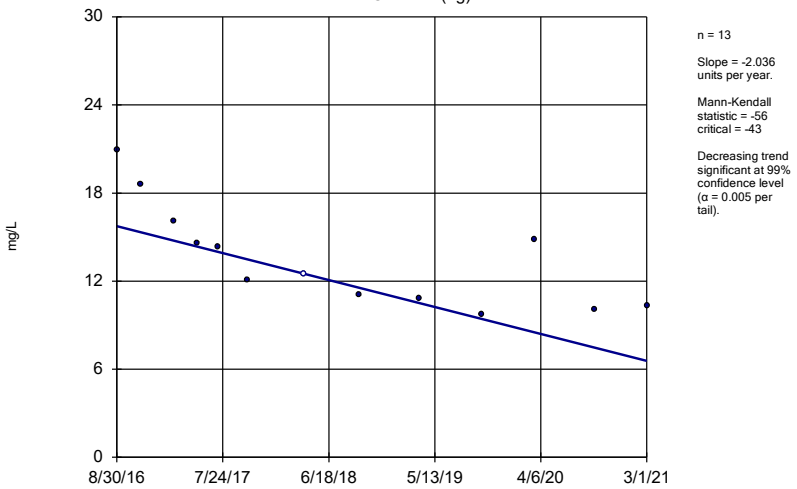
Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -2.036 units per year.

Mann-Kendall statistic = -56
critical = -43

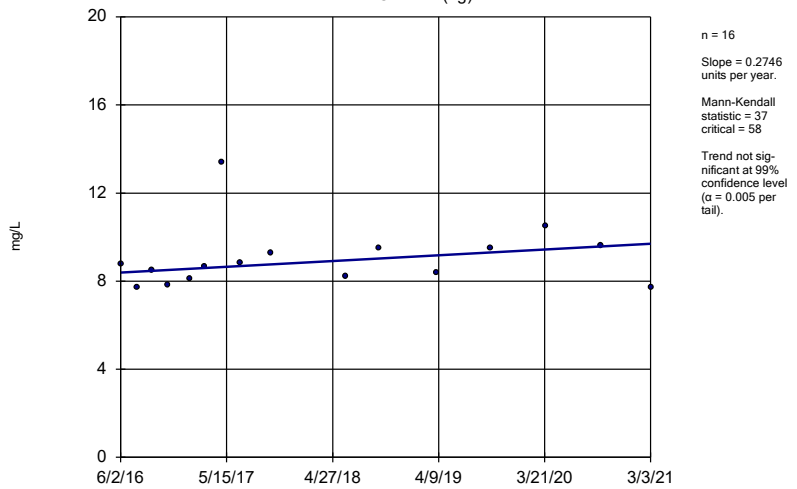
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 0.2746 units per year.

Mann-Kendall statistic = 37
critical = 58

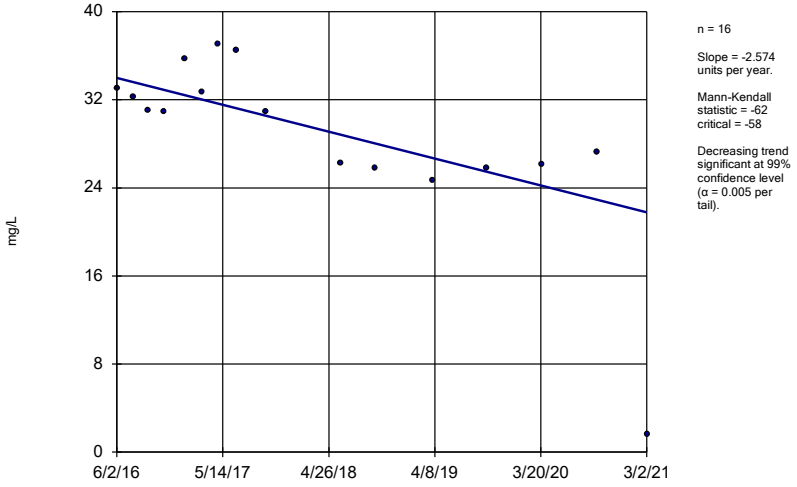
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -2.574 units per year.

Mann-Kendall statistic = -62
critical = -58

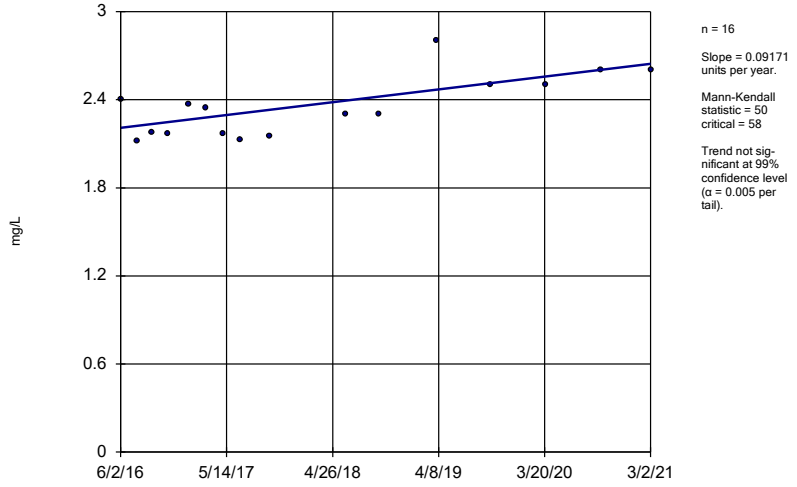
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = 0.09171 units per year.

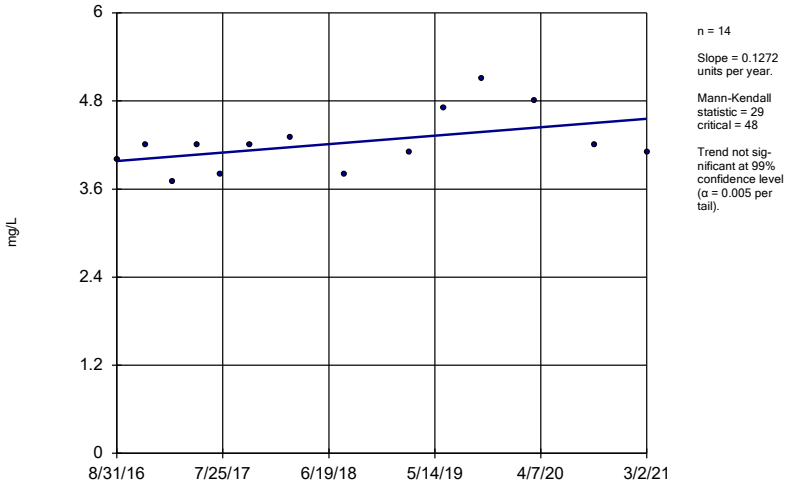
Mann-Kendall statistic = 50
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 0.1272 units per year.

Mann-Kendall statistic = 29 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

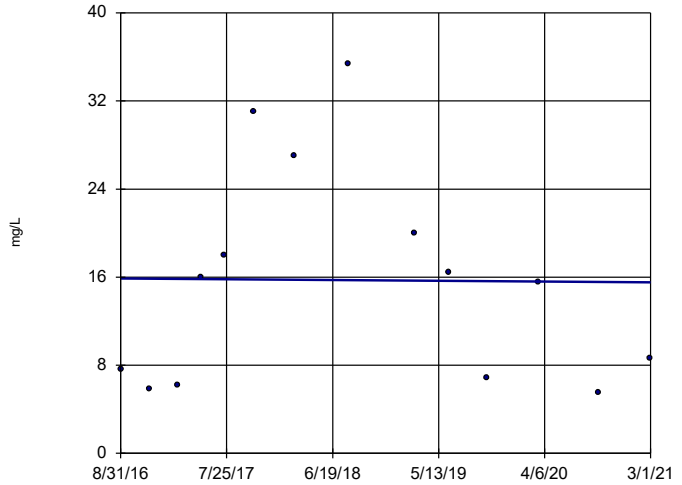
Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-1R



n = 14

Slope = -0.07861 units per year.

Mann-Kendall statistic = -1 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

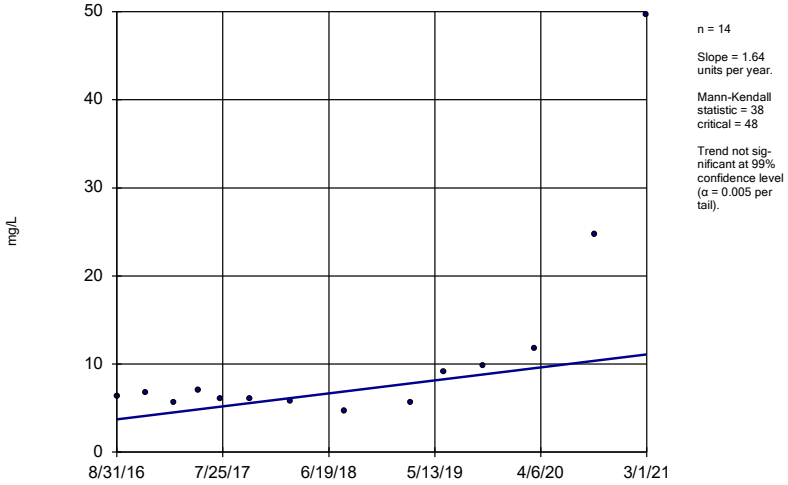
Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-2R



n = 14

Slope = 1.64 units per year.

Mann-Kendall statistic = 38 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

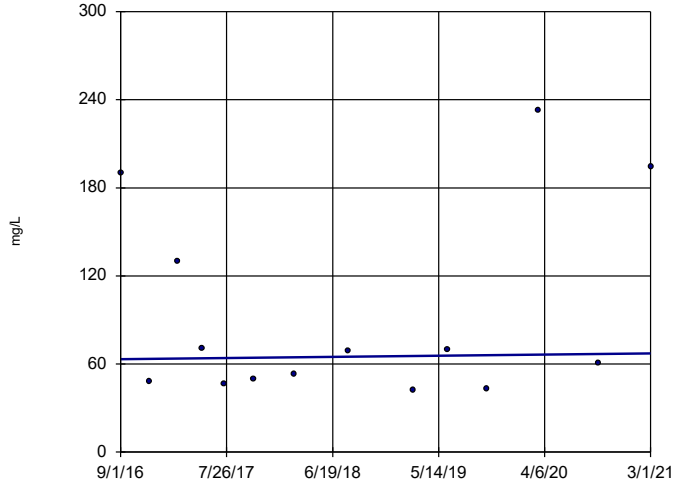
Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-4R



n = 14

Slope = 0.8892 units per year.

Mann-Kendall statistic = 3 critical = 48

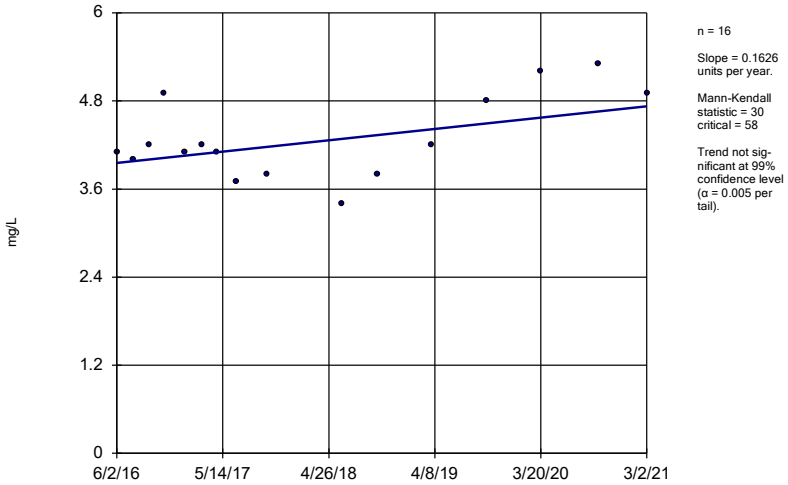
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = 0.1626 units per year.

Mann-Kendall statistic = 30 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

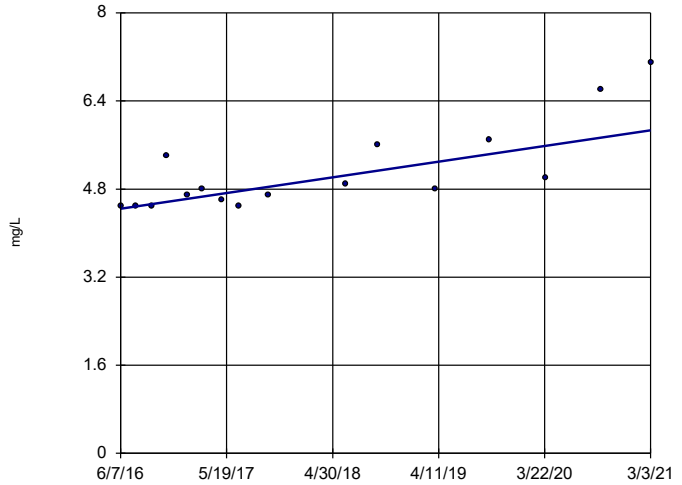
Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = 0.3002 units per year.

Mann-Kendall statistic = 76 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

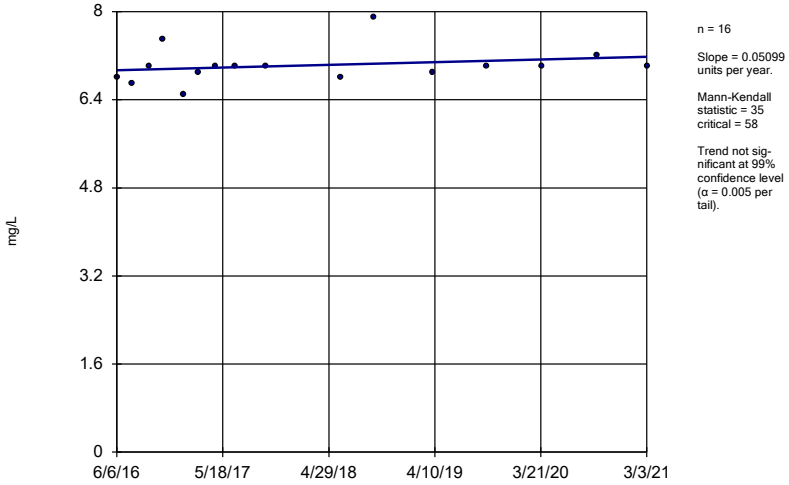
Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = 0.05099 units per year.

Mann-Kendall statistic = 35 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

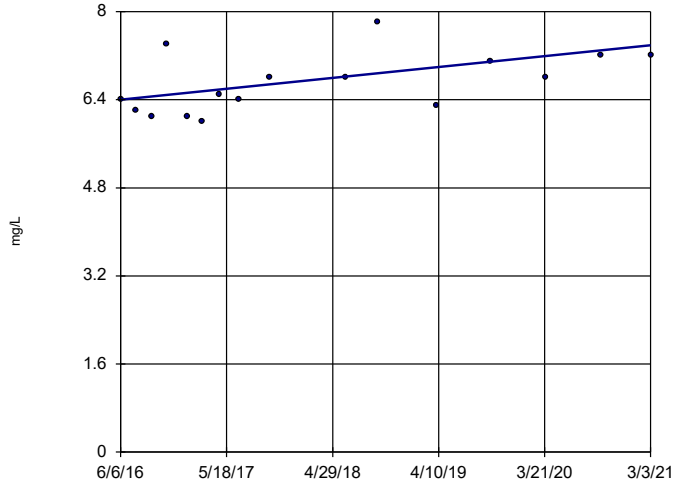
Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = 0.2082 units per year.

Mann-Kendall statistic = 50 critical = 58

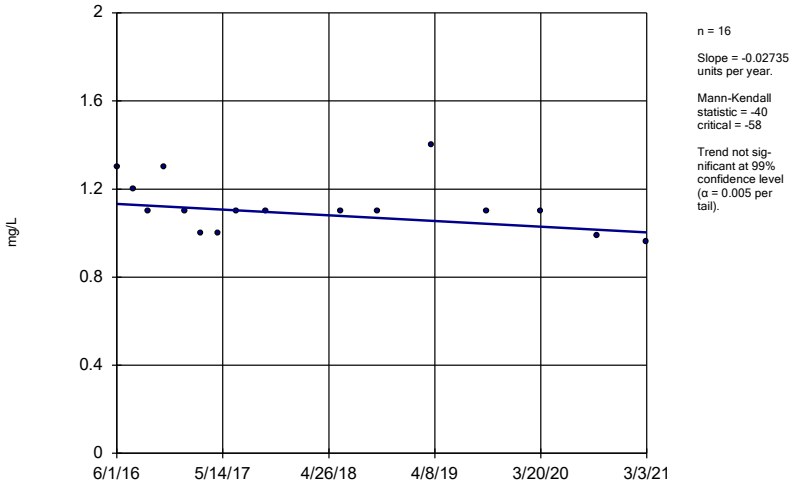
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = -0.02735 units per year.

Mann-Kendall statistic = -40
critical = -58

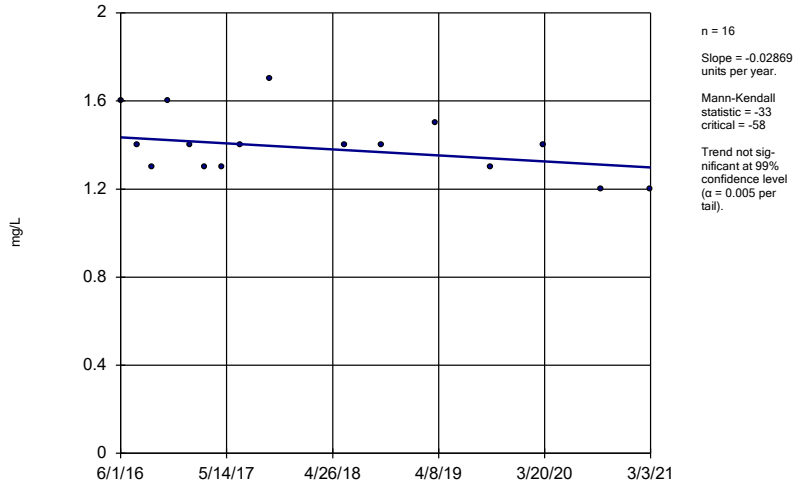
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = -0.02869 units per year.

Mann-Kendall statistic = -33
critical = -58

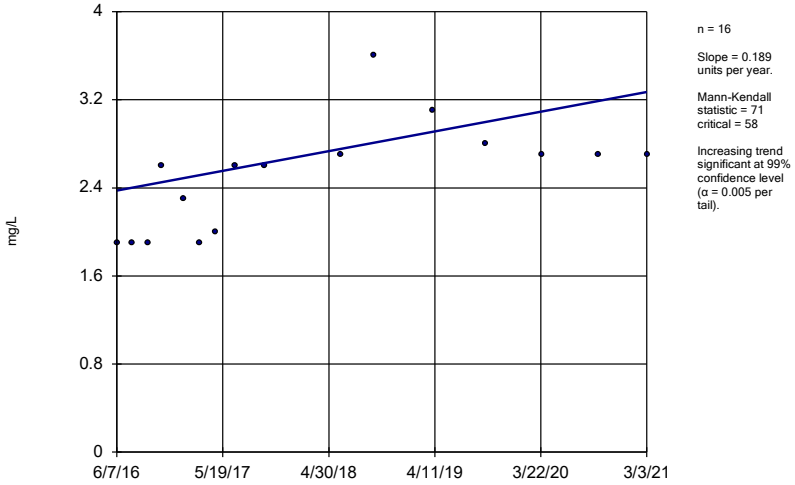
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0.189 units per year.

Mann-Kendall statistic = 71
critical = 58

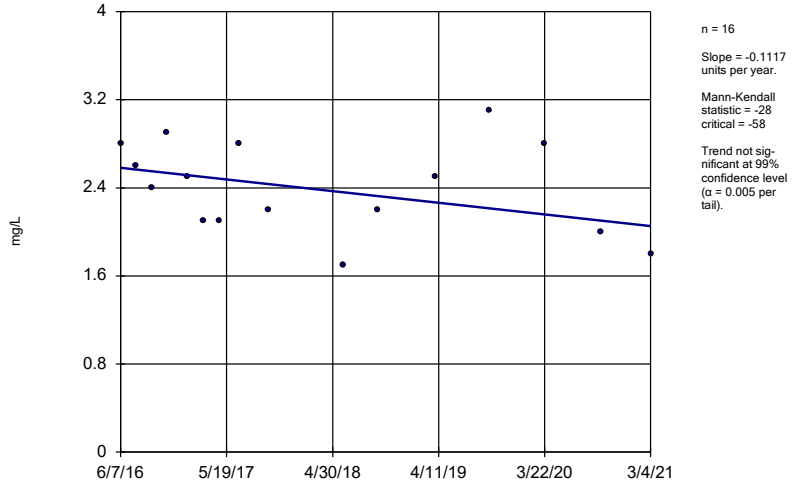
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = -0.1117 units per year.

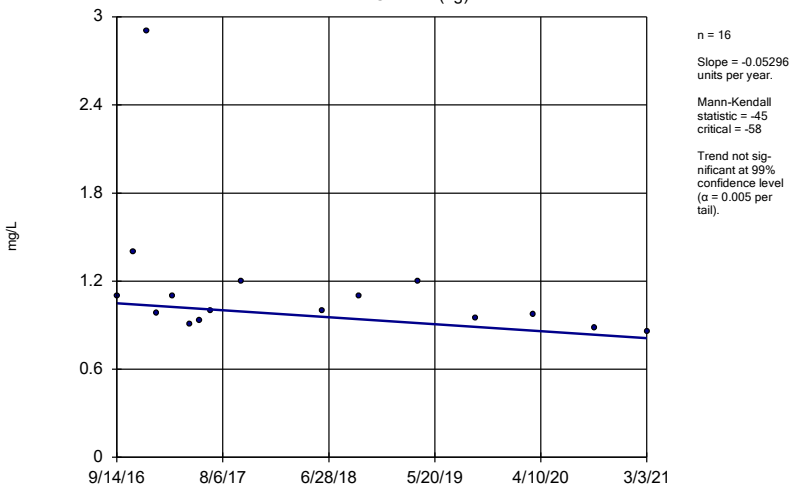
Mann-Kendall statistic = -28
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = -0.05296 units per year.

Mann-Kendall statistic = -45
critical = -58

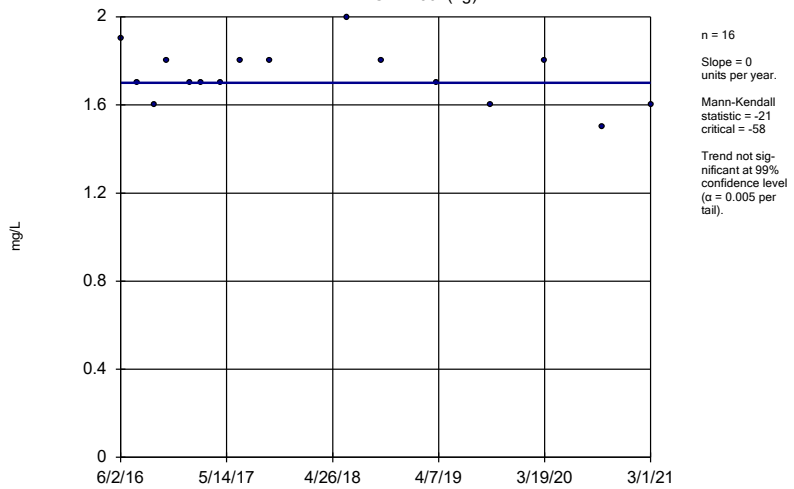
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -21
critical = -58

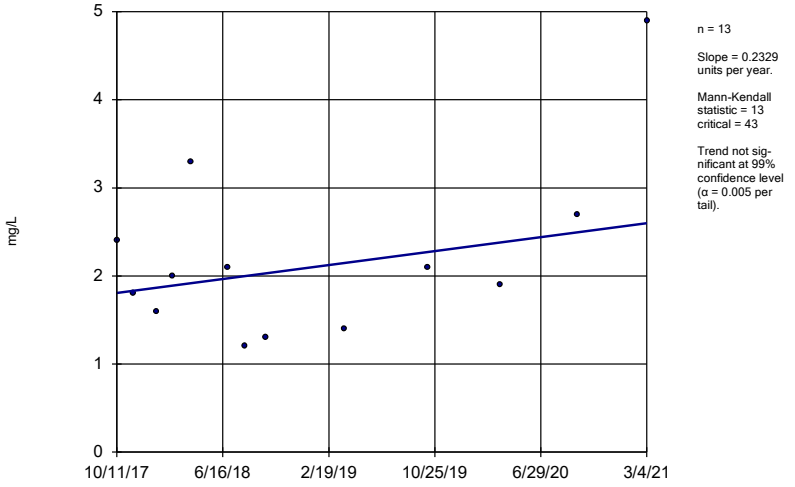
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = 0.2329 units per year.

Mann-Kendall statistic = 13
critical = 43

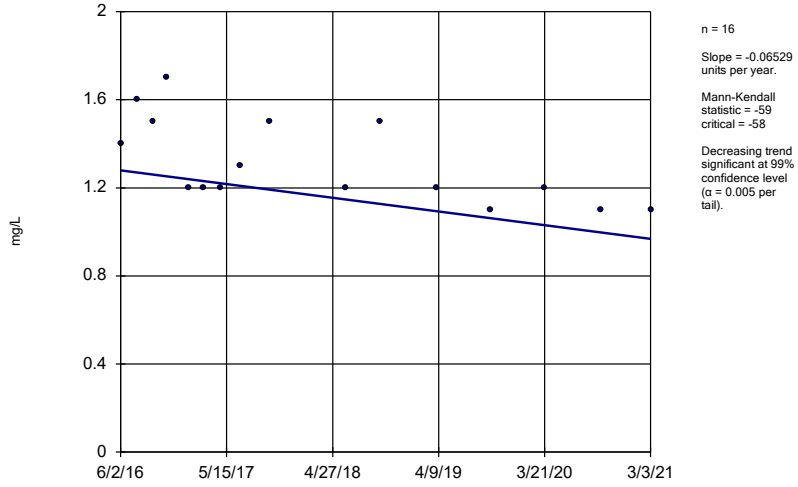
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = -0.06529 units per year.

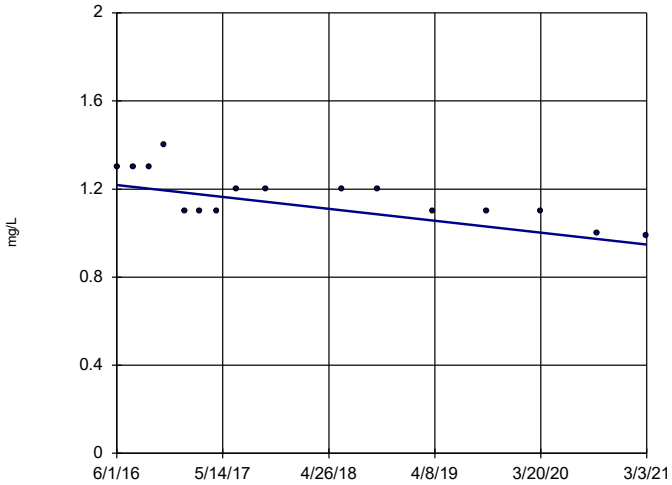
Mann-Kendall statistic = -59
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = -0.05699 units per year.

Mann-Kendall statistic = -66
critical = -58

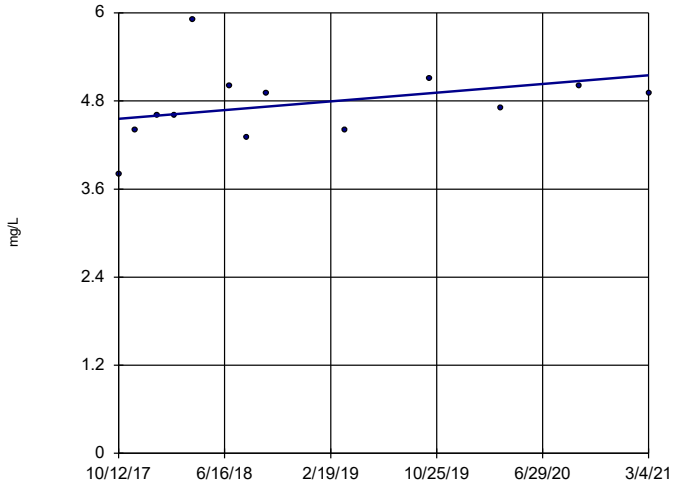
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = 0.1751 units per year.

Mann-Kendall statistic = 26
critical = 43

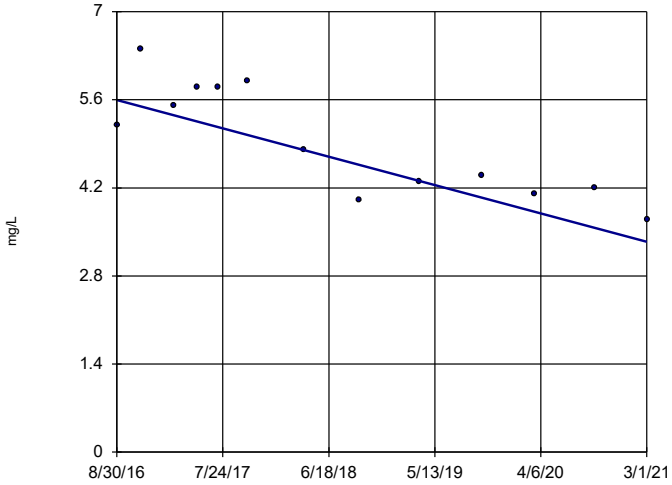
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -0.5003 units per year.

Mann-Kendall statistic = -45
critical = -43

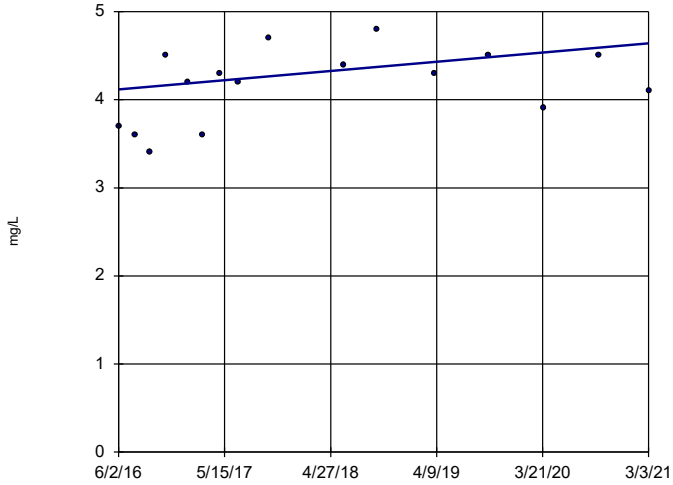
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 0.1099 units per year.

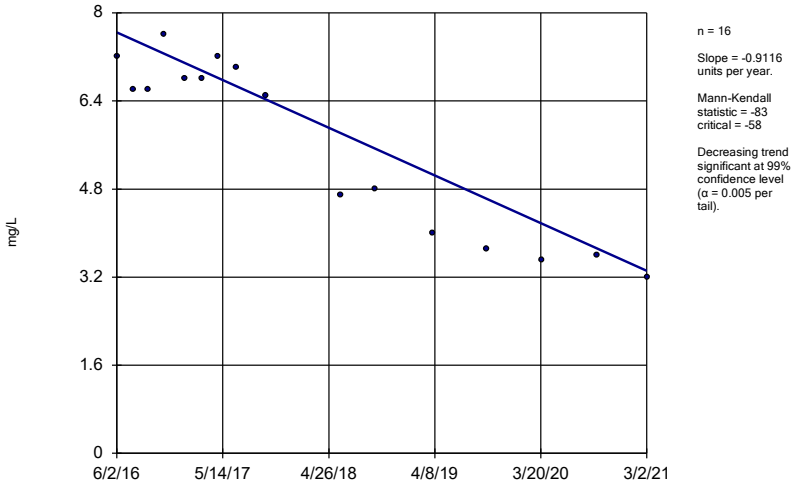
Mann-Kendall statistic = 36
critical = 58

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -0.9116 units per year.

Mann-Kendall statistic = -83 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

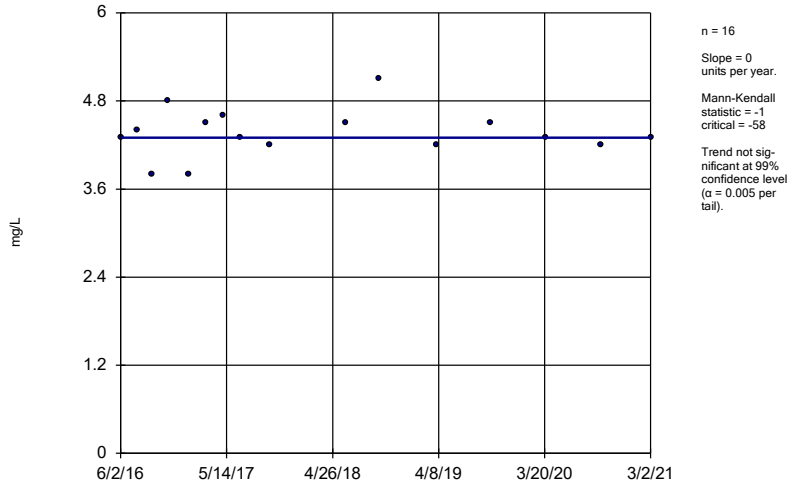
Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -1 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

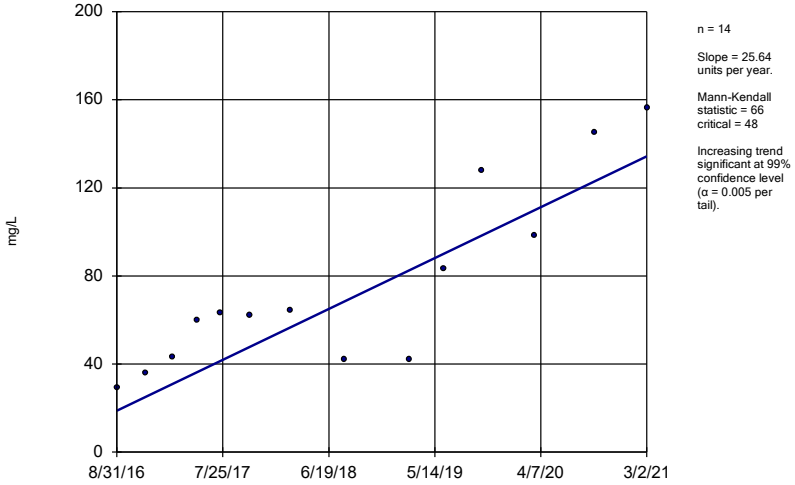
Constituent: Chloride Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 25.64 units per year.

Mann-Kendall statistic = 66 critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

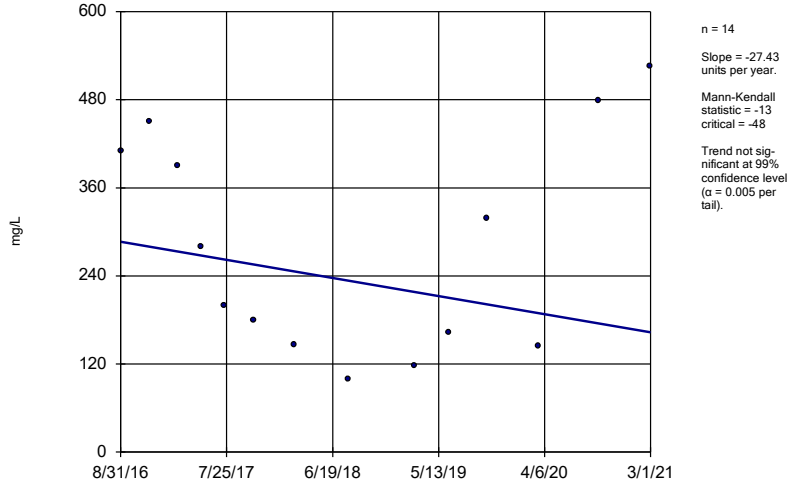
Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-1R



n = 14

Slope = -27.43 units per year.

Mann-Kendall statistic = -13 critical = -48

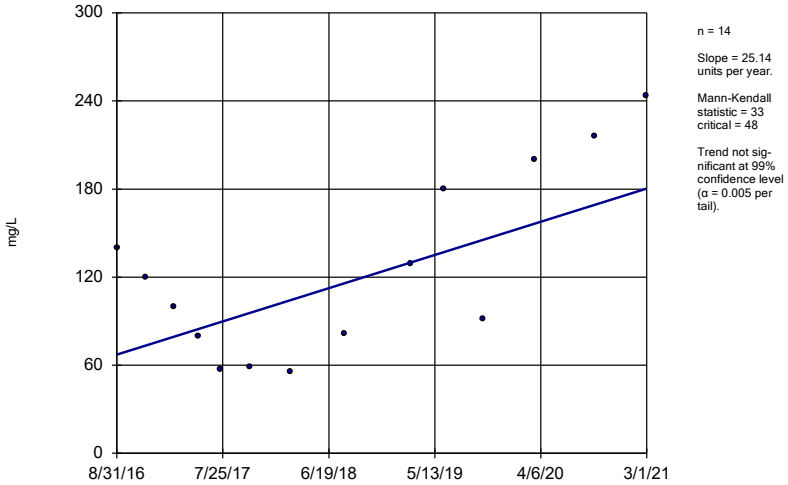
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-2R



n = 14

Slope = 25.14 units per year.

Mann-Kendall statistic = 33 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

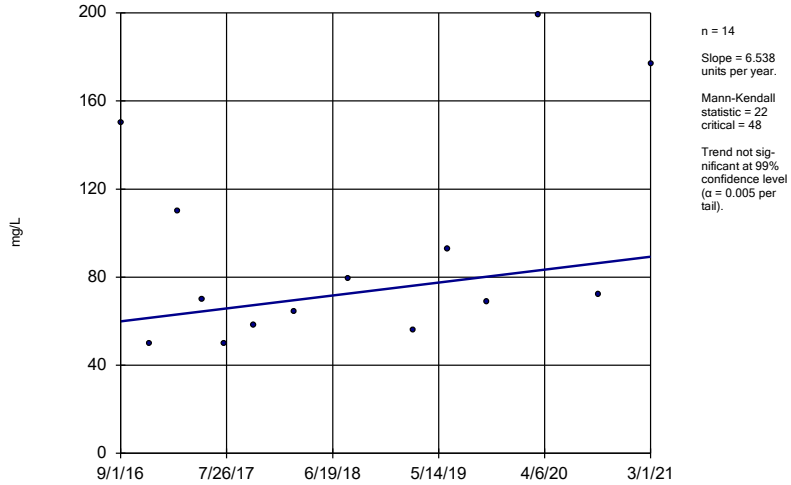
Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-4R



n = 14

Slope = 6.538 units per year.

Mann-Kendall statistic = 22 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

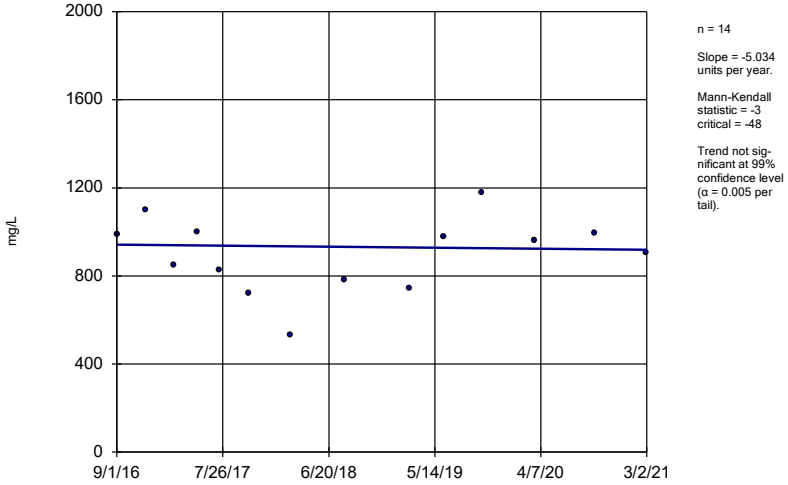
Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-5R



n = 14

Slope = -5.034 units per year.

Mann-Kendall statistic = -3 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

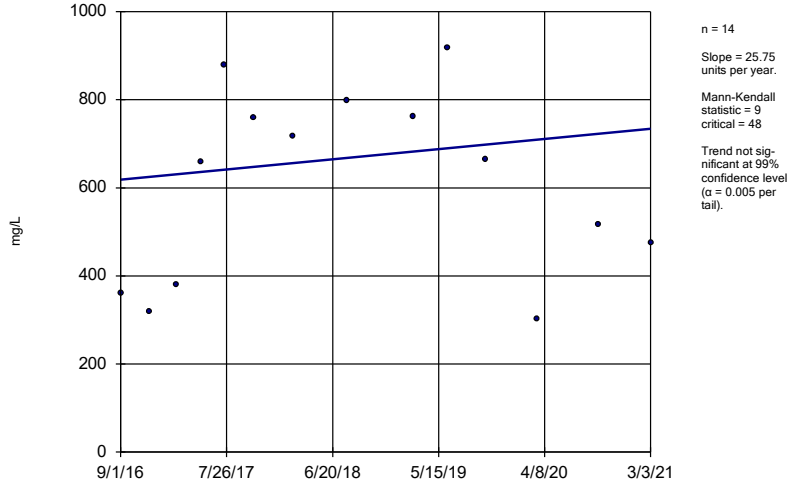
Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-6R



n = 14

Slope = 25.75 units per year.

Mann-Kendall statistic = 9 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

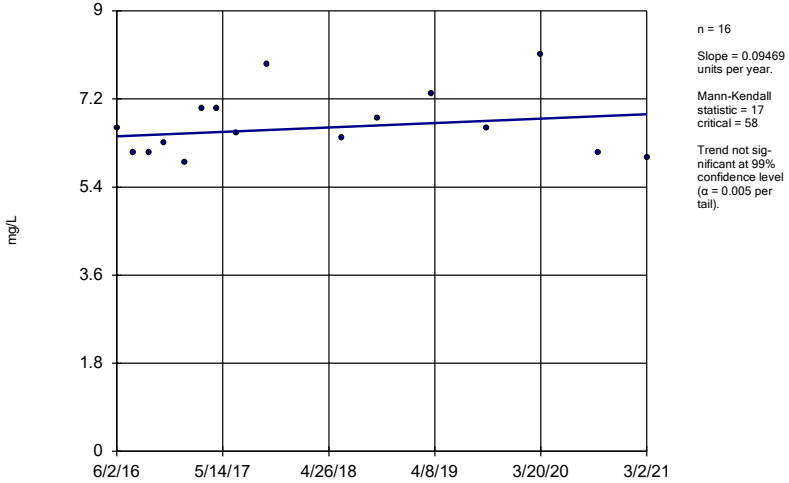
Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = 0.09469 units per year.

Mann-Kendall statistic = 17 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

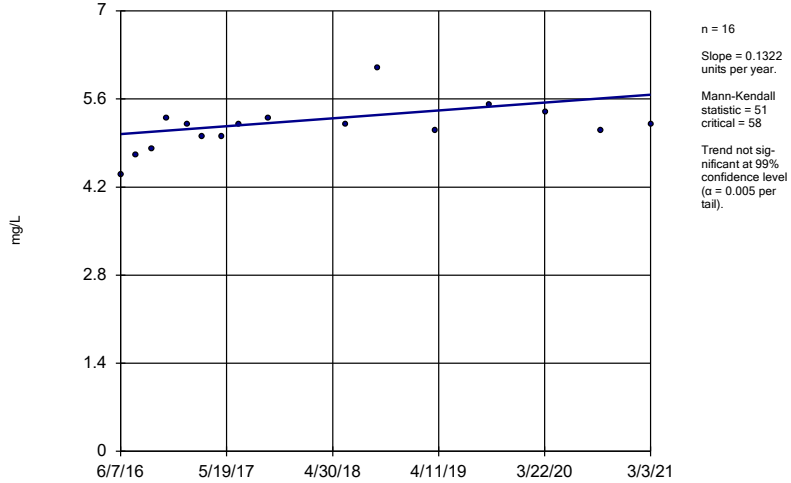
Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = 0.1322 units per year.

Mann-Kendall statistic = 51 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

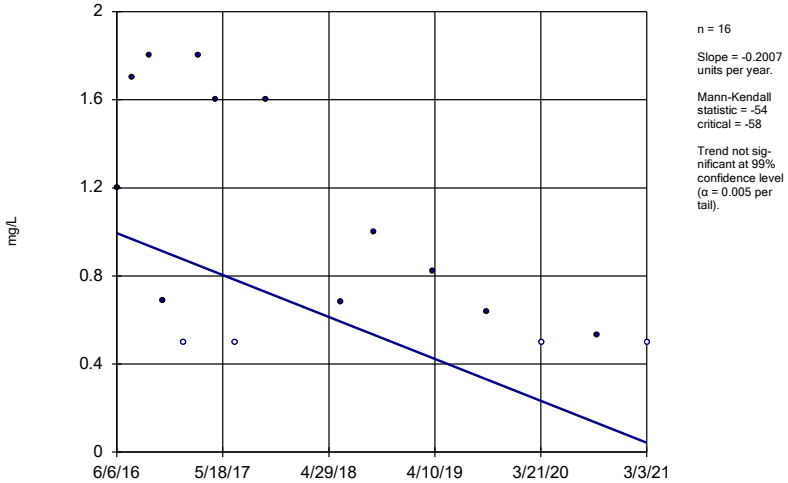
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = -0.2007 units per year.

Mann-Kendall statistic = -54 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

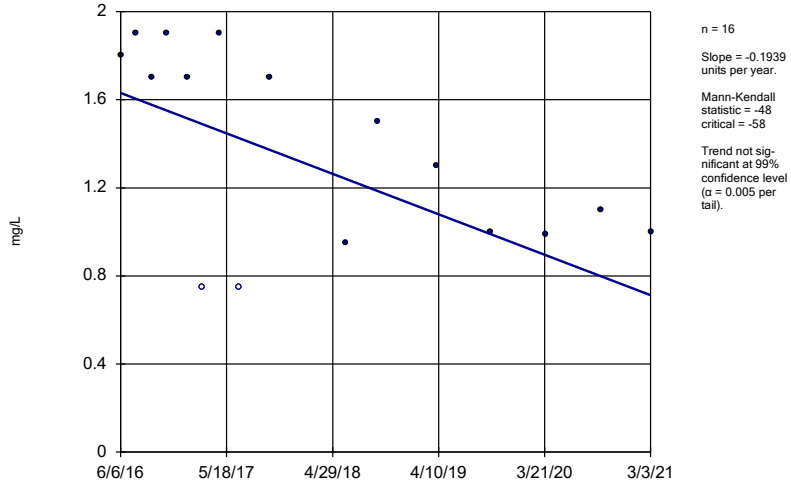
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = -0.1939 units per year.

Mann-Kendall statistic = -48 critical = -58

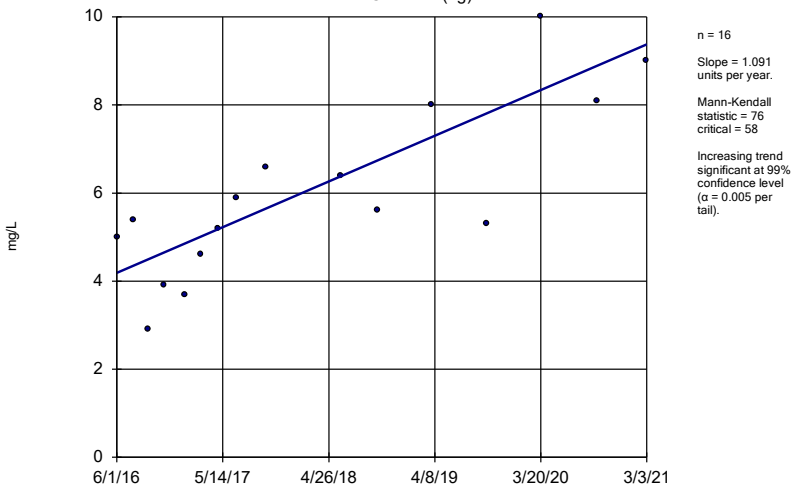
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = 1.091 units per year.

Mann-Kendall statistic = 76
critical = 58

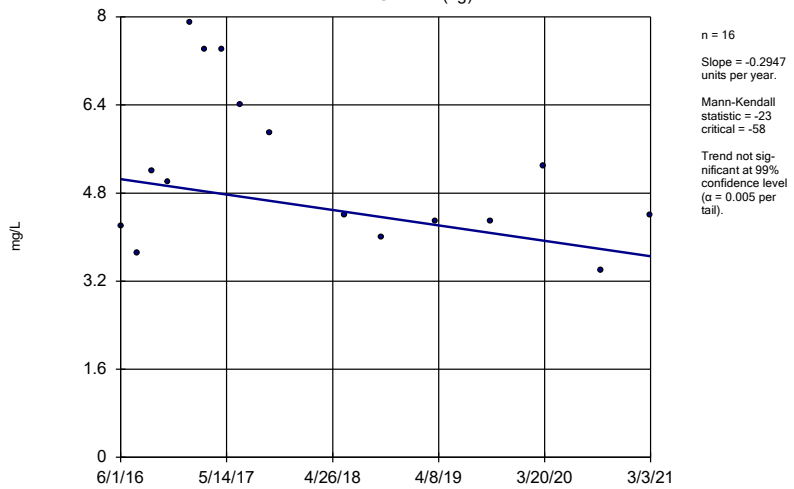
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = -0.2947 units per year.

Mann-Kendall statistic = -23
critical = -58

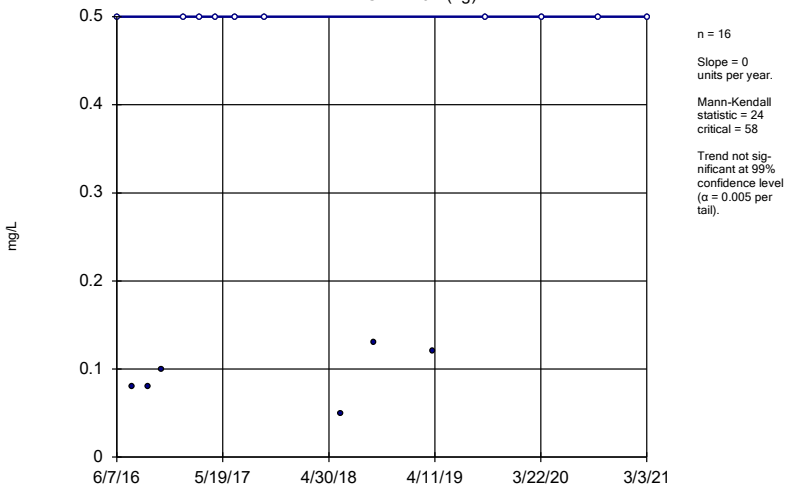
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 24
critical = 58

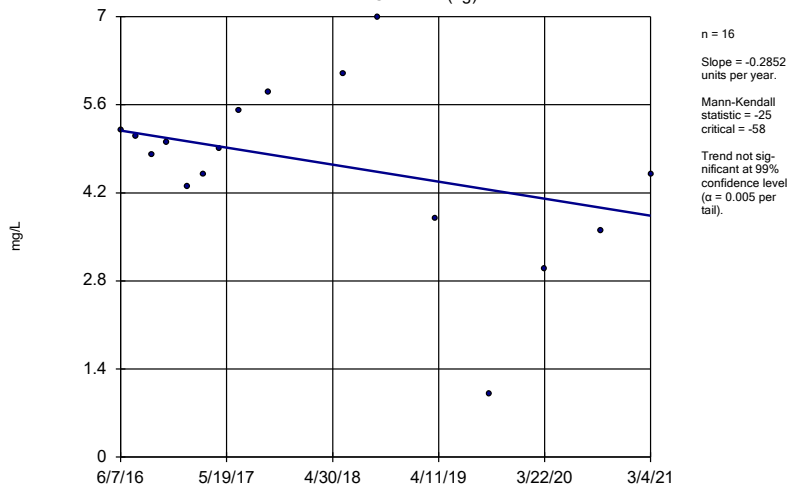
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = -0.2852 units per year.

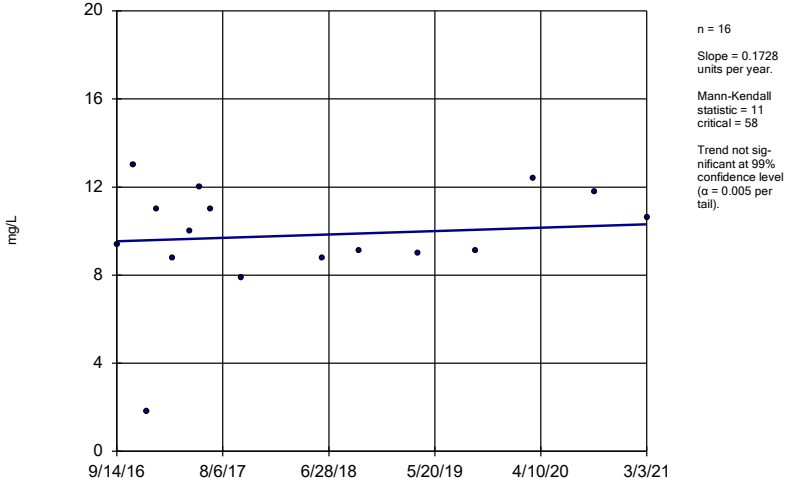
Mann-Kendall statistic = -25
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = 0.1728 units per year.

Mann-Kendall statistic = 11
critical = 58

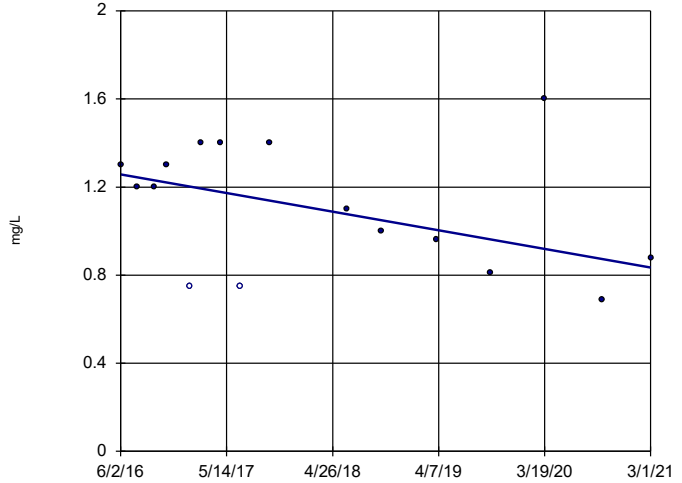
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = -0.08892 units per year.

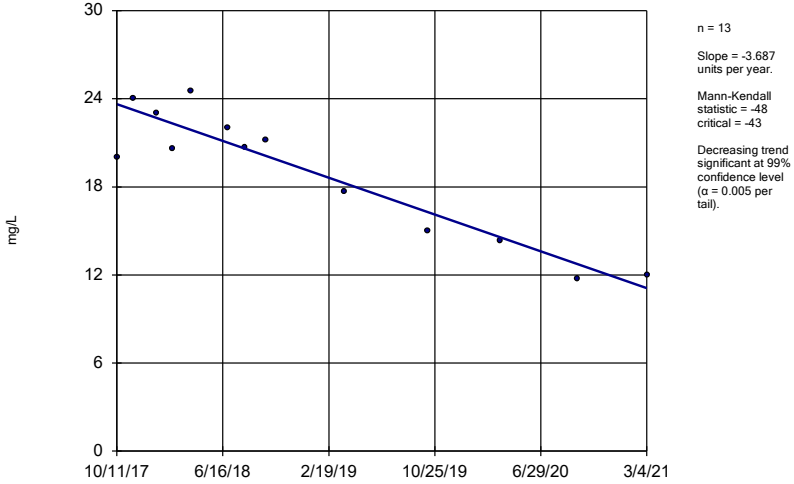
Mann-Kendall statistic = -28
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = -3.687 units per year.

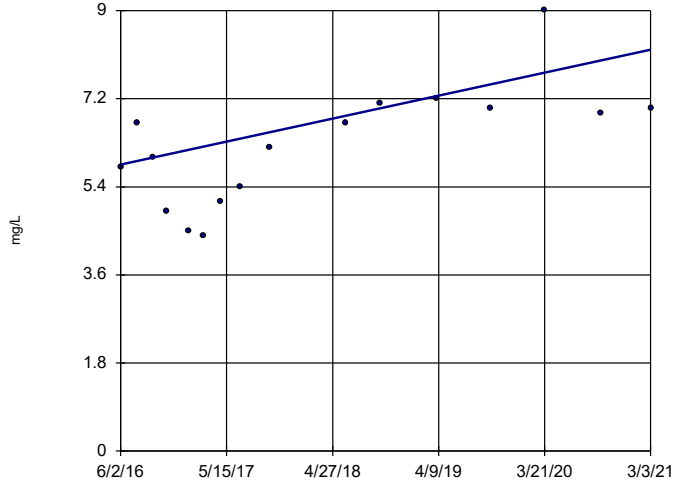
Mann-Kendall statistic = -48
critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = 0.4938 units per year.

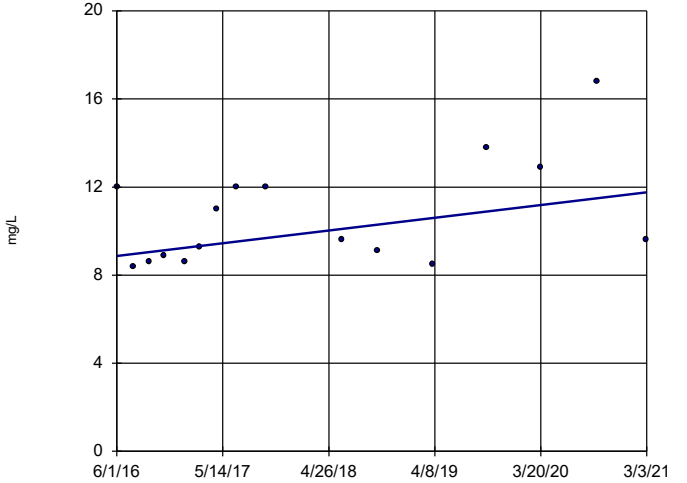
Mann-Kendall statistic = 60
critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = 0.6094 units per year.

Mann-Kendall statistic = 45
critical = 58

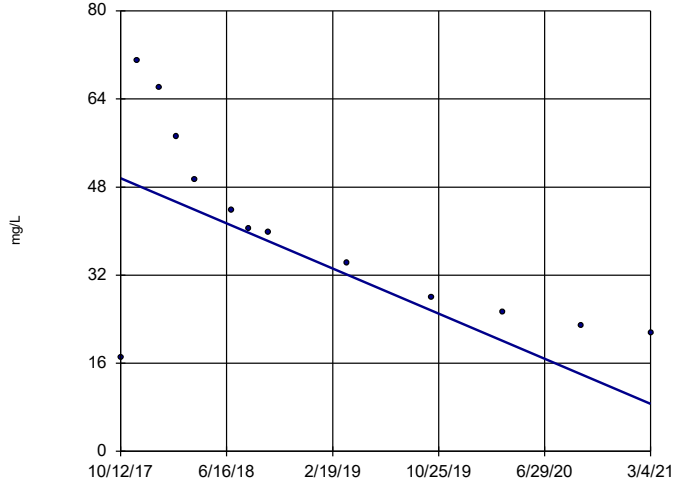
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = -12.05 units per year.

Mann-Kendall statistic = -54
critical = -43

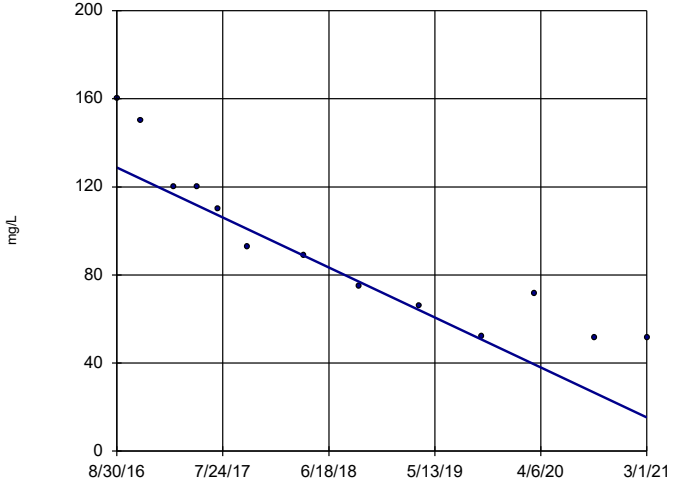
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -25.19 units per year.

Mann-Kendall statistic = -71
critical = -43

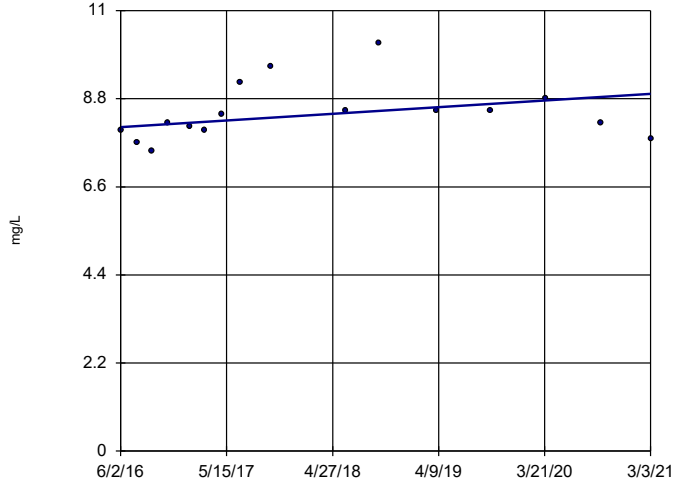
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 0.1751 units per year.

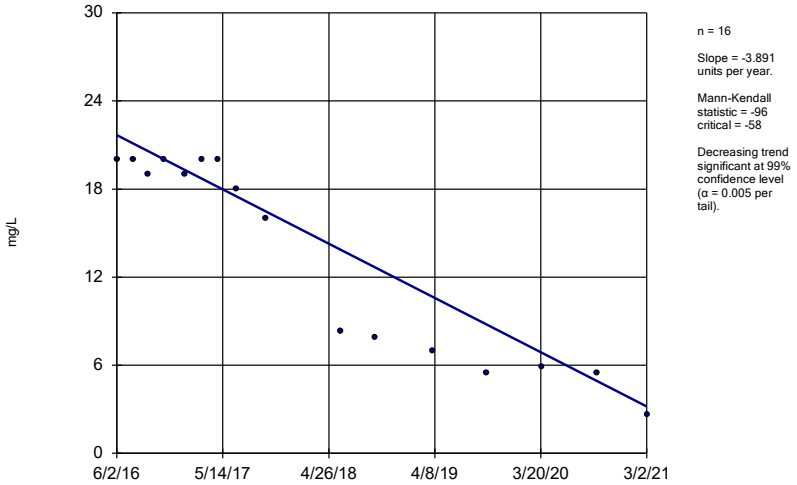
Mann-Kendall statistic = 39
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -3.891 units per year.

Mann-Kendall statistic = -96
critical = -58

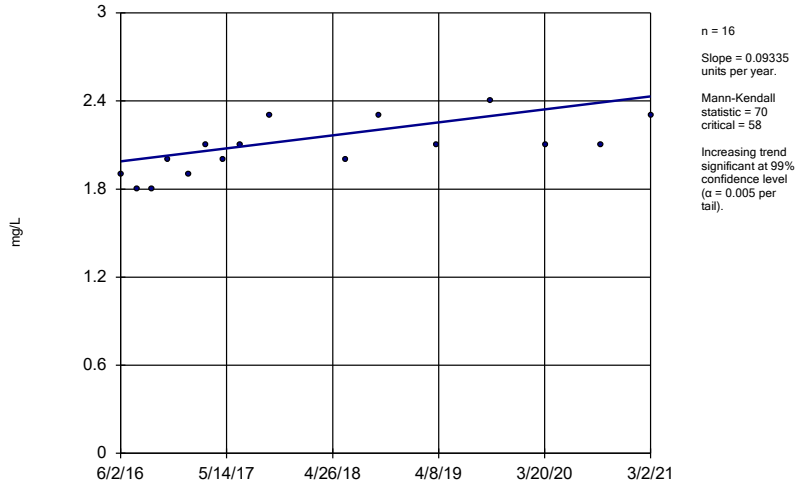
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = 0.09335 units per year.

Mann-Kendall statistic = 70
critical = 58

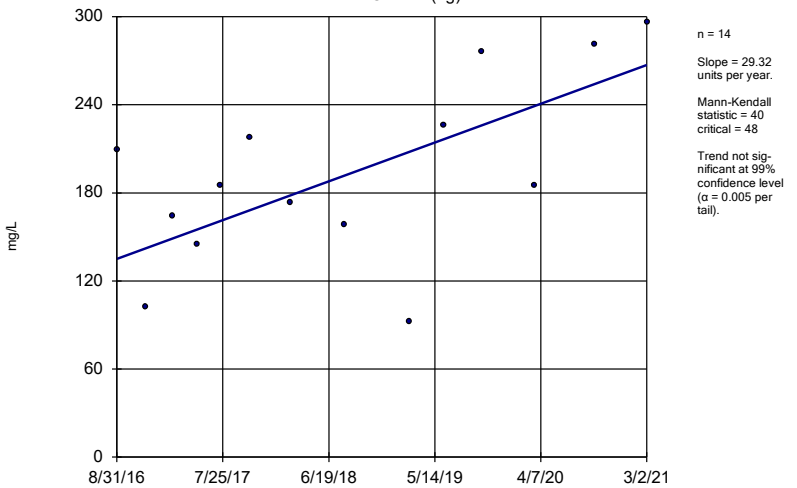
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 29.32 units per year.

Mann-Kendall statistic = 40
critical = 48

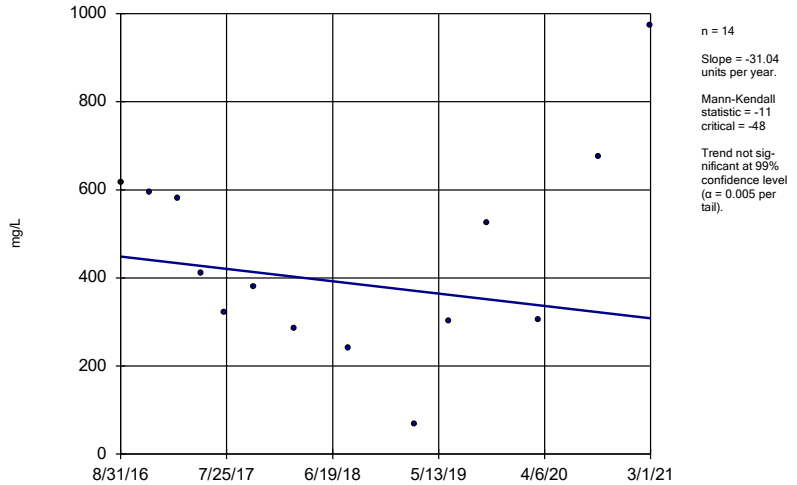
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-1R



n = 14

Slope = -31.04 units per year.

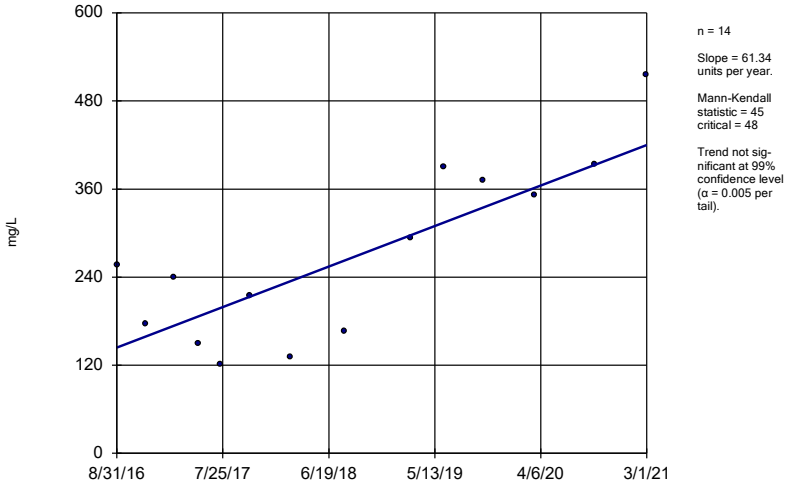
Mann-Kendall statistic = -11
critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

GWC-2R



n = 14

Slope = 61.34 units per year.

Mann-Kendall statistic = 45 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

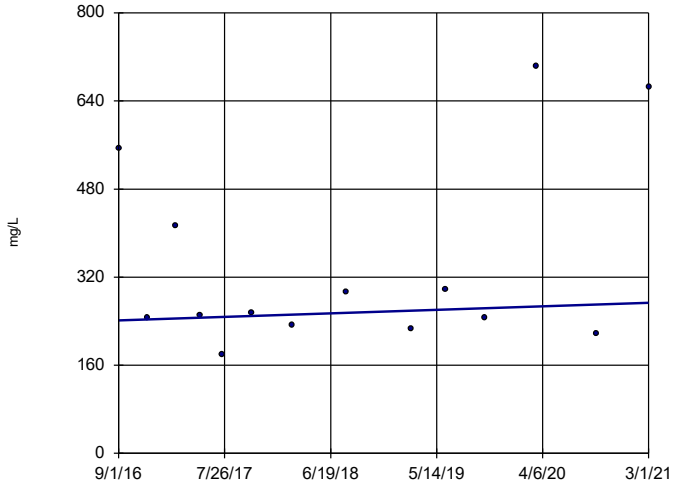
Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-4R



n = 14

Slope = 7.11 units per year.

Mann-Kendall statistic = 2 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

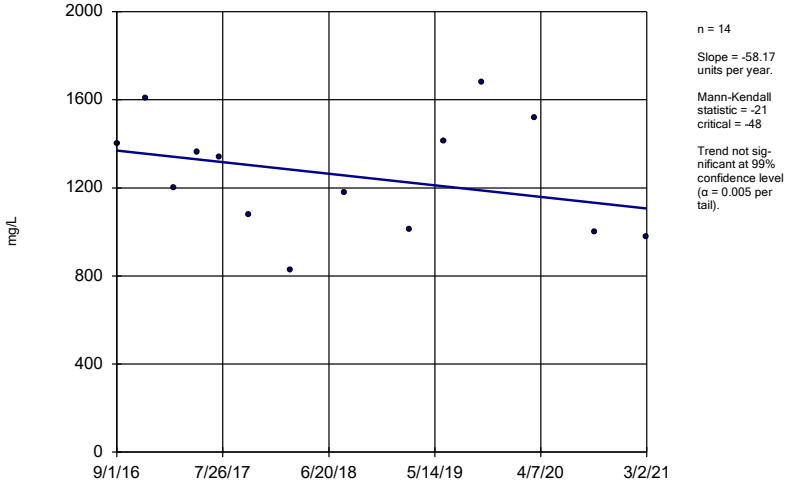
Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-5R



n = 14

Slope = -58.17 units per year.

Mann-Kendall statistic = -21 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

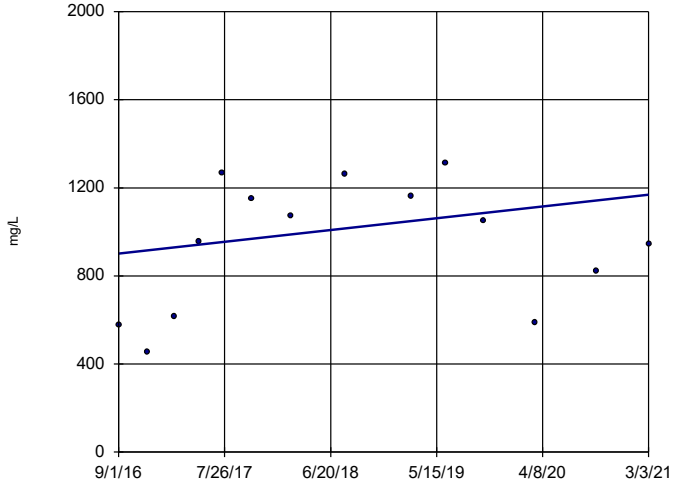
Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWC-6R



n = 14

Slope = 59.56 units per year.

Mann-Kendall statistic = 15 critical = 48

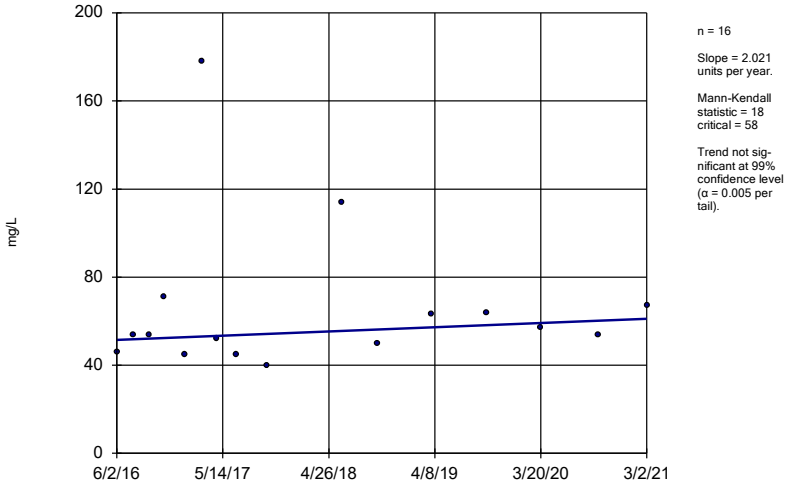
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = 2.021 units per year.

Mann-Kendall statistic = 18
critical = 58

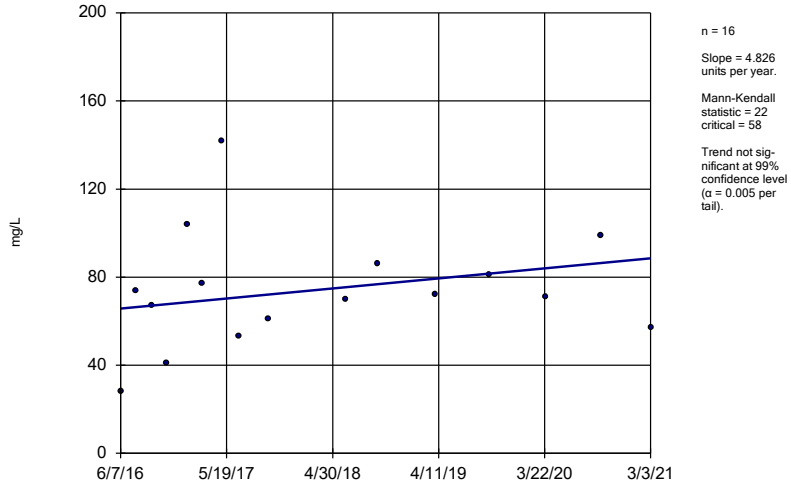
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = 4.826 units per year.

Mann-Kendall statistic = 22
critical = 58

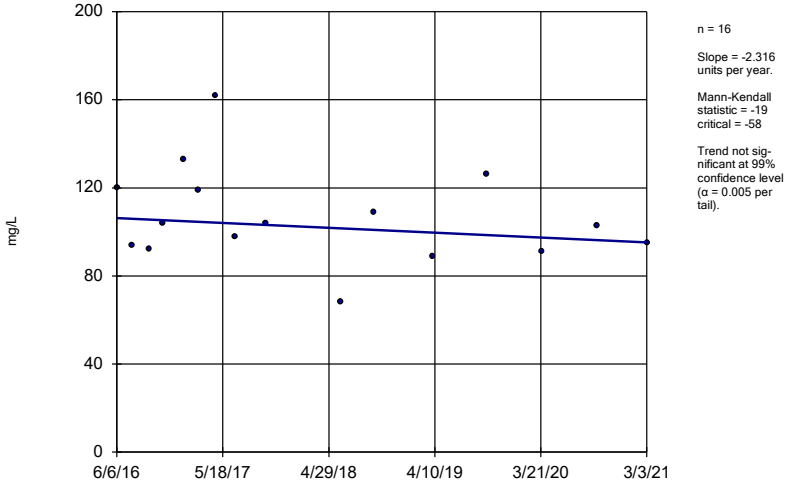
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = -2.316 units per year.

Mann-Kendall statistic = -19
critical = -58

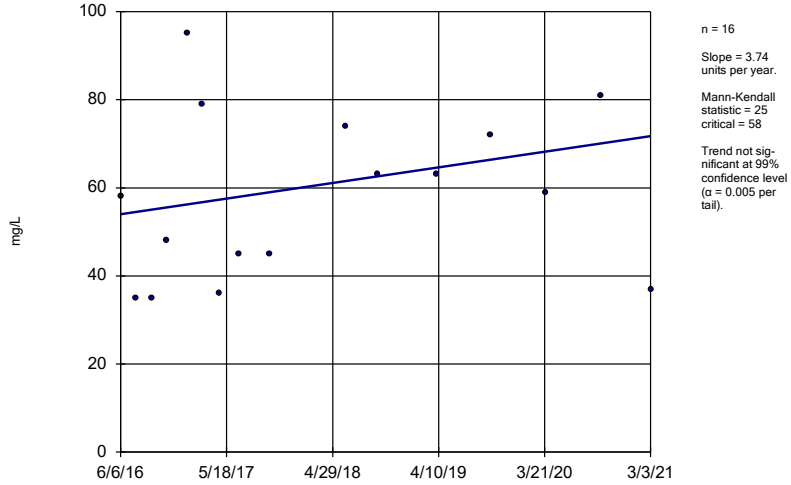
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = 3.74 units per year.

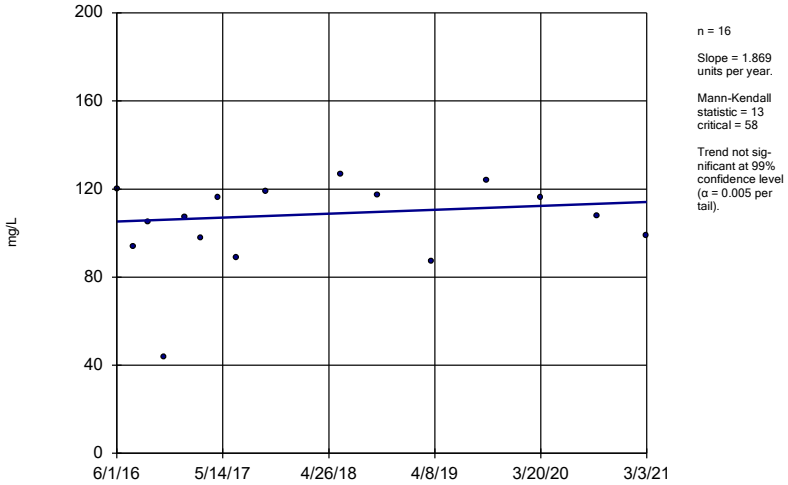
Mann-Kendall statistic = 25
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = 1.869 units per year.

Mann-Kendall statistic = 13 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

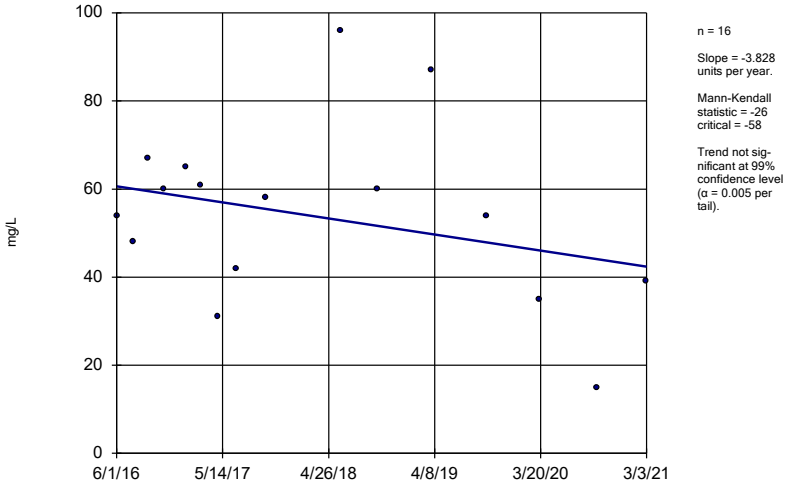
Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = -3.828 units per year.

Mann-Kendall statistic = -26 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

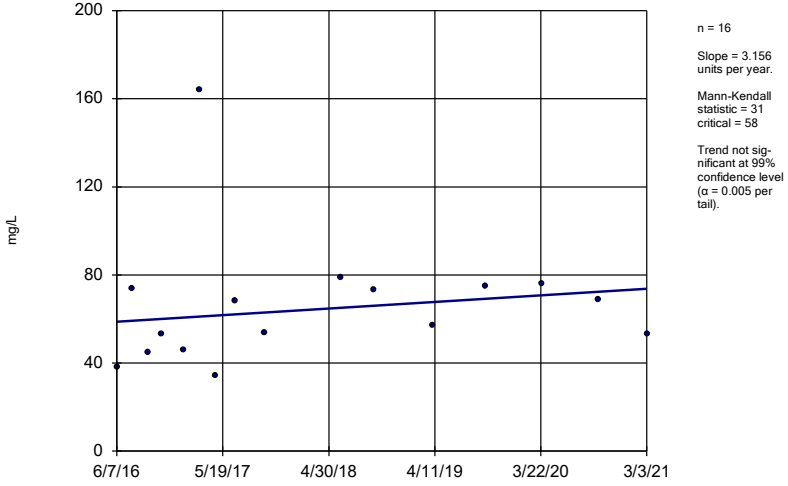
Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 3.156 units per year.

Mann-Kendall statistic = 31 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

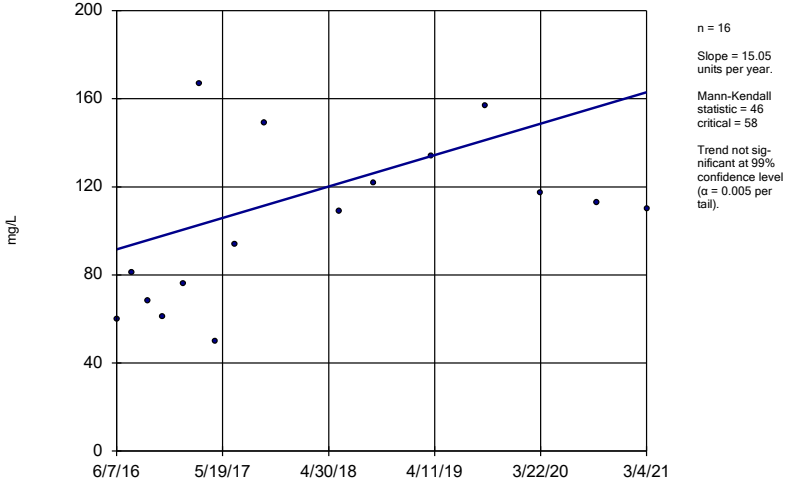
Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = 15.05 units per year.

Mann-Kendall statistic = 46 critical = 58

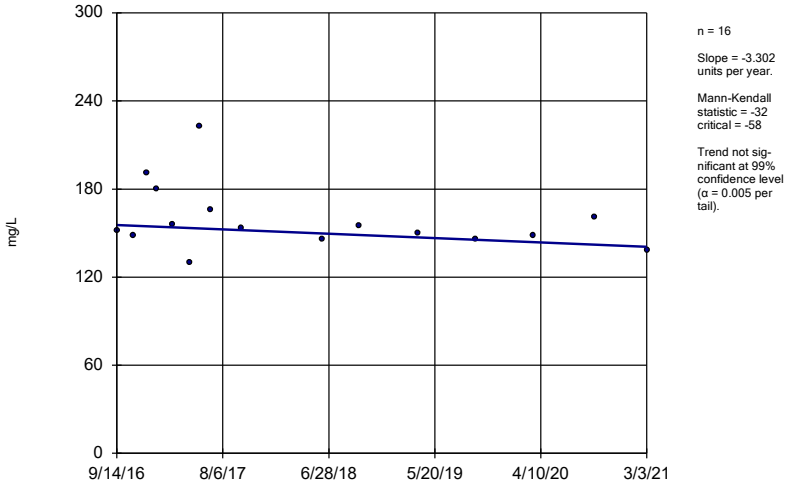
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = -3.302 units per year.

Mann-Kendall statistic = -32 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

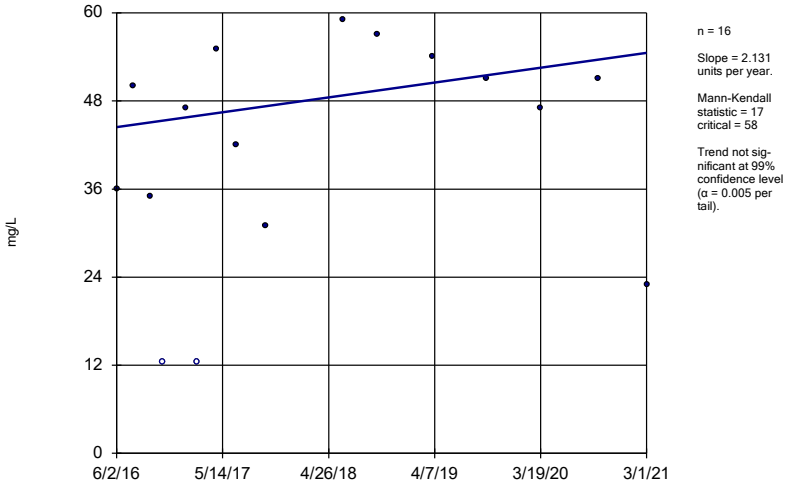
Constituent: TDS Analysis Run 5/6/2021 3:02 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = 2.131 units per year.

Mann-Kendall statistic = 17 critical = 58

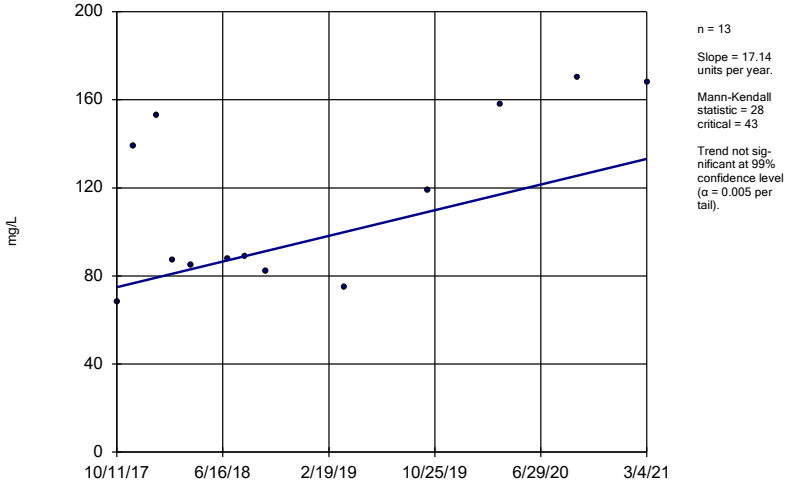
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = 17.14 units per year.

Mann-Kendall statistic = 28 critical = 43

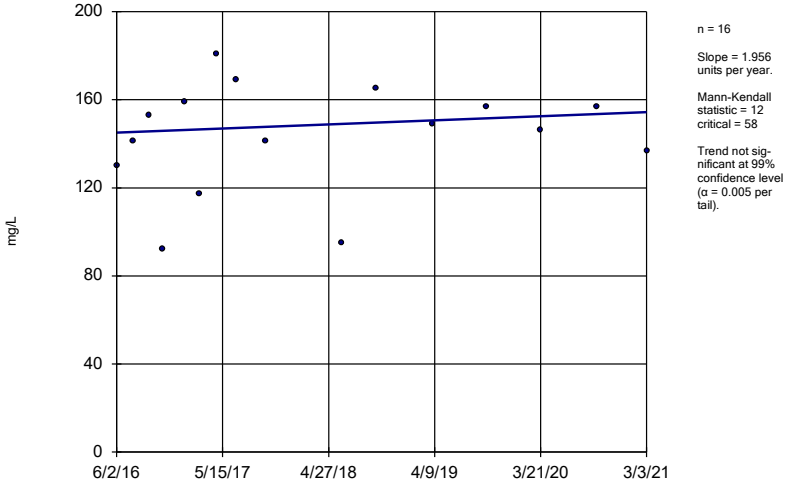
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = 1.956 units per year.

Mann-Kendall statistic = 12 critical = 58

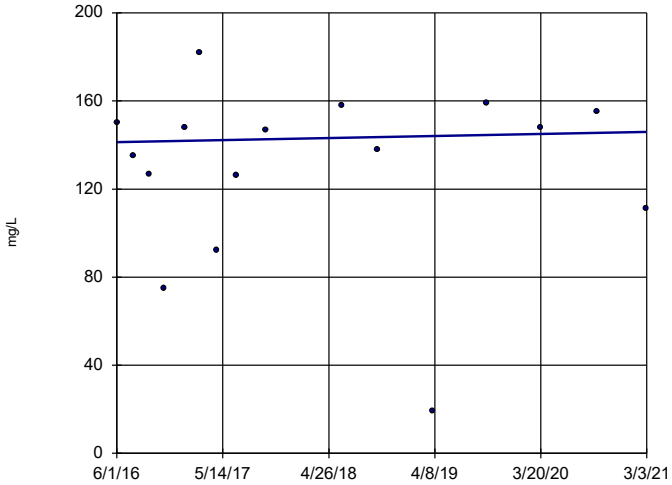
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = 0.9644 units per year.

Mann-Kendall statistic = 5
critical = 58

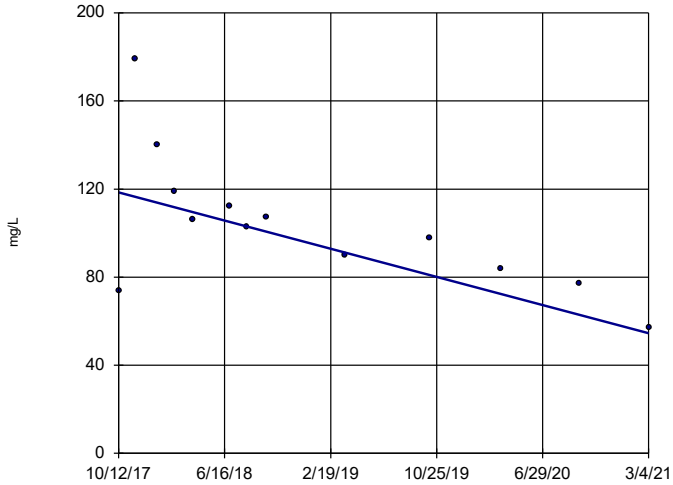
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = -18.83 units per year.

Mann-Kendall statistic = -48
critical = -43

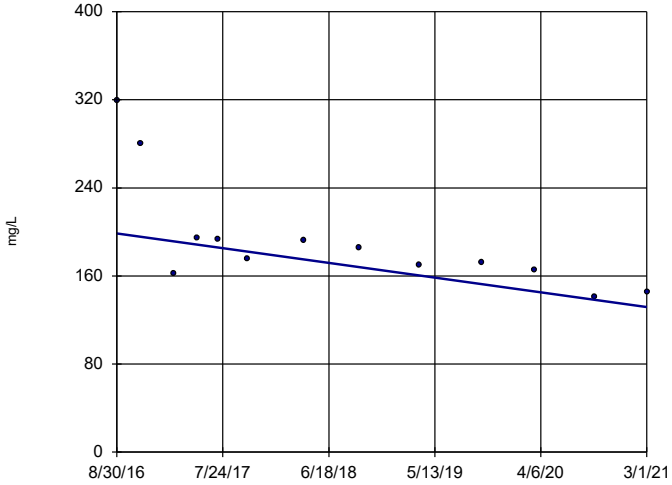
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -14.88 units per year.

Mann-Kendall statistic = -54
critical = -43

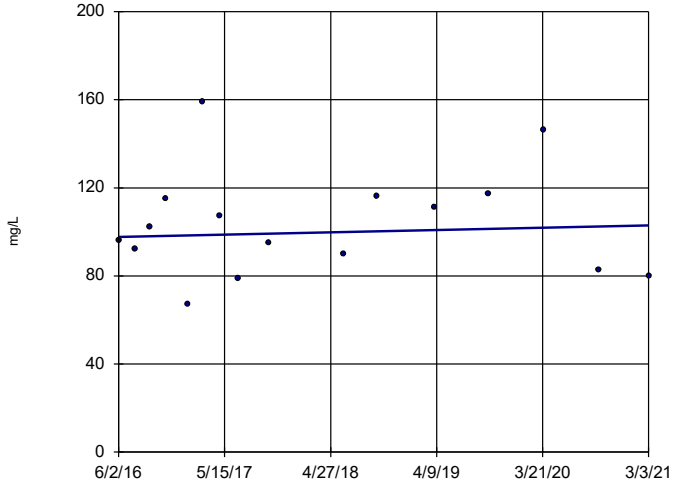
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 1.119 units per year.

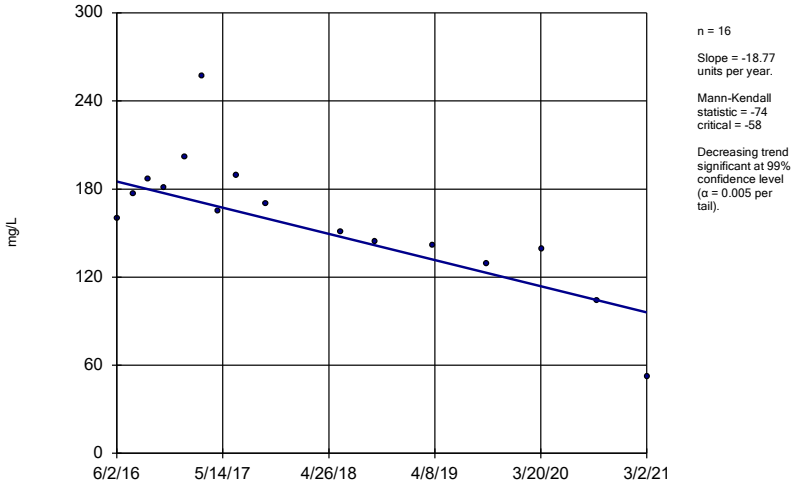
Mann-Kendall statistic = 8
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -18.77 units per year.

Mann-Kendall statistic = -74
critical = -58

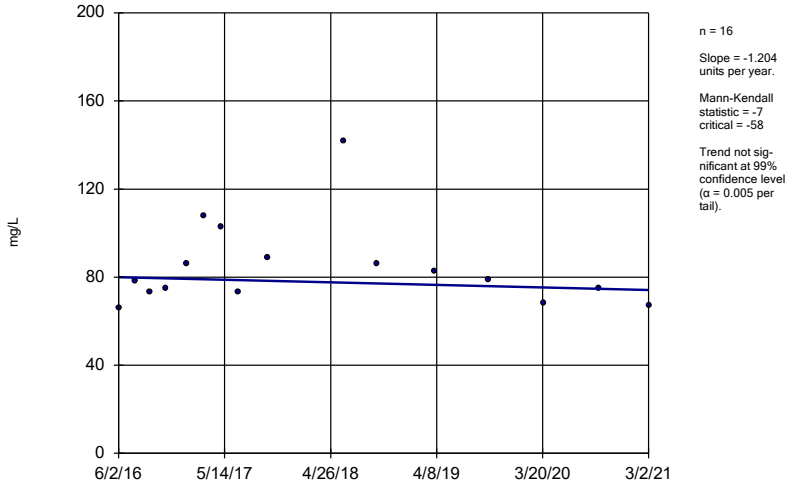
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = -1.204 units per year.

Mann-Kendall statistic = -7
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/6/2021 3:03 PM View: Appendix III Trend Tests
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

FIGURE J.

Upper Tolerance Limits Summary Table

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:27 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0047	n/a	n/a	315	n/a	n/a	86.03	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	363	n/a	n/a	77.96	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.071	n/a	n/a	363	n/a	n/a	3.03	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	347	n/a	n/a	81.27	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	347	n/a	n/a	95.68	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.0093	n/a	n/a	315	n/a	n/a	77.46	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	360	n/a	n/a	69.72	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	342	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	362	n/a	n/a	68.51	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.0013	n/a	n/a	317	n/a	n/a	82.65	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	342	n/a	n/a	27.49	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	278	n/a	n/a	93.17	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	306	n/a	n/a	59.8	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	345	n/a	n/a	91.59	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	298	n/a	n/a	96.64	n/a	n/a	NaN	NP Inter(NDs)

FIGURE K.

YATES LANDFILL GYPSUM STACK GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.0047	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.071	2
Beryllium, Total (mg/L)	0.004	0.0005	0.004
Cadmium, Total (mg/L)	0.005	0.0005	0.005
Chromium, Total (mg/L)	0.1	0.0093	0.1
Cobalt, Total (mg/L)		0.035	0.035
Combined Radium, Total (pCi/L)	5	6.92	6.92
Fluoride, Total (mg/L)	4	0.68	4
Lead, Total (mg/L)		0.0013	0.0013
Lithium, Total (mg/L)		0.03	0.03
Mercury, Total (mg/L)	0.002	0.0002	0.002
Molybdenum, Total (mg/L)		0.014	0.014
Selenium, Total (mg/L)	0.05	0.005	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Grey cell indicates Background Limit is higher than MCL*

**MCL = Maximum Contaminant Level*

**GWPS = Groundwater Protection Standard*

FIGURE L.

Appendix IV Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GWC-2R	0.003	0.0017	0.006	No	17	0.002924	0.0003153	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-4R	0.003	0.0014	0.006	No	17	0.002601	0.0009133	82.35	None	No	0.01	NP (NDs)
Antimony (mg/L)	GWC-5R	0.003	0.00054	0.006	No	17	0.002697	0.0008561	88.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-1R	0.005	0.0011	0.01	No	17	0.003832	0.001899	70.59	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-2R	0.005	0.0011	0.01	No	17	0.004521	0.001355	88.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-3R	0.005	0.0017	0.01	No	17	0.004148	0.001599	76.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-4R	0.005	0.00059	0.01	No	17	0.004468	0.001502	88.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	GWC-5R	0.005	0.00092	0.01	No	17	0.002133	0.001697	23.53	None	No	0.01	NP (normality)
Arsenic (mg/L)	GWC-6R	0.005	0.00072	0.01	No	17	0.002876	0.002098	47.06	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-1R	0.06047	0.03787	2	No	17	0.05009	0.01798	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GWC-2R	0.05309	0.04519	2	No	17	0.04914	0.006305	0	None	No	0.01	Param.
Barium (mg/L)	GWC-3R	0.03249	0.02047	2	No	17	0.02648	0.00959	0	None	No	0.01	Param.
Barium (mg/L)	GWC-4R	0.032	0.0157	2	No	17	0.02336	0.008156	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-5R	0.0345	0.013	2	No	17	0.02133	0.01039	0	None	No	0.01	NP (normality)
Barium (mg/L)	GWC-6R	0.07108	0.04872	2	No	17	0.0599	0.01784	0	None	No	0.01	Param.
Beryllium (mg/L)	GWC-1R	0.003	0.00008	0.004	No	17	0.001142	0.001415	35.29	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-2R	0.003	0.00014	0.004	No	17	0.001664	0.001462	52.94	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-3R	0.00081	0.00026	0.004	No	17	0.0006071	0.0006539	5.882	None	No	0.01	NP (normality)
Beryllium (mg/L)	GWC-4R	0.003	0.00006	0.004	No	17	0.002654	0.0009767	88.24	None	No	0.01	NP (NDs)
Beryllium (mg/L)	GWC-5R	0.00224	0.0007995	0.004	No	17	0.00152	0.00115	5.882	None	No	0.01	Param.
Cadmium (mg/L)	GWC-1R	0.0005	0.00016	0.005	No	17	0.0004112	0.0001657	76.47	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-2R	0.0005	0.00015	0.005	No	17	0.0003924	0.0001726	70.59	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-3R	0.0005	0.00018	0.005	No	17	0.0003588	0.0001639	52.94	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-4R	0.0005	0.0001	0.005	No	17	0.0004765	0.00009701	94.12	None	No	0.01	NP (NDs)
Cadmium (mg/L)	GWC-5R	0.0009485	0.0005562	0.005	No	17	0.0007524	0.000313	5.882	None	No	0.01	Param.
Chromium (mg/L)	GWC-1R	0.005	0.0009	0.1	No	17	0.001994	0.001724	23.53	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-2R	0.005	0.0008	0.1	No	17	0.003962	0.00193	76.47	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-3R	0.0017	0.0009	0.1	No	17	0.00183	0.001534	17.65	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-4R	0.005	0.0011	0.1	No	17	0.003775	0.001963	70.59	None	No	0.01	NP (NDs)
Chromium (mg/L)	GWC-5R	0.0024	0.0018	0.1	No	17	0.002312	0.0007557	5.882	None	No	0.01	NP (normality)
Chromium (mg/L)	GWC-6R	0.0017	0.0012	0.1	No	17	0.001994	0.00145	17.65	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-1R	0.005	0.00064	0.035	No	17	0.002114	0.002015	29.41	None	No	0.01	NP (normality)
Cobalt (mg/L)	GWC-2R	0.02173	0.01147	0.035	No	17	0.0166	0.008186	5.882	None	No	0.01	Param.
Cobalt (mg/L)	GWC-3R	0.0086	0.0041	0.035	No	17	0.005435	0.002392	64.71	None	No	0.01	NP (NDs)
Cobalt (mg/L)	GWC-4R	0.002075	0.0006537	0.035	No	17	0.002309	0.002244	17.65	Kaplan-Meier	x^(1/3)	0.01	Param.
Cobalt (mg/L)	GWC-5R	0.005	0.00044	0.035	No	17	0.003911	0.002025	76.47	Kaplan-Meier	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GWC-1R	1.065	0.5348	6.92	No	13	0.8002	0.3568	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-2R	1.529	0.6499	6.92	No	13	1.089	0.5908	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-3R	1.13	0.2214	6.92	No	13	0.7342	0.7308	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-4R	0.6477	0.2185	6.92	No	13	0.4331	0.2886	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-5R	0.9651	0.2724	6.92	No	13	0.6188	0.4658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GWC-6R	1.183	0.4434	6.92	No	13	0.843	0.576	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GWC-1R	0.1	0.06	4	No	16	0.08813	0.02167	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-2R	0.58	0.05	4	No	16	0.1175	0.1257	68.75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-3R	0.15	0.04	4	No	16	0.1265	0.129	43.75	None	No	0.01	NP (normality)
Fluoride (mg/L)	GWC-4R	0.11	0.08	4	No	16	0.09875	0.02094	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-5R	0.35	0.035	4	No	16	0.1171	0.09869	56.25	None	No	0.01	NP (NDs)
Fluoride (mg/L)	GWC-6R	0.28	0.07	4	No	16	0.1013	0.05303	75	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-1R	0.001	0.000067	0.0013	No	17	0.0008894	0.0003124	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-2R	0.001	0.00007	0.0013	No	17	0.0006191	0.0004694	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-3R	0.001	0.000082	0.0013	No	17	0.0006251	0.0004623	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-4R	0.001	0.000041	0.0013	No	17	0.0009436	0.0002326	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	GWC-5R	0.001	0.00007	0.0013	No	17	0.0006765	0.0004524	64.71	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-1R	0.03	0.0012	0.03	No	14	0.00761	0.01214	21.43	None	No	0.01	NP (normality)
Lithium (mg/L)	GWC-2R	0.03	0.0035	0.03	No	14	0.009593	0.01108	21.43	None	No	0.01	NP (normality)

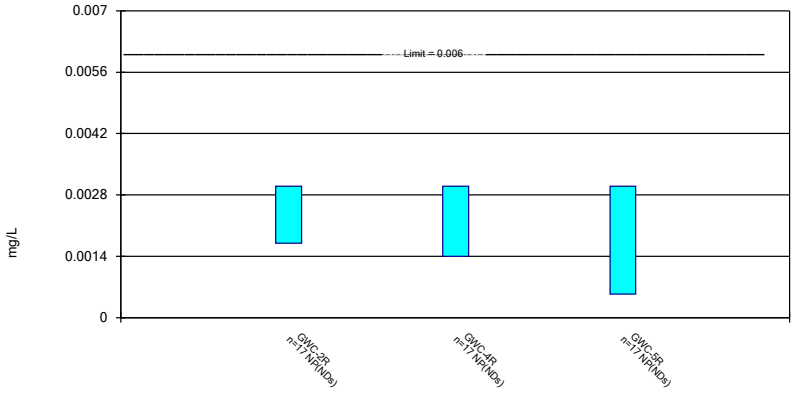
Appendix IV Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill Printed 5/5/2021, 3:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	GWC-3R	0.03	0.0012	0.03	No	14	0.02586	0.01052	85.71	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-4R	0.03	0.0011	0.03	No	14	0.02176	0.01352	71.43	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-5R	0.03	0.0014	0.03	No	14	0.01776	0.01466	57.14	None	No	0.01	NP (NDs)
Lithium (mg/L)	GWC-6R	0.03	0.002	0.03	No	14	0.01079	0.01273	28.57	None	No	0.01	NP (normality)
Mercury (mg/L)	GWC-1R	0.0002	0.000059	0.002	No	17	0.0001917	0.0000342	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-2R	0.0002	0.000071	0.002	No	17	0.0001924	0.00003129	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-3R	0.00043	0.000064	0.002	No	17	0.0001946	0.00008128	82.35	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-4R	0.0002	0.000058	0.002	No	17	0.0001916	0.00003444	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-5R	0.0002	0.00006	0.002	No	17	0.0001918	0.00003395	94.12	None	No	0.01	NP (NDs)
Mercury (mg/L)	GWC-6R	0.0002	0.000067	0.002	No	17	0.0001811	0.00005432	88.24	None	No	0.01	NP (NDs)
Selenium (mg/L)	GWC-1R	0.00595	0.002307	0.05	No	17	0.005306	0.003532	23.53	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-2R	0.003957	0.002466	0.05	No	17	0.003212	0.00119	11.76	None	No	0.01	Param.
Selenium (mg/L)	GWC-3R	0.006481	0.00282	0.05	No	17	0.005141	0.003042	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	GWC-4R	0.005	0.003	0.05	No	17	0.004853	0.002862	5.882	None	No	0.01	NP (normality)
Selenium (mg/L)	GWC-5R	0.0268	0.01846	0.05	No	17	0.02263	0.006655	0	None	No	0.01	Param.
Selenium (mg/L)	GWC-6R	0.004143	0.002559	0.05	No	17	0.003418	0.001258	11.76	None	sqrt(x)	0.01	Param.
Thallium (mg/L)	GWC-2R	0.001	0.00007	0.002	No	17	0.0009453	0.0002256	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	GWC-5R	0.001	0.000053	0.002	No	17	0.0009443	0.0002297	94.12	None	No	0.01	NP (NDs)

Non-Parametric Confidence Interval

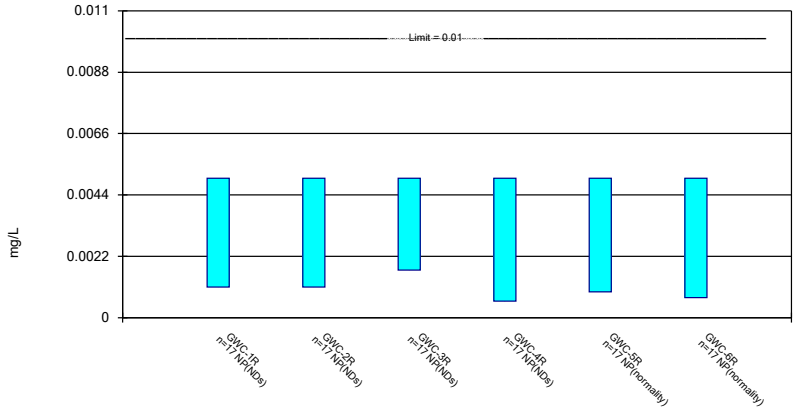
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 5/5/2021 3:31 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

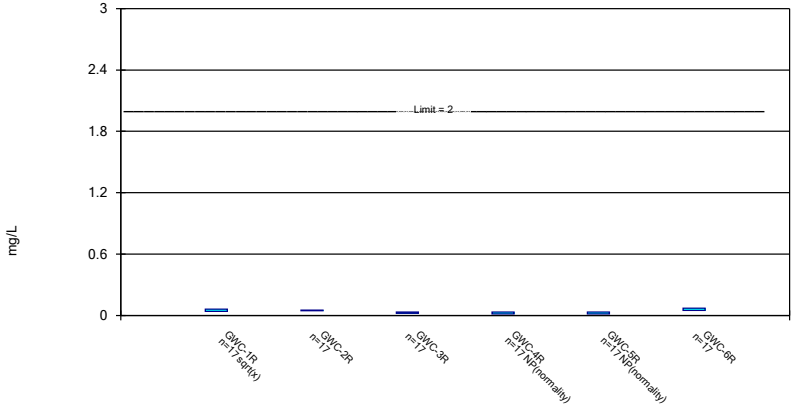
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 5/5/2021 3:31 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

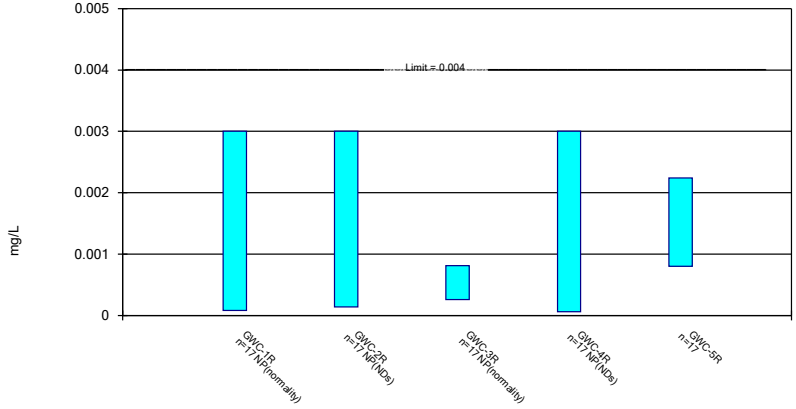
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/5/2021 3:31 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

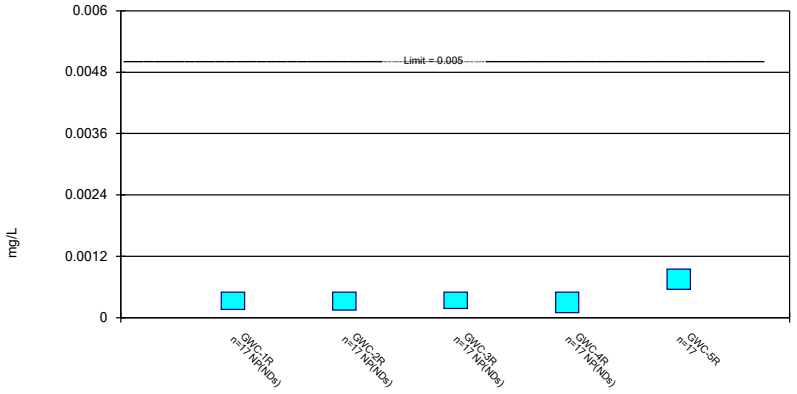
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

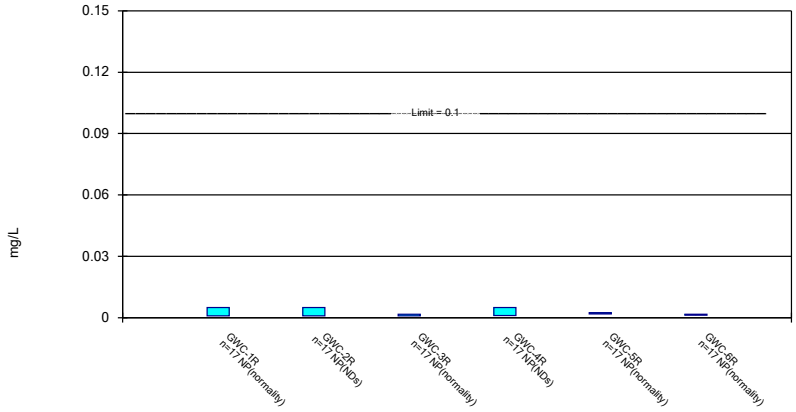
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

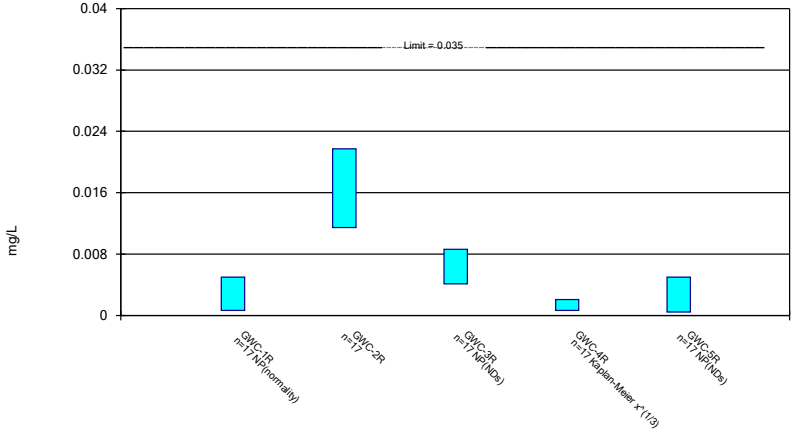
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

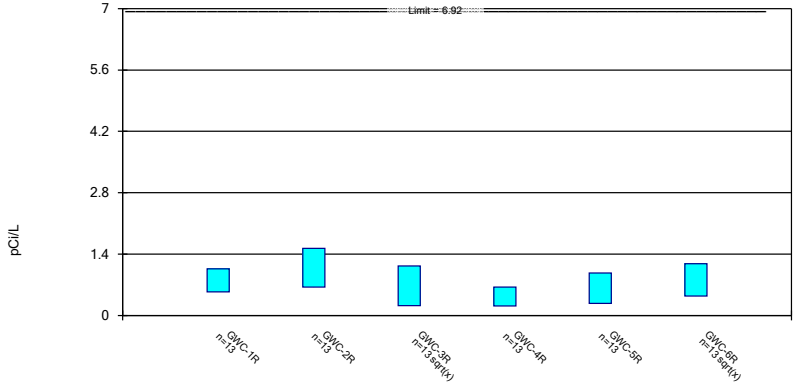
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric Confidence Interval

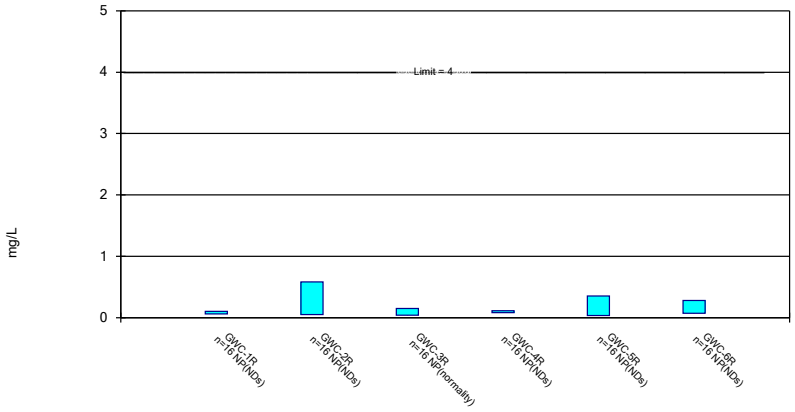
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

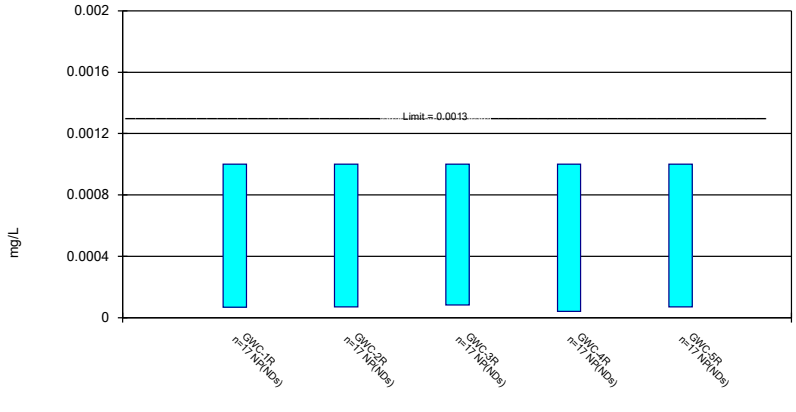
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Fluoride Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

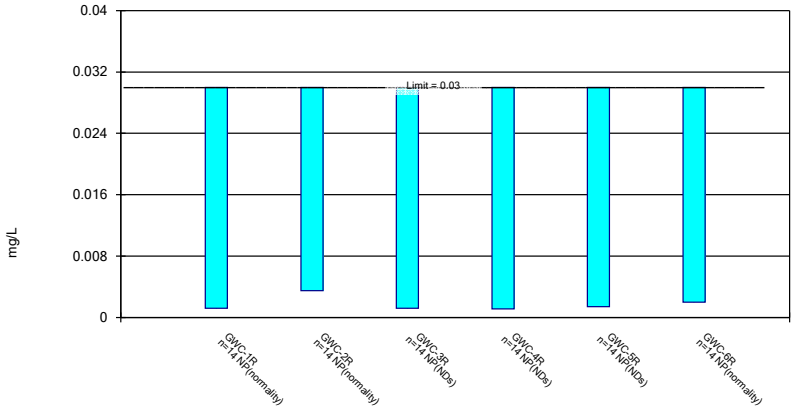
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

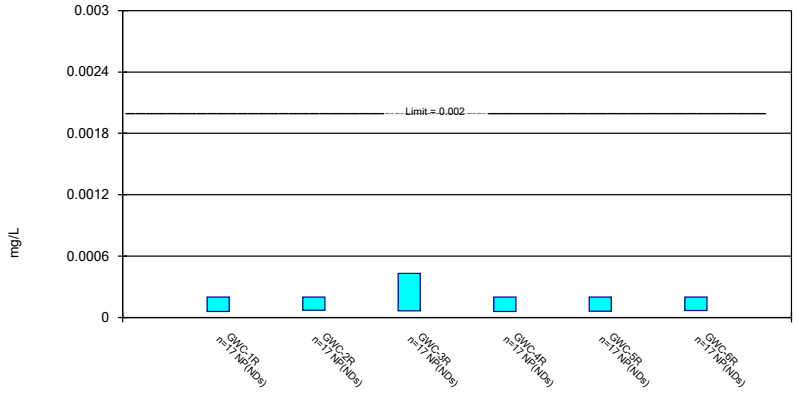
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Non-Parametric Confidence Interval

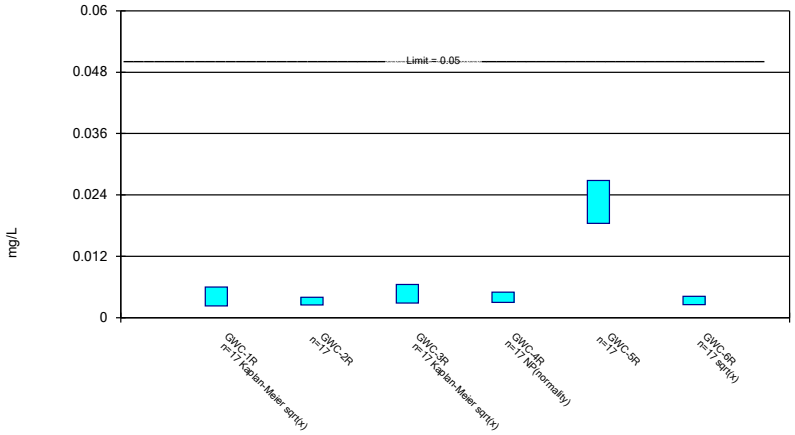
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 5/5/2021 3:32 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



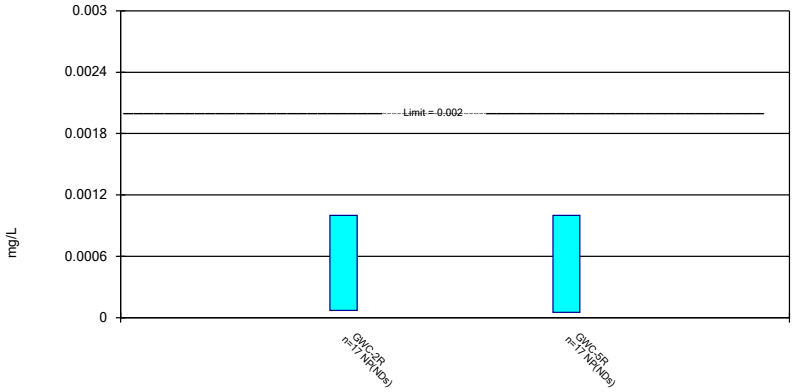
Constituent: Selenium Analysis Run 5/5/2021 3:32 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 5/5/2021 3:32 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Yates Gypsum Landfill

Arcadis U.S., Inc.

2839 Paces Ferry Road

Suite 900

Atlanta, Georgia 30339

Tel 770 431 8666

Fax 770 435 2666

www.arcadis.com

Arcadis U.S., Inc.

2839 Paces Ferry Road

Suite 900

Atlanta, Georgia 30339

Tel 770 431 8666

Fax 770 435 2666

www.arcadis.com